

# Land Reform in Developing Countries

Property rights and property  
wrongs

**Michael Lipton**



Priorities for Development Economics

Michael Lipton has produced a unique work drawing upon the author's extraordinary expertise in rural development. Lipton takes on a great, complex, and contentious topic, land reform, and does justice to this huge topic. He delves deeply and widely, producing a text that is remarkable in its scope, insights, and historical knowledge. He never fears to point out the true complexities of topics that are all too often over-simplified. Lipton's work is also extremely timely, as the world turns its attention once again to smallholder agriculture after decades of relative neglect. Scholars, students, and policy makers in all parts of the world will turn to this new study with enormous benefit and with gratitude to Lipton for his remarkable efforts.

Jeffrey D. Sachs *Director of the Earth Institute at Columbia University;  
Special Advisor to UN Secretary General Ban Ki-Moon on  
the Millennium Development Goals*

Land reform can make a huge contribution in removing poverty, but it has not been effectively tried in many areas of the world. The story has to be finished, and in this important book one of the foremost development economists tells us why and how.

Amartya Sen *Lamont Professor of Economics and Philosophy,  
Harvard University; Nobel prizewinner in economics*

A compelling case is made about the need to refocus on agricultural growth as the engine to reduce rural poverty. Improving access to land will ensure that the benefits of agricultural technical change reach many millions of rural poor. Professor Michael Lipton is a world renowned authority on these issues. His decades of research experience, distilled in the book, offer compelling, insightful and timely solutions which are critical in addressing the global food crisis.

*Akin Adesina Vice President, Alliance for a Green Revolution in Africa*

Michael Lipton (pinching from Mark Twain) convincingly states that 'Reports of land reform's death are greatly exaggerated'. He takes the reader on a developing-world tour and shows tremendous dynamics in land reforms. Land reform is neither dead nor dying. As land (with access to water) becomes more scarce, land values increase as a consequence. Farms in many regions of the developing world actually become smaller – mostly for good economic reasons – and the need for efficient institutional change related to land remains strong. This book gives guidance for sound policy and offers unique opportunities for learning about land reform across time and locations. It is a must for development scholars!

*Joachim von Braun Director, International Food Policy  
Research Institute*

Land reform has had a rollercoaster ride in the toolbox of development strategies: from a panacea that would cure all ills and help replicate the successes of Japan and Korea, to venom that destroys property rights and creates unviable production units that lead to agricultural decline and urban migration as it has purportedly done in Latin America. The story is really much more complex and nuanced. Michael Lipton – the doyen of the field – uses his half-century of thinking and experience as a development economist to set the record straight and to clarify the conditions under which land reform does and does not deliver the goods. It is a must read for those who are committed to finding the road to shared prosperity in the developing world.

Ricardo Hausmann *Director, Center for International Development at Harvard University; Professor of the Practice of Economic Development, Harvard Kennedy School*

This is a passionate book – it is also brilliantly argued. Michael Lipton accepts that the poor of South Asia and Sub-Saharan Africa need appropriate and often advanced scientific technologies – many new green revolutions – but they also need land reform. Without both of these there is little hope of the rural poor lifting themselves out of chronic poverty.

Sir Gordon Conway *Chief Scientific Adviser, Department for International Development, UK; Professor of International Development, Imperial College, London*

Comprehensive, careful, thoughtful and surprising: Land reform is alive and well and delivering development around the world. Serious students of development, poverty and inequality will find here the micro theory and the macro picture – for years to come.

Nancy Birdsall *President, Center for Global Development*

In the context of poverty, land is the major asset. The rights over land are social constructs and so are an emotive political battleground. But rights affect incentives: land reform needs economic analysis. Michael Lipton provides an accessible and comprehensive guide without which no reformer should go into battle.

Paul Collier *Professor of Economics and Director, Centre for the Study of African Economies, Oxford University*

Land and Land Reform are, in several developing countries including India, live issues – perhaps more critical today than they were decades ago. The unique analytical framework, remarkable empirical evidence and insight, and a modern perspective in this path-breaking new book of Prof. Lipton are invaluable to researchers and policymakers in their endeavour to address problems of poverty, inequality and sustainability.

Pramod K Mishra *Chairman, Gujarat Electricity Regulatory Commission (India), and former Secretary to Government of India, Ministry of Agriculture, Department of Agriculture and Cooperation*

Michael Lipton has, for the last few decades, been the world's authority on land reform and economic development. In a world of continuing poverty and inequality, slow agricultural growth, changing economic structures, rapid urbanisation, and facing profound challenges of climate change and deforestation, the institutions, policies and pressures concerning access to and use of land are as important as ever. Michael Lipton's book is a crucial contribution and an analytical landmark.

Lord Nicholas Stern *I.G. Patel Professor of Economics and Government and Director of Asia Research Centre, London School of Economics; Chief Economist and Senior President of the World Bank 2000–2003; leader of the Africa Commission and the Stern Review on climate change.*

# Land Reform in Developing Countries

Land reforms are laws that are intended, and likely, to cut poverty by raising the poor's share of land rights. That raises questions about property rights as old as moral philosophy, and issues of efficiency and fairness that dominate policy from Bolivia to Nepal. Classic reforms directly transfer land from rich to poor. However, much else has been marketed as land reform: the restriction of tenancy, but also its derestriction; collectivisation, but also decollectivisation; land consolidation, but also land division.

In 1955–2000, genuine land reform affected over a billion people, and almost as many hectares. Is land reform still alive, for example in Bolivia, South Africa and Nepal? Or is it dead and, if so, is this because it has succeeded, or because it has failed? There has been massive research on land reform and this book builds on some surprising findings.

- Small farms' share of land is rising in most of Asia and Africa.
- This is driven not (as widely claimed) by growth in rural population or farm productivity, but by the relative efficiency of small farms, and in some cases by land reform.
- Whether land reform helps the poor depends not only on land transfers, but at least as much on its effects through employment, non-farm activity, GDP growth and distribution, as well as the village status and power of the poor.
- Avoidance, evasion and even distortion of land reform laws sometimes advance their main aims.
- Liberalisation and its accompaniments (such as supermarkets) can be powerful friends or fatal foes of small farms and land reform.

This book will be of great interest to students, researchers and consultants working on agriculture, farm organisation, rural development and poverty reduction, with special emphasis on developing countries.

**Michael Lipton** has worked since 1960 as a development economist. He was based for 25 years at the Institute of Development Studies, for three years directed the Sussex University Poverty Research Unit, and remains research professor at Sussex.

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### **Land Reform in Developing Countries**

Property Rights and Property Wrongs

*Michael Lipton*

# **Land Reform in Developing Countries**

Property rights and property wrongs

**Michael Lipton**



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This book was written after I left formal employment in 1997. It is updated to October 2008. No funding body supported it, which is why it took so long. There has been no research assistant. I alone am responsible for gaps and errors.





# Introducing land reform

## (a) Why land reform matters

To over-simplify, land reform comprises laws with the main goal of reducing poverty by substantially increasing the proportion of farmland controlled by the poor, and thereby their income, power or status. The Appendix states and justifies a more precise definition – and fits it into the concept of reform, which has in the recent past been hijacked. However, for now, the point is that land reform ‘matters’ mainly for its effect on poor people.

Poverty is about much more than income or consumption. However, a narrow definition of extreme ‘income poverty’ is: having income normally not sufficient to meet basic calorie and other needs. Based on household surveys covering over 90 per cent of people in the developing world, the line of extreme income (or ‘dollar’) poverty is now usually set at \$1.25 PPP (purchasing-power parity) per person per day in prices of 2005. In 1980, half the people in the developing world were dollar-poor; by 2005, it was a quarter [Ravallion 2008].<sup>1</sup> Absolute poverty probably fell more in 1950–2005 than in 0–1950. How?

GDP growth helped, but cannot be the whole story. It is *farm* GDP on which the dollar-poor mainly depend.<sup>2</sup> The green revolution made poverty far less than it would have been otherwise (pp. 83–7, 112–7), but barely enabled farm GDP in the developing world to keep pace with population – allowing for the fall in farm product prices, not even that (except in East Asia).<sup>3</sup> The sharp acceleration of poverty reduction is due in large part to the addition, to employment-creating technical progress in food production, of land reform.

Most modern land reform has happened in a roundabout way. In 1910–80, very unequal landholdings were collectivised, in succession in Mexico, the USSR, Eastern Europe, China and parts of other Asian, African and Latin American countries. This was often disastrous, and seldom achieved the main goal of land reform (chapter 5(a)). Decollectivisation, mostly since 1977, in many cases led to small, not-very-unequal farms. This land reform by detour now affects over a billion people dependent on agriculture (chapter 5(b)). Perhaps a further half-billion obtained farmland or work since 1945 from major reductions of land inequality through land reforms that distributed private rights from large owners to small and landless agriculturists. This affected, in

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succession, Japan, East Asia, much of South Asia and Latin America, and some of Africa (chapters 3–4). Today, land reform is often pronounced dead (chapter 7).<sup>4</sup> One would not think so in Bolivia, Brazil, China, the Philippines, South Africa, much of the former USSR, Venezuela, Vietnam, Zimbabwe or cyberspace.<sup>5</sup>

Land is poor people's main productive asset. Yet in many developing areas with no, minor, ineffective or incomplete land reform, the poorer half of farming people control below 10 per cent of farmland. This restricts their income from land, farm enterprise, and (as we shall see) employment, making it harder to escape poverty. In a double whammy against the poor, land concentration not only increases income inequality, but in developing countries also probably reduces farm output and slows growth (chapter 2). The main goals of land reformers are to reduce poverty and 'unjustified' inequality: what do these goals mean, and are they 'fair', stable, sustainable, and consistent with the goals and power of interested parties (chapter 1)? How have farm size and tenure, and thus the main types of alleged land reform and substitutes, affected the well-being of the poor, farm and overall growth, and other goals (chapters 3–6)?

Increasing poor people's share of land rights, especially perhaps via land reform, can raise the poor's income in five ways: via farm labour, land, and enterprise; via non-farm activity; and through economy-wide effects on growth and distribution.

First, poor people depend on *labour* for most of their income.<sup>6</sup> For well understood reasons, small farms use more, often much more, labour per hectare than large ones (chapter 2). So more equal distribution of land, by shifting it into smaller farm units, raises the demand for labour,<sup>7</sup> and hence the poor's labour income.

Second, if lower-income people get to own a farm, they also enjoy income from *land* – whether they rent it out or whether, as is more usual, they use it for owner-farming. Land is the main productive asset, and a major source of income, for poorer groups in almost all the developing world. Own-account farming remains *the* main source of income for the poor in China<sup>8</sup> and (with very different social organisations) most of sub-Saharan Africa. To the extent that extra land cannot readily be brought into cultivation – and land of decent quality is increasingly scarce almost everywhere – only land reform can substantially raise the proportion of farmland in the hands of the poor.

Third, if the poor control farmland – whether by owning it or by renting it – they enjoy income from *farm enterprise*, i.e. from planning, managing, supervising and co-ordinating what is done on the farm. This can be achieved either by land reform to get land ownership to the poor, or by laws improving their access to tenancy.

Fourth, land reform tends to raise the poor's *non-farm* income (pp. 105–6). Small farms (and farmers with modest incomes) are likelier than large farms (and rich farmers) to use local and labour-intensive sources of supply for their farm inputs, farm processing requirements, and especially, as farm income rises, extra consumption (retail, transport, house improvement, etc.).

Finally, the poor gain from the *economy-wide* effects of land reform. Extreme inequality of assets, especially land, slows down growth, and therefore poverty reduction, in developing countries (pp. 106–10). Further, countries with extreme land inequality tend also to have extreme income inequality; that makes poverty reduction harder by skewing growth away from the poor, and by reducing their political influence.<sup>9</sup>

These five benefits for the poor accrue only if land reform is implemented, and even then cannot be taken for granted. Any or all can be drowned by disturbances, even civil wars, caused by land reform – or the wrong sort of reform. Apart from effects on equality, and (chapter 2) on efficiency and farm growth, land reform may affect environmental sustainability and income stability. Chapter 1 reviews whether such effects strengthen or swamp efficiency or equity gains from reform.

Land reform is not just an economic and social issue. What are property rights? Rights to do what? When, if ever, is it efficient or just for the State to override property rights? Has an owner the right to use farmland in ways that destroy its productive power, or leave it idle when her neighbour is hungry and seeks work? Does a true understanding of ‘liberty’ [Berlin 1958] give me the right to keep, and to use as I wish, all my farmland, however much and however acquired (if legally), limited only by the obligation to compensate you if my farm management directly harms you [Nozick 1974]? Or is my right limited also by your right to ‘positive liberty’, perhaps interpreted as a right to at least a little property to secure a decent life; to national defence that requires State control of some property; or, most broadly, to a distribution of income conducive to ‘happiness’ or even justice [Rawls 1971]? Is land different, in these respects, from other property? Are rights to property, or land, less if it is inherited than if it is bought with savings out of wages received for effort or skill? If some property is redistributed, who should pay: selected wealthy losers, such as big landowners; or, to finance their partial compensation, all the rich, or taxpayers as a whole? Is it justified to reduce or remove rights to property if it is in the hands of families that obtained it by colonial or other land grab, or otherwise by force or fraud? If the offence was last week, last year, last generation, last century? Chapter 1(b) (iii) addresses these issues of *property rights and property wrongs*, briefly and gingerly since they raise issues as deep as philosophy. Yet philosophy as well as political economy (on which this book concentrates) is crucial to the case for and against land reform, and to the passions it arouses. John Stuart Mill, the finest mind to have given sustained attention to land reform, approached it through both disciplines.<sup>10</sup> In exploring land reform today, we should learn from his example.

Land reform also raises issues as fresh as today’s newspaper. In September 2009, Zimbabwe – after 8 years of doing for land reform what Sweeney Todd, the Demon Barber of Fleet Street, did for men’s hairdressing – has a new government, likely to keep land reform but do it more rationally: what might work? How should one assess Venezuela’s and Bolivia’s newly mooted land reforms, seeking to change highly unequal, wasteful, racially tinged control of

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land; attacked by huge owners (and many media); but advanced with more passion than concern for efficient production and technical progress? Which of China's experiments in 'reform after the reform' is likely to work?<sup>11</sup> Globally, how should policy towards farm size change, as development proceeds? Might small farms best fit the conditions of poor countries but not rich ones, so governments should stimulate smallness in the former but largeness in the latter? Worldwide, rapid technical change and globalisation confront farmers with transformed processing and marketing arrangements, often impinging on production (as when supermarkets or exporters refuse to buy crops unless strict conditions, e.g. on pesticides, are monitored at farm level). Does this harm the competitiveness of small-scale farmers, and is land reform sensible in such circumstances?

One issue raised by land reform is both ancient and recent: the nature of liberalisation, more generally of liberalism, and most generally of reform (pp. 325–7). 'Reform' is a word used, among other things, to commend a legislative change. Around 1830–1975, 'reform' denoted major legislative change that – while as a rule increasing efficiency of outcomes – also made outcomes or opportunities more equal between rich (or more privileged) and poor (or less privileged) people: voting reform, educational reform, military officer selection reform, tax reform, even sanitary reform. Reforms to spread access to land fitted in naturally.

However, from the mid-1970s, 'reform' has been largely appropriated by advocates of liberalisation to denote market-freeing, deregulating, desubsidising, de-protecting, and privatising legislative changes that *reduced* equality of outcome (while still aiming, or claiming, to increase efficiency). Between 1975 and 1985–90, such reforms were incorporated into economy-wide programmes, removing barriers to trade, investment, finance, and market functioning. These programmes – whether home-grown or laid down as conditions for lending by the World Bank in 'structural adjustment programmes' (SAPs) – often increased efficiency, with some effect on economic growth. Yet in some countries the reforms, especially where they induced little growth, may have widened inequality<sup>12</sup> enough that many poor people became poorer in *absolute* terms.<sup>13</sup> From the mid-1980s, the World Bank increasingly sought to incorporate safeguards against this outcome into SAPs. Initially these safeguards tended to be sticking-plasters, aiding the old, ill, or others likeliest to be the walking wounded after a reform; but increasingly safety nets came to include groups of measures to increase the poor's *opportunity* to seize, without undue risk, chances opened by market-freeing reform. Into this group of opportunity-increasing reforms, some sorts of land reform might well fit. However, land reform has suffered from the widespread shift, in the name of liberalisation, in the use of 'reform' to cover efficiency-enhancing measures even if they tend to increase inequality.

'Liberalisation' usually involves a commitment to competition among producers, using their property rights to make and trade products in the confidence that the State will respect those rights. If *any* abridgement of property

rights is seen as distorting or manipulating competition, then land reform with any element of confiscation stands condemned, and State action to move land into smaller farm units is dubious unless confined to demonstrable improvements in the capacity of markets to create the most efficient land allocations through properly informed land rentals and sales. This war between land reform and liberalisation is bogus. Market liberalisation<sup>14</sup> is usually judged to require that cliché, the ‘level playing field’, and extreme land inequality can prevent that. Indeed, it can be argued that, far from impeding market liberalisation, appropriate land redistribution usually helps – and is sometimes essential – to make liberalisation pro-poor, growth-inducing, or even politically sustainable or feasible.<sup>15</sup>

### **(b) Structure of the book: land reform definitions, goals, efficiency, types – and death?**

Chapter 1 examines the goals of persons and groups involved in land reform: public authorities, affected persons, and outsiders, including analysts. ‘Objective’ goals of analysts or outsiders include two that we have identified as defining land reform: reduction of poverty and of gross inequality. But land reform may affect other policy goals. Apart from growth,<sup>16</sup> these include greater stability; sustainability, especially environmental, of income and output; and legitimacy of the reform process. Properly defined, these goals have been consistent with some land reforms, but not others. ‘Subjective’ goals are those of particular groups affected by the reform: not only big and small landowners, tenants and farmworkers, but also urban food buyers and employers, and governments, opposition parties, land lawyers, NGOs, and aid donors. Conflicts of interest mean that subjective goals are more likely to lead to conflicting positions, in regard to a particular land reform, than are objective goals. However, policymakers – if they so wish – can often reduce opposition to a land reform that is desirable on objective grounds, because all-round gains from it permit compensation of the losers, not necessarily by full payment for lost land rights, but partly (for example) by better public provision of roads or schools.

Chapter 2 explores the policy goal of increasing farm, non-farm and national growth and efficiency. How is farm output linked to farm size and land reform? This has little to do with average production costs on small and large farms: economies and diseconomies of scale in farm production are seldom present and, if present, are usually modest. But huge and tiny farms differ greatly in ‘transaction costs’ of engaging and supervising labour and capital equipment. On a given area of land, it is easier and cheaper for many small or family farms to find, screen, and supervise labour – but for one large, even corporate, farm to buy, use and hire capital equipment. In countries with plentiful labour and scarce capital, such as most developing countries, small farms’ advantage (via labour transaction costs) outweighs their disadvantage (via capital transaction costs), giving a net plus to smaller-scale, more equal operation of farmland. The prevailing ‘inverse relationship’ between farm size and average annual

output per hectare – especially if farmland is *very* unequal – swamps the positive relationship between farm size and average output per hour of work. Then, apart from any case for land reform to reduce poverty or inequality, there may be a pure efficiency or growth case for it.<sup>17</sup> However, the other side of the coin is that in developed countries more farm capital, and less labour, switches the transaction-cost advantages to bigger farms. As developing countries succeed, labour leaves the land, rural savings and investments grow, and optimal farm size rises. Also, the best farm size is likely to vary with a farmer's skills, product-mix, and non-farm activities – and with the development of farm-to-market arrangements, especially as supermarkets grow (section 2(f)(iii)). It seems desirable for farm size to be adaptable to these realities; might land reform freeze such adaptation? Further, if farmland were inefficiently distributed by size, would it not pay all parties to put this right without land reform, as owners sold or rented farmland to those able to get higher returns from it (section 2(g))?

We conclude, nevertheless, that redistributive land reform is good for output and growth in many developing rural areas, especially where farmland starts very unequal, and if (as almost always) land rental markets are imperfect. First, very unequal land distribution is often the result, not of farming or entrepreneurial ability, but of colonial, often racial, land grab and subsequent inheritance. Persistence of such ownership patterns means diversion of GDP to reward inheritors, away from incomes of non-landowners: a tax on incentives to labour and entrepreneurship inside and outside farming.<sup>18</sup> Second, shifting land to smaller farms raises labour use per hectare. Where there is widespread unemployment, reducing it is good in itself, and policies to cut farm size by land redistribution can slash unemployment.<sup>19</sup> Third, some benefits to growth from reducing land inequality arise, not at farm level (because of the 'inverse relationship'), but at the level of village or nation, as rural reform beneficiaries gain social independence, market access, and capacity to acquire skills.

Chapters 3–6 explore main types of land reform, assuming that its main goal is farmland-based reduction of gross, unearned inequality and hence of poverty. The 'five benefits' of land reform (p. 2) give it a rhetorical appeal that leads supporters to claim the name for many types of activity. Which types of so-called land reform are likely to reduce poverty and gross inequality? Which have done so in practice, or even proved feasible? The main types of alleged land reform, or substitutes to achieve its main goal, are:

- the paradigm: 'classic' land reform, leading to land transfers from big to small farms (chapter 3);
- laws to stop, restrict, register, enable or encourage tenancy, overall or for particular types (chapter 4 (a), (b));
- other tenurial rules, especially titling and patrilisation of land ownership or control (chapter 4 (c), (d));
- collectivisation into State, collective or co-operative farming (chapter 5a);
- decollectivisation (which may be land reform if resulting land ownership is if fairly equal: chapter 5(b));

- other alleged paths to the aims of land reform: consolidation, settlement, tax reform, etc. (chapter 6(a–d));
- new wave (decentralised, market-friendly and/or non-confiscatory) land reform (chapter 6(e)).

Probably not all of these can really be land reform. Restricting tenancy may well qualify in some conditions and enabling tenancy in others, but (almost certainly) not so collectivisation *and* decollectivisation. Some items listed, in some or all relevant circumstances,<sup>20</sup> fall under our definition of land reform; others complement it; others again are diversions from it, or even counter-reform. We show that ‘classic’ land reform – ceilings legislation and redistribution of above-ceiling landholdings to the farming poor – has spread much further, and with more success, than is widely believed. Classic reform, at least as an option, is also a precondition for the success of other reforms, including much tenancy reform. But can classic land reform be market-friendly or largely non-confiscatory?

In some circumstances, some other claimed types of land reform can complement, or simulate, classic reform, perhaps avoiding some of its problems or drawbacks. Some claimed reforms reverse or mitigate harm from earlier pseudo- or counter-reforms. However, others are counter-productive and none can replace classic land reform. Some so-called land reforms have not advanced the main goal (reducing poverty via reducing gross inequality), or have entailed large unanticipated costs to other, widely shared, policy goals. Such inconsistency between laws and goals happens for four main reasons.

- (1) Sometimes the supposed land reform is internally inconsistent, often due to loopholes inserted by lawmakers under pressure from large landowners.
- (2) Sometimes claimed land reforms set back the policy goals because they are not ‘incentive-compatible’. They induce responses – legal avoidance, or illegal but largely unstoppable evasion – such that reform and responses together do net harm to the main goal, or overriding harm to other goals. This is especially a risk with tenancy reform (chapter 4(b)). However, first, tenancy laws in the right context have proved incentive-compatible. Second, selective evasion or avoidance of some reforms – especially classic reform – itself advances the aims of reform (chapter 3(b) (vii)), though less than full implementation would have done.
- (3) Some sorts of land reform give so much power to State agents that the goal of putting control of land in the hands of the poor is subverted, and the reform abused to extract enforced surplus from rural people, including the poor. This has proved true of most agricultural collectivisation (chapter 4(a)).
- (4) Sometimes, land reform – of any type – is politically infeasible due to the balance of power, or because political and social costs of implementation far exceed benefits of reform.

Chapter 7 reviews in more detail the case for the alleged death of land reform. There are three arguments. First, land reform never lived: there has not been



much, except (usually counter-productively) in a few ‘revolutionary situations’; elsewhere land reform has been avoided or evaded, or temporary gainers have sold or lost their land. Second, land reform, while once alive, is dead now: the rural sector, or farming within it, has become less important; also, since the end of the cold war, the political forces backing or financing land reform have greatly weakened. Third, land reform, though still alive, should be killed off: liberalisation and ‘development’ have weakened the case for state intervention in farmland ownership, and have strengthened the case for larger farms. The three ‘death of land reform’ positions, while often run together, are inconsistent. Moreover, while each has some merit in some cases, all are hugely over-generalised by elision, rhetoric and persuasive definition.

### **(c) Land reform: past and future**

At least 1.5bn people today have some farmland as a result of land reform, and are less poor, or not poor, as a result. But huge, inefficient land inequalities remain, or have re-emerged, in many low-income countries. Land reform remains both ‘unfinished business’ [Walinsky 1977] and alive and well.<sup>21</sup>

Substantial future land reform remains likely and desirable. The global financial crisis of autumn 2008, with its gloomy message for long-run growth prospects, adds to the evidence that extreme, increasing (and increasingly visible), and in particular *unearned* inequality not only increases poverty but also, in the long run, undermines growth. This globally saps the already diminishing tolerance for such inequality [Hirschman and Rothschild 1973]. The foreclosed poor of US and European towns are less tolerant of the huge incomes, often self-certified rather than competitive or earned, of a failing financial sector. Similarly, as the prospect of escaping poverty into rapid non-farm growth dims, the landless poor in the still impoverished rural slums in much of the developing world are less tolerant of their richly landed masters. Redistribution of farm rights will continue.

How much, how fast, where, what sort of land reforms? This book is not by Nostradamus. It records, and draws conclusions from, past land reforms, but does not seek to predict their future in any detail. Clearly, the amount and nature of land reform depend on the degree of inequality in a country, the part comprised by inequality of land rights, the tolerance of the population for such inequality, and the capacity of the groups affected by land reform to organise for action. A few other determinants are listed, with little discussion; there is much analysis and evidence on each issue, but not about their impact on land reform.

- (1) Demography will shape the demand and need for land reform. Prolonged population growth means, each year, more births, who mostly enter the labour force 12–20 years later. Then fertility falls: child populations grow more slowly, but for 12–20 years the population of working age does not. This means more workers per dependent – a ‘window of opportunity’. It

closes again after 30–40 years as the proportion of retirement-age people rises. While open, the window gives opportunity only if productive work exists for the burgeoning population of young adults; otherwise the window looks out onto unemployment, distress migration and crime. In East Asia – largely because the extra young adults initially found work in equal (and hence labour-intensive), growing agricultures – the ‘window’ contributed about a third of growth in 1975–90. South and Central Asia have 15–20 years of ‘window’ left, and much of Africa – and parts of Latin America and West Asia – more like 20–40 years. Without less unequal – and in Africa much more dynamic – agricultures, what can these extra young adults do? Pressure for employment from growing young-adult populations, and the higher capital cost of off-farm jobs, is a huge, almost wholly unrecognised source of policy change.

- (2) The scope for land reform varies among areas.<sup>22</sup> Where big landowners own and farm hundreds or thousands of hectares – in much of rural Latin America, and parts of West Asia and North, East and Southern Africa – growth has proved less good at creating employment or reducing poverty than elsewhere; the case for more land reform is strong. In South Asia, still containing half the world’s poor, 10 ha is in most countries a large owned farm; there is scope for some further land reform, but land shortage and growing non-farm work opportunities may largely limit it to creating tiny ‘home gardens’ for increasingly part-time rural farmers. In China and Vietnam, post-decollectivisation, farm inequality *within localities* is small; the task is to build on this, with some rise in farm size where appropriate, without stimulating yet further rises in *regional* inequality. In most of sub-Saharan Africa, poverty reduction mandates top priority to providing attractive work and life chances in farming, and correcting decades of ‘premature de-agriculturalisation’ [Eastwood *et al.* 2006], by remedying prolonged gross underinvestment and unconcern, by governments and donors alike, for investment in rural and farm infrastructure and science, especially to reverse soil and water depletion and provide irrigation and rural roads. However, some areas of North, East and Southern Africa also feature extreme inequality of farmland. There too the case for land reform is strong.
- (3) The type (not just the scale) of land reform will depend on changing attitudes and power-structures in respect of gender rights and roles.
- (4) It will also depend, in Africa especially, on the (shrinking) availability of common land, and the (surprisingly high) resilience of customary tenure systems.
- (5) Almost everywhere, increasing water stress means that land reform must be integrated with water reforms, towards fair and sustainable access to farm water.
- (6) The economic affordability of compensation, and the political feasibility of cost-sharing rather than confiscation, will also determine the scope of future land reform, especially as donors increasingly recognise that a not-too-conflicted reform path can stimulate peaceful overall economic development.

And yet ... 'Can honour set to a leg? No. Or an arm? No. Or take away the grief of a wound? No. Honour hath no skill in surgery then? No. What is honour? A word. What is in that word honour? I'll none of it', says Falstaff. It is tempting to question land reform and land equity similarly. The poor need technology and rural infrastructure, to provide labour-income and affordable food. 'Can land reform provide fertilisers, improved seeds or water control, to bring more food and labour-income? Will land reform make food and labour-income more secure, by avoiding drought, insects and plant diseases through irrigation and pest management? I'll none of it.' However, this dichotomy between agrotechnical progress and land reform is not quite right, any more than Falstaff's dichotomy between honour and good actions. First, not only actions but also abstractions, such as honour and land equity, may be good in themselves. Second, just as honour often induces right action in business or battle, so a degree of land equity often induces it in relation to farm infrastructure and science. In mainly farming societies with land very unequal, the poor depend for security of life on the rich; and the rich live well from huge land areas, worked for a pittance by labour compelled to serf-like loyalty because it has neither voice nor exit options. Modernity, which inevitably accompanies major injections of science and infrastructure, challenges the feudal dominance of the rich, and has unpredictable effects on the floor-level security of the poor. With very unequal land, there is often too little demand to induce radically improved rural infrastructure and farm science.

In the past century, land reform has played a massive, central role in the time-paths of rural and national poverty, progress, freedom, conflict and suffering. For the next half-century at least, where agriculture continues central to the lives of the poor, the role of land reform will not decline. Indeed, growing populations, scarcer land, and the low and falling employment-intensity of non-farm growth may well increase pressures for, and resistance to, land reform. This carries the potential for severe land conflicts and frustrated rural and national growth. Yet well conceived land reform has often been shown to permit huge gains, in terms of liberty and peace as well as growth and reduced inequality and poverty. 'New-wave land reform' cannot magically dissolve the conflicts and costs around getting land to the poor. However, land reform can become more favourable to the lives of the poor, and less conflict-ridden, if it relies on analysis and evidence, not rhetoric and ideology. This book seeks to contribute modestly to that process.

# 1 Goals

## (a) What goals? Whose? What policy implications?

The main goal of land reform's supporters is to reduce gross inequality of rural land rights, and thus to cut poverty. Much genuine land reform has happened, and has achieved this goal, in developing countries. Some is still happening, though often in new forms, but why not more? The obvious reply: because big landowners lose from land reform and can sometimes stop it. However, much land reform also enhances farm output (chapter 2). Extra output means, in principle, that land gainers can still gain, even though land losers are compensated to the extent politically or morally necessary or desirable.<sup>1</sup> Extra output also makes it easier for the State to borrow, or tax, to provide public-goods infrastructure for reform beneficiaries. Why, then, has not much more land reform happened?

The usual answer is resistance by, and power of, self-interested groups. First, big landowners usually want to resist, because they doubt that they will be properly compensated for full land value, which may include leverage in other markets (for credit, work or crops) and local political power. Second, big landowners usually *can* resist. They are well connected to the power élite, including the judiciary. They can also organise more readily than can potential land recipients. Each of a few dozen huge owners, paying a subscription to support a pressure group, can check that colleagues do the same. Each of many thousand potential land recipients cannot [Olson 1971]. Also, the rural poor often have cause to fear sanctions from big landowners if they agitate for land reform. Third, it is 'seemingly ubiquitous' [Novemsky and Kahneman 2005] that people are readier to invest time, money and effort in avoiding a loss than in securing an equivalent gain.<sup>2</sup> Fourth, powerful people other than landowners may feel threatened by land reform. The urban rich may fear that, if it succeeds, their own interests will be challenged next. Poor urban food buyers may fear that smaller farmers will eat their product, rather than supplying it cheaply the cities.

However, these explanations do not suffice. The rural poor are a big, and (despite the difficulties) in many countries increasingly organised, interest group. It is in the interest of other groups to accommodate them peacefully.

The cost to others of peaceful, well considered land reform can be contained, or compensated to some extent, and is less than the cost of rural unrest.

If self-interested group opposition to land reform is to explain why much more has not happened, there needs to be intellectual backing to convince neutrals, in and out of power. This backing is the argument that land reform will harm other key goals, on which objective persons largely agree. Even if land reform cuts rural inequality, will it address poverty, in particular manifestations (female poverty, ethnic poverty and so on) or generally? Even if so, is land reform the best *way* to attack poverty? If so, will there be grave cost to another goal: liberty, and (arguably part of that) respect for legitimate property rights? Will land reform harm output, efficiency or growth, perhaps because large farms are more efficient or dynamic than small ones?<sup>3</sup> Does land reform threaten environmental sustainability, or economic stability? It is the belief that land reform will harm largely shared *goals* that allows its opponents to plead not self-interest but virtue; puts reformers in the opposite position; and makes it harder to persuade neutrals. This chapter identifies the goals themselves, and the channels through which land reform may affect them.

Each group – big landowners, rural land-hungry, urban food buyers, politicians – has goals. Often they are self-interested, but there is considerable consensus for personal freedom, growth, ‘just’ asset distribution, stability and sustainability. Big disagreements remain, not only about trade-offs among goals<sup>4</sup> but also about defining goals: big landowners and the landless differ about what is a just land distribution. Also, even if a goal is agreed, most people would prefer others to pay for it. Nevertheless, progress in land reform is likelier if we define people’s policy goals, and assess how land reforms affect them.

### *(i) Goals, groups, coalitions, procedures, aims and programmes*

A land reform itself has no goals: people do. People try to improve their score of *final goals*, which in economic matters are more,<sup>5</sup> stabler, and more sustainable income, assets, leisure and independence. To achieve such goals, people seek *intermediate aims*, e.g. to implement, defeat, or change a proposed land reform. An opponent may switch to neutrality or support of an intermediate aim, if she becomes convinced that continued opposition is not worth its costs – e.g. that it is too costly, time-consuming or risky to fight a land reform, given the prospect of success vis-à-vis failure, and the implications of each for final goals. A landowner may be persuaded that achieving his intermediate aim, of preventing a land reform, would impede the growth of local markets for processing facilities that he owned, and would therefore harm, not help, a final goal (income). Or he might decide that offsetting gains – compensation for land lost, better farm prices, reduced risk of revolution – would be more, or more reliable, than he had believed.

When seeking their goals via an intermediate aim such as a land reform, people usually cannot achieve much except as a *group*: a kin network, landowners’ association, farmworkers’ union or political party. A group pursues a

*programme*: a set of intermediate aims, selected and weighted by compromise from the individual wishes of its members, seeking to achieve members' goals. A group that jointly pursues a programme is called a *coalition*. The goals of those seeking a particular land reform, to the extent that they are achieved, advance the programme of one or more coalitions, but may damage the programme of others. Opponents of a proposed land reform may turn into supporters, if they become convinced that, as implemented, the reform will after all advance their programme; or that costs of opposing the reform, or benefits from being seen to support it, will exceed the gains of preventing or modifying it.

As coalitions argue with each other about land reform, each seeks to detach members from other coalitions to support its own programme, even at the cost of amending it. The objective is to build a larger coalition, strong enough to get its way. This usually means accepting amendments that leave some members of the original coalition feeling that they might now better achieve their individual aims by defecting to rival coalitions (hence no debate about a land reform is over till the fat lady sings). The process can involve a wide range of *procedures* by which members of coalitions are attracted, removed, or frightened off: common tactics include meetings, marches, boycotts, bullets, bribes, new evidence, debates in parliament and even in professional journals, and sometimes all of the above.

***(ii) Goals, power, options, procedures: outsiders, interested parties, governments***

We need to distinguish the actions and influences of three types of person: 'disinterested' outside observers; members and officials of governments and their agencies; and people with direct or indirect interests in the amount and terms of land transfer. These three may differ in goals, intermediate aims, types and structures of power, options for (and gains and losses from) coalition-formation, and therefore procedures.

Disinterested outside observers (hereafter called '*outsiders*') comprise those academics, policy analysts, journalists, etc. who seek, or are paid, to tell things as they are. Sometimes outsiders are incompetent or prejudiced: they are no more angelic than anyone else. But their rewards, professional rules, or preferences normally lead them to analyse, and if appropriate support or oppose, a land reform on grounds of what they believe is its impact on well-being. Their concern is with the likely effects, in their view, of the reform on the following goals: income, status or power for the poor; fewer gross or unearned inequalities; growth; sustainability; and stability. Their procedure is to explore those effects; (sometimes) to consult people affected by the reform; and to publish and reason. Ideally outsiders do consult, and their findings depend on evidence and analysis based on law, economics, other social sciences, agronomy or moral philosophy, rather than on hunch, prejudice or anecdote.

*Governments* are legitimate to the extent that they are widely accepted as acting in a national interest, and can be changed if a legitimising body, such

as a majority of adults or a parliament representing them, so wishes. Government agencies' concerns are sometimes assumed to be the same as those of outsiders; both speak of land reforms as being likely, or unlikely, to achieve poverty reduction, efficiency, etc. However, it did not need public-choice theory (chapter 7(b) (viii)) to discredit the view of the State as a benevolent despot, or a Platonic (or Fabian) guardian. Politicians and administrators, while often driven by a vision (or dogma) of the public good, also seek other goals: at worst, self-enrichment, patronage, or revenge; often, political stability, which may mean avoiding civil war or revolution, or just staying in office. In extreme cases – not only 'failed states' but also kleptocratic or avenging governments – neither land reform nor other policy advice has much point: outsiders can at best seek benevolent 'policy-proof' interventions (Vernon Ruttan's term): perhaps, sometimes, improved crop seeds, health care, or training inputs delivered via a non-governmental organisation.

*Interested parties* are who those directly or indirectly gain or lose from a land reform. *Directly affected* are those among whom land rights are transferred: in classic land reform, big farmers, and small farmers or workers who receive land; in decollectivisation, State and collective farm managers and those who receive land; in tenancy reform, landlords and tenants. All these seek more land for themselves or their community, or more compensation for lost land. Sometimes, they use the reform to try and improve the legal or customary terms on which they relate to other land users: workers, owners, tenants. *Indirectly affected* are rural workers who neither gain nor lose land, but whose employment or wage-rates change due to land reform; and consumers, especially the poorer<sup>6</sup> urban and rural non-farmers, if land reform affects the levels (or fluctuations) in prices or availability of farm products, especially the main staple food.

The land-reform goals of governments can overlap with those of interested persons or outsiders. Governments improve their chances of keeping power if their land legislation secures or improves the land rights of many rural people, or helps to increase farm output, thereby providing resources to compensate losers from the legislation. Thus or otherwise, the land legislation can secure wide support, without sufficiently inducing enough powerful 'losers' to act effectively against the legislators. This is tightrope-walking, but has been done quite often,<sup>7</sup> with governments selecting land legislation that most affected people will support, or at least tolerate. To outsiders, land policies that increase farm output and reduce gross inequalities in land distribution are normally desirable,<sup>8</sup> and the evidence on the 'inverse relationship' (chapter 2) suggests that these two goals can be achieved by much the same set of land reforms. Such policies leave governments more popular, with (in the long run) a broader tax base, and better able to afford to buy off, overcome, or anticipate opponents. Hence many affected people will support such policies beforehand, and feel benefit afterwards. So *why* isn't there much more land reform? Why don't governments get on with land policies that meet welfare goals, confident that, if implemented, they will satisfy interested parties too?

We have suggested an answer: big landowners, able to organise, often do not believe that compensation, plus reduced risk of land invasions or other violence, will offset the reform's costs to them. But why? These landowners – especially where the present land dispensation is very unequal, based largely on inheritance, racial or tribal, or all of the above – have reason to believe that most people do not accept their *right* to much of their land. If so, they will expect that compensation, even if promised, will not be paid, or will be inflated away. They may also fear that one reform, far from making them safe, would strengthen the pressure for more. If such landowners are powerful, they may be able to block reform. Also, urban pressure groups may have a strong motivation for derailing land reform, and much power to do so. They often fear (though this seldom happens in the long run: chapter 2(h) (iv)) that land redistribution will reduce food sales to urban areas, lowering the purchasing power of wages, and raising the pressure on employers to pay more. Even neutral urban attitudes damage reform; if the urban rich refuse to pay any part of its costs, the rural rich will not believe in compensation, and will be less disposed to accept any reform.

Outsiders can sometimes achieve much, if they believe – and can persuade others – that a land reform will achieve widely acceptable goals. However, usually the power of the opponents of reform needs to be reduced too. J. S. Mill's devastating analyses of the effects of Irish land tenure advanced its radical reform, but this also required that Irish landlords were politically marginalised in England in 1850–1910 [Mill 1848–71: 324–36; Ensor 1936: 73–74, 92, 187, 358–59, 450–51; Hollander 1985: 847–54]. Outsiders matter, but are seldom decisive (or as influential as Keynes and others asserted<sup>9</sup>) if opposed by the State and many powerful and wealthy private persons. This is likely in the case of many land reforms.

The *procedures* of outsiders, governments and interested parties differ as they seek to affect land reform. Outsiders publish and persuade. Governments legislate and implement, or do nothing. Interested parties mobilise and lobby, threaten and cajole, or boycott<sup>10</sup> and strike. Because of these different procedures, we separate the analysis of how outsiders, governments (including donors) and their agencies, and interested parties seek to influence or modify land reforms. This discussion first concentrates on outsiders' goals because, if they do their job well, they establish standards for evaluating arguments advanced by others.<sup>11</sup> We then review goals of governments, and of groups expecting to gain or lose from land reform.

Outsiders evaluate land reform, in general or in a particular case, by reference to its likely effects in advancing or retarding (1) a more just distribution of income, power or status, and (2) reduced poverty. Also important – though seldom the main aim of its supporters or opponents – is (3) improved efficiency or faster growth (chapter 2). Outsiders are also concerned with how land reform affects (4) agricultural sustainability and (5) stability of farm income and output: these are seldom specified as goals by land reform advocates, yet few – and hardly any outsiders – would welcome a reform that badly destabilised



farm incomes or made them less sustainable, even if it advanced the other three goals. So outsiders should predict the impact of a land reform on all five goals. For most people, too, (6) increased freedom of choice is a further aim of policy, to which a land reform should contribute.<sup>12</sup> Land reform has most impact on these six goals in rural areas, but that is not the whole story. A land reform that improved intra-rural income distribution and poverty might be inadvisable if the side-effects involved substantial income transfers from rural people, or the urban poor, to the urban not-so-poor.

We next ask if plausible land reforms are likely to advance outsiders' 'objective goals' (deferring goal (3) to the next chapter). Next, we consider two goals of governments in doing land reform, and of some donors in supporting it: mobilising agricultural surpluses, and avoiding political violence. Then we ask: what do rural people themselves want from land reform, and can it achieve *their* goals?<sup>13</sup> The task is to discover what sort of land reform, if any, is indicated to meet people's goals, and to devise policies to achieve it.

## **(b) The main goal – reducing poverty and gross inequality: links to liberty**

### ***(i) Specific forms of poverty and inequality***

Outsiders, if they support a land reform, usually do so mainly because of its supposed contribution to the goals of reducing poverty and/or inequality. Suitable indicators would vary with particular situations, but might include, for example, the extent to which a reform cut poverty among rural households below the poverty line,<sup>14</sup> and inequality between the poorest and the richest fifth. However, reformers are often concerned to reduce poverty and/or inequality of status, not just overall, but in specific forms. 'Horizontal inequalities' [Stewart and Langer 2006; Stewart 2008] usually mean the concentration of poverty upon women; people of a particular tribe, ethnic group or caste; inhabitants of a region, especially people in remote areas; workers in particular stigmatised activities, or economic sectors, such as the rural sector; or households of a particular type or structure, e.g. with several small children and only one earning adult. Before asking how land reform affects overall poverty and inequality, we look at its effect on horizontal inequalities, and hence on 'poverties' specific to groups, such as women, the rural, or the remote.

**I. Gender** Although in most developing countries women or female-headed households are no likelier to suffer income poverty, they are likelier to be illiterate, to be casual workers if employed, to be politically weak or inactive, and to own few assets – and hence to be more *vulnerable* to sharp movements into (and out of) poverty [Lipton and Ravallion 1995]. These facts reflect, and help to perpetuate, power-structures and cultures (including interpretations of religious texts) sanctioning male dominance over land, historically the most important productive asset.

Religious and other traditional groups sometimes press successfully for laws – even constitutions – giving preference to sons over daughters, or otherwise discriminating against women, as inheritors of land. Even where land law is gender-neutral, or explicitly forbids discrimination, custom and practice are often biased against land inheritance by daughters.

Agrawal [1994] makes a strong case for specifying, organising for, and implementing gender-neutral land inheritance laws. Such laws are just – and efficient. It cannot be wise or just to ‘disqualify’ good farmers because they are women and so do not inherit land; because it is harder for women to get rights over farmland, an extra female farmer, other things equal, produces more income than an extra male farmer. There has long been evidence that women tend to have higher land productivity than men [e.g. Udry *et al.* 1995 for Burkina] – partly because of smaller holdings, but mainly because social factors ‘screen out’ efficient women from farming, in favour of less efficient men, otherwise similar in relevant respects. Further, even the same amount of extra income is likelier to be used to improve child nutrition, and to reduce vulnerability, if it is in the hands of women [Quisumbing and Maluccio 1999]. Yet land law and custom penalise women not only as daughters at the time of inheritance, but also on death of the spouse. Widows’, as well as daughters’, land rights usually take second place in practice to those of sons. Women are far more numerous than men among over-60s in developing countries; weak claims on land render poor rural widows especially precarious [Drèze 1990; Chen and Drèze 1992; Potash (ed.) 1986].

In many countries, better, more predictable legislation and enforcement have reduced aspects of gender discrimination. However, land injustice to women – and resulting vulnerability and inefficiency – are often culturally (and even religiously) deep-rooted, and highly localised. Practical law enforcement usually bends to such powerful, yet diffused, winds. Deere [1985] showed that, by designating ‘households’ as beneficiaries, most distributivist reforms in Latin America have all too passively adapted to the cultural model in which male household ‘heads’ inherit land; and that collectivist land policies have got land to women only in those rare cases where governments identified and carried through this specific goal.

If deep cultural mind-sets, implanted and implemented in thousands of villages, perpetuate female landlessness, then gender-neutral but necessarily central land laws or reforms may be an unpromising area of concentration for outsiders seeking to reduce gender bias or female poverty. Carter [2003] summarises the evidence that land arrangements shifting control to women will, in general, increase total efficiency and well-being through both routes identified by Deere and Leon [2001]: empowering women and raising their access to economic resources overall. However, land reform and ‘gender reform’ are hard enough to achieve separately. Does it help to combine them, and to fight (but also to unite) those who oppose both sorts of reform? It is a matter for case-by-case judgement. As a rule it seems unlikely. However, in

Maharashtra and Kerala, which amended the Hindu Succession Act in 1994, daughter's shares in and land inheritance improved much faster than in other Indian states [Deiningner and Goyal 2009].

**II. Rurality.** A further systematic aspect of Third World poverty is its rural concentration. Rural poverty, illiteracy and infant mortality are commonly 25–50 per cent above urban. These and other disparities have not generally been shrinking [Lipton 1977; World Bank 1990: 31; Eastwood and Lipton 2000]. Land reform concentrates on *poverty* where it is worst. In rural areas, but does not as such cut rural–urban *inequality*. To do so, it needs to be fairly financed by those best able to pay: the urban and rural rich, not the rural almost-poor, the urban poor, or even the rural rich alone. Nor is it fair or economically sensible to exempt urban or peri-urban agricultural and horticultural land from reform.

**III. Remoteness.** There may not be a good case for concentrating land reform efforts on women or rural areas, despite horizontal inequalities harming both. What about concentrating on the remotest areas? Poverty tends to be highest there [Bardhan 1973; Dasgupta 1977], suggesting concentration of land reformers' efforts to reduce it.<sup>15</sup> However, first, land is usually less valuable (and its yield is more vulnerable) in remote areas than in other, usually better endowed, rural regions of the same country. Therefore a little farmland in a semi-arid or upland region, if acquired by the poor after a land reform, may not reduce the risk of poverty much; in an irrigated delta, even a tiny parcel does [Lipton 1985]. Second, both farmland and rural income are less unequal in remote areas than in more commercialised, developed regions [Dasgupta 1977], again leaving less for land reform to bite on. Third, in much of the world, remote and little-developed lands are held in communal tenure, which is often less clearly amenable to reform (chapter 4(c)).

**IV. Family structure.** About one-third of the incidence of poverty [World Bank 1990: 35], and a significant part of most indicators of inequality, is associated with fluctuations across the life-cycle. For example, families tend to be poorest a few years after couple formation, before inheritance but with several small children and perhaps only one earner. In 'correcting' overall inequality, therefore, land reform could in theory create new injustices, for example by taking too much land from 'big' farms held by old people who – though now comfortably off – had already suffered through a period of poverty, owning little or no farmland, in the early years of their marriage. Also, careless land reform might disrupt an 'agricultural ladder' [Spillman 1916] in which life-cycle advancement, and accumulation of skills or capital, take rural people from hired labour in youth, perhaps

via a period of tenancy or of handover of parental lands, into owner-farming of progressively larger units in old age. To move farmland, by compulsion, from the 'big' holdings of old people who were poor in their youth, to increase the 'small' holdings of young people who will anyway inherit land when they are older, might disrupt this alleged ladder to efficient agricultural growth, yet *increase* inequity (and inequality) over the life-span.

In practice, since most land reforms do not seek to create anything like total equality (or to mulct the middle groups of the landed), these risks are small. Perhaps the extremely egalitarian decollectivisations of China or Vietnam, which aimed at absolutely equal land-values per person, did proceed inequitably against some poor women, old people, or households with very few non-land sources of income. This is an argument for keeping land redistribution within bounds: for seeking a large reduction in great inequalities of land rights (especially unearned, inherited rights), but not total equalisation.

**V. Tribe, caste and ethnic group.** Those in scheduled castes and tribes (and some minority religions) in South Asia, local minority tribes and ethnic groups in Africa, and *indigenos* ('Indians') in Latin America are much likelier than others to live in rural areas and to depend on agriculture for much of their livelihood. Yet they are also much less likely to have secure claims on owned (or in many cases even rented) farmland. Each fact alone would help explain the persistent poverty and exclusion of these groups; the two facts together make matters worse. Poorer tribes, castes and ethnic groups concentrate in activities and areas where advancement depends largely on access to land – yet are denied it, in three main ways.

- Having poor parents, and therefore few and low legacies. *Harijan* (ex-untouchable) castes in India were for generations confined to menial labour as farmworkers or in 'polluted' tasks. So they seldom acquired either land to bequeath, or schooling which could have allowed them to build up earnings and buy land.
- Location in fringe areas where land is especially bad, scarce, or of low value because remote. In much of Latin America, rural *indigenos* were driven to the mountain fringes by the Spanish and Portuguese colonists, and to some extent remain there. In Asia and Africa too, though less systematically, minority groups also tend to live in fringe rural areas, especially hillier ones.
- Exclusion from communal tenure. In much of Africa, customary laws prevent alienation of communal land to minority, non-local or outsider groups [Noronha 1985].

Solutions based on gearing land reform towards these disadvantaged groups, rather than towards the rural landless or poor as a whole, seem appropriate only in the first of these three cases. Though Evo Morales's presidency in

Bolivia may prove different, Latin America's land reforms have done little for the *indigenos*; a standard work on policies to reduce their poverty [Psacharopoulos and Patrinos 1994] does not even mention land reform. In Africa, apart from post-colonial reforms to move land towards African farmers, land reform was largely concentrated on shifts of control *within* tribes and other local groups. However, in India, land reform rhetoric and targeting – and to some extent implementation – has stressed the redressing of past discrimination against scheduled castes and tribes, by means of instructions and guidance that sought to give them priority claims on reformed land. Yet land reform has been a minor component in the Indian authorities' courageous, though controversial, efforts to advance these groups through reverse discrimination; preferences in education and public employment are far more important.

**VI. Nutritionally deprived groups.** Poverty in developing countries is closely linked to nutritional deprivation. Indeed, the poverty line is often *defined* as the level of consumption or income, per equivalent adult, below which it is the expectation that a household (with typical spending patterns) will not meet dietary energy requirements; India's poverty measurement since the 1970s has been largely based on this 'food-energy method' [Lipton and Ravallion 1995].<sup>16</sup> Iron, zinc and vitamin deficiencies are also much more common among the poor. Poverty apart, it is under-fives who are likeliest to be malnourished; and, if malnourished, to suffer serious, even irreversible consequences, even death. Linking these facts, it is poor households that contain the largest proportion of under-fives, absolutely and relatively to working adults [Lipton 1998; Eastwood and Lipton 2001]. But, apart from the poverty and demographic correlates of undernutrition, does land deprivation help to cause it? Might some forms of land reform help to reduce it?

Thirty years ago, Indian rural undernutrition was commoner for the landless than the landed, even with comparable income and demographics [Mitra 1978]. In Bangladesh in the 1990s, lack of a home garden (plot of land, normally totalling well below 0.1 ha, near the house or hut) more than doubled a household's risk that children would suffer serious symptoms of vitamin A deficiency. Being poor and having no home garden had similar effects on children's risk of symptoms. 'The highest intake of vitamin A was associated with home gardens divided into several scattered plots [though] cultivated by the poorest families.' Evidence from elsewhere confirms that even tiny plots accompany less undernutrition, given poverty and household size and structure [Mitchell and Hanstad 2004].

Causal links are complex and may run both ways. However, it is at least plausible that – for groups among the poor known to be at special risk for child calorie and vitamin deprivation – such risk is reduced by even a tiny patch of land, especially near the home and supplemented with home labour, water and waste. Home gardens' special value to undernourished groups

probably derives less from their contribution to food diversity (the poorest cannot afford to eat mangoes even if they grow them) than from their role as an emergency reserve of potential income, either as staples or as high-value items for sale.

**(ii) Overall land-based poverty and inequality**

It is an incomplete argument for a proposed land reform that it is a good way to advance the lot of this or that needy group: the undernourished, women, the remote, etc. The measure might so harm other needy groups as to worsen *overall* poverty and/or inequality. These must be reduced, for specific land legislation to count as a land reform. This raises three groups of issues.

- I. Why attack poverty and inequality? Is the particular State (India, Bihar, the Democratic Republic of Congo...) a credible attacker? If so, why through *asset* redistribution? If through assets, why single out land? If one does, is land reform the best way to go about it?
- II. Will a land reform self-destruct, even if it reduces farm poverty by reducing asset inequality, because the reductions are reversed by other effects of reform: rises in farm-non-farm or other sorts of inequality; rises in poverty due to reduced efficiency or growth; or the reversal of land redistribution itself by landowner violence, political reaction or land reconcentration as beneficiaries are driven to distress sales?
- III. Do hidden goals of governments or implementing agencies, such as settlement (chapter 6(b)) or patrilisation (chapter 4(d)), impede or displace a land reform's overt goals of equalisation and poverty reduction?

**I. Why attack poverty and inequality via land reform?** Unless poverty is voluntary, the case for reducing it is self-evident logically, historically and morally. The case for reducing inequality is much more disputed, but almost nobody would defend, as good in itself or conducive to economic progress, the huge inequalities of unearned, inherited opportunity underlying distributions of income, assets and farmland in (say) Latin America, West Asia, or much of Southern and Eastern Africa. If there are to be efforts to reduce poverty or inequality, should the State lead them? Few would prefer that they were corrected, not by legislative process through a legitimate State, but by revolution or civil war (including class war). Those violent alternatives have faced States run by groups so self-interested, incompetent, unaccountable or resourceless that they will not or cannot seek to reduce poverty or inequality, by land reform or otherwise.

While no State is run by angels, these are extreme, sad cases. Should more typical States operate 'by land reform or otherwise'? There are less controversial ways to reduce poverty and extreme inequality. In 1955–90, more

and more low-income countries provided or supported, for the poor, at least basic primary education and health care (already bought or insured by the better-off). Employment on public works, small-enterprise start-up assistance, social protection, and some tax progressivity are also found in a wide range of developing countries and political systems. Efforts by some donors and ideologues in the 1990s to squeeze out such State action have damaged the poor and tarnished the cause of liberalisation, but are in retreat. Poverty incidence has fallen sharply in Asia since 1970, and substantially in Latin America; arguably the fall has been most dramatic in the wake of equal land redistribution to individual households, in China and Vietnam. However, there as elsewhere, the ‘green revolution’, by raising demand for labour and supply of staple food, has been the most powerful weapon of poverty reduction. As for inequality, while in China and Vietnam it was held back by near-equal farms, it later exploded during industrialisation – and has risen sharply in most countries, land-reforming or not [Cornia 2004]. So what is the case for farmland redistribution as a *main* weapon against poverty or inequality, even in the many low- and middle-income countries where farming is a large part of output, income or employment?

Poverty and affluence (and hence inequality) are of two types: ascribed, mainly by inheritance, and achieved by work, skill or saving. Achievement to some extent reflects differences in effort, savings, and offering what is in demand; some achieved inequality rewards these and helps economic growth. Ascribed inequality, however, largely reflects luck. The more of a country’s income accrues by ascription, including inheritance, the less is available as income to reward, or to incentivise, those who meet consumer demand through their work, skill or enterprise. A large part of assets is inherited, and income from such assets is clearly ascribed rather than achieved. Hence asset inequality is more clearly growth-inhibiting than income inequality. The latter is growth-inhibiting in developing countries, where much of it is ascribed or related to inherited assets – but less so, if at all, in developed countries, where income inequality is much more due to the structure of earnings and non-inherited assets (chapter 2(h) (iii)).

Land is an especially suitable asset to try and get distributed more equally in developing countries, because it is particularly likely to be ascribed rather than earned. Inheritance and inter-family marriage are the main means of accumulating land in Middle Eastern countries [el-Ghonemy 2003]. Reducing farmland inequality is also especially likely to be effective against poverty, for several reasons. First, it addresses vulnerability, a main cause (and curse) of rural poverty: extreme land inequality leaves the poor and near-poor with little or nothing to mortgage or sell in bad years, so they are vulnerable to slipping into (or deeper into) poverty. Second, land – unlike, say, financial assets – can be combined with the poor’s main resource, labour, helping them work their way out of poverty. Third, the great majority of the world’s dollar-poor, probably well over two-thirds, have some experience of how to manage farmland. Fourth, despite that, it is often the poor, especially

in densely populated countries that have not had comprehensive land reform, for whom land comprises a particularly low proportion of assets: in India in 1991–92, for the poorest 7.5 per cent of households, only 18 per cent of asset value comprised land, steadily rising to 73 per cent for the richest 14 per cent of households [Subramanian and Jayaraj 2006]. Fourth, land reform can turn land into a much more important asset for the poor; even in Ethiopia – where land reform was partial, violent and a ‘terrible detour’ – by the early 2000s land inequality (Gini coefficient) was ‘much lower than for total wealth and all other asset sub-categories’, and poor households’ larger share of assets in land reduced the uncertainty to which they were exposed [Rogg 2006].

Might other methods than land reform, or only some of the things *called* land reform, be suitable means to make farmland more equal and poverty-reducing? There is evidence that tenancy markets have been redistributive, probably more so than formal land redistribution in several countries, including China and Ethiopia since the mid-1990s and India from the mid-1980s [Singh 1990; Mani and Gandhi 1994; Deininger and Jin 2005, 2006]. This is one of several reasons why tenancy restriction is seldom land reform (chapter 4(b) (iii)). However, a precondition for tenancy to cause much equalisation – or, perhaps, much poverty reduction – may be classical land reform, or some other way of reducing the economic and other power of rural Big Men. Chapter 4(b) explores the alternatives.

## **II. Will land reform self-destruct as a weapon against inequality or poverty?**

Land reform reduces inequality between big landowners and recipients, who (unless selection is extremely inefficient or corrupt) heavily over-represent the landless or near-landless. Poverty is common among such beneficiaries and rare among land losers. Nevertheless, land reform might fail against poverty or inequality, if there were more-than-offsetting losses by poor or near-poor people among farm labourers who received no land; among rural non-farm labourers or micro-enterprises; or among the urban poor.

Genuine land redistribution, almost by necessity, raises farmers’ demand for labour – even hired labour – and reduces beneficiaries’ supply of labour to the market. That improves wage incomes for hired labourers, even if they get no land; if they do, the supply price of their hired labour also rise, because their new land gives them new opportunities other than hiring out their labour. Some notorious perversions of land reform have succeeded in impoverishing groups of farmworkers, by excluding some nationalities or ethnic groups from receiving reform land; passing alleged reform land to large, capital-intensive farmers as political payoff; and/or violence, chaos or incompetence in the reform process, or in actions to stimulate private or public support services. All these are exemplified by Zimbabwe’s 2003–08 land policies.



However, land reform normally reduces poverty among farm labourers even if they receive no land. As for the rural non-farm poor, they gain because smaller farms both generate more income (and hence demand) per hectare of farmland than big ones, and are likelier to use that income for local, labour-intensive non-farm purchases (chapter 2 n. 106). As for urban people – poor and non-poor – they are weakened *relative to the rural poor* by land reform, but urban labour, containing most of the urban poor, is strengthened relative to the non-poor because land reform raises aggregate demand for labour. So it is unlikely that even a half-serious land reform would harm poor non-beneficiaries, let alone do enough harm to outweigh the poverty and inequality gains of beneficiaries.

Might land reform, while redistributing income towards the poor, harm them by reducing efficiency or growth, inside or outside the farm sector? Chapter 2 shows that in poor countries, with ample labour but scarce savings and capital, smaller farms generally make *more* socially efficient use of resources, with benefits to farm output and economic growth – strengthening the medium-term gains to the poor from redistribution. Nevertheless, short-run costs of change and disruption from land reforms are possible. Given the level of administrative integrity and skill, the more radically a land reform redistributes land to poor rural households, the greater are both redistributive poverty reduction and the risks of output loss through disruption, including conflict. However, for genuinely distributive reforms, whether moderate or radical, even temporary output loss has seldom *outweighed* distributive gain, leaving the poor worse off.

Land reform might self-destruct, finally, because redistribution is reversed by landowner violence, political reaction, or land reconcentration as beneficiaries are driven to distress sales. Some of the most discussed examples, however, turn out to be nothing of the sort. In China, after radical egalitarian privatisation under the household responsibility system (1977–84), and despite rapid modernisation and pressure for larger units (and for dispossession of small farmers for industrial purposes), ‘the distribution of [farm] land appears to have become more equal between 1988 and 1995 [Ginis and concentration ratios, two standard measures of inequality, declined]. In 1995 income from farming [had] an equalising effect on income as a whole’ [Griffin *et al.* 2001]. In Chile, decollectivisation under Pinochet returned some reform land to big farmers, but left most of it with poor households (p. 212). As for distress sales, it is weird to blame these on land reform. By definition, distress drives such sales and more land does not increase distress. ‘In risky environments distress sales will occur, with consequent negative impacts on livelihoods. [T]heir impact is magnified by the typically thin and volatile land sales markets in most rural areas’ [Deininger *et al.* 2003]. If small farmers, land reform beneficiaries or not, choose to sell land, it is because they judge such sales either as their most promising way forward, or as their best way to alleviate distress. In neither case is it clear how land reform is supposed to have made things worse. The popular image of distress sales is that the poor lose their land in

bad years because moneylenders foreclose on mortgages; but moneylenders who choose to do that (rather than using distress to tighten their grip) are exceptional, and land reform weakens their hold on land. Further, land-poor people tend to sell, in distress or otherwise, to other land-poor people (p. 281). In India it is booms and busts, not land reform, that precipitate land sales (distress or other), and such sales are not systematically unequalising, let alone poverty-increasing [Jayaraman and Lanjouw 1998; Mearns 1999]. The fear of distress sales, or other exit by beneficiaries, may lead to the distortion of land reform: in South Africa, the decision to favour beneficiaries who could obtain bank loans meant that a sharply increased proportion of reform land went to larger farmers in larger units, rather than to the poor.

**III. Latent goals versus reduction of poverty and inequality?** Poor rural people want land reform mainly to increase income, power or status. If they succeed, inequality and poverty normally fall. That is usually the main goal of land reformers, whether governments, outsiders or beneficiaries. Sections (c–f) and chapter 2 review other explicit goals. However, some advocates and opponents of land reform have *latent goals*, e.g. transformation from peasant or semi-feudal to capitalist or socialist societies (however defined). Do latent goals underpin or undermine land-based efforts to increase the poor's income, power or status?

Where other goals are openly stated and debated, trade-offs can be discussed and compromises reached, perhaps saving the poverty/inequality-reducing goal if it was under threat. The risk to that goal arises where other goals are hidden. Russian and Chinese revolutionaries won mass support for individual land redistribution, only later showing they were determined to collectivise. Absent frankness and debate, they did so in ways that disempowered the rural poor and impoverished them further: land reform (chapter 5(a)).

Even without concealment, land reformers may underestimate the importance to themselves, or to those who can apply effective pressure, of goals other than, and perhaps undermining, reduction of poverty and inequality. Patrialisation and land settlement – analysed in chapters 4(d) and 6(b) as *means* to attack poverty and inequality other than classic land reform – are instead often latent goals of land reformers, potentially conflicting with that attack. With self-awareness, openness and active civil society, there need be no conflict. Thus in South Africa and Bolivia, poverty and land hunger are both heavily concentrated in particular indigenous (patrial) rural groups, and land distribution to these can address the poverty/inequality-reducing goal. So can land settlement in Brazil, if its latent conflict with that goal is recognised, and transparent selection of poor settlers built into the settlement process. If the latent goal (and the potential conflict) remain undiscussed, however, it offers an easy way for non-poor pressure groups to get the land: land for the better-off, for large-scale capital-intensive farming, is a quick way to settle or

patrialise a lot of land, though at heavy cost to poverty/inequality reduction and, usually, to efficiency. In South Africa ‘eligibility for [land] redistribution requires only that one is a black South African’, and for restitution proven membership of a patrial group deprived of land under apartheid [Aliber 2003]; attempts to speed up patrialisation (though so far not very successful) have steered more and more such land to the non-poor [Radebe 2003]. In Uganda and Namibia, analysts use the same words, ‘very much secondary’, to rank poverty reduction as a goal of land reformers, compared to patrialisation (chapter 4 (d), p. 199); relatedly, land has been increasingly shunted towards far-from-poor beneficiaries, who were increasingly favoured by loan/grant procedures. In Zimbabwe, patrialising land reforms, in their early years successfully poverty-oriented, if slow [Kinsey 2004], were after 2000 skewed towards members of the ruling group in the name of patrialisation.<sup>17</sup> If the patrialisation motive had been openly confronted from the start, and reconciled in free debate with the goal of reducing poverty and inequality, much of the problem could have been avoided.

*(iii) Incumbents’ legitimacy or beneficiaries’ equal opportunity: property rights and property wrongs*

The argument for land reform to reduce gross inequality and poverty faces a fundamental challenge. Its underlying claim, for equality of opportunity, meets a counter-claim for legitimacy.

Very unequal property denies equal opportunity to those who own none or little. Equal opportunity to afford a Porsche matters little. Equal opportunity to obtain sufficient food matters a lot, but can be guaranteed even in societies with very unequal property. But, except in extremely affluent societies, very unequal property means that big property-owners (hereafter called ‘owners’) have much better chances than others (‘non-owners’) to obtain high-quality education and health care, favourable work and leisure environments, and chances to turn these into a long and happy life. Furthermore, very unequal property, by yielding property income to owners, also implicitly taxes opportunities for, and incentives to, non-owners. Owners’ property income absorbs GDP that might otherwise reward people – including non-owners – who work harder, manage better, or are more able. The damage to **non-owners’ access to equal opportunity** (NEO) is more widely tolerated if property ownership is achieved mainly by saving, skill, effort or other achievement, rather than by inheritance or other ascription. The damage to NEO is more, therefore, for types of property such as land that are more frequently inherited. The damage to NEO is also more for forms of property, such as farmland in mainly agrarian societies, that form very large parts of the asset base, especially of the local asset base conveying power to grant or deny employment or credit to non-owners.

Almost everyone agrees that a distributively just property distribution should not be so unequal as to cause major, avoidable harm to NEO.<sup>18</sup> However, most people also agree that some property rights are historically legitimate,<sup>19</sup> and that, for moral as well as economic reasons, property distribution should

not be so disrupted as to cause major, avoidable harm to historical legitimacy. Land reformers' main goal, to reduce poverty and inequality, is usually based on the claim that grossly unequal land means very unequal opportunity. Their opponents usually retort that land reform disregards historical legitimacy. Can the dispute be resolved, or at least eased, in any particular case?

We have discussed the case for NEO. What is the case for historical legitimacy? It means that people can peacefully exercise, and legally enforce, legally acquired rights to property. Only then can incumbents in property, including land, meet their own legitimate expectations, and fulfil contracts. If property incumbents lack predictable rights, the risks of business are such that it will decline and may seize up, with costs to everyone, including the poor. Call the claim that land reform is precluded by the legitimacy of *incumbent* claims owners' *legitimate incumbency* (LI).<sup>20</sup>

The fight between NEO and LI is the main conflict around the claim that land reform is a just route to the goals of reduced poverty and inequality. Notice, first, that there is an asymmetry: arguments for land reform sometimes include not only NEO, but also claims to redress past violations of *beneficiaries'* LI; arguments against land reform centre on LI, and can hardly ever credibly claim that land loss threatens big landowners' equality of opportunity.<sup>21</sup> In poor agricultural areas, big improvements in NEO normally require raising the status of the rural poor – the intended land reform *beneficiaries* – relative to big owners of farmland. But historical legitimacy often does not require freezing the claims of *incumbents* such as big farmers. Indeed, land reforms based on restitution often do little more than nod towards NEO, instead being based mainly on the claim that non-incumbents, usually patrials, have legitimacy and the present incumbents do not. We shall return to these issues, but concentrate first on the main moral conflict between pro-reform and anti-reform views of land ownership, NEO and LI.

Grossly unequal rural rights to farmland – claims, in effect, upon incomes that would otherwise accrue as rewards (and incentives) for farm labour and enterprise – are inconsistent with 'labour equity'. In crudest form, this mandates that identical effort merits identical reward. In practice, modifications are needed for efficiency, with greater rewards where effort is more careful or skilled, involves management or entrepreneurial risk-taking; or is work of a type that is scarce relative to supply, and produces commodities that are similarly scarce. Labour equity, whether or not so modified, is consistent with a good deal of property accumulation. Some people may quickly consume all the rewards of their labour, while others use some of them to buy property. However, labour equity (and equality of opportunity) are not consistent with diversion of your labour income to me because I – let alone my grandfather – acquired all the land on which you might work, whether as slave, serf, tenant or employee. The inconsistency is more extreme if farming is a main, for the unskilled overwhelming, source of income; and most extreme if I, alone or in a small group, can exercise monopoly power over local farmland, so you either work for (or rent from) me, or go without:

No man made the land. It is the original inheritance of the whole species. It is no hardship to any one, to be excluded from what others have produced. But it is some hardship to be born and to find all nature's gifts previously engrossed, and no place left for the newcomer.

[Mill, in Hollander 1985: 831]

Distributive justice, however, does not directly imply that the State should compulsorily redistribute extremely unequal farmland. Distributive justice is not only about equal opportunity or labour equity, but also about legitimacy. For the State to expel people from 'their' property seems arbitrary, open to dishonesty (blackmail, bribery), and, even if done honestly, open to terrible abuse, as the history of 'ethnic cleansing' illustrates. Distributive justice requires that the State should not, without strong grounds, deny *legitimate* expectations. But why is the incumbent's any claim, even if historically founded, 'legitimate'? Land reform, sometimes by mandated democratic governments, has often violated expectations that any claim to own and inherit land – once accepted in law – shall not be abrogated by State fiat. Nevertheless, LI claims remain widespread and durable. Based on them, owners big and small, including large hereditary landlords, make contracts, often with labourers, buyers, sellers, creditors, charities or poor relations. These, not just landowners, lose if those contracts must be broken due to a land reform.

Further, a State, having previously accepted and enforced a person's land rights, must beware of renegeing. Morality apart, it has been argued since Hobbes [1642] that each person makes an implicit contract, surrendering to the State a monopoly of violence, and abandoning his power to seize property, only on the assumption that all others do the same, so the rule of law replaces anarchy. Once that assumption fails, and especially if the State itself reneges and transfers property from the strong to the weak, the strong may renege too, seizing property, overturning the government, and at worst returning to anarchy. Such an 'implicit contract' is one possible reason for asserting that entitlements, e.g. to the product of land, should be based only on *particular* historical rights of ownership or transfer (except for carefully delimited rights to amend mistaken past exercises of those rights). Even if one does not go very far down the road of 'implicit contract' theory, one may reject *systemic* State action to redistribute land, for fear that it seeks to impose, on unwilling persons, a Utopian design that denies rights hitherto seen as legitimate.

How can land reform debates move forward, if for most people and most moral systems distributive justice requires both equal opportunity and historical (usually, though not always, incumbent) legitimacy? Surprisingly, it is very helpful to recognise that these two – as values to guide (for example) State policy on property or farmland – are, in Isaiah Berlin's sense, 'incommensurable'. That is, they cannot be combined into a single guideline that allows almost everyone to agree on an ordering of alternative State actions in terms of merit. However, we *can* argue intelligently, with prospects for a widely agreed outcome, about whether a particular State should undertake a

particular land reform. Cherniss and Hardy [2008, also for citations below] distinguish three sorts of incommensurability: weak, moderate, radical.

- Legitimacy and equal opportunity are not just weakly incommensurable (in the sense that, though the ‘values cannot be ranked quantitatively, [they] can be arranged in a qualitative hierarchy that applies consistently in all cases’). If they were, discussants of any land reform could reach moral consensus that either legitimacy or equal opportunity is more important, if the latter rejecting the reform (unless fully consensual), if the former discussing only its consequences. That is not the case.
- Nor are legitimacy and equal opportunity radically incommensurable (in the sense that the ‘values cannot be compared at all’). If that were the case, ‘choices among values [could] not be based on (objectively valid) evaluative comparisons, but only on personal preference, or on an act of radical choice’. If that applied to the values of legitimacy and equal opportunity, only by coincidence of ‘preference or radical choice’ would people disputing a land reform ever approach consensus. Yet they often do.
- Rather, legitimacy and equal opportunity are moderately incommensurable. This means that, although ‘there is no single, ultimate scale or principle with which to measure [these values – no] “moral slide-rule” or universal unit of normative measurement’ – it may be possible ‘to make judgements between values on a case-by-case basis. [Though] values can’t be compared or ranked in terms of one master-value or formula, [they may still be] compared or deliberated between.’ This accurately describes ‘case-by-case’ arguments about land reform. If equal opportunity ‘wins’ for a proposed reform, given prevailing conditions, the door is wide open; if legitimacy wins, the door is almost shut. The upshot depends on how major or avoidable is the harm to LI from the reform, or to NEO from not doing it. It therefore depends partly on pre-reform conditions, notably how unequal is opportunity, how dependent are the landless or near-landless on land for opportunity, and how legitimate is the landowners’ incumbency.<sup>22</sup>

Consider two regions with 10,000 ha of cropland, each in a different country with major underemployment and poverty, and scarce savings and capital.

- (1) 5,000 ha were granted five years ago to a family, legally but due to biased action by officials related to it. It farms with tractors, combines, and few employees. The other 5000 ha are split equally among 10,000 households with 0.5 ha each. 80 per cent of the national workforce is in agriculture.
- (2) 200 households each have 12.5 ha, acquired in all cases by elderly household heads, out of savings from decades of wage income. Each of the remaining 3000 households farms 2.5 ha. 20 per cent of the national workforce is in agriculture.

In each region, is there a moral case on grounds of distributive justice for land reform to enforce redistribution – say of 1000 ha from larger to smaller

holders, with largeholders receiving well below full compensation? Convene a meeting of outsiders, all valuing both legitimacy and equal opportunity as components of distributive justice, but with different trade-offs. There is no moral hierarchy to rank either value above the other, settling the argument in both regions: equal opportunity and legitimacy are not just *weakly* incommensurable values. But nor do more than a tiny minority of outsiders oppose, or support, the reform based on 'personal preference or radical choice' between the values, i.e. the values are not *radically* incommensurable. Then a big majority of outsiders will soon agree that equal opportunity is more important than legitimacy in case (1), and the reverse in case (2). The values being *moderately* incommensurable, the importance one attaches to each, in supporting or opposing a particular change, depends on the extent to which the change improves or worsens each value, and the extent to which each value was violated prior to the change. In (1) opportunity is grossly unequal and legitimacy of the better-off landowner is very low; in (2) opportunity is not very unequal and legitimacy of the better-off landowner is high. If reform affects other policy goals (economic growth, sustainability, stability) similarly in cases (1) and (2), a large majority of 'objective outsiders' will support reform in case (1) and not in case (2).

Can we find generalisations about the balance between legitimacy arguments and equality arguments, on which all, or almost all, outsiders will agree in deciding on the distributive justice of a particular reform? First, the more a land reform violates legitimacy, the greater the objection to it; and the more it advances equal opportunity, the greater the case for it. Second, the greater the lack of pre-reform land-based equal opportunity, the more important is the case for respecting it in land reform decisions; the same applies to legitimacy of land ownership. Third, the importance of both legitimacy and equal opportunity based on farmland depends on the actual *and potential* importance of such land, and agriculture in general, in well-being – especially of people who have little of it, i.e. those with little income, power or status.

Some land reforms, such as patrilisations in parts of Latin America, may be seen either as offending against legitimacy (if they remove incumbents without agreement and full compensation) or as restoring legitimacy (if they restore earlier land rights). The passage of time – and, perhaps, efficient and humane conduct by landowners – increases legitimacy. It seems unfair to blame a 'good' big landowner for the actions of her grandparents, but leaving all the land with her may also, unfairly, deny very poor people land that was seized from *their* grandparents. To legislate legitimacy in favour of long-ago incumbents raises the question of how far back to go: much farmland has repeatedly changed 'owners' through force, fraud, judge-bribing, colonisation or ethnic cleansing.<sup>23</sup> Restitution rights (almost all for blacks) in post-apartheid South Africa cover only land seized (almost all by whites) since the 1913 Land Act.

Most outsiders probably agree that the legitimacy objection to land reform is weak if the present landowner, even if legitimate under present law, got the land by force, fraud, or political bribes or pressure, especially if recently.

Legitimacy is greater, though still weak, if the land was so acquired by earlier generations and inherited by the current landowner.<sup>24</sup> In either case, legitimacy is further reduced if the present landowner or ancestors had seized the land by colonisation or ethnic cleansing. But that's a lot of land. Much of the agricultural world is like the Europe for which Mill found the claims of legitimacy so weak:

Landed property in all countries of modern Europe derives its origins from force; the land was taken by military violence from former possessors [and thence] been transmitted to its present ... owners, the sellers could not impart to others better title than they themselves possessed.

[Mill, in Hollander 1985: 830]

Yet, if that principle were rigorously applied, most land title, *equal or unequal*, would be illegitimate. Restoring land seized centuries ago is generally infeasible (where are the records?) and often not clearly moral. Wrongs done long ago by A to B cannot be remedied by transfers now from C to D.

On the other hand, it is a standard, and attractive, view that I have complete legitimacy in ownership of land that I have reclaimed: that something not already anyone's property becomes mine when I 'mix my labour' with it [Locke 1690/1960: #30]. That seems a strong moral defence for homesteaders, even if they work and save their way to 100 ha holdings, against reforms, advocated for 'equal opportunity', to redistribute their land to farmers with less than 1 ha. North American homesteading, however, was largely land grab, first during seventeenth-century English colonisation,<sup>25</sup> and later after the 1862 Homestead Act.<sup>26</sup> Labour-based homesteading on previously *truly unused* land is now even rarer, and readily farmed, idle land scarcer. Poor migrants from South Brazil 'mix' their labour to break land in north-west Brazilian Amazonia; but more such land is broken by large, capital-intensive farmers. In both cases unwritten rights, and lives, of indigenous hunter-gatherers are broken too.

Cowen [2006] questions the claim<sup>27</sup> that landed property is legitimate if, and only if, 'justified by either Lockean homesteading from the state of nature or by chains of voluntary exchange starting with original homesteaders [, while only land] not acquired in these manners is unjustified and should be returned to its original owners'. Yet 'few current land titles in the world would satisfy these criteria [, while] it is obviously impractical and almost certainly unjust to redistribute all of the world's land [, and not just due to] ignorance of previous transgressions. We would not wish [i.e. see as legitimate: ML] to overturn all current land titles, even if we knew exactly who had stolen what from whom' [Cowen 2006]. This 'undisentangleable' past rules out any morally founded *restitution* of land seized long ago, but strengthens the case for land *redistribution* in Latin America and Southern Africa. There, not only does extreme present land inequality mean grossly unequal opportunity, but also many huge landowners are the descendants of land-seizing colonists – and many landless poor, of



their victims their victims. It may be infeasible or unjust to attempt restitution from distant descendants of alleged individual or clan *perpetrators* to descendants of alleged individual or community victims; but the *perpetration* strengthens the case for land redistribution from the rich to the poor, because the rich are largely descendants of, or benefiting contractors with, perpetrators.

If LI and NEO are incommensurable but desirable, what makes a strong case for land rights redistribution in a particular case? It is **better justified by NEO**, to reduce inequality/poverty, if current land rights are:

- *very* unequal per person, and leading to extreme inequality of assets, income and opportunity;
- inherited, not acquired from savings out of one's own income from work;
- originating in force, fraud, bribery or politicking, especially if recent;
- due to colonisation, especially if recent – and above all if colonising groups and their successors, having got rich by land grab and inheritance, later failed to equalise land, non-land opportunity, education or voting rights, as in most of Latin America, but not North America [Torche and Spilerman 2006];<sup>28</sup>
- derived from land, rather than from improvements or 'earned' income from farm enterprise; and/or
- shifting income from poor landless workers and small farmers towards rural rentiers who receive such income whether or not they work.

Conversely, land reform **violates LI less**, to the extent that:

- land losers' or their parents had acquired that land illegitimately, especially if it happened recently;
- land losers receive compensation;
- land losers' alternatives to reform (e.g. risk of land invasion or revolution) are unattractive;
- land losers' alternatives *after* reform are reasonable;
- importantly (and much neglected), horizontal equity is respected – rural landowners bear only a 'fair' share of a distributive sacrifice, and are treated no worse than equally rich urban high-income landlords; quite-poor rural farmers are not favoured over poorer urban (or rural) labourers.<sup>29</sup>

These are guidelines for deciding whether, in a particular case, the *ethics* of land reform need to attend, more than usual, to LI or to NEO. That apart, there are some situations where the *politics* of potential land reform make legitimacy issues either moot or, if used as criteria for land law or allocation, likely to cause violent conflict among strong claimants to legitimate land ownership or occupancy. In such cases, reducing extreme inequality of land (and hence opportunity) is normally preferable, as a practical criterion for land law, to legitimacy – and redistribution to (claimed) restitution. We return

to this on p. pp. 38–40, but first consider a different challenge: can one justify land reform as a source of reduced inequality *and* poverty?

**(iv) Types of equalisation goal in land reform: equality versus poverty reduction?**

The *bracketing* of inequality reduction and poverty reduction as a goal of land reformers is persuasive. It is more so if small and equal farms are socially efficient (chapter 2), if farmland inequality is severe and largely inherited, and/or if the poor have few ready alternatives to farming for income. However, the extent to which land reform, by cutting land inequality, also cuts absolute poverty – advancing a joint goal that can in some cases override legitimate incumbency – depends on what sort of inequality is under attack. This does not mean making a mountain out of the distinction between ‘equality of opportunity’ and, at least, gross inequality of outcome: the latter buys the former, sometimes defensibly in one’s own case, less so for one’s descendants.<sup>30</sup> Rather, the key distinctions are as follows.

- (1) Does land reform seek to reduce poverty by addressing horizontal inequalities only (section (b) (i) above)? It is hard, while desirable, to cut gender inequality through land reform. As for regional and rural–urban inequality, land reforms (except for settlement schemes, a doubtful case: chapter 6(b)) do little directly, because land is shifted among people *within* each rural area.<sup>31</sup> This somewhat reduces the salience of land reform in countries where poverty and inequality are, or are becoming, mainly regional issues. However, land reform that is well targeted at the poorest will tend to reduce extreme poverty most where it is commonest: in least-developed rural areas, cutting regional and rural–urban differences in poverty.
- (2) Among whom is land reform meant to cut inequality: farmers; farmers-and/or-farmworkers, by focusing land gains on the landless and employment-intensive; all rural persons; or all persons rural or urban?
- (3) Is the target inequality at the top end (e.g. the income share of the richest 5 per cent of persons), overall (as measured, say, by a Gini coefficient<sup>32</sup> of personal income), or at the bottom end (measured, say, by an Atkinson index, or by the GNP share of the poorest, or the least landed, 20 per cent)?<sup>33</sup>
- (4) What is the goal to reduce inequality, especially inherited or ascribed inequality, *of*? Income-per-person; land-per-person, perhaps adjusted for land quality; or something else, such as power or dignity?

The answers to these four questions, for any proposed land reform, affect not only its impact on the components of distributive justice (equal opportunity and legitimacy), but also its appropriate procedures and rules, and the supporters and opponents that it will mobilise. Which groups of persons, and where, gain or lose from the redistribution of land rights? What parts of the

distribution are the main targets for change – do the reformers seek above all to disperse the heaviest concentrations of rural landed power, to provide at least some land to the very poorest farmworkers, or to enable smaller landholders to support their families wholly from farming? And what ‘target variable’ are land reformers most concerned to redistribute? Redistribution of rights in land is always the instrument of a land reform; but the target variable may be land itself, income, power, or status.

There may, then, be an unrecognised tension: should a land reform concentrate on attacking absolute poverty, or inequality in some sense – usually extreme, overall, rural and local? Many see drastic reduction in top-end rural inequality as necessary, not perhaps<sup>34</sup> always for agricultural growth, but probably for efficiency, transition from so-called feudal or ‘big man’ domination, and widespread consent to the institutions of the rural economy and society. Yet top-end equalisation does less, directly, for the absolute poor than reducing bottom-end inequality, between the poorest 15–20 per cent and the rest. Indeed, where ‘the narrow issue [of reducing poverty has] been elevated into a central issue, the most important indicator of the declining concern for the inequality issue is the tendency to virtually bypass land reform’ [Joshi 1987: 288]. If only poverty reduction, and not top-end inequality, however extreme, matters, then – while reforms may well get a tiny area to each very poor household and cut poverty – reforms to break up the great landed concentrations of rural power have low priority. Yet such great concentrations ‘fix’ the system of patronage, status and power against the rural poor, and preclude NEO for them, not just in Latin America and Southern and Eastern Africa, but in some parts of many other developing regions.

Emphasis on poverty reduction, rather than on top-end inequality, has great appeal. First, poverty is surely the most important problem facing developing countries. Second, overall attacks on ‘inequality’ can – often do<sup>35</sup> – reduce Gini coefficients by redistributing mainly from the super-rich to the rather rich, leaving the poorest little better off; in an extreme case, areas of the Philippines with faster land reform after 1990 had very slightly *slower* poverty reduction.<sup>36</sup> Third, emphasis on poverty reduction in land reform concentrates the mind on what is increasingly the main impact of reform on both equality and growth: the impact via employment (pp. 235–6). Fourth, a very wide constituency can be mobilised in favour of, say, redistributions that assure even the poorest rural people the ownership of their huts and a tiny home garden – achieved in Kerala [Herring 1983], and shown to have major potential in many countries [Mitchell and Hanstad 2004], including India as a whole [Singh 1990: 308, 317]. Opposition to such a modest proposal will be shamefaced and, in view of the smallness of loss to the richest farmers, muted. In Bangladesh [Ravallion 1989, cited in World Bank 1990: 32, Table 2.3 and 155], and in those parts of India with reliable water supply – though not in semi-arid areas – even a tiny landholding greatly reduces the risks that a household will fall into extreme poverty [Lipton 1985: 8–13]. In Kenya, too, where land use had been intensified – in Central Province, but not Western –

a small landholding protected against poverty almost as well as a large one [Heyer 1990: 269]. In such areas, modest reforms, with widespread even if small benefits, may leave the basic structure of rural inequality untouched but can significantly reduce poverty – and will mobilise far less opposition than reforms that drastically reduce the largest holdings to provide correspondingly large gains in land rights for small farmers and/or the landless.

Yet Joshi is right to warn against land policies focused wholly on poverty, to the neglect of top-end rural inequality. First, social and economic frustrations, and possible political instability, are caused by extreme and ‘unearned’ (inherited, rentier) inequality. Second, it can itself be a major component of poverty, which is the arithmetical upshot of (a) low average income and (b) concentration of income on the non-poor – especially on the richest 5–15 per cent. In some middle-income countries, such as Brazil, severe rural poverty persists, largely due to extreme top-end concentration of farmland. In some very low-income countries, such as Bangladesh, that concentration is far more modest, but poverty is so widespread that it cannot be reduced at ‘tolerable’ speed by growth alone, without help via substantial redistribution out of higher-end concentrations of land and income [Ravallion 1991].<sup>37</sup> Third, big landowners often freeze traditional societies into hereditary structures of power, status and income. This may divert the rich away from accumulating for development, towards getting and keeping benefits from stasis [Bhaduri 1973]. Anyway, it often blocks emancipation of the poor.

***(v) Land reform and ‘rural tyrants’: the crucial links connecting equality, inclusion and liberty***

Indeed, while the main goal of land reformers in enhancing poor rural people’s access to land is to reduce both poverty and hence linked low-end inequality, there is a deeper underlying motive justifying a focus on top-end land inequality: *to increase liberty* [Sen 2001].<sup>38</sup> Having land of their own, the poor rely less for work, rentals, emergency loans, or trade on one or two local ‘rural tyrants’ [Bell 1990]: almost always major land controllers, but often also employers, landlords, lenders, traders, with interlocking market power over things that the local poor can neither live without nor, in many cases, readily get elsewhere. Such ‘big men’ may exercise benevolent, even popular, tyranny. They may even seem essential for a legal order without which farming cannot thrive. European feudal lords often organised defence of small farmers’ land from aggressors, and settled internal disputes, e.g. when cattle invaded crops [Bloch *et al.* 1964]. ‘Sheep may safely graze where a good shepherd watches’; it was not cynically that Bach recycled his setting of those words from religious to secular use, from the praise of the Lord to the praise of the lord.

The surface problem with this is that many shepherds are not good, but make law to favour themselves. The deeper problem is that humans are not sheep, and societies of sheep-like humans, even with good shepherds, seldom develop. In unreformed lands, for most of the past millennium, most rural people have

worked tiny pieces of insecure land at the discretion of a local lord, and have usually been obliged, in return, to do near-free 'corvée labour' on his land. Sometimes, he 'freed' them for whole- or part-time, tiny-scale farming or other enterprise, or to seek work in a fledgling local labour market; but in both cases they still usually depended on his custom and credit. If they tried to escape totally, there was no alternative shepherd and they risked wipe-out in bad seasons or years. In a village where most food and work come from local farms, but two-thirds of land is controlled by three families, subservience to Big Men (rural tyrants are almost always male) severely constrains the liberty of others.

Is land reform concentrating on top-end inequality needed to unlock many of today's rural societies from *quasi-feudalism* [Bhaduri 1973]? Increasingly, the near-landless 'poor' can now leave 'service', migrate, and rely on land and labour markets. Even with land unreformed, this can liberate many of the poor, but only with a type of rapid farm progress that bids up demand for labour [Lipton 2005] or burgeoning urban workplaces for the minimally educated. Without these, it is very risky – for people with little capacity to bear risk, or social protection from it – to escape from quasi-feudal shackles, so they stay strong.

Today, the Big Man may be a hacienda-owner with several thousand hectares of good land in Brazil or Chile. He is a substantial commercial farmer, now often well advanced in the transition to capitalism [Kay 1998]. Yet usually he still lets out a few hundred hectares (in plots of 0.2–1 ha each) to numerous tiny peon-farmers, who in return work for him more or less on request. Other surprisingly similar rural Big Men were, and arguably often still are, managers of a State or collective farm in what was, before 1990, the USSR (chapter 5); owner-managers of a white-owned commercial farm in Africa; or owners of sugar, rubber, cotton and tea plantations in several Asian and African countries. All these often provided a working family not only with informal local government, judicial functions, and 'discipline', but also with a tiny farm plot, and basic (usually dreadful) housing, primary schooling and health care. In all these cases, the employee 'accepts' wages below market rates, in return for some security of home, work and income. However, these semi-tied, personalised relationships remain, for employees and their families, a form of near-serfdom: 'near' because escape is possible, to urban migration or the rural job market, but, since this involves losing their quasi-feudal work and micro-farm, at huge risk. Such conditions still affect – albeit less than 30 years ago – tens of millions of rural households in the Middle East, Bihar in India, the Sind in Pakistan, Southern and Eastern Africa – and large parts of Latin America and of the CIS/CEE. There, apparent transitions to capitalism, respectively from hacienda-feudalism [Kay 1998] and collectivism, have increased liberty for some poor, but at the cost of more insecurity and fewer social services.

The status of many such rural workers was, and is, in some ways akin to the status of members of 'total institutions' such as prisons, asylums, military units, or residential private schools [Goffman 1961]. Such institutions bind their subordinates – soldiers, schoolchildren, prisoners, the mentally ill – by disciplines, alongside several forms of provision. Similarly, a village Big Man

is often the main landlord, employer, seller of farm inputs and consumer goods, lender, and settler of disputes. He has much power to exclude or control both competition by rivals and exit by customers. Many Big Men are decent people, but the binding, paternalist relationships within these more-or-less total, choiceless institutions is the reverse of the 'realm of freedom' that most liberals expect from capitalism, and some Marxists from socialism. Such relationships also provide political and social suzerainty to the Big Men, reducing the likelihood that they will either seek entrepreneurial outlets [Bhaduri 1973] or be compelled to allow 'their' workers to do so. Crude models of such multiple binds are often flawed, suggesting, absurdly, that (say) Bihar's rural élite is united or effective in opposing mass education lest the workers get uppity, or in rejecting new farm technology lest the 'semi-feudal' small tenant farmers get out of debt. All the same, extreme inequality of land rights (especially if hereditary) normally denies most rural people in an agricultural economy a 'playing field' levelled by any set of rules, whether socialist, capitalist or communitarian. This increases the protected, monopolistic advantages of the few at the top of the field – advantages in farming, education, political access, loans, or anything else. It is its local land base that keeps the élite in social control, largely excluding the poor and near-landless from competition. Sometimes, a labour-empowering and employment-intensive 'green revolution' or new urban work can help, but if land is very unequal then rural power élites can capture, or exclude others from, these possibilities too. Land reform is often the best chance for social inclusion and freedom.

#### *(vi) Politics and distributive goals of land reform*

The political question is: what numbers and strengths of supporters, and opponents, are likely to be mobilised by a reform? This depends on its inequality-reducing targets (and intensities) along three dimensions. Are the targets mainly top-end, overall, or low-end inequality? Among farmers, rural people, or all people? Inequality of income, power, status, or land? To simplify, assume a classic land reform<sup>39</sup> (chapter 3(b)). The target is to cut overall inequality of owned farmland among agriculturists (farmers plus farmworkers with little or no land). The number of gainers and losers, and the amount of land gained or lost, increases with the radicalism of a reform. Land gains (and losses) increase as the permitted 'ceiling' amount of land, that may be kept by large farmers, is made smaller – and as the number of beneficiaries (and/or the gains per beneficiary and the size of the 'floor' landholding to which they are entitled as a result of land transfer) becomes larger. Increasing radicalism in a reform – by doing more to reduce both poverty and unearned (especially inherited) inequality, but also to frustrate 'legitimate expectations', and contracts and economic plans reasonably founded on them – has political results. More radical reform increases (1) land loss per affected larger farmer and/or the number of larger farmers affected, with a trade-off between the two; (2) land gain per affected poor beneficiary and/or the number of such beneficiaries,

again with a trade-off between the two. Greater radicalism means more opponents and more supporters, both more intense, and may affect their power.

The political sustainability of the reform process depends partly on (1) and (2) above. Also important are (3) the nature (and financing) of compensation, (4) the extent to which land looms large in the sources of income, power and status of gainers and losers, and (5) their capacity to organise, and power to act, to advance their interests. Olson [1971, 1982] showed that (5) does not simply increase with the size and resources of an affected group. If very many dispersed people have a common interest, e.g. in a particular land reform, each is likely to rely on others to organise and finance political campaigns, so the group's political actions are weakened; doubling the number of potential gainers from (say) 1m to 2m, but the number of losers from 500 to 1000, may reduce effectiveness *per person* from each group, but probably much more from the gainers. Finally, there is the special political importance of (6) 'cross-over voters' – key potential losers from a reform who can be persuaded to support it<sup>40</sup> because of moral conviction, a fat bribe, or the sense of a 'positive-sum game' in which they might gain, or better protect their interests. Using all these lures, Macaulay, on 2 March 1831, advised his colleagues in the House of Lords not to obstruct the First Reform Bill, to extend the vote in Britain in 1832: 'Reform, that ye may preserve.' By supporting a reform now, rather than fighting in the last ditch, risk-averse persons may 'minimax regret' [Luce and Raiffa 1957]. A very radical reform alienates possible cross-over voters; minimax regret counts for little if they feel there is nothing, or not much, to lose. The proposers then need good reason to believe that, nevertheless, their supporters are strong and organised enough to win.

These six considerations are not, of course, a political science of land tenure, distribution and reform! They merely raise the political issues, for land reform, that arise from its use to improve distributive justice. It is still necessary to develop and test various models of what (different choices of) distributive reform structure have done to mobilise effective support and to defuse opposition. This book discusses how different sorts of claimed land reform reduce poverty and/or extreme concentrations of landed power, but there is little hard evidence to compare the *political* prospects for different degrees and types of reduction.

### *(vii) The snake in the grass*

However, there is one result of the crude logic of land-reform politics, as outlined above, which, in an important group of special cases, almost rules out legitimacy as a *politically* feasible priority in land reform when land is crucial to income and opportunity, and all three are very unequal.

1. Political effectiveness normally requires organising in groups (grouping).
2. Small groups have organising power more than proportionate to size [Olson 1971].

3. Groups identify themselves with long-farmed land areas, especially where land is the main source of income and opportunity, and hence status and power.
4. In many countries, grouping is far less by class than by kin: clan, ethnic group, caste or tribe.
5. Individual members of such groups are easily identified and, where weak, bullied or attacked.
6. As groups grow and group members move, new land claims and old rights increasingly conflict.

Even without (2) above, group identity is the snake in the grass for any effort to base land rights, and most especially their reform, on legitimacy rather than on reduced poverty/inequality. Pre-reform land rights are already fraught with *group* conflict, prone to become ethnic conflict, about legitimacy. Such conflicts are exacerbated, and new ones created, by land reforms asserting new, or challenging old, land claims on a basis of LI. That is so whether such reforms prioritise security of present incumbents or restitution to earlier incumbents. In countries dogged with land-based ethnic disputes, legitimacy as a basis for land entitlement, let alone for land reform, carries seeds of violence. With (2) above, that is true even if big groups can apparently override small ones. Only if the small group comprises weak, 'discredited' colonisers or their descendants can it be overridden with some confidence that violence can be avoided or contained at reasonable cost. Even then, reforming land away from such groups often reveals a panoply of conflicting claims by domestic groups based on kin, tribe, caste or clan, at best bogging down reform in a mass of contested claims for restitution of the same area as in South Africa since 2000, at worst stoking violence among rival groups of potential land gainers.

Violent conflict is less likely in such cases if land reform is transparently based on reduction of poverty/inequality, rather than on alleged group legitimacy (whether of incumbents or of beneficiaries). Civil violence, ethnic cleansing and civil war are grave risks if land policies are – or can readily be interpreted as being – either fuelled by, or fuel for, competing narratives of kin-group legitimacy, for these are narratives of victory versus defeat, dis-possession versus return, collusive governmental dishonesty versus honourable settlement. In the past 70 years alone, there have been terrible consequences of such rival land narratives, e.g. in Western Poland, the Baltic States, former Yugoslavia, and the Sudetenland; the tribal conflict zones of north-east India; and many African countries, including DR Congo, Ethiopia, Nigeria, Sudan, Rwanda [André and Platteau 1998], and most recently (2008) among Kalenjin, Kikuyu and Luo in Kenya. Fortunately, in most areas where land reform is on the table, issues of tribe, caste and ethnic group do not have this oppressive dominance. Where they do, land reformers should focus not on group non-legitimacy (except in blatant cases), but on reducing poverty and extreme inequality: not on group-focused restitution, but on



group-blind interpersonal redistribution. This reduces the risk of violence – and incidentally of difficult arrangements for group tenure and near-impossible arrangements for group farming.

### **(c) Other relevant ‘objective’ goals**

#### ***(i) Output, efficiency and growth***

It is conventional to assert or assume that large farms are more efficient than small ones, and that land reform reduces farm output, efficiency and growth. Both theory and evidence are substantial, but far removed from the rest of the land reform debate. Hence we deal with them separately in chapter 2.

#### ***(ii) Environment, sustainability and land reform***

**I. A mess, positive abstention and a false trail.** Defining ‘reduced poverty’, ‘gross inequality’, ‘growth’ or ‘stability’ (section iii) is hard, and disputed. Yet most people can usually reach enough agreement on definitions to debate each goal sensibly, and to investigate whether each is helped or harmed by small or large farm size, and by various land reforms. That is not true of ‘environmental sustainability’. Deciding how farm size and land reform affect this goal means sorting out, to use a technical term, a *mess*.<sup>41</sup>

Suppose we can sort out this mess enough to identify, even roughly, a goal of environmental sustainability. How does a particular land reform, or pattern of farm sizes, affect that goal? Humans dislike unavoidable trade-offs, awkward ‘incommensurabilities’, and paralysing undecidables. We want to believe that (say) land redistribution is either good for all goals, or bad for all. It is pleasing for land reformers, whose main goal is to cut poverty and gross inequality, that on most evidence (chapter 2), smaller, not-too-unequal farms in developing countries improve social efficiency and growth. However, one policy choice rarely advances, and hardly ever maximises progress towards, all goals.<sup>42</sup> It is pushing our luck to expect land reforms also to make agriculture more environmentally sustainable. That argument is tempting, and good policies can help it along. With a particular level of policy competence, etc.,<sup>43</sup> land concentration into big farms can harm sustainable agriculture – but can also help it, e.g. by making it more likely that the same farmer owns land downstream and upstream, and so obtains downstream gains (or losses) from her upstream water conservation and management. We shall explore how big or small farms (and land reform) may affect sustainable agriculture; but this has many aspects. On whether big or small farms, or this or that land reform, help agricultural sustainability, the sensible response is not global generalisations, but research on specific (groups of) cases of specific sustainability effects: *positive abstention*.

This is not a theoretical issue only! The view that ‘small is sustainable’, while often correct, has tempted many onto a dangerous path. They come to see small, equal farms as desirable, not because their use of modern scientific inputs (as in China and India) permits mass poverty reduction and growth, but because they can farm – and, allegedly, prosper – with low external inputs, at high levels of self-sufficiency. This is a path, not to sustainable poverty reduction, but to hunger and resource depletion. It is a *false trail*.

**II. Sorting out the issues.** Splitting a mess into component parts may (or may not) clean it up...

- (1) ‘Sustainability’ means environmental capacity to support present, and likely future, human populations without falls – and for the worst-off people, with rises – in well-being. Well-being includes ecosystems reasonably acceptable to people and not liable to become sharply or irreversibly less so.
- (2) ‘The environment’, made more or less sustainable by farming, comprises four main types of resource: land, water, biosphere and atmosphere. Agricultural options, including farm size and land reform, may affect sustainability of each environmental resource in two underlying ways: depletion (or its opposite, enhancement) or pollution (or enrichment). So there are eight ( $4 \times 2$ ) *basic* types of effect of agriculture on sustainability. Seven are meaningful – depleting/increasing atmosphere<sup>44</sup> seems beyond human ingenuity as yet. Table 1.1 illustrates some negative effects of farming on sustainability (another table of positive effects could readily be constructed). All effects are likely to be affected by farm size and land reform. No farm size is ‘best’ at reducing all seven effects; probably, any size will increase some of them.
- (3) There are three *routes* through which farm size or land reform can change the seven types of effect.
  - (a) The direct farm size route: outcomes in Table 1.1 may be more, or less, environmentally sustainable on small farms. Most work by economists concentrates heavily on this route, usually on the assumption (often unstated) that different *choices* by small and big farmers

Table 1.1 Some negative effects of farming on sustainability

Resource	Example of depletion	Example of pollution
Land	Erosion of topsoil	Increased salt/soil ratio; reduced zinc/soil ratio
Water	Lower water table (water mining)	Nitrate/nitrite build-up in drinking water
Biosphere	Lost rice varietal diversity	Increased percentage of pest biotypes with broad resistance
Atmosphere	Not applicable?	Methane from ruminant burps

cause the claimed differences<sup>45</sup> in environmental outcomes and sustainability. However, this focus on the direct route is misleading.

- (b) External-effect routes: suppose a big farmer, for want of drainage management, reduces water flow to the land of a small farmer downstream. This may be sustainable on the big farm, while making the small farm unsustainable. Direct-only comparisons of environmental effects, showing the big farm is more sustainable, are then absurd. Conversely, smallholders often choose labour-intensive, but thirsty, horticultural crops, sustainable in themselves, but so depleting water as to make lower-lying big farms unsustainable.
  - (c) System-effect routes: if upstream and downstream land are in the same, large, farm (rather than in many small farms), many externalities are internalised, so the large farmer feels the environmental costs and benefits of her own actions, and thus farms more sustainably. In the opposite direction, concentration of good land in large farms may force the poor to move to, and overfarm, small farms in marginal lands.
- (4) We thus have seven types of possible *effect* of farm conditions, including size, on environment, and three possible *routes* for each effect. Further, there are three possible *outcome categories* for each combination of effect and route. Each may be affected by (a) agriculture as such, and thus growth of farm area and output; (b) overarching farm choices (mainly product-mix; input-mix, especially extensive versus intensive land use; use of findings from formal science; scope of 'industrial farming'); (c) techniques researched, extended and found profitable to farmers.

Not all the  $(7 \times 3 \times 3)$  or 63 paths, from farm size or inequality to environmental outcomes, will be important for a proposed reform in a particular place, but almost certainly several – not fewer than five – will be, some of them ignored in debates about that reform. Some components are neglected by research and policy, e.g. biosphere pollution effects, external-effect routes, and the outcome category 'farm area growth'. No land reform is likely to be good, or bad, for environment on all 63 paths, or even all important ones.

**III. The false trail.** Some people – called here 'deep greens' (a description, not a term of praise or blame) – see small farms, and land reform, as contributing to a special environmental agenda:

- a much larger share of farm products used, and inputs sourced, locally;
- less use, per hectare, of inorganic fertiliser, and much less use of pesticide;
- more reliance on retained or on-farm-researched seed, less on research-station seed, none on transgenics;
- water control through on-farm management, with minimal large-scale, especially dam, irrigation.

Deep greens see this agenda as needed for sustainable agriculture, because it is likelier to conserve soil, water and energy. Most deep greens also favour land

reform and small-scale farming, partly for fairness and poverty reduction, but also because they believe their agenda suits smaller farmers' experience, incentives and advantages, and thus will be advanced by small farms and land reform. They identify both with campaigns for deep-green (including organic) farming. All this is deeply mistaken.

First, low-input farming means *faster* depletion, as stagnant yields and rising populations force farmers (large or small) to exhaust local soil-water resources and to expand farming into areas where they are even more scanty and vulnerable: just that has happened in most of Africa.<sup>46</sup> Second, smaller farms – absent unbalanced incentives, bad advice, or extremely size-biased access to credit or technology – tend to use *more* fertilisers and other modern inputs than large (p. 74). Third, that is because small farmers' labour-market advantages (chapter 2) help them to use new seeds, fertilisers and water intensively and productively. For example, micro-drip irrigation makes much more productive use of water (by piping it through tiny plastic tubes direct to the root zone) than do big centre-pivot systems; but micro-drip pays only small farmers with lots of labour, and little capital, per unit area. In summary, tying land reforms and small farming to low-input methods retards, not advances, sustainability, apart from entrapping small farmers in pre-scientific, uncompetitive forms of agriculture.

Africa's slow agricultural growth, with minimal irrigation and fertiliser, has led to massive soil-water depletion. Asia's smallholder-based 'green revolution' – with some striking exceptions due to policy errors – has been largely sustainable as well as conducive to growth and poverty reduction. Even within Asia, it is the areas that have *not* had a green revolution that face the gravest threats of overfarming and unsustainability. Most African (and many central Asian) agro-ecologies need a 'doubly green revolution' [Conway 1997], combining the employment-intensive, irrigation-seed-fertiliser-based successes of Asian smallholders with natural resource management to remedy the serious depletion problems created by decades of low-input farming. The need for sustainable agriculture is undisputed; but its alliance with small-scale farming is policy-related, not automatic; and the policies have to be based on scientific agriculture, not on low-input hope. Ironically, advocates of large farming who oppose land reform, and some supporters of land reform on the grounds of small-farm 'organic' sustainability, lead to the same universe, where small farms have little access to inputs and remain 'organic' and unproductive (as well as, in fact, depleting) by default, while large farms become increasingly scientific.

#### **IV. From farm size to sustainability change – evidence, abstention, and policy.** There are two views.

1. Big farms and input-intensive practices [have degraded] natural resources and the environment. When these externalities are considered, big farms are no longer efficient. [Fan and Chan-Kang 2005]

2. Are small farms more efficient in some cases because they are more intensively run, making higher efficiency no more than a rapid mining of the soil and vegetation? [Holden and Binswanger 1998]

Are big farms in unequal land systems less extractive than poor people, small farms, and more equal farm systems that put more land into small farms? It is speculated that the poor are forced to deplete for immediate survival rather than conserving for future income<sup>47</sup> [citations in Thiesenhusen 1991: 7–8]; that smaller farms' lower-cost labour, to the extent that it means more output per hectare (chapter 2), is inherently extractive; and that smaller farms are likelier than large ones to deplete water or erode soils, because less likely to farm (say) 200 m away from one of their depleting or polluting activities. On the other side are speculations that small is ecologically beautiful: family farmers want to conserve land for great-grandchildren; lower-cost labour can be used to conserve; small farms use more natural manure; they are less likely to deplete soils (and biodiversity) through monoculture [Boyce *et al.* 2005].

Not only is the evidence thin; sustainability arguments for a particular farm size, or land reform policy, often contradict each other. One can advocate land reform to provide land to tiny farmers so that they do not, because 'poor and hungry, destroy their immediate environment [by deforestation, overgrazing, or overusing marginal land] in order to survive' [World Commission on Environment and Development, cited in Thiesenhusen 1991]; *or* to achieve 'environmental advantages of small farms [in] a supportive policy environment' [Boyce *et al.* 2005]; but not both! There is no convincing logic that big farmers' 'outcome categories' (p. 42) – based on orientations towards markets, commercial creditors or capital-intensity – are systematically good or bad for sustainability.

The good *and* bad environmental impacts of smallness are exemplified by home gardens, typically below 0.5 ha. Use of animal and human waste for fishponds in West Java, and livestock manure in many cases, are far commoner than on large holdings, and carry health risks (e.g. animal-to-human transmission of diseases such as avian flu). However, 'urban home gardens [sometimes] improve public sanitation at virtually no cost.' 'Terraced home gardens have been recommended to preserve soils on sloping areas', but biodiversity was no more on big than on small home gardens in the Philippines [Mitchell and Hanstad 2004], though if (say) two crops are grown in a 10 ha home garden and in each of 100 home gardens of 0.1 ha each, the latter is probably much more biodiverse over the whole area.

Pender and his team at the International Food Policy Research Institute (IFPRI) have systematically explored the direct farm impact routes from farm size to environmental outcomes. In Uganda, large farms seem to deplete soils more. They are 'more likely to use slash-and-burn and less likely to apply fertiliser or manure and compost [and also mulch, crop residues, and household residues] *to a given plot*'. But these favourable effects of smallness on soil depletion are modest, and the statistical significance is low (10 per cent)

except for slash-and-burn. Similar findings are reported from other sources for Rwanda, and for tobacco farms in Malawi, but opposite findings for western Kenya, and for probability of using fertiliser *at all* even for Uganda [Nkonya *et al.* 2004].

Chapter 2 finds evidence, and credible theory, that in a given area small farms make more productive use of scarce land than large ones. On the whole, however, the evidence does not support generalisations that the direct-effect route leads to better, or worse, results for environment for small farms than for big ones. More credible, but not rigorously tested, is the system-effect route: very unequal agriculture may both push the poorest, and empower the richest, to overfarm marginal lands elsewhere. The steady depletion of the Amazonian rainforests by small-scale settlement and large-scale logging may reflect that twin process.

**V. Environment and reform issues other than farm size – tenancy.** Many land reforms seek to reduce poverty and gross inequality by shifting land from owners to tenants, and between communal and private ownership (chapter 4(b–c)). It is often argued that such reforms affect sustainability because (1) tenants conserve land worse than owner-farmers, (2) communal ownership leads to ‘tragedies of the commons’; (1) appears to be true only with particularly insecure and ‘exploitative’ forms of tenancy, i.e. extremely unequal land rights, while (2) is a gross oversimplification.

Where tenants have short leases that are unlikely to be renewed and/or landlords are absent, the tenant’s incentives to raise income by ‘soil-mining’ or water depletion appear to be strong; and the landlord’s transaction cost of preventing it, to be substantial. But why should all parties be stupid enough to let this ‘just happen’? Normally, tenants want to be able to rent next year, and will worry about reputation. Landlords will seldom rent out fragile, valuable soil-water resources on short lease unless they can include, in a competitive rent, compensation for the cost of observation, or for the risk of depletion by an unobserved tenant with no concerns for reputation.

However, with some short leases, renewal is very insecure. In 1977, seven out of ten of Bangladesh’s ‘tenant farmers had cultivated the same plot for [only] three years or less’. That creates preconditions for neglect of conservation [Eckholm 1979: 19; Jannuzi and Peach 1980]. There is some evidence from developed agricultures that this happens. Iowa, USA in the 1970s – with frequently absentee landlords, short leases, and leasing agreements providing tenants with few incentives to conservation – experienced ‘soil erosion rates of 21 tons per acre on tenant-operated farms compared to 16 tons on owner-operated farms’.<sup>48</sup>

Yet this should not be blown up into a general argument that tenancy is bad for conservation. Just as much research since Cheung [1969] confirms that sharecroppers do not systematically use less input per hectare than otherwise similar owner-farmers – because it usually pays both landlord and sharecropper to control or alter the conditions that might otherwise lead to this outcome<sup>49</sup> – so

landlord/tenant incentives are usually likely to be so arranged as to make soil-mining, on potentially productive and durable yet fragile lands, unlikely and unattractive. If it were not, tenancy arrangements on such lands would seldom pay landlords, who would choose to farm with hired labour.

Two related 'paradigms' in modern economics reinforce this view. First, short-term sharecroppers have an incentive to protect 'reputation', as Akerlof [1984] analyses in different contexts. A sharecropper – even if never caught in the act of soil-mining – whose lands have a habit of deteriorating sharply after the lease ends, will seldom obtain future leases (at least without long-distance migration). Second – the other side of the same coin – the leasing contract can be seen as a partly co-operative prisoner's dilemma game. If such contracts are made only once, it may well pay a big landlord and a small tenant to play 'non-cooperatively'; the landlord shops around for the highest-paying tenant for each plot of land on each occasion and the tenant soil-mines each time, even though both landlord and tenant would fare better if they could rely on each other to play 'co-operatively', i.e. with the tenant conserving the land and the landlord recontracting with the same tenant. But if recontracting is frequent – a 'repeated prisoner's dilemma' – the parties in experimental situations tend to home in on co-operative outcomes, not to be non-co-operative except as tit-for-tat towards someone who has so acted on the last occasion [Axelrod 1984]. Thus, for example, a landlord – concerned with his 'reputation' as a route to good tenants in future contracts – will fail to renew an otherwise satisfactory tenant only if that tenant has been caught soil-mining. In effect, landlords forego the highest rack-rent (from replacing tenants each year) so as to avoid the high transaction cost otherwise required to prevent soil/water-mining and to find suitable new tenants. Similarly, the tenant foregoes the gains from extractive farming, so as to avoid the high transaction cost of repeatedly finding new land, landlords, and even villages or districts.

So the argument that tenancy induces soil and water depletion *through direct effect routes* is very doubtful. However, *system-effect routes* are more worrying. Very unequal rights, because they make it insecure or unattractive to rent in, make reputation hardly worth preserving, and – as land quality declines – may make 'mining' hardly worth policing. 'Short-term contract renters in the southern Honduran highlands had insecure tenure on very small plots. They exhibited the poorest conservation practices'; small owners were less extractive, and large farmers least so [Stonich, cited in Thiesenhusen 1991: 12–13]. Reforms for tenancy registration and regulation – though not restriction and reduction – can well, if corrupt income for regulators is minimised, improve environmental performance of tenancy systems, helping poor and rich alike, while in certain circumstances also qualifying as land reform (chapter 4(b)).

**VI. Environment and reform issues other than farm size – migration and commons.** Engrossing of common land, resumption of tenancies, or environmental decline, in traditionally smallholder-farmed areas, may

speed up emigration from them<sup>50</sup> – either spontaneously, or as governments (or even the engrossers or resusers themselves) seek to create outlets for the dispossessed and angry without grasping the nettle of localised reform. Often all that is left for the migrants to farm, fish, or forest are fragile, unfamiliar, degradable areas. The ‘colonisation [of such lands] to appease land-hungry peasants’ is often a conscious alternative to contentious reforms. Brazil, Ecuador and especially the Peruvian Amazon, where ‘squatters cut forests at 1.09 ha a year versus 0.54 ha for legal tenants’, are examples. ‘Brazil, with 9m landless households, moved colonists into the Amazon in the largest numbers, creating a devastating environmental impact [while] Brazil’s largest landlords hoard [14–33m ha] of ideal farmland’ [Forster 1992: 571]. Thiesenhusen [1996] cites authors who blame the landless for this, and others who blame inequality at home for leaving landless migrants no choice; evidence is scanty. It is likely that very unequal land, insecure tenancy, and engrossment of commons push out the poor into marginal lands (if available) and provide income for the rich to finance profitable investment in ultimately unsustainable logging.

In Bangladesh, a ‘large’ holder is one with 5 ha, not several thousand as in Brazil, but the process is analogous. Inequality and land hunger have intensified in some areas enjoying a rice-based ‘green revolution’ such as Comilla. Especially with population growth, displaced tenants, labourers and micro-farmers from such areas have moved to fragile, readily overfarmed and degraded areas of the Chittagong Hill Tracts. In the agriculturally progressive parts of India also, inadequate land reform – and associated tractorisation by larger farmers, partly because they wished to replace increasingly militant workers – may have turned the initial immigration to areas of the early Green Revolution, around 1966–74, into net emigration. Perhaps that is why it is not green-revolution areas, but fragile arid and semi-arid lands in Rajasthan – with spare areas just farmable, but without good prospects for dramatic technical progress – that have shown India’s highest rates of agricultural settlement and net rural immigration [Mathur 1988].

The conflicts setting traditional slash-and-burn, cyclically fallowing, or common-grazing farmers and communities – often without formal, legally codified ownership rights – against newcomers, seeking to enclose and settle temporarily ‘empty’ lands, can be bloody. Moreover, the inexperienced newcomers not only displace traditional farm systems, but often introduce unsustainable methods on the lands they claim. In marginal semi-arid lands in South Africa, through conquest or legislation, many large commercial white farmers obtained land traditionally farmed extensively by black families (though held in communal tenure). These families were dispossessed; some white commercial farmers then came to cultivate subsidised, intensive and repeated maize monocultures, which replaced the earlier ‘African’ rotations of grazing, light cropping, and fallowing. For a while, net farm income per



hectare rose sharply, but the new farming system in many cases may well be ecologically unsustainable. In many other countries, even without the legalised theft of land that typified apartheid, similar processes of environmentally abusive 'land deform' have accompanied the settlement of traditionally grazed areas by intensive newcomers.

Elsewhere, such invasions mean that the expelled traditional farmers are pressured to survive by overfarming marginal lands. Often hillsides, formerly allowed years to recuperate between plantings, are intensively and erosively farmed. The latter was a serious contributor to land degradation in southern Honduras, because the smallest farmers were crowded into 'highlands with [low] agricultural potential' and driven to farm 'steeper areas' there [Stonich, cited in Thiesenhusen 1991: 10].

To some extent, such intensification is a normal result of population growth – not a consequence of forcing out indigenous extensive farmers as in South Africa, or of allowing settlement to respond to land deform as in Honduras, or to substitute for 'difficult' land reform as in Brazil. Also, investments in mixed farming and/or mulching of grazing lands as they are turned into marginal maize lands, or in terracing hillsides, might permit such forms of intensification without degrading natural resources. However, the new farmers – unsure of the duration of their new rights politically, legally, and morally – are unlikely to be motivated to invest in conservation. If such immigrants are poor and from remote farm systems, they are also likely to lack cash, credit and knowledge for those investments.

The risk of soil and water depletion in many of the new farming systems has been camouflaged by a widespread view – partly intellectual conviction, partly settler ideology – that it is not the overfarmed monocultures of the colonisers, nor the overfarmed marginal lands to which the indigenous farming populations are increasingly confined, that are ecologically unsustainable, but common grazing and cyclic fallowing. This view is itself unsustainable. 'Shifting cultivation has often in the past been denigrated, and with it the land tenure systems that accompany it. That this is wrong is increasingly recognised. [Absent] an agricultural technology that can counteract [land] exhaustion, shifting cultivation and tenure systems consistent with it are only appropriate' [Bruce 1986: 26]. Analogous reasoning applies to most commonly held grazing areas. In Zimbabwe, as in Botswana and elsewhere, communal graziers rightly permit cyclical uptrends in herd size; these uptrends are often mistaken by outsiders for long-term tendencies towards excessive grazing, as is shown by Drinkwater [1991]. More generally, communal tenure (of individually farmed grazing lands) is usually combined with well planned measures, paternalist or democratic, to contain the size of herds relative to the quality of grazing [Lipton 1985; Ostrom 1991; Platteau 1992]. Similar comments apply to alleged tree depletion in communally owned forest lands [Fairhead and Leach 1998].

In all these cases, many outsiders perceive a 'tragedy of the commons'. They allege, for example, that each grazer selfishly destroys the common grazing land by maximizing his herd's private use of it. Or they claim that –

where communal tenure means that a family cannot be sure that its children will be allowed to crop the land they farm this year – each family, pressed by its growing size, steadily shortens the fallows between crops, impairing soil fertility. Outsiders then argue that this ‘tragedy’ needs to be remedied by imposed private tenure systems, titling (chapter 4 (c)), and immigrants using both. Such allegations are often in ironic contrast to the reality: that communal tenure survives only while it represents a viable, jointly managed yet individually farmed, system of managing natural resources (for an example in Kenya’s heavily populated Machakos District, see [Tiffen *et al.* 1994]). This sustainable system is then threatened, not by the ‘tragedy’ of the commons, but by outside migrants who privatise it. Such settlement is often legalised, even imposed, by politicians facing pressure from the land-poor in other areas, but rejecting adequate redistributive land policies there. When the land-poor migrate, and privatise and overfarm commons elsewhere, the resource depletion – in fact due to excess density and premature, enforced privatisation of the commons – is blamed on the ‘tragedy’! Of course, communal tenure under traditional technology should not be idealised. It hardly ever proves capable of increasing farm output fast enough to match population growth on lower-productivity, fragile lands at 2–4 per cent per year. But such lands then deplete, whether common or private. Ending the tragedy requires, not forced-draft privatisation of the commons, but better technology and incentives for all areas, *options* for private titling where technical progress produces mass demand for it, and land redistribution in densely settled, very unequal lands.

### (iii) *Stability*

Probably no land reform has ever been legislated, implemented, or stopped mainly because of its impact on stability: on reducing fluctuations in income, total farm output, or access to food. Yet most outsiders and poor people<sup>51</sup> see stability as a key policy goal. The poor try to stabilise consumption, but often cannot save, store or borrow much. In communities and countries with weak social protection,<sup>52</sup> sharp and unexpected falls in private income mean falls in already low consumption, and can be disastrous.

For farmers, instability deepens poverty, not only in the bad years. A high level of ‘background’ insecurity discourages investment, or even effort, which involves taking further risks in order to achieve higher output. Innovation and growth are ‘sicklied o’er with the pale cast of thought’. Further, even if farmers’ and farmworkers’ private *incomes* are somehow stabilised, the government of a poor country has to consider how to provide access to food in face of yearly (and even seasonal) variations in *output*. It is expensive to guard against bad times by tying up capital in stocks, transport systems, port facilities, or even foreign-exchange reserves.<sup>53</sup> If a land reform greatly reduces the stability of income for the poor, or of output, then such a reform is unlikely to prove attractive to policy analysts, unless its efficiency gains are so large as to make available sufficient resources to insure against such effects.

Land reform may slightly reduce instability by shifting land towards smaller farmers, because they take somewhat more risk-averse decisions than do large ones (though this may also reduce gains in output: chapter 2(d) (viii)). More important, land reform mitigates the consequences of *given* income instability,<sup>54</sup> by raising average income for two groups of frequently poor people: those who gain rights to land, and those who remain landless but gain employment income. At a higher average income, the damage from a given fall, below that average, is less.<sup>55</sup> Land reform that gets more land to tiny farmers in bad times – land that can usually provide some food, and at worst can be mortgaged – raises the income floor, and that is an important contribution to stability. Mitchell and Hanstad [2004] document the importance of tiny home gardens as buffers against severe outside shocks to food security in Russia, Uganda, and Kerala, India. Conning *et al.* [2001] show that in El Salvador even a little land, *at a given level of average household income per person*, cushions against falls in hired labour income and cuts the risk that schooling will be interrupted.

However, though land reform raises the poor's average income and survival floor, it may also raise risk of decline, below that average income towards that bare floor, for five reasons.

- (1) Even in a normal season, there are 'worse-than-usual' and 'better-than-usual' areas vis-à-vis microclimate, soil/water conditions, pests, or management. On one big farm, such area variation has little effect on the farmer's demand for poor farm labourers, or on her power to spend on the labour or products of the non-farm poor. When land reform turns some parts of the large farm into independent small farms – and many labourers become mainly farmers – some will do badly even in a normal year.
- (2) In a bad season, the big farm usually continues to hire much the same amount of pre-harvest labour as normally. Suppose the reform splits the big farm into equal, and in normal years self-sufficient and non-employing, small farms; that only at harvest time does it become clear that the harvest will fail; and that the failure is total.<sup>56</sup> Before the reform, only during and after harvest does the big farmer know that she need hire fewer labourers – and only then do the poor labouring families suffer major falls in employment income. After the reform, each poor family does its own work. Again, in a bad year, only by harvest time does it become clear that the farm will produce nothing. But, *instead of the pre-harvest employment income they enjoyed before the reform, the ex-labourers – now owner-farmers – have no compensation for the harvest failure*: their earlier, pre-harvest work (and calorie cost) is now without return. On-farm employment before the harvest failure has been converted, by the possession of land (instead of paid work) after a reform, from a source of stability in a 'failure year' for poor people, to a source of instability. However, this larger downward fluctuation of poor people's income is caused by the same reform process – transfer of land to those who were previously labourers, wholly or in part – that raises their *average* income. They can

save and store more. So, though the extent of income instability increases, any particular amount of it becomes less damaging, both to welfare and to attitudes to productive risk-taking.

- (3) Labourers who do not get land in a reform are especially exposed as instability increases after reform. During and after a bad harvest, most small land gainers can do all their own farmwork with family labour, and need not hire any. Yet it is precisely in these years that labourers, as net food buyers, suffer because food is scarce and expensive. This increased instability for rural workers who do not receive land in a reform is likely to be less than fully offset by the employment-enhancing effect of land redistribution. That effect raises their average income, but hardly enough to allow them to save or store.
- (4) When reform shifts land from richer to poorer farmers, it also shifts the gains and losses from entrepreneurship: from choosing, taking and managing production and market risks. Even where there is little risk of abnormal rainfall or pest attack, such risks are significant: some crop-mixes, some investments, turn out better than others. A day-labourer, able to choose her workplace, bears almost none of these risks; a sharecropper or contract farmer/worker divides them with the landowner, paying less crop-rental, or receiving a shorter contract or lower piece-rate, when things go badly; but a full-scale farm entrepreneur – such as a land-reform beneficiary who comes to own, or to pay a fixed rental on, land that she used only to work for wage or crop-share – bears all the risks of farming and enjoys all the benefits. Further, immediately after a reform, new risks arise due to possible mistakes on newly acquired land, especially if beneficiaries get plots that they have not previously worked themselves. In short, the conversion of poor labourers into less-poor farmer-entrepreneurs raises the riskiness of their incomes – even where there is little year-to-year harvest variation, or even place-to-place climatic variation in a normal year.
- (5) It often pays large farmers to provide social security. If they disappear after land reforms, it disappears too. Bardhan and Rudra [1981] show how, in those villages in West Bengal where farming was especially uncertain (but not elsewhere), big farmer-employers felt themselves committed to give preferential employment to local workers even when demand for labour was slack – thereby assuring themselves of such workers' loyalty in times of unexpectedly high demand for labour. Again, radical land reform leaves such workers better off on average, but less protected against shocks. The poor themselves may see a rich patron as an insurer, increasing their income stability:

A group of tenants of a big landlord in Almara District vehemently protested against my suggestion that no landowner should be allowed to keep more land than he could cultivate with his own family labour. They remarked, 'In this village we are all small people and if that landlord is reduced to our level, whom shall we approach in times of need...?'

[Joshi 1981: 472, cited in Bardhan, 1988: 511]<sup>57</sup>

The farming poor, of course, use some of their extra resources after a reform to prepare for the associated extra downward instability. It is further offset by the fact that – to the extent that reform enables beneficiaries to grow more of their own food – they become less vulnerable to income falls due to higher food prices. However, small farmers, on the evidence, take only slightly more risk-reducing (e.g. crop-diversifying) decisions than large ones [Binswanger 1981]. And, to the extent that they do so, output gains due to the inverse relationship and other factors (chapter 2) are lessened.

Poor people's farm incomes tend to become more variable after a redistributive land reform, but around a higher average, and perhaps with a higher floor. The poor's non-farm incomes are likely, in the short term, to be a smaller part of their total income than before the reform, reducing both diversity of income and its independence of fluctuations in weather and farm prices. So most distributive land reforms, especially where there is much harvest fluctuation, increase instability of total income for poor beneficiaries in the short term. If sharecropping declines, ex-sharecroppers' income (net of rent) also destabilises.

There are few ways in which poorer people can protect themselves against such instability. Insurance markets in most poor rural areas are at best thin and imperfect. Hence development of safer farming methods (e.g. via water control and pest management), and of income buffers for bad years (e.g. via credit, non-farm income, and rural public works), can complement land reform. Land-reform beneficiaries then suffer less in bad years, and may be readier to take entrepreneurial, innovative farming decisions. And labourers who receive no extra land, but may suffer extra risk, also seek help.

Although individual incomes on post-reform small farms may well fluctuate more after a reform than when those individuals were labourers on the pre-reform large farm, total farm output is likely to become less variable. If a 100 ha commercial farmer purchases seed, fertiliser, draught-power, or even an irrigation system, there are usually cost savings – to the farmer and the supplier – from uniformity,<sup>58</sup> so that if the input goes wrong it does so over a big area. If the same land is managed as 50 family farms of 2 ha, more varied decisions are likely. So the covariance of output, between any 'pair' of cropped hectares, is likely to be reduced by a redistributive land reform. Offsetting this, however, 50 farmers with 2 ha, each buying a little fertiliser or seed, will together incur more fixed cost than one big farmer, purchasing and supplying inputs to all 100 ha. So each small farmer is likelier than was the big farmer to find that the purchase pays only if spread over all (or almost all) farmed area [Asaduzzaman 1980; Feder and O'Mara 1981].

*(iv) Is a special goal for 'landless labourers' required?*

A frequent complaint against land reform is that it harms the interests of 'farm labourers', i.e. those whose main pre-reform income source is not farming, but hired farm labour. This is a strange objection.

- (1) The main goal of land reformers, reducing poverty and gross inequality, normally involves getting benefits to those below the poverty line. In India and Latin America, more of them depend on farm labour as the main income source than on farming (chapter 7(b) (v)). Land reformers would not support, on grounds of poverty and inequality reduction, proposals known to harm more poor people than they help.
- (2) Classic land reform claims to distribute above-ceiling land to the rural poor, whether their pre-reform income derived mainly from farming or farm labour.
- (3) Decollectivisation, if land reform (chapter 5(b)), often redistributes State or collective farms to their labourers, and/or attracts more workers into farming. 'In Armenia, agricultural employment reached 41 per cent in 1999, reflecting a doubling from the late 1980s' [Giovarelli and Bledsoe 2001].
- (4) In almost all developing rural areas, only a small minority of farm labourers are completely without owned or operated farmland. Even if these 'pure labourers' are arbitrarily excluded from direct land reform benefits, most farm labourers have some pre-reform land, and reform would give them more.
- (5) Even if farm labourers get no land in a land reform, they normally benefit from rising demand for labour. Small-farm beneficiaries use more labour per unit of land than did the large farmers who lose land (pp. 109, 326). It may be retorted that this is the labour of those who gain reform land, and that hired farm labour is displaced, but even *hired* labour per hectare is usually larger on smaller farms [Booth and Sundrum 1985]. Further, before they got reform land, mini-farmers had also to supply labour for hire, to stay alive; if after the reform they redirect such work to their new farmland, non-beneficiary labourers can fill the gap.
- (6) If farm labourers gain *any* farmland in a reform, that increases the opportunity-cost of their hired labour. It also improves their bargaining position in the hired-labour market – as does weakening the labour-market power of Big Men by distributing some of their land, and hiring power, to many smaller farms.
- (7) A landless labourer is enriched and strengthened even if land reform brings her only a house site (removing the threat of eviction) or a tiny home garden (improving food security). This was documented in India by Herring [1983] in Kerala, and Mitchell and Hanstad [2004] in Madhya Pradesh.

So either the complaint that land reform harms farm labourers is oddly formulated, or some odd creatures fly the flag of land reform. In fact, both are true. The complaint sometimes stems from evidence that total income from hired farm labour, or farm wage bills, did not rise faster in places or times with more land reform. In West Bengal [Bardhan and Mookherjee 2006], land distribution 'had [no] significant effect on wage rates for agricultural

workers [and lowered hired] employment'. However, we cannot infer lack of 'positive impact on incomes of agricultural workers'. We know that many received reform land; falling hired employment probably corresponds to more time spent on farming, and less on working for others.<sup>59</sup> Failure of farm wage-rates to rise much faster in areas or times of land reform, too, may be more than offset, for poor farm labourers, by their gains from acquiring reform land, or – since the West Bengal reform also registered sharecropping, thus impeding eviction – from better post-reform conditions on their small areas of tenanted farmland. More generally, to praise or condemn land reform for its impact on a supposedly static set of 'agricultural labourers' may be misleading. First, successful reform shifts the income source for *the same people* (and households) part-way from hired labour to farming. Second, 'agricultural workers [have varying stakes in] land reform. For example casual workers may own a small plot of land; permanent workers are often landless [but] sometimes with a piece of land for personal consumption on the farm that employs them' [Leavy *et al.* 2006]. Third, there are other reasons why a reform's effect on incomes of (various types of) farm labourers cannot be established by comparing such people's wage income before and after reform, even if other changes, such as technical improvement or bad harvests, are factored out. The poor use around half their income on food staples, either purchased or produced on-farm. Land reform reduces beneficiaries' – including many labourers' – reliance on food purchases.

Yet *some* alleged land reforms have excluded, or even harmed, labourers. In 1997, a Namibian Commission of Inquiry 'recommended that Government consider: agricultural employees as primary beneficiaries of the land reform policy.; allocat[ing] State-owned land to, or purchase freehold land for, agricultural employees and their families; [procuring loans for] agricultural employees to buy into, and thereby jointly own, private land [with] a minimum 50 per cent share; and] purchasing privately-owned land for the resettlement of agricultural employees and their dependants' [Werner 2003]. If big farmers' reform land had gone substantially to the labourers – or even to other active small farmers, who use more labour per hectare than large farmers – Namibia's Prime Minister would not, seven years later, speak of 'witness[ing] with dismay and outrage how farm workers are left destitute and dumped with their families and belongings on the roadsides by their former employers [and] had lost what had been their home for generations' [Gurirab 2004]. Here as elsewhere, conflict between small farmers' and labourers' interests appears to arise, not from land reform, but from leakage of supposed reform land to better-off, capital-intensive beneficiaries. This often springs from the displacement of rich-to-poor *redistribution* by group-to-group *restitution* as the mainspring of land reform. As elsewhere, an understandable thrust to patrilialisation, a less understandable attachment to colonial laws against subdivision, and sometimes a misplaced faith in group farming have distracted from the main aim of land reform, poverty reduction through redistribution. Ejecting and unemploying of farm labourers, instead of getting

more land (and more work) to them, accompanies the leakage of reform land to non-poor, albeit patril, beneficiaries. Zimbabwe was an extreme case of this process, even before the disasters of 2005–08. On five large commercial farms in Mashonaland in the late 1990s, ‘marginalisation of farm workers in the land reform process means that the impact of land reform on [them was] unfavourable. [L]oss of jobs and livelihoods, housing, and access to social services with land transfer to *black small and large commercial* farmers has led to displacement, lower production and food shortage crises’ [Leavy *et al.* 2006; my italics].

Getting reform lands in smallish units to farmworkers, apparently the natural beneficiaries of land reform, seems the obvious way to ensure that it does not cut their income through lower employment. Longer-term workers often have some pre-reform farm experience on a plot of their own, however tiny. Also, though seldom unionised, they can often apply pressure through a political party, tribal or kin group, or other organisation. So they often get reform land, unless crowded out by its concentration on particular ethnic groups, or on fat cats. However, in most countries, rising proportions of hired farmworkers are casual and/or seasonal. These, especially if migrants (above all short-stay migrants), are more diffuse, harder to organise, less captured by records or statistics, and hence often invisible to policymakers [Leavy *et al.* 2006]. They also usually have less pre-reform, year-round farming experience than longer-term local farmworkers. Migrants, especially short-term, more seldom get to farm even a tiny local plot (as an income supplement to hired labour). So migrants, a growing proportion of agricultural labourers in developing counties, are at risk of not getting reform land. Nevertheless, migrant and casual workers should not *lose*, if most reform land goes to very small farmers. These are more labour-intensive on their own land than big farmers; likelier to meet labour needs, over and above family, from casuals and seasonal migrants; and likely, before reform, to have supplied local hired labour, withdrawn to reform lands afterwards. Genuinely redistributive land reform raises demand for labour, including that of casuals and migrants.

The role in farming of hired labour, especially casual, seasonal and migrant labour, is large and growing. Land reform may raise these groups’ income, but not, in some cases, their land access, power or status. However, the problem should not be exaggerated. Hired, especially migrant, labour in agriculture is most prevalent in Latin America, but little immigrant labour is attracted to farming in the poorest countries (e.g. Bolivia) and regions (marginal uplands).<sup>60</sup> Tiny farms rather than hired farm labour provide the main income source for the poor in most of West, Central and East Africa, and, for very different reasons, in China. Also, in Asia and much of Africa, a large majority of hired farmworkers are local, and most, as in India, also themselves farm a little land.

Sometimes farm labourers, especially if landless, and above all if also casual and/or migrant, lose from (alleged) land reforms. Some of these are not genuine land reforms; others place patrilisation before redistribution;



others, while reducing poverty and inequality overall, get only little land to the poorest, who are often unorganised and sometimes with little local farming experience. In the longer term, successful growth, education, and general development shift hired workers massively out of agriculture, enriching them in the process. During this long process, in many developing countries, including those of South Asia which contain 600m of the world's 1400m dollar-poor,<sup>61</sup> farm labourers remain *the* core poverty problem. Where farmland is very unequal, land reforms, to be real, must increase their rights to it. To handle cases where land reform has not helped farm labour, the need is not a new goal, but to let land reform be land reform. Also, subsequent policy on incentives, institutions, and technology should stimulate post-reform smallholders, and those who provide services for them, to produce labour-intensively.<sup>62</sup>

#### **(d) Goals of governments and donors: land reform to extract surpluses**

We now move from land-reform goals of analysts and observers for land reform, to goals of ministers, advisers, civil servants and donors who – whatever the pressures from below – usually organise it. Powelson and Stock [1987: 3, 36, 89] argue that, in the name of land reform, 'governments have taken land from the aristocrats and given it to the State more than to the peasants'. Through price and other policies, though 'nominally the peasants are owners, many of the benefits are transferred to the State'. For Egypt, the land reform of 1961 and the associated controls of land use and marketing provided 'the mechanism by which the peasants paid and paid and paid, to finance Nasser's industrial drive'. Powelson and Stock conclude, with some Asian and much Latin American evidence, that '[almost] all land reforms of the twentieth century are designed to extract the surplus from the peasantry'. This goes much too far. Surplus is extracted also, perhaps even more, where there are no land reforms. Many iconic reforms (Mexico, decollectivisation in China, *zamindari* abolition in India) were designed to *reduce* at least overt, and massive, surplus extraction. And even where extractive, designs go astray. In Peru and elsewhere, governments found that poor beneficiaries effectively resisted subsequent resource extraction, while rich losers did not invest compensation bonds in support of urban investment.<sup>63</sup>

Furthermore, land reforms usually shift land from big farmers to small ones, who sell smaller shares of output (net of buyback). Such reforms reduce the share of net marketed surplus. A plausible example might see it fall from 30 per cent of output to 20 per cent. Even if heroic (or diabolic) surplus extraction reduces farm prices by 40 per cent, price-related surplus extraction still falls, as a result of land reform, from (40 per cent of 30 per cent) to (40 per cent of 20 per cent), i.e. from 12 per cent to 8 per cent of farmers' income. If governments try to increase price extraction (say from 40 per cent to 50 per cent) after reform, they find that – more than big farmers – numerous small farmers are good at avoidance. They shift their product-mix into items that are costly for the State to steal, underprice or otherwise extract; they eat more

of it; they sell it undetectably to a near neighbour, instead of to an extractive parastatal agency; they hide it, or smuggle it across borders. These activities impose needless costs; but they are lower for farmers than suggested by looking at the usual indicators of surplus extraction,<sup>64</sup> and higher for the State, financially and politically, when they must extract from hundreds of small farms instead of a few big ones. That is a major reason why, in China and the USSR, redistribution of land to the poor was reversed in favour of collectivising non-reform (chapter 5(a)). Powelson and Stock are right that urban élites seek to extract rural surplus, but this much more often leads them to abort land reform than to implement it!

This does not apply to collectivisation into State or collective farms. Collective and State farming normally both mean bigger farms and easier direct extraction by governments, since they can affect the crop-mix and output disposals directly. Both effects tend to raise the ratio of farm surplus to farm product – although they may reduce that product, proportionately, more than they raise the surplus/output ratio, thus cutting *actual* surplus. In chapter 5(a) we ask whether collectivisation is land reform at all. In any case, there have been many distributivist reforms. For all their faults, they have transferred large areas of farmland from rich people to poor people (chapter 7). Even collectivisations have often turned out to be detours [Bell 1990], on the way from big farms to small-scale family farms (chapter 5(b)). Although urban politicians have used the rhetoric of land reform to attempt the mulcting of peasants, these attempts have usually failed, or even proved counter-productive. While such efforts lasted – most strikingly in the USSR in the 1930s [Ellman 1975] – they may well have reduced the volumes of food and fuel extracted from farmers for urban uses.

Governments extract surplus without as well as with, before as well as after, land reform. Those that extract surplus from post-reform peasants sometimes recirculate much of it, by financing the provision of items such as crop research and some forms of irrigation, which are undersupplied privately.<sup>65</sup> Taiwan's 1953 reform was extractive because the original owners had to accept compensation in government bonds the value of which was eroded by inflation, whereas the beneficiaries had to repay the government in kind [Powelson and Stock 1987: 197–98]. Nevertheless in Taiwan, as elsewhere, the rural poor gained greatly from land reform; smaller farms made surplus extraction harder, not easier; and much of the surplus was recirculated to finance improved farm infrastructure.

*Attempted* use of land reform to extract surpluses from farmers for urban use has been pervasive. In the Dominican Republic, 'the Balaguer government [saw] agrarian reform [as] a policy which could stimulate food production to assure a cheap supply of food to a growing urban population' [Stanfield 1989: 312]. In Peru – after the failed attempt during the 1969 reform 'to add to capital formation in manufacturing [by steering] compensation' funds – reform beneficiaries were impeded as farmers in the 1970s as the 'government's commitment to industrialisation on the back of rural extraction led to

a severe price squeeze on, and little reinvestment in, agriculture' [Lastarria-Cornhiel 1989: 144–46]. 'Reform enterprises were, from their creation, subordinate to extractive policies designed to foment capital accumulation. Economic liberalisation in the early 1980s failed to reverse agriculture's unfavourable macro-environment' [Carter and Alvarez 1989: 170]. In Chile, a series of land reforms and counter-reforms – those of Frei, Allende and Pinochet – were sabotaged from the beneficiaries' viewpoint by subsequent price squeezes on agriculture [Jarvis 1989: 265–66]. Though many governments seek to extract surplus from farmers, land reform is not a suitable instrument. Indeed, it is more of a hindrance than a help. That is part of the case for it.

Many governments collectivise out of fear of losing control over agricultural surplus. Others, in distributive reform, stipulate over-large holdings, at the cost of excluding many poor people, and often of efficiency too. Probably such governments feel that larger units will be more willing, or more identifiable and malleable, sources of extractable surplus than numerous small farm families. Ironically, in the medium term, smaller farmers' greater output per hectare often outweighs larger farmers' higher marketed proportion of output; the *amount* of surplus can be greater with small farms. Yet the fear of even short-term falls in surplus availability, or extractability at artificially low prices, has weighed heavily with governments. The State's wish to extract surpluses sometimes militates against land reform, and often distorts it towards State or collective 'solutions'. However, extraction is seldom the main motivation of the reform in the first place.

### **(e) Goals of governments and donors: stopping revolution and keeping the peace**

Land reform to forestall revolution and civil conflict was a major goal of aid to Latin America through the USA's 'Alliance for Progress' in 1962–64. This is not a simple Cold War issue. In its last days, Prosterman and Riedinger [1987: 2, 10–11, 23–24] argued that major 'non-violent reform [would] probably avoid at least half a dozen great civil conflicts, otherwise overwhelmingly likely [before 2000 with] a combined death toll in the millions. [In 1910–45] grievances of [cultivators without long-term security of possession or traditional tenure were] a central [source of rank-and-file] support for the Mexican and Russian revolutions[,] the Spanish Civil War [and] the Irish struggle for independence. [Since 1945 they were central to revolutionary or civil conflict] in China, Bolivia, Vietnam, Cuba, Algeria, Ethiopia [and] Zimbabwe [and contributory in] Iran, Malaya and Kenya [and to] ongoing conflicts in the Philippines, Guatemala and El Salvador. [Elsewhere] major land reforms have [avoided] civil violence.' The wish to avoid the decades of land violence suffered by much of Latin America – not just during the Cold War but before and after – was an explicit ground for the case for land reform in Binswanger *et al.* [1995], and for efforts by the World Bank and other 'foreigners' to support it in post-apartheid South Africa. Still today, from Brazil and Bolivia

to Zimbabwe and South Africa, there are numerous countries where highly unequal agricultures provoke periodic violence. But is land reform justified to forestall it?

Prosterman and Riedinger [1987] attribute most revolution, and much civil conflict, to 'blameable poverty', plus sufficient poor people who believe that a change in power-structure will greatly reduce poverty, cannot be achieved peacefully, and is worth the risk and cost of political organisation and subversion. But are these risk-tolerant poor people the rural near-landless? First, while they sometimes support an urban movement for violent change, they seldom have enough co-ordination (given its cost and their dispersion), tolerance of risk, or unity of motive to bring it about. Mexico and China were exceptions. The rural poor wanted land from the 'left' movements in such conflicts, but most of them, e.g. the Russian Revolution or the Spanish Civil War, had other causes at least as important as unequal land rights or lack of land reform.

Second, Prosterman and Riedinger confirm that revolutions often lead to changes in land law and practice far different from those for which poor rural people supported them.<sup>66</sup> Poor farm labourers and peasants, while initially benefiting as revolutions led to small private farms (chapter 5(a)), later suffered from enforced State/collective farming. Elsewhere distributive reform, while often disappointingly incomplete, usually proved sufficiently incentive-compatible (see chapter 6(b) (vii) for its results to point in the promised pro-poor direction). The poor, in the countries affected and elsewhere, learn from such experiences.

Third, preventive land reform often fails to stop revolution or civil violence. Prosterman and Riedinger [1987: 126] dismiss the South Vietnamese reforms because by 'the end of 1967 less than one-eighth of cultivated land [, viz. 275,000 ha, went to] barely one-tenth of [ex-]tenants'. This is not negligible, yet, as the authors show, failed to appease peasants. Probably that was because the revolutionary forces offered more, but that is the likely effect of partial, preventive land reform on fairly confident insurgents.

Fourth, peaceful land reform can itself stimulate civil conflict or revolution. Hence revolutionaries sometimes support it, and non-revolutionaries, even if reconciled to income redistribution, often baulk at it. True, 'major land redistribution can be implemented peacefully: history need not repeat itself ad nauseam' [van den Brink *et al.* 2006]. Peaceful classic land redistribution or new wave reforms (chapter 6(e)), skilfully managed, can moderate or incorporate revolutionary, insurgent or (perhaps) inter-ethnic land invasions and seizures. A serious but appeasable insurgent threat can even help peaceful land reform, increasing public support and moderating landowner opposition (chapter 6(e) (iii) (IV)), but only if such reform transfers substantial land to the poor. Even then the risk that reform will stir the pot, rather than turning down the heat, remains. 'Major land reforms have occurred under unusual circumstances, namely, as part of a social revolution, as the outcome of war, as part of the process of liberation from a colonial power, or as part of a process of systemic change. Land reforms of more limited scope have

occurred in many other countries, and the benefits should not be dismissed lightly, but by definition they have not been transformative and their effects on the incidence of rural poverty have been modest' [Griffin *et al.* 2001].<sup>67</sup>

These four reasons explain why some governments have proved reluctant to offer substantial land reform on revolution-preventing grounds alone. This reluctance is increased by governments' dependence on the large-farm sector's output and income – sometimes for their own members' wealth, but in general for their power base, and for surpluses of food, savings, and exportables to support urban-biased industrialisation. Two decades after Prosterman and Riedinger [1987], global conflicts are perhaps less likely to fuel revolution, civil conflict, or land reform – and corresponding donor aid<sup>68</sup> – to forestall them. Donors and governments today, if they support land reform, will probably do so because it seems likely to reduce poverty, extreme rural inequality, and exclusion from choices and from civil society, and hence to free people and resources for faster growth; and because such results seem politically desirable, especially for stability and trade. Yet (1) governments (and donors) hate civil conflict, including revolutionary violence, (2) it kills people, and is seldom better than alternatives, (3) rural people are likelier to tolerate or support it if in 'blameable poverty', (4) radical land reform, in good time, may reduce 'blameable poverty' enough to deprive violent movements of much support. Many violent land-related conflicts remain; more are likely. In cases of extreme inequality, governments may still back land reform partly because rural people's lack of land and work, usually combined with ethnic conflict, threatens violent unrest. However, land reform that is too little, too late, diverted to non-poor beneficiaries, underadministered because too far down the agenda of urban politicians, or done in ways that heighten ethnic conflict, can make that threat worse, especially if sluggishness is followed by chaotic catch-up when it is too late, as in Zimbabwe. Where land inequality is extreme, yet the poor rely mainly on farming to live, land reform is 'a race against time'.<sup>69</sup>

#### **(f) Goals of beneficiaries: participation and land reform**

Should those whose goals influence a land system be 'objective' analysts, rulers, or donors, even if committed to the welfare of directly affected people? Shouldn't those people's goals matter most? If so, should analysts and rulers discover and implement the reforms that affected parties, the farmers and labourers of an area, themselves want? Even if a government acts as a congeries of selfish maximisers (as in crude forms of public-choice theory: chapter 7(b) (viii)), are not its political prospects best served by a land reform responsive to the goals of rural constituents? Should not outsiders and rational governments alike back land policies, including land reforms, designed *by* the affected agriculturists, not made from above *for* them? This is the central critique of land-reform practice, made by many who support land reform in theory:

In tenancy reforms and ceilings, legislation has fallen short of proclaimed policy and implementation [and] has been tardy and inefficient [partly because] the land reform measures in India have been a gift from benign government. The beneficiaries are largely unorganised and politically inarticulate. Therefore, pressure from below is not forthcoming for effective implementation.

[Sharma 1992: 103]

Twentieth-century land reforms, in general, have been 'by grace' instead of 'by leverage'[,] bestowed on peasants [who have not] participated in forming [them] by a gracious government which may have conquered the old 'landowning aristocracy' in a revolution, or been elected by an intellectual minority with compassion for the peasantry. But compassion is not enough.

[Powelson and Stock 1987: 3]

Most land reforms have indeed been top-down affairs, attempting to impose the overt goals or covert agendas of analysts or governments, invaders or donors. As a result, the design has reflected the generalisations (wise or not) of professionals. It has slighted the knowledge of farm people about their local agronomic and political situation, and their views on the appropriate pattern of landholding. Such top-down reforms may be detached from the interests of beneficiaries and the local realities of water and land. If so, implementation is weakened, not just by big landowners' opposition, but because 'peasants' are neither mobilised and organised to insist on implementation, nor (in some cases) even motivated to want it much.

Three approaches to 'reform from below' may be alternatives to such top-down goal-setting. *Participation* [Cerne 1991; Chambers 2007] seeks to move forward from consultation, towards 'design from below' of as much as possible of land policy and reform. Recourse to *peasant movements* involves the welling up of demands, goals, and reforms from the direct political action of potential beneficiaries. Somewhat different is the third approach to reform from below: that it has happened, and happens. The *new institutional economics* sees the rules and customs of land tenure and distribution (and of other things) as evolved: as minimising risks and, especially costs, and thus best suiting people's wishes to achieve well-being (chapter 7(c) (vii)). Costs comprise production costs (determined largely, in farming, by the availability and nature of farmland, water, labour and technology) and transaction cost (e.g. organising one's own, family, and hired labour to produce crops and animal products). On this reading, land laws and reforms tend towards sets of rules that cut costs and risks in a given, or changing, environment of physical facts and prices. This might seem to say that land arrangements are evolved ideals, requiring no organisation for change. However, most new institutional economists recognise that such quasi-evolution is long, chancy in its timing, and shifted in their own interests by market, and other, power of those who control most resources. If so, efficient

'evolution' of land systems can be helped along by pressure or action from outside – especially if, before such intervention, most resource control lies, not with the most efficient land managers, but (for example) with land inheritors. Equity also requires such intervention. So there is no presumption against outside land reform 'because' land systems are evolved and evolving: extreme inefficiency or inequity may otherwise prevent system survival, even in a polity based on consent.

New institutional economics may nevertheless see the reform goals of participants and peasant movements, just as of governments and outsiders, as blips on the evolution of land rights, overwhelmed in the very long run by the changing requirements of efficient, sustainable land and water use. But the story does not stop there. Participation and peasant movements both normally (a) accelerate evolutionary, local adaptations of local land tenure and distribution – adaptations to reduce costs of producing and transacting, given the land, water, and labour types and scarcities – by weakening traditional obstacles from the power of landlords and 'their' preferred, long-inherited land systems;<sup>70</sup> and (b) amplify the impact of the mass of economic agents on these developments.

So these three approaches 'converge' on reform from below – by leverage, not grace. This is not to say that the approaches are the same. Participation involves *public* (State) action, however decentralised, to obtain rural views, to hear rural people as they develop such views into institutional proposals, and to act on those proposals where locally agreed and consistent among localities.<sup>71</sup> The approach through 'peasant movements' involves *agriculturists'* action to achieve their goals. The evolutionist approach sees *land, water, labour, technology* and their prices (including transaction cost of combining them) as ultimate 'participants' and 'movers' in rural institution-building, but may see majorities of consulted agriculturists, not pressure from big landowners, as properly accelerating or influencing that evolution.

For all their divergences, there are problems with all three approaches to goals-from-below land reform. First, urban people are often unwilling to pay for compensation, or extra post-reform services to the small farmers. Also, urban workers fear that food supplies will be disrupted because post-reform small farmers will retain and eat more of what they grow; and urban employers fear that the resulting higher food prices will push up wages. In the medium term, these fears are probably misplaced; but goals-from-below, participatory land reform will increase urban doubts. 'Should [peasants'] decisions promote the welfare of others: industrial workers, consumers, professionals, retired people, and so on?' [Powelson and Stock 1987: 284]. Would land reforms in one area affect the welfare of rural people in other areas, perhaps 'downstream' victims of post-reform uses of soil, water or pesticides? If it is agreed that (in view of overall land scarcity or by political power structures) the recipients of land should be only the existing smallholders and tenants, may this harm the interests of rural labour [Herring 1983; Hayami *et al.* 1990]? Local participation is desirable. Most land reforms – partly to avoid undue 'participation' by rural élites – neglect it. Yet governments ultimately suffer if they ignore the impact of land reform on the general welfare.

Apart from conflicts between participants (or others) directly affected by a land reform and other people, there are major conflicts within 'land-reformed' populations. Absent full compensation to land losers, *not* financed by land gainers, these two groups are in conflict. Even potential gainers are often at odds, the more so as (a) the less the initial land of the rural poor, (b) the bigger the gap between their landholding and a minimum 'acceptable' level, (c) the less the locally available land for transfer – i.e. the higher the ceiling, and the fewer, the smaller, and the more equal are the holdings above it (chapter 3 (b) (vi)). Inter-beneficiary conflict often concerns distribution between the landless (not all poor) and the formerly tiny holders with some experience of farming (some very poor). If, before reform, land ownership is very concentrated, rural opponents of reform are fewer – but are stronger and more readily organised (p. 132). Consulting a highly unequal, or faction-ridden, village or region about the optimal design of land reform is not a recipe for a consistent, agreed solution, and may not produce even an uneasy consensus.

Moreover, the effort to consult, to reform via participation, to listen to peasant movements, often falls foul of structures not only of power but of articulateness, even of location. Botswana's Tribal Grazing Lands Programme of the early 1970s sought to reduce pressure of grazing animals on common lands, and to permit a greater amount of commercial ranching, by designating areas for each. To safeguard the interests of poor users of common grazing – both settled villagers and transhumants – local consultations were held, to establish and implement fair boundaries between common and private lands. Yet transhumants, almost by definition, are seldom 'in the right place at the right time' for such consultations. In much of Africa, moreover, transhumants are often the despised and un-self-confident victims of centuries of discrimination. In Botswana, they seldom spoke up in their own interests. Even among settled villagers, the poor seldom spoke out in defence of common land that was disputed with local 'Big Men' seeking ranchland.

Who is consulted, who responds, who participates? And who does the listening if in most countries, as in parts of India, 'the higher echelons of the administration are also substantial landowners or have close links with land-owners' [Sharma 1992: 103]? Especially where the poorest happen to be ethnic or cultural minorities, transhumants, and persons illiterate in the main national languages, there almost has to be a benevolent, analytical outsider, such as Hitchcock [1978; cf. Taylor 2004] in Botswana, to help articulate their needs in a reform process. In India in 1978, and probably still in 2008, fewer than 5 per cent of rural adults belonged to any sort of 'peasant movement' [Alexander 1980]. Most of those are better-off peasants; few are landless labourers. In West Bengal 'Operation Barga' for the registration of tenancies, to enforce security of tenure and rent restrictions, did involve a massive, and probably quite successful, attempt to mobilise the rural poor, though not the poorest (labourers) and with some overstatement of results [Mallick 1992; but cf. Bardhan and Mookherjee 2006].



‘Organisation of participation’ looks like a self-contradiction. Rural people know their evolving local circumstances – economic, political, agro-hydronomic – best. Yet they learn by discussing their possible futures and differences, especially in a context of political action, and organised participation can help. However, the very inherited inequality that land reform is reforming – together with urban power that leaves rural schooling underfinanced – leaves rural people very unequal, not least in capacity to participate. The weakest, least landed, and poorest often also have least education, least time and energy to shift from work to meetings, and most fear of antagonising the rich and strong. Further, governments must consider the outcomes of land reform for all, not only for directly affected users of land. Participation is a desirable goal, but not an overriding one.

## 2 Goals: output, efficiency, growth

### Beyond the inverse relationship

#### (a) What the debate is about, and why it matters

The balance of evidence (section (b)) is that – while in developed countries there is a direct relationship (DR) between farm size and land productivity – there is an *inverse relationship* (IR) in labour-abundant developing countries: small farms produce more, per hectare per year, than large farms. The contrast arises mainly for the following reason (section (c)). Smaller farms have advantages in managing labour, but larger farms in managing capital. Capital, and large-farm advantage, loom larger as a source of higher land productivity in developed, labour-scarce rural areas; labour, and small-farm advantage, count for more in developing, capital-scarce places. The IR suggests that, in developing countries, land redistribution into smaller, more equal farms may raise farm output.<sup>1</sup>

Farm size is not the main determinant of land productivity, but gains importance (alongside services, markets and institutions linked to farm size) as other sources of farm growth in developing countries weaken.

- Most farmers cannot readily expand farm area. Except in a few countries, all sustainably profitable farmland is farmed already.<sup>2</sup> This *farmland constraint* applies to ever more developing areas, due to population growth, farmland loss to cities, and land degradation due to often frightening nutrient loss (chapter 1, n. 46), erosion and salinity. Higher farm output and income require higher land productivity.
- Its main long-run source is technical progress, but since 1990 this has raised land productivity in developing countries by 1 per cent yearly, as against 3 per cent in the 1970s. The green revolution has largely bypassed Africa. Its potential successor, transgenics research, has not yet targeted yield [Lipton 2007a].
- Prospects for boosting farmland productivity in developing countries by improved incentives have also worsened. In domestic markets, by the mid-1990s developing-world governments had already phased out most action to repress farm prices. As for exports, despite the talk, US and European import barriers continue to rise; from 2008 the risk of a prolonged recession will increase pressure for such barriers.

Nevertheless, some find the IR–DR debate irrelevant. Some reformers see land productivity as an unwarranted obsession, driving out the necessary emphasis on equality, and on land as a basis for security. An Indian pressure group states: '[I]nequalities have increased ... The oppressed have either been co-opted with some benefits, or further subjugated as the new focus on land productivity growth has altered government priorities and public perceptions ... [The focus on] land as a basis for livelihood – for subsistence, survival, social justice and human dignity – has largely been lost' [Land Research Action Network 2003]. A focus on equality *alone* makes land productivity irrelevant to land reform, and with it the IR–DR debate. However, those wanting to get people out of poverty (even by 'co-option with benefits') *should* be concerned with the effects of land reform on productivity. If poor farmers get 10 per cent more land, but land productivity falls 15 per cent, they are worse off. With *any* fall in land productivity, poor farmworkers probably lose wages, and all the poor face dearer food.

At the opposite end of the political spectrum, the IR–DR debate is also irrelevant for those who combine opposition to land reform (usually based on property-rights arguments: chapter 1(b) (iii)) with exclusive focus on market-based productivity growth. They usually believe that land reform is worse than – and impedes – markets in shifting land towards optimum sizes of farm.

Both for equality-fetishists and for market-fetishists, IR–DR debates matter little. Yet reformers seeking equality *and* anti-reformers seeking market land allocations, if they ignore land productivity, will and should fail. Since farm size does affect land productivity, they are unwise to neglect the IR–DR debate.

It was prefigured by classical economists and their political colleagues. IR believers such as Mill, Thornton and de Tocqueville argued that the IR provided a presumption in favour of small-scale farming,<sup>3</sup> and, in land-scarce nineteenth-century Ireland and India, distributive land reform. Others counter-claimed a DR, providing a presumption against land reform. DR believers on the Right, such as Torrens and Nassau Senior, looked to markets to shift land to large farms; some also followed the agriculturist Arthur Young in supporting ongoing Enclosure Acts in Britain.<sup>4</sup> DR believers on the Left, including Lenin and – near the end of his life, fearing that capital-intensification had moved British farming from IR to DR – J. S. Mill [Hollander 1985], advocated achieving scale through co-operative farms.

The debate revived with the evidence for the IR in the Indian Farm Management Surveys of the 1950s and the Inter-American Committee for Agricultural Development's reports on seven Latin American countries, showing that 'in the 1950s and early 1960s ... production per hectare ... was [three to five] times higher on *minifundios* than on *latifundios*' [Barraclough, cited in Kay 1998]. Such evidence, and strong worldwide confirmation [e.g. Berry and Cline 1979], inspired two generations of productivity-conscious land reformers. Increasingly, liberal economists [e.g. Binswanger *et al.* 1995] and many Marxists [e.g. Arindam Sen 2003] moved against the view that progressive farming required large scale. Important for policies of developing countries

and donors were IR-based advocacy, research, technical support, and some finance for land distribution to small farms from the main agriculture-related development agencies, the UN Food and Agriculture Organization (FAO) and, some will be surprised to learn, the World Bank. Yet both have reversed their position. The head of FAO's Land Tenure Service and his colleagues wrote:

The 1945 Quebec Conference that founded FAO stated: 'Recourse to land reform may be necessary to remove impediments resulting from an inadequate system of land tenure'. [By the] 1966 FAO World Conference on Land Reform the consensus [was] that land reforms were important [for] equity and economic growth in rural areas. [I]n 1979 FAO's first World Conference on Agrarian Reform and Rural Development [produced a] plan of action [including] access to land, water and other natural resources [with] people's participation. [However,] land policies can only take shape as part of a larger economic and political canvas ... agricultural policies during the 1970s and 1980s were mainly characterised by special agricultural programmes such as price controls, subsidised agricultural services and inputs, state intervention and regulations to protect domestic markets and land immobility through agrarian reform regulations which intimidated investments. The programmes proved to be unsustainable. Thus, we enter into the current period, following the collapse of the Berlin wall, with a return full circle to the marketplace to be the ultimate distributor of land'.

[Herrera *et al.* 1997]

This reversal of 50 years of FAO commitment to, and technical support of, land reform was grounded not in evidence against an IR, but in *faith* that land reform was inextricable from a 'larger economic and political canvas' of 'state intervention' that 'intimidated investments' and 'proved ... unsustainable'.

As for the World Bank, in its 1975 Land Reform Policy Paper it had advocated aid in support of ceilings-based, productivity-conscious and non-confiscatory land redistribution, citing evidence for the IR. With further 'green lights' ever since Kennedy's 1962 Alliance for Progress in Latin America,<sup>5</sup> several land reform programmes, e.g. in Colombia and the Philippines, received World Bank and other donor support through the 1990s. As late as 1994–96 the World Bank, working with the incoming South African government and citing evidence for the IR, designed an ambitious programme to transfer, to up to a million African smallholders, a third of the 87 per cent of farmland owned by some 60,000 white farmers. Yet, like the FAO, the World Bank was shifting its ground. In a recent Research Report, Deininger [2003] writes:

Land ownership ceilings have generally been ineffective ... to facilitate the breakup of big farms, and instead have led to red tape, spurious subdivisions, and corruption. Where they were low, they have apparently

[reduced] investment and landowners' ability to access credit, as in the Philippines. The only situation where they can be justified is where high enough land ceilings may help to limit the speculative acquisition of land, [which] may be relevant in some CIS countries ... [T]he last public pronouncement by the World Bank on land issues was in the 1975 *Land Reform Policy Paper*, which analyzed land in terms of agricultural use and productivity ... <sup>6</sup>

Like the FAO's changing 'political canvas', the World Bank's shift from ceilings reform seems due to a less interventionist mindset, rather than to new evidence. Ceilings are not 'ineffective', and 'spurious subdivision' *advances* their redistributive aim (chapter 3(b)(vii)). If they cut finance for farm investment – not proven in this Research Report – that is offset as smaller farms induce labour input, to both farming and 'labouresque' investment (p. 74). The new FAO and World Bank positions neither question nor admit the IR, but see the IR–DR debate<sup>7</sup> as irrelevant. Whatever the effect on land productivity of ceilings reform, it will be rejected by those who see wholly unimpeded markets as *the* source of optimum land allocation.

All the same, most agricultural and development economists, including those just cited, agree that smaller, more equal farms *do not reduce* farm output (or GDP) in developing countries, provided:

- the pre-reform distribution was seriously unequal (say a farmland Gini above 0.3);
- the post-reform markets in land, especially tenancies, are not frozen or disrupted;
- incentives are not heavily biased against agriculture, small farms, or private providers of farm services;
- major providers of key farm services (credit, research, extension, irrigation), whether private or public, face a business climate stimulating them to meet the emerging needs of post-reform smallholders;
- the reform process avoids severe or prolonged disruption or uncertainty.

This chapter explores the view that, mainly due to the IR plus land scarcity, redistributive land reform in developing countries normally *increases* farm output. Most agricultural and development economists believe this, but far from all. Government action favouring big farms (and the cities relying on them) can camouflage an underlying IR.<sup>8</sup> Probably for that reason, there are counter-examples to the IR [e.g. Dorward 1999]. Also, empirical studies are seldom flawless; believers in DRs (or IRs) honestly, but selectively, pick holes in studies with which they disagree [Sender and Johnston 2004; for a critique, Griffin *et al.* 2004]. A few specialists, and many others, still deny the IR, claiming that distributive land reform harms output per hectare, farm output, GDP or growth. Are not big farmers 'obviously' more modern, innovative and able to bear risk than small ones? Surely better farmers enlarge by

renting or buying land from less able ones? Don't market incentives make this profitable for all parties, so a few outstanding farmers come to operate more and more land? If so, will not better farmers' land, better farmed land, and land with more output per hectare soon be much the same? In developed countries, most farm output is produced on big farms. Mechanisation has released most farmworkers into more rewarding and skilled work in industry or services. Is not transition to large-scale farming now desirable in developing countries too?<sup>9</sup>

The answer to these questions is, on the whole, 'No'. Direct and indirect evidence in developing countries normally shows an IR, with land productivity higher on smaller farms (sections (b) and (g)). Aggregating from farm level, smaller farm size and higher land equality<sup>10</sup> are linked to higher annual farmland productivity, and probably also to faster growth of non-farm and total GDP (section (h)). Does this strengthen the case for land redistribution? Only if farm smallness or equality *causes* the positive effects on output. To resolve that, sections (c–e) look at the statics: why big and small farms might make different decisions on *given* resources and inputs, and with what result for production. Section (f) looks at the dynamics of farm size and productivity: the interaction of changing farmland distribution with a changing outside world.

An IR does not mean that big farmers in developing countries are less efficient than small ones, any more than the DR in developed countries means the opposite. Farmers, big and small alike, are driven – by experience, markets and the need to continue farming – to be privately efficient.<sup>11</sup> Private efficiency comprises 'technical efficiency', i.e. selecting techniques that produce as much as possible from the resources used, and 'price efficiency', i.e. selecting input and output combinations that maximise profits with a given set of techniques. Though farmers vary, private price and technical efficiency tend to be quite high. If risk is significant and farmers want to avoid it, then the definition of efficiency becomes more complex; but pressures towards private efficiency, on big and small farmers alike, are not weakened by risk.<sup>12</sup>

IRs and DRs arise *although* most big and small farmers in the same area are rather efficient privately, with similar total factor productivity.<sup>13</sup> But their transaction costs differ (section (c)), so price efficiency impels them to select different combinations of factors. This is what drives the IR (and the DR). Smaller farms tend to use more labour, and less purchased or hired equipment, per hectare. In developing agricultures, labour (and capital created mainly by slack-season family labour) loom much larger than purchased machinery and equipment. So *small farms tend to produce more output per hectare*.<sup>14</sup> Also, small farms tend to have higher social efficiency in poor developing areas. By using more labour (important in farm production) and less capital (less important), they generate more output per hectare – the IR – and more employment. Redistributing land to small farms in such areas is socially efficient partly because it raises output per unit of 'ultimate' scarce factors (land and water), and partly because small farmers, by producing output in ways that use labour and save land, cost society less than is suggested by the market wage.<sup>15</sup>

**(b) The inverse relationship in low-income countries: direct evidence**

Allowing for land quality, 'the land productivity of smaller farms is usually at least twice that of the biggest in Colombia; in north-east Brazil in most of the six zones; in India; and in the Muda Valley, Malaysia' [Berry 1984: 72]. 'Farm-level data in fifteen countries revealed an IR in twelve countries. Similar results were found in a study of Indian villages, where a 20 per cent decline in [gross output per hectare] was associated with a doubling of farm size' [FAO 1991: 20]. Though Cornia [1985] 'could not confirm the IR with Peru, a strong IR was evident in Mexico and Barbados. Berry and Cline [1979] confirm the IR for Mexico and Brazil. Parthasarathy [1979a] also [confirms for Brazil]' [Thiesenhusen 1989: 20], as do Kutcher and Scandizzo [1981] and Thiesenhusen and Melmed-Sanjak [1990: 403, 405, 414]. Strong evidence in the same direction exists for the Philippines [Hayami *et al.* 1990], Bangladesh [Boyce 1987] and the Dominican Republic [Stanfield 1989: 312].

Contrary to a widespread view, IRs also prevail in Africa. Fieldwork by Barrett [1996] shows this for Madagascar, and by Hunt [1984: 254, 259–62], who cites several other sources, for Kenya. In Uganda, Nkonya *et al.* [2004] find an IR between farm area and crop output value per hectare. In Malawi, 'evidence on domestic resource costs [per unit of tobacco output] reveals that the smallholder sector holds the productivity edge'<sup>16</sup> [Sahn and Arulpragasam 1993: 38] despite discrimination against it. In Ethiopia, Nega *et al.* [2003], though advocating larger farms, report their fieldwork showing a strong IR: the smallest 37 per cent of their 8000 sample farms (operating below 0.5 ha) had 39–59 per cent higher gross margin per hectare cropped than the average for all farms, and 50–58 per cent higher output per hectare net of material input costs.<sup>17</sup> In a few situations, especially in Africa, extreme and prolonged discrimination against small farms has created the illusion of a DR,<sup>18</sup> yet there is evidence of IRs even in South Africa, among large farms, among small farms and between the groups [n. 8; Binswanger *et al.* 1995; Lyne and Ortmann 1996; van den Brink *et al.* 2006], despite decades of such discrimination under apartheid.

The size of the small farmer's land productivity advantage varies with context, but is generally large. In north-east Brazil in 1973, farms of 10–50 ha showed 5.6 times the output per hectare of farms above 100 ha in 1973; in the Pakistan Punjab, farms of 5.1–10.1 ha showed 2.7 times the output per hectare of farms above 20 ha in 1968–69; and among double-cropped farms in Muda, Malaysia, farms of 0.7–1 ha showed 1.5 times the output per hectare of farms of 5.7–11.3 ha in 1972–73 [Berry and Cline 1979; Binswanger *et al.* 1995: 2703]. These comparisons understate the land productivity gap between the smallest and biggest farms. In Brazil in 1980, receipts per hectare of land in farms below 1 ha were 100 times receipts in farms above 10,000 ha; receipts per hectare of cropland were three times larger; per unit of capital, five times larger; and per unit of labour 20 times *smaller* [Thiesenhusen and Melmed-Sanjak 1990].

This illustrates how small farms' low labour-productivity and higher labour-intensity are linked to their higher land-productivity. Does that

undermine the gains, in developing countries, from extra land productivity due to land transfer to smaller farms? As a rule, no. Smaller farms, when they enlarge, shift unemployed or low-productivity labour to work their new land. The higher land productivity on small farms, together with their lower capital/labour ratio, implies that they make more 'socially efficient' use of land than big farms in the circumstances typical of developing rural areas. This has been shown for several zones in Brazil [Binswanger *et al.* 1995: 2704–5]. It does not imply that big farmers are less privately efficient than small farmers: only that, given the privately efficient decisions of small and big farmers, scarce land and underemployed labour make small farms more socially efficient.

Does the IR apply over the whole range of farm sizes?

- Sometimes the tiniest farms – below say, 0.2 ha of irrigated or 0.4 ha of unirrigated land<sup>19</sup> – show a DR, with an IR above that threshold. Then redistributing land from biggest to smallest *seems* to raise land productivity for both groups, with even more output gain than from a uniform IR.
- However, most of the evidence above (e.g. Hunt [1984: 252–64] for Kenya) suggests an IR over the whole range of farm sizes. If so, any land redistribution *seems* to raise output per hectare, with gains most if redistribution is from the largest farms to the tiniest, or to landless farm labourers.<sup>20</sup>
- Some Latin American studies find a strong IR only up to 10 ha or so. In those cases, land redistribution to farms in this range from any larger farms *seems* to raise land productivity – most if the gainers were the initially smallest farmers (or the landless, given adequate management skills).

We say '*seems*', because land redistribution to smaller farms raises land productivity only to the extent that its variation among farms is 'caused' by their differences in size, or something indissolubly associated with size. Also, even if genuine, higher land productivity is desirable<sup>21</sup> only if the extra output from land is worth more than the extra labour and other inputs used to produce it. Neither is certain. Both depend on what the IR comprises, and why it is found.<sup>22</sup> Only recently have researchers moved from testing for the presence or absence of an IR or DR (reported above) to assessing causation (reviewed below). That is why most evidence in sections (c) to (e), while confirming the IR indicated in section (b), is more recent.

### **(c) The make-up of the IR, and the transaction-cost explanation**

In some developing areas, the IR is due to small farms' higher yield of one crop: maize in Madagascar [Barrett 1996], rice in Bangladesh [Hossain 1988]. Often, however, each crop yields no less on big farms,<sup>23</sup> yet an IR is found, due to non-yield aspects of intensive land use:



The higher labour use and land productivity on small farms can [mean] (1) higher percentage of cultivated ... area; (2) higher cropping intensity on cultivated land; (3) higher-value cropping pattern; and (4) higher yields per acre for a given crop. Much of the early debate centred on (4), but this is now recognized to be of minor importance. (1) is of less importance in South Asia than Latin America. In Bangladesh (2) and (3) are the dominant variables.

[Boyce 1987: 38]<sup>24</sup>

As for (1), bigger farms leave larger proportions of land unused. In Latin America 'idle land' on *latifundia*, alongside overfarming on small 'land-hungry' *minifundia*, is a central plank of the land reformers' case.<sup>25</sup> As for (2), in India in the mid-1980s, holdings below 2 ha took, on average, 1.43 crops per year; holdings of 2–5 ha, 1.30; 5–10 ha, 1.20; and above 10 ha, 1.12 [Agrawal 2000].<sup>26</sup> (3) dominates: small farmers achieve higher gross output and value-added per hectare via crop-mix, especially a focus on labour-intensive staples and, increasingly, vegetables. Nor is it only a matter of crop-mix: bigger farms tend to leave much larger shares of non-fallow land in trees or extensive grazing [van den Brink *et al.* 2006], leaving less for crops, which add more value per hectare, but require more labour use and supervision.

Are outcomes (1–4) *due to* farm size? In particular, might big and small farmers face different costs, inducing them to choose different values of output on each hectare of land? Costs of land itself matter little. For farmers who own their land, land cost is the cost of being unable to rent out one's land because one is farming it. This must be paid however much a farmer produces, so it does not affect incentive to produce. That is also true with of a tenant farmer's fixed rent. Sharecropper's rents are an agreed proportion, often half, of the crop, so they rise with output per hectare, but appear to reduce it rather little (chapter 4(b) (vi)).

Unlike land costs, two other sorts of cost are 'variable', i.e. rising with output per hectare, and therefore affecting the incentive to produce. *Production cost* rises with use and price<sup>27</sup> of physical factors – labour, capital such as ploughs, and current inputs such as fertiliser – and of managerial and enterprise skill. *Transaction cost* is the cost of management, co-ordination and transport: the expense of selecting factors, buying or hiring them, moving them to (and around) workplaces, overseeing them so that outputs materialise in the right amount, quality and manner, and marketing the outputs. Leaving aside transaction cost, production cost per unit of output (UPC) varies only a little with farm size. The farmer – irrespective of area farmed – will apply a 'best', normally profit-maximising, amount of labour, fertiliser, water, etc. to each hectare of land of a particular type and quality (including water access quality).<sup>28</sup> Compared to farmers with 1 ha, farmers with 10 ha of identically endowed land will, absent transaction cost, use ten times the amount of each factor, incur ten times the production cost, select the same product-mix, and produce ten times the amount of each product. UPC will not vary with size, and no IR or DR will emerge.

Even with transaction costs, farms of different size seldom have very different *total* UPC. In a minority of studies UPC is slightly less for large farms in rich countries, and for small farms in poor ones. This effect, however, is not large or pervasive enough to explain the big balance of evidence for strong IRs in developing-country agriculture, or the corresponding DRs in developed-country agriculture.

The main explanation is transaction cost per unit of output – UTC. Normally small farms have lower UTC associated with: labour; farm capital made by on-farm labour, so-called ‘sweat capital’;<sup>29</sup> and disposal of output, if most is to feed the farm household, or to pay workers in kind. Normally big farms have lower UTC associated with finance; purchased or hired farm equipment; and disposal of output for sale.<sup>30</sup>

In early development, the UTC advantages of smallness loom large. Labour is plentiful, cheap relative to capital, often underemployed, and therefore the main contributor to farm production. Fixed capital contributes little: capital/labour ratios are low, and much capital is ‘sweat capital’. Much output is eaten by the farm household, or paid to hired workers. So in developing agricultures, small farms face lower UTC. Their lower UTC linked to labour (and to output disposal and ‘sweat capital’) makes it pay to use more labour, and inputs complementary to labour such as fertilisers, per hectare than the large farm does. The fact that small farms have higher UTC linked to external capital means little, because such capital is not very important. So small farms produce more output per hectare. Larger farms’ higher UTC makes an IR likely in developing countries. Conversely – with costly labour, farm capital hired or bought, high capital/labour ratios, and almost all output marketed – in developed agricultures large farms usually face lower UTC, and therefore tend to farm their land more intensively. Hence a DR is likely.<sup>31</sup>

Transaction costs of labour are costs in seeking workers; screening them when found, and allocating them to tasks; and supervising them, partly to prevent ‘shirking’ but also to train, address problems, and co-ordinate effort. All such ‘labour UTC’ is lower for family farms than for commercial farms, and increases, both per hectare and per unit of gross or net value-product, as farm area rises. Small farms face lower labour-related UTC in part because they do more of their tasks with family workers. Unlike hired workers, these are ‘on the spot’ and need not be searched for. Their strengths and weaknesses are known, so that they need not be screened for each new task, or each season. Also – whereas hired labour is engaged until the marginal product equals the wage – family workers share in the total product. This strengthens their motive to co-operate, reducing transaction costs of supervision. Even for employees on small farms, a family member is usually at work close by, so here too UTC is less than on big farms. Employees of family farmers are also often motivated by exchange-hire; A works for B anticipating that later B will work for A. Due to such lower labour-UTC, small farms use more labour per hectare than big farms, and pick products and techniques, and achieve levels of output, corresponding to higher labour inputs. Strong evidence identifies labour-linked UTC as inducing an IR in developing countries.<sup>32</sup>

Pointing the other way, UTC linked to purchased or hired physical capital – tractors, combines, milking equipment – is *higher* for small farms. Such capital looms large in richer countries, helping explain a DR there. Managing a tractor over a 200 ha farm is cheaper than over 100 farms of 2 ha. Further, if borrowing to buy or hire the tractor, a 200 ha farmer often gets lower interest rates than 2 ha farmers. He has reputation, collateral and contacts.<sup>33</sup> Also, at whatever interest, finding (or granting) a \$50,000 loan has lower transaction cost than 100 loans of \$500. However, this matters less in developing countries – not only because the capital/labour ratio in farming is much lower, but also because a larger proportion of farm capital involves no borrowing. Shallow wells can be dug, or bunds maintained, with slack-season labour. In creating such ‘labouresque’ [Sen 1968] sweat capital, it is the small family farmer who has lower UTC. Clark [1957] found no evidence that capital per hectare in low-income countries was more on big farms.

Does UTC induce small farms to (a) obtain, (b) apply more, or fewer, current inputs per hectare? Transaction cost – packaging, transport, purchase time – to *obtain* 1000 kg of fertiliser is less than ten times the transaction cost for 100 kg. However, if there are many small farmers, they have incentives to procure and transport the fertiliser jointly; suppliers and traders are also stimulated to develop cheap small packages. Also, small farmers, with more cheaply supervised labour, find it pays to *apply* inputs more labour-intensively and hence more productively, e.g. by two-stage fertiliser application, or by clean-weeding so more of the fertiliser benefits the crops. So fertiliser-related transaction cost need not be more for small farms. Finally, small farmers can often use ‘labouresque current inputs’, e.g. manure or compost. So small farmers often add more plant nutrients per hectare than big farmers – from Perm, Russia, before the red revolution to Bangladesh after the green [Lenin 1899: 106, 110; Lipton 1977: 115, n. 75; Hossain 1988].

Farmers’ incentives to produce also depend on the unit cost of output disposal. For marketed output, this tends to be higher for smaller farms, due both to UTC and, for transport and storage, to unit materials cost. Where supermarkets and enforced grades and standards (section (f) (iii)) are not important, small farmers can avoid such higher UTCs by substituting low-UTC family labour for outside transactions (e.g. hand-pounding for custom milling). Also, big growers – or those who process for them – may find it pays to ‘package’ attractive contract services for smallholders (tea processing in Kenya; sugar milling in Kwazulu-Natal, South Africa). However, UTC of output *sale* is usually greater for small farmers, tending to discourage output. On its own, that might induce a DR, but in developing countries small farmers have an offsetting advantage. Most are part-time farmers, producing cereals, root crops, vegetables or milk, but less than household requirements. Such ‘deficit farmers’ save UTC thrice when they dispose of output by eating it. First, compared with large farmers’ disposals, they avoid costs of transport and sale. Second, the cow can be milked, or the farm granary run down, daily, saving numerous treks to buy small quantities, often from a distant shop. No wonder small farmers often

devote much effort to ‘subsistence’ production. This is often maligned as uncommercial, or explained by the search for food security, but usually has the highly commercial motive of cutting transaction costs.<sup>34</sup> The UTC saving from subsistence production helps explain both small farmers’ more staples-orientated crop-mix and the IR. Third, risk avoidance also leads deficit and ‘subsistence’ farms – which are typically small – to aim at higher staples output per hectare than larger farms, helping explain the IR (section (d)(viii)).

Lower UTC on smaller farms, especially for family labour, is probably the main explanation of the IR in developing countries. Even hire-workers each farm a smaller area than on big farms, so family supervision per hectare is easier and cheaper [Booth and Sundrum 1985]. This explanation is consistent with the observed DR in developed farming, which uses less labour and capital per hectare.

#### **(d) Other explanations of the IR, and implications for land redistribution**

Does the widespread IR in developing rural areas imply that land redistribution – while aimed mainly at inequality and poverty – is good for output or growth? Only if the IR arises because farm smallness, or something very close to it, *causes* higher output per hectare, without overriding damage to other sources of output or growth. This condition is met in developing rural areas if the IR is explained mainly by small farms’ lower labour-linked transaction cost. In that case, redistributing land (and water) to them would cut this cost, inducing farmers to apply more labour, and hence produce more output, per hectare. Extra farm output due to more labour<sup>35</sup> is not always good for GDP or growth: in some cases, the extra farm labour might be pulled out of other uses where it had been making more GDP. However, most developing rural areas have increasingly scarce farm land and water, and underused labour. There, an IR due to labour-linked UTC probably means that GDP will rise, due to extra farm output, if land is redistributed from large to small farms, or to the landless. But might an apparent IR *not* indicate causal links from farm size to output per hectare? Even if it does, can the links have other reasons than the small farm’s lower UTC? If so, we must question the apparent implication of the IR that land redistribution raises farm output. Section (e) will examine whether smallness is the cause of the IR, or merely a correlate. Here, we look at seven alternative explanations of the IR itself.

##### **(i) Illusion?**

First, the IR may be an illusion, due to inaccurate output measurements. Even if errors do not bias measured output up or down – or differently on small and large farms – they can invalidate observed IRs (or DRs) where weak, or of modest statistical significance [Lamb 2003]. But some IRs persist after allowing for unbiased measurement error [e.g. Kimhi 2006], as is likely

with the strong IRs reported above. As for bias in measurement, it is more likely to underestimate output on smaller farms. They intercrop or home-consume larger proportions of output, and such output is usually under-reported in farm surveys. This bias suggests that observed IRs underestimate true IRs, and that some observed DRs are incorrect.

### *(ii) Unit transaction cost?*

A well measured IR, based on reliable output data from a representative sample of farms of various sizes, may arise not due to UTC, but because farm size-classes vary in: unit production cost; ratios between land, labour and capital; or adoption of new techniques. The standard (production-function) method often does not sort this out well.<sup>36</sup> If the UTC explanation of IRs is therefore in doubt, so may be the path from land redistribution via smaller farms to more farm output. However, there is direct evidence for lower UTC on smaller farms. It is the likeliest explanation for their higher per hectare *profitability* in India [Rosenzweig and Binswanger 1993], and for aggregate evidence (section (h)) that countries with more unequal farmland produce less farm output per hectare [Vollrath 2007], and also have large median farms, and a large proportion of farmland in such farms [Eastwood *et al.* 2009].

### *(iii) Activity splitting?*

The IR may arise because farmers farm out. Small farms delegate to larger, off-farm units *parts* of their operation with both DRs and scale economies. Economists neglect this sensible activity splitting. Most farmers (like other entrepreneurs) divide production into sequential activities, handling each of them according to its response to scale. Tiny farmers often co-operate in activities where scale economies exist: irrigation management in Iran [Amid 1990: 37–38]; capital financing or construction at co-operative, *ejido* level in Mexico [Burke 1979]; many scale-appropriate activities among decollectivised *parceleros* in the Dominican Republic [Stanfield 1989: 333]. In the Huaral Valley in coastal Peru, a substantial scale-economising firm ‘provide[d] capital, technical aid, and economic expertise’ in return for a share of the harvest, while farming itself ‘[wa]s left to units enjoying the advantages of smaller scale in appropriate operations’ [Carter and Alvarez 1989: 175]. Such behaviour, apart from helping explain the IR, leads one to expect other production benefits after ceilings reform, though *rapid* benefits may require public information, extension, or seed money (see also Hirschman [1984]).

### *(iv) Area per worker?*

Labour-related UTC is claimed to induce IRs mainly because smaller farms, having more family workers per hectare, can better supervise both family and hired workers. Yet few studies test exactly that, by measuring differences in

land productivity among households with different farm area per family worker. Most studies relate land productivity to area per *household*. However, those measuring area per family worker [for Madagascar, Barrett 1996; for Gujarat, Mishra 1996] find at least as good IRs as do those measuring area per household. So the objection strengthens the IR.<sup>37</sup>

#### (v) *Dualism?*

In the 1950s the IR was attributed to 'labour-market dualism'. The more labour is applied to any hectare, the less, as a rule, is the return to applying further labour. Farmers owning many hectares therefore hire in person-hours, on each hectare, only until the (falling) marginal product of the last hour bought equals the market wage. In a family farm of 1 ha, the return is averaged among family workers. Since average return exceeds marginal, this may explain why a small (family) farm is worked with more labour, and produces more output, per hectare than a large farm. But why should a family worker continue on the home farm, beyond the point where net benefits, to the family, of her *marginal* output there fall below those from her working elsewhere? Most research work suggests that this stay-put effect – due to so-called 'labour market segregation' – though real, is small [Berry and Sabot 1981].

#### (vi) *Household contribution versus search cost?*

A more appealing form of labour-market dualism asserts that 'peasant households face a lower opportunity cost of labour than big commercial farms' [Barrett 1996]. Net benefits to the hired farm labourer are cut by the opportunity-cost of time spent searching for casual work, and moving to and from the workplace. Barrett's account is really a sophisticated version of the labour-UTC explanation (with search costs). Related is evidence [Kumar 1979] that net benefits from work on one's own farm are increased where this is consistent with a domestic contribution, e.g. child care.<sup>38</sup> Perhaps, too, peasants' 'proclivity to labour' [Barrett 1996] – in Marxist language, 'self-exploitation' or 'the lash of poverty' – drive them to work on their own account more intensely, and for less benefit, than they would accept if working for others. Carter [1984] finds evidence for this in India. Such modifications of UTC theory strengthen the inference from the IR that land redistribution raises farm output.

#### (vii) *Selective market failures?*

Do IRs/DRs arise because market failures affect only some farms? In China, transactions in farm labour or land were until recently illegal (outside trial areas) and are still widely frowned on and locally illegal, with evasion expensive. This is a 'market failure' only for those who *wish* to transact. Most tests for IRs or DRs lump together tiny farmowners constrained from hiring

labour out or land in; bigish farms constrained from hiring labour in or land out; and in-between farms unwilling to transact in land or labour. The groups should be separated, to identify an IR/DR. In China, the IR has different strength within each group [Carter and Yao 2002]. In Paraguay this approach finds which market failures affect small farmers, and thus which institutional changes are needed for land reform (classic or new-wave: chapters 3(b), 6(e)) to have most productivity gain [Carter and Zegarra 2000].<sup>39</sup>

#### *(viii) Risk and the IR*

Almost all farmers dislike risk, but poor farmers (who overlap strongly with small farmers) dislike it somewhat more [Binswanger 1980].<sup>40</sup> At first sight, this suggests a DR. Risk is more of a deterrent to committing inputs for poorer households, which usually have smaller farms. Once extra inputs are committed, the extra cost is certain, but the output contribution is prone to weather and pest risk, and its value to price risk. So will smaller farmers commit fewer extra inputs per hectare, given the uncertain extra outputs, than big farmers? If so, this would weaken, perhaps reverse, the pressure to an IR from small farms' lower UTC. Some agricultural programming models [e.g. Hazell *et al.* 1983 for Mexico] assume that small farmers are less likely to take risks. Lyne and Ortmann [1996] predict disappointingly small employment and output gains from land redistribution in Kwazulu-Natal, South Africa, on the assumption that smaller farms' lower UTC of labour is offset by greater risk aversion.

However, smaller farms tend to apply much more labour per hectare despite the risk situation [Booth and Sundrum 1985]. Might their higher risk aversion *not* discourage inputs (and hence outputs)? Risk aversion implies reduced input, and hence output, only if the inputs do not themselves cut risk. But risk *is* cut by many output-enhancing inputs, such as pest control, or irrigation construction, maintenance or use. The small farmer's greater risk aversion pulls her two ways. She uses fewer risk-neutral inputs (than big farmers) because committed input costs are certain while output is not, but more inputs of types that make output less uncertain.

Even for inputs that do not cut risk, or raise it, small farmers' higher risk aversion can lead them to apply *more* per hectare than big farmers, strengthening the IR. In normal years, most small family farmers in Asia – and many elsewhere – are net food buyers, producing less than family requirements and buying the rest with wage or other income; most big farmers are net food sellers. Risks to food prices will lead big farms, expecting to be net food sellers, to reduce planned output, and hence labour and other inputs. Yet the same risks will induce many small farms (expecting to be net food buyers) to work their farms harder, so as to grow more food, cutting the part of family diet that must be bought and thus exposed to consumption price risk. The greater the normal net food deficit – i.e. the smaller the farm, other things being equal – the greater the incentive to cut price risk by using more farm inputs.

The strong IR observed in Madagascar is partly due to price risk [Barrett 1996]. Srinivasan [1972] shows that *output* risk, too, can lead to an IR.

IRs in developing countries are largely due to labour-linked UTC. If farm size affects behaviour in face of risk, that appears at first glance to weaken such IRs. Yet theoretical and empirical work suggests that this is not the general case and may be the exception. However, if risk responses are to strengthen the IR and hence productivity gains from land reform, the institutions and techniques by which small farms cope with risk, from crop insurance to credit and storage, become crucial.

**(e) Does smallness drive the IR? ‘Missing variables’: family, isolation, land quality, management**

So far, we have shown an IR in developing agricultures,<sup>41</sup> and explored some reasons. We have argued that the evidence and the reasons suggest that land redistribution will generally increase output per hectare, and therefore agricultural production. This provides ‘output support’ for land redistribution, though this is based on equity arguments. But is the IR due to the smallness of small farms, or to correlates of smallness that are often separable from smallness itself? If the latter, some reforms that shift farmland from big to small farms might not raise farm output, and might even lower it.

Small farms are heterogeneous, as are big farms. In each size-group, some farms are run and worked by kin, others by employees; some are remote, others peri-urban; some have favourable land-water conditions, others not; some are well managed, others not. Simple measures, which regress annual farm output per hectare against farm size, miss out these factors.<sup>42</sup> In statistics-speak, the ‘bivariate’ IR hides ‘missing variables’, and thus hides ‘unobserved heterogeneity’ within farm size-groups. Smaller farms may have higher output per hectare, not because of smallness itself, but because, say, they are on land of higher inherent quality. If so, despite the bivariate IR, action to make farms smaller (and more equal) may not raise annual farm output per hectare – on four conditions.<sup>43</sup> The missing variable, say land-water quality, must:

- (1) affect output per hectare;
- (2) favour it more on small than on large farms – if, and only if, land-water quality is better on currently small farms might land redistribution, due to land-water quality differences, not raise land productivity;
- (3) be neither the *result* of farm size, nor in other ways *indissolubly linked* to it. This turns out to be crucial.

Suppose smaller farms have better land-water quality than others, and that this explains much of their higher land productivity. Does the bivariate IR therefore not mean that, if smaller farms get a larger proportion of farmland, farm output will rise? No; it will still rise, if smallness of a farm – due to lower UTC (or anything else) – *results* in higher land-water quality, for



example because smaller farms apply more slack-season labour to maintain hill terraces against erosion, or on-farm irrigation. Machakos District in Kenya is a case in point.<sup>44</sup> Or suppose small farms are much more likely to be family farms, in the sense that a large majority of labour comes from the family; and that family-ness, not smallness as such, explains much of smaller farms' higher land productivity. Does it follow that a shift of land to smaller farms need not, despite a bivariate IR, raise farm output? No; the shift will still mean more output per hectare-year, if farm smallness is *indissolubly linked* to likely family operation, so smaller farms stay more likely to be family farms than large ones.

We now investigate whether main 'missing variables' meet these three conditions and so destroy the IR.

### *(i) 'Family-ness', subsistence, part-time*

The smaller a farm, the more likely is it to be a family farm, i.e. to get all, or almost all, its management and most of its labour from the farm household. Also smaller and/or family farms are more likely to be part-time,<sup>45</sup> with the family (farm manager plus related resident workers) getting, say, a third or more of employment and income away from their farm. And smaller, family and/or part-time farms are more likely than other farms to be 'subsistence', i.e. eating most farm produce in the farm household, growing significant staple crops, and with family food consumption either less than farm output, or roughly in balance.

Smallness and family, part-time and 'subsistence' farming are not linked by logical necessity. But in developing countries they are indissolubly connected by usual farm practice. Few non-family (employer or corporate) farms are small, subsistence or part-time. The developing world contains hundreds of millions of farms below 2 ha; on the above descriptions probably over 90 per cent of them are 'family', over 70 per cent 'subsistence' (many, however, with significant farm sales), and over two-thirds are 'part-time'. Few farms above 50 ha are any of these. Family-ness, rather than smallness, may give small farms features causing an apparent IR. For instance, suppose IRs arise only because labour supervision costs less on smaller farms. If this is so *only* because small farms tend to be family farms, shifts of land between small and big farms will not affect land productivity, except to the extent that 'family-ness' is so twinned with smallness that it will remain much more common in small farms gaining land than in large farms losing it (but remaining larger than small farms). But it is: smaller farms remain, robustly, more likely to feature family overview, family labour, 'subsistence', and part-time farming. If 100,000 ha shift from bigger to smaller farms, a good deal of farmland (though probably less than 100,000 ha) will also shift to family, part-time, and 'subsistence' farms. The output effects – as suggested by a measured IR in developing countries – of a policy to change farm size are then much the same, whether that IR is due to smallness, family-ness, 'subsistence' (as in Barrett [1996]), or part-timeness. However, if the links are weak or shifting, an IR or DR may not predict the

effects of changing farm size on land productivity. For example, if part-time farming expands more quickly on smaller farms, that may erode an IR based on small farmers' supervision-cost advantage. Yet, though research is required, the links seem robust even in the long run. If so, developing countries' IR, like developed countries' DR, will not be much affected by the undoubted fact that smaller farms are more likely to be family, part-time and 'subsistence' farms.<sup>46</sup>

What of the fourth condition (p. 79) – a sort of threshold condition – required to be sure that action to make farmland more equal, pressing downward on farm size, retains favourable output effects even if the IR is due to family-ness, subsistence or part-time-ness? Such action can be analysed as shifting land from farms above 100 ha towards those of 50–100 ha, from 50–100 ha farms towards those of 25–50 ha, and so on. If that happens throughout size-groups, each of them, right down to the smallest – say 0–0.5 ha – gets more land, relative to the next-larger farm group. Each of these changes, taken separately, raises the share of land in a smaller farm group, and hence in one more likely to be family, part-time, and/or subsistence. Adding all these shifts, more land in smaller farm size-groups means more of these features indissolubly linked to smallness. Such a steady shift from each larger size-group towards smaller farm size-groups is what happens after most classic and other size-reducing land reforms. However, a downward shift of farm sizes might *raise* the share of land in a 'second-lowest' farm size group, say 0.5–1 ha, and *cut* the share in the smallest size-group, below the 0.5 ha threshold. That could happen after a land reform 'giving' many tiny farms enough to bring them above the 0.5 ha threshold, but either pulling few landless people into below-threshold farms, or bringing many above the threshold, as with a classic reform taking enough land from big farms to bring all farms up to a 0.5 ha floor (sec.(b) (vi)). Such reform might<sup>47</sup> *cut* the nation's share of land in family, part-time or subsistence farms, because the farm-enlarging effect of land shifts from the smallest size-group into larger ones outweighed the effects of all other land shifts, from larger to smaller farm-size groups. In that unlikely event, even with family-ness, etc., indissolubly linked to smallness, the IR might not ensure that classic land reform raised output per hectare.

## (ii) Isolation

Rural areas isolated by distance or transport costs from markets often feature both large farms and low land productivity. If this isolation effect wholly explains the IR in a country – i.e. if larger farms have no lower land productivity than neighbouring, and hence similarly isolated, smaller farms – then shifting land to nearby smaller farms, e.g. by land reform, will not raise land productivity. The isolation effect was first proved for Madagascar, but there was also a strong IR *within* each area, i.e. independent of isolation [Stifel *et al.* 2003 and pers. comm.].<sup>48</sup> Also, many studies showing an IR in developing countries are in small areas, some even within a village lands area, where small and large farmers would be equally 'isolated'. Conversely, the

very high land productivity of tiny home gardens illustrates how extreme *lack* of market isolation can stimulate micro-farmers to use normally idle time and resources, yet is consistent with a micro-IR among such gardens, and between them and nearby larger farms [Mitchell and Hanstad 2004].<sup>49</sup>

### (iii) *Land quality*<sup>50</sup>

This is the ‘missing variable’ most often claimed to undermine the IR. Does the IR exist only because land is better endowed, located or watered on smaller farms?<sup>51</sup> *Average* farm size is indeed sometimes bigger in *zones* typified by low-quality land quality, e.g. in Madagascar [Stifel *et al.* 2003] and India [Bhalla and Roy 1988]. The latter paper has been much cited to cast doubt on the IR. Yet, as Bhalla and Roy explain, even if smaller farms have better land, this does not invalidate the IR as a case for land redistribution if, as often, the better land arises from farmer actions more likely on smaller farms. Composting, well-digging, and field channel maintenance are in this category, due to smaller farms’ lower labour-linked UTC. If land is redistributed to smaller farms, such productivity-raising activity increases. Hence Bhalla and Roy separate ‘endogenous’ (farmer-determined) from ‘exogenous’ (inherent) causes of higher land-water quality. They conclude that, among farms of similar exogenously caused quality, ‘the IR is observed to weaken and [except in 29 per cent of Indian districts] to disappear’. However, several claimed ‘exogenous quality variables’ [*ibid.*: 58–59, 71] are not fully exogenous, but are enhanced by on-farm decisions more likely to be taken by small than by big farmers.<sup>52</sup> Also, Bhalla and Roy’s statistical reasons for attributing the IR to inherent land quality are questionable.<sup>53</sup> While some cases of the IR – and parts of the explanatory force of many – are due to exogenous (inherent) quality advantages of land on smaller farms, Bhalla and Roy overstate this. Thus they rightly identify location on an irrigation canal as an endogenous quality variable, but do not note that it usually brings *less* ‘quality’ to smaller farms, as they are more likely to rely on lower-quality, less reliable outlets, away from the canal head [Hussain and Wijerathna 2004].

Further, in six south Indian villages, Ryan and Walker [1990] find an IR among *nearby* farms of *similar* land-water quality. Farm-level panels in these villages confirm that land/water quality explained only part of the IR (and that small farmers made more profit per hectare of given quality<sup>54</sup> [Rosenzweig and Binswanger 1993]). ‘An [unadjusted] increase of 1% in the area cropped is associated with a decrease of 33% in the output per acre. When we [adjust] for observed land quality, this coefficient is reduced to 18%’ – still a huge effect of smallness on land output [Assunção and Braido 2004; see also Lamb 2003]. In Pakistan, an IR is found among farms with land of similar ‘irrigation status’ [Heltberg 1998]. In Java too, land quality explains some, but far from all, of the unadjusted IR [Benjamin 1995].

In much of Asia, then, the IR arises partly because small farms are somewhat more likely to be on better land, and to be irrigated. When we allow for

this, and compare land of similar quality, the IR is weaker, but remains powerful. Also, we need to allow for the fact that small farmers create higher land quality, because their lower UTC makes it easier to do so. Such 'endogenous' quality differences do not invalidate quality-unadjusted IRs, nor output-based arguments for land redistribution. Indeed, such arguments are strengthened if smallness helps to *cause* farmer actions enhancing quality.

In much of Africa<sup>55</sup> and Latin America, it is larger farmers who usually have better land/water quality, not because it pays them to do more to improve farms, but for exogenous reasons, e.g. assignment of irrigation to powerful persons. Despite this, IRs are often found. Here, exogenous quality effect *strengthens* the IR case for land redistribution. Colonial plantations were allocated initially as big farms, and usually stayed large, even if transferred to nationals after independence.<sup>56</sup> Formal irrigation, which is much rarer than in Asia, is more commonly found on these large farms. After independence, government and army officers (as in the Niger Basin schemes) were often prioritised for large farms with new, heavily subsidised irrigation. IRs, being usually reported without allowance for exogenous land quality, are thus liable to be underestimated in Africa and Latin America – and DRs to be overestimated or spurious. For example, for Zambian maize farmers, an apparent DR (with 'economies of scale dominant throughout'), measured without quality correction, proved spurious: 'when we correct for the endogeneity of plot size ... the IR dominates the economies of scale in all [farms] up to 3 ha ... 86% of our sample' [Kimhi 2006]. In north-east Brazil, extreme land inequality accompanies a very strong IR [Berry and Cline 1979: 44–58; Kutcher and Scandizzo 1981], little of which can be attributed to resource-quality advantages of small farms.

#### (iv) *Management quality*

It should pay bad farm managers to sell or rent land to good ones. So do good managers end up with big farms, and bad managers with good farms? If so, redistributing land from big farms (with good managers) to small farms (with bad managers) is bad for production. But there has to be something wrong with this line of thinking in labour-plentiful, land-scarce developing countries. If smaller farmers were worse managers, that would impede them from exploiting their lower labour UTC, and even where they did might outweigh its advantages; so we would seldom observe – as we do – more output, and sometimes more profit, per hectare on smaller farms. Small, impoverished farmers often cannot borrow, and so are *less* able to buy or rent extra land than rich farmers. Then, if farm management skill is distributed independently of wealth, *bad* farm managers get to farm larger areas [Assunção and Ghatak 2003]. However, Indian farm panels reveal no effect on output per hectare from household-specific fixed characteristics [Assunção and Braidó 2004], and to some extent management quality is such a characteristic.<sup>57</sup> In short, the evidence does not suggest that managerial quality is a 'missing variable' invalidating IR–DR tests.

**(v) Summary: missing variables do not explain away the IR**

Putting together the evidence on ‘missing variables’, a good summary is [World Bank 2006: 99–100, Table 5.2]. ‘The gap in [land] productivity of small and large farms can be enormous: a factor of 5.6 in Brazil and 2.75 in Pakistan. It is smaller in Malaysia (1.5), but a large farm in Malaysia is not very large. This is strong *prima facie* evidence that markets are not allocating [enough] land to those who currently farm the smaller plots. [T]his kind of evidence ignores the many reasons why the bigger farm may be inherently less productive, for example, lower soil quality. Even so, similar (but somewhat less dramatic) results show up even after controlling for [such variables]’. Thus the evidence shows that the IR is not a bogus statistical artefact of ‘missing variables’ giving small farms advantages uncaused by smallness itself.

Indirectly, such claims are further weakened by other research. Aggregate data show that developing countries with more land inequality have lower land productivity ‘even when controlling for aggregate input use, land quality, human capital, agricultural research effort, and other country-specific institutional factors’ [Vollrath 2007]. History confirms the plantation sector’s felt need to restrict small farmers’ competition [Binswanger *et al.* 1996, Hayami 2009]; why, unless they use similar land more productively? Politically, large farms, not small, are well placed to move ‘missing variables’ in their favour by obtaining price and policy advantages from governments. Further, land sales and rentals in developing countries tend to transfer land from large owners to small or landless tenants, not *vice versa*. Due to such voluntary acts, the proportion of land farmed by smallholders is rising (Table 2.1, Table 7.2). These findings support direct evidence for a strong cross-farm IR, *not* explained away by ‘missing variables’.

**(f) Dynamics of the IR: interactions with Green Revolution, liberalisation and development****(i) ‘Development’ versus the IR?**

Although small farmers have higher output per hectare now, that is a snapshot. Is the IR phasing out? If so, extra output from land redistribution may prove short-lived. Three examples are often cited. First, large farmers may be needed for rapid agro-technical progress, being better at acquiring new inputs, or readier to risk trying them first. Second, liberalisation or globalisation, often bringing changes in market structure such as supermarkets and new product standards, may be raising large farmers’ competitiveness against smaller ones. Third, we know that in rich countries, with more capital and less labour per hectare, transaction cost advantages shift to *larger* farms, turning the IR into a DR; this may happen in fast-growing poor countries too. Do such trends make the IR too ‘static’, so land redistribution based on it requires costly reversal later? Several considerations are relevant.

- Even if IRs weaken over time, land reform can still advance its main goals, *viz.* reducing poverty and inequality. However, there will be a phasing-out of its role in raising farm output.
- The possible phasing-out of the IR may make a case against land redistribution if there is only a gentle IR and modest land inequality – but not in much of Latin America some other regions, with numerous micro-farms below 1 ha, much farmland in macro-farms above 100 ha, and micro-farms often producing more than double the output per hectare of macro-farms.
- In deciding whether future trends ‘outweigh’ the static output effects of today’s IRs, both initial levels and the speed of the trends matter. Some farm areas have high levels *and* good future prospects of rapid technical progress, outreach of globalisation and supermarkets, or economic development with tightening labour markets. In such areas, farms big enough to take risks – as innovators and as exemplars – may well speed up adoption of new technology, product access to supermarkets, and adaptation as economic development brings increasing rural labour scarcity and capital absorption. If ‘extreme’ land reform virtually eliminates biggish, risk-taking farms in such areas, the long-term output losses may outweigh the short-term gains from the IR. Even so, if almost all land is in small and equal farms, both profit and politics ‘evolve’ institutions of intermediation, allowing smallholders to meet the requirements of farm progress. This is seen from the dramatic farm growth and change, after quasi-privatising egalitarian land reforms in China (1977–84) and Vietnam (1993–98), alongside rapid economic development.
- Above all, we need to know whether the above trends are happening and are efficient. To what extent are small farms, though now gaining from an IR, losing their advantages with liberalisation, technical progress, or development? If this is happening, is the process the outcome of efficient markets, or forced by selective intervention, or other sloping of the playing-field towards big farms?

Two issues help us to test claims that ‘dynamics’ destroy the static IR as an argument for land redistribution. Are small farmers ‘worse’ at adopting new techniques, responding to liberalisation and globalisation, or dealing with rising capital/labour ratios? Can, and should, markets and/or states provide inputs or incentives so that small farmers can adapt better to such dynamics? Section (g) asks whether market-based trends in farm size suggest that the IR is really phasing out due to these dynamics. These trends are assessed in chapter 7 in the context of the future of land reform.

## ***(ii) Technical progress, green revolutions and the IR***

Early data for the green revolution seemed to suggest that the dynamic green revolution would chase the static IR away, because larger farmers would innovate sooner, powering ahead of small farmers. The IR indeed *seemed* to weaken or

vanish in green revolution lead areas in Bangladesh [Ahmed 1981: 122] and the Indian Punjab, e.g. Amritsar [Roy 1981].<sup>58</sup> Yet, after the early green revolution, high-yielding varieties (HYVs), fertilisers and irrigation are normally used as intensively by small farmers as large – often more so [Hossain 1988; Abdullah 1989; Lipton with Longhurst 1989]. In India [Bhalla and Roy 1988: 67] ‘there is *no* systematic relationship between the progressivity of a State or District and the nature of the IR’.<sup>59</sup> In Bangladesh in 1976–77 ‘the proportion of acreage devoted to HYVs was inversely related to farm size’ [Boyce 1987: 213]. Fertiliser intensity had earlier come to show a similar pattern [Asaduzzaman 1980].

These findings are consistent with the suggestion [Lipton 1974] that what seemed a suspension or reversal of the IR in areas new to the green-revolution was, in fact, a temporary result of observing a *transition* between two production functions.<sup>60</sup> Middle farmers (seldom the biggest), being less risk-averse and having better access to new seeds and fertilisers, tend to adopt green-revolution innovations, and hence move to the more favourable production function, before small farmers.<sup>61</sup> However, once almost all adopt, the new green-revolution production function again shows the IR, with more labour (and hence output) per hectare on smaller farms. The earlier weakening of the IR in India’s lead areas ‘reflected the earlier adoption of new agricultural technology by large farmers. [A]s the benefits of the green revolution trickled down to small farmers during the 1980s the IR [was] restored. While large farmers face lower capital-related transaction costs, the new agricultural technology in India now appears to be scale-neutral, and the advantages enjoyed by small farmers [appear] of greater overall significance, [so they] show higher output per quality-adjusted hectare’ [Mearns 1999].

In rice areas, as Hossain [1988] indicates, this strengthens the post-green-revolution IR through yield, as well as the more normal IR through crop-mix. In the Indian State of Andhra, the new options opened by the green revolution allowed an IR for rice yield – not present in the late 1970s – to emerge in the late 1970s [Agrawal 2000].<sup>62</sup> Llanto and Ballesteros [2003], following Otsuka, report: ‘Studies show that distributional reform has [increased] yield, specifically of rice. The impact is highest in lands where technical change, e.g. adoption of high-yield varieties, has occurred.’ Bardhan and Mookherjee [2006], for West Bengal, India, find that ‘smaller farms were significantly more productive. Yields and farm incomes were also substantially higher following greater HYV and cash crop adoption ... small farms tended to adopt HYV rice to a greater extent than large farms, further reinforcing the [IR]’. This reinforcement is what one would expect from labour-intensifying innovations like the green revolution, *once widely adopted*. However, rapid adoption matters! It is led by those who have ready access to new inputs and can afford to take risks by using them early. Such dynamics suggest that – if innovation is risky, credit markets imperfect, or access to inputs biased against small farmers – it is unwise from an output viewpoint to go for reform so extreme and rigid that only very small farms (however equal) are left. This might maximise output with a given technology, but at the cost of

slowing innovation. This is a case against going to extremes, but not against feasible land redistribution in most areas. First, improving credit and input markets, and researching new seeds with lower risk to early adopters, are wiser than hobbling land reform. Second, medium-scale farmers (and other entrepreneurs), not the largest, tend to be the lead innovators [Rogers 1995]; such farmers seldom lose much land in redistributions. Third, the re-emergence of the IR shows that, after a green revolution, large static output costs of extreme inequality reappear. The innovation leadership of middle farmers cannot justify, even on pure output grounds, the sort of gross inequality of land that prevails in many developing rural areas.

### *(iii) Liberalisation, globalisation, new market structures: impact on the IR*

Some claim that liberalisation and globalisation (L&G) are reversing, or have reversed, the IR, dooming small farmers and making land redistribution futile. Sometimes that claim is merely lazy code for the fear, or hope, that small farms cannot 'progress' – a view refuted by the green revolution, which did *not* reverse the IR. Second, L&G are often used to cover, or rather to provide cover for, State withdrawal from support of rural roads, health, schools or agricultural research. Such withdrawal may weaken the IR: it harms most farmers, but small ones more. Insofar as it removes public and merit goods needed for farmers to seize opportunities during L&G, withdrawal is dubious: will the harm be outweighed by gains as withdrawn resources are used for other purposes? Dogmatic State withdrawal from providing public or merit goods is not the 'core' of liberalisation, but an ideological add-on – and often a perverse one.<sup>63</sup>

Properly defined, L&G connotes freer competition and thus less distorted, readier access to national (and global) markets. Such 'core' L&G<sup>64</sup> helps consumers, as competition restrains or cuts prices. It helps producers as a whole, through efficiency gains. However, particular producers or consumers, especially if immobile or without general skills, may lose. Among producers, L&G shifts resources (a) towards production readily tradable beyond the immediate locality, i.e. most goods, including most farm products, at the expense of services; (b) among tradables, away from those that compete with derestricted imports ('importables') and towards goods that a country can normally or readily export. Will these shifts, in the wake of L&G, harm poorer households – who overlap with small farmers – relative to others? If so, might the IR either be replaced by a DR, or become irrelevant as small farmers become unable to compete? To assess that, we separate three questions.<sup>65</sup>

**I. Do direct market effects of L&G strengthen or weaken the IR and small producers?**<sup>66</sup> L&G increases the advantages of firms, including farms, the unit cost of which comprises above-average proportions of a country's plentiful factors, and below-average proportions of its scarce factors. On liberalised domestic markets, such firms will find their products more competitive, both against imports and against previously subsidised



domestic products. In a globalising export market such firms will have comparative advantage. In agriculture, UTC leads smaller farms to choose substantially higher ratios of labour to land, capital and skills than larger farms. So we should expect L&G to shift competitive advantage to large farms in rich countries, which tend to have scarce rural labour but ample capital and skills – but to small farms in poorer countries, with ample unskilled labour but scarce capital and skills.<sup>67</sup> In such countries, liberalisation and globalisation *as such* should strengthen the inverse relationship.

**II. Do ‘marketplace institutions’ stimulated by L&G, such as supermarkets, threaten the IR?** Some such institutions may weaken, or even reverse, the competitive advantage of small farms.<sup>68</sup> L&G, mainly via freeing of foreign direct investment in retailing, has induced successive waves of supermarket expansion. Supermarkets took 10–20 per cent of retail food sales in much of South America, South Africa and developing East Asia (outside China) around 1990, but 50–60 per cent by the early 2000s. In much of South-East Asia and Central America, the growth was from 5–10 to 30–50 per cent. Elsewhere in these areas, and in China, India and some of Africa, supermarkets reached 10–20 per cent of retail food sales by 2003 [Reardon and Berdegue 2007]. These shares continue to grow rapidly in many developing areas. So does supermarket outreach, from an urban base into rural areas.

The threat to small farms is not that supermarkets destroy the IR (they don’t). It is that supermarkets, and the procedures they find profitable, may cause the small farmer’s IR advantage – lower UTC up to harvest time – to be overshadowed by the disadvantage of higher post-harvest UTC, in two ways. First, compared with many small retailers, a big supermarket (and even more a chain) tends to procure a given volume of foods from fewer points, and from wholesalers rather than direct from farmers. That may cut post-harvest, transport-linked UTC for big farmers able to deliver large amounts of output to one of these procurement points, but raises such UTC for small farmers, especially if far from these points. Second, supermarket chains, especially if selling internationally, find that it pays them to set rigorous, uniform grades and standards. These apply to health (e.g. low pesticide level and approved type); handling (e.g. fruit size and colour, which affect packaging, processing and shelf cosmetics); and ‘production process’ issues of concern to consumers or NGOs, such as ‘organic’ production or absence of child labour. It is cheaper to verify that such standards are met on 1000 ha of lettuce if they are farmed by one or two big farmers rather than hundreds of small ones. It is also cheaper to communicate to big farmers when standards change.

Such facts explain a strange story. Efficient vegetable farming usually needs more intensive land use than cereal farming, with more precise control of

watering and nutrient enhancement. In developing countries, vegetable farming has long been ideally suited for labour-intensive smallholding. In the past two decades, liberalised trade and retail investment have brought burgeoning demand for developing countries' horticultural products – initially for Western, but increasingly also for domestic, supermarkets.<sup>69</sup> Yet in many developing countries surprisingly little of this extra demand has been met by small, labour-intensive growers, despite their low labour UTC. The successful new horticulturists were often big growers, intensifying land use with equipment rather than with labour. Does the new world of supermarkets, grades and standards, and modern information system create post-harvest scale economies that outweigh the pre-harvest IR, so that land redistribution threatens, rather than boosts, farm output?

**III. Impact on such effects of intermediation, and of public or group action.** The 'supermarket revolution' has been underrated by policy-makers (and land reformers), but there is too much gloom about the impact on small farmers and the IR. If farmers sell to supermarkets rather than selling to retailers – or consuming their own farm products – how could that affect the IR? It might change the product-mix, but not in a way that systematically favours, or disfavors, an IR. It would not normally change the way in which a crop or animal product is farmed, except that unit transaction costs of supervising grades and standards might be higher on smaller farms, somewhat weakening the IR. But the main threat is that supermarkets pay more for – or insist on – products supplied in bulk, at a single point, to uniform standards, for particular sorts of post-harvest processing and treatment. *Absent intermediation* between small farms and supermarkets – lorry hire, sorting, grading, bulking-up, processing – this creates a post-harvest DR between farm size and value-added per hectare to a product between initial production and sale. A strong post-harvest DR can outweigh a weak pre-harvest IR, and might make small farms uncompetitive.

How serious is this threat? Most farmers in developing countries still cater mainly to local demand, not to supermarkets. These remain rare in *rural* West and Central Africa, China, and South Asia. Relatedly, most cropland in poor countries still grows food staples. Supermarkets have gained substantial market share from small retailers in bread, pasta and other packaged or processed staples, but far less in staples in the forms that still typify rural, and many urban, diets: chapatis, tortillas, parboiled rice, etc. A time comes when the rural poor sell almost all they grow, and buy most consumer staples from supermarkets, as in the USA or France,<sup>70</sup> and perhaps in middle-income areas where extreme land inequality makes small farms tiny (parts of Brazil and South Africa). But normally this does not happen until late development.

That is because, where there are many small farmers and land is not very unequal, it pays to provide intermediation between supermarkets and small

farms. Though supermarkets (or wholesalers supplying them) may prefer to buy from a few big farms, that will not meet demand by final consumers. In Greater Beijing and 'Shandong Province, China's fruit and vegetable basket, in contrast to fears of some researchers small and poor farmers have actively participated in China's horticulture economy [, with] almost no penetration of modern wholesalers or retailers into rural communities ... interviews in wholesale markets and with procurement agents in Beijing supermarket chains [show] that...'China's wholesale markets are only being affected marginally' [Wang *et al.* 2006]. Highly equal farmland makes China a special case, but supermarkets elsewhere often buy substantially from small farms. In two out of seven recent case studies (tomatoes in Indonesia, lettuces in Guatemala)<sup>71</sup> the growers in the supermarket supply chain averaged twice as large a cropped area as the excluded. However, the 'included' farms are still small, averaging 2 ha in Guatemala and 1 ha in Indonesia (tomatoes). Only in Kenya (kale) were 'included' growers much larger than the excluded (averaging 10–15 ha as against 1–2 ha). Otherwise, 'in all regions, small farmers are not excluded on the basis of size [or] tenure, except where these affect capacity to implement certain technologies'. In all cases education, transport access and irrigation 'play a much bigger role' in a farm's access to supermarkets than its size [Reardon and Berdegue 2007]. Any remaining 'exclusion' of small farms may reflect, not decisions by supermarkets or wholesalers to procure, but decisions by small-farm households to sell locally, or to consume their products at home.

A safeguard for small farms, as supermarkets spread, is that responses spread too. The spread of supermarkets is a modern example of a familiar 'threat' to small farms. Just as many crops now require timely channels from farmers to supermarkets, so many crops have long needed precise harvesting of a quality-controlled product, with timely collection for larger-scale processing. Rubber latex deteriorates unless collected and processed quickly. Sugar mills need scale and a steady product flow to be economic. High-quality tea processing requires precise conditions on picking. Cotton ginning (separation of fibres from sticky seed pods) is most efficient on a fairly large scale, and for freshly picked and collected cotton. Tobacco has to be delivered, on time and to quality standards, to curing barns. Milk for dairy products goes sour unless collected and processed quickly. Yet successful responses to such needs came mainly as market opportunities were seized by individual farmers, intermediaries or wholesalers; second, from group actions by processing or marketing co-operatives; and third, sometimes from the State. Such responses turned the threat to small farming, from the scale economies of processing, into an opportunity for profitable *intermediation*, linking them to the IR and other small-farm advantages. Because this happened, small farmers – though they can seldom compete without adapting to precise standards ex-farm, timely planned collection, and rapid processing – have stayed competitive in most developing areas since 1800. Widespread networks developed to collect fresh raw material from numerous tiny producers. Indeed, responses to the processing 'threat' to smallholders were so successful that, as slavery was

phased out, plantations almost everywhere needed, and usually got, state protection to survive against smallholders.<sup>72</sup>

*Intermediation failure*, tending to exclude small farms from market development, is not a rare pathology, but normally gets cured. Often, firms initially servicing, or set up by, large planters of sugar, rubber, tobacco, cotton or tea, have found that it paid to provide facilities for nearby smallholders too. For tobacco, a very labour-intensive crop, some big plantations contract out to 1–2 ha family farms, and organise to achieve economies of scale in curing and later processing.<sup>73</sup> Sometimes, private, state, co-operative, or farmer corporations collect or process for many smallholders, as with the Kenya Tea Development Association. In India, the Kaira District Co-operative Milk Producers' Union was set up in 1948, and by the end of that year collected milk from over 400 farmers, each owning 1–10 (rarely as many as 20) milch animals, for local processing and bulking up. Extended by the mid-1970s to the whole state (Gujarat), this 'AMUL scheme' today competes with other co-operative schemes – including since 1965 its all-India offspring, the National Dairy Development Board – and with a strong private sector, to collect small farms' milk, process it, and deliver dairy products to consumers India-wide, often via supermarkets.<sup>74</sup> Such ventures handle many farm products in many countries; similar responses, intermediating between field and shelf, are helping small farmers – with IR advantages – to prosper in the supermarket age. Farm size mostly *fell* in developing countries, even if affected by the supermarket revolution (Tables 2.1–2.4; Table 7.2).

**(g) 'If there's an IR, why aren't all farms small'? Indirect IR evidence, Chicago and Converse Chicago**

Suppose that, in a developing area with scarce land and ample labour, a big landowner B farms the land, alongside several hundred landless people or micro-farmers (near-landless), L. Assume an IR mainly due to the lower per hectare transaction costs of managing labour on smaller farms. When control over farmland shifts from B to L, each hectare will be saturated with more labour, thus producing more farm output. But then why *advocate* land reform? Won't the marketplace for land and labour ensure that land is transferred from B to L anyway? The transfer leads to extra output.<sup>75</sup> So won't it pay everybody, big landowners and near-landless alike, if the big landowners voluntarily rent or sell land to the smallest farmers – or even the landless – until all farms reach their best size? If land-scarce countries, including most of Africa and Asia, provide strong gains from 'shifting land from big to small units, why does the [market] economy [not] autonomously achieve the requisite reallocation?' ([Carter and Mesbah 1991: 8, who call this 'the Chicago question'<sup>76</sup>]). 'If smaller farms are more productive why do landlords not [sell or rent out land and thus] break up large units into smaller ones? If small farms produce more output per hectare, why does the market not bring them about via transfers of land or labour?' [Rashid 2000].

Note that transfers of either 'land or labour' will do. To explain why 'the market' does not adequately transfer land from large to 'efficient' poor, both the land market and the labour market must fail [Binswanger and Rosenzweig 1981, 1986; Feder 1985]. The 'Chicago question' is answered, and the IR case for land reform made credible, only if owners of farms 'too big' to get a high output per hectare cannot, or will not, raise their net incomes *either* by transferring land to smaller units by sale or rental, *or* hiring managers to seek, screen and supervise labour over each of several units of their sub-divided farm.

The 'Chicago question' cannot be brushed aside by claims that the benefits of smaller and more equal farms, or the costs of great farm inequality, are 'external' to the controllers of land or farm labour. The transaction cost gains, if smaller farms more readily or cheaply seek, screen and supervise labour, are internal. If L rents or buys land from B, these gains accrue directly to L afterwards, and/or to B via the rent or sale price. How much of the gain is captured by B, in land rent or price, depends on market realities.<sup>77</sup>

- (1) The first part of the answer to the Chicago question is that, in labour-plentiful and land-scarce areas, major market-mediated farmland transfers from large owners to landless and near-landless farmers do happen. In India, Pakistan, Bangladesh and Latin America, tenancy shifts much farmland *owned* in big units towards small *operated* farms [Singh 1990].<sup>78</sup> These shifts often bring such all-round gain that tenancy restriction laws cannot stop them (chapter 4(b) (iii)). Big landowners still rent to poor sharecroppers, even in Indian States that have outlawed it; 'labour tenancy', outlawed in pre-apartheid (and post-apartheid) South Africa, has also been widespread. Legal transfers of land control, to small family farmers with lower UTC, also often happen via labour markets, or forward product markets via contract farming [Eaton and Shepherd 2001]. But why do such market-mediated land transfers stop short, leaving great farm size inequality between B and Ls, if there is a gain, to B and Ls jointly, from further equalising land shifts?
- (2) A second part of the answer is that market land transfers deal with more of the problem (farmland inequality that constrains output) than seems to be the case. That is because the problem, while big, is less than it looks, due to the 'shorthand' formulation which expresses the IR as a relationship between farm output and area per household. If the IR is due to lower supervision costs, area should be measured per family worker. When (rarely) this is done, it shows a stronger IR than per farm data.<sup>79</sup> Also land per family member, or family worker, is much less unequal than per household [Julka and Sharma 1989]. So part of the reason why big farms have more land is that they have more family workers, avoiding the extra labour-linked UTC linked to labour hire. This part of inter-household 'land inequality' *should* not be corrected by market movements (or by land reforms),<sup>80</sup> if the aim is to exploit potential output gains from the IR. Nor

should the part due in some cases to small farms' better exogenous land quality (section (c) (iii)).

- (3) Nevertheless, the big farmland inequalities in Latin America or Southern Africa – and the persistent, strong IR usually found in developing agri-cultures – probably mean that many farms are far from optimum size. So the Chicago question retains much force. As has long been known, much of the answer is the transaction cost of big-to-small land shifts that it is cheaper to rent or sell to one person than to many:

[T]he expense of making transfers operates to prevent land from coming into the hands of those who would use it to the most advantage, often amounting, in the case of small purchases, to more than the price of the land, and tantamount, therefore, to a prohibition of the purchase and sale of land in small portions, unless in exceptional circumstances

[Mill, cited in Hollander 1985: 841].

- (4) These largely artificial transaction costs of subdivision are increased by three facts. Some countries retain laws, or administrative guidelines, against it (South Africa's Subdivision of Lands Act is still not fully repealed).<sup>81</sup> Social norms such as primogeniture impede subdivision in many areas; though such norms do respond to shifts in the economic advantage of different farm sizes [Baker and Miceli 2005], such response is slow.<sup>82</sup> Above all, B sometimes retains farmland partly to obtain benefits other than from farming. These include tax concessions, speculation upon demand for development land, game rights, prestige, social status, political power – and power over non-land markets. B, if a local landowning monopolist, can pressure the local poor to transact with him when seeking jobs, loans, inputs, or crop sales – or go without access to rented farmland. To the extent that Ls acquire control over land, B's power dwindles. This deters B from selling, or even renting, land to many Ls. Overcoming B's reluctance may drive land prices and rents up to deterrent levels [Binswanger and Elgin 1989] even when B-to-L transfers of control over farmland would raise land income for B, farm income for L, and farm output.
- (5) Land markets to bring farms towards optimal size are also trammelled by incomplete information. Tenants and buyers seldom know all about the quality of the land they seek to farm. Renters-out seldom know how well the tenant will conserve land, pay fixed rent, or work to pay a share-rent. All this delays land transfers, makes them more costly, and biases them against small tenants or buyers who would otherwise gain land due to the IR (as per the Chicago question). For a big land transaction, it is worth buying such information, but less so for each of many small ones. This deters many B-to-L land rentals and sales.
- (6) Suppose all parties gain if land shifts into smaller units, but land transactions to this end are slashed by the above problems and costs in the land market.<sup>83</sup> As a 'Chicago questioner' might still point out, large owners can

instead use labour markets to get their land farmed in smaller units. For example, owners of tea, tobacco, cotton, sugar and rubber plantations [Hayami 2009] often hire several managers to supervise labour, each in a different area within the plantation. To the extent that the IR is due to higher UTC of labour supervision over larger areas, this raises the profitability of the plantation. However, this approach offers fewer UTC savings than does reduction in farm size through sale, rental or land reform. First, paying the managers is itself a new UTC of labour supervision. Second, another new UTC is that managers themselves have to be supervised by the owner, over a large area. Third, and most fundamentally, there are costs to the owner of *co-ordinating* the decisions of managers – on tea plucking or rubber gathering times and qualities, sugar or cotton delivery procedures, or curing and extension by tobacco barn-owners. Such costs cannot be avoided by an endless sequence of managers, managers of managers, etc. Kaldor [1934] showed that co-ordination costs are an ultimate constraint upon the size of firms, and these include farms.

The Chicago question asks: why, if there is a genuine IR, don't market processes shift land into smaller farms until land productivity is optimal, with all farms near the best size for farm output? The required shift is less than it appears to be, and land rental and sale markets do achieve some of it. Yet land-market shifts are often far less than the required shift, for several reasons: the expense of land transfer, incomplete information about land quality, laws and norms restricting subdivision, and gains from retention of large owner-farms that do not depend mainly on their farming productivity. If land markets do not suffice to bring farms to optimal size, labour markets can help, but cannot be relied on to fill most of the gap.

So there are adequate answers to the Chicago question. However, there is a 'converse Chicago question', and it is tougher. Suppose there is a DR, not an IR, in agriculture in developing countries. Then we would predict that, unless something goes wrong, the search for profit would induce market responses that raised farm size. With neither IR nor DR, we would predict no trend in farm size. Many developing countries lack usable data on farm size trends, but where such data exist, they almost all show clear downtrends in farm size over the past 40 years or so. The converse Chicago question is: if there is no IR in developing countries, why do market-mediated trends in farm size almost always show that it is falling? After all, it is agreed that development, of itself, increases optimum farm size. If the market nevertheless pushes actual farm size down, must it not have been too large and unequal in the first place?

India has large, more or less comparable surveys of farmland operation and ownership at roughly ten-year intervals since the early 1960s. The distribution of land by size groups is summarised in Table 2.1. In 40 years, the proportion of India's farmland operated in farms below 1 ha rose from 7 to 22 per cent, and in farms below 2 ha from 22 to 42 per cent. Meanwhile the proportion in

Table 2.1 Percentage operated area in farm-size groups, 1960–61/2002–03: rural India

Farm size (ha)	1960–61	1970–71	1981–82	1991–92	2002–03K*	2002–03R†
0–1	6.9	9.2	11.5	15.6	22.6	21.7
1–2	12.3	14.8	16.6	18.7	20.9	20.3
2–4	20.7	22.6	23.6	24.1	22.5	22.3
4–10	31.2	30.5	30.1	26.4	22.2	23.1
>10	29.0	23.0	18.2	15.2	11.8	12.5
All	100	100	100	100	100	100

Source: NSSO [2006].

\*K = kharif season, harvest July–December.

†R = rabi season, harvest January–June.

farms above 10 ha fell from 29 to 12 per cent. Some of this big shift is due to ceilings legislation, but not most of it. First, ceilings led directly to the transfer of barely 2 per cent of farmland; indirect effects (increased sales and leases by landowners) may have doubled this. Second, the statewide data [NSSO 2006] show that farmland was shifted to smaller holdings in almost all states, whether they had high, low or no ceilings. Third, the effects of ceilings legislation, mostly in the 1950s, were presumably small after 1980–81, yet the shift of land to smaller units continued even after 1991–92, in the period of general market liberalisation. The converse Chicago question is: surely this sustained shift suggests market responses (perhaps suppressed in the colonial period, or in early independence 1947–60), by land sales and leases, to the continuing advantages in 1960–2003 of smaller farms in reducing total UTCs, despite falling proportions of workforce engaged in agriculture and substantial rises in farm capital per hectare and per worker?

The trend to smaller farms is not confined to India. The only big, internationally comparable source is FAO's World Census of Agriculture (WCA) [see also Eastwood *et al.* 2009]. Wars, revolutions, and definitional changes muddy the waters, but the message is clear. For all countries with over 100,000 ha of farmland, and data from more than one WCA round, Tables 2.2 and 2.3 show proportions of holdings and farmland in the smaller farm-size groups in 1986–2002. In seven of the ten developing countries (Table 2.2), 1986–2002 saw a rising share of land in farms below 1 ha, and also in farms below 2 ha. In an eighth, Ethiopia, a rising share of land in farms below 5 ha in 1977–89/92 continued to 2002; after 1989/92 some of the land in farms below 1 ha seems to have shifted towards farms of 1–2 and 2–5 ha, but that is almost certainly an artefact and does not reflect a market shift to larger farms.<sup>84</sup> So all developing countries with relevant data, and low or lower-middle income per head, show shifts of farmland into the lowest farm size categories in 1986–2002. Only the two upper-middle-income developing countries, Turkey and Uruguay, show (modest) shifts of farmland out of the lowest farm size categories in 1986–2002.



Table 2.2 Small and medium farms: agricultural censuses from 1985, Africa, Asia, Central and South America

Country	Year	Holdings (m)	H <sub>a</sub> (m)	<1 ha		1-2 ha		2-5 ha		5-10 ha		10-20 ha	
				% holdings	% ha	% holdings	% ha	% holdings	% ha	% holdings	% ha	% holdings	% ha
Colombia	1988	1.45	36.03	14.1	0.3	21.5*	1.4*	13.0*	1.9*	16.0	4.4	12.6	7.0
	2001	2.02	50.71	18.1	0.4	23.0*	1.7*	11.7*	1.8*	14.4	4.0	11.1	6.2
	1990	2.91	3.30	60.6†	18.5†	29.3†	30.4†	6.8†	15.9†	2.1†	10.1†	0.9§	9.8§
Egypt	1999-2000	3.72	3.75	81.1†	33.5†	13.9†	24.0†	3.3†	13.2†	1.2†	9.9†	0.5§	8.8§
	1988-92	6.09	4.87	72.1	36.9	20.2	25.2	7.4	25.4	0.3	2.2	—	—
Ethiopia	2001-02	10.76	11.05	62.8	27.1	24.3	33.3	11.9	32.6	0.9	5.5	—	—
	1986	97.16	164.56	57.8	13.4	18.4	15.6	13.6**	22.3**	8.1**	28.6**	—	—
India	1991	106.64	165.51	59.4	15.0	18.8	17.4	16.8	30.9	4.4	19.3	—	—
	1995-96	115.58	163.36	61.6	17.2	18.7	18.8	14.8	31.5	3.7	17.7	1.0	9.2
Nepal	1992	2.74	2.60	69.8	30.5	19.4	27.6	9.4	28.0	1.2	8.1	—	—
	2002	3.34	2.65	74.7	38.9	17.6	29.8	6.9	24.0	0.6	5.3	—	—
Pakistan	1990	5.07	19.15	27.0	3.7	20.4	7.6	37.5	27.6	12.3	21.6	4.7	15.8
	2000	6.62	20.41	36.1	5.8	21.5	9.7	28.1	27.9	8.8	19.1	3.9	16.3
Panama	1990	0.21	2.94	46.7	0.5	11.4	0.9	13.5	2.7	7.6	3.5	7.1	6.7
	2001	0.24	2.77	52.7	0.6	—	—	—	—	—	—	—	—
Thailand	1988	4.88	17.46	14.4	2.5	12.3††	4.2††	59.7††	54.6††	—	—	—	—
	1993	5.65	19.00	19.7	3.0	13.2††	4.6††	45.0††	36.1††	17.2††	32.0††	—	—
Turkey	1991	3.97	23.45	15.9	1.4	19.0	4.3	32.1	16.5	18.0	19.0	9.7	21.0
	2001	3.02	18.43	15.5	1.3	17.9	4.0	31.5	16.0	18.5	20.7	10.8	23.5
Uruguay§§	1990	0.05	15.80	§§	§§	8.1	—	—	0.1	12.1	0.3	13.2	0.6
	2000	0.06	16.42	§§	§§	10.9	—	—	0.1	12.5	0.3	12.5	0.6

Countries with >100K ha farmland, and censuses in 1990 and 2000 round showing shares of area and holdings by size-groups on FAO website.

Holdings without farmland (Colombia 1988, Egypt, Nepal 2002, Panama 2001), area in them (Egypt), and government holdings (Pakistan) omitted.

\*1-3 and 3-5 ha, not 1-2 and 2-5 ha.

† less than 0.8 and 0.8-2.1 ha.

‡2.1-4.2 and 4.2-8.4 ha.

§8.4-21 ha.

¶Eritrea excluded in both years. In 1988-92, entire autonomous regions of Asab, Ogaden and Tigray excluded.

\*\*2-4 ha and 4-10 ha.

††1-1.6 and 1.6-6.4 ha.

‡‡1-1.6 ha, 1.6-4.8 ha and 4.8-9.6 ha.

§§Excludes holdings below 1 ha.

Source: [www.fao.org/es/ess/census/wcares/default.asp](http://www.fao.org/es/ess/census/wcares/default.asp)

Table 2.3 Small and medium farms: agricultural censuses from 1985, Europe and North America

Country	Year	Holdings (m)	Ha (m)	<1 ha		1–2 ha		2–5 ha		5–10 ha		10–20 ha	
				% holdings	% ha	% holdings	% ha	% holdings	% ha	% holdings	% ha	% holdings	% ha
Austria	1990	0.27	7.22	3.3	0.1	10.9	0.9	21.3	4.0	17.8	6.8	20.0	13.5
	1999/2000	0.20	6.80	13.5	–	–	2.2	22.0	5.3	19.4	9.7	22.7	17.8
Belgium	1990	0.85	1.40	12.3	0.6	8.7	0.9	15.9	3.5	15.2	7.0	19.9	18.2
	1999/2000	0.06	1.43	15.4	–	–	0.8	13.9	2.2	13.7	4.4	16.8	10.8
Denmark	1989	0.08	2.77	18.1	–	–	–	–	–	–	3.4	24.1	10.3
	2002	0.05	2.67	19.2	–	–	–	–	–	–	2.2	19.3	5.3
France	1988	1.01	28.60	7.8	0.1	11.1	0.4	11.6	1.3	11.3	2.8	16.6	8.5
	1999/2000	0.65	29.88	15.5	–	–	0.7	12.3	1.3	9.3	1.9	10.9	4.2
Italy	1990	3.02	22.70	32.9	2.1	19.6	3.6	23.5	9.7	11.7	10.7	6.7	12.1
	2000	2.59	19.61	38.1	2.4	19.2	3.6	20.6	8.5	10.1	9.3	6.1	11.2
Norway	1989	0.10	0.99	4.3	0.3	9.4	1.3	23.5	7.8	25.1	17.9	25.5	35.8
	1999	0.07	6.36	20.2	–	–	–	–	10.6	23.8	20.6	31.5	30.0
Portugal	1989	0.59	4.01	30.1	2.3	28.2	5.8	23.8	10.9	9.4	9.6	4.6	9.4
	1999	0.42	5.19	26.3	2.7	27.9	6.4	24.4	10.5	10.2	8.6	5.6	0.7
UK	1993	0.24	17.14	5.6†	–	–	0.1†	8.9†	0.4†	12.0	1.3	15.2	3.1
	1999/2000	0.22	16.30	9.6	–	–	0.1	9.7	0.5	11.6	1.3	13.7	2.9
USA	1987	2.09	390.31	8.8*	–	–	–	–	0.1*	19.8*	–	–	1.1*
	1997	1.91	377.09	8.0*	–	–	–	–	0.1*	21.5*	–	–	1.2*
	2002	2.13	379.71	8.4*	–	–	–	–	0.1*	26.5*	–	–	1.6*

\*USA: holdings below 0.4 ha excluded. The entries in the columns '<1 ha to 5 ha' are in fact for 0.4–4 ha, and the entries in the columns '5–20 ha' are in fact for 4–20.2 ha.

†UK: the big rise, 1993–99/2000, in the proportion of holdings below 2 ha is partly illusory; 1993 data exclude farmers' only holding if below 6 ha, with no regular between full-time farmer or worker; fewer than 100 days of labour per year, and greenhouse area below 100 sq. metres. Finland excluded because 1990 and 1999/2000 data appear non-comparable (60% fall in holdings, 53% in area).

Source: [www.fao.org/es/ess/census/wcares/default.asp](http://www.fao.org/es/ess/census/wcares/default.asp)

This is confirmed on a longer view [see also Eastwood *et al.* 2009]. For 1969–93, Table 2.4 covers more developing countries than Table 2.2, but uses slightly different data.<sup>85</sup> ‘Median size for number’ is the size of the median holding – the farm in the middle, with as many larger as smaller, when all farms are ranked in order of area, from the biggest to the smallest. If instead we rank all farmed *hectares*, starting with each hectare in the biggest holding and ending with each in the smallest, ‘median size for area’ is the size of the farm containing the ‘median hectare’. In ten of the 11 African and Asian countries in Table 2.4 with at least two years’ data for median farm size for number *and* for area, both fell, usually steeply.<sup>86</sup>

Tables 2.2–2.4, despite real problems about data and comparisons, suggest that a high and rising proportion of farmland in low-income countries is cultivated in smallholdings; and that a high and rising proportion of farm operators is small. Some big low-income countries, without data sufficient for entries in Table 2.2 or 2.4, also concentrate cropland heavily and increasingly in the smallest farms (e.g. Bangladesh had 69 per cent of farmland in farms below 2 ha in 1996–97).<sup>87</sup> Even China – with farms already very small and equal after the land reforms of 1977–85, and despite land grabs from small farmers by local authorities – shows falling farm size, now averaging below half a hectare, with few big farms and low per-person land inequality; China in 1997 had 58 per cent of its 130m ha of cropland in holdings below 2 ha.<sup>88</sup> The trend to smaller farms continued, reflecting farmer choice, despite several government-led experiments to encourage larger farms [Zhou 2000; Bi *et al.* 2007].<sup>89</sup>

If (as Tables 2.1–2.4 suggest) farmland has been shifting towards smaller farms in developing countries, why? Land reform is part of the answer, but not the main reason. Several countries, showing the shift to smallness in these tables, have seen no ceilings laws, or no enforcement. Elsewhere, enforcement was mostly before the mid-1980s, the start date for the falls in farm size shown in Table 2.2. Nor can we explain those falls by global economic trends that have favoured smaller farms against larger ones. Farm capital/labour ratios globally have been rising, increasing the UTC advantages of big farms (in borrowing and managing capital) relative to those of small farms (in managing labour). Also, trends in distribution – supermarkets and product standards during globalisation and commercialisation – have in some countries, where intermediation response is weak, shifted competitive advantage towards larger farms. Hence, despite pressures in much of Europe to conserve small-scale farming, in *developed* countries the share of farmland in the smaller size-groups (though occasionally not the very smallest) either stayed very low or fell, sometimes sharply (Table 2.3).<sup>90</sup>

So why the continuing shift to smaller farms in Asia and Africa?<sup>91</sup> The ‘converse Chicago question’ suggests an answer: market responses to a strong initial IR. Even if it was weakening over time, it remained enough to induce landowners to shift land to smaller farms through rent, sale, or other voluntary transfers. Are there alternative, credible explanations for small farms’ rising proportion of farmland? Perhaps we can turn to answers to the Chicago

Table 2.4 Size (ha) of median farm, farm with median hectare, and farmland Gini: developing-country trends, 1970–90\*

<i>Country</i>	<i>Date</i>	<i>Median farm size (ha)</i>	<i>Farms with median hectare</i>	<i>Gini</i>
<b>Africa</b>				
DR Congo	1970	1.2	1.8	0.37
	1990	0.39	0.76	0.37
Ethiopia	1977	1.0	2.3	0.46
	1989/92	0.54	1.3	0.47
Lesotho	1970	1.5	2.6	0.39
	1990	1.1	2.4	0.49
Malawi	1969	1.2	2.1	0.36
	1993	0.52	1.8	0.52
<b>Developing Asia</b>				
India	1971	0.98	5.5	0.62
	1977	0.85	4.8	0.61
	1991	0.74	3.4	0.58
Indonesia	1973	0.56	1.8	0.55
	1993	0.54	1.8	0.46
Republic of Korea	1970	0.71	1.2	0.37
	1980	0.75	0.81	0.35
	1990	0.81	1.4	0.34
Turkey	1980	3.6	13.0	0.57
	1991	3.0	13.0	0.61
Nepal	1972	—	2.4	0.56
	1982	0.49	2.8	0.60
	1992	—	1.6	0.45
Pakistan†	1980	2.9	7.8	0.52
	1989	2.1	7.2	0.57
Thailand	1978	2.7	5.8	0.44
	1993	2.4	5.5	0.47
<b>South America</b>				
Panama	1971	3.6	86	0.87
	1981	1.7	95	0.84
	1990	1.2	110	0.87
Paraguay	1981	8.2	—	0.93
	1991	6.9	—	0.93
Brazil‡	1970	9.4	520	0.84
	1980	9.8	730	0.85
	1985	8.6	670	0.85
Peru	1972	1.8	—	0.91
	1994	2.5	—	0.86

Source: Agricultural Censuses at: <http://www.fao.org/es/ess/census/gini/table2.asp>. Excludes countries with below 100,000 ha of farmland. The column headed ‘Med. farm’ shows ‘median size for number’, i.e. ha in the median farm ranked by size. ‘Med. ha’ shows the ‘median size for area’, i.e. ha in the farm containing the ‘median hectare’ of farmland, with hectares ranked in order of the size of the farm where they are found.

\*Includes holdings without land (usually zero or very few); and only countries with data for 1990 round and 1970s or 1980s round.

†Excludes 149 government holdings with 103,000 ha in 1989, and 192 with 50,000 ha in 1980.

‡1985 data used as no later data are available.

question itself, viz. why big farms survive if there is an IR. That was partly answered by the greater cost of renting or selling land in small units than in large; by the cost of information on quality of numerous small pieces of land; by laws or norms favouring big farms, or restricting subdivision; and by political, social, and interlocking-market advantages of large owner-operated holdings. Yet these pressures to large scale make the converse Chicago conundrum even harder. Why should there be land shifts to smaller farms in low-income countries, unless there is a strong IR?<sup>92</sup>

Two 'obvious' answers have no force. First, there might seem to be a demographic explanation. In South Asia and sub-Saharan Africa (though not China or Latin America), rural populations are still growing,<sup>93</sup> though – due to urbanisation and falling fertility – more slowly than in 1960–2000 (Table 7.2–3). Growth of *prime-age* populations seeking work and forming households (persons aged 15–65) does not slow down until 10–25 years after populations as a whole, and continues to rise rapidly in most of the developing world.<sup>94</sup> Despite the rise in the rural non-farm share of GDP, more households seek income from farming each year, while legacies divide land among a growing number of inheritors. With little unused land to be cultivated, doesn't such a demographic mean an automatic fall in land per farm household?

No! Were there a DR, farms would get bigger even in these circumstances. Small landowners could gain by joining their farms, or by selling or renting them to larger owners. Suppose each of three married siblings inherits 1 ha from a father who had farmed 3 ha. Farm size need not then fall from 3 ha to 1 ha. Each sibling can farm her legacy as it is; dispose of some or all, leading to its being farmed in units smaller or bigger than 1 ha; or enlarge and farm, by renting or buying in farmland. This may not happen at once, but the inheritors will not normally continue farming the former 3-ha farm in three farms of 1 ha each, if larger size uses scarce land better and thus pays better. So, as population growth reduces legacies of *owned* farmland, that implies at most a transitory effect on *operated* farm size. Even if land markets are weak, land can be left with relatives, or farmed with neighbours, if bigger units are, or become, more attractive land uses. If 1-ha farms make worse use of land than did 1-ha ha farms, 'population growth' is no reason why the inheriting siblings should lose income by indefinitely cultivating three 3-ha farms. For 50 years in most of Asia and Africa, descendants have indeed cut median farm size. This was not due to automatically split legacies as population grew, but because workforce growth underlined the pre-existing IR: the case for higher farm labour/capital ratios, lower labour-linked UTCs, and thus smaller farms. Population growth would not induce farm-splitting unless the IR had made it more profitable: the weight of economics corrects 'the weight of history', colonial and post-colonial, that had made owned land so unequal.

The second 'obvious' alternative to the IR, in answering the converse Chicago question, is technology: rising land productivity due to the green revolution. There are three versions of this answer.

- In the *crude version*, productivity growth permits a household (of given size and structure) to get the same income as before but with less land; so farm size can fall without income loss, even if there is a static IR with any particular technique. This has no force. Households want to do as well as they safely can from their land, not to maintain a fixed level of living by farming smaller units.
- In the *technological version*, fast technical progress gives the larger farmer lasting dynamic advantages, because she can take more risks, access more credit, adopt each technical advance sooner, and stay ahead. This is conceivable, but contrary to fact. Technical progress in developing agricultures often starts with middle farmers but soon spreads to tiny ones, and the IR is reasserted (pp. 85–6).<sup>95</sup>
- In the *economic version* [Eastwood *et al.* 2009], the supply of labour, and therefore of households, to farming depends on expected farm income. When that rises due to a green revolution, so does the number of households seeking to farm. Hence (given total farmland area) farm size per household falls. This is valid where full-time farm operation is the only income source for extra rural households. However, if they have choices, whom does it pay to choose farm sizes bringing needlessly low output from available land? Households can mix farming, farm labour, and rural non-farm activity so as to optimise the scale of each, and, in the process, farm size.

Any argument – crude, technological or economic – that, even with no IR, rising farmland productivity can explain the falling farm size trend in low-income countries, also faces an empirical objection: that trend is not restricted to countries with fast growth of land productivity, or correlated with it.

The two ‘obvious’ non-IR answers to the converse Chicago question, demographic and technological, make a similar error. Suppose there is no IR. Then population growth, raising the number of households seeking to live off farming, makes it *harder* to explain an observed trend to smaller farms. In areas with DRs, to respond to population growth by reducing farm sizes would *worsen* its impact on levels of living. Similarly, absent an IR, technical progress (raising output per hectare independent of farm size) makes it harder to explain falling size. In areas with DRs, a technology-induced rise in land productivity *raises* the loss from selecting a below-optimum farm size. So population growth and agro-technical progress do not weaken the ‘converse Chicago’ point, that trends to smaller farms indicate an IR. They strengthen it.

Small farms might persist, despite a DR, because rural households, though moving out of farming, keep small farmable units so as to cut risk, via food security and diversified portfolios [Valdes, pers. comm.] However, that does not answer the converse Chicago question by explaining a *trend* to smaller farms. Also, if the IR had become a DR, one would expect tiny landowners, if they wish to keep small farm areas to reduce risk, to rent out operating

rights, keeping the right to resume cultivation if their non-farm endeavours failed. They increasingly do so in developed countries, but seldom in developing rural areas.

The converse Chicago question raises several related questions, similarly unanswerable unless there is a persistent IR in low-income agriculture. Why is tenancy overwhelmingly from big farmers to small? Why did colonial powers [e.g. Assunção 2006: 1] and some post-colonial governments feel the 'need' to protect large farms from competition by small?<sup>96</sup> Why, if small farms did not use land more productively, did several African governments find it necessary to prohibit land sales or rentals, or even labour arrangements leading to farming in smaller units? The 'weight of history' explains why, despite the IR, much farmland in many low-income countries stayed in huge farms during and well after the colonial period. Market-mediated falls in farm size since decolonisation, however, point strongly to an IR.

Both rising land productivity relative to labour, and growing farm labour supply, tend to raise the price and rent of land, and to lower the wage-rate. Land acquisition becomes more costly for the (near-)landless poor, and wages to pay for it are harder to come by. With very well-functioning markets for rented land and credit, this might be overcome. In reality, it means that the green revolution and rural population growth make it *harder* to explain falling farm size trends in low-income countries, unless there is an IR. Almost certainly, these trends confirm other evidence, and signal a persistent IR. The Chicago question does not cast serious doubt on the IR, because incomplete market transfer of land to smaller farms – while genuine – has many credible explanations. The converse Chicago question, however, cannot readily be answered except by the IR. This strengthens the already substantial direct evidence for the IR.<sup>97</sup>

#### **(h) An aggregate IR? Land and overall inequality, non-farmers, and economic performance**

Suppose that a low-income nation has very unequal farmland, with a few big farms, and many 'smallish' farms which have more output per hectare. The sampled *micro-IRs* create a presumption that if farms were more equal, so most farmland was in smallish farms,<sup>98</sup> there would be more farm output. However, it is not clear that we can 'add up' *micro-IRs* to infer a *macro-IR*, between farm size (or farmland inequality) and farm output – still less an *aggregate IR* between farm size and output at the level of a village, let alone region or nation. More farm output (due to land equalisation) in one village might compete away the livelihoods of another. More equal land might harm farm, non-farm, or total output by inducing less favourable conditions for, say, borrowing and lending, or saving and investing, or order and freedom. Also, for these reasons or others, a move to smaller and more equal farms might harm non-output goals. This section looks at the evidence on how farmland size and inequality affect aggregate farm output, non-farm output,

and total GDP. We conclude that the direct evidence on the macro-IR and the aggregate IR tends to support the presumption in their favour from the micro-IR.

*(i) A macro-IR of farm size to total farm output?*

**I. Villages.** In Gujarat, India, Singh [1985] compares villages with more land in smaller farms and greater land equality, to otherwise similar villages with more concentrated land.<sup>99</sup> In the 1970s, the more equal villages responded to both green and 'White' (milk distribution) revolutions with faster, as well as more pro-poor, growth. In West Bengal, Bardhan and Mookherjee [2006] compare land productivity trends across villages affected to different degrees by land reform. Rises in use of HYVs, and hence in farmland productivity, were much faster in the more 'land-reformed' villages, which had enjoyed greater falls in land inequality and in typical farm size. However, 'in our sample [only] 10 per cent of cultivable land was involved in the reforms, whereas HYV adoption rates rose from 10 per cent of acreage in the early 1980s to 66 per cent by the late 1990s', with a big lead in the reform villages. This lead must have applied also in the fields of farmers not affected by reforms; 'direct effects of the land reform [due to a farm-level micro-IR<sup>100</sup>] explain only a small fraction' of village-level macro-IR. Bardhan and Mookherjee attribute most of it to decentralised, participatory rural governance: an impact extending to all land, reformed or not, but stronger in the more reform-affected villages. Probably the weakening of rural 'Big Men' meant more efficient and responsive governance, less biased against small farms.

**II. Regions.** Across India's 57 agro-climatic zones in 1971–72, aggregate farm output was regressed on physical influences (per-hectare fertilisers, irrigation) and the Gini of *owned* land.<sup>101</sup> The regression accounted for 62 per cent of variance among zones in aggregate farm output. Aggregate output in a zone was related strongly and negatively to land inequality, and hence to the proportion of land in big farms.<sup>102</sup> Similarly, Indian states with higher initial land inequality had lower productivity even after land reform legislation. There was a similar dynamic IR in Korea, linking the 1950s' land ceilings to subsequent faster land productivity growth [Jeon and Kim 2000, cited in Vollrath 2007; Banerjee and Iyer 2005].

In India, States (provinces), rather than central government, are responsible for much farm policy. Desai [1997] found that a State's equality of operated farmland was second only to public outlay on research and extension as a determinant of total factor productivity in agriculture. Greater equality in



ownership holdings was also important, though less so. ‘These results ... support the case for improving access to land by the rural poor as part of a strategy for rural growth-with-equity’ [Mearns 1999]. An IR between a State’s farm inequality – in practice, the extent to which its farmland is in big farms – and its *total* factor productivity in farming has two implications. First, if true (since the higher labour/land ratio of small farms is undisputed), it indicates a stronger IR between farm size and *land* productivity. Second, it confirms Bardhan and Mookherjee [2006]: the macro-IR – while partly due to lower labour UTC for small farms’ lower labour UTC – is also partly due to a ‘supra-farm’ impact of greater land equality.

**III. Cross-national comparisons.** On their own, these can be suspect – the causal direction of any *association* between farm size and national performance is hard to confirm – but they underpin village and regional evidence for a macro-IR of farm size to farm output. Among countries, ‘a one standard deviation fall in the Gini coefficient [of operated farmland] is associated with an increase in [land productivity] of 8.5 per cent ... holding constant aggregate input use, land quality, human capital and institutional quality’ [Vollrath 2007]. Latin America’s 0.8 farmland Gini links to 25 per cent less output per hectare of similar land, similarly farmed, than in China or Vietnam (Ginis around 0.3). The shortfall suggests a strong macro-IR.<sup>103</sup>

Investment, or saving to finance it, *may* help explain both why a macro-IR, between mean farm size (or inequality) and village land productivity, exceeds expectations from micro-IRs, and why a dynamic IR might exist, so land redistribution brings faster land productivity growth. Gersovitz [1989] finds no link between rural inequality and high savings rates. Might very unequal land reduce – and land redistribution raise – a village’s *effective* farm investment, and thus the contribution of capital to farm output?

- The Bardhan–Mookherjee finding *may* confirm Bhaduri’s [1973] suggestion that, if – for example due to land reform – smaller farmers require fewer consumption loans, and landowner power weakens in credit markets, lenders will switch towards support of farm investment.
- Small farmers’ lower labour-linked UTC disposes them to investments that are labour-intensive in construction (sweat capital), maintenance and use. Large farmers’ lower capital-linked UTC disposes them to capital intensity. In low-income areas, with capital scarce and labour plentiful, labour-intensive investments are more socially efficient. In Bangladesh, land inequality is associated with choices of irrigation system that are inefficiently capital-intensive [Boyce 1987: 247].
- Some data suggest that within-village land inequality induces out-migration [Connell *et al.* 1976]. Saving, once diverted to train, support and place migrants, is no longer available for farm investment.

- Finally, some common property (secondary irrigation channels, trees) directly affects private land productivity. In villages with very unequal land, power over – and hence benefits from – common property are also unequal. Poor labourers lack incentive to save (or work as ‘sweat capital’) to maintain common property or stop unauthorised overuse. In land-unequal villages, farm output per hectare may suffer.

(ii) *An IR between farm size and non-farm output?*

‘The rural non-farm economy (RNFE) accounts for 35–50 per cent of rural incomes throughout the developing world’ [Haggblade *et al.* 2007]. Whether an aggregate IR or DR links farm size to GDP depends heavily, therefore, on how farm size and inequality affect the RNFE. There are two paths.

- A conventional IR, especially a macro-IR, means that smaller, more equal farms induce higher farm output and income. This means more demand for non-farm products via ‘backward production linkages’ (extra farm inputs), ‘forward production linkages’ (extra processing of farm products), and above all ‘consumption linkages’ as more farm income is used to buy more non-farm goods and services. Estimates of the ‘multiplier’ – extra GDP at national level, including non-farm GDP, per initial one-rupee rise in farm GDP – are ‘1.6–1.8 in Asia and 1.3–1.5 in Africa and Latin America’.<sup>104</sup> In other words, an extra £100 of farm GDP (farm output net of raw materials costs) typically brings £30–80 of non-farm GDP,<sup>105</sup> and totalling £130–80. Most of this £30–80 is made rurally, to meet extra demand by farmers and farmworkers, especially for trade, catering, construction and transport. This induced RNFE growth need not be concentrated in the villages where farm output initially grew, leaving others to fall behind. Among 240 Indian villages from 1971 to 1999, long-run consumption linkages from higher farm productivity are stronger to RNFE where farm productivity initially grew more slowly: ‘footloose factories relocate from high-wage to low-wage villages’ [Foster and Rosenzweig 2004]. Land redistribution pulls up RNFE income because the IR means that it raises farm output, with growth linkages to RNFE.
- Most, but not all,<sup>106</sup> studies suggest further linkage from small farms to higher RNFE income because smaller farmers use or buy more extra non-farm product *per unit of extra farm output* than big farmers.<sup>107</sup>

Many field studies of early development in low-income countries confirm the power of farm income growth as the main stimulant of non-farm growth, usually nearby. That power is probably greater, and is more cheaply released, if many of the initial gains in farm income go to smallholders, and therefore if farmland is not very unequal. Farm growth is also a relatively *affordable* way for a low-income country to seed non-farm growth of income and employment: the capital and skill cost of an extra workplace is usually much lower in

farming, especially small-scale farming, than in non-farm activity, even in the rural sector. Only as development proceeds, and capital and skills become less scarce, does non-farm growth become increasingly self-seeding, rather than a consequence of farm growth [Haggblade *et al.* 2007].

**(iii) *Farmland inequality and economic growth: a dynamic aggregate IR?***

Not only are there apparently strong negative links, in low-income countries, from the concentration of farmland in large holdings to low *levels* of both farm output and farmland productivity (crucial because, in more and more of Asia and Africa, land is scarce). There is also growing, if disputed, evidence that *growth* of total GDP in developing countries is cut by inequality of incomes [Barro 2000] *and/or assets* (see below). How might this work? Perhaps through pressure on politicians to reduce inequality, in ways that harm incentives and hence growth [Alesina and Rodrik 1994, Persson and Tabellini 1994]?<sup>108</sup> But then the link from inequality to slow growth would be strongest among democracies; it is not [Clarke 1997]. Nor is it plausible to attribute the link mainly to capital-market imperfections, preventing the poor in very unequal societies from borrowing to educate their children; the advantages of such education are sufficient that such imperfections would be largely overcome in the long run.

The apparent failure of inequality to harm growth in *developed* countries [Barro 2000] is a clue. In developed countries, most inequality is of earnings, ‘achieved’ through effort and skills [Lydall 1968; Eastwood and Lipton 2002]. Such inequality, up to a point,<sup>109</sup> has a growth-enhancing, incentive function. In developing countries, however, much inequality is linked to ‘ascribed’, especially inherited, possession of assets such as land and access to education. Income from ascribed assets, far from rewarding effort, skills, enterprise, or market responsiveness, diverts current GDP away from such incentives and allocations: education, if ascribed to children because parents can pay, excludes children of the poor, even if better qualified; inherited land is farmed (or rented out), not by the best manager, but by the inheritor. Ascribed inequality slows and distorts growth by artificially rationing market access, not to those with better capacity to get good returns from what is bought, but by purchasing power acquired through inherited or status-determined assets. This probably reduces GDP growth. Further, at any given GDP, extreme ascribed asset (and hence income) inequality<sup>110</sup> also make the poor more numerous and poorer. Larger parts of the population have little chance to save, become well educated, or compete for non-menial work. Many children curtail education out of need to earn, making both education and job assignment cost-ineffective. Further, agrarian societies with severe, unreformed land inequalities hardly ever developed political systems based on equality before the law and open justice [Moore 1966], which seem crucial for growth [Barro 1997]. Extreme ascribed asset inequality not only inhibits growth, but – by making the poor more numerous, while assigning assets in

ways that limit their potential – cuts the poverty-reducing impact of a given growth rate.<sup>111</sup> Gross inequality of ascribed assets – including, and in some developing countries mainly, inherited land – cuts growth by excluding more (and poorer) people not only now, but decades ahead.

The evidence supports the logic: in developing countries, growth is retarded by high inequality of the main ascribed assets, land [Tyler *et al.* 1993; Deininger and Squire 1998; Deininger and Olinto 2000] and access to education [Birdsall *et al.* 1995]. And this is because of asset, rather than income, inequality: when both are added to standard explanators in econometric regressions ‘explaining’ growth-rate differences among developing countries, asset inequality inhibits growth, but income inequality becomes insignificant [Lundberg and Squire 2003]. Asset inequality also causes long-run income inequality: high land Ginis<sup>112</sup> are disproportionately important predictors of high income Ginis in Latin America decades later, even after agriculture’s share of GDP has fallen to 10–15 per cent [Carter 2004]. That grossly unequal landholdings also harm GDP growth is confirmed ‘by tracing long-term development paths of comparable countries (Columbia, Costa Rica, Guatemala, El Salvador; Indonesia, the Philippines, and Thailand; states within India) and [by] cross-country time series [showing] the same “path dependent” development pattern: countries with [more equal] land tend to have better, more inclusive institutions which in turn [accelerate] economic growth’ [van den Brink *et al.* 2006, citing Acemoglu *et al.* 2001, 2002; Deininger 2003; World Bank 2003, 2006; Acemoglu and Robinson 2006]. *Asset redistribution is of the essence. Though ‘better distribution of assets increases aggregate growth and reduces poverty, income [re]distribution without asset [re]distribution will not accelerate income growth’* [Quan 2005, citing Sabates-Wheeler 2005; Birdsall and Londono 1997; Deininger and Squire 1998]. Is a link from asset inequality to slow growth the ultimate IR, proving that land reform normally accelerates development?

***(iv) Can we trust the macro-IR? Possible link-breakers: surplus and stability***

Is a macro-IR linked to an argument that smaller, more equal farms (and perhaps land reforms) advance development? The link can be broken, if small farms are less likely than big ones to send food, raw materials and exportables to the towns and thus to support industrialisation. Early critics of land reform proposals in nineteenth-century England, Ireland and India feared such ‘disarticulation’ of urban growth from rural food provision: will not ten small farms produce less marketed surplus than one large farm on the same land? Might the development gains from a macro-IR be overborne by the higher proportion of output self-consumed on small farms? Thornton [1848] addressed Allyn Young’s fears on this score: ‘As the small farmer would obtain a much larger gross produce than the [large] cultivator, he might retain for his own use as much or more than would have been consumed by the

latter, and yet have a greater quantity for sale'. Hunt [1984: 259, 263] cites data for Kenya confirming that small farmers' higher land productivity raises their per hectare marketed surplus, more than their higher propensity to retain (food) crops for self-consumption lowers it. Narain [1962] revealed the large share of marketed surplus – admittedly gross of buyback – among small farmers in India. Thiesenhusen [1989: 20] points out that marketed surplus rose after land redistribution in Korea.

It is for food staples that small farmers are likely to retain large parts of their crop for home consumption, both to avoid transaction costs of crop sale and food purchase, and because they are averse from price risk. Both reasons for retention on small farms are also reasons for higher production per hectare – with offsetting effects on the marketed surplus. Once household staples security is achieved – and the small farmer achieves it more readily with a little extra reform land – low labour-linked UTC disposes her to labour-intensive cash crops (tea, vegetables), for which the mass of output is normally marketed. This doubtless explains why 82 per cent of gross product was marketed by farmers of below 1 ha in Brazil in 1980 – more than the 78 per cent among 1–10 and 10–50 ha farmers, though less than for even bigger farms [Thiesenhusen and Melmed-Sanjak, 1990: 402]. Indeed 'it is the surplus produce of the country ... over and above the maintenance of the cultivators ... that constitutes the subsistence of the town, which can therefore increase only with the surplus produce' [Smith 1776: book 3, ch. 1]. But marketed non-staple crops, which can be exported in return for staples, are as useful a base for that increase as surplus staples themselves.<sup>113</sup>

Instability is another possible 'link-breaker' between the macro-IR and the case for smaller farms. If small family farms grow more of farm output, won't it (and they) be more vulnerable than before to sharp setbacks in years of low price or bad weather? Won't that eventually make farmers more likely to take less risky, but less growth-generating, decisions? Against this it can be urged that more equal land should stabilise income for the poor. Very unequal holdings force them to rely mainly on income from hiring out their labour. If rains are inadequate, or prices unattractive, farmers lay off hired labour before family labour. So, in famines, labourers suffer, even die, before farmers [Sen 1981]. Yet in six semi-arid south Indian villages, labour income was more stable than land income over an eight-year period [Ryan and Walker, 1990]. In the Gujarat droughts of the early 1970s, incomes fell most quickly for middle-to-large farmers, not small ones [Sambrani and Pichholiya 1975]. In some very unequal societies, rural 'Big Men' – either from *noblesse oblige* or to protect their positions – may feel pressed to act as 'patrons of last resort', insuring the poor against severe crisis. Often, that is how the poor themselves see it:

A group of tenants of a big landlord in Almara District vehemently protested against my suggestion that no landowner should be allowed to keep more land than he could cultivate with family labour. They

remarked, 'In this village we are all small people and if that landlord is reduced to our level, whom shall we approach in times of need?'

[Joshi 1981: 472; see also Bardhan 1988: 511]<sup>114</sup>

As with globalisation, so with land redistribution: a widespread sense that the result is severe instability for the poor, apart from directing resources away from productive investment to social insurance, can undermine the whole policy thrust. The macro-IR is undermined, as it were, by a meta-IR.

However, land redistribution makes the poor better off, on average. Having more in reserve, they can better withstand a harvest shortfall in a bad year. They also have more land in reserve, which can be sold or mortgaged in a very bad year, or two in succession. So land redistribution need not make poorer villagers less safe, or more cautious. Further, though smaller farmers are costlier to insure, land redistribution brings incentives and new options for suppliers of stabilisation or insurance.

Insurance – or self-insurance – may mean that land reform does not destabilise income for the poor, but is this at the cost of growth? When a big farmer-patron, or a collective, disappears, smallholders 'may self-insure by pursuing safer, and perhaps less remunerative, cropping strategies' [Carter and Alvarez 1989: 163]. The evidence for pervasive IRs, however, suggests that any growth-retarding effect is minor: why? First, there may not be a lot of difference between big and small farms in their felt need for safety: Binswanger [1980] confirms, in an Indian village, that when playing a game with cash outcomes, large farmers are readier to take risks in search of reward than small farmers, but the differences are small. Second, small farmers' more safety-oriented behaviour must be overborne by their readiness to apply more labour per hectare, in order to generate the pervasive micro-IRs. Third, small (food deficit) farmers' risk aversion can actually support the IR where mainly or only staples are grown (pp. 78–9) [Srinivasan 1972; Barrett 1996]. Fourth, areas with not-very-unequal small farmers generate incentives to obtain, and supply, tools of risk management that do *not* reduce output, and may even (as with irrigation) increase it. However, insurance supply response is likely to be weak in remote areas, cut off from competitive financial institutions. There, small farms can be made more resilient against production risks at a cost – by subsidised 'social protection' such as research into drought-tolerant seeds, crop insurance or health care [Mishra 1996; Holzmann and Jorgensen 2001; Sinha *et al.* 2002; Asian Development Bank 2005].

There may be another path from smaller, more equal farms to greater income instability for the poor. Labour hired by smaller farms, while more per hectare than on larger farms [Booth and Sundrum 1985], is more likely to be casual. So does farm smallness destabilise income for those who remain landless labourers? Probably that is outweighed by other effects. First, small farms offer a less *seasonally* fluctuating total of farmwork, because their higher net value added per hectare is due in some measure to greater cropping intensity.<sup>115</sup> Second, a small-farm (or post-reform) village absorbs a larger

proportion of labour supply in own-account farming, reducing labour supply (as well as increasing labour demand due to lower UTC). That pulls up the wage, including the 'floor wage' in slack seasons or bad years.

### **(i) If all these IRs are genuine, so what?**

Most developing rural areas feature under-used rural labour but severe limits on increased use of farmland or farm water. Does the evidence for the IR in such areas provide an output argument supporting, or at least not undermining, the main case for land reform, that it cuts gross inequality and poverty?

- (1) The IR argues *against* some sorts of land reform. Tenancy reform without ownership ceilings can massively increase farm size, as does collectivisation (pp. 152–154, 190–192, 198).
- (2) Ceilings-based, distributive land reform should raise farm and total output in areas with an IR.
- (3) Such reform has political costs, and diverts governments from other goals.
- (4) There may be other, less costly ways to bring farmland into smaller, more equal farms.
- (5) An IR argues for land reform because, with scarce land, small and not-too-unequal farms make most socially efficient use of scarce land, not because small farms are privately more efficient than large ones. Farm and enterprise skills vary greatly, but small and large alike must make fairly sensible use of their resources. Those who do not will find that it pays to sell or rent to those who can. If instead they insist on farming badly, they go under when their luck runs out.<sup>116</sup>

If most farms of all sizes are privately efficient, optimum farm size depends on developmental context. Privately efficient responses to UTC underlie small farms' greater use of labour per hectare, and large farms' greater use of capital per hectare. The former makes for an IR, the latter for a DR. Labour/capital ratios are high in developing countries, so labour UTCs dominate capital UTCs, usually leading to an IR; the reverse is true in developed countries, usually leading to a DR. The development process, with labour glut and capital scarcity giving way to their opposites, itself favours – steadily, slightly and slowly – rising optimal farm size. So why does an IR persist in developing countries, including those with successful development, alongside the slow shift of farmland into smaller farms? Given that shift, how can the IR's persistence justify land redistribution? The main reason is that the residues of old institutions keep the shift unduly slow, and farmland concentrated in over-large farms, long 'condemned' by the IR to low output per hectare. This over-concentration is extreme in much of Southern and Eastern Africa, Latin America and much of the former Soviet Union; considerable in North Africa and West Asia; and somewhat less, but still substantial, in parts of South Asia and West and Central Africa.

Suppose that, in a particular developing country, the median hectare (Table 2.4) is in a farm that – due to the IR – is well above the size that maximises farm output per hectare, total farm output, GDP, or growth.<sup>117</sup> Should governments act to remedy this? Even without such action, two things are happening to narrow the gap between actual and optimum farm size. First, land and labour markets are gently reducing *actual* farm size, e.g. the size of the farm with the median hectare. Second, *optimum* farm size is gently rising as capital UTC looms larger relative to labour UTC: farm capital is becoming less scarce, and farm labour scarcer, with development, industrialisation, urbanisation, and slower population growth. Governments have limited energy, resources and time, especially, alas, for the rural poor. If actual farm size falls while optimal farm size rises – so they converge from both ends – how much, if at all, should the IR induce governments to make them converge faster, by redistributive land reform or otherwise?

This suggests due caution, but not undue caution. The IR gives strong output underpinning for ceilings-based land reform in some countries, from Brazil through South Africa to Pakistan. In general, the case is stronger with (1) a stronger IR; (2) a larger share of land in farms above optimum size; (3) slower convergence (e.g. through rentals) between actual and optimum size; (4) higher shares of farming in GDP and employment, (5) good reasons, other than the IR, to cut farm size inequality. (2) (4) and (5) largely determine the case for public action to shrink farm size gaps, because (1) and (3) depend mainly on (2): initially very unequal farmland. This normally means big UTC differences, and therefore big gaps in output per hectare, between land in big and small farms, suggesting big potential output gain from land redistribution. Yet the largest farms often have reasons, not directly linked to farmland productivity, for not selling or renting out land (section (g)), and have shown the power to resist pressure to do so.<sup>118</sup> That keeps down (3), convergence of actual to optimum size via falls in actual size. Convergence is also kept down by the macro-IR: growth is slower in countries with large, unequal farms, slowing the rise in optimal farm size.

Hence (2), the degree of farmland inequality (allowing for land-water quality and farm household size), greatly influences the potential output gain from land redistribution. So does (4): only a government with huge resources and energy, or under huge pressure, would prioritise land reform if agriculture provided, and had the potential to provide, only 5 per cent of income and employment. However, several middle-income countries in Latin America and Southern Africa have severe inequality, and hence much more poverty than would be expected at their levels of GDP per person. That is largely due to very unequal farmland, on which a few large farmers, perfectly sensibly given their UTCs, put much of the land under capital-intensive, low-employment techniques and products. Partly because of such ‘premature de-agriculturalisation’, such countries also have lower shares of employment, and often GDP, in agriculture than do other countries of similar average GDP [Eastwood *et al.* 2006]. Since the central goal of land reform is to reduce inequality and poverty (see (5) above and chapter 1(b)), there is a strong case for it in these



countries (and in others slightly less unequal but with farming looming larger in employment and GDP), because the IR tells us that output gains are likely; at worst, output losses are very unlikely to override distributive gains for the poor: land reform will reduce poverty. Chapters 3–6 review what types of land reform – ceilings-based land redistribution, new-wave land reform, or other methods – are most promising.

In a few countries (China, Vietnam) with well over half the workforce still in agriculture, very small, fairly equal farms leave the IR little to bite on. In such countries – while there is no obvious case for pushing towards larger farms faster than markets (driven by changing UTCs) do on their own – further land redistribution can do little to raise farm output, or to reduce inequality. In a third group of poor countries with important farm sectors (e.g. Uganda, Nepal and Bolivia), severe farmland inequality persists, as does mass poverty. There, the IR-based output case complements the anti-poverty case for land redistribution.

### **(j) Farm size, science and IRs: cutting poverty by small farms, or oilisation of agricultural development?**

Some readers will feel impatient with this chapter so far. After all, nobody suggests that it is mainly farm size that decides how much land productivity, let alone farm output and growth, a country achieves from its resources of soil, water and climate. The immediate *causes* are the amount and quality of farm land and water, labour, skill, current inputs such as fertiliser, capital equipment such as wells, and available technology such as seeds. Behind these are the ultimate *determinants* of how farmers get, use and improve these things: governance and security; road and water infrastructures; incentives and access; health and education; and farm research and science and its delivery to the farm. If the last – for short, ‘farm science’ – is scanty or inappropriate, all the rest can get farming up to a certain output level, but have limited scope, once land-water resources are fully used, to achieve further growth to meet rising expectations (or populations).<sup>119</sup> So in the developmental ‘long run’ what determines land productivity, farm output and growth is farm science; hence the possible impatience with emphasis on the IR. Even if there is an IR, doesn’t land redistribution fly in the face of the long-run need for efficient, science-based farming? And doesn’t this mean moving from scratch-a-patch<sup>120</sup> to large scale?

Well, no. But, among those who have not seen the green revolution with its millions of scientific yet labour-intensive smallholdings, this is a common reaction. In most of Africa and much of West and Central Asia, aren’t there two worlds of farming: large, neat, combine-harvested farms, fertilised and with the best modern seeds, run full-time from computers with centre-pivot irrigation, alongside tiny, messy, mixed-crop, low-input, part-time, often dried-up-looking holdings? What field visits and élite prattle leave hidden is that:

- (1) this contrast is due largely to decades, sometimes centuries, of big-farm skew in water control, fertiliser access, seed research, subsidies, and the power to get and keep all of the above;
- (2) yet on comparable land-water systems, the IR, not the DR, predominates;
- (3) at unsubsidised prices reflecting the scarcity value of inputs and outputs, tiny-scale scratch-a-patch usually beats large-scale 'modern' farming (probably due mainly to labour UTC advantages: section (c)) – in West Africa around 1980, rice production was internationally competitive in the messy upland small-farm system, but not on the shiny largeholdings despite their access to more irrigation [Pearson *et al.* 1981];
- (4) there *are* huge economic and environmental returns to *appropriate* new technology (seeds, fertilisers, water control, not employment-saving machines), but Asia's green revolution shows this is feasible on tiny farms given good policy for infrastructure, research and farm size, and functioning input and product markets;
- (5) above all, large farms, and governments leaving most farmland with them, skew farm science towards capital-intensive, labour-displacing innovation – appropriate in rich countries with scarce rural labour, but dead wrong for developing countries needing employment-intensive farm growth to cut poverty.

The reaction that large farms must somehow be superior because they are more scientific, whatever the IR studies show, looks like 'the evidence of one's own eyes', but – like the evidence that the Earth is flat – turns out to be interpretation based on dogma. Dogma can usually read interpret evidence as it wishes. After all, the IR can be concealed if – as is common, especially in Africa – large farmers have privileged access to fertilisers and controlled farm water and research. This apart, a minority of good research does run against the IR consensus; most of us sometimes wrongly reject evidence that challenges our beliefs, and this mistake is made easier because most or all studies have errors or loopholes. However, underlying the view that (whatever the IR evidence) bigger farms mean better farm science, are two deep, linked issues about land reform, farm size and growth: issues which the arguments about the IR do not fully engage.

First, though we define land reformers as aiming to redistribute land to reduce poverty and inequality, there is some ambiguity about the role of growth. In the 1950s – a decade before the green-revolution – early IR evidence led many to advocate land redistribution almost as much to raise farm output and efficiency – whether for growth or [Bhaduri 1973] to remove semi-feudalism – as to reduce poverty and inequality. From the mid-1960s it became clear that, even in some areas with little or no land reform, farm science in the form of the green-revolution-induced growth as well as poverty reduction, benefiting small farmers, landless rural labourers, and the urban poor. Some people concluded that land reform was not needed, either for growth or for poverty reduction: new science could do both in many areas, leaving new basic

research, non-farm growth, or urbanisation to look after the rest. Others, looking at the long delay in the 1970s in spreading the green-revolution to some unreformed areas, concluded that gross land inequality impedes science-based water control or other aspects of a green revolution, so that land reform is needed for growth after all [Boyce 1987]. It seemed reasonable, however, to conclude that, at national level, the task of raising agricultural productivity might be left to the green revolution (alongside institutional reforms of credit, markets, etc.), leaving land reform with a partial role in redistribution,<sup>121</sup> but a minor role even there if the green revolution helped the poor.

Second, in 2000–10 substantial developing areas, including most of Africa, have no green-revolution; less farm product per person than in the 1960s; and neither the irrigation nor the soil conditions to make a green revolution likely. Some of these areas have not-very-unequal farmland and, to the casual observer, much ‘spare’ unfarmed or underfarmed land. Surely both small farms and land reform are irrelevant here, and the need is for capital-intensive development of large farms (as is on offer with oil finance in several African countries), using science not on green revolution lines, but as in countries such as Australia, Spain or the USA?

### ***(i) The slowing Green Revolution and the distributive-growth goals of land reformers – Asia***

Joshi [1987: 295], following Ladejinsky, Gadgil and Myrdal, argued that ‘the ‘new agricultural strategy’ of the green revolution: had ‘implicit bias against institutional reforms and land reforms in particular’; emphasised ‘large-farmer-led agricultural development’; and saw ‘the problem of land development (i.e. output expansion) in isolation from the problem of labour absorption (i.e. employment expansion)’. In other words, by overlooking the employment advantages of smaller farms, the new strategy mistakenly inferred that the green revolution should displace, not complement, land reform as a source of growth. Yet, while Asia’s green revolution varieties and methods *initially* favoured farmers with, say, 3–8 ha, these were not huge landowners or rural tyrants. And the green revolution by the 1970s was proving size-neutral and pro-poor, also through employment. Both small and large farmers were raising total factor productivity, and, with bigger harvests and more fertiliser application, labour demand too [Lipton with Longhurst 1989; Kerr and Kolavalli 1999; Hazell *et al.* 2000].

Yet this does not eliminate Joshi’s case: that, though poverty and inequality are the targets of land reformers, they have driven land reform *as a source of growth and employment* too far down the agenda.<sup>122</sup> That is even more likely with the slowdown of the green revolution since 1985, and its slow spread in Africa, where there has been little land reform, yet also little growth of labour absorption in farms (or elsewhere).

Gunnar Myrdal in 1971 famously wrote: ‘Better seed grains can[not] substitute for agrarian reform[;] their wider spread and [importance] for raising

yields presupposes such a reform' [cited in Joshi 1987: 290]. At first glance, this has been refuted. Green revolutions have indeed engendered rapid growth, well beyond the initial lead areas, and have spread benefits to tiny farmers, tenants and landless labourers, even where there has been no effective land reform [Hazell *et al.* 2000]. But the process has revealed its own limits.

First, since the green revolution began, cereal stocks (e.g. in India) have piled up, despite mass malnutrition, probably more widespread even than in Africa; who can afford the huge extra output from green revolutions, if the poorest (the only people who spend most extra income on food staples) get little or no extra land?<sup>123</sup> This is especially a dilemma if the poorest are usually farm labourers whose employment prospects, though improved by the green revolution, remain far from buoyant as workforce grows – and improve more slowly later in the green revolution, as wage-rates creep up and big-farm employers learn how to save labour. In Asia a 10 per cent rise in rice yield, due to improved varieties, led to about 4 per cent more employment in the late 1960s – but only 1–2 per cent by the late 1980s [Jayasuriya and Shand 1986]; the effect was no better for wheat in 'advanced' parts of rural India [Bhalla 1987], and is even less now.

Second, in many places with stagnant agriculture, land reform may be a precondition for green-revolution growth. This is not to argue, incorrectly, that 'only' some types or sizes of *farm* will innovate. Rather, it is because restructured *systems* of farm ownership or operation are needed to spread the green revolution to many promising but currently backward areas. Rapid farm progress often requires greatly improved structures and institutions of water-control and drainage. Absent irrigation-based 'Oriental despotism' [Wittfogel 1957]<sup>124</sup> these will not be adequately developed – as they have not been for centuries – in a context of highly unequal land claims and patronage powers, supporting unequal farms fragmented into several plots. In such conditions a farmer faces high costs to maintain (let alone improve) water control, including drainage – and little confidence that neighbours will co-operate, so she can gain from her time and investment in better water management. This probably helps to explain slow agricultural growth in West Bengal in the early green-revolution years, and acceleration after 'Operation Barga' land reform and decentralisation [Boyce 1987; Bardhan and Mukherjee 2006]. New science and better prices are no quick fix for this: the slowdown of green revolution yield growth since the mid-1980s is widespread, and has supply-side causes [Lipton 2005], reducing supply response to price upsurges such as that of 2008.

Hence, once the early spectacular potential for green-revolution yield growth fades, absence of land reform can inhibit further science-based farm growth in two ways. First, even if farmers big and small, owner or tenant, adopt good new practices individually, the land poverty of those who would use extra income mainly to buy more staples – mini-farmers and landless labourers – remains, and unreformed land structures depress national growth of demand for grain, and hence the demand-side incentives to pay for

innovations that would raise yields. Second, in some areas, highly unequal holdings, e.g. by discouraging farmers from co-operating on drainage and water management, may be supply-side constraints on efficient growth.<sup>125</sup>

India, like some other countries, has partly met the problem of maintaining demand for main food staples – and hence incentives to supply them – by huge public purchases of wheat for stocks, and by some success in reducing poverty, and hence raising *private* demand for grain (via small-farm growth, plus some urban growth, non-farm assets for some of the rural poor and public works programmes).<sup>126</sup> However, the green revolution continues to slow down; revival through biotechnology will take many years and has to fight increasing water shortages and soil depletion [Lipton 2005]; and non-farm employment continues to expand rather slowly. In such conditions, land reform can induce faster growth of income among poor *food deficit* farmers' incomes (and hence in demand for food staples). That is one way to maintain the attractiveness to growers of expanding food staples production, and to researchers of enabling that.

Can farmers' problems of demand in 'progressive' farm areas be solved without land reform? In 1965–2000, those problems were eased. Mass staples demand in Asia and Latin America was stimulated by falling *world* prices (trending down, relative to those of manufactures, by 0.3–0.5 per cent yearly, with a blip in the early 1970s); meanwhile fast-improving supply technology meant that most farmers got better off, despite falling prices of farm outputs relative to farmers' purchases. However, that improvement has decelerated steadily since the mid-1980s, and this, with other factors,<sup>127</sup> pushed up world staples prices since 2000 – radically in 2007–08.<sup>128</sup> This may stimulate renewed technical progress in staples production, but where land is highly unequal (and farm production therefore not very labour-intensive) a durable rise in staples prices harms poor consumers' capacity to buy extra staples. Further, green-revolution inputs – irrigation, as water gets scarcer; pump-engines and nitrogenous fertiliser, as fossil-fuel feedstock prices rise – are getting costlier. So both poor people's capacity to demand staples, and farmers' incentive to supply them, are kept sluggish by rising world prices. Many countries try to keep prices to consumers down by food subsidies, and to farmers by fertiliser or farm-power subsidies; but the fiscal cost, already huge, becomes even less affordable as world prices rise, increasingly crowding out – as in India – public investment in water control and other public goods for farming. As world food and fertiliser prices are both pushed up, how can poor people's consumption and farmers' production of staples be kept rising?

Land reform can help raise both supply and poor people's demand for staples. It shifts land to smaller farmers, who tend both to produce more per hectare due to the IR, and to plant more of their land to staples. And extra staples supply 'finds its own demand' more readily if supply shifts, e.g. after land reform, to smaller, less unequal farmers: being poor, they eat much of their extra staples production, and much of the rest goes to extra labour (smaller farmers use more labour, usually even *hired* labour, per hectare: p. 314). So

land reform helps address both supply and demand limits on staples growth, addressing the two distinct causes of hunger: insufficient food availability and insufficient, or maldistributed, 'entitlements' to food [Sen 1981]. As green-revolution growth slows, and with it the tightrope act that kept farm producers' and food consumers' poverty falling together [Lipton 2005], so land reform – rather than farm science alone – plays a bigger role as an engine of growth, though still mainly aimed at reducing poverty and inequality.

Globalisation of trade and technology<sup>129</sup> also has two relevant effects. First, it raises poor countries' prospects for higher-value, longer-distance, non-staples exports. That is a good thing as such, but diverts demand for farm science away from staples. Second, globalisation frees up the international transmission of technology. That too is good in itself, but technical progress at global level responds mainly to demands (and scientific alignments) in rich countries, and therefore tends to be labour-saving. That makes growth less employment-generating per unit of output: within farming, outside it, and as workers move from farming to less labour-intensive non-farm production. Both these effects reduce the prospects that science will greatly ease the supply problems inhibiting poverty-reducing farm growth. Public-sector international research can and does help, but the trend remains: a growing majority of farm science outlay is private, and does not cater mainly for the crops and traits of poor farmers, nor for employment-intensive farming. In the techno-euphoria of the green revolution in 1970–85, it might have seemed sensible to play down both the growth side-effects of land reform, and its role in poverty reduction. Today it does not.

*(ii) Science, land reform and farm size in non-green-revolution areas: oilisation?*

What are the prospects for growth from science in countries with very unequal farmland but few signs of a green revolution? From the 1970s and still today, some of Asia and Latin America and most of Africa<sup>130</sup> remains a largely green-revolution-free zone. There is little water control.<sup>131</sup> Main food staples – maize, sorghum, cassava, etc. – have yields less affected by HYVs than South and East Asia's rice and wheat. Both crop varieties and water management are improvable, but that requires a transformation of institutions, not least of government-supported agricultural research. There are signs of this. 2007–08 has seen a long-overdue (and long-promised) reversal of agriculture's decades of declining aid (by some two-thirds since the late 1970s [IFAD 2001]). By 2008, half a dozen African countries had completed their 2003 commitment under the Comprehensive African Agriculture Development Programme (CAADP) to double agriculture's share of public spending.<sup>132</sup> The Alliance for a Green Revolution in Africa (AGRA) supports programmes and institutions for efficient agricultural support, research and delivery.<sup>133</sup> However, it will be a decade or more before technical progress in much of Africa can create either the heightened incentives to farm efficiency,

or the improved rewards to farm growth, that might permit rapid progress without land reform. Meanwhile, much can be done to improve the incentives to apply labour (and known technology) to land and water. That usually requires improved rural institutions and governance. That includes land access for the efficient poor through orderly land reform where land distribution is very unequal, as in much of Eastern and Southern Africa.

An alternative is on offer. Some food-importing countries (especially but not only oil producers in West Asia), increasingly concerned about rising and fluctuating farm import prices, are offering countries with much farmland – in Africa in 2008 including Angola and the Sudan – substantial funds to develop large, capital-intensive farms to grow food and agricultural commodities earmarked for the funding country. This represents ‘oilisation’ not because of the source of funds – China is similarly negotiating for expanded agricultural supply from large farms in Latin America – but because such agricultural production is being treated as, and may play the role in an exporting economy of, oil. First, both oil and large-farm export production are primarily foreign-exchange machines, generating export revenues but, usually, little employment or income for the poor. Second, assignment of oil rights, like assignment of claims on big swathes of farmland (as in Cambodia), provides – in political systems with weak public overview or élite responsiveness – great prospects for what is politely termed rent-seeking by politicians and officials. Third, as oil is extracted, it runs out; but so do scarce soil nutrients and water, if neither incentives nor low-cost family labour are available to conserve them. In particular, the best land is developed and farmed first. Why is new land, being considered for these new large farms, not farmed already? Perhaps it is, for example in cyclic bush fallows. Will such land be extruded (with its usually poor, vulnerable users) on the usual pretence that it is nobody’s land, *terra nullius* (chapter 6(b); chapter 1(b) (iii), n. 25)? Perhaps the land is not sustainable for crop-based settlement, and will follow the precedent of earlier unsuccessful settlements by over-farming, then exhausting, the marginal land-water systems. The promise of modern farm science in non-green-revolution, poor, employment-hungry lands is usually through water control, fertilisers and better seeds, and on labour-intensive smallholdings. Shiny, capital-intensive large-farm science may have its place but must not be assumed to generate sustainable farm output growth. It must be eaten, if at all, with a long spoon, lest it involve land *deform*. Cotula [2009] and Byerlee [2009] offer valuable new evidence.

### ***(iii) Farm science, land reform and new growth needs***

Since the early 1980s, despite continuing advances in some cases, some of the steam has gone out of the engine of technical progress in green-revolution areas. Biotechnology will eventually speed things up again, but nobody knows when. In agriculturally stagnant areas, especially in Africa, governments can improve farm incentives (largely done) and infrastructures (largely to do), helping to induce agro-technical catch-up; but the institutional requirements

are huge. In both types of agricultural area, rapid progress against poverty usually depends on increasing the *attractiveness* of growing food. Internationally, many years of negotiations on a 'Doha round' of trade liberalisation, including improved access for agricultural exports from developing countries, broke down in 2008; severe recession makes it even less likely that OECD countries will help by cutting artificial supports for their own farmers. Meanwhile, both the demand for food, and the incentives to its labour-intensive supply, in many developing countries are impeded by gross land inequality. Given the weak outlook for other methods, land reform must probably play a renewed role, if developing countries are to render innovation (and efficiency) in farm production more rewarding and attractive.

Land reformers seek mainly to reduce inequality and poverty, not inefficiency and stagnation. However, efficient growth is in many circumstances constrained by unreformed land distribution and tenure. Even if the resulting inequalities increase savings, which may well not be the case [Gersovitz 1988], the returns to investing savings into farming are often unattractive in very unequal, unreformed land systems, which limit supply *and* demand for most farm products. Then, especially with slow or no dramatic green revolution, such systems impede growth – as does extreme land inequality alongside the static inverse relationship between farm size and output per acre.

As population grows and extra land per person becomes scarcer and of worse quality, and as climate change threatens more unstable and faster-evaporated water supply, the need to look to institutional sources of farm growth, such as land reform, is sharpened. The instability of world food and farm-input prices makes the need sharper still, since not-too-unequal, mostly small family farmers avoid some of the harm from price instability. They partly circumvent output price instability by eating more of what they grow, and input price instability by using more labour to raise the productivity of purchased farm inputs, e.g. by micro-drip irrigation, and by supplementing inorganic fertiliser with organic manure. Farmers – small and large – in many poor areas, especially in Central Asia and sub-Saharan Africa, have dismal productivity and unsustainable, depleting soil-water systems partly for want of purchased inputs; they need much more, not less, inorganic fertiliser and controlled farm water. But not-too-unequal small-farm systems are needed if these essential extra modern inputs are to be well used. Asia's green revolution confirmed that tiny, including deficit, farmers can be highly efficient and productive users of such inputs. But they need more land to build on that. As time passes, water gets costlier and fertiliser prices get higher or more unstable, and prospects of efficient (let alone poverty-reducing) growth from very unequal land distributions dwindle. Science and land reform are complements, not alternatives. Capital-intensive, big-farm science is usually socially inefficient and bad for growth in labour-plentiful developing rural areas.

There is a further reason why land reform choices, while rightly focused on reduced poverty and inequality, should attend to efficiency and growth. Extreme inequality may create rental claims that are not 'incentive-compatible' with



rapid growth. Krueger [1974] and, in Pakistan, Papanek [1969] showed the harmful economic effects, if it pays a firm with high-level skills better to use them in seeking 'economic rents' (by obtaining Government licences and permits, legally or not) rather than for profitable production opportunities. The same logic applies if it is easier and more attractive to use such energies to accrete rent-bearing land than to raise farm output. Moreover, if 25 per cent of GNP is pre-empted each year for rent – whether on the farming value of inherited land, or on the value of industrial permits bribed out of the government – that reduces, by 25 per cent, the incentives payable, as wages or profits, to workers or entrepreneurs (including farmers). This central fear, about the growth-inhibiting effect of a high ratio of rent to GNP, is as valid now as when Ricardo first expressed it.<sup>134</sup> This threat to growth from 'incentive milking' by rents in unreformed, very unequal land *systems* – like the threat, in such systems, of tighter supply and demand limits to food production – is not captured by comparing the performance of big and small *farms*, telling though such comparisons are.

There is a final sense in which land reform can release the capacity for efficient growth: by releasing pent-up entrepreneurship, not only among rural people deprived of land, but also among landlords swaddled in it. In Taiwan, some members of the rural élites who lost land after the reforms of 1949 and 1953 joined the new entrepreneurs. (So, in a different way, did the small peasants who gained from the reforms.) In China after 1982, local authorities – with less income from mulcting agriculture, now returned to 'household responsibility' – both *engaged in* and *freed up* (for later taxation) rural non-farm enterprise. In Japan and Korea in the 1950s, land reform may also have released entrepreneurial potential for growth.

ANNEX Table 2.1 Distribution of farm size from 1990 and 2000 rounds of FAO farm censuses

Year	Mean	Gini	Permanent pasture (%)	Holdings <2 ha (%)	Area <2 ha (%)	Holdings <5 ha (%)	Area <5 ha (%)
<b>Africa</b>							
<i>North</i>							
Algeria	01	8.26	0.65	16.7	0.44	21.8	0.8
Egypt	99/00	0.83	0.69	90.8	47.4	—	—
Libya	87	14.22	0.75	17.7	—	42.5	—
Morocco	96	5.84	0.64	—	—	71.1	23.9
<i>Sub-Saharan</i>							
Botswana	93	3.18	—	—	—	—	—
Burkina Faso	93	3.92	0.42	32.4	12.9	73.6	61.5
DR Congo	90	0.53	0.37	97.1	86	—	—
Ethiopia	01/02	1.01	0.47	87.1	60.4	99.0	93.1
Gambia	01/02	4.41	—	—	—	—	—
Guinea	95	2.03	—	65.2	32.2	93.2	74
Guinea-Bissau	88	1.14	0.62	87.8	—	97.9	—
Lesotho	89/90	1.44	0.49	76.8	—	96.5	—
Malawi	93	0.75	0.52	95.0	—	—	—
Mozambique	99/00	1.28	—	83.4	—	97.3	—
Namibia	96/97	2.89	0.36	38.9	15.8	87.8	69.9
Réunion	89	4.42	0.61	55.9	11.4	83.5	36.5
Senegal	98/99	4.30	0.50	37.5	8.1	70.0	33.3
Togo	96	1.96	—	—	29.3	—	72.7
Uganda	91	2.16	0.59	73.4	—	90.8	—
Zambia	90	—	—	—	—	92.2	—
<b>South-Central</b>							
<b>America</b>							
Bahamas	94	11.55	0.87	61.2	4.3	—	—
Barbados	89	1.26	0.94	97.8	13	98.9	15.6
Dominica	95	2.34	0.67	74.5	23.5	—	—

ANNEX Table 2.1 (continued)

	Year	Mean	Gini	Permanent pasture (%)	Holdings <2 ha (%)	Area <2 ha (%)	Holdings <5 ha (%)	Area <5 ha (%)
Grenada	95	0.77	0.73	8.4	92.5	32	—	—
Guadeloupe	89	3.24	0.56	34.7	58.9	17.8	90.4	42.6
Honduras	93	11.17	0.66	64.3	—	—	54.7	7.7
Martinique	89	2.40	0.75	51.3	77.9	16.4	93	36
Mexico*	91	24.58	—	68.4	—	—	59	3
Nicaragua	01	31.34	0.72	—	21.3	0.7	—	—
Panama	90	13.75	0.87	77.6	58.1	1.5	71.5	4.2
Puerto Rico	02	15.37	0.73	—	22.9	2.5	50.9	7.0
<i>South</i>								
Argentina	88	468.97	0.83	82.9	—	—	15.1	0.1
Brazil	96	73.09	0.85	78.0	20.3	0.3	36.8	1.0
Chile	97	83.74	0.92	84.9	—	—	42.5	0.9
Colombia	01	23.90	0.78	74.2	—	—	50.3	3.8
Ecuador	99/00	14.66	0.85	41.2	43	2.0	63.5	6.3
French Guiana	00	6.52	—	—	56.3	—	91.1	—
Paraguay	91	77.53	0.93	69.3	—	—	40	1.0
Peru	94	20.15	0.86	—	—	—	—	—
Uruguay	00	287.40	0.85	82.5	—	—	23.4	0.4
Venezuela	97	60.02	0.90	83.4	22.6	0.3	48.4	1.6
<i>Asia</i>								
Bangladesh	96	0.46	0.57	—	95.5	68.8	—	—
China	97	0.67	—	—	95.8	57.5	99.2	77.3
Cyprus	94	3.41	0.63	3.5	53.9	11.2	—	—
India	95-97	1.41	0.60	—	80.3	36.0	95.1	67.5
Indonesia	93	0.87	0.46	—	—	—	—	—
Iran	93	4.29	0.70	7.2	50.5	4.8	71.2	17.1
Israel	95	12.35	—	—	—	—	—	—
Japan	95	1.20	0.59	—	88.5	48.2	97.6	69.9

ANNEX Table 2.1 (continued)

	Year	Mean	Gini	Permanent pasture (%)	Holdings <2 ha (%)	Area <2 ha (%)	Holdings <5 ha (%)	Area <5 ha (%)
Jordan	97	3.15	0.78	—	69.9	11.0	86.2	26.2
Republic of Korea	90	1.05	0.34	—	92.4	71.8	—	—
Kyrgyzstan	02	1.16	0.90	—	88.2	14.0	97.2	31.3
Laos	98/99	1.57	0.76	1.7	72.7	42.8	—	—
Lebanon	98	1.27	0.89	—	86.8	34.8	—	—
Myanmar*	93	2.35	0.77	—	56.7	20.7	—	—
Nepal	02	0.79	0.49	1.5	92.4	68.7	99.2	92.7
Pakistan	02	3.08	0.61	—	57.6	15.5	85.7	43.4
Philippines	91	2.16	0.55	1.3	65.1	23.4	90.6	56.2
Sri Lanka	02	0.81	0.38	—	—	—	—	—
Thailand*	93	3.36	0.47	1.2	33.9	7.6	72.9	43.8
Turkey	01	5.99	0.58	4.1	34.5	5.3	65.4	21.3
Vietnam	94	0.52	0.53	—	—	—	—	—

\*Data for Mexico (which exclude *ejidos*) are for percentages of area and holdings in holdings below 5.1 ha (not 5); data for Myanmar are for percentages below 2.02 (not 2) ha; data for Thailand are for percentages below 1.6 (not 2) and 4.8 (not 5) ha.  
Source: Eastwood *et al.* [2008], from FAOSTAT at <http://www.fao.org/ess/census/default.asp>

### 3 Land reforms

#### The types and the classic paradigm

##### (a) Types of institutional environments and types of land reform

###### (i) *Institutional environments*

Our preferred definition of land reform is 'legislation intended and likely to directly redistribute ownership of, claims on, or rights to current farmland, and thus to benefit the poor by raising their absolute and relative status, power, and/or income, compared with likely situations without the legislation'. However, one and the same law could well be a genuine land reform in some national circumstances, but not in others. We identify five main institutional environments of farms in developing countries. These help to determine whether a particular law is likely to meet our preferred definition of land reform.

- (1) In communal tenure, a household or group takes the farm decisions and income, but 'the community' limits the right to transfer, sell, rent, bequeath or mortgage land. Details vary [on Africa see Noronha 1985]. As a rule, the community shares most grazing land but animals are privately owned. Cropland is farmed privately, but private rights to transfer it usually depend on community agreement (usually via a local authority or a chief). Communal tenure on almost all the little remaining land in cyclic bush fallow (slash-and-burn),<sup>1</sup> and most settled farmland, covers perhaps two-thirds of the private farmland in sub-Saharan Africa; in the former Soviet Union (CIS), the 5–20 per cent of farmland held in 'usership' or 'lifetime possession'; in Mexico, much of the 'vast area' farmed by 3m households in *ejidos* [Heath 1992: 695–96], though less since sales into pure private ownership were permitted in 1992; and significant areas, especially in marginal uplands farmed by indigenous people, elsewhere in Latin America and Asia.
- (2) Typical of South and East Asia<sup>2</sup> is smallholder private tenure. Over 70 per cent of farms are largely family-cultivated, the large majority with below 2 ha of irrigated or 5 ha of rainfed land. Below a quarter of land is in holdings above 20 ha, and below a fifth is rented. Sale and rental are allowed but often restricted.

- (2a) Some smallholder systems, e.g. post-1984 China, are on the border between (1) and (2): very equal land; periodic redistribution away from households with slower population growth (or to meet political or commercial pressures); very restricted sale or rental; and ultimate ownership by local authorities.<sup>3</sup>
- (3) *Latifundia–minifundia* systems are mostly found in Latin America. Large private landowners with 200–20,000 ha employ many working families. Each family usually also farms 0.2–2 ha rented, or obtained from the large landowner as part payment for labour, from their employer. Due partly to threats of land reform and partly to commercial pressures, many traditional largeholders have turned into commercial farmers, and former worker-*cum*-farmers into farm employees, smallholders, rural non-farm producers, or townward migrants. Where commercial farmers continue residual semi-feudal or plantation-style control over labour, this is what Lenin called the ‘Junker path’, after large-scale farmers in 19th-century Prussia [Binswanger *et al.* 1996; de Janvry 1981].
- (4) Large-scale State/collective farming prevailed before 1990 in much of Eastern Europe and the USSR.
- (5) Surprisingly similar in some ways to State/collective farms (and hence to each other) are (a) in parts of the CIS, semi-decollectivised farms (usually alongside private farms), (b) in Southern Africa, big private farms. In both cases, a few thousand people – mainly (a) white farmers, or (b) former managers of State/collective farms – command most farmland, irrigation, research, and other subsidised inputs. Such collective, State and white sub-sectors, like some remaining plantations in Latin America (and in the manner of ‘total institutions’ [Goffman 1961]), often supply ‘their’ workers with monopolised services, from schools, housing and garden plots to law enforcement and retailing, and have traditionally found means to restrict labour emigration. Even if agriculture overall is squeezed to benefit the cities, the élites that run these privileged sub-sectors enjoy significant parts of their product. These economies are in transition, but not all transitions involve land reform. They often shift land from State/collective managers to equally large and powerful private farmers, or from white to black large farmers, not from rich to poor.<sup>4</sup>

The main candidates for the title of ‘land reform’ are the paradigm, classic ceilings-based redistribution; some main alternative land reforms; and proposals to achieve land reformers’ main goal by other means. Some candidates are clearly not relevant to some of the above institutional environments. For example, a *purely* communal tenure system is immune from ceilings-based reform, and obviously private land is immune from equalising decollectivisation. However, complete immunity is rare, because the environments are ‘ideal types’. For example, almost no country with communal tenure lacks areas of private land, often very unequal, and sometimes encapsulated in formal communal-tenure norms; and many private land systems have collectivist ‘islands’.

*(ii) Types of proposed land reform and their environments*

In the paradigm, (1) **classic land reform** (CLR; this chapter), households owning more land than a stipulated *ceiling* must surrender the excess to a state Land Authority.<sup>5</sup> This distributes such land to landless, land-poor, or other target households. Such reforms are found mainly in *latifundia–minifundia* systems of Latin America, plantation systems, and the more unequal smallholder areas within Asia and parts of Africa.

The main (alleged) alternative land reforms are tenurial (chapter 4). (2) **Tenancy reduction** laws, from prohibition of some types (e.g. sharecropping) to rights of purchase for tenants, (3) **tenancy rebalancing** laws, seeking to improve (poor) tenants' position, for example by rent limits or security against eviction, and (4) **tenancy registration** are land reform, i.e. transfer land rights to the poor, in some circumstances, but can be counter-productive. In such cases, we explore whether, instead, tenancy *derestriction* or encouragement might constitute land reform. Further tenurial reforms include (4) **titling** of freehold rights to farmland – typically, but not only, legislated in communal systems, and often involving conflict with others asserting rights to that land, so whether it is 'land reform' depends, in part, on whether gainers are poorer than losers; and (5) **patrialisation**, transferring or limiting land rights to citizens (and their descendants) of a State and/or of a defined (or alleged) nation or ethnic group. Patrialisation has been commonest in 'islands' of private ownership within countries where much land tenure is communal, especially in decolonising African countries. Usually the losers are land-owners in another ethnic group, which once colonised or seized land, or inherited it from those who did. Patrialisation may expose a trade-off between two concepts of land justice:<sup>6</sup> *restitution* to original owners and *redistribution* to the poor. (6) **Compulsory State, collective, or co-operative farming**, by 1960–70, had been imposed on over a third of the world's farmers. It affected *kulaks* or *latifundistas* first, but later smallholders too. In China and the former Soviet Union, these included many who had only recently acquired smallholdings in a CLR [Wolf 1969; Bruce and Harrell 1989]. As in parts of Eastern Europe and South-East Asia, non-private farming in centrally planned economies replaced fairly, or very, unequal private farming. It later spread to some *latifundia–minifundia* systems of Latin America and some African communal tenure systems. (7) Its reversal – **decollectivisation** – has now affected huge areas of former collective or State farming. It may or may not be land reform. Like patrialisation, it claims to reverse earlier 'land deforms' and in so doing sets counter-claims on reform land – for restitution and for redistribution – against each other. Collectivisation and decollectivisation are treated in chapter 5.

Approaches to land reform by other means (chapter 6) can apply across institutional environments, though with much more relevance in some than in others. (8) **Consolidation** by exchange of plots (fragments) may benefit the rural poor through contiguous farms. (9) **Settlement** can provide them 'new'

land. (10) **Tax reform**, e.g. progressive land tax, may induce private land transfer from rich to poor. Another option is to use incentives to encourage smaller, more equal farms by following (11) **pro-poor rural development** paths. Finally (12) **'new wave' land reform** seeks CLR outcomes without the Land Authority model, via more decentralised, consensual land redistribution, often through the market. One cannot show that 'new wave', or anything else, is not land reform only by pointing to compensation, sharing burdens between ex-largeholders and others. Yet the 'new wave' is land reform only under special conditions.

## **(b) Classic land reform: ceilings, distribution, and the Land Authority model**

### *(i) Classic land reform as the paradigm*

In the simplest CLR, the government declares (1) a Land Authority (section (b) (ii)), (2) a maximum (ceiling) of owned farmland, (3) rules for (full, partial or nil) compensation to land losers, (4) a minimum (floor) of owned farmland, to which eligible persons are to be raised, (5) dates for the Authority to take farmland above the ceiling<sup>7</sup> (6) and, later, to distribute it to identified land gainers so they reach the floor holding,<sup>8</sup> (7) rules for (full, partial or nil) payment for land by, and loans to, gainers. Items (2) and (4) are tightly related (section (b) (iv–v)); so are (3) and (7), which with (2) and (4) affect reform cost (section (b) (iii–iv)).

Groups qualifying to receive land are normally poor before reform. So CLR is a paradigm of land reform, aiming 'to redistribute ... rights to farmland, and thus to benefit the poor by raising their absolute and relative status, power, and income'. Yet CLR has built-in dilemmas. States find it costly if compensation to land losers is complete; but politically difficult if it is incomplete, or largely recovered from land gainers. Swift implementation, especially with weak information, risks big mistakes that are hard to correct; slow implementation allows big landowners to learn techniques of avoidance. Yet CLR has a huge and largely successful record (chapter 7(a)), for three reasons. First, if it works, it is by *direct* land transfers from rich, or landed, to poor, or (near-)landless. Hence CLR's success in achieving the central distributive and poverty-reducing aim depends 'only' on political reality and ingenuity, plus good design and implementation. Most non-CLR candidate land reforms also depend on long chains of hopeful reasoning from reform to central aim. Second, classic reform creates incentives to do things that advance the central aim: it is incentive-compatible. Many candidate reforms – collectivisation usually, tenancy reforms often – even if implemented, create perverse incentives, subverting the central aim. Third, CLR is also unlike some other reforms in that, through smaller and more equal farms, it tends to raise farm output (chapter 2), creating resources to pay both for the reform and for ancillary services to land gainers.



CLR, though the paradigm of land reform, *need* not work better than other candidates. CLR has sometimes grossly failed to reduce inequality or poverty. And alternatives – e.g. egalitarian decollectivisation and some tenancy and titling reforms – have sometimes shifted land rights and benefits to the rural poor.

***(ii) The Land Authority: top-down, here-there, participation and decentralisation***

Ceilings are up, floors are down. However, a top-down process is not necessary. Only for brevity were Land Authority, floors and ceilings presented as matters for central government. Any component of CLR can be decentralised to provinces,<sup>9</sup> districts, watersheds or villages. Whether decentralised or not, CLR design choices (e.g. whether and how to allow for land quality) and implementation can be more, or less, participatory: done by participants, popular assemblies and discussions, rather than administrators and politicians. Decentralised or participant decision-makers must observe national law. Also they should bear most of the local, extra cost of their actions (over and above cost of a national reform). Otherwise the taxpayer becomes a ‘lander’ of last resort, responsible for paying for local land-reform decisions but unable to affect them. That said, decentralisation of CLRs is often best where rural regions have (1) heterogeneous agro-ecologies and socio-economic conditions, (2) boundaries, among types of conditions, that overlap well with borders among local authorities, (3) sufficient local design and implementation capacity. Participation in CLRs is indicated where the rural poor are (1) organised, (2) with time and inclination to discuss and compromise, (3) with reasonably high levels of mutual trust (due in part to bonding social capital [e.g. Helliwell and Putnam 2004]); (4) not too exposed to retaliation from the rural rich.

For some, participation and decentralisation are both always desirable. However, first, either may be desirable though the other is not. Second, whether either or both is a good idea may vary, among types of reform design, implementation and overview.<sup>10</sup> Third, as for participation, not all decisions are best made by participatory gatherings in a constant state of referendum. Fourth, as for decentralisation, it can increase the variability of land law and practice across boundaries; that has costs and drawbacks, especially during rapid development with economic integration. Finally, both decentralisation and participation may fail a big test of successful land reform: that it should not fall foul of, but should weaken, the grip of local ‘Big Men’. Moderating their diversionary and retaliatory power may be harder for local assemblies, however nominally inclusive, than for a more remote central government with more recourse to legislative, and in the last resort coercive, power. West Bengal, at least a partial land reform success, illustrates big, separate, but interactive roles for both central and decentralised participatory authorities, interacting in part via political parties, active locally and state-wide, competing, and with wide membership.

Land Authorities may or may not be top-down, but land is always in a particular place. Good choices on participation and decentralisation depend

on land location: where are the land losers, where are the gainers, where is the reform land? If the land lost by big landowners is many miles from the homes – and farm experience – of the land gainers, prospects are less good (see chapter 6(b) on settlement schemes).<sup>11</sup> Inappropriate borders between decentralised land authorities can exacerbate the problem, e.g. if land gainers are assigned land from distant land losers in the same jurisdiction, though nearby land is available in another. Prior planning of information flow and cross-jurisdiction land swaps reduce such difficulties.

### *(iii) Compensation and repayment rules*

Three linked issues are: (1) To what extent should land losers be compensated? (2) To what extent should land gainers pay? (3) How should payments, if any, to losers or by gainers be sequenced? The criteria are: affordability, production, fairness, implementability, and political sustainability. Affordability links (1) and (2): the greater the proportion of land gains that gainers repay, the more the State can afford to compensate land losers (given the tax take and foreign aid). The link goes via (3): more compensation is affordable for the state if land losers receive it over a longer period, e.g. as income from bonds, and if land gainers can pay a larger proportion, and sooner rather than later.<sup>12</sup> However, a heavy or rapid repayment burden can sap land gainers' investment capacity, risk their failure as farmers, and encourage them to avoid repayment. So repayment, if desired or needed, should be phased in gradually, supported by loans, and enforced (as loan repayment) only upon successful use of the land.

Other negative production effects may arise if land losers – whatever their compensation for land – receive none for improvements such as wells or trees. That discourages future improvements by 'signalling' a risk of future confiscation. As for above-ceiling land, fairness indicates less, perhaps no, compensation if the owner had acquired it by force, fraud or seizure, especially if recent or by the agency of an undemocratic or colonial government. Compensation might fairly be more for land losers who had bought their land by saving income from work (rather than, say, inheriting it).

Fairness also suggests that wealthy non-landowners – especially with income from inheritance, not earnings – should be taxed to help compensate land losers. Implementability requires that compensation levels allow for *power* of land losers to organise and insist, of gainers to organise and threaten, and of governments to mobilise taxes and aid. Finally, political sustainability requires that transfers, of land and cash, can be maintained throughout the reform. All this needs planning before reform, and varies with political context. Compensation should *not* always be zero, or always at market prices, or 'always' anything.

### *(iv) Relation between compensation, reform cost, and level of the ceiling*

Compensation policies, then, cannot depend on cost alone. Nor is cost the only element in wise policy for ceiling and floor levels (section (v)). Yet cost is

the main constraint on classic reform; compensation is most of cost (and least recoverable from foreign aid); and the ceiling level is a major determinant of compensation cost, and (together with the floor level) other reform costs. A few letters (not really algebra, and only two paragraphs) help understand links, politics and trade-offs involving ceiling and floor levels, compensation, gains and costs to land gainers, land losers and 'the public purse'.<sup>13</sup>

$L + P + S = C$ : of the cost  $C$  of a classic reform, compensation for land acquisition ( $L$ ), if paid, is typically 40–80 per cent, with public administration ( $P$ ) and services ( $S$ )<sup>14</sup> typically 10–30 per cent each.  $L$  is compensation per hectare *multiplied by* area above the ceiling (minus area affected by exemption, evasion and avoidance: EEA).<sup>15</sup> Given the compensation per hectare and EEA, the ceiling level determines  $L$ . Ceiling and floor levels also affect not only the politically plausible ranges of compensation per hectare and of EEA, but also  $S$  and  $P$  – and hence whether the state can 'afford' classic reform.

Of the cost,  $L + P + S$ ,  $P$  is financed publicly.  $L$ , the bulk, is divided between land losers (to the extent they are not compensated), land gainers (through gradual repayment of land loans<sup>16</sup>), and public provision. Now  $L = rH$ : the rate of compensation per hectare *multiplied by* hectares above the ceiling. A lower ceiling means more  $H$  and thus  $L$ . To the extent that land gainers pay for extra land, e.g. by servicing land loans, they bear part of this extra  $L$ -cost: a lower ceiling means more land gainers or more land each, allowing more repayment of land loans.<sup>17</sup> Also, as mentioned, the ceiling level – and its consequences for land distribution – affect the rate of compensation *per hectare*,  $r$ : it depends partly on political pressure. A lower ceiling means that powerful élite losers lose more land. So they apply fiercer pressure for high  $r$ , perhaps threatening to destroy the reform or even the régime. A lower ceiling also brings more, middle-class land losers. These broaden the base for pressure to raise  $r$ , and are less tainted with the sins (or unpopularity) of the landed élite, being less likely to have acquired land through inheritance or power. The effect of a lower ceiling on recovery is ambiguous. Hence a low ceiling raises both the hectares taken and (probably) average cost per hectare, and may well not raise the proportion of that cost recoverable from land gainers. Further, the high floor, and numerous gainers, permitted by a low ceiling raise  $P$  and  $S$ .

Low ceilings and high floors are sometimes affordable, not just in rare (and often harsh) 'revolutionary situations' but in a peaceful framework. In West Bengal, political parties supporting the reform competed in mobilising poor land gainers to help implement a low ceiling, even with incomplete compensation for land loss (and none for the simultaneous ceilings on rents) [Bandyopadhyay 1995]. Sometimes, high compensation costs can be managed thanks to a windfall; post-1945 Korea and Taiwan compensated land losers largely with urban assets seized from a retreating invader, Japan. Sometimes, land losers are less resistant to low ceilings because their experience enables them to occupy profitable niches – though preferably not monopolies – in supplying post-reform services (extension, finance, processing, marketing) to new customers: the land gainers. All these things count for more if there is an

inverse relationship (IR) between farm size and output per hectare (chapter 2). That raises post-reform owner-farms' ability to pay back loans, pay taxes, and buy post-reform services, and makes compensation more affordable. This is most promising in areas of extreme land inequality, where both pressure for reform and the IR often correspond to under-utilised, and hence initially cheap, land above the ceiling. All the same, the cost consequences of low ceilings can be prohibitive, forcing the state to accept low implementation – and high exemption, evasion and avoidance – simply to keep the reform affordable.

### ***(v) Levels and types of ceiling and floor***

We shall present a real-life illustration of the effects of different *levels* of ceiling and floor, and to show that crude *types* – ungraduated and ignoring household size or land quality – have severe and avoidable disadvantages. First, we explore key issues around levels of ceilings and floors, continuing to assume use of the crude types. They can readily be refined, without affecting arguments about levels.

Higher ceilings create fewer middle-class land losers, and the land-richest lose less land each. So the reform has fewer enemies, with the most powerful not so angry. But it also has fewer, less determined allies, because higher ceilings provide the Land Authority with less land, implying fewer gainers and/or a lower floor.<sup>18</sup> If higher ceilings mean a lower floor, that means a larger proportion of gainers who are very poor, and less extra land each for those who are not; gainers thus have, on average, worse prospects to make significant income from farming and to repay land loans. A strong inverse relationship across all farm sizes (p. 71), where found, favours a lowish floor. Most countries undertaking CLR since the 1960s have set too-high floor areas, reducing the number of potential gainers, increasing their inducement to lobby or bribe, and reducing output gains from the inverse relationship (chapter 2). In CLR in Egypt (1952, 1961 and 1964), a 40 ha ceiling meant only 10 per cent of arable land available to distribute. In Korea (1945–50), a 3 ha ceiling meant 65 per cent [el-Ghonemy 2003]. This does not imply that Egypt should have adopted a 3 ha ceiling, or Korea a 40 ha ceiling. Land quality apart, four issues bear on choice of ceiling size: compensation (see above); exemption, evasion and avoidance (EEA); organisation and power of rural rich and poor; and pre-reform distribution of land.

**I. Ceiling size and exemption, evasion, avoidance.** Given the ceiling, land taken is reduced by EEA. So less EEA allows several possible combinations of (a) a higher ceiling, fewer losers, and less land loss per very rich loser, and thus fewer and less determined opponents; (b) a higher floor, more gainers, and more land per very poor gainer, and thus more, and more determined, supporters. Causation also works *from* the chosen ceiling size to EEA. A lower ceiling means more losers, more of them

losing heavily, and hence more incentives to incur the cost or risk of EEA. 'Supply' of devices to evade or avoid will increase. Many would-be escapers will have relatives or clients among officials, lawyers or enforcers. A lower ceiling also enables, however, more poor gainers and/or larger gains each – and therefore more people with incentives to restrain or report evaders and (more difficult) avoiders. Whether high or low ceilings are better suited to reducing EEA – or to handling compensation and repayment – depends partly on the balance of political power, and hence, in part, on the initial distribution of land.

**II. The politics of ceiling choice.** Lower ceilings, and the higher floors they allow, swell the potential number of gainers more than that of losers. The lower the ceiling, the greater the *net* increase in supporters – the more so, the more unequal was initial distribution of land. However, land losers start off richer and stronger; low ceilings raise their number and, for the richest, average loss. Can politicians predict the *balance* of political impact from lower or higher ceilings, by adding each gainer (times her land gain) and deducting each loser (times his land loss), with each person weighted by political power? That first stab is simplistic. Even if CLR is zero-sum – what the gainers gain is what the losers lose – counting gainers and losers to assess their power overlooks a crucial issue [Olson 1971]. Major potential land losers in an area are a smallish pressure-group, knowing each other and sharing an interest against ceilings reform or low compensation. Each potential land loser can check that colleagues share in the work (or cost) of pressing the group interest on the State. In contrast, potential land gainers are a large pressure group (of often very different, dispersed persons), so they face a 'free-rider problem': a group member cannot supervise, or even know, most colleagues, and thus tends to shirk (and to believe that colleagues shirk) the cost and time of organising and financing political pressure. A lower ceiling means a bigger group of land gainers, a bigger group of losers, and a larger average land stake for both; all these would be expected to raise political activity and conflict. Yet either or both groups' larger membership may well bring more free-riding (as well as less cohesion), and hence less cost-sharing or effective political action. One's hunch is that this is outweighed by the effects of larger numbers and a larger stake, but that depends on organisational costs and strengths, including coalition prospects. These are situation-specific, and need analysis accordingly.

Further, there are non-ceiling issues on which land losers and land gainers agree, and where wise policies can soften contention about ceiling and floor levels. (a) Gainers and losers agree that other taxpayers and aid donors should support reform costs, including compensation. (b) The IR (especially in its broader forms: chapter 2(h)) suggests, in the medium term, more

resources from higher output following redistributive reform. (c) Alongside this, taxpayers have more resources, and donors more stimulus, if ceilings (and floors or land gains) are chosen with an eye on high productivity of post-reform lands. (d) Gainers and losers agree that this process should be stimulated by other post-reform policies, both to help land gainers to contribute to the cost of compensation, and to compensate land losers indirectly through higher returns on their remaining land.<sup>19</sup> (e) There is often advantage – to land gainers, land losers and GDP – if the State provides inducement, insurance or infrastructure for former big landowners to sell farm services (credit, marketing, improved seeds, or extension) to the new smallholders.<sup>20</sup> The management of ceilings affects prospects to build on these shared aims of land gainers and land losers, and thus to increase the chances of a not-too-fraught reform process. Imaginative politics can lower the manageable ceiling, raise the floor, or shift given ceilings and floors towards non-zero-sum outcomes.

### **III. Initial land distribution – effect on size options for ceilings and floors:**

Pre-reform distribution greatly affects compensation, EEA, the balance of political power, and thus whether a low or high ceiling makes sense. Indeed, pre-reform land distribution determines what is *meant* by a ‘high’ or ‘low’ ceiling. In most of the developing world, 25–70 per cent of farm households – households for which farm labour, land and enterprise together provide the main single source of income – own no land, or less than 1 ha. That said, there is a sharp dichotomy between land distributions. In some countries of Latin America and Southern, Eastern and Northern Africa, a few hundred farm households have hundreds of hectares, and a few dozen have thousands. A national ceiling of 20 ha would permit massive redistribution to land-poor agriculturists, but is so ‘low’ that serious attempts to implement it are politically unlikely without exceptional events. In West and Central Africa and most of Asia,<sup>21</sup> very few households own or control as much as 1000 ha, and not many over 100 ha. A national ceiling of 20 ha is so ‘high’ as to affect few landowners and release little land: perhaps politically manageable, but of little use to poor agriculturists.

Such differences in land ownership structure among agriculture-dependent developing countries make it hard to discuss ceilings and floors for a ‘typical’ country. But usually it makes sense to call a ceiling above 50 ha high, and below 10 ha low.<sup>22</sup> In both these contrasting examples, suppose the State seeks land to bring landowners with below 2 ha,<sup>23</sup> plus landless farmworkers, to a 2 ha. floor.

- (1) First, consider a ‘Latin American’ example. Half the farmland is owned by a few thousand households above 100 ha, most by a few score with over 500 ha; 10 per cent is in a few thousand holdings of 50–100 ha; 40 per cent

is with millions of holders below 50 ha, most well below 2 ha; and a few million farm households own no farmland. Here a 100 ha (or even 500 ha) ceiling makes more sense than 50 ha. It cuts cost, opposition, compensation to meet the (minimum) per hectare rate required for reasons of justice and politics, and hence the burden of extra tax, or of land-loan repayment by reform beneficiaries. But this 'high' ceiling works only if most potential reform land starts in very large holdings.

- (2) By contrast, consider an example similar to some nations of South and South-East Asia. A few million farm households own practically no land, and similar numbers with below 5 ha own half the land, split about equally among three groups: (a) millions with below 1 ha, (b) hundreds of thousands with 1–2 ha, (c) (fewer) hundreds of thousands with 2–5 ha. A quarter of farmland is with tens of thousands of households owning 5–10 ha each, an eighth with similar numbers having 10–20 ha, and the remaining eighth with a few thousand households above 20 ha. Here, a ceiling as high as 100 or even 50 ha would incur fixed costs (administrative and political) of reform, while usually releasing too little land to get many landless and near-landless to a 2 ha floor. Ceilings-based reform probably makes sense only if a ceiling of 15 ha or less is acceptable on grounds of efficiency, perceived justice, political feasibility and affordable compensation.

What can be done in cases such as (2), or harder cases (i.e. with even less land and less unequal pre-reform distribution)? In hard cases, even if a somewhat higher ceiling is inevitable, classic reform may be attainable with a lower floor, say 1 ha, or even with distribution only of tiny home gardens (pp. 292–3). Sometimes such strategies are wrongly dismissed as supporting 'part-time farming', as if this were damning. Such farming spreads with development, and often has more virtues than drawbacks.

Sensible ceilings and floors depend on economics of farm size, but also on initial land distribution. It varies hugely over time and space, among and within countries. Yet pre-reform knowledge of it is too often disputed, vague and contested. A would-be classic reformer should know 'enough'<sup>24</sup> about the distribution of owned land, by area, type and region, before choosing ceilings and floors. Otherwise, miscalculation of political, administrative and economic benefits and costs may jeopardise reform for want of funds or backers, when a small adjustment in ceiling or floor sizes would have brought success.

High ceilings are sometimes responses by the law-drafter to élite pressure or bribery, but may reflect a considered judgement that they are needed to restrain evasion, compensation cost and loser numbers, and hence political opposition. Also low ownership ceilings, where the rental market is weak, may stop households from buying in land to adapt to local or household conditions (e.g. if returning migrants raise household size, worker/dependent ratio and capacity to farm). Perhaps, too, a few bigger farmers can be a bulwark against extraction from agriculture [Lele and Agrawal 1989].

However, most recent arguments for higher – or no – rural land ceilings are evidence-free.<sup>25</sup> Where land is scarce and labour plentiful, smaller and more equal *operated* farms have advantages, not yet reversed by development, and applying down to tiny farm sizes (chapter 2). Rental markets shift some land from big *owned* holdings to small farmers, but far from enough for full efficiency, so an IR case for low ownership ceilings remains. As for the equity/anti-poverty case, ‘despite the limited success in the redistribution of [Indian] surplus agricultural land, ceiling laws have [checked the] concentration of land in the hands of a few’. So we cannot agree that ‘further implementation of ceiling laws [in India] is no longer a feasible option’ [Deshpande 2003] or that ceilings-based reform is ‘passé’ [Rashid and Quibria 1995]. In India only one state has raised rural land ceilings.<sup>26</sup> A slow, interrupted effort to enforce them in the Philippines has had much success. New ceilings-based reform is under way in several countries, most recently Bolivia.

*(vi) Ceilings and floors – alternative levels, improved types, feasibility, justice: a Rajasthan example*

How should a legitimate government, with a mandate for classic reform, choose *levels* and *types* of land ceiling or floor? How do the choices affect the reform’s fiscal cost, political feasibility, justice and economic impact? This section shows how small refinements can improve the effect. Neglecting them has meant bad choices affecting ceilings and floors. In too many CLRs, ceiling and floor are (a) not graduated but all-or-nothing – above a ceiling all land is lost, below a floor all shortfall is made good, and in between nothing happens; (b) applied in hectares, unadjusted for irrigation, terrain or soil; (c) applied per household, not per person. We use a numerical example to show the effects of ceiling and floor size with these simple but unfair rules, and then the prospects for more sensible rules.

Ceiling–floor farmland reforms aim at a more ‘just’ balance of access to income, status and power between land-rich and land-poor. They often partly fail due to inattention, in laws or implementation, to other aspects of justice: between households with good land and bad; many and few members; many and few non-land assets; many and few non-farm income sources; *within* rural rich and rural poor; and between urban and rural. These are not ‘procedural issues’ of negotiating consent, implementing land shifts, compensating losers and recovering some cost from gainers; they are justice issues, and getting them wrong creates ill-will. That makes the ‘procedural questions’ harder to answer, subverting the reform and reducing or invalidating its effects. The example helps explore the options for getting some justice issues right.

Table 3.1 uses Indian National Sample Survey data, because they are recent and good. The sample is big enough to illustrate reform options, but not to *plan* a reform.<sup>27</sup> And no sample, even if big enough for virtually complete accuracy about land owned by size-groups, suffices to *implement* a reform. The authority needs to know the area owned, not by a sample, but by each



Table 3.1 Rural Rajasthan 2003: owned land by size class, farm and household size characteristics

Size class: area owned (ha)	Households (thousands)	Persons per household	Percentage of households, main income from:				Hectares per household	Percentage agriculture (ha)	Sandy (%) plots)
			Agricultural labour	Other labour	Agriculture s/e	Non-agriculture s/e			
0	127.6	2.59	2.2	3.3	10.6	25.3	0	0	n.a.
<0.002	268.9	3.95	13.4	31.3	10.4	15.4	.002	0	57.2
0.002-0.005	330.2	4.52	23.8	21.9	6.7	26.0	.004	0	44.9
0.005-0.040	593.6	5.51	16.3	27.0	10.8	27.2	.014	0	41.5
0.040-0.500	1222.8	5.02	8.2	40.9	27.8	16.5	.295	87.9	22.8
0.500-1.00	1334.9	5.08	6.5	19.1	58.5	8.7	.733	88.2	22.0
1-2	1160.2	5.61	4.8	16.2	57.6	13.8	1.406	78.7	35.0
2-3	648.3	6.02	2.8	13.3	65.9	11.8	2.409	78.7	34.9
3-4	336.7	6.47	0.7	14.3	73.1	7.8	3.416	84.5	42.5
4-5	229.8	6.34	3.3	14.4	73.0	6.4	4.667	80.4	42.0
5-7.5	388.4	6.70	0.8	15.2	78.7	1.6	6.086	80.1	50.9
7.5-10	90.7	7.03	0.9	12.0	77.7	4.1	8.261	73.8	52.9
10-20	246.6	7.73	2.3	10.9	72.0	10.7	14.33	72.4	62.6
>20	38.7	13.58	0	13.1	75.8	10.0	31.17	62.9	46.8
All sizes	7017.4	5.53	7.1	21.8	47.6	13.6	2.077	83.0	35.6

Source: [NSSO 2006].

Notes: Household number is grossed up from the sample (2638 households for rural Rajasthan), %ha agr: % area in seasonal crops (76.6% for all sizes), orchards (0.61%) and water bodies (0.03%). [Other classifications: homestead (1.0%); parts set aside for orchards/seasonal crops are so classified, not as homesteads; households with <0.04ha have >99% of it in homesteads, those with 0.04-0.5 ha 4%, all other size groups <2%); other non-agricultural uses (0.7% of owned land); and other uses (21.1%: cultivable waste, miscellaneous tree crops and groves not included elsewhere, permanent pastures and other grazing, and barren and uncultivable waste.) Sandy % plots % 'classified as sandy'; other types, loam, silt, light/heavy clay. 9605 plots were classified (of 9695 with sample households; estimated plots in Rajasthan, 25.08m).

rural household. With floor–ceilings reform on the cards, both big farmers and the near-landless have incentives to under-report ownership. Ideal is an up-to-date cadaster of ownership, but even without this a mixture of incentives (especially with consensual reforms), checks and laws can induce fairly accurate information. Table 3.1 is used merely to illustrate reform options, not to comment on, let alone suggest reforms for, rural Rajasthan (which has, in fact, long had a feebly implemented ceiling).

Assume nothing about how the reform is done – from instantaneous to slow, from confiscatory to consensual; but assume that ceilings and floors are fully applied and implemented without EEA. Suppose the reform takes no account of household size or type, or land quality, but appropriates all land owned by any rural household in excess of a ceiling, and provides land to any rural household requiring it to reach a floor. A 10 ha ceiling would release 1.89m ha of land;<sup>28</sup> a more rigorous 7.5 ha ceiling 2.28m ha.<sup>29</sup> To raise the 3.88m households owning no land, or below 1 ha, to a 1 ha ownership floor requires distribution of 2.53m ha;<sup>30</sup> a less generous 0.5 ha floor requires 0.91m ha.<sup>31</sup> A fully implemented ceiling of 8.5 ha, four times the average holding in Table 3.1 and almost triple the ceiling in several East Asian reforms, suffices to bring all households owning below 1 ha to that size. A 10 ha ceiling provides over double the land required to bring all rural households up to a 0.5 ha ceiling. In other words, if we drop the assumption that there is no EEA, a 0.5 ha floor would be feasible with a 10 ha ceiling, even if EEA by larger landowners meant that they kept half their land above the ceiling. Realistic assessment of EEA is needed to set a credible floor and ceiling, i.e. to decide how rigorous and low (or lenient and high) a ceiling is required to give the reform authority enough land for a higher and more ambitious (or lower, less ambitious) floor.

Can we drop our assumption that the reform takes no account of household size or type, or land quality? If not, a (less than fully consensual) reform with ha-per-household ceilings or floors is often unjust among the more-landed, among the less-landed, and between the two groups. Among the more-landed, it is unjust to transfer land from a household with 10 ha of bad land, but not from another (of the same size) with 9 ha of good land. Among the less-landed, it is unjust to allocate reform land to a 0.4 ha household, but not to one with 0.6 ha of land of the same quality but twice as many members. Between more- and less-landed households, it is unjust to transfer land from one with 10 members and 10 ha of bad land, to a one-member household with 1 ha of land twice as good. Table 3.1 tells us too little to show just how to avoid these injustices, but enough to show the method, work a rough-and-ready example, specify what we must know to do better, and explain why some reforms do *not* make these ‘obvious’ justice-seeking adjustments.

**I. Justice and household size.**<sup>32</sup> First, it seems more just if, other things being equal, bigger households have more land. CLR can allow for that. Average household size in Table 3.1 is about five. So, instead of a ceiling

of 10 (or 7.5) ha per household, we might set ceilings of 2 (or 1.5) ha per person; and instead of floors of 1 (0.5) ha per household, 0.2 (0.1) ha per person. Assume that within each range of land areas (row) in Table 3.1, all households have the same ha per person.<sup>33</sup> An implemented 2 ha/person ceiling releases only 155,200 ha, but 1.5 ha/person releases 1.23m. A floor of 0.2 ha/person requires 2.47m ha, and a 0.1 ha/person floor 0.86m ha.<sup>34</sup> Because smaller households tend to have less land, both the *need* and the *scope* for land redistribution are reduced by setting ceilings and floors more 'justly' in terms of land per person, rather than in roughly equivalent land per household terms but without adjusting for household size. Thus making all households below 0.2 ha up to a 0.2 ha/person floor is infeasible, even with a rigorous 1.5 ha-per-person ceiling; yet the corresponding per-household distribution (assuming average households of five persons), to those below a 1 ha/household floor from those above a 7.5 ha/household ceiling, is amply feasible. However, a 0.1 ha/person floor, needing 0.86m ha, can be achieved by implementing a 1.5 ha/person ceiling (releasing 1.09m ha), even allowing for some EEA.

Reduced scope for distribution with per-person ceilings is one reason why many CLRs use a per-household ceiling, but there are two better arguments. First, with per-person ceilings and floors, large landowners can sometimes evade reform, and not-so-small owners can claim reform land, by 'declaring' more people members of their households. Second, exempting large holders from ceilings – or qualifying medium holders to receive 'floor' reform land – because they have large families rewards past high fertility and encourages it in future. Such encouragements reduce future growth and equalisation [Eastwood and Lipton 1999], and land reform based on such rewards is less just than it seems: penalising small families retrospectively punishes late marriage. Probably floors and ceilings should be set with partial, not total, adjustment for family size.

**II. Justice and land quality.**<sup>35</sup> Can one improve the justice of reform outcomes as between households with better and worse land? We measure land ownership, floors and ceilings in standard hectares (sha), defined as hectares of quality (agricultural value) average for a household in a country or region. Ideally we would weight each household's owned area to allow for quality of soil, terrain and water access, but the source of these tables identifies only five broad soil types. We assume: (a) sandy soils have half the value per hectare of silt, loam, or heavy or light clay soils, (b) soil type determines land quality, (c) plot area is independent of soil type, (d) *within each ha size group*, all households have the same ratio of sha to ha owned.<sup>36</sup> How do redistribution prospects with floors and ceilings set in hectares standardised for land quality (sha) compare with prospects at the same levels as those in hectares explored above? To make

this comparison, we set – for the average household and thus all sampled households together – area in sha equal to area in hectares. On these data, this requires multiplying a household or group's sandy area by 0.608, and non-sandy area by 1.216, to convert area from ha into sha.<sup>37</sup> Table 3.2 repeats earlier calculations in sha instead of ha. We then assess reform prospects with floors and ceilings set 'justly' as between households with different qualities of land.

The final column of numbers shows the average standard hectares held by landowners in each surveyed (unadjusted hectare) size group. A household with 11 sha would reach the 10 sha ceiling by a land *loss* of 1 sha, i.e. 0.608 ha of non-sandy soil, or 1.216 ha of sandy soil, or any combination with the same agricultural value. The same land *gain* would bring a landless household to a 1 ha floor.

In Asia – as in Latin America, though usually not Africa – households owning (or operating) more land tend also to have worse land (chapter 2(e) (iii)). In Table 3.2, the proportion of sandy soil rises, though not uniformly, with area owned. So the land-poor, starting with better land, need less extra to reach a given floor if it is quality-adjusted into standard hectares. The effect is not large, however, because many land-poor start with little or no land, whether in sha or in ha, to adjust for quality. A 1 sha floor requires the land authority to obtain 2.24m sha (as against 2.53m ha for a 1 ha floor), and a 0.5 sha floor 0.78m sha (0.91m ha), reductions of only 12–15 per cent. The effect of adjustment is larger for the land-rich, who, due to their lower land quality, face less rigorous (higher) ceilings in a CLR and so lose less land: a 10 sha ceiling releases 1.22m sha (as against 1.89m ha with a 10 ha ceiling) and a 7.5 sha ceiling releases 1.94m (as against 3.28m), reductions of over a third.<sup>38</sup> Even a 7.5 sha ceiling is not enough to bring all the land-poor to a 1 sha floor; probably a 6.5 sha ceiling would be needed. However, on our assumptions, a less rigorous 10 sha ceiling suffices, even with some EEA, to ensure that all the land-poor have at least 0.5 ha of land.

### **III. Effects of adjusting ceilings and floors for land quality and household**

**size.** It is a matter of arithmetic to put together the two 'justice corrections' above, for household size and for land quality: i.e. to express floors and ceilings in standard hectares per person. Both corrections reduce both the amounts of land *required* for redistribution and the amounts *needed*, but the latter less than the former. So both the household-size and the land-quality adjustments, with 'equivalent' ceilings and floors – say a 0.1 and 1 sha per person, with average household size of 5, rather than 0.5 and 7.5 ha per household – tend to mean that less apparent land redistribution is achieved, even relative to apparent requirements, than with crude land-per-household approaches. However, those approaches – while claiming, as land reform, to seek justice between land-rich and land-poor – are rooted in unjust procedures that favour small

Table 3.2 Rural Rajasthan: owned land by size class (standard ha, sha) (sandiness determines quality; sandy area half as good as other; soil independent of plot area)

Size class: area owned (ha)	Households (thousands)	Persons per household	Hectares per household	Percentage agriculture (ha)	Sandy plots	%	Owned shalhh = owned halhh [(sandy proportion x 0.608) + (non-sandy proportion x 1.216)]
0	127.6	2.59	0	n.a.	n.a.		n.a.
<0.002	268.9	3.95	0.002	0	57.2		0.002[(0.572 0.608)+(0.428 1.216)] = 0.002
0.002-0.005	330.2	4.52	0.004	0	44.9		0.004[(0.449 0.608)+(0.551 1.216)] = 0.004
0.005-0.040	593.6	5.51	0.014	0	41.5		0.014[(0.415 0.608)+(0.585 1.216)] = 0.013
0.040-0.500	1222.8	5.02	0.295	87.9	22.8		0.295[(0.228 0.608)+(0.772 1.216)] = 0.318
0.500-501.00	1334.9	5.08	0.733	88.2	22.0		0.733[(0.220 0.608)+(0.780 1.216)] = 0.818
1-2	1160.2	5.61	1.406	78.7	35.0		1.406[(0.350 0.608)+(0.650 1.216)] = 1.410
2-3	648.3	6.02	2.409	78.7	34.9		2.409[(0.349 0.608)+(0.651 1.216)] = 2.418
3-4	336.7	6.47	3.416	84.5	42.5		3.416[(0.425 0.608)+(0.575 1.216)] = 3.271
4-5	229.8	6.34	4.667	80.4	42.0		4.667[(0.420 0.608)+(0.580 1.216)] = 4.483
5-7.5	388.4	6.70	6.086	80.1	50.9		6.086[(0.509 0.608)+(0.491 1.216)] = 5.517
7.5-10	90.7	7.03	8.261	73.8	52.9		8.261[(0.529 0.608)+(0.471 1.216)] = 7.375
10-20	246.6	7.73	14.33	72.4	62.6		14.33[(0.626 0.608)+(0.374 1.216)] = 11.971
>20	38.7	13.58	31.17	62.9	46.8		31.17[(0.468 0.608)+(0.532 1.216)] = 29.033
All sizes	7017.4	5.53	2.077	83.0	35.6		2.077[(0.356 0.608)+(0.644 1.216)] = 2.077

households, or owners of better quality land. That is inconsistent, morally dubious, and politically vulnerable as 'hard cases' multiply, are exposed, and gather support for anti-reformers

On the other hand, full adjustment of ceilings and floors for land quality and household size has practical drawbacks. Information with the Land Authority is inadequate and there are incentives to distort it. Per person floors and ceilings stimulate land losers and gainers alike to exaggerate household numbers – and perhaps, before CLR, to enlarge household size. Quality adjustments induce land gainers and losers to understate land quality – and perhaps, if CLR with floors and ceilings in sha rather than ha is anticipated, to do little to improve it. An owner's land quality may be high, not due to soil type or a nearby dam, but because she has worked or saved to dig a well or add humus to the soil; might CLR make incentives to do less of that? If so, however, the remedy is not to ignore land quality differences in redistributing land, but either to take account only of the differences *not* due to landowners' action, or to compensate them fully for that action. There is no case for transferring land from, say, a 20-member household with 11 ha (or sha) to a 1-member household with 1 ha (or sha); or from a household with 20 ha of land yielding income of 20 rupees per hectare, to a household with 1 ha yielding 500 rupees. Given the problems of information and perverse incentives, the best solution may be a ceiling that partly, but not fully, reflects differences in household size and land quality.

**IV. All-or-nothing versus graduation.** However land quality and household size are treated, injustice can arise if, as is usually the case, all-or-nothing applies. Irrespective of pre-reform ownership levels, all those owning land above the ceiling lose all the excess; and all owning less land than the floor are raised to make up all the deficiency. With a 10 ha-per-household ceiling, households owning 100, 50 and 10 ha are totally 'land-equalised', the latter losing nothing. With a 0.5 sha-per-person floor, people owning no land, 0.3 and 0.5 sha are (quality-adjusted) land-equalised, the latter gaining nothing. Even if farmland were the only income source, is it the fairest solution to do nothing for the owner of 0.5 sha – almost certainly poor – while totally removing his small relative advantage over a person who owns 0.3 sha or none? Or to take 50 per cent from a household that starts with 20 ha and 9 per cent from one with 11 ha, so they are land-equalised to a 10 ha owner, who loses nothing? What if the 11 ha owner has not inherited, but worked and saved, for the extra hectare now removed, so she becomes equal to the 10 ha owner? If farmland is the only income source, transferring it from the highly landed to the least landed may be just, but all-or-nothing around the cut-off points is unjust. If, as in most developing rural areas, 30–40 per cent of income is *not* from agriculture [Haggblade *et al.* 2007], land reform that ignores non-farm income and assets may well still be justified

if it redresses the main, broad cause of huge, inherited inequality, not only of assets but of opportunity; but sudden 'clicking-in' at, say, a per-person ceiling of 7.5 sha and a floor of 0.2 sha risks a severe new unfairness at these points, if (for example) a 0.1 sha person with significant non-farm income gets land-equalised with a 0.2 sha person, reliant entirely on agriculture, who gets nothing. The possible sense of injustice rankles most in the status-ridden societies, with power traditional and ascribed, where land reform is most required. Yet increasing the sense of injustice *among* those with low status, and among those with high status, is not a necessary result of reforms seeking to correct extreme disparities *between* high and low. It is an accident of non-graduated floors and ceilings. How might graduated ceilings work?

Forget about land reform for two paragraphs. Instead, consider the following 'all-or-nothing' scheme. (a) An income tax is levied on 100 per cent of household income-per-person above an *exemption line* of £5000 per year, with zero below that line. (b) All proceeds (minus administration costs) are used to bring every household with income per person below a *support level* of £300 per year<sup>39</sup> up to that level; there is no subvention for those with income already above the support line. Such a scheme, if perfectly implemented, destroys an arbitrarily selected range of expectations, rewards and incentives. If you have worked, saved or studied to raise your income to £300, expect no reward; had you not done so, the scheme gets you to £300 anyway. Similarly, if you had worked, saved or studied to raise income from £5000, bad luck; the extra income is fully taxed away. Incentives to *future* work, learning or saving to raise incomes above £50,000, or below £300, are similarly destroyed. Between £300 and £5000, incentives and expectations are unaffected.

Some of the harm to incentives and expectations is due to redistribution itself, to the extent that it affects income from work. Such harm may be justified to achieve more fairness, and (by empowering the poor to compete) more output. However, 100 per cent all-or-none, applying to tax right down to the exemption line and to subsidy right up to the support line, does much more, needless, harm, both to fairness and, via incentives, to output. Preferable is a graduated scheme: (a) no income tax below an exemption line, but above the line rising *gradually*, either proportional to income per person above the line, or (more usually) as such income increases a progressively rising part of each increase, reaching a maximum of 50–60 per cent at a very high income level; (b) for households with income per person below the support line, poverty-reducing subventions taking the recipient (say) 40–70 per cent of the way to the line; it is consistent with that for the *proportion* of subvention to income to be larger for those initially poorer (further below the line), yet never to push a poorer person's income all the way up to that of someone slightly less poor, thus destroying all incentive or reward around that income level. The subvention *gradually* tapers off to zero at the support line. To achieve roughly similar benefits for the poor as an all-or-nothing tax, a

graduated scheme needs to set an exemption line considerably lower, and a support line usually somewhat lower. A graduated tax-subvention scheme makes undesirable effects on expectations and incentives smaller, smoother and less arbitrary. Supporters of a graduated scheme can claim, more credibly than those of an all-or-nothing scheme, that gains from reducing poverty and extreme inequality outweigh losses from reducing incentive.

Almost all tax-subvention schemes, of course, are graduated. Yet land ceilings and floors usually operate like an all-or-nothing scheme, with similarly harmful effects. All land above an arbitrary ceiling is taken from large owners, and none from owners with less than the ceiling. Land is given to households with little land, but only to those with less land than an arbitrary floor, and by giving each household the arbitrary area that just raises ownership to that floor.

Why does this matter? Land reformers seek land redistribution *to* the poor/near-landless, *from* larger landowners, with the main aim of greater justice,<sup>40</sup> and in the subsidiary hope of raising farm output. To these ends, as well as to attain and maintain broad support, schemes of reform should also be fair (and with good output effects) *among* the poor, and *among* larger landowners. Fairness and output gains are undermined by the arbitrary nature of all-or-nothing schemes. Arbitrary injustice discourages reformers, whose momentum and idealism come largely from a belief that they are acting justly. Further, land reform creates problems of obtaining and sustaining political consensus, and these are aggravated by the arbitrary all-or-nothing procedure. A 20 ha owner-farmer might (with some compensation) accept losing 10 ha to reach a 10 ha ceiling, if he felt that landowners were treated with vertical and horizontal equity.<sup>41</sup> However, suppose he is 'reduced' to the landholding of a neighbour who owns and farms 10 ha of similar quality and loses no land at all. That neighbour may well own pre-reform non-farm assets giving him, before the reform, at least equal income and status to his 20 ha neighbour. Loss of *relative* status to former near-equals makes land losers' resentment and political opposition fiercer. An all-or-nothing floor, say at 1 ha, risks similar perceived injustice among the poor. Even worse, suppose a farmer who began with 0.6 ha gains 0.4 ha to reach a 1-ha floor, but his neighbour who began with 1 ha, perhaps with less income from non-farm assets and hence just as poor, gains nothing. She sees her already low land-based status shrinking to that of her neighbour. One more embittered enemy of land reform!

These problems have two causes. First, land reform distributes only land, from land-rich to land-poor, and thus neglects non-farm incomes and assets. All-or-nothing ceilings and floors worsen the arbitrary effects of this deficiency of ceiling-floor reforms; the deficiency itself is almost avoidable, and less serious than it seems,<sup>42</sup> but exacerbating it with all-or-nothing is unwise and easier to remedy. Instead of taking no land owned below a ceiling of 60 sha and all land above it, the same amount of land can be obtained by (say) taking 1 per cent of the 30th sha owned by a household,  $1 + x$  per cent of the 31st,  $1 + 2x$  per cent of the 32nd ... reaching a maximum that takes, say, half or two-thirds of land *above* 60 sha from the largest owner. Similarly, non-landowning



households might receive (say) 0.35 sha of reform land, owners of 0.01–0.10 sha an extra 0.37 sha, and so on, up to an affordable limit of land gain at 0.5 sha.<sup>43</sup> Such a graduated scheme can be designed to shift as much land *from big to small* owners as the all-or-nothing scheme; and *within each group* of owners to give slightly more proportionately to the less well off, but without destroying previous rankings (and rewards) completely. Gains to rich–poor justice (and probably farm output) are similar with the two schemes. But the graduated scheme is better for within-rich and within-poor justice, and does far less than the all-or-nothing scheme to disappoint expectations from past action in improving or acquiring land, or to weaken incentives to similar future action.

**V. Conclusions from the Rajasthan example.** This section has explored the consequences and interconnections of high and low ceilings, of allowing for household size and land quality, and of graduated rather than all-or-nothing approaches. Does this suggest a sensible sequence of action for CLRs? The first step is to search and, if needed, improve the data so as to predict the amount, scale and cost of land transfers. This should be done for different *levels* of ceiling and floor, modified towards per-person, quality-adjusted and graduated *types*; these are much fairer and more acceptable, but require somewhat more data and implementing capacity, and create incentive and information problems militating against extreme application. Second, these predictions allow tentative forecasts, for various ceiling levels and types, of numbers and transfers, and hence strength and enthusiasm, of gainers and losers. The third step is to predict not only the redistributive impact and the fiscal cost of implementing alternative floor–ceiling choices, but also their administrative and political feasibility, and the risks of EEA. Such forecasts should take account of local politics, including land gainers’ and losers’ group organisation, power, and legal and ethical constraints. Fourth – after taking these steps, and ensuring that the reform is legitimised by democratic participatory procedures – a government can instruct a Land Authority regarding preferred ceiling and floor levels and types.

Two objections, one of method and one of fact, leap to mind. On method, why use an example and predict reform outcomes from the arithmetic of land ownership in each particular case? Why did I reject (after some self-debate) formulating overall principles from the calculus and algebra of general cumulative distribution functions? Partly because others can do the maths better; but mainly because the case-by-case approach, while inelegant, is the right way to choose policies for any specific land reform. Each area has its own pattern, not smoothly fitting a formula, of variation among households and household groups in land owned, land quality and household size. Some of this can be captured, to the extent needed for policy *design*, by a good sample survey, such as the Indian National Sample Survey for Rajasthan. For

policy *implementation*, that does not suffice: information on all potentially affected households' land (and probably land quality and household size) is needed. For both design and implementation, it is in these circumstances pointless, as well as inaccurate and by its errors provocative, to rely on general formulae.

Much CLR has *not* followed the procedure outlined above, both for lack of information and because the crucible of reform politics often burns too hot, leaving neither time nor mood for cool analyses and choices. If the pre-reform position had sufficiently bad results, even such 'situationist' reform is better than none. Many, possibly even most, reforms have been forced by political dissent upon seriously underprepared and underinformed reformers. But that should arouse not acceptance, but action to do things better, as many CLR's have done. CLR, even if just, is discredited if done by unjust methods, out of haste and ignorance. It is possible, and often cheap and quick, to get basic information. Incentives to understate land ownership and quality, and to overstate household size, exist, for potential land gainers as well as potential land losers, but policy can remove these incentives. For example, if the cadaster is made or revised before the reform, undeclared land does not get registered, and the owner's future claims on it are therefore not safe.

There may be a net moral and economic case for or against CLR in a particular case. There is no case in which such a reform is better done without the basic information than with it. Such information is obtainable and can ease the process of political, as well as fiscal, planning for a widely acceptable, though never fully consensual, process of reducing land inequalities.

***(vii) Procedure in classic reform: big problems, big impact, incentive-compatibility***

Despite efforts by the rich to evade and avoid CLR, and by the non-poor to grab gains from it, major land transfers to the poor have proved feasible, often without war or revolution and in functioning democracies (chapter 7). Data claiming otherwise are based on unrealistic expectations, aggregations over vast areas (such as India) that obscure big successes in some areas, and omission of favourable indirect effects of ceilings on market transfers from rich to poor. But just how is classic reform to be done?

The leading civil servant implementing ceilings-based reform in West Bengal in 1969–71 listed procedures and requirements on the ground [Bandyopadhyay 1995: 305]:

- (1) Identification of families [with] land above the ceiling; (2) locating and identifying all plots in the effective ... possession of every such family ... tracing of lands held clandestinely or in somebody else's name, real or imaginary, through fictitious or collusive transactions; (3) ... vesting all surplus land ... by gathering evidence which would stand the scrutiny of administrative tribunals or courts; (4) taking over possession of vested land ...; (5) assigning such land according to prescribed priority among

the landless and land-poor peasantry; (6) prevent[ing] illegal physical eviction from the assigned land; (7) consumption and production credit to enable the resourceless new allottee to start cultivation.

(1) and (5) assume, as we do, that a household should lose land in a classic reform if, and only if, it owns 'land above the ceiling' (perhaps adjusted for household size and/or land quality), and should gain land if, and only if, 'among the landless and land-poor peasantry' ('peasantry' being, roughly, what we call 'farm households'). Instead, if information allows and the task is not too complex, one might exempt income-poor households, even if slightly above the ceiling, from land loss; or near-landless farm households from land gain, if they had enough regular non-farm income (e.g. as teachers or irrigation officials). One must also decide whether priority for reform land goes to the land-poorest – usually helping the neediest most, and efficient with an inverse relationship across all farm sizes (p. 71) – or to those needing only a little land to rise to the land floor, allowing more households to be helped, given the reform land available.

(1–7) are a difficult *combination* of measures. The first two need participation of poor beneficiaries. The next two use a judicial process probably biased towards élites. The last requires post-reform acquiescence, willing or induced, by the local rich. The whole process demands sustained political will; yet politicians are prone to electoral overthrow, infiltration by (or loyalty to) élite groups, risks of corruption and difficulties of coalition. It is facile to scapegoat 'the bureaucracy': 'in some cases they are unable to implement laws and/or corrupt, but in most of India they have been well able to administer complex and controversial laws if they have sustained support from the political leadership' [Bandyopadhyay 1995: 319–20].

Largely for want of such political underpinnings, CLR has often faced many delays in vesting and divesting land, with widespread evasion, shortfall, corruption and disappointment. Yet CLR has shifted a huge amount of farmland from rich to poor in many countries (chapter 7), often despite deficiencies of 'political will'. Part of the reason, and part of the case for seeing CLR as the paradigm, is that it is largely *incentive-compatible*; unlike many market-assisted, tenancy, and other candidate land reforms, CLR sets up incentives, including incentives to evade or avoid, that reinforce, not undermine, its redistributive intentions.

First, the main means of (legal) avoidance of CLR ceilings – in contrast to most tenancy restrictions and some other land reform candidates – is incentive-compatible. To avoid future (or anticipate enforcement of past) ceilings, big owners often seek to sell land or, in some circumstances,<sup>44</sup> to rent it out. This pushes land prices and/or rents down, making it easier for the poor to enter land markets.<sup>45</sup> In contrast, market-assisted land reform – where usually the State buys (parts of) large farms for transfer to the poor, perhaps against land voucher (chapter 6(e)) – *raises* the price of land; and, absent effective ceilings, most tenancy restrictions raise rentals, as big landowners respond by (legally) reducing supply of rented land, instead farming it themselves. CLR also has the market advantage that, for all parties to remain below the ceiling,

large holders must sell surplus land to buyers initially with far below ceiling holdings. That too is incentive-compatible, reinforcing the reform's intent.

Second, land ceilings are in sharp contrast to tenancy restrictions, in that the main, notorious and hard-to-detect means of (illegal) evasion is incentive-compatible. Tenancy restrictions stimulate covert evictions or new landlord rules for tenants, reversing the pro-poor intentions of reform (chapter 4 (b) (ii–iii)). Contrastingly, land ceilings stimulate transfers of above-ceiling land to poor relatives or clients in 'bad faith': the big owner does not intend to let go of the land, believing the transferees, being poor and weak, depend on him for employment, credit, etc. [Mearns 1999]. This delays the pro-poor effects of ceilings but does not undo them, and in the long run may strengthen them. Poor relatives<sup>46</sup> and clients learn, organise, and use their rights [Vyas 1979]. The means of evasion (as of avoidance) of CLR advance the aims of reform.

Third, and similarly, ceilings legislation 'in reserve' creates opportunities for subsequent would-be enforcers, whether from civil society organisations, political parties, or motivated State agencies. Land ceiling laws almost defunct through EEA can spring to life through local or central action, sometimes including occupations of land illegally held above the ceiling, as in West Bengal during 'Operation Barga' in 1977–84, and in Brazil under the auspices of the Movimento Sem Terra (MSN) in the 1990s. This can work, slowly and locally, even under desperately unfavourable political conditions. In Bihar – of all India's States the most notorious for subversion of ceilings by landowner power and political corruption – Bharti [1993] documents big, delayed impact of *localised* agitation, official activism, and enforcement.

Fourth, CLR raises returns to labour as a means to higher income for poor workers and farmers; alternative reforms often do not. Collective and State farms weaken the link between work, supervision/management, and workers' income; classic reform strengthens that link where land from big farms with hired labour is used to enlarge small family farms, and creates the link if the land goes to the landless.

Accusations of counter-productiveness due to 'perverse incentives' are a staple of 'the rhetoric of reaction' [Hirschman 1991, 1993]. Such claims apply to many (but far from all) tenancy reforms. However, CLR normally creates incentives that work *towards* the aims of the reform.

#### *(viii) Critiques: does classic reform still meet the definition?*

Nevertheless, there is an overriding critique that *all* land reform fails to meet our definition, because they are contrary to efficiency or market functioning [e.g. Rashid and Quibria 1995; Rashid 2000]. We recall three issues. First, farmland is unlike other property in its role as 'gatekeeper' to local income, status and power: extreme land inequality distorts non-land markets. Second, now as in J. S. Mill's day, many large landholdings rest not on purchase out of earned income, nor on proven farm or landlord efficiency, but on land seizure, intervention by colonial or recent governments, or inheritance (chapter 1(b)

(iii)). Third, nothing in this chapter implies confiscation. Rich taxpayers, not land losers as such, can pay some costs of reform.

Apart from critiques of *all* land reform, there are three sorts of claim that ceiling–floor schemes fail to meet our definition of land reform, because they do not achieve its aims. First, it is argued that ceilings do not work [Deininger *et al.* 2003; Deshpande 2003], due to EEA by large owners, and delay and corruption in Land Authorities. Indeed, areas transferred under ceilings laws often fall well short of (unrealistic) expectations. Yet chapter 7(a) shows that great areas have been reassigned from above-ceiling holdings of large land-owners (or of collective and State holders) to the rural poor, directly or due to incentive-compatible effects on private markets and transfers; and chapter 2 (g) that farmland in labour-intensive developing agricultures has been shifting steadily towards smaller holdings – as the IR predicts, and as CLR's support.

Second, some argue that CLR no longer meets the aims in our definition of reform – has become undesirable, or is no longer needed. Some say that industrialisation, urbanisation, and a burgeoning rural non-farm sector have created employment opportunities such that poor rural people no longer require, or clamour for, farmland; hence demand for reform land is small and, once distributed, it is often re-sold to large holders (chapter 7(b) (iii–iv)). Third, almost the opposite claim is used to declare classic reform *passé*: that, due to population growth, (a) too many people want reform land, (b) there is too little for classic reform to produce significant gains per beneficiary, and (c) rising land prices have made even minimum acceptable compensation unaffordable. Chapter 7(b) shows that these claims have little force. Fourth, some say that ceilings have lost their value because larger farms are now required for efficiency, as advantages of smallness are reversed by economic development, globalisation and supermarkets; except for developed countries, chapter 2 refutes this claim.

Fifth, some emphasise that clear property rights are good for growth, and claim that ceilings must damage property rights and should be removed. But not only the rich's property rights matter! In much of Asia and Latin America ceilings were imposed decades ago, often by democratically mandated governments. That created property rights in land for the poor. Incomplete implementation affronted those rights. Sanctioning that illegal affront by removing, instead of enforcing, evaded ceilings hardly helps property rights.

The case for ceilings reform rests also on the poor's heavy reliance on income from work. The rising pressure of labour supply – better managed on small family units (chapter 2) – helps to explain the steady shift of farmland in Asia, Africa and much of Latin America into smaller holdings (chapter 2 (g)); market forces still favour these, but the shift is usually slow, and ceilings reform helps remove the barriers to it. Meanwhile, in 2002, just over three-quarters of the world's 1.2bn dollar-poor were rural; while falling, the proportion is credibly projected to remain over half until the 2040s [Ravallion *et al.* 2007:24–25, 36]. For most rural (and for many urban) poor, agriculture remains the main source of income. Yet their income from land *and* labour is

severely curtailed where farmland is concentrated into large, low-employment units. Urban and industrial jobs have usually proved too demanding in capital or skills to offer much relief. Rural non-farm growth depends heavily on rising demand from smallholder farmers. Yet it does mean that part-time farms can shift rural households out of poverty: from the Ukraine to India and Indonesia, tiny home gardens have contributed hugely to the income, nutrition, status and self-esteem of the rural poor [Mitchell and Hanstad 2004]. While ceilings low enough to permit significant floor holdings are preferable if politically and financially feasible, higher ceilings can release enough land to enable millions of the rural poor to acquire home gardens (and house-land), as in Kerala [Herring 1983].

So the case for ceilings reform, at least where farmland inequality is still large, has to be taken more seriously than is implied by claims that it is, or has become, unimplementable or undesirable or both. Chapter 7 reviews what has happened to CLR. Briefly, the pace slowed in the early 1980s, but 1990–2007 saw an upsurge. Sometimes this affects private largeholdings, as in Zimbabwe, Bolivia and the Philippines. In China (1977–84), Vietnam, and several CIS and Eastern European cases, CLR came dressed in the surprising clothing of decollectivisation. Whether the ‘rural tyrant’, benevolent or not, owes his local bind on power, status and income to a private, State or collective farm, it is hard to envisage reform without something like ceilings, floors, and a Land Authority to vest and divest land.

The case must not be overstated. Other types of land reform – tenancy legislation, new wave reforms – can meet the definition (chapters 4, 6). However, for these to work, in the background there must usually be the likelihood that too much foot-dragging will lead to classic reform. In some cases (Brazil, India) the legal requirements for such a reform, notably ceilings, exist but implementation is very limited or minimal; if non-classic reforms are evaded or resisted for too long, the State may implement the classic ceilings, perhaps egged on by land invasions that plausibly claim not to break the law but to implement it. Whether the State can genuinely act as ‘reformer of last resort’ depends on who the State is, but also on power and organisation, among poor as well as rich. In any case, CLR remains the paradigm of land reform.

## 4 Tenurial options

### Tenancy reform, titling, patrialisation

#### (a) Tenurialism: tenancy, title, patrialise, collectivise, decollectivise – reform or deform?

In developing countries, classic land reform (CLR) has gone far (chapter 7 (a)). Some assert that land rights are properly distributed without reform, or will become so if markets operate freely. Others question CLR because they are *tenuralists*, believing that its aims are better met via tenurial reform. Chapters 4 and 5 explore the performance of the five main types of tenurial reform: when are they land reform, when neutral, and when land deform?

- In 1960–85, many countries in South Asia and Latin America (especially where CLR had fallen short of often unrealistic expectations) attempted wide-ranging tenancy reforms (chapter 4(b)), especially of sharecropping. Absent a credible prospect of implemented CLR ceilings, tenancy reduction and some rebalancing (less so registration) usually fell foul of evasion, avoidance or perverse incentives.
- Some countries with communal tenure (mainly in Africa) or insecure small-scale tenure (mainly in Latin America) have sought the goals of land reform by registering title (chapter 4(c)). As a rule, titling brings efficiency gains only if driven by smallholder demand, and reduces inequality or poverty only alongside complementary measures – typically classic ceilings reform – to disempower rural ‘Big Men’. Like restraints on sharecropping, titling seldom achieves the central goal of land reform if it *substitutes* for CLR.
- Many ex-colonial countries, by land patrialisation, shifted tenure from foreigners to nationals (chapter 4(d)).
- The USSR in the late 1920s and 1930s, China in the late 1950s and 1960s<sup>1</sup> and other governments expropriated most private farms, with collectivisation of tenure to collective, state or commune farms, usually large (chapter 5(a)).<sup>2</sup> This was aimed partly at equality, partly at (chimerical) economies of scale, but mostly at extracting rural surpluses of fuel, food and saving to support State-led urban–industrial growth.
- Decollectivisation in China in 1977–84, and some of the CIS and CEE after 1990, returned these farms to small-scale household tenure. Other countries re-enacted this ‘terrible detour’ (chapter 5(b)).

There are, in general, two sorts of law that affect control over land: laws like CLR, affecting concentration of land and of landed rights and power; and laws affecting terms and types of tenure. If land concentration is fixed, then tenurial types and conditions tend to adapt towards a compromise between two outcomes: 'optimal' production and inputs on the land as a whole; and maintenance of power and control by the landed and powerful, before or after the legislation. Pure tenurial reforms (laws against sharecropping, titling, collectivisation, privatisation) often do not change the preceding, very unequal, distribution of land and rural power. Often the old élite, whether big landlords, chiefs, or (after pseudo-decollectivisation: chapter 5(b) (iii) (I)) collective-farm managers, have the will and the unreformed power to resist or divert pure tenurial reforms. Sometimes tenurial reform merely changes the rural 'Big Men' from white to black, or from private to State. In either case, keeping the land concentration unchanged, and merely restricting its tenurial modes, may harm efficiency without reducing inequality, damaging the interests of the poor. So pure tenurial reforms are unlikely to benefit the poor, unless land redistribution (or good luck) has evened out farmland and power. If it has, pure tenurial reforms are unlikely to be needed to advance the interests of the poor. Yet in specific circumstances the unlikely happens, and some tenurial reforms are real land reform.

### **(b) Tenancy, tenancy regulation, land reform**

Four facts about doctors help us to understand the role of tenancy in land reform.

First, there are more doctors where more people are ill. Similarly, there is more tenancy where rural landholding and power are grossly unequal.

Second, one cannot usually conclude that doctors cause illness, or that rules or incentives that reduce doctors' activities will bring less illness. Usually the causation goes from illness to more demand for, and supply of, doctors to alleviate or cure it. If so, reducing doctors *increases* the harm done by illness. Similarly, it is seldom tenancy that causes gross rural inequality and associated 'exploitation'. Usually gross farmland inequality raises supply and demand for tenancies, which reduce the harm from land inequality to efficiency and equity. If so, laws or disincentives against tenancy are likely to increase such harm.

Third, however, doctors who neglect hygiene or medical 'best practice' may indeed cause illness. So appropriate rules or incentives for doctors can help. Similarly, powerful landlords may distort or abuse the 'market' terms of tenancy. Appropriate tenancy laws or incentives can help to discourage that.

Fourth, to reduce illness, addressing its predisposing causes (malnutrition, infection, etc.) usually achieves more than regulating doctors. Similarly, to reduce harm from gross or 'unearned' rural inequality, addressing its causes (notably by CLR) usually achieves more than regulating landlords.



*(i) The reversing consensus*

Until recently the consensus was that farm tenancy, especially sharecropping,<sup>3</sup> is usually less fair and efficient than owner-occupancy. Even when apparently chosen in the marketplace, tenancy was seen as an inherently exploitative use of market power by a rich landlord – often the village's only supplier of land to rent – against landless workers competing for tenancy to eke out meagre livelihoods. From the successful campaigns for 'fair rent, free sale and fixity of tenure' in Ireland in the 1890s, through many Asian and Latin American laws in 1945–80, tenancy restriction was seen as a key type of land reform. Yet since 1985–90 the consensus has been overturned. Most economists and development professionals – even those with a jaundiced view of market efficiency in developing rural areas – now believe that, normally, tenancy restrictions are counter-productive; that unrestricted tenancies are a desirable market outcome, usually shifting farm operation to poorer, and at least as efficient, households; and that sharecropping is a rational choice for tenant and landlord. On the new view it is not tenancy restriction, but its reduction and if possible removal, that comprises land reform.

*(ii) Types of tenancy, restriction, effect*

This tenancy pendulum has swung between absurd extremes. In truth, restrictions on landlords' rights or options may be land reform – or land deform. So may derestriction. Most (though far from all) tenancy shifts land rights from rich to poor, but not all tenancy laws reduce that shift, and some increase it. Tenancy, in particular sharecropping, is not in general evil or inefficient, but its outcomes seldom result from a level playing field. Though some laws to change them are counter-productive (as pure ceilings laws seldom are), others achieve their goals. So: what tenancy restrictions or derestrictions, in what conditions, are land reform? To answer, we must sort out types of *tenancy*, done for different reasons, and transferring farm rights and income differently between rich and poor; types of *restriction* (and derestriction), targeting different outcomes of tenancy; and types of *effect* of tenancy laws on land transfer and use, and hence efficiency, equality and poverty reduction.

Tenancies – on whatever terms (sharecrop, fixed rent, etc.) – are of two types.<sup>4</sup> Adjustment tenancies enable households to adjust their farming: in which years it happens, where, and with what role in their members' life-courses and careers. Size transfer tenancies enable large and small landowners to farm at efficient scales of operation. In developing countries, most adjustment tenancies are between well off landed households, or between poor households with little land; size-transfer tenancies normally involve better-off, more landed owners who rent farmland to poorer, less landed or landless tenants.<sup>5</sup>

Tenancy restrictions comprise – and tenancy derestrictions relax or repeal – laws of three types. Tenancy reduction laws aim to reduce the *amount* of tenanted land. Typical are laws against sharecropping in several Indian States, and caps

on area that a landlord may rent out (1–3 ha) in Taiwan. Tenancy rebalancing laws aim to shift the terms of tenancy in favour of tenants: that is, to reduce the effective *price* (rent) of a tenancy contract. Typical are caps on crop-share, at well below market levels, in much of South Asia and Latin America; tenants' rights (or first option) to buy the rented plot, often at below-market prices; and severe restrictions on existing, or proposed, rights to evict. Tenancy registration laws aim at formal registration of terms of tenancies, so as to increase security against one-sided variation of contract, especially by landlords seeking to pressurise tenants, to cultivate personally, or to change tenants.

Tenancy restrictions have intended, direct effects on distribution of farm income, or of gains from rent levels and terms of tenancy contracts. They also have indirect effects on distribution and efficiency, due to (a) side-effects of implementation, (b) non-implementation due to EEA. In general, though each type of restriction or derestriction targets a direct effect on one of three things – amount of tenancy, effective price, security – there are indirect effects on the other two. Economists emphasise indirect effects due to incentives: for example, tenancy rebalancing, aimed at improving tenancies' *prices* and terms, indirectly affects tenancy *amount*, inducing owners to supply less land for rent (though increasing demand from potential tenants). However, indirect effects also depend heavily on political circumstances, as we shall see.

In developing countries, adjustment tenancy is usually between households of similar levels of living and landedness. However, most size-transfer tenancy, especially sharecropping, shifts land and farming from better-off, landed households to less landed, poorer ones (e.g. p. 289), whose farms also use more hired labour per hectare (p. 3). So the usual direct effects of more tenancy are shifts of land control and farm income:

- (1) from landowners to poorer people, often land-poor<sup>6</sup> – without tenancies they can earn income only by labour; with them, they can also earn through their farm enterprise and skill;
- (2) from bigger to smaller farms, which normally use more labour per hectare; and hence
- (3) from farmers to labourers, usually in poorer rural households.

A surprisingly strong conclusion follows from these facts: that *direct* effects of tenancy rebalancing laws normally cut rural poverty and inequality, but direct effects of tenancy reduction laws increase them.

### *(iii) Tenancy reduction laws*

The direct effects (1) and (2) imply that successful tenancy reduction laws shift – from tenants, usually sharecroppers, to less poor owner-landowners – the chance to raise income by applying farm management skills. The direct effects (2) and (3) imply that such laws also harm the poorest rural group, farm labourers without owned *or* rented farmland, by cutting their employment

and/or wage-rate. Further inequality and harm to the poor accrue from tenancy reduction laws (absent redistribution of owned land) via indirect effects. If implementation compels landlords to withdraw land from the tenancy market, rents rise. If landlords try to evade implementation, they will require higher rent to persuade them not to farm their own land, but to risk prosecution and perhaps land loss. Further, landlords try to evade tenancy reduction by making it hard for the authorities to identify tenanted holdings above the landlord's legal renting limit: they shift tenants around plots, or periodically farm plots themselves. This harms poor tenants by reducing their security, their chance to 'learn by doing' on a given plot, and their ability to plan.

To avoid harm from tenancy reduction laws to poverty and inequality, they are often packaged with laws to stimulate owner-farming by poor ex-tenants, by giving them prior, or subsidised, rights to buy the land they used to rent. If they can, this benefits them. But it may harm other poor people, because landlords, to avoid forced or disadvantageous land sales, evict tenants and self-cultivate, or reduce future supply of land to rent. If lawmakers seek to make farmland rights more equal, it seems best to use their political capital for ceilings laws to increase land ownership by the poor. Where these are infeasible, the poor choose tenancy, so they can farm. Tenancy reduction laws, directly and indirectly, impede this; hopeful add-ons may not help. Tenancy increases equality, farm size optimality, demand for labour, and land rights and welfare of the poor – all compared not with an ideal situation, but with non-tenancy, given the distribution of owned land and of power. There is a case for tenancy rebalancing and registration, but – it appears – seldom for tenancy reduction, at least in the absence of enforceable ownership ceilings.<sup>7</sup>

#### *(iv) Tenancy rebalancing laws*

Tenancy rebalancing comprises mainly laws to limit rentals, typically reducing the landlord's crop-share from the prevailing one-half to a third or a quarter; laws to give tenants first option to buy their plots, often below the market price; and laws to guarantee tenants against eviction, even for some forms of breach of contract (non-payment of rent, 'soil-mining' practices). In developing countries, the make-up of tenants and landlords makes such laws, in direct effect, pro-poor and equalising. However, especially in the longer term, this may be outweighed by indirect effects harming the poor, especially through induced tenancy reduction. These laws stimulate landowners to avoid, evade, or distort implementation. This they often do by reducing the supply of land-to-rent. Such effects in India and Latin America are the main reason why the professional consensus of 1950–80 – that tenancy rebalancing laws were land reform, and laws to free the market from such laws land *deform* – has been overturned. Tenancy rebalancing laws are seen as incentive-incompatible and therefore counter-productive. Typical is the finding that, in Nepal in 1970–90, tenancy regulations proved 'unenforceable [yet] harmful to the status of

tenants[, with] evictions, ... shifting of tenants to informal settlements, and rent increases' [Riedinger 1993: 26].

We need to be cautious about claims that indirect effects, especially harmful incentives to the rich,<sup>8</sup> mean that a claimed reform will leave the supposed gainers worse off. Such claims have been used to attack almost every social reform law: for example, in the 1860s alone, laws against serfdom in Russia (1861), child chimney-sweeping in Britain (1863), and slavery in the USA (1865).<sup>9</sup> Even today, laws mandating equal pay for equal work, irrespective of race or gender, are sometimes attacked as disincentives to the employer to hire blacks or women. Such 'perverse' effects can be real. Some of the poor may be made poorer by losing actual or potential positions as slaves, serfs, child chimney-sweeps, or victims of wage discrimination. Such effects, though, are usually too small to outweigh the gains to freed slaves, serfs, etc. who do find other work. Further, such laws mean more bargaining power for poor, unskilled free labourers; strengthen the competitive position of employers who did *not* enslave, discriminate, etc; and create incentives to work by removing the risk of discrimination or worse. So it is unlikely that such laws, through net disincentives, harm blacks or women. Even when they do, the harm is probably brief: the assault on social institutions, and norms, of discrimination, and the provision of legal redress, provide the poor with more than commensurate gains.

Analogous arguments against automatic counter-productiveness apply to tenancy rebalancing. It increases tenants' bargaining power, good landlords' competitiveness, rural labourers' incentive to farm tenanted land (because tenancy has become more rewarding or less demeaning), and in many cases the justice and openness of rural socio-economic norms and institutions. Nor is rebalancing, any more than equal-pay legislation, an efficiency-reducing intervention in a well functioning market. Like women and blacks,<sup>10</sup> absent rebalancing legislation, poor tenants seldom face a free-market choice, with full information, among rich landlords offering various combinations of terms. Too often, the developing-country landless can farm only by renting from a sole big village landowner (or one of a few) with market power over land, and perhaps over village jobs and loans too. Tenancy rebalancing laws in such situations are often far from counter-productive. 'Perverse' indirect effects (from incentives or non-implementation) may prevail over direct beneficial effects, but need not.<sup>11</sup> After all, if the legal and political climate favours a new law (including laws pro-poor in intention and direct effect), that law creates an incentive to obey, not to subvert it by illegal evasion or unpopular avoidance.

However, if the climate is wrong – if the rural poor have little power – great net harm has been done by *implemented* rebalancing, without steps to compel or incentivise large landlords not to shift land from tenancy to personal cultivation. Some sitting tenants benefit,<sup>12</sup> but landowners evict or fail to renew others, and offer fewer new tenancies. Evicted, or potential but frustrated, tenants lose. That probably means the poor; better-off tenants are better

placed to keep or get tenancies on rebalanced terms. As for *unimplemented* rebalancing, that does not improve terms or cut rents for most tenants – yet increases the risk that, fearing implementation later, landlords will evict soon, even if illegally. That risk is most for poorer, weaker tenants. Being vulnerable and hence averse from risk, these are likeliest to be pushed, by extra risk of eviction, into cautious, unenterprising, low-income behaviours. In the wrong legal and political climate, tenancy rebalancing laws may well harm the poor.

What is the *right* climate for tenancy rebalancing to be implemented, and in ways that – through incentive or through effective law – inhibit landowners from resuming personal cultivation, thereby cutting the supply of rented land for the poor? At least one of the following conditions is needed.

- The village élite is weak, divided or ill-organised (compared with tenants and the poor). That usually happens where they do not own a large proportion of farmland, or it is divided among many of them. Usually such villages have no ‘rural tyrant’: the rich must compete for the adherence and custom of the poor. Land ownership is not very unequal, and one or two landlords are unlikely to control the polity or the law. Then, rebalancing laws are feasible with few harmful side-effects. However, with land not very unequal, most tenancy is for adjustment among near-equals, and it is not clear why that needs rebalancing.
- It is a credible deterrent, against landlords who repossess land or evict or shuffle tenants, to implement ownership ceilings, either because the previous condition applies, or – if rural society remains highly unequal – because of strong local organisation of the poor, linked to a central polity mandated for classic reform. That polity may be an occupying power (Japan, Korea and Taiwan after 1945) or, in democracies (West Bengal and several Latin American cases), a competitive political party.
- Rural élites believe they will be compensated for any lost rental income and rural power and status due to laws against tenancy because – though prevented from resuming farming on tenanted lands – they find rebalancing ‘packaged’ with compensating gains on the land they do farm.<sup>13</sup> Examples are irrigation as crypto-compensation for big farmer-cum-landlords in north-east Brazil [Tendler 1991], and the progress of the green revolution alongside tenancy rebalancing in West Bengal [Bardhan and Mookherjee 2006].

Though complementary, any one of these conditions, if met to a sufficient degree, can lead to successful pro-poor rebalancing reform. The second condition, credible ceilings, is the commonest and likeliest.

The new consensus is right to warn that rebalancing *may* harm the poor, but wrong to write it off, if one or more of the above conditions is met. Increasing land scarcity normally raises the proportion of land in tenancy: rural population pressure on land supply, especially in Africa, is making tenancy increasingly important [Lastarria-Cornhiel and Melmed-Sanjak

1999], alongside its effect as an equaliser of land rights. Absent rebalancing, this will be at rents, and on terms, increasingly unfavourable to poor and small tenants. Rebalancing in South Korea, Taiwan, West Bengal and parts of Latin America cut poverty, enhanced equity, and probably increased efficiency, not because indirect effects were absent, but because the political conditions meant that landlords' avoidance behaviour was different and did not undermine the intention of the rebalancing laws. For example, in South Korea, landlords were prevented – by peasant political organisation and *de facto* ceilings, not simply by quasi-colonial implementation – from *evading* rebalancing by resuming cultivation, evicting tenants, or shuffling them around; instead they *avoided* the legislation by selling land to poor tenants [Powelson and Stock 1987: 179]. That response, legally avoiding the law yet advancing its key aim, makes rebalancing (like ceilings: Chapter 3 (b) (viii)) incentive-compatible.

Usually,<sup>14</sup> successful and incentive-compatible rebalancing required a credible threat of ceilings. That made substantial eviction, and resumption by landlords of personal cultivation, infeasible. Further, via political parties, farmers' associations or otherwise, the rural poor had already acquired considerable power. This is in sharp contrast to the circumstances usually surrounding tenancy legislation. Without any of the three conditions (p. 156), tenancy laws are empty threats, waved at grossly unequal rural power and miscalled land reform, as a bad cook waves a leek at boiling water and calls it leek soup.

There is an intermediate situation. Suppose the conditions for beneficial rebalancing are met to some extent. Rebalancing is likely to bring medium-term gains for poor sitting (and staying) tenants; however, medium-term losses for as-poor, or poorer, evicted and potential tenants (and some labourers) may equal, or slightly exceed, the gains. Even so, reformers, politicians, and the poor themselves may want *some* types of rebalancing legislation. First, it creates a legal basis, to be implemented whenever the poor can mobilise enough pressure – and thus encourages them to organise for that purpose. Second, without rebalancing laws, the terms of tenancy emerging in the marketplace can be *increasingly* harsh for poor, powerless tenants, due to rises in population/land ratios, or (during green revolutions) due to the increasing appeal to landlords of self-cultivation. Polarisation, with big landowners increasingly having local and unregulated monopoly power over tiny sharecroppers, may sabotage rural development: returns to acquiring farmland for rent, even by absentee landlords, increasingly exceed the returns to investment, perpetuating a low-growth 'quasi-feudal' rural scene [Bhaduri 1973; see also Boyce 1987]. Policymakers and voters, including poor ones, might conclude that rebalancing, to reduce income per hectare from 'quasi-feudal' landlordism, was a long-run social gain, even if the poor suffered some medium-run net loss.

But, if landowners' investment is curtailed because it is more profitable for them to impose 'harsh terms' on sharecroppers, is there a better remedy than

rebalancing those terms? Can one address the root causes of the rural poor's *lack of alternatives* to sharecropping, and hence of their inability to get better terms (in the marketplace and/or through political organisation)? The causes are: high and rising person/land ratios; inadequate non-farm (including urban) alternatives to farming; and, above all, extreme concentration of farmland ownership. This implies little competition among landlords *or* farm employers for the services of the working poor, whether as tenants *or* as employees. In both roles, too, the poor's bargaining position is further weakened because they lack owned farmland, education for non-farm work,<sup>15</sup> and hence alternatives to sharecropping or casual farm labour. Absent CLR, rebalancing may help some poor tenants, but does not address the main cause of 'harsh terms': land ownership inequality. Without ceilings at least in the background, rebalancing usually cuts down the poor's main palliatives – the supply of tenancies, and offers of hired employment – by inducing big land-owners to replace small tenancies by large, capital-intensive owner-farming. There are probably few cases where ceilings are not feasible, but major, non-counter-productive rebalancing is. Otherwise, where rebalancing would bring net gain to the poor, so would ceilings-based redistribution: the threat of ceilings is what makes rebalancing work. It may work without them in the right political conditions, but then CLR is usually feasible and preferable.

#### **(v) Tenancy registration laws**

Tenancy registration requires landlord and tenant to sign and deposit an agreed contract, enforceable at law, specifying both rental details and what each may do, or must do, about the land. Landlords and/or tenants increasingly seek registration as agricultures develop and formalise. But when do benefits exceed the costs? Who gets the benefits, and who incurs the costs? Tenancy registration, especially where there is no up-to-date and reliable cadaster of owned land, is costly to set up and administer. Usually its effects are modestly good for poor and rich alike. However, it does not substantially redistribute income or power to the poor, and so is not land reform, except in one important set of circumstances.

Tens of millions of unregistered tenancies of farmland are verbal only, and rarely even witnessed. Landlord and tenant are usually kin or bound by group rules and loyalties. Standard rules of rental and repossession part of common knowledge. (In much of India a 50–50 crop-share rental, renegotiated each year if either party insists, is the norm.) So why bother with registration? As land becomes more scarce and valuable, and as formal law replaces customary law, it becomes more important to record agreed rules that define feasible, and penalise or prevent arbitrary, actions by landlord or tenant. Without registration, as the sanctions of face-to-face kin societies weaken, landlords may be able to repossess at will – even, in extreme cases, just before harvest, perhaps claiming arrears of 'agreed' (but unregistered) rent. Or tenants may claim that they have farmed the land for years and now own it.

Both parties avoid such problems and gain security by tenancy registration. The more literate party (usually the landlord) may be better placed to manipulate a contract; on the other hand, it offers extra security, from which the poorer party (usually the tenant) gains more, as she is worse placed to cope with unexpected shocks to income.

On this 'balanced' account, tenancy registration is, at best, modestly pro-poor in its direct effects. However, there is a huge exception. Power imbalance between landlord and tenant can increase due to increasing scarcity and value of tenanted farmland – induced by agrotechnical progress and population growth. This raises the bargaining power of big landlords, especially if there are only one or two in a village. Absent registration, poorer sharecroppers are increasingly at risk of summary eviction, or of being shifted from plot to plot. Growing land scarcity means growing power for big landlords, who may increasingly enforce tenancy disputes in their disfavour through economic blackmail ('insist on your claim, and you won't get land to rent in this village'), political pressure, legal manipulation, bribery or brute force. Registration cannot guarantee against this sort of thing, especially if legal systems are not neutral, but in the right political and legal circumstances it provides considerable protection.

So the direct effects of laws requiring farm tenancy registration are modestly pro-poor and equalising in most cases, but substantially so in some. What of indirect effects? Incomplete implementation limits, but is unlikely to reverse, benefit. As for incentives, by reducing risks and transaction costs of landlord-tenant disputes, registration rules – if both compliance and verification stay cheap and uncumbersome – encourage both owners and (near-) landless to transact tenancies. That raises the proportion of land rented.<sup>16</sup> That tends to shift returns to farm enterprise from rich to poor, and by cutting farm size to raise demand for labour from farm employees. So indirect as well as direct effects of tenancy registration are also likely to be modestly pro-poor, and can lead to more. The crucial start for West Bengal's huge land reform, 'Operation Barga' (p. 159), was a campaign – politically concerted from above and below – to get sharecroppers (*bargadars*) to register their holdings.<sup>17</sup> But it would not have been major land reform on its own. It was accompanied by reforms to rebalance the reward from sharecropping in favour of the tenant, and by ownership ceilings to deter landlords from evicting tenants or reducing the supply of land for tenancies.

#### *(vi) Sharecropping: three underlying issues*

Most tenancy laws are concerned mainly to alter the extent or terms of sharecropping. To evaluate such laws, we need to know why it is chosen. There are three issues. First, why should tenancy emerge – that is, why should a landowner, unable or unwilling to do much farmwork or sell much land, choose to rent land out, rather than hiring farm labour in; and why should a worker, wanting to farm but owning little or no land,<sup>18</sup> choose to rent land in,



rather than hiring labour out? The answers may help explain the location and timing of tenancy. Second, if tenancy emerges, will sharecropping or fixed rent be preferred by owner and tenant? Third, if sharecropping emerges as a dominant or sole method of tenancy, how do the landowners and the land-poor reassess the choice between tenancy and farming with hired labour?

**I Tenancy: why, where, when?** Tenancy has five adjustment functions and five size-transfer functions.

- (1) It helps people adjust when they farm. Often, for example, one and the same household rents out when it contains many small children, or during illness or temporary migration of workers – but rents farmland in when children reach working age, or when migrants return.
- (2) It helps people adjust where they farm. Often, for example, a household rents out plots far from home, rents in nearby plots, and so cuts time and cost of moving labour, inputs, and outputs.<sup>19</sup>
- (3) Tenancy adjusts land to skill in farm enterprise or management. Households with comparative advantage in these, but little or no land, can rent in; households with few such skills but much land can rent out.
- (4) It adjusts land to draught animals: those owning only land can rent some to those with only animals.<sup>20</sup>
- (5) It adjusts careers: tenancy may be a useful ‘rung’, between farm labour and owner-farming, enabling the enterprising poor to climb an ‘agri-cultural ladder’ of learning and risk management (p. 162).
- (6) Tenancy allows farming in units of more efficient size (farm area) where farmland ownership is very variable, mainly by cutting transaction costs. This works differently in poor and rich countries (chapter 2(c)).
- (7) In rich countries, rural labour is scarcer and its wages higher, relative to capital costs, than in poor countries. Rural saving is more, and its institutions more advanced and usually competitive. So capital (rather than labour) use looms large, as do capital-linked transaction costs. These are lower on large farms, including tenanted ones, than on small farms, both for farmers and for capital suppliers. In farming, it costs more for 100 small owner-farmers to borrow \$100 each to hire a combine for a few hours, than for a large farmer, renting in their land, to borrow \$10,000 to hire combines for the harvest season. It is also cheaper for a lender (or hirer) to pre-screen and monitor the repayment capacity (or combine maintenance) of one big farmer, rather than 100 small ones. Usually owners, tenants, capital hirers and lenders gain, in rich countries, if small owners rent land to *larger* farms with lower transaction costs of capital.<sup>21</sup>
- (8) In poor countries, labour is cheaper relative to capital, so it is more used in farming. Hand harvesting in Africa and most of Asia is normally far cheaper than combines (unless heavily subsidised). So labour-linked transaction costs<sup>22</sup> loom larger. These are lower on smaller farms, both for farmers and for labourers, favouring big-to-small

tenancy: instead of seeking, screening, training and supervising farm-workers, the big landowner rents out to small-farm tenants, lowering transaction costs. For farmers, cost per hectare of supervision is less on smaller, more visible holdings, and more land is worked by family labour, with direct incentive to work.<sup>23</sup> For workers, instead of seeking uncertain farmwork at inconvenient times, they can work rented plots as and when they choose.<sup>24</sup> In poor countries, big landowners and poor workers gain, as large owners rent to *smaller* farms with lower transaction costs of labour (chapter 2(c)).

- (9) Thus big-to-small tenancy helps farm output in poor countries. In extreme cases smaller farms have higher total factor productivity [Mookherjee 1995]. More widely, 'tenancy reallocates land from large and middle ... to marginal farmers [, leading] to greater utilisation of land and labour' [Swamy 1988: 555, 562].
- (10) In poor countries, tenancy has social gains by avoiding a large-farm development path. Without tenancy, large owner-farmers cut the high costs linked to labour by hiring or buying combines, tractors, herbicides, etc., often using their political power to obtain subsidies. That path tends to be hard, inefficient and socially destructive. It is hard, because rural savings are scarce, while urban and foreign savers are often reluctant to finance farming due to the need for local knowledge. It tends to be socially inefficient, because capital-intensive large farms in poor countries – though usually privately efficient – leave rural labour and skills idle or underused, at last temporarily. It is socially destructive, because it pulls down wage-rates and employment for the rural poor before non-farm and urban development can compensate.

All ten functions are sometimes met by farmland sales, but these are fewer, riskier, costlier, and less flexible – harder to reverse – than rentals. Often, too, sales get little farmland to the poor, because they lack cash and cannot readily borrow.<sup>25</sup>

The latter five 'size transfer functions' can also be met by ceilings-based reform. That also reduces the rural inequality that promotes fears of 'exploitative' tenancy. So one might expect that tenancy would be welcome for its adjustment functions where ceilings are implemented, and for its size transfer functions where they are not. Yet, even with ceilings, many tenancy laws reduce tenancy, whether as an aim or as a side-effect. Are such laws land deform, and is their repeal or deregulation land reform? In its size transfer role,<sup>26</sup> tenancy in poor countries shifts farming from large ownership units to smaller operated farms. That normally means more farm output and land productivity. Also in its size transfer role, tenancy in poor countries allows land-poor agriculturists to earn from farm enterprise skills, not just raw labour. The shift to smaller farms also means more demand for labour per hectare and thus higher employment, and perhaps wage-rates, for the labouring poor.

So the size-transfer effects of farm tenancy, in developing countries, normally reduce poverty and inequality. Tenancy *reduction* laws are, absent clear counter-evidence, land reform, and reversal of such laws may be land reform. To improve on poor tenants' 'harsh terms', land reform must attack the causes by imposing effective ceilings or, where rural power structures prevent that, by changing them. As part of such change, but seldom otherwise, land reform can be advanced by tenancy *registration*, and by careful *rebalancing* measures that do not reduce the area under small-scale tenancy.

What of adjustment tenancy? It increases farming efficiency and convenience, but usually moves income from land management and farm enterprise among farmers of similar status. Only size transfer tenancy is normally redistributive at any moment. However, over time, 'career adjustment' tenancy can help young, poor, but progressive rural people to climb an agricultural ladder. As young landless labourers, they first obtain farm experience. Next, they acquire entrepreneurial experience as tenants, while saving enough to buy land. The process was described for the USA by Spillman [1916] and partly applies to some developing areas. In poor areas of Ecuador in 1970–85, cash saved by sharecroppers, out of farm income, allowed them to climb the ladder by buying farmland later [Forster 1989a: 7]. Where the ladder exists, tenancy reduction 'reform' may displace a vital rung, preventing some of the poor from climbing out of poverty.

The felt need for tenancy is reduced where there are alternatives. Space adjustment tenancy often emerges to create contiguous farms where land owned is much fragmented, but is less needed where there are accepted, regular arrangements to consolidate plots (chapter 6(a)). Time adjustment tenancy often emerges where there are many temporary rural out-migrants, but is less needed where they belong to 'share families' whose working members shift between urban and rural, exchanging functions as temporary out-migrants and farmers [Epstein 1973]. As for the size transfer functions of tenancy, they are most required if farmland ownership is very unequal, and tenancy can shift land to sizes of farm operation (usually smaller and more equal) best for production. Effective ceilings-based land reform largely substitutes for tenancy in its size transfer role, but much less so in its adjustment roles.

The pressure for tenancy restriction to improve 'harsh terms', its chances of achieving land-reform goals, and its risk of being counter-productive depend on the economic options, and political bargaining power, of large owners and land-poor tenants (and would-be tenants). So the regional record of tenancy and tenancy laws, and their success in achieving the goals of land reform, depend on<sup>27</sup> two time-paths. The first is that of land scarcity: the pressure of rural population on land, as mediated by non-farm options. The second is that of the power balance in rural institutions. What can we learn from regional tenancy trends?

*East Asia* before 1945 featured middle-to-large owner-farms with employees, many small owner-farms, and a significant minority of small farms sharecropped on 'harsh terms'. In 1945–75, this gave way to three 'solutions': revolutionary collectivism (China, Vietnam, Laos, Cambodia); tenancy

reform with effective ceilings (Japan, South Korea, Taiwan); and partly frustrated tenancy reduction and rebalancing, plus some resettlement (Indonesia, Malaysia, Philippines). Later, China (1977–85) and Vietnam (1990–99) decollectivised into fairly equal, household-controlled farms. Tenancies emerged, though initially sparse and often legally harassed. They had big roles in adjustment, and, in China, in size transfer. Some households shrank while others grew, but voluntary and sometimes illegal rentals from small to large households did more to contain inequality than officially imposed (and often politicised) redistributions [Deininger and Jin 2005; for the same result in Ethiopia see Deininger and Jin 2006]. For the classic post-1945 land reformers – Japan, South Korea, Taiwan – effective ceilings allowed implementation of tenancy reforms without mass evictions. Most tenants became family owner-farmers by 1955, since when most remaining sharecropping has been replaced by fixed-rental or owner-farming. In the third group, the Philippines shifted from tenancy reduction and rebalancing in the Marcos period – which did get owner-occupancy to some tenants – to controversial, incomplete, but more pro-poor efforts [chapter 6(e)]; Borras 2007].

Less than 15 per cent of farmland in *South Asia*, and in much of *Latin America*, is rented and the proportion is declining [Singh 1990; NSSO 2006, 2006a; Thiesenhusen (ed.) 1989; Lastarria-Cornhiel and Melmed-Sanjak 1998]. Bruce [1986: 50] adds that tenancy in Latin America and Asia does not deter investment and that its restriction ‘is unlikely to benefit tenants and is no substitute for redistributive land reform’, but argues that *Africa* may be different: the ‘ethnic element in much tenancy [renders its reform often] a critical step in the political process [that] releases energies which result in tenant demands for a more thoroughgoing reform’. However, releasing inter-ethnic energies in land matters carries fearful risks (chapter 1(b) (vii)). Further, in Africa, probably less than 5 per cent of farmland is tenanted; and in Zimbabwe and South Africa an emerging (or revived) tenancy market seems likely to increase the share, in land rights, enjoyed by poor people who formerly suffered ethnic discrimination.

**II. If tenancy, why sharecrop, not fix-rent?** Some tenancy reformers have sharecropping alone in their sights. They have no wish to reduce or rebalance fixed-rental tenancy. Regulators argue that it is land reform to enact laws stimulating shifts to fixed rentals by reducing or rebalancing sharecropping. Deregulators argue that it is land reform to remove or reverse such laws. To assess these arguments, we note that, where farm tenancy is common, a big majority of rented farm area is *either* fixed- or share-rented<sup>28</sup> – in developing countries almost always the latter, except where the tenant is a substantial farmer. What sort of people prefer each type of tenancy, in what conditions, and with what social outcomes?

Much sharecropped land is with ‘pure’ sharecropping households (i.e. they farm no fixed-rent or owned land). Similarly, much fixed-rent land is with

pure fixed-rent households, and much owner-farmed land with pure owner-farmed households. However, many 'mixed' farms are with households that farm more than one land type.<sup>29</sup> In developing countries, employment and output per unit area tend to be:

- (1) slightly less on *sharecropped than fixed-rent (or owner-farmed) land* for mixed farms [Bell 1989];
- (2) similar on *sharecropped and other land of all households* for all farms [Hayami and Otsuka 1988];
- (3) similar on land of *sharecropped, fixed-rent and owner-farmed pure farms* of the same size.<sup>30</sup>

For (1) and (2) both to be correct, employment and farm output per unit area on pure farms of *all* sizes must be slightly *more* on sharecropped than on other land. This is consistent with (3), because small farms tend to have higher employment and output per unit area than large farms (chapter 2), and sharecropped farms tend to be smaller than other farms. In other words, (3) is true – sharecropped farms show *no higher* employment and output per unit area than other pure farms (even though smaller) – because sharecropping is pushing down input and output, just as (see (1)) it does on mixed farms. Thus a reform that shifts land from sharecrop to fixed-rental seems to improve output and employment,<sup>31</sup> unless the reform has offsetting unintended effects, e.g. by encouraging shifts of land to larger farms where it is less productive.

Privately too, fixed-rent seems preferable. Marshall [1961] argued that sharecroppers, having to sacrifice part of extra output to landlords, have less incentive than owner- or fixed-rent farmers to put in extra work and inputs, and therefore apply less per hectare. Cheung [1969] showed that (a) it is in the interests of landlord and sharecropper to share costs, so the incentive to apply inputs increases towards the level prevailing on owner-farmed and fixed-rent holding, and (b) much of this often happens. However, much is not all, and often is not always. Cheungian cost-sharing itself has costs in time, money and trust. Due to such costs, *Marshallian disincentives* explain why sharecropped land may fall (slightly) behind fixed-rent and owner-farmed land in per hectare employment, output and income, for any given size-distribution of farms. Yet this suggests that, *if only income or output counted*, private incentives would shift cultivation out of sharecropping and marginalise it, but for abuses of power – filed by radicals under 'exploitation' and by liberals under 'market failure'. A shift from sharecropping to owner-farming might be reformers' first choice, but – since owners typically farm considerably more land than sharecroppers – might mean larger, less labour-intensive farms (absent the political conditions to implement ceilings reform). As second best, reformers seek to shift farmland out of sharecropping, especially if it is on 'harsh terms'. Yet it remains much more prevalent than fixed rental farming, especially for poor tenants, in developing countries. Before 'reforming'

sharecropping away, one should ask whether it persists despite loss of income and output, not mainly because of abuses of power, but because landlord *and* tenant prefer it to fixed rental on grounds other than income and employment. There are three reasons why they might.

First, sharecropping is a way for poor farmers to reduce their risks (at a price), just as a company does by raising money from 'equity' shareholders rather than from the bank. If the funds come from a bank, it seeks the same repayments whether a company does well or badly, and if it does not get them can bankrupt the company. If the funds came from shareholders, they share the cost if things go wrong, through foregone dividends and perhaps capital loss; if the company does well, they share in the gains. Poor farmers seldom get such 'equity' lending directly. If they 'borrow' their land on a fixed rental (just as if they took a bank loan), they must pay debt in full, even if there is no harvest. But poor landless farmers can 'borrow' land on risk-sharing terms, analogous to equity lending, via a sharecropping contract. If a sharecropped farm does badly – pest attack, poor rains, low prices for cash-crops – the crop-share rent payment is smaller: the farmer reduces losses by sharing them with the landlord. If the farm does well, the value of the landowner's rent share also rises. In return for bearing these risks, the landlord's share-rent is higher (in typical years) than the market rate of fixed rental. In effect, the crop-share landlord is both renting out land and selling insurance. This deal makes sense for both parties. The poorer tenant is happy to pay a bit more in the average year because she cannot tolerate risk. The richer landlord, being better able to bear risk, is glad to sell insurance in the form of a somewhat higher rent in an average year.

Second, by the same token, sharecropping (and hence risk-sharing) makes a small farmer less than usually reluctant to take extra risks in search of higher income. That improves her prospects to raise *long-term* output and thus escape poverty through riskier, but in typical years more rewarding, crops and methods. For a sharecropper, income fluctuation is less than for a fixed-rental tenant (or owner-farmer): in bad years income is lower but so is rent, and in good years both rise. Many small sharecroppers also own a little land; but such risk-sharing causes them to accept more risk, in search of profit, on sharecropped than on owned land. If Marshallian disincentives are not important (or, as often, are overcome by cost-sharing between landlord and tenant), such farmers will in the long run produce more, per hectare, on sharecropped land.<sup>32</sup> As for those farming *only* sharecropped land, they face two circumstances stimulating higher long-run output per ha. Compared with those in similar soil-water conditions farming only owned land, they face less downside risk. Also they tend to farm smaller areas (so that lower transaction costs linked to labour matter more: chapter 2(c)). Yet, despite these dynamic incentives for sharecroppers to input, invest and innovate, output per hectare is *not* more on sharecropped than on other land, taking all households together [Hayami and Otsuka 1988]. This shows the power of static, Marshallian disincentives. However, the risk-reducing aspect of sharecropping speeds the

spread of farm innovation to poor tenants. That is important where environmental risk is high and when agrotechnical progress is fast, unfamiliar or risky-looking.

A third reason why sharecropping is often preferred privately is its effect, via the time of payment, on the poor's access to rented land. If fixed rent is paid in arrears, rich and mobile tenants may *choose* to default if the harvest fails – and poor tenants may *need* to default, because they lack savings, collateral, and borrowing capacity. So landlords, if paid by fixed rental, almost always insist on it in advance, whatever their bargaining power.<sup>33</sup> That keeps out many poor tenants, who often lack significant accumulated savings, and access to credit too: microfinance agencies such as Bangladesh's Grameen Bank seldom lend for rent payments. So the poor often cannot pay fixed rent in advance. They find sharecropping – by definition paid after harvest, and low when that is low – far easier.

A final motive is often claimed for sharecropping: that the large landowner avoids the supervision cost of working the land with hired labour.<sup>34</sup> For that purpose, however, fixed rent is better, in three ways. First, Marshallian disincentives induce sharecroppers to trim their time and effort per hectare; crop-share landlords have costs in avoiding (some of) that. Second, with sharecropping, the landowner has a new supervision cost: to check the sharecropper's harvest and share. Third, since fixed rental is normally paid in advance, supervision is less important, except to the extent that the landlord is a close relative, a philanthropist, or worried about soil mining – all equally relevant for sharecropping. Supervision costs indeed help to explain why owners rent out rather than owner-farming, but not why they choose sharecropping over fixed rental. True, if few or no rich tenants are available, owners seeking to avoid farm supervision costs by renting out may have no alternative to crop-share rent, for reasons already discussed.

So: are laws with the effect of shifting farmland from sharecropping to fixed rental land reform? The private choice of sharecropping over fixed-rental contracts appears to be explained, especially in the case of poor tenants, by risk considerations. It does not need explanation in terms of coercion or imperfect markets. If those exist, there may be better remedies than laws to induce a shift from sharecropping to fixed rentals. Admittedly sharecropping, as against fixed tenancy, may have some output cost. Also, in a typical or good year, sharecropping rent transfers a somewhat larger share of output from tenant to (generally richer) landlord than does fixed rental, because the sharecropper's rental transaction includes an implicit insurance purchase. Yet the gains from a shift to fixed rentals are small. They may even be negative for the poor, who need and welcome the insurance provided by having to pay less rent when the harvest is bad, and who normally cannot pay rental in advance, as required for fixed tenancies.

The coexistence of fixed-rental and sharecropping reflects diversity among landlords. Those experienced in farming, who know their tenants, or who are not absentee, are likelier than other landlords to choose sharecropping

[Otsuka 1990: 10].<sup>35</sup> Further, restricting sharecropping deters not just rental to the poor (size-transfer), but efficient adjustment within size-groups. If policymakers try to improve centrally on the local incentives to choice of tenancy contract, they may sometimes reduce exploitative abuse of local power, but will often damage non-exploitative adjustments by households, and will reduce total tenancy.

Coercion or market power in sharecropping should be remedied. Ceilings laws help to do that. So may rebalancing of sharecropping, allowing for indirect effects, in the right political conditions. Laws to shift sharecropped land to fixed rentals, even without indirect effects, are seldom pro-poor or land reform.

**III. If tenancy is sharecrop, why not owner-farm?** In the normal situation in poor areas, and for poor tenants, there is little fixed rental, and the crop-share is usually uniform and (absent legislation) fairly constant: typically half each for landowner and tenant.<sup>36</sup> Do these 'normal' facts change the preferences of landowner and land-poor, as between tenancy and alternatives? The landowner asks: is (a) half the tenant's crop, if I share-crop (minus harvest supervision costs, and any input costs that I pay) more than (b) all my own crop, if I farm (minus production costs, including value of my own time in working and supervising)? The potential tenant asks: will my effort will bring more return as a wage-labourer than as a 50 per cent sharecropper? Both parties also want to cut risk, the potential tenant (being usually poorer) more so than the landowner. *Where law and custom permit*, the normal outcome in poor rural areas<sup>37</sup> is that:

- (1) big landowners, while often owner-farming all land (despite the cost of labour supervision), typically owner-farm most land, and sharecrop out some as 'size-transfer tenancy' to poor households;
- (2) poor farm households live off labour, sometimes with a little owner-farming, in either case sometimes combined with farming a little land share-rented or labour-tenanted mainly from bigger landowners;
- (3) there is some adjustment tenancy; usually large owners rent to large, and small to small or landless;
- (4) with development and formalisation, there are gentle, interrupted tendencies for large landowners to shift from sharecropping, to owner-farming or fixed-rent; for the landless and land-poor to increase reliance on non-farm or urban income; and for reverse tenancy (from small owners to large) to emerge.

In this normal situation, which laws to reduce or rebalance tenancy are likely conform to our (pro-poor) definition of land reform? Adjustment tenancy raises efficiency and leaves distribution largely unchanged. Size-transfer tenancy raises output per hectare (chapter 2), and improves distribution by shifting farming from landowners to poorer tenants, so they can earn income



from farm enterprise. Sharecropping shifts risk from poorer tenants to richer landlords. Reduced farm size means more demand for labour, including that of poor non-tenants, and restrains demand for, and income from, scarce farm capital. All this advances efficiency and equality. So tenancy reduction laws are land reform only in unusual cases.

More often, some tenancy rebalancing laws, in appropriate contexts, comprise land reform. 'Size-transfer tenancy' is seldom among equals. Big owners have political and market power; land-poor potential tenants do not. Can a landlord impose terms because he is the only large landowner in the village who offers size-transfer tenancy, or because he can deny access to other village markets (for food processing or sale, employment, or credit)? If tenancy contracts are unwritten, can he (unlike the tenant) vary or ignore the contract, even evicting at will, if circumstances change? Restraining such conduct enhances equity – and efficiency, by increasing transparency and predictability. In 1977–84 in West Bengal, villages enforcing more tenancy rebalancing and registration in 'Operation Barga' enjoyed – mainly through village, rather than farm, effects – much faster growth than other villages in farm output, land productivity, and green-revolution innovation.<sup>38</sup> However, this tenancy legislation met, to an unusual extent, the conditions for pro-poor land reform. First, beneficiaries – politically organised, largely at village level, through political parties in the West Bengal government – oversaw implementation. Second, with credible ceilings in place, landlords could not respond to tenancy laws by evicting or reducing the supply of new tenancies, except by selling land to the land-poor. Third, for unreformed as well as reformed farms, the 'village effects' of reform – more transparent incentives, less non-market power – could be translated into rapid productivity growth thanks to green-revolution technology, available for faster adoption once that meant gains for farmers and not just landlords [Bardhan and Mookherjee 2006].

In less favourable conditions, especially where rural land and power are very unequal, tenancy reform alone is unlikely to be pro-poor land reform. Conversely, where they are fairly equal, laws *derestricting* tenancy well may be. In China in 1978–80, at the outset of the household responsibility system – the massive land reform that transferred farm decisions from communes and managers to almost equal family farms – subleasing was prohibited, but the restraints were gradually relaxed and by 1983–84 tenancy had acquired considerable importance, fulfilling adjustment functions (pp. 160–1) without major problems [Bruce and Harrell 1989: 18], and in recent years, tenancy has done more to curb rural inequality than did specific public measures seeking to do so [Deininger and Jin 2005]. In Albania, following redistribution of State and collective land, each almost equally sized family farm could rent some fragments in and others out, thus consolidating many holdings to some extent [Stanfield *et al.* 1992: 2].

We should suspect claims that any and every proposed reform is 'counter-productive' (chapter 3(b) (vii)). If such claims deter reformers, who benefits? Yet in tenancy reform, counter-productiveness is a real danger if – as often –

reformers: do not know just who landlords and tenants are; operate in the wrong political conditions; aim at the wrong targets; or fail to analyse likely side-effects. Benefits of reform for sitting and incoming tenants must be set against possible costs, for potential tenants denied tenancies and for potential workers denied employment, if (due either to non-implementation or to landowner response to implementation) land is moved out of small tenancies into larger-scale, less employment-intensive owner-farming. Tenancy reform has many successes, but almost always in the context of initially low rural inequality, or of other laws (especially land ceilings) and political actions to cut the power of rural élites.

### **(c) Titling private rights to farmland, and other measures to increase land rights security**

Titling is State registration of written, publicly accessible, legally enforceable guarantees of (1) borders among land controllers (owners, tenants, farmers), (2) the scope of each land controller's rights to use, rent in or out, sell, give away, mortgage, or bequeath land within the borders.<sup>39</sup> This 'need not 'require issuing formal individual titles, and [often] more simple measures [are preferable]' to overcome high survey costs, lack of records, etc. [Deininger 2003]. In Amhara, Ethiopia, field-based handwritten certification, with agents responsible to locally elected committees but without formal surveyors, reached 25 million plots, and increased farmers' investment compared with other similar plots [Deininger 2008].

Some argue that titling, and other measures to increase land-rights security, are the most promising land reforms and can raise the poor's share of land rights, perhaps in the context of new-wave reforms (chapter 6(e)). Certainly titling is radical, because – unless welcomed by almost everyone, rich and poor – it may have to be more or less compulsory. USAID [1986: 2, 13] offered to support 'policies and programmes which lead to a general, country-wide reliance on market forces in valuation and distribution of land ownership and land use rights ... such as codification of customary law and practice, cadastral surveys, or development of appropriate title recording or registration methods'. The World Bank made more nuanced proposals, in the context of poverty reduction. Deininger [2003: 39] – after showing that in developing countries 'land comprises a large share of the asset portfolio of the poor', usually larger than among the rich, and less likely to carry title – infers that 'giving secure property rights to land they already possess can greatly increase the net wealth of poor people'. But will it?

That depends on context. For poor, organised sharecroppers in an individual tenure system, titling is normally land reform, not only securing them against eviction by their current landlord, but empowering them more widely. In 2007, the local authority in Nandigram Special Economic Zone of West Bengal attempted to seize farmland for urban development; but, thanks to earlier political organisation for title, effective agitation secured compensation

not only for small owners but even (at 25 per cent) for sharecroppers [Ramesh 2007, Foster 2007]. At the other extreme, titling often provides State backing for colonisers or dam-builders to seize land from local people, who had farmed with customary, unwritten claims; that is land deform. In between, in communal tenure, formal title can protect a poor farmer against chiefs and/or developers seeking her informally held land for free, or can confirm their power to seize that land from her [Roth and Haase 1998]. In the aftermath of decollectivisation, local authorities collude, sometimes corruptly, to help plantations, dam-builders, miners, property developers or others to get title as they physically bully out small farmers from possession.<sup>40</sup> Titles *potentially* support poor people's rights; the potential can be realised as a 'weapon of the weak' [Scott 1985] in some political contexts. In others, titles can be subverted, undermined or acquired by the rich to seize land from the poor who work it.<sup>41</sup> In other cases again, the State lacks the means to enforce titles against local, often thuggish, power.

Even if it is land reform, is State-induced transition, by titling or otherwise, to securely formalised land rights needed? Or is there anyway 'a move toward more individualized forms of property rights with economic development'? The risk-reducing 'advantage of group ... rights will generally decrease ... [as] technical progress reduces the risk of crop failure, development of the non-farm economy reduces risk [via access to non-farm] income streams, [and g]reater accessibility resulting from improved physical infra-structure reduces [farm risks and] the cost of publicly providing property rights' [Deininger *et al.* 2003]. The 'new institutional economics' suggests that, as land values rise and collective or communal tenure becomes a barrier to income generation, farmers themselves push institutions towards individual title<sup>42</sup> [Ault and Rutman 1979; Platteau 1992, 1993, for evidence and reservations], and private and State initiatives replace those once provided by community or chief. However, this is not a reliable process of evolution. It can take a long time, as the institutional change itself involves conflict of interest and transaction cost. Meanwhile, lack of title may inhibit investment. The delays in adapting to new prospects can mean foregoing farm income, as outdated tenurial institutions, slow to respond to new scarcities and opportunities yet represented by powerful functionaries, raise the costs or risks of rational adjustment. Further, since it is the better-off farmers who seek and get title first if titling is left to 'evolve' with developmental pressures, to leave titling to evolution is to shift towards larger farm size and more inequality:<sup>43</sup> long-term tolerance for dramatic rises in inequality, as in decollectivised countries (and Anglo-Saxon countries) in 1980–2000, has yet to be tested in the longer term. So 'evolutionary' arguments do not invalidate the case for public action – incentive, permissive, persuasive, but often legislative – in support of titling, or other means to formalise land rights, if most farmers want it *and if it is land reform*.

But is it? To be land reform (or pro-poor), making land rights more secure should, at least, improve *either* farm output growth *or* land-rights distribution, and (at worst) not harm the other goal. In some political contexts this

can happen; but asking whether land rights security helps the poor is rather like asking whether crossing a bridge helps you. It depends on who you are; your powers *vis-à-vis* those jostling you, before and after the bridge is crossed; and what is on each side of the river. There are five main transits.

- From customary ‘communal’ tenure to more formal possession, usually individual but sometimes group.
- From State or collective farms – perhaps via ‘household responsibility’, *viz.* limited lease with full rights to usufruct, but none to sell, and restricted rights to sublet or bequeath – to individual freehold.
- In already largely private land ownership systems, from informal to formal private rental; or
- From possession that illegally survives ceilings reform to titles that abide by it, either through its enforcement or through its reversal.
- From disputed land ownership after conflict, to a reasonably acceptable and binding set of land rules.

*(i) Measures to formalise or individualise claims on farmland in common tenure*

**I. Productivity/growth impact.** Do such measures raise farm output and income enough to be land reform, even if they do little to equalise rights to farmland? Some claim that ‘the magic of property turns sand into gold’:<sup>44</sup> that secure ownership of assets, by stimulating enterprise, must greatly raise income. Yet one thing that property cannot do is turn sand into gold, unless technology to do so exists, and is so priced that secure property rights make it profitable. Hence, in four African countries, farmers without title, or with fewer rights to transfer land, did not differ in productivity from otherwise similar farmers with more secure title [Migot-Adholla *et al.* 1991; Place and Hazell 1993; and several other studies reported in Torche and Spilerman 2006]. Such findings led donors to reduce pressure for individual titling of land in communal tenure [Khan and Ickowitz 2004]. However, in dynamic agricultures in parts of Ecuador, Thailand and Ghana [references in Torche and Spilerman 2006], titling of common-tenure cropland showed some productivity impact. Possible mechanisms are:

- increased farmer ability to increase farm inputs and investment, by borrowing against land collateral;
- increased will to do so, since secure landholders can enjoy subsequent gains;
- increased will to conserve land and water and invest in doing so, since offspring can enjoy the gains.

For such improvements to be caused by titling, one of two things seems required. Either farmers, though rational [Schultz 1964] albeit risk-constrained

[Lipton 1968] as individuals, in commonhold irrationally fail to take collective action (among themselves, or with other people such as lenders or communal tenure authorities) to raise their income, i.e. are 'rational fools' [Sen 1977]. Or the transaction costs of collective action by commonholders exceed potential gains. Probably, the scope for titling is greatest where farm technology has moved ahead fast, making chances for profitable investment, but this is constrained by the high cost of collective action – including the search for consensus – in communal tenure systems.

*Borrowing.* There is mixed evidence on whether farmers with secure land rights are more able to borrow. This proved so in Guatemala [Shearer *et al.* 1991: iv, 19] and Thailand [Feder *et al.* 1988] – in areas with technical progress and shifts towards more valuable crop-mixes. In the 1990s in Paraguay (with slower rural growth), bigger farmers had readier access to credit if they had title; but for poorer farmers, legal tenure security made little difference: their access to credit remained small [Carter and Zegarra 2000]. In several African countries, farmers with individual tenure had no better access to loans than those with communal tenure [Migot-Adholla *et al.* 1991: 171]. In Guatemala and Thailand, but not in the African cases, titling was spreading of its own accord. Except where such spread is unduly slow or costly, therefore, State efforts to shift communal land towards individual title appear unlikely to do much to improve access to farm credit – partly because seizing land as collateral is a costly and therefore implausible lender response to non-repayment. It is not mainly small farmers' lack of collateral, but the high risk and unit cost of lending and loan enforcement, that curtails their access to credit.

*Investment.* Will communal or unsecured land induce its holders to under-invest, fearing that their efforts may bear fruit for others who come to occupy the land? 'Greater formalisation of property rights has tended to *evolve in response to* higher potential returns from investment [, reflecting] prospects for more intensive use of land [due to] population growth, greater market integration *and technical advances* ... [Such investments] require investments in land that cultivators are more likely to make if land rights are secure. [Though] appropriate institutional innovations can lead to greater investment in land, economic growth and increased welfare ... failure of the institutions administering land rights to respond to these demands can lead to conflict, and in extreme circumstances can undermine societies' productive and economic potential' [Deininger *et al.* 2003: 4, my italics]. In other words, first, land institutions for acquiring or securing title (or for allocating communal-tenure land) can stimulate investment only if appropriate technology exists to make it profitable. Second, if it does, titling (or communal allocations) can create secure and widely acceptable land claims that stimulate investment – or land grabs by local Big Men or rich

outsiders that increase inequality and create resentment, social insecurity, or conflict that destroy the incentive to invest. Third, if new institutions such as title are needed to induce otherwise profitable investment, they tend to evolve, if perhaps slowly and inequitably [Hayami and Ruttan 1985].

There is modest evidence that farm investment increases as customary land rights are formalised in South Asia [Faruqee and Carey 1997]. Investments to raise output in food crops (mostly for household consumption) respond less than longer-term investments in cash crops, notably in planting trees such as cocoa [Otsuka *et al.* 2003]. Deininger [2003: 44–48] cites work from India, Indonesia, the Philippines and Thailand showing that investment, output per hectare, and land values are all significantly higher on titled (or otherwise more secure) land, than on land in less secure forms of communal tenure. However, in all these countries potential farm productivity has been rising fast in some areas and land types. Probably, in these only, titling evolves naturally, releasing investment potential and raising land values and farm output. That does not prove that laws for land registration would do so in less dynamic areas. Titling or tenure security may well be *correlated with* higher inputs or higher investments without *causing* them. First, the correlations may mean that people invest, e.g. plant trees, to strengthen their claims to land: investment causes title, not *vice versa* [Deininger 2003; for Vietnam, Ngo 2004]. Second, Ghana's experience<sup>45</sup> shows that those with 'powerful positions in a local political hierarchy' are likelier (1) to have more land, permitting longer fallowing, and thus higher soil fertility and better response to investment; (2) to manage the politico-legal system so as to get secure tenure [Goldstein and Udry 2005]; again, this provides no evidence that titling-type interventions in all lands will raise investment or productivity.

*Conservation.* Does individualising, formalising or securing common tenure reduce its alleged harm to resources? Any overall harm might have three aspects: soil-water mining on cropland, underinvestment in conservation, and the alleged 'tragedy of the commons'.

As for soil/water mining, common tenure normally accompanies individual *use* rights to specific areas of cropland. Normally, each area is specific to a family or individual. Then no incentive to soil-water mining arises from communal tenure. Sometimes, however, to equalise land quality while avoiding 'excess' fragmentation as population grows, a kin-group divides an area into farms, each rotated among families every year. Each family farms each farm in turn, sometimes returning only after several decades.<sup>46</sup> It pays each farmer that all conserve, and thus that she should see her neighbours do so, and be seen by them to do likewise. Rotation almost compels the community to certify access rights; further title seems needless to deter soil mining, though title becomes useful in other ways if transactions with persons outside the community become important.

As for conservation *investment*, Jodha [1992] and Shanmugaratham [1996] documented substantial private and state takeover of common lands in Rajsathan, India, showing that this had reduced investment (mainly direct labour investment) in conservation. However, Nkonya *et al.* [2004] found that, in Uganda, security of title was not linked to resource-conserving farm practices, nor to conservation (or other) investment. It *was* linked to higher soil fertility, not as a cause, but because powerful people, with secure title, have more land and hence can afford to let it recover fertility by lying fallow for longer.<sup>47</sup> Titling may stimulate long-run investment in water conservation in semi-arid areas, e.g. terracing, by avoiding the risk that the traditional land authority prevents inheritance, which would deny the conserving family the return to its investment [on Mbere, Kenya, see Hunt 1995]. However, in most areas with communal tenure, that risk is small. It may even be larger after titling, because the land can be mortgaged and forfeited to a lender. Also, in semi-arid areas the cost of titling per hectare is high, relative to the value of farm output.

Finally, the tragedy of the commons [Hardin 1968] is that (allegedly) each commonholder overuses resources, though loss to the community exceeds private gain, because she does not trust, or cannot police, her neighbours not to do so. Since common *use* of cropland, even in common tenure, is very rare (unless compelled by collectivisation), the tragedy of the commons is more relevant to grazing land, fish tanks, trees, and shared irrigation sources. Commonholders managing a shared farm resource, such as grazing land, usually act collectively to avoid overuse of common resources [Ostrom 1990]. They design controls on cattle numbers and/or land quality, and pay authorities, including chiefs, to exercise such controls in acceptable ways [Drinkwater 1991; Tapson 1990]. However, outdated tenurial institutions slow to respond to new scarcities – or run by strong people who gain from them! – can impede adjustment. Also growing populations, with limited land areas, increase the costs of agreeing collective action, policing implementation, and securing common property from invasions [Lipton 1985a]. These are among reasons why population growth and agricultural development induce shifts towards individual title.<sup>48</sup>

More formal land security in communal lands, up to and including titling, might increase farm growth, output, income and productivity by increasing farmers' access to borrowing, willingness to invest, and preparedness to conserve. There is good reason to expect such effects, but precisely for that reason they often happen through spontaneous community action. There is little evidence that such effects often provide benefit/cost ratios sufficient to justify formal titling. This is a costly and sometimes divisive process, though probably much less so if it can be decentralised for low-cost, participant certification [on Amhara, Ethiopia, see Deininger 2008]. Titling offers most (1) where communal tenure was least secure, perhaps because a powerful chief profited from influencing informal land allocations – but then opposition to securitisation (or the risk that it confirms chiefly power) is also strongest; (2) where informal tenure is made less efficient by rapid change in farm technology or population density – but then the efficiency gains from securitisation induce

its 'evolution' without intervention. We conclude, not that titling (let alone milder measures) should seldom be implemented in communal lands, but that the *efficiency* gains to the rural poor seldom suffice for such steps to count as land reform with significant pro-poor impact, let alone impact comparable to that of well executed ceilings reform.

**II. Equity impact.** So, if titling in communal lands is to count as land reform, it has to be mainly by raising the security, and hence well-being, of the poor *relative* to the rich. *Prima facie*, this is plausible. In areas of common tenure, the data, mostly from Africa, show that (1) land is a somewhat larger proportion of assets for poorer people, (2) poorer people nevertheless farm less land each, (3) holdings of small farmers are more likely to be insecure [Deininger 2003],<sup>49</sup> (4) despite some exceptions, farming usually provides a larger part of income for the poor than for the non-poor [Haggblade *et al.* 2007]. From (3), laws that make secure the same proportion of *insecurely held land* in big holdings (mainly farmed by the better-off) and in smallholdings (mainly farmed by the poor) secure a larger proportion the poor's *land* than of the non-poor's; and, from (1), (3) and (4), even formalisation securing only the same proportion of *all land* for rich and poor secures a larger proportion of the poor's *assets* and *income*. Further, a similar amount of extra security means more to the poor, as they are more averse than the non-poor to risk and less able to handle it. Therefore, titling or other land-securing measures might well improve the relative and absolute position of the poor enough to be land reform, despite (2) above – in a 'neutral' political context, such that poor people's land was as liable as rich people's to titling or other land-securing measures.

However, political contexts are seldom neutral. Titling is often sought by chiefs or other 'Big Men', using their power to secure their land, currently in common tenure, against poor claimants – or to seize from poor farmers land currently in informal tenure, and to register it as unchallenged owners. Advocates of titling rightly stress that a pre-colonial Golden Age of land-equal 'Merrie Africa' in communal tenure is a romantic myth. But the creation of a rural 'Merrie America'<sup>50</sup> by private securitisation of common-tenure land is just as much of a myth in most political contexts, where it is mostly the rich who have power to get laws granting them title. The issue is not whether communal and group authority, or rights, is better for the poor than secure private title; it is that proposed changes must allow for actual power-structures that determine outcomes of tenure laws, whether customary or legislated, oral or written, nominally insecure or secure, informal or formal, and group or individual.<sup>51</sup>

Examples of titling that increase poor people's shares in land seldom come from areas with communal tenure. There, the title-seekers usually come from overlapping élite segments: progressive farmers, chiefs, 'Big Men' with several



wives who do much of the farmwork, outsiders seeking secure title to formerly common land, insiders who wish to sell to them. Titling of customary land in Malawi led to a major transfer of income and land from poor people to big estate-owners [Sahn and Arulpragasam 1993: 308–11].<sup>52</sup> Similar things happened to a lesser extent in Kenya [FAO 1991: 25; Barrows and Roth 1989: 4–11]. In Uganda, titling of square-mile freehold blocks to chiefs and other notables, and in 1975 the extension of eviction rights to them, substantially reduced poor tenants' security (while not inducing investment), and from the 1990s land securitisation – perhaps because its impact on distribution remained problematic – was not integrated into the Poverty Eradication Action Plan [Barrows and Roth 1989: 15; Nsabagasani 1997; Bosworth 2003]. In Latin America, similar sequences have been documented [Thiesenhusen 1989: 494; Hirschman 1984, on in the Mapuche lands in Chile]; 'achievement of titles may offer more advantage to large ... farmers who have better access to markets' [Shearer *et al.* 1991: viii]. In India, scheduled tribes' reliance on customary title may specially expose them to arbitrary land seizures – by dam-builders, developers, or even 'local mafias and corrupt officials' [Ramesh 2007a] – with no, or inadequate, compensation; however, there is little evidence that title alone helps. Land deprivation is worse among ex-'untouchable' scheduled castes, who normally have land title, than among scheduled tribes.<sup>53</sup>

The impact of titling or otherwise securitising land in communal tenure on poverty via equity and efficiency can be positive given the right circumstances: politically, sufficient 'poor power'; agro-economically, technology making it worthwhile for poor farmers to invest and raise inputs, once their farmland is secured. In more usual circumstances, it is the wealthier, more powerful largeholders who will seek title, to secure themselves against – or gain yet more land from – the poor. These may well be too weak, in the courts, communal authorities, and national politics, to acquire or defend formalised rights against powerful local opposition. Where this happens in increasingly labour-surplus, land-scarce rural economies, the shift of land towards larger farms tends to reduce not only equality, but also farm output per hectare. The long-term gains from justiciable land rights as 'markers' may outweigh these dangers, even for the poorest. But this hardly makes exogenous land securitisation in communal lands into land reform.

***(ii) Titling in transition from State or collective farming via household responsibility to full freehold***

The status, as land reform, of land securitisation has been most controversial in the context of wholly or partly traditional or communal tenure. Evidence from these areas, and the principles underlying it, often apply to other contexts, allowing for the often very different politics. Collectivised or 'State-ised' agricultures often left significant parts of land in communal tenure. Almost everywhere communal traditions (such as the Russian *mir*) survived, modifying and competing with, first, the institutions of communist agriculture, and

later, during decollectivisation, the re-emergence of individual tenure (chapter 5(b) (iv) (IV)).

Many countries have shifted land from State or collective use, often via household responsibility, to individual freehold. This was pioneered in the 1980s outside the Communist countries by Honduras, to individualise land that had earlier been land-reformed into joint farming. In those political circumstances, titling helped to ensure that poor, not only rich, buyers got security [Shearer *et al.* 1991: iv, 9–10, 13]. Recent experience with titling in wholesale decollectivisation is mixed. In Cambodia, title is commoner among the non-poor,<sup>54</sup> and seems to have served partly to alienate land from small farmers to large corporations, often corruptly [Kazmin 2007; Hauter 2007].<sup>55</sup> In Mozambique, titling after decollectivisation was biased towards very unequal, plantation-type, neo-colonial outcomes [Tanner 2001]; in some decollectivising polities, Lenin-style support for large-scale farming survived the élite's abandonment of Marxist–Leninism in good health.

Household responsibility is found *de facto* in many agricultures with communal tenure, and also in many emerging from State, commune or collective farming (e.g. China, Cambodia, Ethiopia). In communal systems there is weak evidence that lack of individual title in household responsibility made farmers less willing to invest and to conserve. The evidence is stronger in the early years of decollectivised agriculture, where the State normally remains powerful. 'Fieldwork ... in five provinces and one province-level municipality in China [confirmed] the positive effects of the [transition from commune farms to] household responsibility system in agriculture [in 1978–84]. However, after the initial surges of production growth ... grain production stagnated ... [F]armers ... lacked the assurance of long-term security of possession of the land that would lead them to make the long-term investments (such as irrigation wells, land levelling, terracing, drainage, or soil improvement) that are essential for further gains ... The farmers interviewed made clear that only ... individual ownership (privatisation) of the land would lead them to make such long-term investments, and that neither long-term "use" contracts, nor increased prices, nor other alternatives would' [Prosterman and Hanstad 1990]. However, this is largely due to two avoidable risks: administrative land grab, and retention by local authorities of the right – sometimes the duty – to reallocate lands periodically towards larger rural families. Despite experiments to reduce these weaknesses, such demographic reallocations (often violating laws extending household responsibility leases to 30 years) have been the norm in over 80 per cent of China's villages, despite a big majority of farmers opposed. Despite the Chinese government's commitment in October 2008 to much greater private rights, regional variations in State power to vary household responsibility land rights reduce central power to restrain these practices [Ping Li 2003]. Yet surveys in many countries with household responsibility [e.g. Nega *et al.* 2003 for Ethiopia] usually show that most farmers prefer usership to freeholds, especially where it comes with leases of 30 years or more, immune from land reallocation. This may conform to

farmers' sense that freeholds, once available, will go to the rich or corrupt. Like President Hun Sen in Cambodia,<sup>56</sup> Premier Wen in China frequently warns against this, but in this matter finds it hard to impose, on local élites, even the agreed wishes of the centre and the local populace.

Vietnam provides fascinating evidence of the dependence on the political context of production (and equity) effects of post-household responsibility securitisation. Ngo [2004] explores separately the impact on private investment of (1) exogenous increases in tenure security brought about by the 1993 Land Law, (2) the presence of cadastral title. She finds that impact on investment behaviour of (1) was positive and significant in North Vietnam, but much weaker (and significant only at the 10 per cent level) in the South; impact of (2) was present but weak in North Vietnam but absent in the South; and (1) and (2) affected investment behaviour *additively* in North Vietnam only. She attributes her findings to different concepts 'of land rights as they evolved in North and South Vietnam'. In Ethiopia, too, different post-decollectivisation moves towards fuller title – *transferability* of farmland by sale, lease or bequest, and *securitisation* of farmland, e.g. against population reallocations – show different, context-dependent effects. Transferability enhances investment in both terraces and trees, but securitisation only in terraces, partly because trees are planted by farmers to establish secure land claims, rather than in response to them [Deininger and Jin 2006].

Another context for expanded security or rights of title in formerly, or residually, collective agricultures is that of advanced economic development, with rural areas moving towards much higher capital/labour ratios. Increased farm scale can become desirable, compared with the more equal individual farm units of a Mexican *ejido*, or with Albanian farms after the 1989 decollectivisation; how is rural equity to be preserved? Post-1992 laws allowing *ejidatarios* to rent out land meant that 'agricultural firms ... consolidate many *ejido* plots into one medium-sized parcel. Often, the *ejidatarios* work as wage labourers on the land they have rented out [and] receive cash rent and] wage income'. Lastarria-Cornhiel and Melmed-Sanjak [1999] interpret this benevolently, but one must ask: can *ejidatarios* keep, let alone recapture, rights to self-cultivate, if they find it necessary or advantageous? In several transitions beyond household responsibility in Eastern Europe and the CIS, too, registered title would accelerate shifts towards larger farms. Can this still be pro-poor? Conducive factors [Giovarelli and Bledsoe 2001] are that (1) farm labourers who do not get title faced booming off-farm employment opportunities (at least until the 2008–9 recession), (2) post-decollectivised farmland is fairly equal, as in Albania, Armenia and Romania, (3) titling focuses on home gardens, as in Estonia, (4) action is taken to force down legal fees or otherwise make titling accessible to the poor, as in Moldova. Especially in CIS countries, reasonably free and independent civil society organisations are crucial, to press the post-communist power élite to expand farmland rights to the poor, rather than to itself.

**(iii) Private land systems: from informal to formal private rental**

As discussed in chapter 4(b) (v), registration of sharecroppers' claims can reduce the power of strong landlords to use coercive or interlocking market power. Indian landlords, concerned to stop tenants from establishing a first option (or in some cases an absolute right) to buy land, sometimes move them from plot to plot each year. Registration of sharecropper title – given political circumstances where the poor have voice, as in West Bengal's 'Operation Barga' [Bandyopadhyay 1995] – can be part of genuine pro-poor land reform. It is also a necessary condition for compensating sharecroppers, if their farm is later repossessed or bought out. Incentive-compatibility and unintended consequences matter: in West Bengal, securing of tenancy deterred some landlords from renting out land, but the harm to sharecroppers' welfare and productivity was outweighed by positive effects of their increased bargaining power [Banerjee *et al.* 2002].

**(iv) Does private land title after ceilings reforms enforce or reverse them?**

The controversy about whether titling is pro-poor land reform neglects an important issue. In many parts of India, Brazil and other countries, ceilings laws on the statute book for 20–50 years have often not been implemented, partly because big landowners bribed officials [Mearns 1999]. Thus many large landowners retain legal title documents, but to land owned illegally. Conversely, many landless people and tiny farmers lack land, and therefore documents, to which they are entitled by floor legislation, because much land above the ceiling has not been taken by the Land Authority and so cannot be distributed. One might assume that advocates of titling, who seek to formalise possession of lands legitimately but insecurely held, would also advocate the removal of titles to illegally held above-ceiling land, and their transfer to those who, by law, should have the land. Yet those who campaign for titling on property rights grounds usually also seek to remove or abolish land ceilings.

Prolonged non-enforcement of ceilings laws breeds resentment and law-breaking. If the State does not use its supposed monopoly of coercive power to enforce the law – or, worse, colludes with landowner violence to stop enforcement – landless invaders increasingly resort to violence themselves. Titling can remedy this situation in two ways: by enforcing the law, or by removing or raising ceilings. Even where, rarely, there is an economic case for the latter, justice is not served by enforcing long-illegal title, or continuing to penalise, by non-enforcement or reversal, intended beneficiaries of earlier ceilings laws.

**(v) Formalising and enforcing land dispensations after war or civil conflict**

War, civil conflict and associated 'ethnic cleansing' often mean that many farmers lose land. After conflict ends, numerous conflicting land claims remain. These can fuel new violence and discourage investment and even production, just when

the country needs to re-establish a damaged economy. Settling the claims, and obtaining consensus to the settlement, is made harder where pre-conflict land dispensations are widely seen as unequal or unfair, and in need of land reform. Traditional institutions of local dispute settlement are often divided by conflict or otherwise discredited. Formal legal systems, often weak and/or corrupt, are weakened and divided further in conflict-torn countries, yet get low priority amid the demands of economic reconstruction.<sup>57</sup> Titling may well have a part to play, but aid donors especially, who often loom large, need to consider three points. First, lawyers and agricultural specialists, national and foreign, need to interact, and often do not. Second, a dilemma is whether to simplify and speed up land stabilisation by restoring possibly unjust pre-conflict rights, or to aim for land rights that better underpin greater equality, farm productivity, or sustainability in local polities. Third, even more than in non-conflict situations, caution is needed before imposing formal title on customary systems.

#### **(d) Patrialisation of land**

Colonists or invaders have often<sup>58</sup> forcibly enclosed farmland formerly used by indigenous farmers, herders or hunter-gatherers.<sup>59</sup> Such régimes, or 'ethnocratic' successors in much of Southern Africa and Latin America, enforced or favoured farmland possession by colonists and their descendants, normally as private landlords or farmers. Patrialisation is the return of this land, usually after the coloniser or invader has left or been expelled, to persons of local or national origin, usually with communal or private tenure.<sup>60</sup> It shares important features with decollectivisation. Both are in part tenurialist, in that laws affecting tenure are reversed. Neither need make farm outcomes more efficient or equal (so neither *need* be land reform). Often both have done so, but even then the main aim is to reverse past injustice, not to increase present efficiency or equity. These are subverted (and new injustice substituted for old) if farmland is patrialised not to the efficient poor, but to the politically strong. When is patrialisation land reform?

Land gainers are usually not the poorest as such, even within the ethnically patrial groups, but individuals or communities that successfully claim historical rights to particular pieces of land. Capacity to argue claims, organise resistance, afford lawyers, and influence politicians are not concentrated on the poorest among patrials – or among colonists' descendants. Absent strong local democracy and organisation, politics favours restitution from the poorer and weaker among ex-colonist families, to the stronger and richer families and tribes among patrials. Even if redistribution (and not only restitution) is pursued, or built into the rules, it is often clouded by arbitrary and sometimes corrupt exclusions, inclusions and diversions. Anyway, even if well and fairly implemented, the justice of patrialisation is rough. It concentrates compensation, and the price of inter-ethnic peace, on ex-colonial *farmers*. That is just for those farmers complicit in recent land theft from indigenous users, but for

others justice requires that *all* gainers from colonialism – especially the wealthiest, who are mostly urban – share the tax cost of land transfer. The longer ago the colonial land grab,<sup>61</sup> the more uneasy is the premise that wrongs (land seizures) done by A to B can be righted by similar wrongs done by B's descendants to A's. Patrilisation is also a doubtful source of land reform if it discriminates against particular ethnic groups wrongly associated with colonial theft. In Latvia, decollectivisation was muddled by a form of patrilisation that removed much land from non-Latvians [Giovarelli and Bledsoe 2001]. In post-colonial Zimbabwe, patrilisation of colonial farmland in Matabeleland to the majority Shonas meant that many Ndebele workers on colonial lands lost their jobs but got no land.

CLR can have somewhat similar unfairnesses. Nevertheless, there is a *prima facie* case that most patrilisation, like most CLR, is redistributive, pro-poor land reform.<sup>62</sup> Farm-owners of colonial origin in Algeria in 1956, South Africa in 1994 and Zimbabwe in 2000, and hacienda-owning descendants of conquistadors in Latin America, were almost all much richer than almost all agriculturists of local origin. Not only most land, but even more of the *best* land,<sup>63</sup> had been seized by colonists and kept by their descendants as islands of affluence in oceans of poverty. This was an explicit argument for patrilisation, and despite the above problems it normally makes land distribution less unequal. That cuts income inequality *between* mainly rich non-patrials and mainly poor patrials, normally outweighing possible increase in inequality *among* patrials (and among non-patrials), so rural land and income inequality falls. Patrial farms also normally favour the poor by being smaller-scale and hence more employment-intensive (chapter 2). So equalisation and poverty reduction, while seldom what patrilisation is *for*,<sup>64</sup> are normally what it *does*, though policy error can reverse the gains, e.g. by following the fallacy that 'large is efficient' in farming.

There are two main types of post-colonial patrilisation, responding to different types and effects of colonial land grab: 'Latin American' and 'African', respectively with patrials the minority and overwhelming parts of the demand for land reform. The first huge modern land reform, in Mexico, happened long after Spain and Portugal had relinquished colonial authority in mainland Latin America. Their rural descendants were, and are, settled nationals, a few very rich but many as poor as most *indigenos*. Except for a few areas – notably Bolivia, Amazonia and Chiapas in Mexico – patrials are a minority, often a small minority (in Brazil below 3 per cent) of agriculturists, and hence of seekers after, and gainers from, land reform. Ex-colonist families (especially if *mestizos* are included) have long outnumbered *indigenos* with Amerindian first languages, who had been decimated by disease and war [Diamond 1997] and were increasingly expelled to smallholdings on hilly or forest margins, usually far from the large settler farms. Land reforms in 1910–80 centred on shifting land rights, not from descendants of long-departed colonisers to *indigenos*, but from landed rich to land-poor, both largely from the majority ethnic group with European mother-tongues. Recently, however,

the extreme deprivation of largely rural *indigenos* has made land patrilialisation an important issue, partly in response to their 'second expulsion' (by loggers, miners and farmers) from some of their little remaining land, for instance in Amazonia. Increasing political organisation of *indigenos* culminated in the election of one of their leaders, Evo Morales, in 2005 as President of Bolivia. 'Latin American' patrilialisation is, tragically, easier in most countries because so few descendants of original patrials survive, but they are disproportionately dependent on agriculture and land-deprived.<sup>65</sup> As in Bolivia, many rural *indigenos* live far from the big under-used holdings of many farmers and landlords of European origin. So patrilialisation often requires settlement schemes, with all their problems and costs (chapter 6(b)), if the patrials are to farm new lands.

In 'African' patrilialisation, patrials form a huge majority of land claimants. In some African countries, colonists came mainly to seize farmland. As in Latin America, many patrial agriculturists were expelled to land elsewhere, often not far away, or employed on settler farms. However, far more survived than in Latin America, and there was less permanent European settlement and intermarriage. Hence 'African' land reform in such countries is largely about patrilialising lands, seized by colonists and still owned by their descendants, to ethnic groups who originally possessed and farmed them. Unlike most 'Latin American' patrials, these groups still comprise large majorities of national populations, and very large majorities of the rural and the poor.<sup>66</sup> Many fewer coloniser families in Africa intermarried, and many sold to other such families and urbanised (or emigrated) before or after independence, leaving a few descendants in possession of large parts of the land. The return of this land to patrials, and disputes about which patrials, has been the central theme of land reform in many African countries in 1960–2010.

The manner of colonial land management influenced the manner of patrilialisation after Independence. Vietnam, despite the pressures of a terrible war, exemplifies *patrilialisation after colonial landlordism*. 'In 1955 ... 40 per cent of riceland areas in the South were held by 0.25 per cent of the population, most of them French. [F]rom 1971 to 1974 [the state] redistributed over 1.1 million hectares ... to about 1 million [ex-]tenants, [comprising] 44 per cent of total farm area and over 75 per cent of tenanted area. By 1974 agriculture in the South was dominated by small, owner-operated farms [while] per capita growth in rice production and productivity increased' [Prosterman and Hanstad 1994: 6]. The ex-tenants already knew how to farm the land, and were in place: problematic settlement schemes were not needed.

More difficult problems arise in *patrilialisation after colonial farming*. Many colonists, having taken the land, farmed it themselves, starting four centuries ago in South Africa, and more recently in francophone North Africa, Kenya and Zimbabwe. Initially labour, rather than land, was scarce, and was extracted by serf-like arrangements. So it remained attractive to the colonists to farm commercially, with labourers rather than tenants. This has made post-colonial patrilialisation harder. First, labourers did not automatically

acquire experience of farm management (as tenants do), though some commuted to small plots in the 'native reserves' or 'trust lands'. Second, the ex-colonist farmers, who sometimes became nationals, used their power to skew agricultural institutions and markets in their favour, to repress indigenous farming competition, and to squeeze indigenous labour into their workforce.<sup>67</sup> Third, as labour became freer, they increasingly adopted capital-intensive methods (combines, centre-pivot irrigation) that are costly, or organisationally difficult, to adapt to smaller-scale farming. Fourth, ex-colonist farmers continued to exercise power well after independence (or, in South Africa, after political deracialisation). Fifth, they contribute substantially to farm output, skilfully obtain the support or collaboration of rich and powerful members of majority ethnic groups, and are technically innovative. Yet their outputs, techniques and innovations, if often *privately* efficient, are rooted in high-capital, low-employment farming.

While patrilisation 'from landlordism' seems easier than 'from farming' – due mainly to patril land recipients' relative lack of farm-enterprise experience, small-farm institutions and services – the latter is also prospectively more powerful as pro-poor land reform. Where the colonisers were landlords, at least tenancy transferred income from farm enterprise and management substantially to the poor, and, even before patrilisation, meant small, labour-intensive farms. Where ex-colonist working farms – usually big and relatively capital-intensive – are patrilised, the process can create small, equal farms, raising employment, and obtaining output gains (chapter 2). However, unlike patrilisation 'from tenancy',<sup>68</sup> patrilisation 'from farming' requires new types of farm service – from research and extension, through credit, to input packaging and output processing and marketing – directed at the new structure of smaller farms. Such provision is normally private, but initial public sector subsidy is likely to offer good social returns, given private suppliers' risk aversion and unfamiliarity with small-farm conditions.

In this context there is an opportunity, largely neglected, to draw on ex-colonial land losers' skills in finance, marketing, and (where they had earlier provided some farm services to small patril farmers, often including legal or illegal tenants) processing, credit and extension. Land losers might be compensated for some of their lost farm income by extra returns from providing such services to the new, patril small farmers. This can ease the fiscal burden of land reform in two ways: by cutting the costs of (minimum politically tolerable) land compensation, and by reducing public subsidy to, or provision of, services to new farmers. Such possibilities deserve exploration in the context of almost any land reform, perhaps especially where ex-colonial land losers were mainly farmers, not landlords, so small-farm patril successors initially may lack appropriate service providers. It is important that service provision by ex-colonial farmers is reasonably competitive, and does not exclude provision by patrials.

Land redistribution from rich to poor, and (where there is unemployment and land scarcity) from land-intensive to labour-intensive land-users, seems better than restitution to (alleged) historical land allocations among ethnic



groups: white to black, Spanish-speaking to *indigeno*, Serb to Moslem, etc. However, patrialisation is not only about land, but also about ethnic peace, and redress for past ethnic land grabs. Further, it does normally raise the proportion of land with poorer people. In post-Independence Algeria, Kenya and Zimbabwe, and in deracialised South Africa, large farmers were almost all white, though many were nationals; and a huge majority of rural agriculturists was patrial and poor. How can patrialisation *fail* to raise income for the poor? Well, it can be managed.

Several African countries have Subdivision Laws that forbid the creation of holdings below a given size, usually far above that of a family farm. Such laws harm efficiency, equity and choice. If they are enforced, patrialisation cannot get land to the poor. However, it can still shift land from large to medium-sized farms. Even that should raise demand for unskilled labour and hence its wage-rate and employment. However, some claim that none of this applies to patrialised ranchland, a major part of white farm activity in Southern Africa. Namibia's Land Reform Advisory Commission recommends allocations of patrialised grazing not 'less than 1000 ha in the central and northern regions and at least 3000 ha in the more arid south'. Astonishingly (even given low-grade pasture), large, white-owned ranches employ only one labourer per 1000 ha, yet 'sustainable redistributive land reform [need not] put more people on the land ... it must be assumed that most farm workers on [patrialised] redistributed land have lost their jobs without compensation ... [Absent an] integrated plan ... to accommodate farm labourers ... [they will] be the losers of land reform [, which] would solve ... the needs of the landless by creating ... landless and unemployed agricultural workers'. Werner [2003] then outlines a credible 'integrated plan', but is he right that holdings below 1000 ha are infeasible on patrialised ranchlands, and that employment does not rise as farm size falls? Most (not all) the evidence of much higher per hectare use of labour, even hired labour, on smaller farms is for cropland, but animal farming also offers smaller farms transaction cost incentives to replace capital with labour. Options include methods of husbandry (more intensive grazing/rotation systems; human rather than mechanical meat, dairy and wool management), but also the product-mix among animals (younger and older; sheep, goats, cattle), and between them and low-rainfall pasture species, and in some areas millet or sorghum.

Such options are strangled at birth, if the mythology of necessarily large farms becomes the policy for patrialisation. Patrialising élites are often also patronising élites, writing off small farmers. They too readily assume that, because colonial farms were big and capital-intensive, so should patrial farms be; and that alternatives – including the labour-intensive, science-based smallholdings of most of Asia – are inferior, non-modern and second-best. That ideology also provides cover for élite patrials who want patrialised land themselves. But this gets no land to the poor, and little employment income either. Colonial farmers farmed as their large scale indicated, capital-intensively; so will large patrial farms.

A twin-track strategy, with separate agencies patrilising land to small and big farmers, has been tried. However, it may not drive out the ideology that only patrilisation into big farms is worth much cash or effort. In Namibia 'the Affirmative Action Loan Scheme ... led to more than three-and-a-half times more land being redistributed than the National Resettlement Programme orientated to smaller purchasers' [Sherbourne 2004]. In cropland too, political pressure sometimes squeezes the poor out, as land recipients or employees. In Lithuania, land was restituted to patrials who were allowed to leave it idle for up to five years [Giovarelli and Bledsoe 2001], favouring large landholders who can afford such luxuries or speculations. In Kenya, though the post-Independence 'million acre' patrilisation programme for land redistribution and settlement programme largely continued the focus of the colonial Swynnerton Plan on individual titling for medium-to-large farmers, many landless and near-landless patrials got land, often with good results [Leo 1984; Hunt, pers. comm.], despite inter-tribal disputes and politicisation (chapter 7). In Zimbabwe, after initial successful [Kinsey 2004] patrilisation to smallholdings of voluntarily sold 'white farms' in the 1980s and early 1990s, patrilisation increasingly rewarded political clients.

South Africa illustrates the potential and problems of patrilising land from a few big farmers to many farmers from other, wronged ethnic groups. Colonial land grabs from the seventeenth century culminated in the 1913 Land Act. Being large, the white farmers subsequently found it paid to cut labour supervision costs by mechanising agriculture, and used their political clout to obtain state support for this. This led to large-scale 'forced removals' of blacks from what had become 'white' land. With majority rule in 1994, the incoming African National Congress government faced a situation where only 13 per cent of farmland could legally be owned or farmed by blacks, who comprised over 90 per cent of the rural population. The 50–60,000 white farmers owned over 85 per cent of land, leaving the rest to over a million patrial (mostly African part-time) farmers. Both apartheid and markets ensured that large, capital-intensive white farms captured shares, far above even their share of land, in subsidies, water, farm inputs (including improved seeds), research and services.

With most of these large white farms using little labour per hectare, patrilisation was a necessary condition for land reform, and probably for a serious attack on high, and still mainly rural, poverty and dependency. In 1994 the incoming government committed itself to reversing the *post-1913* land grab, and to transferring 30 per cent of white-owned land to blacks, through a twin-track process of restitution and redistribution. The latter started with a pilot programme in each of the nine provinces, yet patrilisation has been extremely slow: why? Land claimants, whether for restitution or redistribution, include groups and individuals, poor and non-poor, and seek land for housing and speculation as well as for farming. Patrials seeking land range from those wanting to build a home, through the land-poor wanting to farm 0.5–5 ha (initially the intended gainers, but increasingly written off as 'subsistence' and part-time farmers<sup>69</sup>), to middle-to-large farmers who, since

1998, have been the main government priority. Some of the latter are would-be land barons, chiefly or with political connections. Change is slow because the priorities are disputed and fluid, leading to reluctance to spend government money, especially at provincial and local levels, on necessary capacity-building for administration and support services.<sup>70</sup> Many claims, too, are disputed, both among claimants and against white incumbents. The 'willing buyer, willing seller' model means that 'unwilling sellers' can stay on the land unless forced out by long, costly lawsuits, while 'willing sellers' can insist on full market compensation. Thus frustrated, the thrust of land reform has been diverted towards legislation on title in the communal lands. The always huge difficulties of that issue are aggravated by extreme shortage of communal land, due largely to the failure to redistribute nearby private lands!

Yet this need not be a zero-sum game. White farmers' skills and experience can be shifted, profitably to themselves, towards providing services for new black smallholders. But the reality is polarisation, farm murders and land invasions. This may get worse. So far, agriculture's small share in employment and GDP, and the poor's past experience of low returns from racially skewed farming, have reduced mass demand for farmland or farm jobs: hence low government priority for action on land reform, and subdued mass discontent with continuing extreme land inequality. However, it is becoming clear that mass urban employment growth in the foreseeable future is a mirage, while land inequality underlies poverty and rural dependency. The situation is fragile [Aliber 2003]. In the absence of faster consensual patrilialisation, there is likely to be pressure to sudden action, with Zimbabwe-style destruction of the farm sector [Cousins 2003]. Orderly, consensual, production-oriented land reform through redistributive patrilialisation has stalled in South Africa. It is still feasible, but time is running out.

The history of colonial land grab sets a trap for successor patrilialising governments, as the South African case reveals. Under settler regimes, large capital-intensive farms were long identified not just with oppression and seizure, but also with science and modernity. These farms look good; the dependence of their success and capital-intensity on subsidies for water and other inputs is often hidden. This traps South African (and other) successor régimes – and their intellectuals of both Left and Right – into identifying scale with success, and small farming (and even 'African' farming itself) with exploitation and failure. The trap closes notwithstanding the strong evidence that countries with underemployed labour and (still) scarce rural capital best approach efficient growth, as well as employment-intensity and poverty reduction, by emphasising small-scale farming. Despite courageous dissenting voices,<sup>71</sup> policy tends to favour urban industry over agriculture, and patrilialisation of land into large-scale over small-scale farming. *Élite land patrilialisation* increasingly took over from pro-poor land redistribution (e.g. in Kenya and South Africa) as the majority-rule élite gained strength and sought, naturally enough, to capture some of the privileges that the settler élites enjoyed. Patrilialising governments such as South Africa's are genuinely

concerned for food security, but – just as in many countries – this is readily diverted into concern for secure food supply to the cities, and that is mainly marketed by bigger farmers. Élite land patrilialisation has proved incompatible with rapid employment growth, and probably with rapid poverty reduction as well; time will tell whether such a path is politically sustainable, especially in democracies such as Kenya and South Africa.

Two questions largely determine whether patrilialisation is land reform. First, is land, transferred from large holdings of colonists or their descendants, redistributed to the poor (and/or to those best able to farm it), or restituted to the ‘original’ owners on some agreed date? As discussed, patrilialisation is almost always rough-and-ready redistribution, but it may be more or less equitable, and more or less pro-poor. Claims for restitution often come from townspeople, sometimes many generations from the land. Such claims, apart from being hard to establish, conflict with the claims of farm-workers – or poor nearby rural communities – for redistribution and/or restitution of the same land. Whether restitution drives out redistribution – and with it the claims of patrilialisation to be land reform – depends on who gets the land.<sup>72</sup> That depends partly on who gains from restitution. In traditional tenure systems, claims for restitution are often claims to restore communal tenure. This *may* mean chiefly power and perquisites, alongside the assumption of male predominance in land rights. If restitution takes precedence over redistribution – and especially if local power decides who benefits – the poor may not gain much. ‘Debate about land in Uganda ... was heavily influenced by the issue of what to do about the past. Concerns about the likely distributive effect ... were *very much secondary*’. This led *inter alia* to failure of reform to address] women’s tenure insecurity ... gender division of access to and control of [land has set] advocates of increased ownership rights for women against the entrenched [in traditional tenure institutions] political, economic and social superiority of men.’ In Namibia, too, land restitution on grounds of race trumps everything else: ‘black Namibians should own more of Namibia’s commercial farmland ... agricultural output, treatment of farm workers, poverty reduction, environmental sustainability [are] *very much secondary*’.<sup>73</sup> The strikingly similar language, used by independent authors discussing different countries, hints at a more general syndrome.

The second issue is the *methods* of patrilialisation. Even if patrilialisation increases the poor’s share of land – and we have seen that this aim is sometimes secondary – it need not be pro-poor land reform, if the (farm) GDP loss outweighs the distributional gain. The fear that this will happen if patrilialisation reduces farm size – while common in the literature, especially on animal farming – has little basis in fact (see above and chapter 2). However, crude populist methods of patrilialisation can lose and destroy – not use and turn to the advantage of incoming patrials – the farm, public, and human capital provided both *by* and *to* ex-settlers. Will the new farmers and their employees enjoy the research, extension, roads, water and other services made available to the former colonist farmers? Will the latter’s skills and scale

economies (not in farming, but in financial services, marketing, nucleus estates,<sup>74</sup> etc.) be retuned, from the old exploitative régime of special price advantages and repressed labourers, to meet new needs? Of course, the new smaller farmers need different sorts of research, organisation of processing, etc., from their predecessors, the big colonist farmers. Experience shows, however, that the destruction of old support systems after patrilialisation is as great a danger as their distorted survival.

Patrilialisation usually redistributes land from the richest, and not seldom from land thieves or their children. For it to be land reform, it must also put more income, power and status – from land rights and/or extra jobs – in the hands of the poor. Yet the land sometimes reaches mainly new-rich patrials. Especially but not only then, jobs and output, in principle increased due to the inverse relationship (chapter 2), can be undermined by wrong incentives. Skills and scale economies in service provision, by rather than to expatriates, can be destroyed or lost. Even then, patrilialisation may raise the autonomy and status of the rural poor, but their income may fall. So we must question, case by case, the reasonable *assumption* that patrilialisation, unless wholly corrupted, is rough-and-ready land reform. It shifts land, by and large, from rich to poor. To the extent that it makes farms smaller and less unequal, it tends to raise land productivity – especially important because land per person is getting scarcer. But there is a worm in the apple. The political thrust towards patrilialisation comes largely from the post-colonial majority's deep hurt at the ethnic theft and humiliation of colonialism, especially of land theft. But hurt élites readily seek to replace their oppressors, rather than to aim for efficient dispensations at the cost of land élitism. As W. H. Auden put it:

I and the public know  
What all schoolchildren learn:  
Those to whom evil is done  
Do evil in return.

The farm-owning descendants of colonists are usually no less decent and hard-working than other groups. But they are living reminders of colonial theft and humiliation, and are marked out by skin colour, wealth, and ownership of land taken from ethnic majorities. Often, these farmers are the *only* large group of whites staying after independence. Not seldom, their grandparents, or even parents, enforced 'cheap' farm labour through slavery, serfdom and physical brutality. The offspring's large farms tend to use land with little labour. In developing countries reaching independence *without* much non-patrial land, rising income from labour-intensive farms is the main source of early development and poverty reduction. Where much land is non-patrial, this path seems blocked to the ethnic majority – supposedly empowered by decolonisation – by a few conspicuous and generally wealthy ethnic-minority farmers.

Land patrilialisation seeks to right wrongs, but also almost always contains the ghost of a wish for ethnic humiliation and revenge. And that wish, unless

patrialisation is managed with care, can induce thoughtless, even violent, policies or invasions, seriously damaging the agriculture they seek to transfer. Expelling non-patrial farmers and losing their skills is less helpful than inducing them to transfer those skills to patrials. Massive land equalisation is required for efficiency, equity and political stability, and must involve land patrialisation. This is a special case of the fact that, in the hugely unequal societies of Latin America and (even more) Southern Africa, redistribution of assets and incomes is inevitable and must include transfers (whether or not called 'compensation' for colonialism) from settlers' descendants to patrials. But the cost and burden should be shared among wealthy taxpayers, mostly settlers' descendants – not concentrated on the descendant families who, perhaps long ago, inherited or bought stolen land.

That is *not* an excuse for thwarting patrialisation through prolonged post-colonial inaction. Such inaction stokes up, and combines, two fires: need for land and lust for revenge. In Zimbabwe, prolonged delays in patrialisation were followed by a violent, planless, corrupt rush, with huge (if perhaps temporary) losses of output and labour income. Latin America's 'land wars' of 1910–80 [Binswanger *et al.* 1996] were due mainly to decades of delay in tackling gross land and income inequality. Compared with Africa, the special deprivation of original patrials (*indigenos*) was a smaller component in Latin America – but a virulent one, as Bolivia, and Mexico's *Zapatistas*, remind us. Timely, planned and, to the extent possible, consensual patrialisation, not corrupted or diverted to fat cats, is hard, but experience suggests that it is possible.

## 5 The terrible detour

### Collectivisation, decollectivisation

#### **(a) Collectivisation: collective, State, and induced joint farming**

Farm collectivisation is conversion of tenurial rules so farmland is transferred from individuals to groups representing the collectivity. In collective and co-operative farms, the group shares incomes and costs, and (normally)<sup>1</sup> runs the farm. In State farms, the State runs the farm, pays group members, and keeps remaining farm profits (or losses). In co-operative farming, the group is voluntary.<sup>2</sup> Entry to collective and State farming is mandatory, or induced by strong government pressure; exit is usually stopped, restricted or discouraged. Collective and State farms shade into each other. State farms can be made partly collective by devolving management to workers. More often, the State turns collective farms into semi-State farms<sup>3</sup> by taking over key decisions. The USSR in the 1930s and 1940s and China in the 1950s and 1960s forced collectives to plant and deliver crop quotas at below-market prices, partly to get more food to the cities and reduce urban unrest. Later, Communist States often sought to reduce rural unrest and the drift to the cities by requiring (and subsidising) employment on State and collective farms. That typified the USSR in 1970–90, and afterwards those CIS states where decollectivisation was largely nominal (pp. 205–7).<sup>4</sup>

The two global tides of enforced agrarian change, colonisation and collectivisation, have similarities. Each affected perhaps half the world's farm families, colonised in Asia, Africa and Latin America by 1910, or collectivised in Mexico, the USSR, China, Vietnam and many other countries in 1910–75.<sup>5</sup> Both imposed radically new forms of farm ownership and management; larger farm size; labour-displacing mechanisation; planting to specific crops; quantities for delivery, usually at below-market prices, to the State or 'parastatal' monopolies; and resettlement in remote areas. Both involved huge production failures and human costs, impoverishing farmers – often killing them – usually without even providing the State with the control (or urban food supplies) that it sought [Ellman 1975]. Both colonial and collectivist farm policies were first softened,<sup>6</sup> then reversed, respectively by patrilisation in 1945–70 (pp. 180–9) and by decollectivisation in 1977–2000 (pp. 203–36).

Given the history of State and collective farming, why do ill-disguised updates of it survive on over half the farmland of the former USSR, including

Russia, Belarus and Kazakhstan? Why do many governments in developing countries (currently including Venezuela and South Africa),<sup>7</sup> and major peasant movements such as Brazil's Movimento Sem Terra (MST),<sup>8</sup> still return regularly to such farming, and render land reform benefits hard to access without it? Often, the reasons include creating or retaining large, controlled units from which to extract surplus; political pressure to become, or remain, a farm official; and private greed. But we shall not understand the persistence of agrarian collectivism unless we recognise that (like colonisation) it was – and is – advocated, designed and implemented by intelligent idealists, not just by brutes, thieves and gulls. Negatively, most collectivisers rightly saw previous land distribution as grossly unequal, underproductive, or both<sup>9</sup> – and themselves as modernisers and land reformers, 'attempt[ing] to replace a local social order that was quasi-autonomous, resistant, and "illegible" [to central authorities and that] embod[ied] hierarchies of caste, gender, and lineage ... profoundly disabling of real citizenship' [Scott 2002]. Positively, collective action can spread the power of decision, and the mental skills it inculcates, beyond a managerial élite; create trust; and make tedious work pleasanter: 'light is the burden of labour, where each man is helping his neighbour'. Liberals, even libertarians, can see joint effort for owned and shared production as liberating: 'Fifty men own the lemon grove, and no man is a slave'.<sup>10</sup> More prosaically, collective activity among farm neighbours (as in the family) can initially increase efficiency in work to displace heavy objects, while avoiding the cost of supervising hired workers: in lifting, as a second or third person helps; in pulling or pushing, if each takes a 'rest turn' while colleagues work. With these high ideals, and apparent advantages, for collective and co-operative (and to some extent State) farming, why has it brought poor farm performance, brutal force, and surplus extraction?

Collectivisation hardly ever stems from demand by poor rural families. What they want is land of their own. 'The path from concentrated individual property rights to [their] fairly egalitarian distribution ... may have entailed an unnecessary ... detour into collectivism' [Bell 1990: 155]. If *U* is very unequal private farming, *C* is collective or State farming and *E* is fairly equal private farming, this is a two-stage detour, Stage 1 from *U* to *C* and Stage 2 from *C* to *E*. More typical, however, was a three-stage detour: Stage 1 from *U* to *E*, Stage 2 from *E* to *C*, and Stage 3, decollectivisation from *C* to *E*. In Stage 1, insurgent or incoming radical régimes in largely rural societies won mass support by backing, infiltrating or guiding peasant movements that distributed land from rural 'Big Men' into fairly equal family farms. This bottom-up, disorderly, but effective analogue of classic reform enabled the rural poor to eat (and grow) more food, but they farmed in a technologically undynamic sector with little research, fertiliser, rural transport or reliable farm water. Unlike the big *U*-farms before the revolution, the new *E*-farms, having fed their families better than before, had little to sell to the cities. That might have been remedied with publicly funded infrastructures, but most incoming radical leaderships, their resources (and taxable capacity) depleted



by conflict, could not or would not provide them. In Stage 2 (from E to C), the leaders – forced to feed the cities, keen to industrialise, and often committed to collective production and contemptuous of small-scale private farmers – responded by seizing peasant land for collective or State farms, and extracting underpriced food and fuel for the cities to support industrialisation. The peasants, having recently acquired land and autonomy, opposed this, first by struggle, later by undermining with ‘the weapons of the weak’ [Scott 1985]. So collective and State farms were crippled by tacit mass opposition, as well as by State extraction, unduly large scale,<sup>11</sup> inappropriate mechanisation and unviable incentive structures. Hence privatisation, which often, though not always, led to Stage 3 (from C to E). This took the rural poor towards the more equal family land that they had wanted all along, got in Stage 1, and lost to collectivisation in Stage 2, but this time – unlike in Stage 1 – with better farm techniques and State public-goods provision, making it profitable to produce not only for subsistence but also to sell surpluses at market prices.

Most modern radical and revolutionary régimes gained support – in countries with large, poor and oppressed peasant majorities – by initially promising and delivering classic land reform (CLR). This delivered rural improvements, but at the cost of food and savings that could be extracted to feed the towns and develop industry. Only then did most régimes, often collectivist in principle, become so in practice and with force.

- In the USSR, 76.5m ha was seized in 1917–18 from peasants and 124.7m ha from large owners by village authorities, mostly for equal subdivision; only a little went to co-operatives and egalitarian communes [Wolf 1969: 90]. Prolonged debate ensued about how, and how quickly, to collectivise and extract. Advocates of both, such as Preobrazhensky, saw them as gradual and painless for the peasantry, because larger scale and mechanisation would bring ‘intensive methods of cultivation [through which] incomes in the countryside could be tripled!’ [Lewin 1968: 151]. However, no such breakthrough lay to hand. The small farmers, once they had a little more land, grew more food for themselves, rather than underpriced goods for the cities; the surplus eroded, then collapsed.<sup>12</sup> After the procurements crisis of 1928–29, rapid and coercive collectivisation began. In 1935–89, some 49 per cent of the USSR’s farmland was in collectives, some 45 per cent in State farms, and 2 per cent private, mostly in tiny plots [McHenry 1976; Overchuk 2003].
- In China ‘in the early 1930s less than 10 per cent of the rural population owned ... 70–80 per cent of arable land ... [I]n 1949, the government redistributed about 47m ha [of China’s 100m ha] of arable land on an equitable basis to some 50–60m rural households’ [Bruce and Harrell 1989: 3]. After modest steps towards team farming from 1954, the Great Leap Forward of 1958 rapidly and massively increased collective (commune) farm control, collective labour, and delivery requirements to the cities [Yang 1996]; even when this failed, such requirements survived the retrenchment towards smaller farming teams in 1961–63.

Hence, in the USSR and China, revolution brought a version of CLR to hundreds of millions of poor people, but later forced them into collective or State farms.

Most other communist revolutionary governments,<sup>13</sup> while dealing with fewer people and less land, also first redistributed oppressively unequal farmland, and only later collectivised:

- In Vietnam the I–E stage overlapped with decolonising war. In 1945–53 ‘the Viet Minh distributed 310,000 ha, or about 15 per cent, of the total cultivable land [in the North] to 17 per cent of peasant households’. After expelling the French and taking over North Vietnam in 1954, the Viet Minh continued to prioritise private land redistribution for some years. The E–C stage came only in 1958–60, and was 76 per cent of the land collectivised [Wolf 1969: 188, 192; cf. Bruce and Harrell 1989].
- In North Korea’s I–E, ‘peasants ... welcomed the redistribution of farmland from Japanese and Korean landlords in 1946’. Yet the régime, despite ‘acknowledg[ing] a big debt to the owner-peasants for their valiant production ... during the 1951–53 war’, undertook an extreme form of E–C. In 1954–57 it brought over 90 per cent of peasants into State or (more usually) collective farms. Centralised intervention steadily intensified, and despite a façade of voluntarism became increasingly compulsory, large-scale and extractive [Oh and Hassig 2000]. In 1958 almost all the ex-peasants were reorganised into even larger units, either State or (more usually) collective, of ‘300–500 ha, as compared with 85–130 ha [around] 1954. ‘The farmers who lost their family boundaries with the collectivisation now lost even their village boundaries’ [Lee 2000]. 1976 saw a “nature remaking programme” to literally bulldoze [the] countryside into fields of “regular shapes like a checkerboard” [aiming to] sever the connection between former landholders and the land ... “beyond recognition”’ [Noland 2003; his citations are from government statements]. The State also imposed changes in cropping patterns and heavy food delivery quotas at extractive prices.
- In Cuba’s I–E in the 1960s, Castro’s government quintupled the number of peasant farmers. Land seized from large proprietors was distributed to 160,000 small tenants, sharecroppers and squatters. E–C followed ‘almost two decades after the revolution [as] the Cuban leadership launched a campaign [to induce] peasants ... to form agricultural and livestock production cooperatives [they had resisted joining State farms] and within a decade over two-thirds of all peasant farmers had done so’ [Kay 1998].
- What of sub-Saharan Africa? Ethiopia’s 1974 Revolution led to the splitting up of most large feudal, army and church holdings for fairly equal family farming. This I–E was followed after 1976 by increasing pressure from the Government to form collectives, and when the peasants resisted State farms. At first glance, not much E–C happened: less than 10 per cent of land was ever farmed in these systems. However, the State simulated

some of the effects of E–C by diverting most purchased inputs, farm research, credit and subsidies into State and collective farms [Ofcansky and Berry 1991], and pressured families into collectives by forced resettlement and/or villageisation.<sup>14</sup> This partial simulation of E–C typifies other African countries, such as Tanzania, where collectivisation was willed but could not be directly implemented.<sup>15</sup> In Mozambique too, ‘with the official focus on State farms, family farms were denied access to modern inputs and technical assistance, and had little ... access to transport services as these were all State-run and served only the State farms ... [I]n the decade after Independence most small family-run farms became increasingly subsistence-oriented’. That, and their poverty, were ‘*not* a reflection of ... inherent backwardness or lack of market awareness and skills[, yet] reinforced the view of urban-based policy-makers that the “family sector” *was* mainly subsistence-oriented, and that “development” had to rely on other, better endowed and more capable elements of society’ [Tanner 2001: his italics].

Given what happened, did collective and State farming, especially where mandatory, meet the definition of land reform? No. Due to incentive and management problems, it normally cut farm output and income.

- In the USSR, accelerated collectivisation in 1929–34 went alongside millions of deaths and widespread famine. Bad weather was partly to blame. The charge of deliberate genocide, e.g. of Kazakhs or Ukrainians, is baseless. Yet blame is shared by weak incentives and overview in collectives, the chaos of rapid enforced collectivisation, its use to extract grain on the cheap from hungry farmers, imposition of bureaucratic managers on huge and new farms, and central enforcement of often inappropriate farm methods [Radkey 1958, 1963; Lewin 1968]. The collective sector involved ‘preposterous costs in terms of [forced] inputs of fertilizer, labour, and machinery’ yet ‘failed to provision the cities adequately<sup>16</sup> and ... provoked demoralisation and illegal flight to the cities’ [Scott 2002]. Remaining tiny private plots and farms ‘produced 20 percent of gross agricultural output on 2 percent of the land’ [Lerman 2002; cf. Hanstad 1998]. ‘[For] vegetables, potatoes, meat and milk, large farms failed to compete against small, subsidiary land plots ... privately operated by workers of state and collective farms after work’ [Overchuk 2003].
- In China, total factor productivity in agriculture seemed to rise during *property-rights* collectivisation in 1954–58, but only afterwards was *farming* collectivised [Kung and Putterman 1997]. The ‘great leap forward’ meant a fever of ‘permanent mobilisation backed up by coercion’, free food distribution in rural mess halls, and rising extraction through quotas. Especially when weather worsened, this meant collapsing farm output and income. Official output data were fantasy; the reality was famine, reflected in a best estimate for 1958–61 of 30m excess deaths and 10m fewer births.

This 40m demographic impact ‘dwarfed that of the Soviet collectivisation of 1929–33 by more than three to one’ [Yang 1996: 38].<sup>17</sup>

- In North Korea, ‘perhaps the world’s most input-intensive agriculture’ delayed, but did not prevent ... the collapse of collectivisation, with 600,000–1m famine deaths (of a 22m population) in 1994–2000 [Noland 2003]. Officials blamed reduced USSR fertiliser aid and exports in the mid-1980s, and floods in 1994–95. This has some force, as have similar exculpations in the USSR and Chinese famines. But in all cases, most blame goes to excess farm size, forced extraction and incentive failure due to collectivisation.<sup>18</sup>

Where collectivisation was incomplete and moderate, its effect on farm output and income was less, but easier to compare with the performance of other farms in the same countries.

- In Latin America around 1965–90, collective and co-operative farms showed lower productivity than private farms in Bolivia, Chile and Mexico, though apparently not in El Salvador [Kay 1998].
- Africa had similar experience. In Ethiopia, civil war and drought helped cause the 1984–85 famine, but again much of the blame must go to collectivisation: though below 10 per cent of farmland was taken out of private farms, most fertilisers and credit were diverted to far worse-performing collective and State farms; forced resettlement and villageisation, used to promote them, caused further output loss (as in Tanzania) [Kisis 2006; Clay and Holcomb 1986]. On reform lands in Zimbabwe in the 1980s, semi-collective farms performed far worse than small-to-medium family farms [Kinsey 2004]. This was also ‘typical of experiments in Ethiopia, Tanzania and Mozambique’ [Roth and Bruce 1994: 25–26; cf. Bruce 1986: 63]. Land grantees in South Africa’s 1995–2005 redistribution failed even to increase their income and food security where group farming was enforced, but did far better in the minority of cases where land was distributed individually, e.g. to former labour tenants [Aliber 2003; Valente 2008].

The rural poor did gain as collectivisation cut the land share, and the extractive power, of big private farmers and landlords. However, such gains were eroded by new extractions by the State, and dwarfed by the reduction in total farm output and income on the collectivised lands due to State and collective farms’ weakened incentives, large scale, difficult supervision and, frequently, arbitrary State extraction and centralised farm mismanagement. A further shock to the income of the rural poor – especially where many remained landless or migrant labourers even after collectivisation – came through the redistribution of income from labour to capital on State and collective farms. These, being large, found it paid to replace labour (costly to supervise on a large scale) by machinery (for which large scale lowered unit costs of supervision). Thus, although collective members and State farm-workers in China and the USSR had job security (if they survived disruption, famine and other hardships), their labour income was pushed down, and

depended on the price at which the State chose to extract output. On collective farms there was a further threat to labour income: if, as often happened in the early years, it was shared equally, lack of incentives reduced output (and income) further; if farm labour reward was divided according to work-points, older and weaker workers, and households with many children, fared worse. Indeed, where workers were free to shift, they often moved from collective to state farms, but seldom the other way. In Latin American and African collectivising experiments, former landless employees usually received no land, and were made poorer and less secure. The harm to employees was less if they had formerly worked on big plantations or *estancias*, but where – as often – much of their work had been for labour-intensive family farmers, these were replaced by collective or State managers of big, capital-intensive joint farms motivated to cut employment, especially of casual workers. Often not only feudal barons in Ethiopia and Nicaragua, and colonists in Mozambique, but also medium and even small family farm employers, gave way to State or party functionaries. These received preferential access to foreign exchange for subsidised, job-displacing tractors and herbicides, machines and inputs (denying fertilisers to the more numerous and poorer people in the remaining peasant sector), but in return had to deliver output quotas at oppressive prices.

Collectivising reforms appear to have been specially prone to overlook and harm the interests of seasonal migrant workers, indigenous minorities, and other very poor people not automatically included in the new farms. In much of Latin America, distribution of above-ceiling land from large *haciendas* was, in part, to compulsory collectives or co-operatives. Those who could not share in the distribution lost out. Normally, permanent employees of large farms, and established tenants of large landlords, received priority as members of the new collective or co-operative unit; seasonal or other temporary workers, squatters or shifting tenants often got nothing. Also the high supervision costs on a large State or collective farm create incentives to displace non-member labour with machinery where feasible. So those excluded from direct participation in the joint farms often lost even the chance to work on the land. 'Given the disappointing record of [largely collectivising: ML] agrarian reforms [for Latin American] agricultural production, income distribution and employment, their impact on poverty alleviation is likely to be marginal. While standards of living generally improved for the direct beneficiaries ... these were not generally the poorest in rural society; except in Cuba, they did not include the minifundistas, seasonal wage labourers, comuneros or members of the indigenous communities [, together comprising most] of the rural poor' [Kay 1998].<sup>19</sup>

To summarise the rural poor's lot before and after I-E-C, i.e. before Stage 1 (with unequal private farming) and + after Stage 2 (with large collective or state farms): they lost because total income and output were cut; gained because the old landed classes no longer extracted their share (often in ways that had demeaned the poor); but lost because similar demeaning extraction

was done, instead, by new State and party élites that ran the huge new farms, enforced often serf-like labour discipline, increased machine use relative to labour use, and repressed farm prices. As a rule, losses outweighed gains for the farming poor. Further, exit from State or collective farms was restricted, directly and/or (as in the USSR and China) by impeding migration to towns. So collectivisation reduced the absolute income of the rural poor. While it raised their status and power relative to the rural rich, it reduced them relative to the urban and political élite. The rural poor, freed from the tyranny of the rural 'Big Man', instead suffered the equally damaging tyranny of the urban politician, but with less chance of escape into subsistence cultivation. Rural famine in the USSR in 1932–34, China in 1960–63, Ethiopia in 1985–86 and elsewhere cannot be wholly blamed on State and collective farming, but they played a part. Clearly, such collectivisation was not land reform.

Yet many farm collectivisers had good motives. Could collective or State farms have achieved land reform, enriching and empowering the rural poor, if the State had acted otherwise? There are five main, harmful and general concomitants of collective and State farming – force, extraction, State-enforced micro-management, excessive size, over-mechanisation. Are they separable from farm collectivisation?

- (1) The thrust to *force* people into State or collective farms (often with brutality, chaos or both) is seldom avoidable during collectivisation. The need for force arises because small, equal peasants rarely accept collectivisation voluntarily, intoning 'The State has given, the State has taken away; blessed be the name of the State' – least of all where they only recently received reform land from an incoming régime desperate for their support. Speed, force and chaos are then hard to avoid.
- (2) Is increased State *extraction* of rural output, especially staple food, at artificially low prices for urban use,<sup>20</sup> avoidable and separable from collectivisation? No, because the logic of the detour drives both. Stage 1, **I–E**, creates small peasant farmers who want to eat more, not to sell at State-repressed prices. The State needs such sales to feed the cities, supply cheap wage-goods, and permit industrialisation. So in Stage 2, **E–C**, it enforces visible, State-dependent collective or State farms for readier extraction.<sup>21</sup>
- (3) *State-enforced micro-management* of farm decisions – 'hierarchical and centralised state plans that [are] thin and schematic as well as authoritarian' [Scott 2002] – is closely linked to farm collectivisation, which might perform better without that link. In China and Vietnam 'probably perseverance with] their small peasant farming systems ... would have avoided the long periods of slow growth, the consequent persistence of massive rural poverty and the periodic disasters, in China, of the "great leap forward". [F]amine and the "cultural revolution" [stemmed from the] framework of central planning. [ ... S]uccessful peasant farming was [just as] impossible [as] successful collective farming[, given] irrational ... relative prices, arbitrary procurement policies ... and bureaucratic control over

inputs and agricultural services' [Griffin *et al.* 2004]. Indeed, collective and State farming did far worse than the tiny, not-too-unequal plots retained by many households in the otherwise collectivised USSR, but they covered only 2 per cent of farmland. Few collectivist, centrally planned systems allowed such farms to predominate; they did so (for historical reasons) only in Poland and Yugoslavia. There, agriculture performed far less badly.

- (4) A fourth anti-output and anti-poor concomitant of collective and State farms is, almost always, *farms too large* for efficient supervision, and for appropriately labour-intensive methods and crop-mixes (chapter 2). However, if collectivisation is driven by (and almost inevitably linked to) the State's need to extract surplus on the cheap, large farm size is almost a precondition; hundreds of thousands of small farmers can easily pick crop-mixes or hiding places that make major extraction nearly impossible.
- (5) Finally, collective and State farms are almost always linked to *over-mechanisation*, leading to capital/labour ratios too high to be efficient until a late stage in economic development. This concomitant, too, is hard to de-link from such farms. The mistaken but genuine belief in efficient early mechanisation is a prime 'justification' for collectivisation. Also, as in the USSR, agencies providing (or denying) timely tractor hire were a crucial lever in extracting farm surplus.

'The path from concentrated individual property rights to [their] fairly egalitarian distribution ... may have entailed an unnecessary ... detour into collectivism' Bell [1990: 155]. Possibly so, but this was a terrible detour. The enforced voyagers experienced mass suffering and death, although nowhere (even in Ethiopia in the later Mengistu period, when civil wars supplemented disastrous agricultural policy) was the distress on the scale<sup>22</sup> of the USSR (1931–35)<sup>23</sup> or China (1959–63); it is propaganda to blame group farming for all the sins of totalitarianism.<sup>24</sup> Yet subsequent African and Latin American collectivisations share with the Soviet and Chinese experiences an inherent logic: the new urban élite's need to extract farm surpluses for industrialisation drives it to enforce on farms, alongside collectivisation, hugeness, detailed top-down plans, and labour-displacing mechanisation. The myth of scale economies (chapter 2) drove Latin American collectivisation, even in capitalist countries.<sup>25</sup> The harmful albatrosses carried by collectivisation are, in these (usual) circumstances, irremovable.

But suppose not. Suppose that an imaginary non-self-interested State builds on the real advantages of collective action. Can it make a success of albatross-free, gentle farm collectivisation? Even without the 'concomitants', collective and State production carries disadvantages special to agriculture. Farming, of all human activities except perhaps parenting,<sup>26</sup> is least likely to show efficiency gains from stimulating more jointness than people choose voluntarily, without pressure. Such gains from co-operative work are likeliest where there are (a) economies of scale; (b) *intermediate* interdependence, in the sense that output and income from your activity are *moderately*

dependent on my producing efficiently (so there is something to be achieved if we work, or own the means of production, together), but not *highly* dependent (so the costs of failed, trust-based co-operation become very high); (c) ready mutual observation, i.e. with production operations carried out over a small space and more or less at the same time; but (d) sufficient mutual ignorance or distrust that, absent co-operative institutions, major chances for voluntary joint activity are neglected. Such conditions<sup>27</sup> apply less to farming, which normally comprises highly interdependent operations spread over space and time, than to most forms of human production.

There are, however, *segments* and *types* of farm-related activity that do reward collective action and require low, or readily monitored, levels of trust. A sample of 984 private farmers in post-Communist Russia shows 30–40 per cent participating in joint or co-operative activity in respect of various farm services [Brooks and Lerman 1994: xiii]. In 1966 I lived in a village in Maharashtra, India, where local conditions had led to formation of groups of three to ten small-farm households to practise exchange labour, *varangula*, normally with a succession of teams of two or three workers and/or oxen within a group. *Varangula* was common in ploughing and interculture, where farmers judged that gains from joint work exceeded costs of creating trust and of preparing and monitoring shared obligations. *Varangula* never applied in harvesting, where the distinction between my crop and yours is crucial to us both, yet very hard to validate jointly. Farms that impose collective action on harvesting are not a good idea.<sup>28</sup>

Similar considerations apply to farm services. Small and coherent farmer teams often work well in marketing. A lorry for a ton of grain or milk is cheaper than ten lorries each for 0.1 ton; probably millions of groups of small farmers, around the world, jointly own, drive and maintain such a lorry. Even where initial faction, doubt or inexperience impedes voluntary joint action, marketing co-operatives often succeed. There are also economies of scale and co-operation in getting farm loans; ten small borrowers without collateral can borrow more cheaply than each alone, especially if each stands guarantor for the loans of all. So can farm borrowing also be expanded by induced co-operation? Despite marked, durable and still thriving institutions such as Denmark's Raffeisen banks from the 1850s, and Grameen and BRAC in Bangladesh from the 1980s, institutions of induced co-operation are much rarer (and less likely to support farming) in credit than in marketing, and less imitable across countries [Hulme and Mosley 1996]. That is, again, partly due to the high requirements for mutual trust: how do I know whether you, and your farm, are using productively your part of the loan, of which I am co-guarantor? Small irrigators in Andhra Pradesh, India, facing *moderate* uncertainty about water arrivals found it worth co-operating to reduce that uncertainty: with great uncertainty, the water is not worth enough; with little, the costs of co-operation are not worth incurring [Wade 1979].

It may sometimes make sense for the State to use its funds to support, subsidise, or otherwise 'seed' more farm co-operation in irrigation, marketing



or credit. It seldom, if ever, makes sense to *impose* joint action, across the whole gamut of farming activity, by comprehensive State or collective institutions. Individual farmers have long learned to co-operate in those parts of farming, and in those farm services, where each farmer judges – almost invariably in a *small* group – that benefits exceed costs, including costs of preserving trust and observing action over space and time. National and international companies and NGOs have long tried to create, support and strengthen such task-specific collective action, with some successes and some failures. What advantage is likely if bureaucrats force farmers to combine on *all* farm activities and crops, including those where farmers have judged that costs of co-operation exceed benefits?<sup>29</sup>

When they do so, the scale of State action is normally large, its decisions central, and – to keep the system ‘legible’ for the State – farm units rather large. That means diffused, impersonal incentives to both labour and management in collective and State farming. When collectivisation and large scale are imposed together, the results are especially bad. In the Dominican Republic, ‘collectives with over 100 members proved impossible to administer’ in the early 1970s [Stanfield 1989: 338]. Yet the Marxian paradigm sought collectivisation precisely to permit, without private ‘exploitation’, the alleged scale economies of large farms. As in the USSR, so in Chile, El Salvador and Peru: collectives were ‘so large that ... individual members did not know what was going on’ [Strasma 1989: 425]. In South Africa, ‘the strategy of project design converged [by 1996–97] into a typical formula [including normally large] group production, [with] no consideration of tenure options other than group ownership’ [Aliber 2003].

Even in ideal conditions, frequent group or collective decisions, especially for a *large* farm – let alone centralised decisions for many such farms, or for State farms – pose serious problems.

- (1) In such farms, the State or collective can choose between two payment systems, each with serious drawbacks. With fairly equal rewards, each worker/member knows that her colleague (as one of many over a large area), being hard to monitor, might shirk. That undermines her own resolution not to. With workpoints or piece-rates, rewards (and the process of setting, monitoring and paying them) – being delinked from either family or market – are increasingly suspected of unfairness or corruption. The larger the farm, the more do these State/collective problems and those of monitoring exacerbate each other. Both case-studies and literary accounts suggest that this is a main reason for the decline of voluntary village-level farm production co-operatives, such as the *kibbutzim* in Israel and experiments in the early USSR and in India. If joint farming does not prosper even when voluntary, still less will it do so when governments ‘officially keep alive’ by compulsion, or by restrictions on leaving.
- (2) A farm run as a collective labour-managed enterprise, seeking to maximise dividend per member rather than total profits, tends to employ fewer

people and to acquire more capital equipment than either a corporate or family farm with the same land-water conditions. The employment-reducing effect of such 'Illyrian incentives' to enrich existing collective members is sharpened if profitability rises, e.g. due to higher crop prices [Bonin and Putterman 1987].<sup>30</sup> Employment reduction – due both to such incentives and to large farm size (chapter 2) – is harmful in labour-surplus, savings-scarce developing rural areas.

- (3) Farming requires frequent, prompt, localised decisions based on changing local facts. Collective committees, to reach agreement, meet long and often (even at seasonal labour peaks) to agree decisions. State farm managers can move faster, but at the cost of losing touch with both farmworkers and local facts.
- (4) Frequently, after the consequences of coercion become clear, governments try to re-base State or collective farms on consent. Then, in view of their inefficiency, they must be subsidised if they are to retain members, workers and area. To restrain unemployment and urban drift, they are further subsidised to maintain larger workforces than are justified by their level of mechanisation, scale, and non-individual payment incentives. As in the USSR from the 1960s, they avoid bankruptcy (or unpopular redundancies) only by padded payrolls made possible by 'soft budget constraints' [Lerman *et al.* 2002]: a polite term for hidden losses. These farms are a drag on growth and industrialisation, not a source of surplus for it.

There may well be scope for 'encouraging' some collective action, even in some farm activities, after CLR, though not for compulsion. Nicaragua 'in the 1960s and 1970s experimented with "dead furrow" cooperatives [where] land was planned and planted collectively, while individual families managed later cultivation and harvest ... on subplots demarcated by ... an unplanted furrow ... to mark one family's property. Such semi-collective organizations can ease access to capital [as during] the early stages of the [1977–84] reforms in China ... An important lesson from China (and from the more general failure of fully collectivised agriculture) is not to make the collective arrangements permanent. Instead, they can provide a transition period while reform beneficiaries learn, establish credit reputations, etc. The key [may] be to establish individual property rights [while] easing the transition to individual farming through ... an initial semi-collective model [with] a definite time at which it will disappear and from which individuals can exit' [Carter 2003]. Similarly, 'in Chile [with Frei's reforms] and el Salvador, as beneficiaries gained entrepreneurial and technical experience a gradual process of decollectivisation was envisaged' [Kay 1998]. But inexperienced farmers won't gain from being forced to farm jointly with other inexperience. With good extension it seems pointless, without it useless. Further, it is hard to hold officials to commitments to 'disappear'; meanwhile, over time (as in a case study in Peru), performance on collective farms can worsen, suggesting declining physical and human capital and increasing vulnerability to shocks,

not just the disincentive problems typical of co-operative production [Melmed 1988].

The lesson of Carter's 'dead furrows' – apart from the need for clear property rights, private or voluntarily communal – may be that collective work is less problematic, not with farming early in a career, but with closely spaced activities. Farm planning can be done round a table, and benefits from knowing one's neighbour's intentions. So may the linked activity of raising loans to support farm plans: five or ten co-guarantor farmers, especially if they are tenants and therefore cannot use land as collateral, may well be able to borrow £1000 at lower interest than each farmer separately can borrow £200. In Asia, rice nursery and transplanting often involves a group of workers living nearby, which may well reduce the cost and difficulty of large-scale overview with joint incentives. Sometimes, farmers can be effectively stimulated by outside help to co-operation, as with farm savings for joint irrigation in the Mexican *ejido* [Burke 1979]. Where it is the scale and incidence of managerial costs (including costs of building trust) that stop farmers from choosing co-operative institutions,<sup>31</sup> there may be a public-goods case for State incentives to them. About 60,000 of the 300,000-odd egalitarian family farmers, created out of the Armenian decollectivisation in the early 1990s, chose to work through optional (but misnamed) 'collected farms', which were joint mainly in respect of asset purchase, leasing arrangements, farm management advice and the consolidation and exchange of fragments; but the number of these units fell from 8200 on 1 April 1992 to about 6000 at the end of the year [Csaki *et al.* 1995: 35]. In Romania, where 80 per cent of farmland was similarly decollectivised to fairly equal family farms, similar State-aided Farmers' Associations – if, in their early years, in part an effort by former collective managers and the State to reassert old patterns of scale and procurement upon the new peasantry – have become a useful route towards joint extension and processing [Proagricultura 2003] as 'rural business centres, [not] communist co-ops' [Pronataul National Roman, n.d.], and for representing farmers' shared concerns to government. State help to cut the *initial* managerial costs and externalities of otherwise desired joint activity is often desirable, but outside enforcement of joint farm activity not desired by the farmers is not. There is no case for enforcing 'semi-collectiveness', overall or in particular farm activities, on farmers who do not want it.

Indeed, while decollectivised farmers often keep appropriate activities joint, collective farmers vote – with feet or votes – when given the chance, to split land into individual, fairly equal family holdings.<sup>32</sup> In the Dominican Republic, 'by 1984, despite the ire of the Agriculture Department, and the reluctance of the Agrarian Bank to lend to private plots, only 13.5 per cent of the collectively distributed land was still in collectives[. The rest] had been divided into private properties'. Interviewees explained why: "(1) [In collectives] we get the same proportion of the net income whether we work hard or [not] at all. (2) [Individual farmers] see that ... crops are planted and weeded on time. (3) [On the collective] we did not see the bookkeeping ... costs of

production, or total production. The income was much inferior to what we earn now. (4) We couldn't keep our family working because there is no facility to pay them wages. (5) We can't [pass unencumbered] land on to our children after death'" [Rodriguez *et al.* 1985: 18].

## **(b) Decollectivisation: the Great Reversion from farm collectivism**

Since 1970, many have declared land reform dead (chapter 7). Yet decollectivisation is the furthest-reaching natural experiment in the history of land reform, perhaps even of agriculture. It has involved different ways of reallocating State and collective farmland, and different ways of following up the reallocation. Some of these ways amount to land reform; others do not. The latter are of course not an ideal 'control group', but the comparison is very illuminating.

### ***(i) Processes: decollectivisation, privatisation, liberalisation, positive enablement***

Decollectivisation is State action to shift management, and basic rights to usufruct, from State or collective farms to individual, household or company farms. If we award marks to farm reorganisations for outreach, speed and impact, then the *Great Reversion*, decollectivisation, scores more points than any other reorganisation, ever. It took 30 years, 1970–2000;<sup>33</sup> farm collectivisation had taken over 70 years, from 1910 (Mexico), via almost all communist countries<sup>34</sup> and many others (1930–60), to the 1980s (Ethiopia, El Salvador).<sup>35</sup> At some time in 1965–75 over a billion persons, about half the world's farm population, were on State or collective farms. Exit was legally limited in the USSR, China, Vietnam and most of Eastern Europe, and hard elsewhere. Yet 90–95m ha were decollectivised in China (1977–84),<sup>36</sup> 4m in Vietnam (1988–90) [Ravallion and van de Walle 2001] and 2.4m in Cambodia in 1989–94<sup>37</sup> [Ramamurthy *et al.* 2001: chapter 2]. In 1990–2000 'over 145m ha were transferred' from collective or State farms in the CEE and the CIS [Dudwick *et al.* 2005: iv].<sup>38</sup> Much land was also decollectivised in non-Communist countries: 3m ha in Algeria (1980–87),<sup>39</sup> some 15m in Mexico from 1992,<sup>40</sup> over 7m in Chile (1972–79),<sup>41</sup> about 2.5m in Peru,<sup>42</sup> and big areas in Iraq, Bolivia, Ethiopia, Mozambique, Angola and Tanzania. Today almost all the world's farm population is on nominally private, family, or (far fewer) on company farms.<sup>43</sup>

Pathologies such as the USSR in 1932–34 and China's 'Great Leap Forward' of 1958–61 aside, farm collectivisms are unhappy in much the same way. However, each decollectivisation is different, some happy, some not. Farm collectivisms have weakened and impoverished the poor, but that by no means ensures that all decollectivisations are pro-poor land reforms. To decide which are, we can classify reversions by processes defining them, by their real-life aspects, or by sorting countries by their types of experience.

Three sorts of process define the Great Reversion, but efficiency and equity require a fourth.

- *Decollectivisation* moves farm management and usufruct from State or collective to household, individual or company.
- *Privatisation* moves full ownership rights (mainly power to sell, lease or bequeath) similarly [Prosterman and Hanstad 1994: 1].<sup>44</sup>
- *Liberalisation* – negative enablement – reduces or removes rules that compel or stop, and farm taxes and subsidies<sup>45</sup> that induce or deter, (a) output, sale, or use of current inputs (labour, water, fertiliser, etc.), (b) types of land transaction or use.
- The often-missing requirement is positive enablement: *State support for farm/rural infrastructure and services* (FRIS) – schools, clinics, water, roads, farm research, etc. Most FRIS comprises goods systematically under-supplied privately.<sup>46</sup> Most big State or collective farms provided FRIS,<sup>47</sup> but phased it out after decollectivisation. This also happened where ‘share privatisation’ let them re-brand collectivism in semi-corporate form. After State or collective farming ends, firms in the market often supply other FRIS, but seldom promptly (or competitively), especially to starting, remote, small or poor farmers.<sup>48</sup> So, for some time after decollectivisation, public support for FRIS not only helps equity, but underpins farm output and efficiency by ‘seeding the market’ until private suppliers arrive. Yet fast, excessive withdrawal of FRIS during decollectivisation was almost universal in ex-Communist countries and common elsewhere, for example in Algeria [Forni 2003]. Most such governments faced harsh fiscal conditions, and pressure from foreign advisers and lenders to shrink the State and cut distortive subsidies. The border between these and legitimate positive enablement of FRIS is fuzzy and disputed;<sup>49</sup> the World Trade Organization has even sometimes seen State-aided agricultural research as a constraint on competition.

Some of these four processes – decollectivisation, liberalisation, privatisation, State support for FRIS – can benefit the poor, even while others harm them. The poverty impact of each process depends on country situations before reversion; ‘management’ and power pressures on it; and the other processes. For example, liberalisation of farm prices normally favours efficiency and GDP, but impact on the rural poor depends on how far (a) prices had previously been repressed or subsidised, (b) the poor made farm products, i.e. kept or received significant farmland, and power to manage it, during decollectivisation.

## *(ii) Aspects of reversion, types of reverting country*

To see which reversions were pro-poor, two other classifications are useful. First, FRIS apart,<sup>50</sup> we can reorder the processes into three *aspects* of

reversion. Though simultaneous (even mutually needed) and uniform in neo-liberal theory, they were sequential but divergent in post-collectivist practice:<sup>51</sup>

- (*Aspect/phase 1*) Shifting farm decisions and output claims to household or company farms: decollectivisation. As in China's household responsibility system (HRS) from 1977–84, this assigns farm responsibility, and most or all claims to product, to individual households rather than the collective or the State.
- (*Aspect/phase 2*) Reducing or removing major State actions directly affecting farm prices, such as quotas forcing farmers to give up output on the cheap (China) or laws compelling and subsidising farms to retain workers (Russia): the 'outputs and current inputs' part of liberalisation.
- (*Aspect/phase 3*) Enlarging farmers' rights to keep land for long periods or indefinitely, buy or sell it, rent it in or out, bequeath it, mortgage it, etc. This is under way in almost all decollectivising countries, barely begun in some, complete in others.<sup>52</sup> It is privatisation, plus the 'land' part of liberalisation.

Any or all of these three aspects of decollectivisation might increase or reduce farm output, farm efficiency, national product, income distribution, and hence the income of the poor; and, this apart, might raise or lower their status, power or self-esteem. So is the process, or each aspect of it, 'land reform'?

It helps to locate these aspects in *types of national experience*. A deep analyst of transition agriculture [Swinnen 2005; cf. Swinnen 1998, Rozelle and Swinnen 2004, Swinnen 2006] identifies three types of country reversion. In 'Russia'-like cases, total and per-worker farm output fell. In 'China-like' cases, both rose. In 'East Europe-like' cases, total farm output fell but farm output per worker rose. We add a fourth set of cases, Latin American and African decollectivisations; and then review overarching issues – farm size, restitution or redistribution, full farm ownership or usership, residual state ownership, farm size, demographics – which also affect the land-reform prospects of the Great Reversion.

- (1) 'Russia-like cases' cover Russia, Belarus, Kazakhstan (together a large majority of farmers and land in the former Soviet Union), until recently (section (b) (iv) (III)) Ukraine, and most of the rest of the CIS. In the USSR, farm collectivism had meant State farming, overtly in the *sovkhos*, covertly in the *kolkhoz*. Most of the time and in most ways the *kolkhoz*, while a collective farm in name, was no more controlled by its farmers or workers than the *sovkhos*. In both, State/Party orders guided farm decisions and were mediated through the farm manager as State/Party functionary.<sup>53</sup> In Russia-like cases, both State and pseudo-collective farms were largely pseudo-decollectivised. 'Share privatisation' (p. 224) was imposed on most of the land and people. The farm manager shifted part-way from State functionary to profit-seeking quasi-owner, but kept authority over a farm constrained to be over-large, under-devolved, historically over-mechanised and hence inefficient. Yet even with pseudo-decollectivisation, these States – due to severe

fiscal constraint, much outside pressure, and some internal conviction – price-liberalised. They hardened the ‘soft budget constraints’ on farm managers. That meant fewer subsidies<sup>54</sup> to farm production, guarantees of jobs to employees, and requirements (and cash) to provide FRIS. The rural poor lost out.

- (2) In ‘China-like’ cases, the collective and State farmland went to fairly equal, employment-intensive family farms. Land liberalisation was modest in China, delayed to 1998 but then near-total in Vietnam, and significant elsewhere. Price liberalisation in China and Vietnam slashed previous taxes on agriculture; was mildly desubsidising in Albania, Azerbaijan, Armenia, Georgia, to some extent Kyrgyzstan, and Romania; and cut FRIS everywhere. Yet land control made the process, on the whole and on balance, pro-poor.
- (3) In ‘East Europe’-like cases, decollectivisation shifted farmland to large, potentially or actually capital-intensive private farms, and liberalisation cut subsidies that had favoured farm output and employment.<sup>55</sup> The rural poor lost relatively, and for some time absolutely too. However, in contrast to the ‘Russia-like’ cases, larger farm size and capital-intensification were reasonable economic responses to increasing labour scarcity and the prospect for an employment-creating non-farm economy.
- (4) In Latin American/African (LAA) cases, decollectivisation shifted land out of partial, semi-voluntary collectivism.

The Great Reversion was normally pro-poor land reform in China-like cases; normally not, in Russia-like cases; rather helpful to the poor, but less than to the non-poor, in East Europe-like cases; and in LAA-like cases if and only if decollectivisation moved most collective/State farmland to small family farms.<sup>56</sup>

### *(iii) Types of national experience of reversion*

**I. Reversion – Russia-like cases.** These include the CIS countries, except

(a) Armenia, Azerbaijan, Georgia since 1996 [Dudwick *et al.* 2005: 28], Azerbaijan, and to some extent Kyrgyzstan (China-like transitions); (b) since 1998 only [Giovarelli and Bledsoe 2001] Moldova,<sup>57</sup> and (c) the Baltic states.<sup>58</sup> Otherwise in the CIS, i.e. for a big majority of its agriculturists and farmland, Aspect 1 has taken the largely bogus form of ‘share decollectivisation’. Collective and State farmers and sometimes employees received shares, but usually unlinked to parcels of land or equipment, and on conditions that constrained or induced them to sell back the shares and continue working for the former State or collective farm managers.<sup>59</sup> President Lukashenko said in 2004 that in Belarus ‘collective farms must be preserved, as they are the units which will always protect people, and help them’ [Proletarian Online 2007]. Few CIS leaders have been that frank, but in the Ukraine in 2001 [Giovarelli and Bledsoe 2001], ‘though issuing land share certificates [was] almost complete, less than 5 per cent of all collective members ... separated

from the larger collective agricultural enterprises'. In Russia-like cases today,<sup>60</sup> decollectivisation is little more genuine. In Kazakhstan, 37 per cent of rural households received land, but by 2003 only 14 per cent of these – 5.3 per cent of rural households – used any themselves, as against leasing it back, or leaving it unused or for others' use without payment.<sup>61</sup> Though 'share decollectivisation' was nominally wound up in 1995–2000 and private leaseback became illegal in 2005, corporations farm over 60 per cent of the land (more in the North, less in the South). They are the successors of collectives, usually with the same or similar managers, and with similar centralisation of management and capital-intensity. They are similar also in their large size (average 12,000 ha) [Dudwick *et al.* 2005: 40–42, 61], even larger than 'in Russia, where farms in the cosmetically reorganized collective sector average ... 4–5,000 ha of arable land' [Giovarelli and Bledsoe 2001]. In Russia-type cases, Aspect 2, output-input liberalisation, has gone far, but enough subsidies often remain for corporate (pseudo-decollectivised) farms to make them look profitable where huge size would otherwise rule this out.<sup>62</sup> Aspect 3, full privatisation via land sale and rental rights, has begun in some cases on the minority of land truly decollectivised.<sup>63</sup>

In 'Russia-type' countries, liberalisation meant withdrawal of many subsidies to farm output and inputs, especially employment. Also, the fiscal weakness of most States led them to withdraw most FRIS. With decollectivisation largely bogus, price liberalisation implying desubsidisation of employment, land liberalisation favouring large scale, and FRIS dwindling, the net impact of transition on farm output and labour productivity was strongly negative. This contraction in a large, labour-intensive sector – agriculture in the USSR around 1990 engaged some 17 per cent of workforce – harmed employment. Yet labour productivity fell (by around 30 per cent) and farm output by almost 50 per cent in the CIS in the 7–10 years after the fall of Communism [Swinnen 2005]. Mass rural living standards could nevertheless rise if, as in Kazakhstan, an oil boom enabled governments to continue employment subsidies of over-large, over-mechanised, share-privatised, but effectively quasi-collective farms. But the Russia-type farm sequence itself cut GDP, worsened distribution and hence harmed the poor.

**II. Reversion – East Europe-like cases.** Slovakia, the Czech Republic, and (somewhat less and later) Hungary<sup>64</sup> typified this path. First came major Aspect 1 decollectivisation [Swinnen 2005]. Most land was restituted to former owners, mainly (except in Romania and Bulgaria) as large commercial farms.<sup>65</sup> Aspect 2, input–output liberalisation, removed many distortions of Communism, but in the European Union accession countries – i.e. most of CEE – gradually replaced them by the differently illiberal, smaller, but less pro-poor distortions of EU farm protection and subsidy,<sup>66</sup> usually phased in well before accession. Aspect 3, freeing of



land sale and rental markets, is almost complete, and was a condition of accession to EU. During the first four years of transition, gross farm output fell by about 30 per cent but then stabilised; during the first 9 years, employment per unit of farm output fell (i.e. labour productivity rose) by about 10 per cent per year [Swinnen 2005]. The net effect of transition on the poor *via agriculture* was probably negative, but the total effect was better. As large State and collective farms privatised, farm labour was 'forced to be free' – i.e. unemployed<sup>67</sup> – but after some years of distress was absorbed at rising productivity into urban non-farm production, sometimes abroad. This was real economic development and probably left the poorest better off, but a small-farm path would have placed them better to maintain food consumption during later recession, as in 2008–09.

Farming in typical CEE countries was almost wholly, and in typical CIS countries somewhat, marketised [Swinnen 2006]. The big-farm outcomes of desubsidising employment, whether with pseudo-decollectivisation in most of the CIS or with commercial restitution in most of CEE, were not poor. But there is a sharp contrast. In Russia-type reversions, at least outside the combine-harvested wheatlands, big farms still usually mean inefficiently low labour use [Hanstad 1998]. In much of the CEE industrial workforce, growth and falling labour/land ratios indicated farm capitalisation, and hence justified – and induced – larger farms as rural labour markets tightened. In EU candidates, accession, initially without full EU farm support, threatened to compete away small undercapitalised farms. In Poland and the former Yugoslavia, many of these had survived the communist period.

**III. Reversion – China-like cases.** The 'China-type' Great Reversion is typified also by Vietnam [Swinnen 2006; cf. Ravallion and van de Walle 2008], and by a few agricultures outside East Asia.<sup>68</sup> These, 'with labour-intensive [agriculture, shifted] from large-scale collective ... to small-scale individual farming' [Swinnen 2006]. Aspect 1, decollectivisation, is almost complete. In China itself, it was prefigured in 1960–65, after the disasters of the Great Leap Forward: 'land ownership reverted [from communes] to the team level [and some] private plots and markets were reinstated' [EACP n.d.]. This was interrupted by smallish leaps backward in 1965–77,<sup>69</sup> but devolution to household farms – the Household Responsibility System (HRS) – came mainly in 1981–84. 'By the end of 1983, 200 million family farms had adopted' it [FAO 1994]; the process was more gradual and bottom-up than is often recognised.<sup>70</sup> Aspect 2, input and output marketisation, was also gradual but is now substantial in China, save for restrictions on hiring farm labour (and these are weakening). China shows early signs of Aspect 3, land liberalisation: local authorities control farmland, on renewable 30-year lease to

households, but in 2008 the central government indicated that households should be permitted to sub-let (p. 353, chapter. 3, n. 3).

Vietnam, after egalitarian decollectivisation in 1988–90, largely completed Aspects 2 and 3 with the 1998 Land Law, freeing up employment, land rents and land sales. All this had pro-poor results; the fear that in transition agri-cultures (including China) ‘local officials and élites will subvert [marketisation] and that [its] gains ... will be unfairly distributed with some [farmers] becoming ... landless and impoverished’ did not, on the whole, materialise in Vietnam [Ravallion and van de Walle 2008]. The contrast with recent farm ejections in China and Cambodia (p. 360, note 40) suggests that élite capture and subversion endanger poor farmers more if local government keeps residual land rights than if they revert to households. However, this is specific to marketisation after ‘China-type’ decollectivisation to small, equal farms.

The poor gained much, in both efficiency and equity terms, from ‘China-type’ farm transition: labour productivity grew, but farm output and work grew faster, so labour income rose [Swinnen 2005, 2006]. China’s decollectivisation of 1977–84 coincided with, and helped cause, an upsurge in both grain output (at 6 per cent yearly) and income of the rural poor. Vietnam’s experience was similar [Ravallion and van de Walle 2001, 2008; Ngo 2004]. Azerbaijan enjoyed rapid growth of land and labour productivity and farm output after a highly egalitarian decollectivisation in 1996, which also reduced poverty [Dudwick *et al.* 2005: 31–33; Lerman and Sedik 2008: chapter 5]. Demand for labour rose: Romania experienced labour inflow into agriculture during decollectivisation [Swinnen 2006], Armenia’s farm workforce doubled in the 1990s [Giovarelli and Bledsoe 2001], and rising farm demand fuelled the growth of China’s labour-intensive village enterprises in the 1980s. These were genuine land reforms, mainly because initial decollectivisation was, and stayed, fairly equal. That leaves a big question: could ‘Russia-type’ or ‘East Europe-type’ transition countries have achieved similar benefits from leaving farming ‘private’ but fairly equal? Perhaps; but conditions before decollectivisation made that path more credible for ‘China-type’ countries.

Collectivism in China and Vietnam left a negative and a positive legacy: huge unmet local food needs, but a public infrastructure of irrigation and seed research geared to small groups, not vast collectives. As decollectivisation improved incentives to increase output, enabling infrastructure was ready, so food needs could be better met and poverty sharply reduced. In most of the USSR and Eastern Europe around 1990, there was less unmet food need, but also less irrigation or research suited to labour-intensive conditions. The new family farmers in ‘China-type’ countries also gained from input and output marketisation because it alleviated substantial pre-transition farm price repression, often with compulsory deliveries.<sup>71</sup> While that had also been true of the USSR in the 1930s and 1940s, by 1960–90 farms were subsidised, as in Eastern Europe. Marketisation, while removing some distortions, hurt because the subsidies fell away.

At the start of transition, China and Vietnam had over 70 per cent of workers in agriculture, and other China-type transition countries well above the 10–20 per cent typifying the CEE and the Western CIS.<sup>72</sup> In labour-intensive agricultures, small scale pays, due to easier labour supervision; in capital-intensive agricultures, advantages shift towards larger farms (chapter 2). With the move to small-scale family farming, labour productivity rose, but output rose faster, so demand for labour grew. Labour supervision savings on small family farms meant ‘strong gains in technical efficiency with relatively small losses in scale efficiency ... [In] China, Vietnam, Albania, Armenia, Georgia and Romania, significant gains in productivity came mostly from the shift to household farming when land was distributed to rural households’. State support for mechanisation fell away; substitution by employment and self-employment became more appealing as small scale and family overview cut supervision cost [Swinen 2006].

The initial conditions of ‘China-type’ economies explain why decollectivisation and marketisation there, but not (say) in Hungary, were consistent with fairly equal small farms and unharmed, perhaps improved, income distribution.<sup>73</sup> However, initial conditions do not fully explain why Russia or northern Kazakhstan rejected the small-farm path. Each has a highly diverse agriculture, but overall neither was so far from, say, Armenia in population shares in agriculture, underemployment, and hence prospects for labour intensity that favoured farm smallness. Was there a politically popular and economically sound option for Russia or Kazakhstan at the start of transition: to decollectivise farming first, into fairly equal small family farms, followed by input–output marketisation and careful freeing of land markets? Instead, Russia started transition with industrial and mineral privatisations to friends and relations, alongside withdrawal of the State from public services. This led to a big fall in employment and living standards, deep government unpopularity, and demoralisation. Yet farm collectivism, inefficient and unpopular, remains largely unaddressed in Russia, Kazakhstan and Belarus. There, economics may indeed indicate slightly larger farms than in (say) Romania, but does not justify monsters of thousands of hectares; they are hangovers of State power, usually needing subsidy to survive. The prospects for a historical alternative – for *starting* post-Soviet privatisation by unleashing farm productivity with egalitarian farm decollectivisation, China-style – remain one of the great ‘What Ifs’ of history. Another is what might have happened if, in 1927–35, the USSR, like China in 1977 with over two-thirds of its people dependent on labour-intensive agriculture, had chosen a household responsibility system instead of enforcing collectivism.

The chess master Tarrasch said: ‘Chess, like love, like music, has the power to make people happy’. Imposing big farming in labour-intensive economies, communist or capitalist, has the power to make people unequal, unproductive and miserable, and governments brutal, unpopular and ultimately fragile.

**IV. Latin American and African (LAA) cases.** Substantial State or collective farming was undertaken, and later reversed, in Algeria, Angola, Bolivia, Chile, Colombia, Ethiopia, Peru, Mexico and Mozambique. It is hard to know even the rough area of farmland decollectivised – or, indeed, originally collectivised – in LAA. Both collectivisation and decollectivisation were more benign and consensual, but also more disorderly and under-implemented, than in Communist countries. Hence collectivisation left small farmers' management skills less damaged. Even overtly collectivist governments in LAA were less willing or able than, say, China or the USSR (1) to take most farmland into State or collective *ownership* (e.g. below 8 per cent in Ethiopia [Ofcansky and Berry 1991]), (2) to stop farmers from continuing family *operation* on collectivised land – as they did in Mexico on almost all, in Peru about half, and in Chile and El Salvador about a fifth [Kay 1998], (3) to enforce *extraction* of farm surpluses from collective/State farms. In LAA, collectivisation was incomplete and avoidable. Because family farmers had survived and not become dependent on collective or State farms for services and infrastructure, decollectivisation was less all-embracing, expensive and problem-ridden than in CIS, CEE or East Asian communist and successor countries.

Moreover, unlike these, LAA largely confined collectivisation to bigger holdings. So *decollectivisation*, even if some land did not reach the poor, left them with more than before collectivisation. In Mozambique it was the big, sometimes abandoned ex-colonists' plantations that were collectivised, and then decollectivised, though to some extent into large farms again. In Chile, collectivisation had concentrated on farms above 80 basic irrigated hectares; though the Pinochet régime in 1972–79 decollectivised some land by restoring it to the original largeholders, much stayed with, or went to, the poor. In 1979 'the largest landholders [i.e. above 80 basic irrigated ha controlled] 25–30 per cent of the total land, about half of what they held in 1965', while 'small farms' (below 20 basic irrigated ha) raised their share from a fifth to half [Jarvis 1986: 20–22].<sup>74</sup>

Kay [1998] argues that the reversal of Latin America's collectivisation, far from bringing an egalitarian end to the 'terrible detour', interlocked with dogmatic State minimalism to pave the way for large capitalist farmers. In Peru, these are the gainers 'from the liberalisation of land, labour and financial markets, the further opening of the economy to international competition, the new drive towards exports and the withdrawal of supportive measures for the peasant sector'; their 'greater land, capital and technical resources [and] superior links with ... markets and greater influence on agricultural policy ensure that they are more able to exploit the new market opportunities than peasant farmers'. Similar post-decollectivisation advantages for large capitalist farms, even (or especially) in the potentially highly employment-intensive horticultural sector, are claimed in Chile and Mexico.<sup>75</sup>

Kay concludes that in Latin America 'the main legacy of agrarian reform [was] hastening the demise of the landed oligarchy ... clearing away the institutional debris which prevented the development of markets and the full commercialisation of agriculture. Thus the main winners have been the capitalist farmers. Though a minority of *campesinos* gained some benefits, for [most] the promise of agrarian reform remains unfulfilled'. Yet this assessment, as Kay himself shows, is too gloomy. In Chile '[as] between pre-reform (1965) and post-counterreform (1986) ... [land in] the 5 to 20 basic irrigated ha [basic irrigated ha equivalent] farm sector more than doubled, while the large-farm sector (more than 80 basic irrigated ha) was reduced by more than half'. In Peru, '[where decollectivisation was] the largest to date in Latin America ... farms of less than 10 ha ... currently control about one-half of Peru's agricultural land and about two-thirds of ... livestock' [Kay 1998].

There remain huge, unreformed swathes of Latin America, including Argentina and most of Brazil, where most farmland is still on huge *fincas* owned and farmed by (increasingly capitalised) descendants of the *colons*. But small farms cover huge tracts of post-detour land. There, the stage is set for a classic battle. Though the detour has reduced the huge historic bias towards excessive farm size, land under-use and capital-intensity, much land remains in underfarmed largeholdings. So will farms get smaller? Even if today's optimum size is small, it rises with the continent's development. Farm labour is becoming scarcer (already below 20 per cent of Latin America's workforce is mainly engaged in farming) and investment per hectare more plentiful. How far will the 'playing field' be tilted to favour rich farmers? Much depends on small farmers' access to radically changing markets, including supermarkets (pp. 88–91).

In sub-Saharan Africa, only few countries collectivised, and those only partially, and usually disrupted by civil war. Hence there was little to decollectivise. As in Mozambique, the process cannot pave the way for land reform if it merely transfers farmland from State or collective largeholdings to private ones.

#### *(iv) Overarching issues*

China-type and most LAA-type decollectivisations left the rural poor controlling substantially larger shares of land, and (because farms were smaller) benefiting from more employment-intensive output paths, after decollectivisation than before collectivisation. Most CIS-type and East Europe-type decollectivisations left the rural poor's share of land control less, and the employment-intensity of the agricultural growth path much less, after decollectivisation than before collectivisation – though meanwhile many rural poor had found new and better life chances in the cities.<sup>76</sup> The poverty effect of decollectivisation and its aftermath depends on six issues, some of which arise also with other types of claimed land reform.

- (i) What is the time-path of farm size? During and after decollectivisation, land may shift to (i) household plots, (ii) small farms or (iii) large farms. In developed, capital-intensive farming, (iii) has efficiency advantages. Only shifts to (i) and (ii) are normally land reform.
- (ii) Do laws restitute or redistribute State/collective land?<sup>77</sup> Restitution to former owners or descendants may seem fair, but is it land reform (shifting land or power to the poor)? A prior choice is:
- (iii) Are rights to income from land, water and capital individualised by physical split of area, or by distributing shares while keeping central management of the farm)? If the former, linked choices are:
- (iv) Do laws place land, water and capital under household usership with lease, or full ownership? and
- (v) Should usership/ownership be unrestricted, or subject to residual State holding?<sup>78</sup> On all three issues, too many assume that decollectivisation does best if the new land laws ape those of some rich country.
- (vi) If decollectivised farms are small and fairly equal, are they stable, or reallocable in face of demographic change, e.g. as between households becoming smaller and households becoming larger?

In each case, the choices affect the poor via wages and employment, as well as direct income from land.

**I. Time-path of farm size after decollectivisation.** In the early 1990s, many expected that decollectivised agricultures would either stay in huge farms (because collectivised rural people had lost the will or ability to farm), or move swiftly to family holdings (because of their greater efficiency). In reality, such agricultures differ hugely in farm size and in associated economic structures, partly due to path-dependence: ‘institutional innovations [early in decollectivisation] address constraints and opportunities posed by the current structures, [thereby] “locking in” [those] structures’ [Swinnen 2006] to some extent. In Russia, as in much of the CIS, divestment from State or collective farms was largely formal. Big corporate farms occupy well over half the farmland, and ‘in the grain producing regions of Kazakhstan and Russia ... have developed as part of vertically integrated agribusiness companies, sometimes owning and operating more than 100,000 ha’ [Swinnen 2006]. Small areas have become private farms, averaging 50 ha in Russia, largely family-worked. A further small share of decollectivised land has been added to household subsidiary plots (owned by almost all rural and many urban families); in the straitened times of early transition, their average size rose.<sup>79</sup> At the other extreme, such enterprises – small, fairly equal family farms – occupy the huge majority of decollectivised farmland in Albania, Armenia, Azerbaijan, China and Romania, and to some extent Moldova (after 1998), Kyrgyzstan, the Baltic States and Georgia. The average farm in China was 0.466 ha in 1992, almost all in family holdings below 3 ha [Fu Chen and Davis

1998]; in 1997, 161m (of 193m) farms were below 0.6 ha [FAO 2000] and this has changed little since.<sup>80</sup> In between, most East European countries (including the Baltic states) are tending towards 10–40 ha family-farmed holdings, but significant farm employers and landlords have emerged.

The big impact on employment, and hence poverty, of the farm size trajectory after decollectivisation is shown by the contrast between Armenia and Hungary [Giovarelli and Bledsoe 2001]. Armenia followed a ‘China-type’ egalitarian decollectivisation with an ‘East Europe-type’ land privatisation. Compared with the collective large-farm régime of the 1980s, by 1999 agricultural employment had doubled, to 41 per cent of the total. By 2002 Hungary had ‘not significantly transformed its farm sector’. Though preparation and conditions of entry to the EU induced privatisation, large farms with corporate structures remained, and ‘agriculture’s role in Hungary’s economy ... declined [although] Hungary has more arable land *per capita* than most other European countries[,] relatively fertile and well suited for agriculture’.

Also, the dollar-poor are more food-secure if decollectivised farmland is distributed more equally. They typically use half their income (including ‘subsistence’) for staple foods, which are subject to periodic price shocks.<sup>81</sup> If the poor have land, they lose less when world demand boosts staples prices, and in some cases, as in Vietnam, may gain, even in the short run [World Bank, cited in Beattie and Blas 2008]. Further, in the longer term, higher demand-based grain prices increase incentives to expand food production; these are likelier to shift poor people into the ‘net seller’ category if they have significant land.

This ‘Vietnam’ situation, with most of the poor at worst immunised against significant loss when food prices rise, probably prevails in China, Albania and other ‘China-type’ decollectivisers, but not in CIS countries with almost seamless transition from the vast, centralised, vertically integrated, pseudo-collective or State farm to the vast, pseudo-decollectivised,<sup>82</sup> proto-capitalist farm corporation. Collective and State farm managers – like the industrial and energy oligarchs who ‘inherited’ State industrial and mineral enterprises – used their position at the intersection of State and market to allocate land above all – but also power, jobs, incomes, and (often) subsidies and other ‘competitive’ edges – to themselves, not to competing small farmers, actual or potential.

Defenders of large-farm post-collective trajectories might claim that leaving the poor with more land (and keeping farms small and employment-intensive), even if raising the poor’s *share* of income, impedes agricultural growth if rising capital/labour ratios make larger farms more economic. Yet then, even as *operated* farm size rises, the poor may still gain (a) if they *own* some land, and can rent it to larger farms, recouping part of the growing farm income (reverse tenancy); (b) if, as they are eased out of low-income farming, they are absorbed into labour-intensive but higher-income, manufacturing and service work, rural and urban. Large-farm pseudo-decollectivisation does not stimulate such outcomes.

A nation's farm size path after decollectivisation often looks as if it might have been otherwise, with a slightly different turn of agricultural, economic and political events. But is this illusory, with the path determined by interlocked State/corporate-farm power, or by factor scarcities? It is tempting to be a post-decollectivisation determinist. For example, though he does not state that position, Swinnen's [2006] account of northern Kazakhstan<sup>83</sup> is consistent with class determination of farm size and structure by powerful, State-capturing classes: politicians, bureaucracy, plus State/collective farm managers pseudo-decollectivised into a corporate *grande bourgeoisie*. The classes seem to collude to preserve vertically integrated giant farms, and to share the gains – political, not just economic, rents – from market and State power.

An alternative, market determinism sees farm size as determined by factor endowments, exploited by individual maximisers. Everywhere, rural-labour is getting scarcer and capital more plentiful; this has induced rising farm size in developed countries, decollectivising or not. Yet farm size has fallen in low- and middle-income countries – again decollectivising or not<sup>84</sup> – as individuals and States correct previous inducements to over-large farm size – despite plentiful labour alongside scarce savings and capital. These remain after decollectivisation, so smaller, family farms have market advantages (chapter 2). So, even if the control of decollectivised land stays with the political/farm-managerial classes, they may best secure their position, political or economic, by turning the ex-State/collective farms into household farms, as in China or Vietnam. Even if they do not, it will pay the controllers of remaining huge farms to sell or rent land to small farmers. Then the land brings more money for all – however the money is shared among farmers, landlords, ex-managers and politicians – than if the latter groups cling to inefficient control of the huge post-collectivist farms. If, after decollectivisation, rural labour becomes increasingly scarce and dear, while domestic or foreign capital is increasingly available, efficiency considerations may justify farms larger than the 0.5–5 ha that a peasant household normally crops – but far smaller than the monster Soviet-style farms of Russia or North Kazakhstan,<sup>85</sup> which even after decollectivisation carry radical inefficiencies.

Does class determinism, market determinism, or neither explain farm size after decollectivisation? Big-farm paths are commoner where rural labour capital and labour/land ratios are low, large proportions of workforce have urbanised, and so there is widespread mechanisation, especially wheat combining; and where the collective–corporate interlock between State and managers carries over, with little democratic or market modification, from communist to later forms. Where both apply strongly, decollectivised farms have been large; where neither applies, small. More typically, especially where the two indicators point in opposite ways, farm size trends have been diverse and unpredictable. In short, two rival determinisms, each plausible and with some supporting evidence and examples, are really no determinism at all.

Several examples illustrate this. In Kazakhstan, crop economics radically modify post-collectivist power. 'The northern regions are dominated by vast



grain-producing farming corporations, sometimes using hundreds of thousands of hectares': State/corporate power works with the 'grain' of low labour/land and labour/capital ratios. Its scale-seeking tendency is overcome in southern regions by crop-specific advantages of smallness: 'the cotton areas ... are dominated by very small household farms' [Swinnen 2006]. In Hungary, large State and collective farms were transformed into large corporate farms, and stayed that way well after 2000; in sharp contrast, in similarly fertile soils in Armenia, 'Chinese-style' decollectivisation generated egalitarian small farming [Giovarelli and Bledsoe 2001]. Yes, capital/labour ratios in Hungary were somewhat higher than in Armenia, and Hungary's impending EU entry favoured larger farms with more market integration, and perhaps reduced the prospect for special Government favours to smaller farms; but that does not explain the extreme divergence between the Hungarian and Armenian farm-size paths. Further, in Hungary after 2002, farm sizes converged: the large pseudo-decollectivised corporate farms became not only more genuinely private but smaller, as they sold and rented land; the smallish family farms became somewhat larger.<sup>86</sup> There is more scope for human agency to affect the time-path of farm size after decollectivisation than neo-Marxist or neo-classical determinism suggests.

Public-choice and rent-seeking theory proclaims, sometimes to excess, that human agency in politicians and civil servants is corrupt. But it is perhaps more important that they and their advisers are often in error. For instance, they reject a small-farm path because they confuse small farms with small plots. Fragmentation of farms into small *plots* may well harm rural output and income [Oldenburg 1990]. But this does mean that small *farms* do so. In most of the CIS, larger farms are seldom as efficient as smaller ones [Hanstad 1998]. Rembold [2003] shows the damage from plot fragmentation after decollectivisation in Eastern Europe, but one should not infer that there is something wrong with small, fairly equal farms. If 'cooperative and state farmlands were distributed according to equity principles, [ignoring] farm management aspects', so that 'parcels ... were either too small or were badly shaped, for instance in length-to-width ratio', the remedy was and is better plot parcelling, not reneging on 'equity principles' in farm distribution. Yes, 'Bulgaria and Romania [were both in process of joining] the EU', so that 'to increase productivity, efficiency and hence competitiveness ... land re-parcelling and consolidation [were] vital', but that implied organising *plot* exchanges and shaping: imposing more *farm* inequality was irrelevant.

In 1986 the average decollectivised 'household responsibility' farm in China covered 0.466 ha, but was fragmented into 5.85 plots, each averaging only 0.08 ha, partly because, with parcels differing in 'soil fertility, irrigation conditions, location ... a household had to obtain parcels from each of the grades [so that] the total was not only insufficient but also fragmented and scattered around villages' [Chen and Davis 1998]. But why should not farmers be assigned – or helped to reach by fair market transactions – a consolidated area? Where lands have long been private, as in India, this is usually a long

and costly procedure, requiring farmers' consent to exchanging plots that they have long owned and farmed, and usually to agreeing side payments (pp. 241–3). Decollectivisation offers a chance to pre-empt this, offering a simpler route towards unfragmented family farms. Instead, analysts have conflated desirable *plot* consolidation with questionable avoidance of small *farms*. This helped forward the grave error of decollectivising not land but 'shares' in State/collective farms (section III): 'identification of land [for individuals] in the field would result in the fragmentation of land and a further need to conduct costly land consolidation [as in] former Soviet Republics, where the demarcation has physically taken place in the field ... physical demarcation of land should be avoided or done with great caution' [Overchuk 2003]. But each new farm can be demarcated in one consolidated plot. Instead, avoiding demarcation through 'share privatisation' has proved largely bogus, allowing the same farm managers to keep control of giant enterprises (section III).

In some decollectivising areas, a small-farm path does have worrying associations. In the Baltic states [Gorton and White 2002], decollectivising politicians backed restitution to smallholders out of 'agrarian nationalism ... a belief that the identity of a people is rooted in the land, generating notions of a smallholder society as ideal',<sup>87</sup> plus neo-liberalism adopted not for economic reasons but 'as a reaction to communist orthodoxy and as part of a process of reasserting ... linkages with Western Europe'. Often, however, small-farm decollectivisation (in Armenia, Azerbaijan, China, Romania, Vietnam and elsewhere) is motivated mainly by small farms' efficiency and equity advantages. Their collectivist predecessors failed largely, though not wholly, because vastness impeded co-ordination and labour management.

Post-collective small farming is sometimes condemned because (as in south-eastern Europe) 'most private farmers are restricted to subsistence agriculture and cannot participate in commercial production' [Rembold 2003]. In Mozambique, despite unemployment inducing major emigration and dire capital shortage, politicians have sought large-farm outcomes for decollectivised land out of 'a deep and persistent view among urban élites ... that small farmers are purely subsistence-oriented' and that this is somehow wrong or anti-modern [Tanner 2001]. Yet almost every farmer buys some inputs and sells some outputs.<sup>88</sup> She avoids food purchases (by storing product for later home use) only when this option seems best for food security and/or profitability. Such 'subsistence', or self-provisioning, increases food security in hard times (e.g. in 2009–10?), reduces demand problems and marketing costs in good times, and is not harmful unless artificially stimulated by incomplete markets, poor risk management or bad transport. That small farmers may choose subsistence is a terrible argument for keeping over-large farms.

A more justified concern is that, after decollectivisation, small, equal family farms – especially pending the arrival of *competitive* service providers to formerly collective areas – may lack the services (FRIS) formerly provided by large corporate farms. But why leap to advocacy of large corporate farms, pseudo-decollectivised or genuinely private? A common alternative is farmers'

service co-operatives, often seeded or subsidised initially by the State. Sabates-Wheeler [2007; see also 2002] finds that 'poorer communities in Kyrgyzstan and north-east Romania [demonstrate] safety net, labour specialisation, asset-pooling and service delivery functions of different groups ... [With] imperfect information, sluggish labour and land markets, and constrained capital markets ... small to medium forms of cooperation provide the rural poor with predictable livelihood strategies under conditions of uncertainty [and] substitute for imperfect markets'. Several papers in Thiesenhusen (ed.) [1989] show that in Latin America decollectivising farmers, when given the choice, keep some activities joint, while choosing small-scale, family solutions for cropping. This argues for helping small farmers to co-operate to provide services, or discharge functions, where scale economies outweigh transactions costs of co-operation. As with consolidation, so with service co-operatives: decollectivisation may provide a timely opportunity. However, this does not justify incentives, let alone compulsions, to big co-operative farms; farming lacks scale economies outside the most developed, capital-intensive areas. In many countries large collective farms, with compulsory membership, State-appointed senior staff, and rigid and detailed State control, had been 'administered under the label of cooperatives ... [though] imposed from above in a forced collectivisation process. Consequently, among many [rural people] cooperation in agricultural production [lacks] the positive and idealistic connotations it has had in the traditional cooperative movement throughout Europe and North America. In its place, we find a strong psychological resistance to cooperation, bred from years of abuse of the whole concept' [Gardner and Lerman 2006]. 'Farmers interviewed in [ex-collective] areas with a substantial number of individual farms' even strongly resist 'service co-operatives, because they see too many similarities [to] the collective organisation they have left behind' [Lerman *et al.* 2002].

As well as access to FRIS, a further justified concern about decollectivisation to small farms is whether they can increase farm size – perhaps by lease, amalgamation or sale – when indicated by development and rising capital/labour ratios. China has featured, in the 30 years since the start of the HRS, several experiments in seeking a reasonably equitable path to larger farm size. The most widespread was the 'two-land system', initiated by Pingdu County in 1984. By 1992 it had spread to over 47 per cent of China's cropland. Each household was assigned 'food land' for subsistence, and could bid for renewable leases on further 'contract land ... in relatively large parcels', meaning 'usually 1.33–2 ha' [Chen and Davis 1998; see also Prosterman *et al.* 1998; Zhou 2000]. Here and subsequently, we see no rush to hugeness in Chinese farming, nor in that of other decollectivising countries that opted for small family farms.

How did farm size paths during and after decollectivisation affect efficiency? We should separate the effects of farm size and of family or corporate status. Corporate farms are often under strong pressures towards efficiency in fairly open, competitive, institutionally evolved environments with easy land sales and rentals, e.g. in Australasia or North America. However, such pressures

are weaker in pseudo-decollectivised or 'crony capitalist' farming régimes. There, corporate giants in farming and elsewhere are favoured against small and family competitors by laws, subsidies, soft budget constraints, and privileged access to input and output markets, so that profits depend more upon political access and market control than on efficiency in, say, crop choice or conversion of inputs into outputs. Pressures to efficiency are greater, and less diluted, in family farms – yet they also have less access to the information and knowledge that make efficiency possible. As for scale, the huge advantages of, and gains from, moving to smallness in labour-intensive agricultures are well documented; even where capital/labour ratios are already high, efficiency will normally gain from downsizing the vast collectivist (albeit 'decollectivised') farms of, say, northern Kazakhstan. But where labour-absorbing industrialisation is dominant, rural workforces small and shrinking, and agriculture increasingly competing with large farms in the industrialised world, the most efficient farms are not the smallest; it would be silly to lock decollectivised agricultures into a path towards Japanese or South Korean agriculture, in which, despite scarce farm labour and plentiful capital, subsidies and cossetting maintain tiny, high-cost farms on scarce peri-urban land for politico-sentimental reasons. EU members such as Poland – the only ex-communist country with evidence of scale economies over part of the range of farm sizes – do not optimise through very small farm size.<sup>89</sup> On the other hand, most of the CIS would gain efficiency, and cut poverty, by edging towards a Chinese small-farm path, away from pseudo-decollectivised gigantism. There is enough 'human agency' for this to be conceivable.

Can one separate the efficiency consequences, under decollectivisation, of scale and organisational form? Almost always, giant farms are corporate organisations, and tiny farms family-run. In between, the larger the farm, the likelier it is to be corporate; but there are plenty of moderately large family farms, and in some cases a fair number of smallish ex-collective corporate farms. In Russian agriculture, output, both per worker and for a fixed amount of land and labour, is significantly higher in regions with a larger share of farmland in individual (as against corporate) farms [Lerman and Schreinemachers 2005]. In 2003 Dudwick *et al.* [2005: 10, 33, 49, 63] found that family farms achieved over triple the total factor productivity of corporate farms in Moldova, over double in Azerbaijan, and almost double in Kazakhstan, but apparently<sup>90</sup> only half in Bulgaria, the most capital-intensive of the four agricultures; in the others, even total factor productivity (TFP) and output, let alone equity, suffered from keeping land corporate rather than family-farmed. Land productivity on family farms was seven times that of corporate farms in Bulgaria, triple in Moldova, double in Azerbaijan, and one-third higher in Kazakhstan; in Azerbaijan even labour productivity was twice as high in family farms, but elsewhere corporate farms, given post-collective freedom to dismiss workers where profitable, intensified capital use and achieved 50–200 per cent higher labour productivity.

Can one separate the effect of farm size? Only in Moldova were farms below 5 ha sampled (113 out of 200); their TFP was over double that of the

next smallest group (the 26 farms of 5–10 ha) and TFP continued to fall as farm size rose.<sup>91</sup> Elsewhere, farms were sampled in six groups, ranging from 5–10 ha to over 500 ha. In Kazakhstan, of 200 farms sampled, the 22 smallest (5–10 ha) had the highest TFP, 19 per cent above the level for all farms, but the next-smallest farms (10–50 ha) fell 23 per cent *below* that level. Azerbaijan's 80 sampled farms showed no relationship between size and TFP. In Bulgaria the 5–10 ha farms had TFP over double that of the 13 with 10–100 ha, but some 20 per cent below that of the 21 largest farms (above 500 ha) and well below half the TFP of the eight farms of 200–500 ha – but the tiny sample (57 farms), none below 5 ha, makes inferences dangerous. The inverse relationship was strong: the smallest size-group produced twice the value per hectare of the largest in Azerbaijan, 2.6 times more in Bulgaria, 4.2 times more in Kazakhstan, and *seven* times more in Moldova, the only country with farms below 5 ha sampled. Conversely, except in Moldova, labour-productivity normally increased with farm size. Overall, higher land productivity of small and family farms argues for them as land users anywhere; given the output level, they leave more land free to meet non-farm demands or needs such as housing or parks. Higher labour productivity on large and corporate farms argues for these only to the extent that the 'freed' labour is employed elsewhere at production levels – and labour benefits – at least comparable to those lost in farming.

Might the above findings be driven, less by the superiority of smaller and individual farms, than by tendencies for regions with better farmland to be more readily individualised, or split into smaller units?<sup>92</sup> The evidence of chapter 2(e) (iii) suggests that this is sometimes part of the story, but not more. A review of the sequence of change by Swinnen [2005, 2006], covering a wide range of decollectivisations, also suggests causation from smaller, less corporatist decollectivisations to better performance. In labour-intensive countries (farms above 0.2 workers/ha) countries shifting 'from large-scale collective ... to small-scale individual farming [enjoyed] strong gains in technical efficiency with relatively small losses in scale efficiency ... China, Vietnam, Albania, Armenia, Georgia and Romania [experienced] significant gains in productivity'. Where large farms do show higher TFP, where 'farming was more capital- and land-intensive [below 0.14 workers/ha], [such] gains came primarily from [decollectivised] large farms shedding labour, [which] during the first five years of transition ... declined by 44 per cent on average' in the Czech Republic, Slovakia and Hungary; Estonia too had a 'massive outflow' of farm labour. Even in many parts of the CIS that took the big-farm path, the subsequently continuing higher productive performance of home gardens ('household plots') is well documented;<sup>93</sup> more generally, smaller units proved more efficient [Hanstad 1998], at least outside the levelled and combine-harvested wheatlands.

Structural change in the small-farm decollectivisers raised farm output and technical efficiency, and redistributed land income and increased labour demand and staples supply: both pro-poor. In the large-farm decollectivisers, higher farm efficiency was due to reduced demand for farm labour, and was

accompanied by regressive land and land income redistribution, all anti-poor – but usually labour-shedding allowed rising GDP with non-farm labour absorption, eventually with net gains for displaced farmworkers. But this took 5 to 10 years, during which farm change brought these people, many poor already, clear loss. That may be the main reason for the contrast since 1990 between sharp falls in poverty in most small-farm decollectivisers, but sharp rises in most large-farm decollectivisers [Chen and Ravallion 2007; World Bank 2008: 336–37]. If the events of late 2008 presage prolonged recession, that further strengthens the employment and security case for smaller-farm paths in decollectivising countries – and elsewhere.

The trajectory of farm size interacts with other overarching issues after decollectivisation (sections II–VI), but the interactions are neither universal nor immune to policy. Restitution has generally had larger-farm, less pro-poor outcomes than redistribution, but these were avoided in countries where priority for restitution was given to poorer claimants intending to farm the land themselves, and where restitution to the better-off was in cash rather than in farmland. Pseudo-decollectivisation did *tend* to ‘fix’ earlier gigantism, but not all collective and state farms were giants, and later policy sometimes removed laws or incentives for post-collective farms to stay either corporate or huge (on the striking turnaround in the Ukraine, see pp. 224–5). Assigning family farms usership rights, rather than fuller ownership, was partly intended to protect them against emerging land inequality (e.g. after repossession by mortgage or other lenders), but is neither necessary nor sufficient for that, and sometimes proved irrelevant or even counter-productive. State residual ownership can protect – or threaten – mainly big farmers, or mainly small ones. And, while population-based land reassignments in some decollectivised agricultures do ‘fix’ farm size (usually small and equal) at the cost of farm security and investment, there are better policy responses to rural demographics, as a source of inequality or otherwise, that have little impact on farm size trends. While farm size trends after decollectivisation interact with all these five issues, such trends depend mainly on human agency, as well as on conditioning (but not fully determining) factors in two spheres: capital/labour ratios, markets and prices; and corporate, farm and State class power.

**II. Equity versus equality: restitution or redistribution?** Apart from using, say, 1–5 per cent of land to create or enlarge home gardens, and apart from pseudo- or ‘share’ decollectivisation (section III), decollectivisers have two options: to redistribute land to members of collectives, or State farmworkers, usually in proportion to household size; or to reconstitute land to former owners. The ‘China-type’ decollectivisers, except Romania and Georgia, chose redistribution. In most of the CIS, pseudo-decollectivisation apart, ‘land [was given] to those who worked it’ under collectivism. However, most ‘CEE countries have [restituted land] to former owners’ [Lerman *et al.* 2002] dispossessed by collectivisation, or to their descendants (as did the Baltic republics, influenced by resurgent nationalism

[Gorton and White 2002]<sup>94</sup>), though Hungary and Romania combined restitution and redistribution [Brooks and Lerman 1994a: 27]. Restitution can reach redistributive results if, as in Bulgaria [Kopeva *et al.* 1994: 203–4]<sup>95</sup> and Albania,<sup>96</sup> it is to farm families that had owned land, not very unequally, before collectivisation and then continued to farm when it was taken over by larger State or collective farms. Elsewhere, restitution normally restores very unequal pre-Communist farm régimes; indeed, their inequality had been a major source of support for communism.

Restitution attracts (a) countries and politicians prioritising return to reliable legal forms, permanent and inviolable property rights, and economic arrangements and laws, such as those of the European Union, based on them; (b) countries where earlier urbanisation and rural development indicate capital-intensive, large-farm paths: in the Czech Republic in 2000 only 8 per cent of workers remained agricultural. However, restitution to the rich descendants of ex-owners, usually with little recent or relevant experience of farming or even leasing, seldom induces efficient, let alone pro-poor, farm size. Sometimes a strong legal and moral case can be made for restitution, e.g. to clearly identified, relatively ‘innocent’ farm families subjected to recent collectivising expropriation. But then should restitution be in land rather than cash?<sup>97</sup> In the Czech Republic and to some extent Hungary, significant farmland is finding its way back to ex-aristocrats, ‘Big Men’ with local monopoly power, or other descendants of victims of expropriation; often the families have long resided in cities, or abroad. Even if such people had been rural tyrants, benevolent or otherwise, expropriation without compensation was unjust, and there are hard cases. Farmland owned by Jews, often not rich, in East Germany, Czechoslovakia, Hungary and Poland was stolen in the 1930s and 1940s under Nazism, and collectivised after 1945 (still without compensation) by successor communist régimes. Yet it would also be unjust, and far from land reform, to move from the local equality of forced joint farming (albeit with hidden extraction to the centre and to State and party bosses) to the old, grinding inequality and hierarchy of much of Eastern Europe in the 1930s. Even if restitution does restore substantial farmland inequality, decollectivisation would leave the poor less poor than then, or even under Communism, partly due to urbanisation and industrialisation. Also, some of the returned Big Men might well take the ‘Junker path’ to progressive, albeit labour-displacing, large-scale capitalist farming. Yet land ‘restitution’ that is, literally, reactionary and maldistributive cannot be land reform.

In several countries, difficulties in restitution, notably in choosing between conflicting claimants, delayed decollectivisation [Giovarelli and Bledsoe 2001]. In Bulgaria and probably elsewhere, restitution produced older farmers than redistribution would have done [Dudwick *et al.* 2005]. Decollectivisers who redistribute and those who restitute do not, as a whole, show different medium-term results [Lerman *et al.* 2002]. That is

unsurprising: restituting big farms to urban Czech businessmen is very different from restituting small units to former Albanian owners who have since worked collectivised land.

Restitution and redistribution of formerly State or collective farmlands embody different *moralities*, with different long-run effects on economic behaviour and hence outcomes. The case for redistributing land to poor workers who have farmed it – rather than restituting it to descendants of large owners relieved of ‘Big Man’ status long ago – is normally strong. Often reality is that simple, but sometimes it is not.

- (1) The case for restitution is stronger if land was collectivised recently, without compensation, and from farmers or landlords who had acquired it by work or saving rather than inheritance, behaved properly towards tenants and workers, and enjoyed little affluence or monopoly power. The case for restituting land rather than cash is often weak, but less so if the recipients have active or recent links to farming.
- (2) The case for redistribution is weaker if few of the poor, even the rural poor, still depend mainly on, or are disposed towards, farming. As with restitution, even if the principle is accepted, the case for applying it to land rather than cash is also not self-evident. Former workers on State or collective farms may have better chances to escape poverty if compensated, not with farmland, but with a similar value of access to education, apprenticeship, capital for urban enterprise – or cash to use as they think best.
- (3) Is redistribution of collective farmland to its former workers, i.e. in small units, preferable to restitution on the principle ‘The valley to the waterers, that it yield fruit’?<sup>98</sup> That depends on the extent to which (i) high labour/capital ratios make an efficiency case for small and fairly equal farms (chapter 2); (ii) the ex-workers, rather than the original incumbents, have worked the land they acquire and (iii) have recent family managerial experience on it, or on similar land, before collectivisation or (if that was decentralised) during it; and/or (iv) decollectivisation into big farms tends to continue corporate collectivism by other means, even as pseudo-decollectivisation.

We have shown that the first three conditions often, but not always, apply. We now turn to the fourth.

### **III. Pseudo-decollectivisation and the long shadow of ‘share privatisation’.**

Though Communist rule ended in 1989–90, by 2000 most farmland in the CIS and much of the CEE – even in some countries on the verge of entry to the European Union – had been merely pseudo-decollectivised. ‘In the Czech Republic, for instance, privately owned agricultural land is still to some extent incorporated into large user units (a heritage from the era of collective management) which prevent private landowners from using their own land for farming’ [Rembold 2003]. ‘Agriculture [was] still



dominated by large, collective-style farms in many EU accession countries' including Hungary, the Czech Republic and the Slovak Republic'. In these countries, Slovenia, and Croatia, there were even laws against subdivision [Giovarelli and Bledsoe 2001]; everywhere the playing field was tilted to favour big farms. This assisted the almost seamless conversion of corporate units – despite their hugeness by EU and even US standards, and their inferior performance compared with family and smaller farms – from the inefficiency of collectivism to that of the EU's Common Agricultural Policy. Though decollectivisation became genuine after 1998–99 in the CEE and the Ukraine, and has also prevailed in former Yugoslavia and the Baltic republics, major relics of collectivo-corporatist gigantism remain. In Hungary, share-based decollectivisation and leaseback meant that 'unfavourable farm structures were established in a great number of cases' [Popp and Stauder 2003]. As late as 2005, only half the farmland was in 'private farms' averaging 27 ha, and the rest in 'economic organisations' averaging 395 ha, often retaining the personnel, and some of the stigmata, of a State/collectivist management that has morphed readily into corporate farming [Hubbard *et al.* 2007]. All this is despite the fact that countries joining the EU must 'liberalize their land markets and open them up to foreign ownership and occupancy of land' [Grover 2006]. As for the CIS, in several countries decollectivisation remains cosmetic even today, despite a constant stream of 'privatisation' laws.

How did, and do, collective and State farm managers keep power? First, and by preference, they issued 'shares' in the nominally decollectivised farm, instead of dividing it into individual farms with rights to usufruct, let alone ownership.<sup>99</sup> In practice, 'paper shares represent partial ownership of a large tract of shared land, which in reality is managed and controlled by somebody else'. Second, 'in some countries managers of former socialist farm enterprises [exploited the share recipients'] lack of experience with individual farm operation to entice them to sell their shares of formerly collective land [which remained] concentrated in the hands of a small number of farm bosses' [Lerman *et al.* 2002]. Third, even where farm members or workers received land, or were nominally allowed to convert a share into land, they could be virtually compelled to lease it back to the management of the old, vertically integrated State or collective farm, due to its power over inputs, output markets, and credit. 'The malfunctioning of rural output and factor markets ... in many cases prevented households from leaving former collectives' [Deininger 2003].

Political preference, or tolerance, for post-communist farm collectivo-corporatism makes it likely that share decollectivisation will be pseudo. It locks in power structures, and institutions, that cast a long shadow. However, escape is possible, as in Moldova (p. 370, note 57) and the Ukraine. There, earlier reforms 'failed to radically change the traditional collective organisation of Ukrainian farms', but in December 1999 'a Presidential Decree ...

[converted] the 'land shares' into demarcated and titled physical plots' so that '7 million rural residents became owners of physical land plots, not just paper shares'. Yet, even after such reforms, the shadow lives on. Often it brings an almost Latin American polarisation of land. Ukrainian corporate farms, even now, occupy 60 per cent of farmland (though producing only 30 per cent of gross output) and average 1700 ha, far above the 500–600 ha typical of corporate farms in the USA. Only 7 per cent of farmland is in peasant farms (mean size 140 ha) and 33 per cent in household plots (mean size 1.7 ha), farmed by households getting most of their income from non-farm work [Lerman *et al.* 2007]. More extreme cases are Belarus, Russia and northern Kazakhstan, between them with most of the farm area and population of the former Soviet Union: decollectivisation, apart from 7–10 per cent of land in private farms and household plots, remains confined to share certificates and is largely cosmetic [Giovarelli and Bledsoe 2001; Gorton and White 2002; Rembold 2003; Bagherzade *et al.* 2007; Lerman *et al.* 2007].

At the highest level, Russia's decollectivisation was meant genuinely. It was made pseudo by the powerlessness and inexperience of the intended beneficiaries, the lack of farm services outside the ambit of the giant state and collective farms, and the self-interest of their farm/bureaucratic élite. Yet privatising 7–15 per cent of Russia's vast farm area, while socio-corporatising much of the remainder, seems and is a big effort: '*No country has experienced the extent of changes to land tenure patterns as did Russia in the 1990s. ... By 1998 some 129m ha (7.6% of the country's total area) had been transferred into what was declared to be ownership of individuals and legal entities. This figure has remained stable since, with ... some decline in the share of privately held lands. [Their] area is comparable to ... continental Western Europe*' [Overchuk 2003]. Yet the words I have italicised hint at a different reality [Swinnen 2006]: though the régime genuinely sought in the 1990s 'to create a new class of landowners and to increase the efficiency of farm production by breaking up large state and collective farms into smaller privately operated farms ... this often [led to farms changing] their names from old-fashioned state and collective farms to ... partnerships, cooperatives and corporations as a proxy for change. [Though] some 12m people suddenly became legal owners of 119m ha of prime agricultural land [, most] never planned ... land ownership and [many] had neither worked in the farm sector nor planned to. Early reformers [saw] land shares as [allowing] transfer of land from the state to private individuals ... [but] most land-shares owners [leased] to large farms ... Less than 5 percent ... transformed their land into ... independent private farm[s]. Land parcel boundary plans ... for owners of land shares ... were almost never demarcated in the field.' So the old management retained its powers, even though 'only about 10 percent of large farms remain in state hands'.

Russia's ex-collective/State farmers tended to be both old and without farm-management experience. That cut demand for private farmland [Wegren and Durgin 1997]. Yet the main problem is repression of the demand that does exist. Collective farm managers in the Russian Far East frustrated the

intention of the laws, leading to 'pseudo-privatisation': members not only could not turn their shares into land, but were not compensated for collectives' retention of all rights in them [Duncan and Ruetschle 2001]. Share decollectivisation meant that later privatisation might *increase* gigantism [Giovarelli and Bledsoe 2001]: 'workers transferred their land shares [unlinked to specific plots] to the corporate farm, e.g. in exchange for employment. When farms were sold ... the land shares were part of the farm assets and [buyer-]investors ... became landowners. This led to the concentration of land ownership, e.g. in parts of Russia and Kazakhstan, with vertically integrated companies owning now hundreds of thousands of hectares of land'.

Kazakhstan's similar vast effort to decollectivise [Dudwick *et al.* 2005: 40] – 'by 1997, share issues accounted for 118m ha' – proved less pseudo in the South, where substantial areas switched to small-scale cotton cultivation. Yet nationwide 'only [34m ha] were transformed into physical plots for ... family farms', the other 71 per cent presumably staying with, or leased back to, former management. Much of the Caucasus/Asian CIS has avoided such traps, but Tajikistan too seems set on pseudo-decollectivisation by and for a farm/bureaucratic élite set on keeping the power to take farm decisions. Even cotton lands have not gone to smallholders because 'cotton generates considerable income both for the powers-that-be and for the business sector ... the State [decides] how much cotton each region should cultivate ... local authorities [must implement this] and ... cling to the old State farm structure with its built-in hierarchy ... most of the farmers in the survey thought they were still working for State farms because the farms were still being run the same way as before'. As elsewhere, the intention to decollectivise was genuine, but according to the Chairman of the State Land Committee 'as the process was getting under way ... influential and educated individuals saw the personal gains to be made and took control of large tracts of land ... Some [were] heads of local authorities [and] have been keeping farmers in the dark about their rights'. As elsewhere, family farms are few mainly due to restriction of land supply of land to them, but the scapegoat is (alleged) demand failure by a ruined peasantry: the Chairman (while accepting blame for bad planning and piloting) claimed that 'farmers have lost much of their agricultural skills and know-how [because Russian collective managers ran] farm production during the Soviet era' [Nissen 2004].

One can trace sector-specific results from pseudo- and real decollectivisation. Vineyards and wineries formed an island of pseudo-decollectivisation in Georgia (an otherwise egalitarian decollectiviser), and an island of egalitarian decollectivisation in Moldova (until the second, 1998 reform generally a share-decollectiviser). The contrast [Patterson 2007] shows that economic ill-effects proved easier to correct in the marketplace in Moldova, where wine-land ownership became small and fairly equal if initially over-fragmented, than in Georgia, where winelands faced (again contrary to the national agricultural experience) highly unequal privatisation to friends and relations. The damage to wineries in Georgia has proved long-lasting despite widespread

family farming outside the wine sector. In Moldova, a base of tiny wineries, even if initially chaotic, found incentive to reorganise, sometimes on a small scale for local markets, sometimes by rental to larger capital-intensive, vertically integrated units, if appropriate run by ex-collective winery managers.<sup>100</sup> The different paths of crop and livestock farming in Bulgaria illustrate a similar contrast, and show how even CEE candidates for the EU, with its requirements for free land markets, feel the 'long shadow' of pseudo-decollectivisation. '44 percent of land is cultivated by reformed cooperatives and joint stock companies [and has not] undergone the labour shedding'<sup>101</sup> [that in other CEE] countries allowed farms to [shift expenditure from labour to] on other inputs, increasing crop yields. This may explain part of the persistent stagnation in crop yields in Bulgaria, while livestock yields (nearly exclusively on individual farms) have risen dramatically' [Dudwick *et al.* 2005]. As such contrasts confirm, share decollectivisation tends to 'lock in' a transition from collectivism to corporatism – both less efficient, equitable or flexible than fairly equal family farms.

**IV. Ownership or usership?** Where land is genuinely decollectivised into private holdings, in most cases it is initially as usership for a period (often 20–40 years) or life. The owner remains the State, in the form of the residual collective, the Ministry of Lands, or (usually) the local authority. It leases the farm to the new user, who can sometimes bequeath the lease, but usually cannot sell, mortgage, or often rent without State approval, often refused. Defenders of usership claim that it inhibits: gross land inequality, which might arise from unrestricted land sales; repossession of land given as collateral; and new disadvantages for households with faster population growth.<sup>102</sup> Advocates of full ownership claim that it stimulates investment and conservation,<sup>103</sup> permits readier adjustment to family needs and economic incentives, and protects the poor better than usership against land rip-offs. What is the evidence? What do farmers prefer?

Inability to use land as collateral, partly due to usership, continues to impede investment in Russia, both by corporate entities and by private farmers. However, this may not be the main impediment to investment, and to high returns from it, in the climate of pseudo-decollectivisation. Evidence is scanty that, where former communist countries have opted for secure usership rights for a lifetime or 20–40 years (usually renewable and heritable but with no sale or mortgage rights) rather than full ownership, this has greatly deterred investment. 'New institutional economics' suggests that – with some friction, transaction-costs, delay and waste – once the institutions of private land ownership and/or cost-sharing show high returns, they will emerge to permit expanded investment, once it shows a high rate of return. Vietnam's 1998 land law did, however, embody the view that more complete privatisation would help the poor among the new land users and thus constitute more, or

better, land reform. Stronger land tenure security did tend to increase long-term investment among affected households in North Vietnam, additively to a weaker effect of full land ownership title, but the effects were weaker or even absent in South Vietnam [Ngo 2004]; the feared harm to income distribution was small [Ravallion and van de Walle 2008].

Surveys suggest that 50–60 per cent of private farmers prefer lifetime heritable possession, without rights to buy and sell, to untrammelled private sale rights [Overchuk 2003 on Russia; Lerman *et al.* 1994: 49 for the Ukraine; Ping Li 2003 17-province survey in August 2001 in China; Nega *et al.* 2003 on Ethiopia]. Perhaps such preferences are ‘fear of the unknown’ and lapse as experience of ownership spreads. However, fears of repossession, and of markets biased towards richer and stronger owners, are hardly irrational.

On the other hand, decollectivised user-farmers’ lack of ownership rights, far from restraining land inequality, can enable rich outsiders (or insiders) to collude with local authorities and seize land to which the poor lack formal claim.<sup>104</sup> Governments may be complicit in the rip-offs (as in Cambodia) – or unable to stop them. In China ‘farmland is owned by village collectives. Individual [farm households] land rights have been formally strengthened with the extension of land lease contracts up to 30 years, but in practice remain weak ... Low compensation for ... land has become [a] main reason for peasants’ discontent. The government has tried to tighten control over the conversion of farmland to non-agricultural uses and several legislative initiatives have been undertaken to protect farmers’ economic rights, but their implementation remains weak’ [Bagherzade *et al.* 2007; cf. Ping Li 2003]. In Mozambique, usership with ‘State ownership has meant that access to land ... is managed through centrally directed State administrative structures. As market-based mechanisms and local land management capacity play no formal role, gaining access to land has become a very low-cost exercise in real terms [as] *de facto* secure rights (renewable and inheritable long leases) are attributed by the State to successful applicants since 1992 ... large areas have been allocated to private sector interests ... to the detriment of local producers’ [Tanner 2001].<sup>105</sup>

Farm surveys suggest that most poor farmers prefer usership. There is some evidence that decollectivisation is better for the poor with ownership rather than usership, but it is inconclusive, especially if ownership comes with no ceilings or constraint on land accumulation. Are ownership rights *necessary* against growing land and power grab from the poor by the rich and the State, if law and civil society are strong and fair? If they are not, are ownership rights *sufficient* for that purpose, or even useful?

**V. Residual State ownership.** Whether or not the State retains, or asserts, legal residual State ownership (RSO) of farmland (or other land) is, on its own, largely irrelevant to the effect of decollectivisation on efficiency or equity, and indeed to whether it is land reform or not. In many Islamic countries RSO has continued pre-Islamic laws [Forni n.d.].

'Successful market agriculture can develop on State-owned land. [In Israel] most land is leased by the State to farmers for terms of 49 or 99 years' [Lerman *et al.* 2002]. In many, perhaps most, countries, the State is a sort of owner of last resort, retaining a right of 'eminent domain' that allows it to occupy a piece of land – usually, but far from always, subject to court proceedings and/or compensation at market prices – if there is overriding public interest, or sometimes the weaker requirement of 'public purpose'. In many English-speaking countries the government retains – usually in addition to the power of eminent domain – nominal ownership in the sense that it can charge 'land revenue' as a form of rent (rather than tax), as it did in India when a British colony, and has done in independent India ever since.

Forms of RSO exist in both democratic and other countries, decollectivising and other. A farmer with RSO usually has a long lease from the State; this often gives more 'property rights' than all but the longest-lease private tenant farmers enjoy in countries with no RSO, though somewhat fewer than those of owner-occupiers. Sharecroppers in many parts of Asia without RSO are much more subject to arbitrary eviction or revision of contract by private landlords than are even short leaseholders from States with RSO. Some States with RSO do little – and some without it do much – to abridge a farmer's rights to continue farming, to farm what (and as) she chooses, or to sell, rent, or bequeath land. As for the key issue for land reform, whether the State enacts laws or incentives to get land to the poor has little to do with whether or not it asserts RSO. If the State is not subject to overview – if there is neither judicial restraint nor free and active civil society – RSO can be used with little constraint against farmers' property rights. Then RSO is likelier to be used to enforce laws against poor and weak farmers, and in collusion with those among rich and strong farmers who bribe officials and support governmental purposes.<sup>106</sup> However, even without RSO, such States have other effective ways to control farmers, all liable to anti-poor bias in the same way. Nor does RSO as such matter much in democracies with strong civil societies and judicial restraint. There, RSO or not, electoral mandate and legal decisions limit, and to some extent codify, State power to advance some farmers against others – whether as land reform, as its opposite (stimulation of larger and more unequal farms), or as other steps to limit or enlarge property rights.<sup>107</sup>

Ethiopia provides a telling example. During Mengistu's régime, though State or collective farming was initiated on below 10 per cent of land, the State declared RSO of all of it. Mengistu was overthrown by a régime that often states its commitment to private farming, yet RSO remains, alongside its periodic use to redistribute villagers' (already fairly equal) farmland towards families that have grown faster. That power has been decentralised to provincial authorities, and is abused by some of them, with harmful effects on Ethiopian farmers' investment decisions and well-being [Deininger and Jin

2006]. That is largely confirmed by Nega *et al.* [2003], who stress the ‘unfortunate focus on ownership issues’. Analysts endlessly debate private ownership versus RSO. Either is compatible with presence – or absence – of secure occupancy, guarantees against periodic demographic (or politicised) distributions, and clear property rights, perhaps with some restraints on sale. Lawyers care about RSO, but it is these matters that concern farmers, and affect their investment, farming, and welfare, as influenced by perceived security against arbitrary power. Indeed, while strongly averse to periodic distribution by officials, most Ethiopian farmers prefer lease from the State to outright land ownership [Haileselassie *et al.* 2004].

A holy war against RSO may actually impede land reform and decollectivisation. Overchuk [2003] shows how a sense of nationhood influenced Russia’s insistence on preserving RSO during formal decollectivisation: the State felt the need to preserve controls on land use in the national interest, and perhaps to guard against foreign acquisition of some lands. This is understandable, consistent with genuine decollectivisation into family farms, and entirely a matter for Russia’s people and government. Good advice against gigantism and pseudo-decollectivisation, and for freer land markets, is much less persuasive in an ideological anti-RSO ‘wrapper’ that needlessly offends sensitive feelings of nationhood. In China from 1982, RSO allowed ‘state lease of land [for] any number of years or, in principle, in perpetuity [though] ownership is not relinquished by the state’, but farmers had the ‘right to transfer or to sell the leased resource[, e.g. by] subletting’ [Cheung 1990: 22]. RSO has not impeded extension of that right, most recently in late 2008, or lengthening of leases. In Vietnam in 1998, RSO proved no barrier to following up earlier Chinese-style decollectivisation with almost total liberalisation of land markets, including sale rights [Ravallion and van de Walle 2008]. That was also true of partial RSO in Azerbaijan and Armenia. These, despite egalitarian distribution of most collective and State farmland in the 1990s, retained, respectively, 5 per cent and over 15 per cent, for public purposes and for later lease in larger units [Giovarelli and Bledsoe 2001].

The issue here is not whether RSO was asserted by, or useful to, collectivising régimes such as that of Mengistu in Ethiopia (it was). In decollectivising régimes and elsewhere, the issue is whether RSO, as opposed to private ownership, better defends the security of farmers, especially the poor and weak, against arbitrary land rules, including grabs. That issue arises whether private seizure is enforced lawlessly by the private engrosser (as sometimes in Brazil) or through arbitrary acts of corporate collusion with local government (as sometimes in China and often in Cambodia). Sometimes RSO seems to protect the poor against arbitrary power; sometimes to expose them to it. What really matters is not RSO, but an honest and independent judiciary, legal constraints on State power, and above all ‘poor power’ in civil-society institutions with freedom of speech. Where all three are absent, the property rights of poor farmers are vulnerable, RSO or not. Where all three are strong, those rights have some protection from naked power, State, private or

conjoined. In 2006–07, corporations and local authorities colluded to grab land from micro-farmers; these got compensation in West Bengal (p. 169) but not Cambodia or China.

# **VI. Demographics after decollectivisation: beyond population readjustment**

**by land reallocation?** Some governments, in decollectivising by distribution to local farmers and farmworkers, aimed to avoid the inefficiency of giant State and collective farming, but to keep its (claimed) equity benefits. So village families were allocated equal land per resident, allowing for land quality. In Albania, Armenia,<sup>108</sup> Azerbaijan and Romania, governments followed this by rapidly freeing the land sale market (often after a moratorium – 3 years in Armenia – to ensure buyers had time to evaluate their land and offers for it); then land became effectively private. Elsewhere, however, governments periodically reallocated land in order to stop an old problem, demographic differentiation, from re-emerging.

Some families grow faster than average.<sup>109</sup> Even if land is decollectivised, and each household receives the same quality-adjusted land per person, some years later such families may have much less than others. If this merely transfers land per person from times when a family is large (e.g. because there are several small children) to other times in the same family's life-cycle, income inequality is little affected: saving and borrowing usually smooth out consumption across these predictable swings. However, demographic differentiation can have serious cumulative effects. Children in larger families are somewhat likelier to die before reaching working age; to drop out of school; as adults, to fail to enhance family income by migrant remittances; and to have more children themselves. Over the generations, such families often get steadily worse off than other families, having steadily less land-per-person yet relying more on farm income. Countries decollectivised into family farms, and sometimes restricted land sale markets, to minimise such land inequality.<sup>110</sup> So some such countries – Vietnam till 1998, much of China and Ethiopia still – periodically reallocate village land from families that shrank since the last allocation, to families that grew. How did this work? Are there better ways to react to demographic levels and changes?

In China, such reassignments after the introduction of HRS were frequent and disruptive. They may be partly to blame for the sharp deterioration, after 1985, of China's remarkable food production spurt during the 1978–85 shift to HRS. Between 1978 and 1993, '65.2 percent of China's villages readjusted households' land – 37.1 percent once, 19.8 percent twice and 8.3 percent three times[, mainly to offset inter-household differences in] population growth ... Worried about the risk of losing their land as well as investment, farmers had no incentives to improve land conservation and agricultural infrastructure. [Hence] irrigated [area] remained almost unchanged during the 1980s; farmers overexploited the soil to pursue short-term returns; land redistribution itself



[required] much labour and time in organisation and implementation; and [because land was allocated per household member, whether or not of working age, or employed outside agriculture] some large households with limited labour force could have too much land to work, while smaller households, particularly if specialised in agriculture, could have insufficient land for full employment'.<sup>111</sup> After 1987 readjustments became less frequent in many areas [Chen and Davis 1998]. Yet, despite this slowdown, by 1999 'readjusting village landholdings to reflect household population [had affected about] 80 percent of Chinese villages' (as against 65 percent in 1992), cutting 'will- ingness to make long-term investment in land'. Some provinces ignored central pressure to advise villages against population readjustments, or to assign 30-year non-adjustable leases; and many villages ignored provinces' pressure [Ping Li 2003]. Even if medium-term productivity [Huang and Rozelle 2005] was no longer being harmed, welfare, security and village politics were: such arbitrary power risks abuse to advance personal interest in local authorities. In March 2003 a law 'prohibiting ... illegal land readjustments' (sic) came into force [Ping Li 2003]; the words show that central law alone cannot make local authorities less self-seeking, or more responsive to residents. In Ethiopia after 1991, land was formally decollectivised, but 'land issues were made a regional responsibility ... Tigray declared an end to administrative land redistribution while Oromia restricted [it] to irrigated land ... In 1991–98 9 per cent of [districts] and 8 per cent of farmers ... were affected by land redistribution [sometimes politicised]. Despite an intent to discourage [it], the lack of either a law or a clear policy statement ... leads to high levels of uncertainty ... only 27 per cent of farmers are confident that there will not be a land redistribution in the future and 9 per cent expect one ... within five years' [Deininger and Jin 2006].

Countries that have redistributed land in egalitarian fashion often face sharp rises in other inequalities, intra-rural, rural–urban and regional. To act strongly against modest unequalising effects of demographic differentiation, while tolerating (say) China's proven explosion of regional, rural–urban and other inequalities [Lipton and Zhang 2009], may seem to 'strain at a gnat, and swallow a camel'. Yet people most readily and frequently compare themselves with neighbours, visible daily. Villagers may most resent inequalities in the main local productive asset, land, which collectivisation had (at dreadful cost) equalised, and which decollectivisation had kept equal.<sup>112</sup> To wish to maintain that is understandable, even though demographic differentiation is far from the main source of rising inequality. Though surveys show majorities against demographic readjustment in both China and Ethiopia, they are not large. Readjustment surely raises local authorities' power, and often income, but probably they 'get away with it' because it responds to some people's genuine wishes, either from self-interest or from a sense of justice. Nevertheless, readjustments are costly and disruptive, and generate needless uncertainty. Can governments find better ways to reduce the unequalising effects of demographic differentiation?

That requires a look at such differentiation, and the role of land and land reform, in the context of *demographic transition*, ongoing in most decollectivised countries outside Europe, and at an early stage in Ethiopia. It is almost complete in urban China, but not yet in the villages, especially in poorer and more remote areas. It begins with better nutrition and control of malaria and dysentery, leading to big falls in child mortality. Some 10–25 years later, total fertility rates – the best estimate of expected children per live woman – usually start to fall at an accelerating rate. That is because parents develop confidence that fewer births are needed to ensure surviving heirs, and find that it increases well-being ‘to substitute quality for quantity’: to have fewer children, whom they can afford to care for better and to educate more, and who eventually provide more family income each. Meanwhile, rising incomes (and often rising status of women) mean that it pays mothers better to work rather than to have many children, and daughters to stay in education and delay marriage. So (a) population growth rises in early transition due to falling child mortality, (b) the decline in fertility slows (and eventually stops) population growth, (c) this slowdown takes some time to arrive, because the children saved by lower child mortality grow up into the child-producing age-groups, (d) crucially, the dependency burden<sup>113</sup> first rises (as child mortality falls), then falls (as fertility also falls, and the ‘saved’ children enter the workforce). Falling dependency ratios were crucial to accelerated growth, improved income distribution [Eastwood and Lipton 2001], and hence fast poverty reduction in much of Asia. How long will they take to spread to the *rural* poor? That depends on family planning commitment, but also on progress in education, employment and gender equality.

Demographic transition is crucial for rural inequality, and hence for selecting sensible policies – land-reallocating or other – to meet inter-household demographic differentiation in land per person. That is because demographic transition affects better-off households sooner and more than poorer households. A better-off household has better chances, sooner, of good child nutrition and health access, and for children to be educated (and mothers to find higher-earning outside work) rather than helping on the farm all the time. A household that *gets* better off, sooner, *improves* its prospects in these respects, relative to households that stay poor. Hence the incentives to cut fertility substantially and soon are stronger for better-off households, and improve faster for households that get less poor. Policy for land access, alongside incentives and enablers for fertility reduction, is crucial in reducing rural poverty and inequality. Governments eager to tackle these issues, therefore, need to address the land and fertility issues together. However, offsetting demographic differentiation by periodic land reallocations to faster-growing households reduces the incentive for rural couples to have fewer children. That slows the spread of demographic transition to poor people in rural and remote (usually poor) areas. That cuts the poor’s prospects to escape poverty by reducing their dependency ratio. In China, family size norms fell faster where land readjustments became less frequent after 1987–90 [Chen and

Davis 1998]. Especially where land inequality is small and other causes of inequality large and rising (as in China, Ethiopia, Vietnam and parts of Africa) it is counter-productive to focus on correcting demographic differentiation in land control through reallocations.

## **VII. Land markets as the path to optimum farm size after decollectivisation?**

One of the many functions of land rentals and sales (pp. 160–1) is to shift land towards those who use it with the highest returns, by allowing owners to benefit by transferring control of land to others who can get more out of it. With properly working land markets, this should leave both land buyer (or lessor) and seller (or lessee) better off. In China, if scale economies begin to emerge in currently highly equal peri-urban farming, freer rental and even sale mean that bigger farms will emerge. In countries such as the Czech Republic, Slovakia and Hungary, ‘the potential for rental markets is particularly high where land [was] restituted to original owners [reluctant to farm, while] uncertainty and shallow financial markets [inhibited] land sales markets’ [Deininger 2003]. In Russia, free land rental and sale would cause huge pseudo-decollectivised farms to be broken up into smaller, more efficient and employment-intensive private farms. But such processes face both opposition from vested interests, and genuine problems. In Russia, an ‘opinion poll [of] *farm managers and agricultural experts* [showed that only 20 per cent] support the idea of a free rural land market’ [Overchuk 2003, *my italics*]. Land sales to farmers and workers would end their power. Turkey does not vote for Christmas, and these turkeys acted to avoid it: share privatisation made land rentals and sales very difficult, except between farm managers.

However, if rural and agricultural infrastructure and services are inadequate, land markets are not very good at solving the problems they are supposed to address. Suppose a farmer wants to use land as collateral for borrowing to finance investment. Secure land rights and a land market, with mortgages, are a necessary condition, which several formally decollectivised countries such as Russia and China do not meet. Even if it is met, lack of registered title may impede mortgage lending; in 2001 (and 2008) registration remained seriously inadequate in the Balkans and the Western CIS.<sup>114</sup> However, adequate registration and an active land market are not *sufficient* to generate a mortgage market without ‘a larger scheme of providing credit to farmers’. In Armenia, Azerbaijan and Georgia weak financial institutions, not lack of a free land market, have hampered mortgages. In much of the CEE, despite an active land market, ‘few landowners are using land as security for loans ... [Little] mortgage lending [will] occur until ... foreclosure procedures are reasonably quick and effective’ [Giovarelli and Bledsoe 2001]. Yet fear that foreclosure will lead to concentration of land and rural discontent deters some governments from freeing land and credit markets.

However, the main efficiency benefits from freer land markets need not depend on mortgages, and in the right circumstances may be pro-poor. In Vietnam after 1993, egalitarian decollectivisation – while allocating land much more efficiently than collectivism – had left ‘inefficiencies of administrative assignment’: some households had too much land for efficient farming, others too little, given their labour resources and non-farm opportunities. In 1998 further ‘legal reforms to introduce a market in land-use rights’ allowed households with more land than they wanted to lease or sell it to those with less. This gradually reduced the remaining inefficiency. Crucially, the efficiency gains to the poor were *not* undermined by rising inequality: experience has not justified ‘concerns ... that local officials and élites will subvert the process and that the gains from a market will be unfairly distributed amongst farmers, with some becoming, in due course, landless and impoverished.’ Instead, once land markets were allowed to work, many initially poor people sold or leased their land, migrated to urban areas, and became at once landless and *less* poor [Ravallion and van de Walle 2008: 14–15, 177–80]. These findings indirectly confirm [Griffin *et al.* 2004]: initially egalitarian decollectivisation – as in Vietnam, China, Albania, Azerbaijan, Romania and a few other countries – is more likely to make subsequent market-freeing reforms pro-poor than is the large-farm path of most of the CEE and western CIS. This is an important signpost for land market reforms in China, as Ravallion and van de Walle emphasise – and also for Ethiopia, which has also been reluctant to permit land sales or leases [Deininger and Jin 2005, 2006]. However, the case of Vietnam also illustrates the importance, in ensuring good outcomes for poor people who give up their control of land once markets are freed, of rapid growth in non-farm employment. Economic downturns are bad times for that.

Indeed, what land reform – including egalitarian decollectivisation – delivers for the poor depends increasingly on its indirect effects on employment (including self-employment), rather than on its direct effect on land ownership. Privatisation of collectives removes disincentives to hire non-members. It can also bring drastic reductions in farm size, making machines costly to allocate and labour easier to supervise. Both effects reduce previous incentives to use machines rather than labour, and to produce outputs that do so.

Communist agriculture provided, as in China, an ‘iron rice bowl’ that, except during mad and repressive experiments, guaranteed survival. It locked in farmers and workers, but guaranteed, as well as requiring, employment (though not a decent or rising income). Privatised agriculture, though more efficient, provides no such guarantee. The huge *potential* land reform of decollectivisation can still be turned into land deform, if it is pushed or subsidised towards large scale, or if public policy disregards the gains to the poor from fuller employment, or follows ideologies that deny the State an enabling role.

The poverty impact of decollectivisation, and of its market-freeing aftermath, is crucial not only for the affected farmers, but for the poor’s

prospects overall, through high and rising employment. Small land recipients reallocate their own labour towards their farms, leaving more jobs for others. They also employ more hired workers per hectare than large farmers. In transition counties threatened by conflict, fiscal disruption, and partial loss of main markets, such as Azerbaijan and Armenia, the role of small farms in providing labour income has special significance. China-style egalitarian decollectivisation raised the share of rural population from 31 per cent in 1990 to 33 per cent in 1998 in Azerbaijan. In Armenia it raised agriculture's share of employment to 41 per cent by 1999, 'a doubling from the late 1980s' [Giovarelli and Bledsoe 2001]. Such trends, undesirable in the long run, are life-savers in the short. Even in less strained circumstances, decollectivisation has usually<sup>115</sup> been best for the poor when the successor farms were small and fairly equal, due to their impact in boosting demand for labour. Afterwards, freer markets in inputs, outputs and land are needed for efficiency, but should be backed by social and physical infrastructure – public, competitively private, and/or through farmers' organisations, including service co-operatives – to deliver agricultural and rural services to smaller farmers.

## 6 Alternatives, complements, diversions, 'new-wave land reform'

This chapter examines five attempts to achieve the goals of land reform without direct transfer of land rights to the rural poor. *Consolidation* and *settlement schemes* can increase production, and potentially can distribute land or income towards poor farmers. Yet these often have good reason to reject such plans. They can reduce security, and are often as costly, politically contentious and hard to implement as most land reforms. So, to a lesser extent, are *land taxes*. As for *equitable rural development* overall, this is the result of many pressures, and policies perhaps including land reforms, not an articulated policy alternative to them. Finally, *new-wave land reform* involves decentralised, consensual or market-driven methods to get land rights to the poor. All five approaches are likelier to achieve the goals of land reform as complements to CLR than as alternatives.

### (a) Consolidation

Consolidation comprises government actions, through markets and/or schemes, to reduce – ideally to a single plot – the number of plots (also called parcels or fragments) into which a farm is divided, thus raising *plot* size. Fragmentation arises for two main reasons. First, many parents seek to distribute all their land, good and bad, high and low, 'fairly' among offspring. Second, many decollectivisers seek much the same for beneficiaries. Fragmentation has drawbacks (see below), but if consolidation, by land market or by scheme, is to reduce plot numbers significantly, many farmers have to agree; securing that is costly and difficult.<sup>1</sup> Yet a typical small farm in many developing and/or decollectivised countries has three to eight awkwardly shaped parcels. Fewer plots per farm reduce borderland<sup>2</sup> and travel time.

Most farmers, though reluctant at first 'to accept a [different] land plot in the process' [on Moldova see Lerman and Cimpoieş 2006]), want those savings. *Plot* consolidation – if trusted – is popular. So the word is often misused to win support for government actions with a more controversial aim: to get farmland out of small farms into bigger ones, thus raising *farm* size.<sup>3</sup> We call the latter actions 'consolidation' (in inverted commas). That is, we distinguish two aims, and effects, of government action: consolidation and 'consolidation'.

Each can work by helping, inducing, pressurising or forcing farmers to amalgamate, sell land, or exchange fragments – or by freeing or supporting the market in land sales or leases.

‘Consolidation’ by non-market government action to push land into larger farms is not land reform. Small farmers continue to farm because they judge that the ‘package’ of income, security and life-style is better from farming than from selling or renting their farmland, saving the income, and working at something else. Farm ‘consolidation’ by public action to override that judgement is likely to make small farmers worse off. This risk is less if getting land into larger farms is achieved by small farmers who (a) use a well informed, properly functioning (or transparently regulated) land market, (b) choose to rent or sell land, (c) apply the receipts, and their labour released from farming, to other activities with informed, and open or regulated, markets. These desiderata may require State action to improve: small-farmer information about land markets; their regulation, to avoid abuse of market power by large tenants or land buyers; or information about off-farm job opportunities. Probably, small farmers voluntarily respond to such benign incentives to farm ‘consolidation’ only where development has already made rural labour much scarcer, capital more plentiful, and thus larger farms more economic, as in parts of Hungary and the Ukraine. There, small farmers seldom lose from such a process but in the interests of security they usually rent, rather than sell, land to a larger holder, so they can return to farming if it becomes more profitable, or if non-farm prospects disappoint. However, even benign ‘consolidation’ tends to harm landless labourers, usually poorest of all. Wage-rates fall as bigger farms demand less labour per hectare; former small farmers swell labour supply.

‘Consolidation’ into larger farms seldom improves equity, so it can be justified only if they are more efficient than small, family, part-time or mainly ‘subsistence’ farms. That sometimes applies in developed, capital-intensive countries, but the evidence elsewhere is against it (chapter 2).<sup>4</sup> Some authors even give such evidence yet support ‘consolidation’ [Nega *et al.* 2003, on Ethiopia], perhaps only as a possibility and up to a modest size limit.<sup>5</sup> This may be because ‘a comfortable standard of living is associated with a much larger farm size than lower standards of living. [In Moldova] peasant farmers reporting a comfortable standard of living ... have 11 ha on average, compared with less than 5 ha for farms in ... poverty, when family income is not sufficient to buy food, [or] subsistence, when family income is sufficient to buy food and daily necessities [only]. The standard of living of peasant farmers is thus an increasing function of farm size, as is commonly observed in farm surveys in CIS and other transition countries ... the probability of [having] the highest standard of living ... increases with farm size, while the probability of being on the lowest “poverty” level ... sharply decreases with farm size.’ Do ‘these results provide the ultimate support for land consolidation policies’ [Lerman and Cimpoeş 2006]? Similarly, are Nega *et al.* [2003] right to advocate ‘consolidation’ in Ethiopia while showing a strong inverse

relationship (IR) (p. 70) because, as they also show, very small farmers lack basic food security, while larger farmers are much better off? No! Big farmers are less poor than small farmers, but only if there were no losers, i.e. if small farms can readily expand into good unused land, can one neatly cut poverty by making all farms big. Small farmers would long ago have farmed good unused land, if available. As it isn't, making farms bigger means squeezing others out. In real life, it is richer, stronger households who will get larger farms, while poorer, weaker ones lose the little land they have. And larger farms on existing land mean less demand for labourers, the poorest of all.

Farm 'consolidation' worsens income distribution and, except in some high-income countries, usually cuts farm output (chapter 2). So government pressure towards larger farm size is not land reform. Measures to free land-lease markets – while improving information, terms of contract, and bargaining power for small and poor farmers – can be land reform, but usually not via farm 'consolidation' but the reverse, land rental from large to small landowners (p. 348, note 78). Occasionally, if the non-farm sector is labour-intensive and booming, freer land markets may instead help the poor by permitting voluntary, reversible farm 'consolidation' via reverse tenancy, as shown in agricultural lead areas such as the Indian Punjab from the 1980s, in some middle-income countries in the 1990s,<sup>6</sup> and perhaps since 1998 in Vietnam [Ravallion and van de Walle 2008]. Net reverse tenancy in Moldova [Lerman and Cimpoies 2006] and the Ukraine is yet another reason why, despite rising capital-intensity in farming, the *remaining* small farmers remain at least as efficient as large: small farmers better at farming have least incentive to lease out, while reverse tenancy appeals most to those better adapted to non-farm activity. They stop farming, take rent from their land, and can return to farm it if non-farm prospects worsen relatively. The last is crucial: rental, not land sale even where it faces few restrictions, has been the usual market path to '*farm consolidation*'.<sup>7</sup>

We now revert to consolidation proper: government action to reduce number of farm fragments (directly or through markets) *not* linked to any pressure to reduce number of farms. Is that land reform? Fragmentation usually increases the proportion of family and hired labour needed, not for farming, but for moving people and inputs to, from and among the fragments of the farm, and between them and the home, the market, and the source of inputs. So the return to a given amount of *productive* labour is smaller on a farm, of given area, to the extent that fragmentation compels it to use more *transport* labour. The effect increases with the number of fragments, and with their distance of the fragments from home, market, and each other. This reduces incentive to farm production, investment and growth. Fragmentation, and therefore this production handicap, increase in South Asia with rural population growth and partible inheritance.<sup>8</sup> Where countries undertook decollectivisation, fragmentation was often caused as each household received land of several types, often in different places.<sup>9</sup> The cost rises with the proportion of farm output marketed, and as more heavy inputs (from tractors to



fertilisers) must be got to the fields. So fragmentation becomes more costly as farms develop, become more specialised, and engage increasingly in exchange [Johnson 1970]. So it seems reasonable to expect consolidation to raise the incomes of poor and rich farmers alike – increasingly so, as population grows and as agriculture develops.

So is plot consolidation land reform? In some circumstances it can do more for poor rural people than for bigger farmers. First, though it reduces the need for ‘transport labour’, consolidation raises incentives to hire production labour, and cuts the transaction costs of labour management; on balance, employment and wage-rates could rise. Second, consolidation both releases borderland and raises incentives to produce farm output; especially in isolated areas, this restrains food prices, leaving larger farmers, who sell most of their food production, less certain to gain than many small farmers, who eat more than they grow. Third, though large farms tend to have more fragments than smaller ones, it is less than in proportion to size. For example, it is common in most of Asia for a 1 ha farm to have four or five fragments, whereas a 10 ha farm on similar land will have perhaps ten. Handkerchief-size plots, which seem hardly worth incurring fixed costs of farming and are therefore sometimes underfarmed, are almost always found, if at all, on small farms with several such fragments. In China, the average farm household in 1987 cultivated 0.6 ha divided into nine separate plots [Bruce and Harrell 1989: 6]; today such plots are smaller still.

A fourth reason why smaller farms can gain proportionately more from consolidation is that they tend to have smaller fragments (plots) than big ones. Yield is likely to rise proportionately more due to consolidation on smaller fragments, because the deterrent to intensive farming increases more sharply as the size of the fragment declines. There is a fixed cost of (say) bagging and delivering fertiliser from a shed at home to a fragment 3 miles distant, as well as elements of cost that vary as between a tiny fragment and a big one – yet the gains depend on output, which is more for a larger fragment. Also, some costs increase much more slowly than the area of a fragment; double the plot area needs less than double the fencing or furrow. Small farmers have smaller fragments than big ones, tend to be poorer, and – as they intensify when fragments are consolidated – are likelier to do so by using family labour, where larger farmers would buy extra equipment.

Yet often consolidation helps bigger farms most. Perhaps their greater reliance on hired (rather than family) labour makes the cost of travel among fragments a greater deterrent to applying more labour to raise output. In Vietnam, fragmentation reduced the responsiveness of output to extra labour input, but less for the smaller farms [Tanaka 2001]. Also, consolidation by exchange of fragments may get better land to richer farmers if they unduly influence the process.<sup>10</sup> Often such effects are outweighed by inherent absolute and relative advantages to small and poor farmers, and employment gains to labourers. But we cannot be sure that consolidation is redistributive. It is not land reform – it shifts no land, rights or claims from rich to poor – but can it

achieve some goals of land reform less contentiously? For a village or small area, might shifting from fragmentation to plot consolidation benefit all groups (smaller farmers perhaps most), raise TFP and output, yet not threaten the power structure? In Moldova in 2003, household plots with one parcel produced 930 lei per ha; with two, 580; with three, 340; and with ten or over, only 110. This effect was also found in Georgia [Lerman and Cimpoeș 2006; Lerman 2005].<sup>11</sup> Some consolidation is claimed to have raised output more than 15 per cent [Oldenburg 1990, for the Punjab in India; Roche 1956: 541 for France]. But then why do farmers 'not simply agree to consolidate their holdings' [Johnson 1970: 176], or achieve similar results without formal agreement, through land sale, exchange or lease?

The transaction costs of such action, including the costs of creating trust and of overcoming each farmer's relative lack of knowledge about other people's land, are large. In some such cases, it may be cheaper and easier for an outsider to facilitate consolidation for a whole village, rather than for the farmers to act individually. Yet outsiders hardly ever offer such services privately. A public sector authority might win farmers' trust, and consolidate fragments where private farmers (or consolidators employed by them) cannot; in some parts of India, such consolidation has been quite successfully completed.<sup>12</sup>

However, as in Moldova (p. 238), *small farmers often do not want to consolidate*. They believe that fragmentation has agronomic or economic advantage, exceeding its cost – and wish to avoid the mutual mistrust, hassle and suspicion likely to be engendered by many months of consolidation. Apart from a farmer's attachment to plots (even if fragmented) that she knows from long experience:

- Consolidation is sometimes agronomic nonsense. In Sri Lanka and several other countries it is normal to farm fragments of land of different types (e.g. paddies, highland, horticulture, grazing). Such fragments may *necessarily* be separated, with distinct soil-water conditions. In Armenia, most family farms 'are fragmented because irrigated, rainfed, orchards, grasslands and pasture were distributed separately within each village' during decollectivisation [Csaki *et al.* 1995: 34], as in Albania [Stanfield *et al.* 1992: 9, 12]; in such cases consolidation may not be desirable, or sometimes even feasible.
- It may pay each farmer to cultivate several fragments of one land type – say rainfed cropland. Fragments often feature different sorts of land, with different peak times – in the year or the day – for requirements of labour or water, or production of food. This is especially the case if non-village jobs, water supplies, or food involve costly transport, high risk, or ill-informed or otherwise imperfect markets. Spreading such peaks makes a case for 'not controlling subdivision of paddy lands' in Sri Lanka [Farmer 1960].
- In Africa, consolidation 'has a downside' ecologically. On fragmented farms, 'farmers pursue opportunistic strategies by farming little pockets of land where there are better soils and moisture [and] thereby sometimes ... retard the spread of pests and diseases' [Roth and Bruce 1994: 36].

- In such a context, Blarel *et al.* [1992] show that in Ghana and Rwanda 'costs [of] fragmentation (e.g. travel time) are ... only a matter of minutes [while it] increases the diversity of agroclimatic conditions [and hence] cropping patterns ... consolidation policies are unlikely to lead to significant increases in productivity, [though] policymakers [should] avoid ... restrictions on sales or rentals that limit the ability of farmers to adjust optimally the extent of fragmentation (or consolidation) of their holdings over time'.
- Fragmentation can reduce output risk and price risk. In wet years, when lowland is waterlogged, higher patches (unless eroded) can yield at their best; in drier drought years, low-lying patches may be well adequately watered, while upland may yield next to nothing. In any year, prices may collapse for crops grown on some sorts of land, while crops on other fragments prosper.<sup>13</sup>

All this shows that consolidation may not help farmers. The last point shows that it may also harm the poor most; they are the most vulnerable, if consolidation raises risks. A second danger is that a programme purporting to consolidate *fragments* can shift – for ideological reasons or because desired by the rich – to creating larger, less labour-using *farms* [Csaki *et al.* 1995: 40; Bain 1993: 129–36]. Third, if consolidation precedes registration of titles, the poor can lose relatively, because they lack political and juridical influence on deciding claims, setting borders, and valuing lands. In India a 'lesson from the Punjab ... is that the exact position of property rights should be recorded before consolidation. [Otherwise it] might wipe out those rights without any chance of retrieval. [This] is essential for Bihar, where thousands of tenants have been evicted illegally and thousands of others have been denied titles which they should have been given [while] thousands of others ... have legal rights but not possession' [B. Singh 1990: 67].

Even a process of titling followed by consolidation may harm the poor, because titling itself may (chapter 4(c)). That did not happen in the Punjab mainly because, after the Indian partition, the exchange of refugees and migrants between the Pakistani and Indian rural Punjabs tended to make land on the Indian side less unequal [Randhawa 1986: 58; B. Singh 1990: 66]. This suggests that special conditions or sequences may be required, if consolidation is not shift land from the poor to the rich and powerful. For instance, the Indian Punjab featured reduced land inequality (and hence big-farm power to influence consolidation?) first; titling later; and well administered consolidation last.

It is not, therefore, surprising that farmers (a) often resist plot consolidation, or reverse it by re-fragmentation, (b) sometimes, if trust and transaction cost barriers can be overcome, achieve it without outside help where it is most needed. In Kenya consolidation 'was initiated during the colonial period [1956] and was continued by the independent [government though] some communities did not favour [it], arguing that fragmented holdings were useful for the cultivation of different crops that need varying soil types ... The programme ... has been completed only in Central Province; work is in progress [elsewhere but] in some districts ... has been prevented by customary practices ... [with] refragmentation of smallholder lands in areas where consolidation had

been completed ... In 1971, in Nyeri District where consolidation [had been] completed in 1962, refragmentation [had] begun to occur' [Konyimbih 2001]. Yet in China, public pressure to consolidate fragments has had little success [Deininger *et al.* 2003].

In India, 'around a third of [farmland] was ... consolidated by the mid-1980s, almost all ... in Punjab, Haryana, Uttar Pradesh, Maharashtra and Madhya Pradesh ... In [some states, e.g.] Tamil Nadu, Kerala, no [laws] exist for [plot] consolidation, yet some [was] achieved ... by farmers themselves in the land market'. Hence, 'despite growing rural population and division of some parcels on inheritance, their number per holding fell from 5.7 (1961–62) to 4 in 1982 and 2 in 1992'. Markets or voluntary plot exchanges were achieving what laws seldom could: 'The high transaction costs of land transfers [especially with outdated or unclear] records of rights ... constrain [schemes for] voluntary consolidation ... Overall ... measures to deregulate land markets may [produce] more consolidation than would further [schemes] to implement [it] directly' [Mearns 1999; cf. Deshpande 2003]. Consolidation by voluntary plot exchange is also seen in Turkey and Iran, where the 'web of tenancy' rules (and past land-reform methods) render both law and market highly imperfect means to consolidation [Forni 2003].

Resistance and reversal of plot consolidation can be exacerbated by inter-group disputes about land, and fears that consolidation will be an excuse for 'consolidation', i.e. for land-grabbers to engross smallholdings. This fear has foundations. Many otherwise careful papers reviewed for this book systematically run together 'consolidation' and consolidation, often advocating both indiscriminately to remedy both proven non-evils like small scale, and probably imagined 'evils' like farming for subsistence, or part-time.

A theme recurs across potential land reforms (tenancy laws, titling) and alternatives (plot consolidation, settlement schemes): that the poor – absent prior redistribution of land rights from an *old land régime* – tend to have claims that, however strong ethically or legally, are weak in respect of formal political and juridical implementation.<sup>14</sup> However, where a *new land régime* is being created by a reform that anyway involves the titling of family-size farms – e.g. in Albania after 1991 – there is a strong case for introducing consolidation at the same time. Despite the list of 'good reasons for fragmentation', nobody who has seen the waste, frustration and constraints on land and water management occasioned by handkerchief-sized plots (not by small farms!) can feel easy about them. As rural population increases, so does the cost, to sustainable farming, from numerous tiny partitions as a source of land and water *mismanagement* – but so also does the number of farmers and fragments, and thus the trust and transaction cost needed for private consolidation. Good lease markets can help farmers to swap plots, and publicly facilitated plot consolidation can help the poor absolutely and relatively. But this often does not happen. Like titling and settlement, consolidation of fragments, far from substituting for land reform, is likely to help the poor substantially only if prior transfer of land rights has already strengthened their hand.

Consolidation is not land reform. It can help the poor by raising food output or farming efficiency, but there is a *prima facie* case against this: if the gains were great, farmers would probably have exchanged fragments of their own volition. Like other land legislation, if consolidation is designed and implemented where farmland is very unequal – or where urban decision-making élites favour larger farmers, who deliver food, savings and perhaps ‘social control’ in rural areas – the poor are less likely to be net gainers. Consolidation can, however, valuably complement land reform, especially if farmers want an exchange of fragments but, due to transaction cost or mistrust, cannot achieve it without outside help.

## **(b) Settlement schemes**

The main specialised journal on land reform is entitled *Land Reform, Land Settlement and Co-operatives*. In the past 10 years it has carried hardly any papers on settlement. Yet in the 1970s settlement was widely seen as a major hope for getting farmland to the rural poor. Increasing population pressure on land and unsatisfactory settlement schemes have weakened the prospect, but such schemes still have a place.

Settlement schemes are State actions to enable people to settle and farm three main types of land. First is land once farmed but not currently claimed, e.g. abandoned tea estate land in Sri Lanka in the early 1970s or, in the mid-1990s, abandoned ‘white’ commercial farms in Southern Africa. Second and most significant globally is the planned settlement of hitherto virgin land after its development has been financed or subsidised by the State, sometimes with irrigation, as in several parts of the Niger Delta in West Africa, and the Mahaweli Scheme in Sri Lanka. Third is the settlement of land formerly reserved for State use (for defence, or within large State or collective farms) or as commons.

Many governments have tried settlement schemes, firstly to redistribute populations towards less densely farmed areas, and secondly as a way of getting land to the poor without confronting the rich: <sup>15</sup> Kenya after 1974; Indonesia by ‘transmigration’ from Java to the less densely settled outer islands since the 1950s; Malaysia with the Federal Land Development Authority (FELDA) scheme; Brazil with the large-scale movements from the south to the north-east. In the 1980s in Indonesia, Thailand, Tunisia, Morocco and Algeria, settlement schemes took increasing priority over land redistribution [FAO 1991: 17–18].

Some transmigrations are huge. Transmigration from Java involved 418,000 persons in State-supported settlement schemes and 604,000 in spontaneous settlement in 1950–72, and a further 377,000 and 221,000, respectively, in 1975–80, a rate that accelerated slightly until at least 1982. Yet even huge schemes typically deal with only a fraction of population growth, and at high cost. In this case, the cost was \$12,000 per publicly settled farm family by 1982–83; and only a fifth of rural Java’s population *growth* would have been absorbed even if the target rate of transmigration had been achieved [Oberai 1988: 64–84].

Settlement schemes do not transfer claims on currently farmed land. They are not land reform. But do they fulfil its goals? The poor gain absolutely if they get new farmland, or extra employment on it, but seldom relatively, as usually rich farmers retain their old land and power, and tend to engross the benefits from 'new' farmland. In Brazil around 1980, with perhaps the world's most unequal farmland, one-third of settlers were 'familiar with cropping 25 ha or more'; so the new schemes replicated old inequalities, but most settlers, even poor ones, felt their conditions had improved absolutely [Oberai 1988: 337–39]. But are settlement schemes an efficient way to advance the poor? Usually their efficiency record is worse than that of conventional land reform, which gets land and water to poor people with experience nearby. Most schemes have been costly ways of getting land to not very poor people with irrelevant farm experience [Kinsey and Binswanger 1993] or none: in Indonesia in 1976, one in three surveyed settlers had never owned or managed farmland [Oberai 1988: 52]. Key issues are as follows.

- Is the settlement far from the settlers' home? If so, they must re-house to farm it, causing a dilemma. To the extent that the State pays, other pro-poor expenditure is driven out. To the extent that settlers pay, that will especially deter the poor. In Russian pseudo-decollectivisation, 'when a land plot is demarcated for allocation, it is located far away from the owner's settlement ... contribut[ing] to the paucity of land share owners who have chosen to convert their shares into land parcels' [Giovarelli and Bledsoe 2001].
- Must the new land be developed, through irrigation, fencing, etc.? That raises settlement costs *per hectare*. Unless the land is very fertile, permitting many settlers per hectare, the above dilemma is repeated.
- Three linked issues arise. Is settlement spontaneous or directed? Is it supported by high and wide-ranging social and productive infrastructure? If directed, is farming individual, traditionally communal, or collective? In the late 1970s, most settlers were spontaneous, barely a quarter being in 'schemes' [World Bank 1978], but growing land scarcity has raised that proportion substantially since. The total costs of infrastructure for a 5 ha individual rice farm in the Philippines around 1978 were about twice as high for self-financed farmers as for those resettled via schemes [Oberai 1988: 155]. Collective farming is hardly ever spontaneous; directed collective settlement normally leads to disastrous failures, whether in Latin America [Nelson 1973: 265], Ethiopia or elsewhere. A gentler paternalism, in which a Settlement Authority decides and meets many settler needs, has very high costs, as with FELDA in Malaysia, but 'the finite horizon of the Kenyan task force approach and of the Indonesian handover to local governments has avoided ... perpetual paternalism'. Especially in newly settled areas, public provision of some services, such as extension and clean water, to settlers has advantages; yet 'there is no direct evidence ... that higher public costs per beneficiary family are associated with success' [Kinsey and Binswanger 1993: 9–19].

- Do settlement planners, like advocates of collective farming in Chile and El Salvador [Strasma 1989: 425], make the 'fundamental error ... of assuming that ... former owner[s] had somehow determined optimum size ... that "big is beautiful"'? If they do, the farms on the new lands will have needlessly low employment, direct overview, and incentives to effort. Even privately farmed settlement schemes sometimes face the problem of excessive farm size. In 'Kenya and Zimbabwe ... laws against subdivision [mean] large blocks of land [that] create obstacles to efficient land use and impede employment generation ... In Zimbabwe insistence that official settlement take place on large, contiguous areas has meant that many isolated farms acquired remained unused', while small-scale farming and efficient labour use were further discouraged because 'settlers are prohibited from participation in the non-farm labour market'. In Sudan's Gezira Scheme, many 'settlers became absentee landlords because the land allocated to them initially far exceeded the labour capacity of their families ... In Kenya, [an] early stud[y] of ... resettlement schemes ... put the increase in production arising from the shift from large to small units in the range 15–90 per cent' [Kinsey and Binswanger 1993: 5–6, 9].
- Is there a conflict between settling potentially efficient farmers and settling the very poor? 'Agricultural settlement schemes do not make good welfare programmes', but the poor do not systematically perform worse on them. Settlers are likelier to succeed as farmers if (i) married, (ii) with more workers per household, (iii) with farm experience and skills, (iv) under 45, (v) better educated. Characteristics (i), (ii) and (iv) are probably commoner among poorer households, as is (iii) where land is plentiful, tenancy readily available, or relevant farm experience attainable through farm labour; only (v) is linked to affluence. Capital assets, nationality and criminal record do not predict success or failure [Kinsey and Binswanger 1993: 13].
- Does pluralist politics – or democracy – pressurise local authorities or task forces to settle the poor and weak, and to provide appropriate production inputs such as research and extension when they settle spontaneously? In Kenya, pluralism weakened after the imprisonment of the main opposition leaders in 1974; meanwhile [Harbeson 1984: 157] intended private land reform was turned into land deform, alongside a decreasing poverty emphasis in settlement, though the decolonising régime had sought 'to give control of the settlement programme, land transfers, and the land itself to quasi-autonomous bodies outside the direct control of the [successor] Kenyatta government'. In Malaysia, whether due to the Communist threat or to pluralism, local leaders favoured claims to remote settled lands not for the rich and powerful, but for locally 'known troublemakers in order to get rid of them' [Oberai 1988: 96].
- Is the settlement driving off poor people, often 'invisible' users – tribal peoples with shifting farms and unwritten claims – with little consultation or compensation, or with environmental costs from intensified forestry or farming, or from new roads that lower the cost of such unsustainable land

uses? This is the main criticism made by non-governmental organisations, and increasingly scholars, about major settlement and land development schemes from western India to north-western Brazil. The NGOs often fail to offset such claims against the gains from settlement schemes; supporters of such schemes often ignore the reality that, while many gainers are powerful and rich (and able to commission benefit-cost analyses), displaced losers tend to be poor, weak, and speaking minority languages, and environmental losers are often not yet born.

These issues indicate that, though the rural poor are credible candidates to gain from a settlement scheme, even *absolute* gain for them has often been uncertain, despite high costs. The schemes can bring *relative* gains to the poor, and support the aims of land reform, if land inequality is initially fairly small; or if land reform itself, and with it the redistribution of rural power, has made some progress already. In such cases, the rural poor can exercise influence on the selection of settlers and services. But if the rich retain great power, a settlement scheme will not persuade them to let the poor have most good new land. Normally, such schemes cannot avoid the issue of getting land from the rich to the nearby poor – who do not need the costly new infrastructures, as they do if they must move many miles to farm new land. Historically, most settlement schemes have aimed mainly to even out population densities across a nation, and to develop ‘virgin lands’, not to redistribute land or to reduce poverty. Population growth and spontaneous settlement have greatly reduced the scope for such schemes.

This begs a further ‘issue’ raised above: was the land being settled truly unfarmed or abandoned? In three major types of settlement, this is not so. First, some settlement schemes involve intensification and privatisation of land formerly held on communal tenure, usually with trees or cyclic bush fallow replaced by annual standing crops. Such schemes tend to raise both output and the numbers who can live off farming, but with mixed effects on environmental stability: privatisation deters depletion (e.g. in slash-and-burn with shortening fallows) but also collective action to maintain land-water systems, including the remaining commons.<sup>16</sup> Second, post-conflict settlement schemes aim to *resettle* communities in farms and homes; conflict usually continues as dispute about land rights (seldom written), within as well as among each conflicting group. Because many distrust the government that emerges after a conflict, the role of neutrals, perhaps especially aid donors or NGOs, in post-conflict resettlement can be crucial.<sup>17</sup>

Third, and most widespread, some settlement schemes, and many private land settlements, have been less settlement than planned or half-conscious theft. The land, taken for settled farming, had previously been managed by traditional users. This thread runs from the Neolithic settlements in Asia and Europe; through the ‘Great Trek’ in South Africa, and the steady erosion of indigenous land rights throughout North and South America and Australia; to some settlements in Amazonia today. Unconscious theft sounds like a



handy excuse, especially for settlers of a different ethnic group to their victims, but it is just possible. Settlers may not 'see' traditional land use, and their legal systems may not recognise it, using the convenient fiction of '*terra nullius*' (p. 337, note 25). Traditional users are typically mobile: hunter-gatherers, transhumant herders or shifting cultivators. They operate at much lower population density and land-use intensity than the settlers are used to. Their claims on land are often customary and unwritten. This is not the place to explore the economic, ecological and human consequences of such pseudo-settlements, but they may masquerade as settlement schemes or even land reform. They are the reverse, shifting land from poorer people (traditional users) to settlers, who may undergo hardships and farm well, but who normally start better off than those they displace.

## **(c) Tax reform and progressive land taxes**

### **(i) Context**

Land control can be shifted towards poorer people, or smaller farms, by three main methods:

- (1) allowing incentives to 'private redistribution' (sale or rent of land from rich to poor) to work, e.g. by removing restrictions on the land market such as laws against subdivision of holdings or sharecropping;
- (2) increasing incentives to private redistribution, e.g. 'new wave land reform' (section (e)) or tax change;
- (3) transferring land directly, as with classical reform or egalitarian decollectivisation.

Not only economists, but all who value choice or dislike conflict, are happy if a desirable result – say, the transfer of land from rich to poor – can be achieved voluntarily. Further, if equally effective in redistributing farmland and equally feasible, taxes raise money for the State, while physical land reallocations and reforms cost it money. The trouble is that voluntary approaches, including market derestriction and even tax/incentive changes, have often done little to reduce major farmland inequality. Nor are tax approaches to land redistribution easier to manage (especially in developing countries with few resources, and much private power outside, or manipulating, the state). Both attract evasion and avoidance, and hence need friends to implement. A tax doesn't recruit friends. It makes some feel much poorer, others less so, but nobody feels richer.<sup>18</sup> Direct land redistribution recruits many (though weak) friends and a few strong enemies. For a given impact on land distribution, taxes may arouse no less opposition than classic land reform (CLR).

Further, land taxation is seldom motivated mainly by a wish to stimulate land redistribution. The main arguments for it are that it raises revenue; does

so in a form well suited to collection by, and finance of, local authorities, notoriously under-financed and hence weak in many developing countries; spreads the tax burden to the large, dispersed farm sector with less distortion of incentives than is caused by other sorts of farm tax, e.g. on inputs or outputs; and may intensify land use. Most expositions of land tax [e.g. Herrera *et al.* 1997; Deininger 2003] emphasise these aims, rather than land distribution impact. Sarris [1994: chapter 2] stresses that land taxes are not only 'efficient in the sense that they do not distort relative output prices within agriculture [or] diminish production incentives' but also 'equitable because those with larger pieces of land, and hence wealthier, pay more', but does not refer to impact on land distribution. To stimulate land sales or leases from large to small farms, or deter them from small to large, three main taxes have been proposed: on larger holdings, on idle or underused land and on land transactions.

## ***(ii) Progressive land tax***

In a Latin American country with very unequal land, owned holdings land above 1000 ha might be taxed at 1.5 per cent of value per year, 500–1000 ha at 1 per cent, 20–500 ha at 0.5 per cent and less than 20 ha not at all.<sup>19</sup> That gives a large owner incentive to legally *avoid* land tax by selling some land, to (say) 0–15 ha owners, in lots small enough to keep them below the 20 ha ownership limit. Suppose the owner of 1000 ha of farmland sells out to 0–5 ha farmers in 1–15 ha lots. The buyers, as they pay no land tax, gain as long as they pay less than the full capitalised value of annual income from land. The seller gains even at a much lower price, since he escapes the land tax. The market price will settle between these two prices, with incentive both for the large holder to sell to the small and landless, and for them to buy from her.<sup>20</sup> This land-reform-like incentive adds to other advantages of property taxation: smaller, more neutral impact on production incentives, and removal of tax burdens from enterprise and labour. These have made property taxes popular with economists of all stamps, from Adam Smith to Henry George. However, there are problems. First, a prerequisite for complete coverage is a reliable, up-to-date land register; few developing countries have this. Second, 'the trick ... of distributing the burden in a manner acceptable to the contending parties' [Bell 1990: 157] may be no easier for radical tax reform than for overt land reform. Third, it is claimed that collection is hard and costly for any land tax, and a nightmare for progressive land tax.

These objections are exaggerated. Progressive land tax can be made simple, at some cost to fairness. Especially where land is very unequal, tax may apply only to holdings above a 'lower bound' of area or value, or (as in Namibia) only to 'commercial' (normally very large) holdings. The richest 1–5 per cent or so of owned holdings are almost always titled and registered. A tax of, say, 0.5–1 per cent of land value per year *on these farmers only* would achieve rough-and-ready progressiveness. Assuming farmland value is 10–20 times as

high as the net farm income it generates, this 'rich farmers' land tax' would take 5–20 per cent of their net farm income – hardly likely to engender counter-revolution, especially if it wholly or partly replaced agricultural income tax.<sup>21</sup> In Chile, 'property tax exemption applies to agricultural real estate with 1998 assessed values of less than US\$3,533 and the owner's residence on the land' [Strasma 2000]. Despite out-of-date assessments, such that land tax collected only 25 per cent of the target; property tax overall (of which farmland tax was over a fifth) provided 4 per cent of tax revenue, financed 35 per cent of the costs of municipal government, and – though relatively expensive to set up and administer in the early years – by the 1990s cost barely 2 per cent of the revenue it raised [World Bank 2003a].

Chile, Argentina, Jamaica, Uruguay and to some extent Colombia have significant land taxes [Shearer *et al.* 1991: 41; Skinner 1991], usually with a lower bound or other progressive elements. Low revenue yields, as in India and Bangladesh, show 'not that land taxes have little potential, but the lack of a strong commitment' [Dorner 1992: 78]. Zimbabwe allows local councils to impose modest but progressive land taxes, and in the 1990s most did so [Roth and Bruce 1994: 55–56]. Skinner [1991] shows that, while theoretical objections to land tax are ill-founded, its 'Achilles Heel ... is administration', but the evidence casts doubt on his view that 'progressive tax rates based on land holdings are nearly impossible to administer'. 'Positive results were achieved in Japan and Australia in the nineteenth and early twentieth centuries'; in the USA property or land taxes absorb over 15 per cent of the return on farmland; in 1994 Sweden introduced a 1.7 per cent tax on land values. These examples may be *regressive*, but show that land tax is feasible [cf. Dorner and Saliba 1981]. An experiment in Meitan County, China, also suggests that small land taxes for local use can be effectively collected [Bruce and Harrell 1989: 14–15]. Namibia's land tax aimed to 'encourage redistribution/diversification of ownership, reduce land prices and thus broaden the access to ownership, and redress the skewed pattern of land ownership ... despite shortcomings [in implementation] N\$28m was collected, [exceeding] expected collection [of] N\$18m during the first year [2004–05]' [Republic of Namibia, n.d.].

It is objected that most countries' agricultural land tax is a falling share of revenue.<sup>22</sup> However, first, this is due partly to the decline in agriculture's share of GDP. Second, if it is traceable to tax avoidance via land sales from big owners to landless and small farmers, it is a sign of *success* from a land-reform perspective. Third, determined administrations can raise the proportion of their revenue coming from land tax. It rose in West Bengal from 3 per cent in 1970–71 to 17 per cent by 1989–90, though the all-India share fell from 20–21 per cent in 1950 and 1960 to a mere 2.6 per cent by 1989–90 [Prasad 1993: 73, 76].

There is, however, a radical problem. To be land reform, a progressive land tax requires not to raise revenue, nor to bear mainly on the well off, but to induce big owners to transfer farmland to the rural poor so as to *avoid* the tax: i.e. to subdivide their holdings by selling farmland to those with little or none. That is plausible, but the literature lacks evidence for (or against) it, suggesting that

the effect is not large. The World Bank [2003b] advised ‘collection of a progressive land tax that generates revenues and introduces incentives to increase the supply of land on the market’ in the Philippines, adding that with ‘a programme of grants to facilitate acquisition of land ownership’<sup>23</sup> this would achieve land redistribution without ‘the need for compulsory sales of large holdings as currently mandated’, but even with such a programme there is no evidence for (or against) this claim. That also applies to the numerous proposals and draft laws on progressive land tax from Thailand to South Africa. Though progressive land tax avoids land confiscation and is feasible and elegant, there is no empirical case for, or against, its potential as land reform.<sup>24</sup>

### *(iii) Taxing idle land*

Part of the case for land redistribution rests on evidence that larger farmers choose to leave higher proportions of land idle (chapter 2(c)). Such choices are, like the IR of which they are part, natural consequences of larger farms’ greater labour supervision cost, neither fully compensated by their advantages nor much remedied by land lease or sale from ‘idlers’ to others. Taxing idle land, rather than redistributing directly, may stimulate such sale or lease to smaller and more intensive farmers, and/or more intensive land use by all farmers. A sensible tax would apply only to land idle for several seasons, more than needed for fallow, or ‘resting’ for soil-water management or recovery. Nor would tax be imposed on households with temporary shortage of labour or supervision, e.g. due to migration or illness.

The difficulty of checking such conditions – plus the fact that unused land is often the hardest for which to determine ownership – limits the feasibility of identifying, for tax or other penalty, idle land [on Guatemala see Wittman with Tanaka 2006]. Even more limited is any effect of such taxation on land redistribution. In Venezuela, the 1999 Constitution (article 307) enjoins taxation, and permits seizure for redistribution, of idle land from *latifundia*; a 2001 land law specified procedures [Woods 2006; Suggett 2008]. In practice there has been substantial seizure – with major argument about whether the land was genuinely idle – but no reports of taxation. Further, the taxation of unused land and progressive land tax can, in effect, annihilate each other: Brazil has both in law, but in practice ‘with modest crop production, farmers [even the largest] can cut their [progressive land] tax rate almost to zero’ [Binswanger and Elgin 1998: 325].

### *(iv) Tax rules and land transactions*

Many countries tax land transfers. Hungary’s tax is suspended if a transfer runs together small farms (because the government believes, perhaps rightly, that rural labour shortages and rising capital/labour ratios make many farms too small). Can rules affecting land transactions, instead, induce private land redistribution? Market principles suggest that good rules, including tax laws,

should increase access to information and expertise, reduce market power of the strong or collusive, but not delay or deter land transactions. An owner-farmer, having received 0.5 ha in a land reform and shortly selling or leasing it, often acts from correctly perceived economic self-interest; 'protective' laws or taxes to impede such action can be misplaced paternalism. However, farmers – especially inexperienced ones, or before post-reform markets have settled down – may sell out of shock at bad results due to inexperience, a bad season, a rapacious lender, lack of credit or insurance, or due to misinformation, perhaps deliberate,<sup>25</sup> perhaps to help a big farmer or ex-collective manager to regain control of reform land. The best State action to stop this would support more accurate information, better farm extension, and more complete credit and insurance markets, but these are long-term. Meanwhile a State with electoral legitimacy – having spent much effort and (taxpayers') money on improving the fairness or efficiency of the land régime, and faced with reversal of those improvements as small beneficiaries are levered off their land – may be wise to put in a little sand. Often this takes the form of restricting beneficiary resale of reform lands, commonly for five years. A better procedure may be modest taxes on land sales by small farmers, deterring them only if their gain from such sale is also modest. In Armenia in the late 1990s, there were no legal barriers to land transactions, but they were 'constrained by the high cadastral value of land fixed by the government, which is well above current market prices, and the need to pay a substantial tax in cash based on the cadastral value when registering transactions ... [Below] 1 per cent of the respondents to a nationwide survey reported buying or selling land' [Giovarelli and Bledsoe 2001]. Clearly Armenia was seeking to protect the land distribution created by egalitarian decollectivisation, but without discouraging leases, and without stopping sales if there was strong economic gain to transactors.<sup>26</sup> Taxes to deter land sales have efficiency costs, but they may be offset by equity gains in early post-reform years.

#### *(v) Tax reform and land reform*

Can progressive land tax, taxes on idle land, and modest taxes on land sales for a few years after reform reduce, or at worst constrain, inequality of farmland? It is plausible, but evidence either way is lacking. This suggests that the effects are not dramatic. It would be unwise to count on these measures as comprising land reform on their own.

Further, even if they support land reform, such measures may not fit a programme of *tax* reform. Before the mid-1980s, this meant tax changes that improve equity vertically (helping the poor by shifting tax to the rich) and horizontally (helping the overtaxed by equalising tax burdens, given ability to pay). Since the 1980s the meaning of reform (Appendix, section (b)), including tax reform, has been shifted, not entirely openly, from equity to efficiency objectives. Tax changes are likelier to be tax reform to the extent that they:

- have *impact* on (are ultimately paid by) – not *incidence* for (i.e. are collected from) – the rich rather than the poor (vertical equity), or on the lightly-taxed rather than the heavily-taxed relative to ability to pay (horizontal equity);<sup>27</sup>
- together with tax-induced changes in income, demand and supply, raise the prices of goods mainly consumed by the rich rather than the poor, or by those previously taxed lightly relative to ability to pay;
- raise the relative appeal of producing goods made mainly labour-intensively or by poorer producers;
- improve economic efficiency, or cut the cost of tax collection.<sup>28</sup>

Economists since Smith have favoured *uniform* property tax (say a 0.5 per cent annual levy on wealth) as the least distortive of taxes. Perhaps *directional* property taxes such as progressive land tax or taxation of unused farmland are also pro-poor and not very distortive, but this needs to be ascertained in each country considering such legislation.

Land reform aims to transform rural efficiency and equity by slashing major, mainly inherited land inequality. Tax reform is not land reform, but the equalising effect of public action involves both together.

#### **(d) Accelerating equitable development as a substitute for land reform?**

##### **(i) Removing distortions**

Apart from the above tax (or subsidy) changes, might removal of price distortions achieve some of the aims of land reform? Almost all countries are permeated by such distortions, open and hidden, especially in the context of farm pricing, trade and promotion. On balance, the distortions enrich farmers in developed countries, and impoverish them in developing countries. Almost everywhere they cut GNP; more often than not they are regressive. Tax-subsidy systems that stimulate unsustainable or unduly capital-intensive farming undermine land reform. Reducing some forms of tax-subsidy distortion and regressiveness, apart from being desirable in itself, might achieve or complement some of the aims of land reform. For example, removing fiscal concessions that favour large owners or operators, or their typical crops, over small farmers, would increase incentives to sell big farms, and to buy them for small farming. In Brazil, this is a good additional reason for levelling the tax-subsidy treatment of both outputs [Thiesenhusen and Melmed-Sanjak 1990: 408] and inputs [Binswanger and Elgin 1988].

Where land is very unequal and the polity undemocratic or unresponsive, the rural poor have little influence on tax policy. Levelling the playing field by cutting anti-poor taxes or subsidies is opposed by powerful people who would lose from it. However, given the power balance, fiscal crises push governments to reduce deficits by subsidy reform, not to spend on land reform. The revival of democracy in Latin America and Africa also leads middle farmers, who would

oppose land reform, to press for more equitable tax-subsidy treatment [de Janvry and Sadoulet 1991]. However, removing tax distortions is unlikely to do much to achieve the rural income and power redistribution sought by land reformers.

More generally, developing countries have typically kept both farm input and output prices below world levels. Reducing these distortions usually increases growth and efficiency, but is it good for the poor?

1. Probably not to the extent that it raises prices of farm inputs complementary with employment, such as fertiliser – though subsidies on such inputs normally help bigger farmers more than smaller ones.
2. Yes, to the extent that it gets the farmer a higher share of market prices – in turn stimulating more output and employment – for non-staple or export crops such as cotton, sugar or coffee.
3. In the long run only, if it raises staples prices. In the short run, the poor – half of whose consumption typically comprises staples – lose unless they are mainly rural, farmland is very equal (usually after egalitarian decollectivisation or classical reform), and the nation is not a major staples importer.<sup>29</sup>

Reduction of price distortions is desirable but not always pro-poor, and may not meet the aims of land reform.

## *(ii) Credit access*

Reducing barriers to credit access, so the poor can borrow to buy land, is a conceivable route to private land redistribution. In the past 30 years the old, politicised and discredited route of large subsidised State (including pseudo-co-operative) credit labelled ‘for the poor’ has been displaced by an intermittently successful approach: unsubsidised, often peer-monitored groups of five to twenty poor borrowers from a village, supported by NGO or quasi-bank credit. However, as a path to land access, credit policy has even less leverage than reducing the tax-subsidy advantages of big farmers over small. First, more credit to buy land raises demand and bids up the price; removing tax-subsidy incentives to large-scale farming raises the supply of land to small buyers, not just their demand. Second, tax-subsidy levelling avoids the difficulties of identifying, for credit, those who have the ability and intention both to use the credit to buy land, and to use land profitably and safely [Stiglitz and Weiss 1981] to repay loans. Such difficulties have led most micro-credit agencies and NGOs, such as Grameen and BRAC in Bangladesh and followers elsewhere, to lend little for land acquisition, focusing on non-farm lending [Hulme and Mosley 1996].

## *(iii) Growth and rural development as ‘the real land reform’*

This sounds nice, rather like ‘living well is the best revenge’ or ‘virtue is its own reward’, but like those nostrums, it is not much use to man or beast. If

growth and equitable rural development are achieved, without or with land reform, the poor indeed have a better chance to escape poverty. Unfortunately the prospects of achievement are doubly damaged by extreme inequality of farmland. First, it reduces farm output and hence normally retards rural development (chapter 2). Second, it gives the rich more political power – and market power as landowners, rural employers, grain sellers, fertiliser buyers – to seize most of the gains from such rural development as does happen, at least until it leads to labour shortage and hence rises in wages, employment, and the bargaining power of labour. Third, that ‘until’ is delayed because land is concentrated into large farms that are more capital-intensive, with less employment per hectare [Booth and Sundrum 1985].

‘Rural development’ is partly code for better infrastructure and social services. These help the poor, but, where rural land and power are very unequal, less than the rich. The poor’s gains from such service-oriented rural development have been lowered since the 1980s world-wide by user fees, which deter the poor most. The spread of user fees to primary schooling and health care is now widely seen as a mistake, but fiscal systems have come to rely on fees, making them hard to cut. There may be better prospects for ‘integrated rural development’ that *combines* infrastructure and social services with policies to improve the poor’s participation and access, to cut subsidies on farm inputs that benefit mainly the better-off, and to steer land to the poor, as in the late 1980s in north-east Brazil [Tendler 1991: 120]. In other words, rural development can be land reform, if it includes land reform. In fact, shortages of funds and politico-administrative energy usually imply a choice between ‘rural development’ and land reform, not least in Brazil: ‘land redistribution ... [in the 1970s was] virtually abandoned ... in favour of infrastructure building ... The perception has radically changed in the last 15 years. Improving the rural poor’s access to land is currently seen as a relevant policy to combat overwhelming rural poverty’ [da Silveira *et al.* 2008].

#### *(iv) Agro-technical progress*

Technical progress, as in the green revolution, is needed for rapid rural income growth. Poor consumers benefit from lower and more stable food prices, and farmworkers from higher employment. In the early green revolution, smaller farmers were impeded by risk and access problems from adopting new seeds and higher fertiliser levels – and sometimes suffered from output price falls as richer farmers adopted and produced more. However, they caught up; where a green revolution was achieved, absolute income and welfare almost always rose substantially, for poor as well as rich [Hazell *et al.* 2000; Kerr and Kolavalli 1999; Lipton with Longhurst 1989]. In some circumstances green revolutions even redistribute from rich to poor: for familiar reasons (chapter 2, section (c)), small farmers end up using more fertiliser per hectare after the green revolution, thus increasing yields more; the poorer a consumer, the higher the proportion of income spent on green-revolution



staples, whose prices have been restrained and stabilised by extra green-revolution output; and, where a green revolution greatly raises not only yields but the proportion of land in (labour-intensive) staples, farm labourers may gain proportionately most of all [Hazell and Ramasamy 1991]. However, if land distribution is extremely unequal and many rural people lack land – as in rural South Africa, Bihar State in India, or north-east Brazil – even the combination of rural development, levelling of the anti-poor price playing field, and technical progress may do little for the poor. The cereals green revolution seems ideal for the poor. It has raised the demand for labour; increased net farm income per hectare at least as much on tiny farms as on big ones; and raised, cheapened and stabilised staple food supply. Yet as a rule, while the rural poor gained income from the green revolution, townspeople [Abler *et al.* 1994] – and in the early years large farmers – gained proportionately more income. This is partly because poor people respond to new green-revolution opportunities with greater participation in work and lower mortality, increasing the supply of labour and bidding down its wage. Also, urban élites and big farmers have more influence than the rural poor on political decisions – especially about foreign trade and cereal stock policies – that, as much as the economics, determine who gains from agro-technical advances. There is also a regional dimension: the poor in large regions left out of the green revolution – often the poorest regions to start with – gained little, or even lost, from it in India, China and elsewhere.

The green revolution helped most of the poor in most areas where it happened. It even perhaps sometimes raised their incomes faster than those of the rich. But it did not produce income redistribution on a scale comparable to a major land reform. Nor did the green revolution induce major land redistribution (though early fears that it would shift farmland *away* from the poor proved largely unfounded). The green revolution slashed poverty, and seeded economic development that shifted millions out of rural areas and farmwork; both effects probably reduced the policy salience of rural poverty reduction, and of land reforms as a means to it. With the same effect, the green revolution made *regional* inequality a more important component of total inequality: a component not addressed by land reform (almost always *within* a region). In green revolution areas, land reform became even more conflictual, because (by making farms more profitable and secure) the green revolution sharpened both the land-hunger of those without land, and the tenacity with which the landed seek to keep it. This redirects land-reform concerns to areas, and countries, without a green revolution. So does the fact that the farm poor are increasingly concentrated there: even before the green revolution, such places had usually been poorer, more agriculture-based, more remote and with less water control. The green revolution and its effects are neither land reform nor substitutes for it.

#### ***(v) Development, transition and land reform***

Successful economic development to some extent *squeezes out* the efficiency case for land reform where there is scarce capital and underused labour. One

side of the squeeze is that, where colonial or subsequent history has concentrated land into large underfarmed holdings, that concentration tends to be corrected as land markets, land values and land scarcities grow; indeed, measures of farm size and land inequality have fallen in such countries.<sup>30</sup> The other side of the squeeze is that economic growth and poverty reduction normally accompany greater access to capital and less abundance of labour, justifying slightly higher farm size. So declining actual farm size and rising optimal farm size converge – more with land reform, but to some extent even without it. This squeeze is slow to work where farmland starts very unequal; where indirect (non-market, cross-market or political) gains from large-farm ownership or operation are great; or where most wealth still depends on ascribed advantage confirmed by old social structures, not on achieved advantage earned from an initial platform of not-very-unequal opportunity. However, economic development and transition, in the broadest sense, are about shifting away from these last two conditions.

Political transition can support this (though there is no simple relationship between democracy and ‘development’). de Janvry and Sadoulet [1991] show that, in many Latin American countries in the late 1980s, transition from military governments to more open and democratic polities created openings in which the poor mobilised to raise their share in gains from technical progress, rural social services, and the correction of price distortions.

However, the growing *regionalisation* of poverty, discussed above [see also Lipton and Zhang 2009], limits the poor’s gains, even if such transitions yield aggregate policy improvements. Better farm prices or agricultural extension may bypass poor people ‘stuck’ in rural areas too unpromising to respond much to such improvements. Often, too, the poorest find it hard to migrate out of poverty: they are risk-averse, and concentrated in places and ethnic groups that over-represent (and hence signal to employers) low educational levels [Psacharopoulos and Patrinos 1994 for Latin America]. Poverty incidence and severity remain much higher in remote, hilly, arid or semi-arid areas [Hanumantha Rao *et al.* 1989; Mason 1996]. Most such areas also face agro-ecological and technical constraints that impede local responsiveness, whether to price reform, general liberalisation or rural development; but such constraints are often not the main issue. Remote, dispersed, undereducated areas provide hard conditions for effective *political* action, even in developed democracies. People, especially the poor, in such areas enjoy below-average allocations of agricultural research, education and transport than richer people and areas – even where returns on investment in advanced rural areas have become low.<sup>31</sup> ‘Betting on the strong’, early in India’s green revolution, involved regional priorities chosen ‘not so much out of regard for rationality or the social interest [as for the] balance of political forces’ [Joshi 1987: 296].

Outside these problem areas – where, it can fairly be retorted, land reform is not such a wonderful cure-all either! – can it be in the self-interest of the powerful to spread ‘growth and rural development’ to the rural poor if farmland is very unequal, but the polity is (or is becoming) open or

democratic? The power and income of the rural rich depend largely on farmland. So the rural rich are likelier to back widespread rural development<sup>32</sup> if they see it as needed, or likely, to prevent or delay confiscatory land reform. Conversely the reality, threat or fear of such reform makes the rich less keen to block the poor's alternative paths to advance (e.g. the effective steering of rural development or agricultural research towards labour-intensive small farms). If land is extremely unequal *and no land reform is in prospect*, the rural rich can capture the gains from research, education and subsidies, and have the power and motive to avoid the costs and risks of a wide spread of rural development. On the other hand, this will be secured by poor power anyway, if land is rather equally distributed, or *if major land reform is likely*.

Hence, if there is great land inequality and no prospect of land reform, rural development is unlikely to spread widely to the rural poor, even in an increasingly democratic polity; and if there is such a prospect, then it will be realised within such a polity. So where is the gain for the powerful in spreading rural development towards the poor? Only *in intermediate situations*, e.g. in parts of South Asia – where land is unequal but not extremely so, real land reform is feasible but far from certain, and popular pressure for it is real but can be diverted by widespread growth and rural development – have policy-makers much freedom (or much incentive) to determine that much more of the gains from such development reach the poor. Even then, policy can durably steer schooling, credit or farm research towards the rural poor only if they have some power; yet, if they have, they are also likelier to succeed in obtaining land (and often it is the struggle for land that mobilises the rural poor to seek their other aims as well). Hence, except where agro-technical progress is unusually fast, exogenous and labour-using, the poor are likely to secure major absolute and relative gains from it – or from price correction and 'rural development' – not as a substitute for low or falling land inequality or land reform, but where they already exist, or are in prospect.

### **(e) Sheep, ceremonies and arsenic: 'new wave' land reform**

We have examined the definition, scope and performance of three groups of measures to shift farmland rights, income and power to small farmers and workers:

- CLR, shifting land from large to small farms via a Land Authority (chapter 3(b) above);
- tenurial reform – tenancy rules, titling, patrilisation, collectivisation, decollectivisation (chapters 4 and 5);
- standard alternatives – settlement, consolidation, tax reform or 'rural development' (sections (a)–(d) above).

There remains a non-standard alternative: 'new wave' land reform (NWLR), avoiding both confiscation and the Land Authority Model (section (c)) by consensual, decentralised or market-assisted land transfer.

*(i) Defining NWLR: is it really land reform?*

The term ‘new-wave land reform’ is used neutrally in this book. Whether it is really new, and if so whether it is the newness of useful innovation or of ideological fashion, remain to be seen. We define NWLR as a set of laws, mostly post-1985, to redistribute land without classical Land Authorities, and generally characterised by decentralisation, the use of land markets, and reluctance to compel. ‘The first refereed article on the subject entitles it “negotiated land reform”’ [Deininger 1999]. Subsequent terms have been ‘community-based’, ‘community-managed’, ‘market-friendly’ and ‘market-assisted’ [Ciamarra 2003], ‘market-led’, ‘market-based’, ‘willing-seller–willing buyer’, ‘non-confiscatory’ and ‘decentralised’ land reform [Deininger 1999; Tanaka and Wittman 2003; da Silveira *et al.* 2008]. The terms do not always distinguish NWLR from classic land reform (CLR). As for ‘market-led’, State laws lead NWLR just as much as CLR. As for ‘market-assisted’, the success of CLR, except in a fully effective dictatorship, depends as much on market responses (via incentive-compatibility) as does the success of NWLR. Other terms distinguish much NWLR from much CLR, but no more. Much CLR has been largely ‘non-confiscatory’<sup>33</sup> and much NWLR seeks to keep land prices down by training and organising groups of poor buyers. Most NWLR has been ‘willing-buyer, willing-seller’ only via heavy subsidies (usually on land vouchers) to *make* both parties willing; and some CLR, too, has focused on willing sellers, though often nudging or compelling others. Reluctance to centralise, to override land markets (market-friendliness), and especially to compel land sales does distinguish most NWLRs from most CLRs, but by no means all. In practice the relationship of NWLRs to markets is not obviously less complex or less distortive than that of CLRs.

Those who deny that NWLR is land reform [e.g. Frank 2002; perhaps Borras 2008] have two objections of principle. First, they argue that, because NWLR seeks to avoid confiscation, it cannot redistribute to the poor,<sup>34</sup> including tiny farmers and the landless. Such redistribution is the *intention* of many NWLR advocates: Deininger [1999, 2003] argues that more equal distribution brings faster growth, as does the World Bank’s 2006 *World Development Report* on equity. But can redistribution *result* from NWLR?

- Even if NWLR does not make big landlords poorer, it may redistribute by making former tiny farmers and landless people richer because (1) they get subsidies, from aid or (partly progressive) taxation, to buy land or to borrow money to do so; (2) they gain, from former big owners, rewards for *managing* land;<sup>35</sup> and/or (3) production and income rise after land is divided into smaller farms.
- Furthermore NWLR may, with redistributive effect, make land cheaper for the poor if its resources are used to buy when prices are low, as in Southern Africa [Kirsten and van Zyl 1999], or to organise and train groups of poor borrowers to bargain jointly against big sellers [Deininger

2003]. This may outweigh the fact that NWLR increases small buyers' demand for land, especially as it does so partly by discouraging large buyers.

NWLR should be compared with a feasible, not a fanciful, CLR alternative. NWLR advocates often argue not that CLR is bad, nor that one should not redistribute land and power to the rural poor, but that CLR increasingly fails to do so: that the balance of opinion (not just power) has turned against it, because CLR's centralised bureaucratic procedures fail to deliver the redistribution it claims to seek. Chapter 7 shows that CLR has redistributed much rural land and power, still does so, and retains much potential. Borras [2007] – while warning against careless readings of the data – provides recent evidence from the Philippines of redistributive gains from CLR (alongside tenancy reform), but much less so from NWLR. Yet there is no *general* law that NWLR must be rejected, as a distributor of land, income and power to the rural poor, in favour of CLR. It depends on the practical prospects of each. These will differ among countries at any time, and often among decades within a country.

The same argument applies to the other objection that, in principle, NWLR cannot be real land reform: that it is part of a neo-liberal programme to reduce the role of the State, undermining its capacity to provide post-reform services and thus to implement *any* land reform. Sometimes NWLR's opponents see it as a deliberate wrecking ball, to destroy CLR or peasant movements that support it.<sup>36</sup> As a rule, that is unfair. In a 1988 US vice-presidential election debate, a statement by Dan Quayle provoked Lloyd Bentsen to respond: 'I knew Jack Kennedy; you're no Jack Kennedy'. Well, I know some main advocates of NWLR, and they're no neo-liberals.<sup>37</sup> They are voices, often effective, for the rural poor within public or international agencies. They do oppose many restraints on markets, seeing them as reflecting the power-structures of States that impose them, and thus often capturing rents for the rich rather than advancing the interests of the poor. Sen [1997], no dogmatic neo-liberal, has argued, for similar reasons, that it was pro-poor to slash regulatory and price distortions in India. Why should Marxists, who often rightly attack such class-motivated State abuses, reject NWLR because its supporters attack them too?<sup>38</sup> NWLR advocates are seldom neo-liberals in the normal sense (semi-libertarian minimisers of State action or price intervention), or believers that whatever land and income distribution emerges from free markets is inherently optimal.

Whatever the motives of NWLR's intellectual defenders, its financial backers in governments and agencies – and big landowners themselves – might indeed use it as a Trojan horse, not just for sensible use of markets but for neo-liberal dogma, including the switching-off of CLR and peasant movements so markets can facilitate entry of domestic and foreign agrarian 'big capital' at the expense of small-scale farming and the rural poor.<sup>39</sup> A key test is whether the associations for group purchase of land 'for the poor' in

NWLR are genuine and work. The NWLR 'model posits that the land reform process is under the control of the landless. However ... associations are not voluntarily formed by the landless, but [by] local governmental authorities and landowners wishing to sell land. Leaders are often imposed on the associations from the outside'; in Guatemala the World Bank agrees that large farmers' local power, and reluctance to sell to the rural poor, prevent NWLR from achieving much for them [Frank 2002]. Yet da Silveira *et al.* [2008] argue that in Brazil the associations buying land in the substantial NWLR programme (Cedula de la Terra) were genuinely peasant-run, with beneficiaries self-selected. As with CLR, so with NWLR: whether it works, and represents and benefits the rural poor, or is an entryist strategy for big farmers and big capital to dispossess the rural poor, depends on local conditions and power-structures. There was, and may still be, an option for NWLR reformers in Mexico to challenge politically dominant institutions of large-scale farming, and to work 'bottom-up' with both traditional institutions and movements such as the *Zapatistas* in Chiapas [Quintana *et al.* 1998]. Labelling such options, or NWLR in general, as neo-liberal (or neo-populist) is wrong. It is also wrong to juxtapose model with muddle, contrasting an idealised view of CLR with the flawed practice of NWLR [e.g. Paasch n.d.] or *vice versa* [perhaps Deininger 1999].

*(ii) How does NWLR relate to classic land reform?*

There are five ways to look at this relationship. The first and commonest is as a zero-sum game, with NWLR and CLR as alternatives – one genuine land reform, the other not – for the same area and time; as rivals for the support of the people and the powerful, for resources, and for kudos when land redistribution succeeds or blame when it fails. Second, beneath the rhetoric, NWLR and CLR may be very similar. Third, it may be horses for courses, with CLR better in some places and times, NWLR in others. Fourth, they may be complements, advancing (or, by their weakness, impeding) land and power redistribution in the same area and period – either because success in one style of reform assists the other, or because competition between CLR and NWLR organisations stimulates both to do better. Fifth, NWLR and CLR may be a sequence, with one taking over as the other loses momentum or support (or as facts change), perhaps itself to be replaced later. Further, both CLR and NWLR interact with a third guest at the land-reform party: peasant movements and organisations, sometimes involved in land invasions.

**I. NWLR and CLR as rivals.** 'Deininger [1999] ... discusses the presumed advantages of [NWLR] vis-à-vis flaws and shortcomings of state-led reforms [as do others ... They] can appear to be substitute instruments' [el-Ghonemy 2007]. But how much of this is about belief, and how much is about budget? NWLR and CLR often compete for limited budgetary resources, often from the same Ministry (Agriculture or Lands). In Brazil

[Windfuhr 2002, Domingos 2003] the main rivalry concerned alleged shifting of State funds from the CLR agency (INCRA) to the NWLR Cedula project and its successor. Conversely, *absence* of budgetary competition accounts for the shortage of NWLR-CLR rivalry during decollectivisation, often the closing phase of land redistribution after decades of ‘terrible detour’ (chapter 5(b)), but with low budgetary costs, compared with NWLR or direct CLR. There is nobody to compensate; the beneficiaries need not be trained to farm, as they farm already; and farm services and institutions need not be financed anew, because they exist already (though sometimes either ill-adapted to post-collectivist farming, or else too readily phased out). There was much dispute about the size and organisation of post-collective farming, but – with no major issue of compensation or budget – little overt NWLR-CLR rivalry.

If NWLR and CLR are rivals, can one compare their performance under budgetary constraints, at least within one country? For Brazil, da Silveira *et al.* [2008] conclude from numerous surveys that – though it is ‘a strong indicator of [a] low degree of efficiency’ that no CLR project studied has reached ‘emancipation’ (independence of special government support) – the ‘differences between [NWLR and CLR] settlements and household living conditions are too small to suggest Cedula da Terra [NWLR – or, of course, the rival CLR] as more efficient’. Other analysts, usually with strong prior preferences, conclude that these or similar data show that either CLR [see review in Paasch 2003] or NWLR has clearly done better. There are two fatal objections to all these conclusions. First, CLR and NWLR in the same country may, and almost certainly do, interact in various ways. That has important effects of the performance of both (see below). Second, so do shifts in budgetary allocation, i.e. what looks like good performance of NWLR (or CLR) may be wholly a response to resources improving information or morale within an organisation.

**II. Are NWLR and CLR sisters under the skin?** Contents of a programme likely to succeed in NWLR and CLR often look oddly similar. Deininger [1999] lists four requirements for Colombia’s NWLR pilots: ‘(i) ... a programme “owned” by the local government, thus achieving better integration ... with existing municipal development priorities or investments ... (ii) ... elaboration of productive projects [as] a basis for ... beneficiary training, negotiation of land prices, and [cost-benefit ... ]; (iii) ... a decentralised and “hands-on” programme of beneficiary training ... as a means of pre-selecting beneficiaries; (iv) ... a transparent and public process of project approval’. Yet all four are as crucial for success in CLR as in NWLR. Many over-centralised, top-down CLR’s indeed undervalued them, but so can NWLR’s. Paasch [2003] rightly says of NWLR: ‘To expect poor people to buy the land at market prices is highly unrealistic’ – and that’s why both NWLR and CLR normally

subsidise poor purchasers (or loans to them). He adds, 'Unequal bargaining power ... leads to excessive land prices' in NWLR – and that's why beneficiaries in NWLR, just as in CLR (which is far from fully confiscatory), should be and often are screened, formed into groups, and trained. NWLR's supporters emphasise the place of – and opponents, the cost of – farm plans and budgets, including for land preparation, followed by training [Deininger 1999, da Silveira *et al.* 2008], especially for beneficiaries with limited farm experience. Yet these are just as essential for success in CLR, and are just as readily neglected in NWLR, as in South Africa in 1994–2008, with damaging results.

Problems of State and institutional attitudes and structures hostile to pro-poor land distribution, too, are not so different as between NWLR and CLR. Supposed CLR land, nominally intended for the poor, can readily go instead to politicians, civil servants, their manipulated agents, or their powerful clients. The remedy is strong, transparent public overview, and Deininger [1999] shows how NWLR in Brazil (Cedula) improved on the procedures of INCRA for CLR. But we do not yet know how well this works to prevent a very similar problem with NWLR: that willing-buyer–willing-seller transactions, in an environment where States and power-structures reflect big-farm interests, may shift land, not from rich to poor, but (with public subsidy) from big farmers to other rich people. Filho *et al.* [2004] show that, in Brazil's Cedula NWLR pilot project, 'technical assistance, years of schooling, and better access to credit ... increase technical and allocative efficiency among beneficiaries'. These also help in post-CLR farming, and indeed in farming of any sort. Relatedly, there is a dilemma in Brazil about whether to focus on 'the poorest or the more skilled poor as beneficiaries', but only 'slight differences' in this outcome as between NWLR and CLR [da Silveira *et al.* 2008].

Pro-NWLR and pro-CLR factions alike claim that their preferred reforms, and only these, shift land to the rural poor. Deininger *et al.* [2003] show how segmented land markets (where rich sell to rich, and poor to poor), distress sales, and high transaction costs 'imply that land acquisition by the poor through the land sales market will be difficult'. But that is true for NWLR as well as CLR. Both skew the land sales market by selectively subsidising rich-to-poor transfers: NWLR directly via land sales, e.g. by subsidising vouchers issued to trained groups of poor beneficiaries; CLR indirectly, by channelling many such sales through compulsory acquisition by a Land Authority that subsidises transfer to the poor, and by making remaining direct, private rich-to-poor sales incentive-compatible as a legal way to escape compulsory land acquisition (chapter 3(b) (vii)). However, incentives *against* rich-to-poor land transfers,<sup>40</sup> and thus the difficulties of NWLR and CLR alike, remain, *viz.* 'policy distortions that favour larger farms ... and drive up land prices to levels well above the capitalised value of future farm profits [which] limits the supply of land to beneficiaries and encourage purchase of land by other groups' [van Zyl and Kirsten 1997, on Southern Africa]. Such distortions also



increase big farmers' (and rent-seeking officials') incentive to subvert CLR by reducing rich-to-poor land transfers. So both CLR and NWLR face problems of evasion: big owners, by bogus rich-to-poor transfers, disguise retention of land, exchange with rich neighbours, or other ways to perpetuate market and non-market power over the poor [Borras 2007]. Either NWLR or (as in rural Bihar: p. 147). CLR can overcome such problems, even in unfavourable polities, if the laws can be enforced on evaders, perhaps much later, with the help of courageous peasant movements or officials.

The voluntarist, market-linked, decentralised emphasis of NWLR 'feels' very different, to analysts of all political persuasions, from the State-led, compulsion-linked, often centralised emphasis of CLR. What all feel as different probably is. Yet political polarisation has led to gross overstatement of the difference. The requirements for success, the obstacles, and the actual implemented contents of NWLRs and CLRs are similar in many ways. One should perhaps see them as a spectrum:

- extreme CLR, highly confiscatory, compulsory and centralised;
- determined CLR, with a confiscatory element, but slower, gentler, more local, working with incentives;
- far-reaching NWLR, removing distortions against smaller, poorer farms, substantially subsidising land transfers to them, and training their groups to improve bargaining skills, land searches and farm plans;
- minimally interventionist NWLR, slightly cutting the price of land transfer from rich to poor.

Minimal NWLR usually disturbs the surface of rural exploitation too little to achieve much redistribution, and is seldom land reform. Most States attempting extreme CLR, where they have not fallen far short, have either suffered years of land wars, or shifted to the 'terrible detour' via imposed State or collective farming. Determined but gentler CLR and far-reaching NWLR are more similar than their advocates suggest. Either can meet our definition of land reform.

**III. Horses for courses?** A standard review of CLR [Binswanger *et al.* 1996] concludes that, especially when combined with tenancy reform, it often worked well in landlord-based farm systems, but seldom in employer-based farm systems. Deininger [1999]<sup>41</sup> bases his case for NWLR less on attacking CLR than on this dichotomy: NWLR is to achieve for hacienda areas what CLR has achieved for landlord areas. Ciamarra [2003] argues that success in NWLRs requires 'large tracts of [under-exploited] land of arable potential' and 'excess latent supply of land *vis-à-vis* prospective demand'; and is handicapped where 'poor people are trapped in socio-economic structures that [inhibit substantial response] to market incentives' by severe initial inequality plus very weak 'schooling, health, research, communications, and transport and other

infrastructure'. el-Ghonemy [2007] argues that historical successes of NWLR, while substantial, have required a high degree of State neutrality, together with a specific combination of regulatory and deregulatory actions at the borders of State and market; absent these it is CLR or nothing.

NWLR has better prospects in some places and times, and so does CLR. However, these places and times are frequently the same! It is not so much a matter of horses for courses. Some courses increase the speed of both horses; others reduce it. The above authors indicate factors making the *relative* chance of success of CLR, as compared with NWLR, more in some cases and less in others. Such factors probably exist, but there is no evidence that the rather ad hoc list in the last paragraph includes all of them, or the main ones, or even that all the included factors work in the direction claimed. If it is horses for courses, that may well be, not because of inherent features of areas or periods, but because the supporters and financiers of reform have, at some places and in some times, chosen to *make* specific conditions more favourable to a particular, approved type of land policy – as the USSR did for collectivisation in Eastern Europe in the 1950s; as the USA did for ‘determined but gentle’ CLR in Latin America in the 1960s with the ‘Alliance for Progress’; and as the World Bank may be doing for NWLR in some areas today.

**IV. Complementarity?** Rivalry between agencies, older ones for CLR and newer ones for NWLR, can make both raise their game. CLR agencies, cut back to make funds for NWLR newcomers, may focus on projects with better chances of success. In Brazil, da Silveira *et al.* [2008] quantifies the ‘enormous productivity gain within the public sector [CLR] in the decade’ after rival NWLR projects began.

There are other ways for NWLR to be ‘a complement, rather than a substitute, for other forms of gaining access to land, especially land rental’ [Deininger 1999] but that also applies to CLR. In the Philippines, NWLR is structured – and pressured – to be ‘successful complements in securing equal access to land for the resource poor ... The programme is both coercive state-led and voluntary market-driven ... allow[ing] compulsory acquisition of privately owned land [but stipulating] that land transfer can be based on voluntary agreements among willing buyers and willing sellers, [which], except for tenanted rice and maize land, have been the most used modes of land acquisition and distribution. This worked only thanks to an open, democratic framework with ‘vigorous grassroots movements’ able to ‘exert strong ... pressures on central and local authorities’, alongside decentralised government [Ciamarra 2003]. CLR achieved more than is often claimed, and many voluntary NWLR-style land transfers were bogus: de facto evasion by former owners, who later reasserted their power, left tenants and the landless little or no better off [Borras 2007, 2008]. However (just as in Indian CLR) there are two

long-run limits on evasion of NWLR *if CLR remains*, even in reserve. The first limit on NWLR evasion is that the letter of the CLR law might then be enforced, by individual poor farmers or by group pressure from below, even at financial cost and sometimes physical risk; interaction between social movements and committed legal specialists, ‘a support structure for politico-legal mobilisation’, is crucial here [Franco 2008]. The second limit is that land transfers from rich to poor are a feasible way to evade CLR (chapter 3(b) (vi)), also when it is a backup to NWLR.

Such backup is critical to complementarity between NWLR and CLR, which in the Philippines provides a ‘background ... credible threat of the government, *backed by popular movements*, to acquire the land’ if landowners reject voluntary NWLR sales. This ‘has strongly contributed to the success of [NWLR] ... in underutilised lands but also in large profitable commercial plantations’ [Ciamarra 2003; my italics], and could do so in South Africa too. Indeed, freer land markets in Mexico and several African countries have proved unlikely, *on their own*, to be pro-poor even in an NWLR context [Cotula *et al.* 2006; cf. Borras 2008]. But the reserve threat, behind NWLR, of CLR takeover with less-than-full compensation can correct the biases of land markets against the poor; and popular movements, even land invasions, can reinforce that threat. Extreme caution is needed with this argument. First, invasions always disrupt production, often lead to bloodshed, and sometimes bring chaos. Second, production, and especially investment, require that land and other markets function with recourse to law, not to violence or its threat. Third, even if one believes that violence and bias against the poor need correction, resort to threats and force will in most cases favour those with most power or money to buy and keep guns and therefore land; such people are rarely the rural poor. Land invasions as in Zimbabwe from 2002, where self-styled war veterans used force to expel farmers, sometimes replacing them by people neither poor nor intending to farm (even including the wife of President Mugabe: *Guardian* 6 March 2009), have little to commend them. Yet occupations by the Movimento Sem Terra in Brazil, and by some peasant movements in India, have sometimes been non-violent, and usually on land both illegally owned above the ceiling (unenforced due to owner pressure on the polity and the judiciary), and idle or underutilised (so there are few farm-workers to oppose invasion). *It is naïve to advocate land invasions in disregard of the harm from violence and illegality; it is just as naïve to see as non-violent or legal the continued use of large landowners’ power over law and politics to continue above-ceiling occupancy, while financing (as in some Indian States) campaigns to relax ceilings, effectively buying legal sanction for their past illegal non-enforcement.* Anyway, the threat of land invasions – even if seldom desirable – can catalyse effective complementarity between NWLR and CLR.

**V. Sequences?** NWLR seldom simply displaces CLR. Aspects of NWLR existed in some land reforms in 1950–85. Since 1990 there has been far more CLR than is usually recognised.<sup>42</sup> Yet, if we compare the two

periods, NWLR has gained ground at the expense of CLR. There are two main current explanations. Opponents of CLR argue that it died a natural death, either through the slowness of a centralised Land Authority with vested interests in keeping control of land rather than distributing it, or through succeeding where success was of little value while disappointing expectations elsewhere. Opponents of NWLR argue that CLR was murdered: subverted by 'neo-liberals', some of whom used NWLR to meet (or pretend to meet) land aspirations in the context of a minimal State.

The scale, in families and hectares, of Brazil's CLR-NWLR experience is big; and that experience is awkward for either of the above explanations of the sequence. First, the efficiency of CLR institutions (beneficiary numbers and area, per month and per unit of cost) has been steadily rising. Second, while that was partly due to NWLR competition (section ii (I)), the main shift to NWLR under President Cardoso happened *after* the first sharp rise in CLR efficiency [da Silveira *et al.* 2008]. This is not consistent with a model of CLR becoming less efficient, or reaching its limits, to be replaced as a satisfier of land aspirations by NWLR. Nor is the steady NWLR growth, accompanied by improved CLR outcomes, consistent with an outside conspiracy to displace successful CLR by an NWLR more agreeable to élites. Furthermore, much of Brazil's partial shift from CLR to NWLR went with intensification of very underused land. Over 60 per cent of beneficiaries in 1995–2002 were in three 'frontier' states [Windfuhr 2002]. Some of this was genuine land transfer from rich to poor, but some of what seemed to be a CLR–NWLR sequence was in part a shift from land distribution of *any* sort to settlement. In his respect, Brazil is likely to be typical of many NWLR areas, as NWLR is widely believed to require price-elastic supply of land.

While there was a sequence of CLR followed by NWLR in several countries, the reason seems to be neither that CLR failed (or, where feasible, was completed), nor that CLR was subverted and NWLR forced in by neo-liberals. In some countries (such as Namibia and South Africa) NWLR is being piloted without CLR ever having been tried. And in several countries, including these, there is a strong possibility that CLR (with significant confiscatory elements) will replace a so far slow, unsatisfactory NWLR process.

### *(iii) Sheep and arsenic: rewards, last resorts*

Can one achieve land reform by consensus? 'Words and ceremonies will effectually destroy a whole flock of sheep, if administered with a sufficient portion of arsenic' [Voltaire 1764/1901]. Substantial land transfers from rich to poor can be achieved by 'words and ceremonies', with *either* significant confiscation of above-ceiling land as last resort, *or* sufficient rewards to land sellers. NWLR relies mainly on rewards, CLR mainly on the presence of a last resort, but normally both use both.

With the reward route, costs of land acquisition, instead of falling wholly on large farmers, are shared among taxpayers (urban and rural) and aid donors, often via vouchers to groups of poor land buyers. This may be no cheaper or easier for the State than are ceilings, but there is a case for it. A large confiscatory element, so that much of the cost of land reform falls on big-farm losers, may be just, if they (or perhaps their parents) acquired the land recently and/or by force, fraud or inheritance, rather than by purchase based on hard work and saving. Otherwise, it is not obviously just that rural poverty is achieved by imposing all the costs on big landowners, while other citizens, as rich or richer, pay nothing. Nor does this create trust that legitimate businesspersons can make contracts, and invest, without risk that their property rights are abrogated arbitrarily. To recognise this is not a last-ditch defence of incumbency (chapter 1(b) (iii)), or an argument against redistribution<sup>43</sup> or land reform, but for sharing its cost equitably. Land reform is done in hope of net public gain, e.g. through rural peace, equity, and perhaps higher output and productivity. If so, taxpayers – unless guilty of recent land seizure – should share the cost of land reform in proportion to their ability to pay, modified perhaps by their expected share in that gain (which is one reason for charging recipients part of the cost of reform land<sup>44</sup>). If aid donors seek to support growth and poverty reduction, it makes sense for them to support productivity-oriented measures to get land to the farming poor. Both ‘horizontal equity’ (equal contribution to the fisc by equally rich people) and donor attitudes can underpin enrichment and empowerment of the poor through ‘far-reaching’ NWLR, or through CLR.

However, the last resort of potential ceilings is usually needed as ‘arsenic’. Big owners, especially where farmland is most unequal and reform most needed, often hang on to land not only for farm income, but also for status, power, or speculation. Land reform with, say, 85 per cent compensation for such value is likely to be too costly for taxpayers and donors.<sup>45</sup> Have ceilings a role here? In many countries such as Brazil and India, they have been enacted but widely evaded; they may be enforced in future. In countries with no ceilings, they may later be chosen by the government, or induced by popular pressure. NWLR here, far from being an alternative to ceilings, can build on their *potential* use to make land reform affordable, as well as on the fisc and donors to make its peaceful imposition on big owners possible. In such cases peasant movements can play a constructive role – or, if they overplay their hand, a destructive one.

NWLRs do not avoid cost or confiscation, but share and soften both. They do not avoid some degree of Land Authority-type bureaucracy, but use markets, decentralisation and popular action to simplify and speed its actions. NWLR, seeking to get land to the land-poor by consensual means, can achieve something. But the market is a medium, not a miracle. A policy that ignores or confronts markets usually fails, but so does a policy that assumes markets can magically resolve conflicts and eliminate costs. ‘Willing buyer, willing seller’ arrangements cannot *suffice* to shift a large amount of

farmland to the poor; if they did, where the IR prevails, markets would have removed more land inequality, even without land reform (chapter 2 (g)). Getting land from the very rich to the very poor involves some combination of land markets; last resorts (such as ceilings) based on a sense of threat among the rich, and of empowerment among the poor; and rewards, such as subsidies to poor land buyers, or compensation to rich farmers who sell to them. Markets go only part of the way towards efficient or equitable land distribution, for reasons we have discussed. Rewards are costly to donors and taxpayers, and political alignments mean that they too go only part of the way. Hence the potential, at least, for some ceilings 'arsenic' is usually needed, if NWLR 'ceremonies' are to get much land to the poor.

Some readers will object that this discussion of NWLR, and indeed chapters 3–6 as a whole, are too eclectic, spuriously post-modern; that one cannot 'mix and match' reform types, because one's choice of type of land reform embodies both an ideology, and a judgement that – given the nature of the State and the structure of power among classes – such a type of reform can 'work' (get land, income, power and status to the rural poor). Even if we agree that CLR is the paradigm, how can one pick-and-mix aspects of NWLR (and tenancy reforms, etc.) likely, or unlikely, to succeed in particular situations, or values of economic variables such as supply elasticity of land? If NWLR, land invasions and CLR spring from conflicting power-bases, how can they complement each other?

My defence is that groups of the rural poor and rich do not act – or have power – *only, consistently, or lifelong* as members of a particular class, or in a particular relation to the State. Both their conduct and their power stem also from individual incentives and mind-sets. Experience shows that various types and combinations of claimed land reforms can and do 'work' in particular circumstances and not in others. Some seldom work, and should not normally be called land reform. But getting land, and hence power and income, to the rural poor is difficult. No credible ally in the cause should be rejected out of hand.

## **Appendix: Supply-led versus demand-led NWLR – the role of N-land**

The impact of reward and last resort, in deciding whether NWLR adds much to poor people's ownership of farmland, depends on land-value transferred voluntarily by rich farmers to poor (net of transfer by poor to rich). Call it *N-land*. Without reform, there is not much; most land sales (unlike rentals) are between big landowners, or between small ones [e.g. Shearer *et al.* 1991]. To raise N-land per year NWLR might:

- increase the net supply of land (given its quality) by big-farm households, i.e. push up their supply curve of land (of some or all qualities);
- given their net supply of land area, increase its average quality;

- as a means to these two outcomes, raise big landowners' preference for selling land in small units, or to poor, landless, and/or small-farm households;
- raise the net land-demand curve (given quality) by land-poor households;
- given the net area they demand, raise its mean quality;
- as a means to these two outcomes, raise poor households' preference for buying land from richer households, or for buying better land from land-rich farmers rather than from other land-poor farmers.

The latter three methods, in effect, increase land-poor people's demand for N-land. To the extent that farmland is scarce (i.e. extra land cannot be farmed except with steeply rising unit costs of breaking and/or production), it is likely to be in price-inelastic supply, i.e. a rise in the demand for it leads to a substantial rise in price and only a small rise in the amount supplied. In such cases, a rise in the total demand for land – or, other things equal, for N-land, or for land of higher qualities – will sharply raise land prices. This will most inhibit poor people's capacity to acquire N-land, and the State's ability to support them. Even *announcing* that the poor are to receive support to buy land from the rich, e.g. by grants (including land vouchers) or loans, raises land prices.<sup>46</sup> It thus transfers resources to wealthy sellers of farmland. In part the transfer is from taxpayers;<sup>47</sup> sharing the cost of land reform among those able to pay instead of imposing it all on big farmers may be no bad thing, but slashing poor people's *non-NWLR* demand for land, and overstressing weak tax systems, are. In part it is net buyers of land, including poor ones,<sup>48</sup> who lose if extra demand for land bids up its price. Also rising land prices reduce the amount of land that governments can buy for consensual transfer to the poor. Demand-led NWLR sharpens the problem of affordability, for government, taxpayers, and (if any) donors. The more price-inelastic is land supply, the more serious is this problem. Demand-led NWLR, therefore, is likely to be land reform only if timed when land prices are relatively low, or combined with measures to restrain them.

Demand-led NWLR, by raising the demand curves for types and qualities of N-land along fixed supply curves, raises land prices (and land rents), including for non-beneficiaries of reform. That *reduces* the income of poor households, either when they buy N-land or when they pay taxes to finance its subsidy. This offsets poor people's gains as recipients of grants or subsidies to buy N-land, or as employees who get more work because post-reform smallholders are more labour-intensive than pre-reform large farmers. Crucial questions, affecting both affordability of NWLR and its net benefits to the poor, are:

- (1) how much NWLR raises net demand for N-land;
- (2) responsiveness of the price of N-land to extra demand;
- (3) how far such price rises are offset, or reversed, by measures to raise the net supply of N-land.

*Demand-led NWLR seldom achieves much unless (3) is large, i.e. unless there are either costly rewards, or the 'last resort' of CLR with enforced ceilings. The fattest sheep must be given some arsenic or much cream.*

Evidence on (1), the response of smallholder land demand to availability, is hard to find. Surveys in the CIS and South Africa suggest that below 30 per cent of farm employees say they want to farm. However, we cannot read much into lukewarm responses to hypothetical questions about unfamiliar events. The lifelong landless, recalling repression of smallholders' prospects, prices and public goods, are unlikely to be keen on independent farming. Experience from Albania to (pre-2000) Zimbabwe shows increased response, once ex-employees or micro-farmers *in fact* get the chance to farm family holdings on a more 'level playing field'. If so, while good news for NWLR uptake, this is bad news for land price impact.

What of (2), the supply-elasticity of N-land? This is determined by that of all farmland, that of the share of N-land within it, and this N-share itself. Turnover of total farmland, even in so-called traditional societies, is quite high and price-responsive. From tribal Orissa [Bailey 1953] through South Africa to North America, it is normal for 3–6 per cent of farmland to change hands annually by voluntary transfer (other than inheritance). However, especially as arable land becomes more productive, while the marginal returns to newly-farmed land dwindle relative to those from already-farmed land, supply elasticities are or become small – typically around 0.5 in South Africa [Kirsten and van Zyl 1999]. So, if NWLR's stimuli to demand for N-land induce a rise of about 20 per cent in the demand curve – i.e. the amount of land bought at each given price – this means a rise of only about 0 per cent, in its supply (along a given supply curve). Unless big sellers readily reassign (or can be induced to reassign) land for sale from big to small buyers, subsidising or grouping the poor to buy land may greatly raise the cost of getting land to the poor.

Hence both the affordability of demand-led NWLR (raising demand for N-land), and its capacity to substantially assist the rural poor, depend on (3): on whether, as new-wave reforms increase demand for farmland by the land-poor, 'things happen' to moderate or reverse the rise in the price of such land. Partly it is a matter of serendipity: NWLRs, and supporting measures to raise demand for N-land (e.g. land-grants to the land-poor), do best when and where land prices are abnormally low due to droughts, debts, or other factors increasing land abandonment or sale by big farmers. Mainly, however, it depends on whether NWLRs also stimulate the *supply* of N-land.

Many ways to do this have been tried. Vinoba Bhavé's *Bhoodan*, or land-gift, movement in India in the 1950s (p. 382, note 19) appealed to rich people's sense of moral and religious duty, and released 0.9m ha of land, although, predictably, it was mostly bad land, and it did not always pass to the poor quickly, or at all. In Taiwan, the government induced higher land supply by offering compensation in the form of shares in seized Japanese urban assets. Many African countries, however, had, and some still have, laws



against subdivision; removing such laws, in itself desirable, incidentally raises the share of N-land in total land supply. Apart from such free lunches, either rewards or last resorts might raise the supply of N-land. In some Brazilian decentralized reforms, local authorities secured consensus by rewarding large landowners with new irrigation on their retained land, in return for giving up some N-land cheaply to the reform [Tendler 1991]. This only works if someone, the taxpayer or (as in this case) a World Bank loan, pays. Even then, threats as well as promises lay behind the increases – locally substantial – in the supply of N-land. The rich might be exposed, if they refused, to invasions, as land invasions, as in several parts of Brazil [*Financial Times* 15 August 1991; 11 August 1994], or to the enforcement of laws, formerly evaded or ignored, that set land ceilings and restricted the occupation of public or common lands [Tendler 1991].

Another possible ‘reward’, within NWLR, for raising the supply of N-land comprises incentives, perhaps subsidies, to big farmers selling land at ‘acceptable’ prices to the poor, in the form of contracts or access to supply services – water, finance, seeds, transport, processing, extension, research contact – to post-NWLR smallholders, perhaps from a nucleus estate or via contract farming [Eaton and Shepherd 2001]. This is a promising approach, provided former big farmers do not obtain such market power over key inputs that the small landholder pays so much that she is as poor as before. The approach has a long pre-history outside the land-reform context, e.g. for tea smallholders from estates in Kenya, sugar smallholders from mills and large sugar growers in S Africa, and tobacco growers in Sri Lanka. If, after land reform, smallholders produce more per hectare and per litre than the giants they replace, while the latter reap profits due to scale economies in supplying services, then all can in principle gain. This might be realised by ‘market-assisted’ NWLR, even though, in markets without NWLR, many landowners would keep and farm all their land (chapter 2(g)). In general, such reforms require a direct stimulus to the supply of N-land. This, in turn, is unlikely to be substantial and affordable unless the owners fear ceilings.

## 7 The alleged death of land reform

Land reform ground to a halt [in Latin America except El Salvador and Nicaragua] in the early 1970s ... the political strength to manage orderly reform is lacking.

[de Janvry and Sadoulet 1991: 267]

Reports of land reform's death in Latin America are, to pinch from Mark Twain, greatly exaggerated. El Salvador and Nicaragua are in the midst of major land reform programmes. Land reform is firmly entered into the political debate in Brazil and, more recently, in Paraguay. Honduras is ... between debate and action. Elsewhere patterns of growth continue to create a demand for it.

[Carter and Mesbah 1991: 278]

1991 is not special; nor is Latin America. In the Roman republic from 133 to 70 BCE, there was a to-and-fro of attempted and underfinanced land reforms and partial reversals, central to political, and at times violent, struggle between Plebs and Optimates [Bringmann and Smyth 2007: 151–82].<sup>1</sup> Possibly ever since, and certainly every year from Lehmann [1978] to 2008, land reform has been authoritatively pronounced dead by some, and healthy by others. King Charles II, who apologised on his deathbed for 'taking such an unconscionable time a-dying', had nothing on land reform.

The slogan 'land reform is dead' covers three distinct claims.

- That land reform was (almost) *always dead*: not much ever happened, except perhaps in 'revolutionary' situations, or severely attenuated by evasion or avoidance by the rich, or loss of reform land by the poor.
- That land reform, while once alive, is *dying*: less is happening, or likely, than previously: in some countries reforms are complete; where they are not, remaining highly unequal farmland is not readily reformable; and the balance of national and world power has shifted against land reform.
- That land reform *ought to die*. Either it is not needed, e.g. because farmland inequality is not (or is no longer) a major cause of poverty; or any advantages of small and equal farming have been reversed by this or that global change ('development', liberalisation, climate change, supermarkets, ... ).

Each claim has force in some cases. So the death of land reform can be made to look plausible by slurring from one case, and one claim, to another. Yet none of the claims is generally or even widely true. Section (a) considers the first two claims, and section (b) the third.

**(a) The gravediggers' case: land reform was always dead, or is dying now**

*(i) Has not much land reform happened? Has it stopped happening?*

FAO concluded (in 1991) that 'commitment to redistributive land reforms ... [had] appeared to wane during the 1980s', but then reviewed numerous and populous exceptions.<sup>2</sup> Rashid and Quibria [1995], among many, argue that land reform is 'passé' because past reforms were not implemented, or did not have the desired effects. That may or may not *be* true – we explore the facts below – but one should beware of assumptions that make it *look* true. The scope or impact of land reform is made to look smaller than it is by the following:

- Defining it very narrowly (often to include radical classic land reform (CLR) only), ruling out many land-based methods of cutting poverty and gross inequality.
- Defining it as happening only if provides everything the post-reform farms need to prosper: not only land transfer but also farmer training, credit, research, inputs, transport, administration, etc. – too many things for most States to do, some anyway best left to beneficiaries themselves, or to private suppliers.<sup>3</sup>
- Committing the glass fallacy (not seeing that a half-empty glass is also half-full) – defining as a failure a land reform that distributes, say, half the target area or reaches half the targeted number of beneficiaries. At some points in this chapter, we italicise the words '*only*' and '*barely*' where they signal this fallacy.
- Using targets (official or personal) that are themselves unreasonably high – or too wide, for example by accepting as land reform only what, largely on its own, removes rural poverty [Jannuzi and Peach 1980].
- Looking only at direct effects of land rights on the poor, slighting indirect or systemic effects.

All such thinking underrates the reach of land reform. And, even where the reach recedes, 'death' is the wrong metaphor. Land reform, like education or tax reform, is a thrust towards more equitable and efficient distribution. The thrust weakens or strengthens with economic situations and power balances, but does not die. Analysts may sense this when, like the FAO [1991, and in Herrera *et al.* 1997], they first claim the death of land reform, and then show, through many large exceptions, that it is alive and well.

*(ii) Is land reform dead or dying in Latin America?*

Kay [1998] summarises: 'Fearful of the spread of [Cuba's] revolution ... the US launched the Alliance for Progress ... which encouraged ... agrarian reform programmes by providing economic aid. Consequently, from the 1960s to the 1970s a number of countries in Latin America undertook agrarian reforms, among them Chile, Peru, Ecuador and Colombia ... In Colombia, Panama, El Salvador and the Dominican Republic between one-sixth and one-quarter of the agricultural land was expropriated [and a] smaller proportion ... in Ecuador, Costa Rica, Honduras and Uruguay. In the late 1970s and 1980s ... in Nicaragua and ... el Salvador, agrarian reforms were also carried out. Only in Argentina has agrarian reform been completely absent. In Brazil strong opposition from landlords stalled any significant agrarian reform, but there has been some minor land redistribution since the restoration of democratic rule in the mid-1980s.' Yet 'with the spread of neo-liberal policies ... the era of major agrarian reforms that started with the Mexican revolution at the beginning of the 20th century has come to a close'.<sup>4</sup> Has it?

The Alliance for Progress (and Russo-US competition in developing countries overall) affected land reform, as did 'neo-liberalism'. However, as Kay recognises, land reform lived before the Alliance and has not been killed by neo-liberalism. Despite appalling foreign interventions, land reform's dynamic is usually internal, not driven by US or other foreign approval or disapproval. And internal conditions in many developing countries still favour land reform, especially in Latin America. Income, and even more farmland (Table 2.3; Table 7.2), are distributed more unequally than elsewhere. As was the case 50 years ago, severe poverty remains mainly rural and due to extreme, inherited and (with land underuse in giant farms) inefficient land inequality. More than for most of the past 50 years, Latin America's rural poor can, to some extent, organise and agitate; most of the efficiently repressive dictatorships are long gone (Stroessner in Paraguay, Pinochet in Chile, Galtieri in Argentina).

Further, though the land reform thrust weakened from the mid-1970s, observers from the mid-1980s [e.g. de Janvry and Sadoulet 1991] saw factors tending to revive it. First, from the mid-1980s, spreading democracy and political organisation led to civil-society activism, including land invasions to press for enforcement of unimplemented land reform laws. Second, in some countries new-wave land reform (NWLR) – more an effort, however insufficient, at a pacifying response than an adjunct of neo-liberalism – both complemented and egged on CLR agencies and peasant movements (chapter 6(e) (ii)). Third, growth and new markets have induced many giant, near-feudal *haciendas* to become commercial farms; this turns tied workers into casual, often part-time employees, freer to press for land reform and sometimes more in need of it. Fourth, in faster-growing countries, urban growth – though not, outside informal services, employment-intensive – has two opposite effects on the salience of land reform. Urbanisation shifts visible poverty priorities *at*

*national level* from farms towards cities; but *at rural level* it empowers the rural poor, by providing an option other than accepting their fate – and weakens the opposition of the rural rich to land reform, by tempting them to take what compensation they can get, and try their luck in the city. No wonder Latin America since 2003 has seen a widening array of (land-)reformist governments.

Internal dynamics, then, support, rather than killing, land reform in twenty-first-century Latin America. Since the Mexican Revolution of 1910 (with striking exceptions during the Cold War)<sup>5</sup> internal dynamics, more than meddling foreigners,<sup>6</sup> decide whether land reform slows, pauses, resumes or accelerates (none of them, by the way, a clinical sign of death). Sometimes it was seen as complete, either having reached its limits or succumbed to limitations, mainly underperformance and unpopularity due to collectivist rather than distributivist approaches [Thiesenhusen (ed.) 1989]. But in no country did land reform quite die, and in several it has resumed or speeded up. Indeed, in some countries land reform sputtered on with many stops and starts [e.g. Seligson 1995 on el Salvador]. The timing of slowdowns or reversals varied, from as early as 1973 in Chile. The timing of resumption or acceleration also varied, from the early 1990s in Brazil to 2006–08 in Bolivia and Venezuela. Many huge farms have partly transformed from haciendas to partly modernised commercial farms [Kay 1998]<sup>7</sup> but gross, growth-inhibiting, and largely inherited land inequality remains, and so does scope for land reform. In Argentina huge land inequality remains unaddressed, but few, even among the poor, now depend mainly on farming for livelihoods. In Brazil new-wave reform, classical reform and land invasions complement each other, messily and slowly but effectively, in getting some land to the poor. In 2008 Bolivia, Venezuela, Paraguay, Ecuador and Peru have governments committed to CLR; in the first three it is well under way. Table 7.1 [Eastwood *et al.* 2009] summarises land reform in 1961–87. To this table, we add outlines of later changes in these countries, and some land reform experiences elsewhere in Latin America.

In *Bolivia*, there is a mystery: disappearing land reform. In 1950, 4 per cent of farms controlled 82 per cent of land area [Weisbrot and Sandoval 2008]. After 1952 ‘the agrarian reforms ... were [alongside Cuba’s, Latin America’s] most extensive with respect to the amount of land expropriated ... about four-fifths of agricultural land ... About three-quarters of agricultural households were incorporated into the reformed sector’. Even if ‘by 1970 *only* 45 per cent of peasant households had received title to land’ [Kay 1998], that is no empty glass. It is agreed that much genuine redistribution happened in the early years of reform, though in ‘the late 1960s and 1970s and again in the 1990s vast amounts of land were given to a smaller group of individuals in the eastern part of the country, accompanied by corruption’; but major reversion of reform land has not been suggested. Yet by 1984 farmland was ‘even more unequally distributed than before’, with the 1.8 per cent of farms above 500 ha controlling 85 per cent of land. This extreme land inequality is mainly

Table 7.1 Land Authority (classical) land reforms in Latin America, 1961–85

Where	When	Outcomes: land transfers	Outcomes: people	Change in distribution	References
Mexico	1915–68	64m ha, 65% of 1961 farmland		Farmland Gini still 0.68 (1988)	Otero 1989: 27; King 1977: 93
Ecuador	1964–83	0.8m ha, 9% of farmland	15% of farm families received land	37% land in farms >100 ha in 1954, 22.1% in 1974	Carter and Alvarez 1989: 23–43; Carter and Mesbah 1993:291; Zevallos 1989: 50–52
El Salvador	After 1980	Land acquired from holdings >100 ha	22.7% of rural households received land		Strasma 1989: 409–12; Diskin 1989: 429–43; Powelson 1984: 105
Dominican Republic	1961–81	83,000 ha (2.7% 1961 farmland) as private parcels, 30,000 ha as collectives	32,275 private parcels created, 13% of peasant holdings		Stanfield 1989: 319–23
Peru	1969–80	About 8.6m ha, 40–50% of farmland, acquired	375,000 direct beneficiaries, 24% of rural workforce	Land Gini 0.91 (1972), 0.86 (1994)	Carter and Mesbah 1993: 288–89
Chile	Up to 1973	0.9m basic irrigated ha taken (20% of 1973 arable area). 1986: 0.5m ha still in reform sector		Land Gini 0.92 in 1996	Jarvis 1989: 245; Thome 1989: 204

regional: in 2005 17 per cent of farms in Pando, Santa Cruz and Beni<sup>8</sup> controlled 77 per cent of cropland, while 37 per cent of farms in the Altiplano had only 6 per cent [Weisbrot and Sandoval 2008]. Rich, giant, capital-intensive farms, especially in Santa Cruz, contrast sharply with desperately poor, tiny holdings elsewhere. The strong revival of land reform in 2006–08 under the Morales government is unsurprising, but the task is made harder because much of the underused land in giant holdings is far from the farms, and experience, of the needy *indigenos*.<sup>9</sup>

In *Brazil*, apart from government lands, 19.4m ha were expropriated between the Sarney (1985–89) and Cardoso (1995–2003) administrations, well below targets but a lot! In 2003–06, the incoming government of Lula da

Silva claimed to have achieved over 95 per cent of targets and distributed land to 400,000 families, but that may include housing and settlements, and may overstate by three-quarters actual land transfers from large farms [Filho 2006; Osava 2007]. After 1993 full market compensation was paid, making the land reform (like its administration) costly. It was largely consensual, decentralised, and highly concentrated regionally. However, it was not negligible. The poorest, landless, and least educated gained most: for 'the whole rural population, land reform [led to] a less unequal distribution of assets, since it increase[d] land ownership among poor households and reduce[d it] among rich households', though land distribution *among landowners* may have become even more unequal [Assunção 2006].

In *Chile* the reform sector, by July 1972, already comprised 35 per cent of agricultural land (in standardised units, basic irrigated hectares)' [Thome 1989: 204; cf. Belissario 2007]. In 1986, after Allende's reforms and Pinochet's counter-reforms, 'of the [900,000 basic irrigated ha] originally expropriated [by the Frei government and by the Allende government up to the September 1973 coup], 57 per cent (in terms of productive value) remained in the reform sector under cooperative and individual management ... and 10 per cent was retained in the public sector' [Jarvis 1989: 245; see also Belissario 2007]. Since the 1980s many beneficiaries sold out as capitalisation increased optimal farm size, using the receipts to invest in finding non-farm work, where opportunities were improving rapidly [Jarvis 2004]. Land reform *may* have completed its task in Chile, but it did move substantial areas of farmland from rich to poor.

In the *Dominican Republic* by 1981 – mostly out of land seized from the Trujillos and their clients and relations after 1961 – some 83,000 ha had been distributed as 32,275 private parcels (13 per cent of peasant holdings), plus a further 30,000 ha as collectives [Stanfield 1989: 319–23].

In *Ecuador* 'from 1964 to 1983, about 9 per cent of all agricultural land [i.e. about] 809,000 ha, was adjudicated through land reform to about 15 per cent of all farm families', or about 86,000, apart from 48,000 who were settled on colonised land [Carter and Mesbah 1993: 291]. Such reform went far beyond the ending of pre-capitalist claims on labour. There was no clear tendency towards large or reconcentrated units in the reform sector [Zevallos 1989: 50–52], but land remains highly unequal, and in 2007 the agriculture minister in the incoming Correa administration stated a limited commitment: 'While avoiding wholesale expropriation ... the target of this transformation and redistribution is abandoned, idle, improperly farmed land, land that is not directly worked' [AFP/Mywire 2007].

While land reform in *el Salvador* was derailed by civil war and foreign interference, after 1980 some 80 per cent of the intended 100,000 direct beneficiary households obtained direct access to lands expropriated from holdings above 100–250 ha [Strasma 1989: 409–12]. However, the 1990 electoral defeat of the Sandinistas involved defeats in key land reform areas; one can infer from Enriquez [1997: 3–4, 17–25] that this reflected dissatisfaction with the results of collective, rather than individual, choices of post-reform land

management. The 1992 Peace Accord contained the commitment: 'Lands that exceed the constitutional limit of 245 hectares: the government of el Salvador will insure the transfer of these rural lands'. Alternation of Sandinista and rightist parties notwithstanding, land reform progress has been slow, but the commitment and the requirement remain. Dormancy is not death.

In *Guatemala* the counter-reform following the US-inspired overthrow of Arbenz's land-reforming government in 1954 led to prolonged civil war, substantially about land. Little has happened to implement the land reform commitments of the 1996 peace accords, but commentators 'see ... increased grassroots organisation [and] political space for dialogue' despite 'land reform efforts advancing only in fits and starts' [Tanaka and Wittman 2003; Sadowski 2008]. This is not 'death', especially with nearby leaders recently elected or strengthened with mandates for land reform in Bolivia, Ecuador, Paraguay and Venezuela.

The battle over land reform in *Mexico*, from huge haciendas and mostly to voluntary semi-cooperative *ejidos*, began with the 1910 revolution and has cost many lives. The 1915 Agrarian Reform Act was followed by 18 years of slow change: the proportion of rural families landless fell from 95 per cent in 1911 to 71 per cent in 1934, when 13 per cent of cropland was with *ejidos*. Redistribution sharply accelerated in the administrations of Cardenas (1933–40) and Echeverria (after 1970). By 1968, 50 years of intermittent but at times 'truly revolutionary reforms' had redistributed 64m ha [King 1977: 93]; 'the *ejido* sector and private farms under 5 ha [used over] 70 per cent of the plentiful [rural] labour resources [and] only 38 per cent of [capital, on half the farmland, [to produce] half the agricultural product'. By 1992 'Mexico's reform sector consisted of some 28,000 *ejidos* and indigenous communities, half the farmland in the country, and some 3m people' [Thiesenhusen 1996]. Sometimes land reform was slowed or reversed. In 1991–92 the Salinas administration allowed *ejido* land to be sold or mortgaged, but there is no compulsion to do so, let alone to move such land back to the control of rich farmers: this is hardly counter-reform. Many *ejidos* remained poor and untouched by the green revolution. Many areas remained little affected by Mexico's rapid non-farm growth, dominated by huge farms, and very unequal, with many near-landless farmworkers. Extreme rural poverty remains, concentrated in a few areas with many land-poor *indigenos*. This precipitated violent disturbances in Chiapas in 1994. Yet it seems odd to claim that the 1910 revolution, and by implication subsequent land reform, 'did not modify property relations fundamentally' [Otero 1989]. Land reform was substantial, but the pressures for it continue.

*Paraguay* since 1945–2007 experienced one-party rule – in 1954–89 military dictatorship – and no land reform. 1 per cent of farmers control 77 per cent of cropland. Yet land reform, long dormant, may revive. A bishop, ministering to poor villagers, was in August 2008 inaugurated as President. 'The hope of land reform helped drive Lugo's election, and now the pressure is on him to deliver'. He seeks to control 'dozens of land invasions', yet affirms 'the



right of all Paraguayans to have access to a piece of land', despite legal processes 'dominated by judges appointed by the long-ruling Colorado Party' [Orsi 2008].

In Peru 8.6m ha – 40–50 per cent of agricultural and grazing land – were expropriated in 1969–80 to 375,000 direct beneficiaries, 24 per cent of the rural economically active population [Carter and Mesbah 1993: 288–89]. Subsequently much of this was decollectivised into not-too-unequal peasant holdings, but the net effect of reform was highly redistributive. From 1972 to 1994 Peru (unlike Panama, Paraguay or Brazil) showed a fall in the farmland Gini (from 0.91 to 0.86) and was the only developing country, of thirteen with relevant data, to show a rise (from 1.8 to 2.5 ha) in median farm size (Table 2.4); falling Ginis and rising median size probably indicate that if land has been substantially shifted towards farms in the 1.8–2.5 ha range. Yet a 0.86 farmland Gini confirms that massive land inequality remains. President Garcia, elected in 2006 against a more radical advocate of redistributing land to the *indigenos*, had failed in a previous administration to deepen the reforms, but is under pressure to do more this time.

In *Venezuela*, there was no significant land reform until the current (second) Chavez administration. It is committed to taking idle land from large estates with compensation; how much will go to poor individuals, and how much will be trapped in quasi-collective 'social production units' (p. 364, note 7), is not clear. The Agriculture and Land Ministry in October 2007 claimed to have 'rescued' 2m ha of idle land from big estates, leaving 4m ha to be expropriated in 2008. 'Several prominent estate owners ... offered to peacefully negotiate the surrender of a portion of their lands ... while others ... will take the government to the courts' [Suggett 2008]. Whatever this is, it is not the death of land reform.

There are standouts. It can be argued that Colombia exemplifies aborted reform [de Janvry and Sadoulet 1989]. In Argentina, access to land remains unreformed, massively unequal, and a brake on efficient land use. Yet most of the continent has seen much genuine land reform. A spate of elections and re-elections since 2000 has confirmed advocates of land reform, moderate or radical, in office. How, then, have some people convinced themselves that it is tiny, dying, or has never lived? The glass fallacy (p. 274) is a large part of the answer. In Peru's early reforms (1964–68), 384,000 ha were distributed to 14,300 peasants; it is reasonable to complain that this is only '4 per cent of the land that could have been distributed with the legal instruments available and less than 2 per cent of the peasants in need of land' [Lastarria-Cornhiel 1989: 138], but more was done in 1969–80. In Ecuador, it is a gloomy view that neither the 1964 nor the 1970 reform 'brought about a major redistribution of land': in 1964–83 '9 per cent of all agricultural land ... had been adjudicated to ... 15 per cent of the country's farm families' and the proportion of units in holdings above 1000 ha fell from 0.21 per cent (37.4 per cent of land) in 1954 to 0.12 per cent (22.1 per cent of land) in 1974 [Carter and Alvarez 1989]. In El Salvador, should one complain that 'a much-vaunted

smallholders' reform has accomplished *only* half its goals' and that '40 per cent or more of the rural population [the landless] are not statutorily included in the reform'? That '22.7 per cent of rural families benefited' is an achievement, if short of 'a goal of 60 per cent' [Diskin 1989: 429, 435, 443; cf. Powelson 1984: 105].

In almost every country where land reform happened, its proponents denigrate it. Enormous social changes, challenging *some* 'rural tyrants' and placing land and power in the hands of *some* of the rural 'masses' for the first time for centuries, should not be written down – or written off – because they fail to meet exaggerated targets or expectations; or to solve the whole problem of rural poverty; or to redistribute all targeted lands at once; or to reach all the poor in all places.

### *(iii) The life of land reform in transition economies*

The communist revolutions often began with distributive, pro-poor land reform, later negated by the 'terrible detour' into State and collective farming (chapter 5 (a)). Post-collectivist transition *potentially* renewed land reform, allowing the 'terrible detour' to end with a turn (or return) to not-too-unequal family farms. Chapter 5 (b) presented evidence of the vast scale of decollectivisation. Many examples, some large, did constitute radical, if tragically deferred, land reform. We identified four processes, decollectivisation, privatisation, liberalisation and positive enablement; three aspects, unwinding collective or State on-farm decision power, curtailing (usually extractive) state interventions, and enlarging privatised rights to transact in land; and four types of national experience, typified by China, Russia, East Europe, and Latin America and Africa. Cutting across processes and aspects, what do national experiences suggest about the life, death or completeness of land reform? What were the effects on poverty and inequality? Will they last?<sup>10</sup>

**I. China-style.** Some ex-Communist countries, starting with China in 1978–84, moved former State and collective farms towards fairly equal family holdings, notably Armenia, Albania, Azerbaijan, Georgia, Moldova (after a false start), Vietnam and Romania. For instance, in Romania in 1991–92, about 80 per cent of farmland, previously in collectives, was restituted to members, largely as small, family-size farms. In most of the cases, above all China, small farms have demonstrated their efficiency, including capacity to feed products into modern supermarket systems. The outcome in these rather egalitarian decollectivisers – whether compared to pre-revolution or State/collective farming – probably represents the largest-ever land reform, in the sense of transfer, via land-rights redistribution, of income, power and status to the rural poor. Some land rights remain to be extended to farm households. Further, the institutional memory (or hangover) from State/collective farms has mixed effects.<sup>11</sup> However, this is success, not death. Land systems and

farm structures must adapt to capital-intensifying growth, urbanisation, and globalised markets<sup>12</sup> – but in these still labour-intensive, substantially rural economies adaptation is proving consistent with continued competitive advantages for small, fairly equal family farms. Claims that emerging conditions already require larger or corporate farms are premature or exaggerated, and likely to remain so until perhaps 2015 in (for example) Romania and Armenia, and 2020 in China and Vietnam. By then, rural labour scarcity and savings availability will increasingly make larger farms more efficient in raising land and water yields. Poverty and inequality redressal will increasingly depend on urban events. In this group of countries, decollectivisation has brought genuine, large-scale land reform, achieving most aims, but requiring adaptation in the medium term.

**II. Russia-style.** Most farmland in CIS countries – notably in Belarus, Russia, Kazakhstan and to some extent the Ukraine – was pseudo-decollectivised. Most farms remained large, usually with elements of labour tying and State or pseudo-collective control. However, even these countries did some land reform after 1990. A small part of land was genuinely decollectivised, and a small part of that reached poor people as small farms. More important, significant collective and State farmland was used to make household plots somewhat less tiny, substantially increasing these highly productive areas (from a small base). Will land reform go further? Even where decollectivisation is becoming (or has become) less pseudo, vast flat wheatlands can seldom economically return to small-scale family operation, given the sunk investments in combines, the transaction cost of land partitions and machine hire, and the limited scope for labour-intensification. Outside these lands, CIS land reform will remain a live issue to reduce rural poverty and inequality, but also because smaller farms, and greater rural labour absorption, are both efficient and politically and socially urgent. Oil- and mineral-based expansion in several CIS countries, while doing little for employment, has the usual ‘Dutch disease’ effect of revaluing local currencies and thus reducing competitiveness elsewhere. This worsens unemployment, already induced by displacement of padded workforces from the part-privatised ‘military–industrial complex’. Small-farm land reform can offer substantial extra employment income, as it did in Armenia and Azerbaijan, not by makework, but efficiently. Studies in Ukraine, Moldova, Russia and elsewhere show that – in contrast to some richer, more capital-intensive countries in East Europe – large farms, even where not (as usual) hamstrung by relics of collective and State farming, struggle to compete with small ones. In these countries land reform has been impeded by the alliance of State reluctance and big-farm power. However, another alliance – that of efficiency and equity in smaller farms, sharpened by the standing reproach of tiny, successful household plots – and

the growing contrast of rural poverty and oil-based affluence suggest that land reform's time will come, perhaps soon, if global recession makes farm activity relatively more attractive for urban workers.

**III. East European style.** Much of East Europe genuinely decollectivised, but the land was restituted, often to the non-poor.<sup>13</sup> Most recipients – even when, as in some well publicised cases, foreign residents and/or descendants of feudal landlords – now function as, or rent the land to, modern commercial farmers.<sup>14</sup> Whether the restitutees were mainly earlier largeholders (Hungary, former Czechoslovakia, East Germany) or patrilials (Latvia, Lithuania), reducing poverty or inequality was neither an aim nor a likely result. However, in these relatively developed economies, moderately large farms may have conduced to efficiency in an EU context.

**IV. 'Third World' styles.** Is land reform thriving in the decollectivising countries of Africa, Latin America and South Asia? Almost invariably, only (some) bigger holdings had been collectivised (chapter 5 (b) (iii) (IV)). Did these lands, when decollectivised, shift into small farms controlled by poorer groups, in effect completing the detour into distributive land reform? If so, can these poorer farmers prosper, or if not can they benefit from selling their small farms? Mostly, the answers were 'yes'. Reverting to Latin America, an unfavourable case appears to be Chile, yet even Pinochet's decollectivisations left most reform land with the rural poor (p. 211). True, a gradual shift to larger farms appears to be under way, but Chile is middle-income and increasingly capital-intensive; in other developing-country decollectivisers, though farmland remains very unequal, small farms are largely holding their own. Horticulture is a key sector. It spearheaded big-farm expansion in Chile. Yet in many developing countries, some middle-income, vegetable farming and to some extent orchards are potentially highly labour-intensive, leaving small farms competitive well into later development. The key issue is: can they board the supermarket bandwagon (chapter 2(f) (iii) (II))? In Chile they have found it harder than in most other developing areas, perhaps because these were spared the expectations, created by widespread farm collectivism, that public entities would solve private marketing problems.

*(iv) The life of land reform in other developing countries*

**I. South and South-East Asia.** Decollectivisation (except in Vietnam with its almost completed, rather egalitarian reform) is a minor factor in South and South-East Asia, as in the Middle East and Africa. These

regions, with China, contain the vast majority of the world's farming populations.<sup>15</sup> So they should dominate any global view of whether land reform has died or is dying. In fact, major land reforms have happened there in the past 50 years, and some are happening now.

*India.* The developing world's agricultural population<sup>16</sup> in 2005 was 2.6bn, of whom 1.4bn were in China (843m) and India (566m) (Tables 7.2 and 7.3). China's household responsibility system left one-third of the world's agricultural population in a highly equal land system (pp. 208–9). A further one-fifth are in India, where in 2005 agriculture was the main income source for 51 per cent of Indians, including 57 per cent of the economically active.<sup>17</sup>

Skeptics see India, like Latin America, as a place where land reform hardly lived, and is now dead. Yet substantial classical, tenancy, and other reforms (chapters 3–4, 6) had considerable effect. Some States, such as West Bengal, achieved a lot. Even in laggard States such as Bihar, reforms on the statute book focused the poor (and pro-poor) on organising to make them real; some civil servants, on helping them [I.K.Singh 1990]; and the landed, on forms of evasion that often also got land to the poor (chapter 3(b) (vii)).

In the 1950s, independent India abolished 'the *zamindari* system of rent-collecting intermediaries', who had been given control of huge swathes of North Indian farmland in return for revenue payments to the British Raj. 'In West Bengal, Uttar Pradesh and much of the rest of India, [as in] Bangladesh ... by 1956 ... millions of tenants were made secure on their land and freed from a host of illegal exactions', though the beneficiaries were not usually amongst the poorest, and lease contracts have subsequently shortened [Singh 1990: 293; 278, 285; cp. Lanjouw and Stern 1998]. The scale of the reform – like the compensation needed, Rs 6.7bn in prices of 1950–56 – was vast. 'Intermediaries [were] abolished over 6.0m ha of land and ownership rights ... granted to 20m tillers' [Ministry of Rural Development 2005]. 'Statutory landlordism constituted in 1947–48 ... 57 per cent of the private agricultural land in British India [and more in the] princely states ... Over 20m tenants were brought into direct relationship with the State [i.e. as owners, paying much] less by way of land revenue' [Saxena 1990: 116–17].

The second phase of land reform – redistributing land rights, and improving terms of tenancy, within an intermediary-free system – remains very incomplete. There was widespread evasion and avoidance of ceilings legislation. In India by the mid-1980s, *only* 2.9m ha had been declared surplus, 2.4m possessed, and 1.8m distributed to 4.1m persons [Saxena 1990]. By 1996 this had crawled up to 3.0m ha possessed and 2.2m ha distributed to 5.7m beneficiaries; in 2001–05 'the position was virtually the same' [Planning Commission, Govt. of India 2002; cf. National Commission on Farmers, Govt. of India 2006: 91]. Reform land was often 'of poor quality'.<sup>18</sup> Was distribution – except perhaps in three States, Assam, Andhra and West Bengal – 'too small to make an impact on landlessness' [Saxena 1990]?

ANNEX Table 7.2 Operated farmland Ginis 1950–2003, grouped by ha/holding

Group/Country	80 agp/ha	G 1950s	G 1960s	G 1970s	G 1980s	G 1990–2003	Ha/holding 1980s
<b>I</b> Uruguay	0.3	—	0.82, 0.83 <sub>W66</sub>	0.83	0.84	0.85 <sub>00</sub>	234.4
Chile	—	—	0.93 <sub>B</sub>	—	—	0.92 <sub>97</sub>	92.4
Paraguay	0.9	—	0.93, 0.87 <sub>D</sub>	—	0.94	0.93 <sub>91</sub>	88.1
Venezuela	—	—	0.94	0.92	—	0.90 <sub>97</sub>	82.0
Brazil	0.5	0.83	0.84	0.84	0.86	0.85 <sub>96</sub>	70.7
Argentina	—	—	0.84 <sub>B</sub>	0.87 <sub>W</sub>	0.83 <sub>88</sub>	—	46.9 <sub>70</sub>
Mexico	—	—	0.75 <sub>B,D</sub>	0.75	—	—	41.4
Costa Rica	1.2	0.79	0.78	0.83 <sub>73</sub>	—	—	38.3 <sub>70</sub>
Nicaragua	—	—	0.80 <sub>B</sub>	—	—	0.72 <sub>01</sub>	37.3 <sub>60</sub>
Colombia	1.6	0.85 <sub>54</sub>	0.86	0.86	—	0.78 <sub>01</sub>	23.3 <sub>90</sub>
Peru	—	—	0.95 <sub>W</sub> , 0.93 <sub>D</sub>	0.78/0.91 <sub>072</sub>	—	0.86 <sub>94</sub>	20.1 <sub>90,C94</sub>
II Tunisia	—	—	0.64 <sub>B</sub>	—	—	—	15.4 <sub>60</sub>
Ecuador	—	—	0.84 <sub>D</sub>	—	—	0.85 <sub>90-00</sub>	15.3 <sub>70</sub>
Panama	1.2	0.72 <sub>50</sub>	0.74, 0.80 <sub>O</sub>	0.78, 0.71 <sub>C</sub>	0.84	0.87 <sub>90</sub>	14.7
Honduras	1.3	0.73 <sub>52</sub>	—	0.78 <sub>71,487</sub>	—	0.66 <sub>93</sub>	11.2 <sub>90</sub>
Saudi Arabia	4.1	—	—	0.79 <sub>72</sub>	0.83 <sub>83</sub>	—	10.1
Morocco	—	—	0.64 <sub>B</sub>	—	—	0.64 <sub>96</sub>	9.8 <sub>60</sub>
Iraq	0.7	0.88 <sub>57</sub>	0.73 <sub>D</sub>	0.57/0.65 <sub>S</sub>	0.39 <sub>82</sub>	—	9.7 <sub>70</sub>
Dominican Republic	1.8	0.79	0.80	0.79	—	—	9.0 <sub>70</sub>
III Guatemala	—	—	0.83 <sub>B</sub>	0.85 <sub>S79</sub>	—	—	7.8
Algeria	—	—	0.72 <sub>S73</sub>	0.72 <sub>S73</sub>	—	0.65 <sub>01</sub>	6.2
Turkey	0.9	—	0.63 <sub>63</sub> , 0.59 <sub>D</sub>	—	0.58, 0.57 <sub>C</sub>	0.61 <sub>91</sub> , 0.58 <sub>01</sub>	6.2
Jordan	—	—	—	—	0.69 <sub>83</sub>	0.78 <sub>97</sub>	5.9
Iran	—	—	0.62 <sub>W</sub>	—	—	0.70 <sub>93</sub>	5.2 <sub>90</sub>
Pakistan	2.5	—	0.63, 0.61 <sub>S</sub> W, 0.56 <sub>D</sub>	0.52 <sub>73S</sub> , 0.51 <sub>C71/3</sub>	0.54, 0.52 <sub>C80</sub> , 0.57 <sub>C89</sub>	0.61 <sub>02</sub>	4.7
El Salvador	—	—	—	0.61 <sub>S</sub>	—	—	4.6 <sub>70</sub>
IV Thailand	1.7	—	0.46 <sub>63</sub> , 0.43 <sub>D</sub>	0.41, 0.46 <sub>73</sub>	—	0.47 <sub>93</sub>	3.7 <sub>G,C78</sub>
Senegal	—	—	0.40 <sub>B</sub> , 0.49 <sub>D</sub>	—	—	0.50 <sub>98/199</sub>	3.6
Mali	—	—	0.48 <sub>D69</sub>	—	—	—	3.3 <sub>60</sub>
Jamaica	—	—	0.80, 0.80 <sub>69</sub>	0.81 <sub>73</sub>	0.8580	—	2.9
Philippines	3.2	0.51 <sub>48</sub>	0.50, 0.56 <sub>D</sub> , 0.58 <sub>W</sub>	0.51	0.53, 0.51 <sub>C81</sub> , 0.61 <sub>S</sub>	0.55 <sub>91</sub>	2.9 <sub>G,C81</sub>
Tanzania	—	—	0.79 <sub>D</sub>	—	—	—	2.8 <sub>90</sub>
Kenya	6.0	—	0.82	0.80	0.77 <sub>S</sub>	—	2.5
Myanmar	—	—	0.44 <sub>D</sub>	—	—	0.77 <sub>93</sub>	2.4 <sub>90</sub>
Uganda	—	—	0.48 <sub>B</sub> , 0.55 <sub>D</sub>	—	—	0.59 <sub>91</sub>	2.2 <sub>90</sub>
India	2.7	0.68 <sub>54</sub>	0.59	0.62 <sub>71</sub> , 0.61 <sub>C77</sub>	0.63	0.64 <sub>91</sub> , 0.60 <sub>97</sub> , 0.58 <sub>C91</sub>	2.0 <sub>C77</sub>

ANNEX Table 7.2 (continued)

Group/Country	80 agp/arha	G 1950s	G 1960s	G 1970s	G 1980s	G 1990-2005	Halholding 1980s
V Lesotho	—	—	—	0.39 <sub>C70</sub>	—	0.49 <sub>C90</sub>	1.4 <sub>90</sub>
Ethiopia	—	—	—	0.43 <sub>S77</sub>	—	0.47 <sub>01(1/2,C)89921</sub>	1.4
Bangladesh	7.2	—	0.47	0.57, 0.47 <sub>77</sub> , 0.42 <sub>D76(1/7</sub>	0.55(0.60 <sub>S84</sub>	0.57 <sub>96</sub>	1.3
Madagascar	—	—	—	—	0.80 <sub>84</sub>	—	1.3
Indonesia	4.1	—	0.62 <sub>63</sub> , 0.55 <sub>D,B</sub>	0.72, 0.53 <sub>S</sub> , 0.55 <sub>073</sub>	—	0.46 <sub>93</sub>	1.1
Nepal	5.9	—	0.57	0.56 <sub>073</sub>	0.61 <sub>82</sub> , 0.60 <sub>C82</sub>	0.49 <sub>02</sub>	1.1
Sri Lanka	3.4	—	0.66	0.69, 0.56 <sub>0</sub> , 0.72	0.6282	0.38 <sub>02</sub>	1.1 <sub>C82</sub>
Republic of Korea	5.8	0.72 <sub>45</sub>	0.34, 0.38 <sub>66</sub> , 0.20 <sub>B</sub> , 0.31(1/0.37, 0.37 <sub>C</sub>	0.51 <sub>73</sub>	0.30, 0.34 <sub>C</sub>	0.34 <sub>92,C90</sub>	0.9
VI China	—	0.70 <sub>S1930's</sub>	—	0.21	0.19 <sub>84</sub>	—	—(<1.0)
Cuba	—	—	0.35 <sub>63</sub>	0.28 <sub>73</sub> , 0.21 <sub>78</sub>	—	—	—
Egypt	7.8	0.61	0.35, 0.55 <sub>D65</sub>	—	0.43 <sub>84</sub>	0.69 <sub>99-00</sub>	—
Malaysia	—	—	0.64 <sub>D</sub>	—	—	—	—
Taiwan	—	—	0.40, 0.47 <sub>W</sub>	—	—	—	—

Last column: [FAO 1997: Table 1]. Data for 1980s when available, **else (census) dates in brackets**. For many countries this also gives data for 1960s, 1970s and/or 1990s/2000s (see Tables 2.2-2.4).

Penultimate column: where no letter suffix, Table 2.5, drawing on FAO *World Census of Agriculture* (CA), as in [Eastwood *et al.* 2009].

All other columns: where no letter suffix, [el-Ghonyemy 1990: 30, 168-69, 173, 304, 310, 183, 197 (China), 203 (South Korea), 220 (Iraq), 225 (Cuba), 230 (Egypt)], based on CA.

India: Ginis 1980, 1991; NSSO in *Survekshana*, XX, 3 (1997): 22, 26. Mexico: *ejidos* assumed equally divided among *ejidatario* households.

Letter suffixes

B: [Berry and Cline 1979: 38-39], from 1960 CA.

C: CA, in [FAO 2008] at [www.fao.org/ES/ess/census/gini/table2.asp](http://www.fao.org/ES/ess/census/gini/table2.asp)

D: [Deininger and Olinto 2000: 24], from CA, except Egypt (from Simon Commander) and Myanmar (from 1993 Report on the Myanmar CA).

O: [Otsuka *et al.* 1992], citing FAO 1991, plus publications by Governments of Bangladesh, India, Nepal and Thailand.

S: [Sobhan 1993: 8-11].

W: [Berry and Cline 1979: 41-42], from [World Bank 1975].

B, C, D, S, O and W often confirm [el-Ghonyemy 1990] and are noted only where they give new information, or show conflicting Ginis or dates.

Number suffixes: last two figures of year of survey or CA. Where there is no number suffix, the year is assumed to be 1950, 1960, etc.

Col. 2: 80agp/arha = agricultural population per arable hectare, about 1980.

First, India's size means that its proportional land reform achievements are unfairly denigrated in international comparisons. In terms of absolute numbers, land reform was significant for many beneficiaries and families.<sup>19</sup> Through CLRs, 'surplus land was distributed to landless and near-landless poor farmers' – 5.7m households receiving an average of 0.4 ha each from direct ceilings effects alone, benefiting some 27m people; further, 'tenurial rights to almost 10m ha of land were transferred during the 1970s and 1980s – [over triple the area] in the well-known land reforms of Japan, Korea and other East Asian countries' [National Commission on Farmers, Govt. of India 2006]. This was heavily concentrated in a few Indian States, but the effects there were not small.

Second, these are only the direct effects. Ceilings laws indirectly caused further land redistribution.<sup>20</sup> To escape ceilings, the rich sold land to those who initially had little, or transferred it to poor relatives and other clients with the intention of retaining control. But the new land controllers, for example in Gujarat, began to insist on their rights [Vyas 1976].

At very least, land reform and ancillary measures helped to check any rise in land Ginis in India. Table 2.1 documented the long, large rise in the proportion of Indian farmland in small holdings from 1961 to 2003. CLR is not the main cause,<sup>21</sup> but it is *a* cause, directly through distribution of above-ceiling land, indirectly due to sales and transfers to escape ceilings legislation – and through ancillary actions. 'By 1980 more than 6m ha of waste, fallow, and other ... unused land had been vested in state governments and ... distributed to landless agricultural workers' [Library of Congress 1995] and the process continues: 'In April–December 2007, 245,829 ha of wasteland was developed and distributed to the landless' [Ministry of Statistics and Programme Implementation, Govt. of India 2008: 67–68]. Some such land does not reach the poorest or the landless; some that does has little value; and some distributed lands had previously been used informally or communally (e.g. for wood), often with good sustainability or poverty focus that is diluted by private redistribution [Jodha 1992, 2001]. Even allowing for these facts, the poverty-reducing impact of these major land transfers cannot have been negligible and in some States have been substantial.<sup>22</sup>

As for tenancy reforms, in at least two Indian States, Kerala and West Bengal, political activism helped enforcement, so that many poor tenants improved their position. Elsewhere, notably in Karnataka [Manor 1989: 353–50] and probably Maharashtra, populist politics led to successive land reforms that apparently benefited castes comprising mainly poor tenants. Such reforms were followed, even if more as a result of avoidance than of implementation, by a sharp decline in the proportion of land under tenancy (even with generous allowance for concealment); this declining access to tenancies, as the fear of the legislation reduced their supply, of itself harmed the rural poor. But did they lose from the reform package as a whole? Probably not. For all-India, falling rentals-in by marginal farmers<sup>23</sup> were outweighed by rising owner-operated area. Hence operated area per marginal holding *rose*



from 1961–62 through 1981–82 to 2002–03, sharply so relative to the marked *fall* in average holding size overall: the proportion of operational holdings below 1 ha rose 1.78-fold, from 39.1 via 56.0 to 69.7 per cent, but their proportion of operated area rose 3.28-fold, from 6.9 via 11.5 to 22.6 per cent [Singh 1990: 66; NSSO 2006: 18–20; Table 2.1].

Though overall Ginis of operated land hardly changed, the smallest size-groups gained from the largest – as regards owned holdings, which respond directly to ceilings reforms. In 1961–62, the top 0.6 per cent of Indian rural households owned above 20 ha, but had 12.1 per cent of farmland; by 2002–03 only the top 0.1 per cent of rural households owned over 20 ha, and this comprised a mere 3.0 per cent of farmland.<sup>24</sup> Even above a more modest 10 ha threshold, 2.8 per cent of owners had 28.2 per cent of rural farmland in 1961–62, but by 2002–03 this had fallen to 0.5 per cent of owners and only 11.5 per cent of farmland [NSSO 2006a: 12]. Classic ceilings reform is part of the reason for such changes, though not the main reason. At worst, India is among several countries (Tables 2.1, 2.2, 2.4) where direct and indirect effects of ceilings and other land-reform-like laws *helped* outweigh pressures towards larger farm size. If anything, owned and operated holdings became a bit less unequal [Sanyal 1988; Singh 1990: ch. 3; NSSO 2006, 2006a].<sup>25</sup>

Is land reform in India, whatever its past, dead now? The Indian Planning Commission [2001: 207] is self-critical: ‘Land reforms seem to have been relegated to the background in the 1990s ... There has been no progress in the detection of concealed land and its distribution to the landless rural poor. The case of tenancy reforms is equally unsatisfactory’. The Eleventh Plan takes a firm position, but stops short of a commitment to action: ‘Planning efficient and equitable shift of labour from agriculture to non-agriculture [must not] become an excuse to dilute existing ceiling laws, conjuring visions of “efficient” large farms. Such false ideas are dangerous and need pre-empting. There is no evidence of economies of scale beyond what current ceilings allow, land hunger is unabated, and land per agricultural worker will remain below 1 ha for over a decade even if non-agricultural employment grows at 6 per cent per annum. Only a positive message, that stresses equity and puts land reform back on the agenda, will make it possible to move on more difficult issues involving efficiency, such as tenancy’ [Planning Commission, Govt. of India 2006: 61; 2007: 12].

This is a correct analysis of the link between CLR and tenancy laws in India. Confirming and implementing ceilings laws (efficient and equitable) is a precondition for political consensus *against* anti-tenancy laws (inefficient, and only superficially equitable: chapter 4(b) (iii)). Successful acceleration of Indian land reform, however, depends on showing that smaller, more equal farms are not ‘only’ equitable but also good for productivity. The poverty reduction motive for land reform indeed stresses ‘land as a basis of livelihood – for subsistence, survival, social justice and human dignity’ [Land Research Action Network 2003], but to set this *against* productivity goals not only slights the importance of productivity for the poor, but reduces the

practical prospect of land reform in fast-growing economies such as India. Talking down productivity will alienate much potentially sympathetic élite support for land reform. Few of the poor will campaign for it – while non-farm growth gives good prospects of exit from farming – unless the land they get is productive enough to be worth having. Despite open and free peasant organisation and pressure in India, repeated public commitments since 1990 have not speeded up land reform. Yet past reforms<sup>26</sup> and other pressures against large scale had, by 2003, left only 148,000 Indian rural households – about 12 in 1000 – owning over 20 ha, and on average 31.0 ha each. A 20 ha household ceiling, fully enforced, would have left only 1.6m ha for distribution, and even a 10 ha ceiling only 5.7m ha [NSSO 2006a: A-15]; in 2009 the distributable areas would be still smaller; and the fact that big farms support more Indians on worse land makes those areas smaller still. That said, several Indian States have ceilings well below 20 ha on the statute book, and East Asian countries in the 1950s successfully imposed 3 ha ceilings.

Not much land is left in big holdings in India, and hardly any in the ostentatiously vast holdings that characterise Latin America. Is there a balance of political forces sufficient to implement lower ceilings? Prospects remain, given the federal structure (with land reform a State responsibility), the fact that even tiny home gardens can enrich the poor [Herring 1983; Mitchell and Hanstad 2004: sec.3.3], and complementarity among classic, new-wave and peasant-movement reformers. To realise those prospects, land reform – though equity- and poverty-motivated – needs support from efficiency arguments if sound, and from policies to make them so where not. The record of Indian land reforms is much better than their reputation. State-level reform in the right political conditions<sup>27</sup> will continue. Land reform in India does not smell of death. But regeneration will need new effort, politics or circumstances.

*Pakistan* has about 75m people, half the population, dependent on agriculture as main income source (Tables 7.3 and 7.4), and higher land concentration than other big agricultural economies in Asia. In 2000, 21 per cent of land was with 1.5 per cent of operated farms [FAO 2008]. Tenancy, mostly from rich to poor, covers a large part of smallholdings, so owned farmland distribution was even more unequal [Hussain 1982; Singh 1990]. But it had been much more so at Independence in 1948 [Library of Congress 1995a]. The change was due partly to the inverse relationship (IR) at work (chapter 2 (g)), but partly to the fact that, despite Pakistan's reputation for land-reform inactivity, some had happened. In 1959 Ayub set high ownership ceilings: 500 ha of irrigated land or 1000 ha unirrigated. Looking at results through a half-empty glass, little was achieved: '*Barely* 35 per cent of the excess land declared by landowners was ... obtained by the government, with redistribution benefiting *only* 8 per cent of subsistence farmers' [Anon. 2002]. Bhutto's 1972 reforms imposed lower ceilings, 60 ha of irrigated or 129 ha of unirrigated land, but allowances for machinery and (excessively) land productivity turned the 129 ha into 189 ha in the Punjab and 227 ha in Sind for a

Table 7.3 Farm population, selected countries\*, 1961–2005

Country	Farm/total popln. (%)			Farm/total popln (%)		
	1961	1981	2005†	1961	1981	2005†
Bangladesh	45.7	60.4	72.0	87.2	71.8	50.8
Brazil	40.5	43.5	25.8	54.0	35.6	13.8
Chile	2.3	2.4	2.4	29.9	20.8	14.5
China	554.1	749.7	843.4	82.4	73.7	63.7
DR Congo	12.5	20.5	35.0	78.9	71.2	60.8
Egypt	19.6	26.6	24.6	68.6	59.2	33.2
Ethiopia	—	—	62.1	—	—	83.9
Ghana	4.6	7.1	12.2	32.4	60.7	55.1
Hungary	4.0	2.2	1.0	39.9	20.1	10.1
India	318.0	447.0	566.1	70.2	63.5	51.3
Indonesia	61.1	81.8	90.9	70.5	53.3	40.8
Iran	12.6	15.7	16.8	56.4	38.2	24.1
Kenya	7.3	13.9	25.0	87.6	82.0	73.1
Mexico	21.7	26.6	22.0	57.0	38.2	20.5
Nepal	9.7	14.5	21.2	94.9	93.8	92.9
Nigeria*	30.5	37.2	38.0	63.6	52.8*	28.9*
Pakistan	32.7	53.9	76.2	69.0	57.6	48.2
Philippines	17.5	25.4	30.2	62.9	51.9	36.4
Romania	11.2	7.0	23.5	60.4	31.5	10.8
Russian Federation	—	—	13.1	—	—	9.2
Sudan	10.1	14.8	20.5	86.1	71.9	56.5
Tanzania	9.4	16.3	29.0	91.3	83.8	75.7
Thailand	21.6	30.0	28.9	78.6	63.6	45.0
Turkey	18.7	20.6	20.3	64.6	43.4	27.7
Uganda	6.3	11.2	22.0	92.0	86.0	76.3
Uzbekistan	—	—	6.5	—	—	24.4
Venezuela	2.9	2.6	2.1	36.6	16.6	7.8
Vietnam	27.8	39.5	55.0	81.1	72.9	65.3

Source: FAOSTAT Population Estimates (2004 revision) at <http://faostat.fao.org/site/550/default.aspx#ancor>

\*All developing countries with at least 20 million persons mainly dependent on agriculture for income in 2005, plus a few countries selected for representativeness or special interest.

†These 2005 (and probably 1981) official figures are large underestimates. Expert estimates of the proportion of agricultural in total population range from 60 to 70 per cent [UN 1999; Manyong *et al.* 2005; Library of Congress 2008].

tractor/tubewell owner [Hussain 1982]. In both the 1959 and the 1972 reforms ‘individual, rather than family, ceilings permitted avoidance by bogus transfers to family members: below 0.4m ha was acquired for redistribution, about one-third of the land resumed under the 1959 land reforms. [Hence by] 2002, according to the Federal Land Commission, *only* 1.8m ha (less than 8 per cent of cultivated area) [had] been resumed [and] 1.4m ha ... distributed to 288,000 beneficiaries’ [Anon. 2002].

The reforms were badly flawed, but not negligible. 8 per cent is four times the proportion of cultivated area redistributed under ceilings laws in India,

Table 7.4 Farm population, developing regions, 1961–2005

Developing region	Farm/total popln. (%)			Farm/total popln. (%)		
	1961	1981	2005	1961	1981	2005
Least developed	218.6	324.3	512.7	86.6	78.5	67.6
Landlocked developing	62.4	96.0	245.5 (o)	86.8	80.8	64.9 (o)
Eastern Africa (a)	75.3	125.4	216.9	86.9	83.4	75.4
Middle Africa (b)	27.1	40.7	65.8	82.4	72.7	60.0
Northern Africa (c)	49.4	62.5	65.5	71.6	57.0	34.3
Southern Africa (d)	10.2	9.4	8.4	50.4	27.7	15.5
Western Africa (e)	63.8	88.5	126.2 (e)	78.0	64.3	47.9 (e)
Latin America/ Caribbean (f)	111.3	127.1	103.0	49.6	34.3	18.4
(of which: Central America) (g)	30.3	37.9	34.4	59.1	40.8	23.4
(South America) (h)	70.9	79.4	59.7	46.5	32.0	15.9
Central Asia (i)	—	—	13.8	—	—	—
Eastern Asia (j)	576.5	770.4	852.8	81.1	71.6	61.1
Southern Asia (k)	433.6	611.8	787.2	71.5	63.8	50.7
South-Eastern Asia (l)	166.1	216.2	258.1	72.7	59.1	46.4
Western Asia (m)	35.4	40.2	44.1	61.5	38.7	20.6
Eastern Europe (n)	118.7	82.7	32.6	39.8	22.0	11.0

(a) Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Réunion, Rwanda, Seychelles, Somalia, Tanzania, Uganda, Zambia, Zimbabwe.

(b) Angola, Cameroon, Central African Republic, Chad, Congo, DR Congo, Equatorial Guinea, Gabon, Sao Tome/ Principe

(c) Algeria, Egypt, Libya. Morocco, Sudan, Tunisia, Western Sahara.

(d) Botswana, Lesotho, Namibia, South Africa, Swaziland.

(e) Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, St Helena, Senegal, Sierra Leone, Togo. 2005 numbers not comparable with other years or areas because substantially underestimated due to farm population in Nigeria: see note \* to Table 7.3.

(f) As in notes (g) and (h) plus Caribbean countries.

(g) Belize, Costa Rica, el Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama.

(h) Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Falkland Islands, French Guinea, Guyana, Paraguay, Peru, Suriname, Uruguay, Venezuela.

(i) Kazakhstan, Kyrgyzstan, Turkmenistan and Uzbekistan.

(j) Exc. Japan; China, Korea, Korea DPR, Mongolia.

(k) Afghanistan, Bangladesh, Bhutan, India, Iran, Maldives, Nepal, Pakistan, Sri Lanka

(l) Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Malaysia, Singapore, Thailand, Timor-Leste, Vietnam

(m) Armenia, Azerbaijan, Bahrain, Cyprus, Georgia, Iraq, Israel, Jordan, Kuwait, Lebanon, Occupied Palestinian Territory, Oman, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates, Yemen.

(n) Belarus, Bulgaria, Czech Republic, Hungary, Moldova, Poland, Romania, Slovakia and Russian Federation. Respective data for the USSR were: 1961, 82.7m (38.0 per cent); 1981, 60.3m (22.5 per cent); 1991 (last available year), 56.0m (19.2 per cent).

(o) 2005 data are not directly comparable with those for earlier years, and differ substantially mainly because subdivisions in 1989–2005, most within the former USSR, created several new landlocked countries, some populous.

and (at a guesstimate) 15–25 per cent of land initially owned by those above the ceilings. However, 288,000 beneficiaries comprise only 4.5 per cent of Pakistan's farms in 2000, and (with dependants) are a much smaller proportion of rural people than in India. Is further CLR feasible? If owned and operated farmland were identically distributed,<sup>28</sup> a rigorously enforced 20 ha ceiling on owned land in 2000 would have released 1.6m ha for redistribution; this would have sufficed to more than double the size of all the 2.4m holdings below 1 ha (since they covered only 1.2m ha) [FAO 2008] – much more scope for further reform than in India.<sup>29</sup> Yet in Pakistan past reforms suggest that even imperfect governments close to the landed élite<sup>30</sup> can distribute substantial areas. Much land remains in big holdings. If the political constellation allows or compels, CLR can substantially reduce rural poverty and inequality, probably with net gains to production [e.g. Heltberg 1998]. In Pakistan's uneasy polity, land reform, far from being dead, may be a source of revival.

*Bangladesh* also contains some 75m persons, about half depending mainly on agriculture. *Zamindari* was abolished (p. 284) in 1951, and in 1972 set a 13.5 ha ceiling was set, and provision made for distribution of some *khas* (public) lands to the landless. Implementation was partial [Howes *et al.* 2003], but there is little further scope for ceilings-based reform. Already by 1996, assuming owned and operated distributions of farmland were the same, even a fully implemented 10 ha ceiling on ownership would have released only 41,000 ha. Even if (relaxing this assumption) this area is doubled to 82,000 ha due to owners of above 10 ha who rent out, it is tiny compared to the 1.8m landless and below-0.4 ha households, which operate an average of 0.11 ha [www.fao.org/ES/ess/census/wcares/bangla\_2000.pdf]. However, a land reform programme centred on home gardens, as for Indonesia (see below), may be feasible.

In *Indonesia* [Prosterman and Mitchell 2002] the Government 'redistributed 0.85m ha [in 1960–65] ... only 3 per cent of cropland in Indonesia and only 6 per cent ... in Java [the most land-hungry region]'. This is indeed 'a very small proportion' by the standards of the East Asian reformers, but not negligible, especially compared to the proportion of land (unknown but probably not very large) with large owners in 1960. It is also severe to argue that reform 'did not ... affect many agricultural families, either on Java or off Java ... redistribut[ing] land to only 1.29m families [average land received 0.66 ha], including 0.82m [0.42 ha] ... on Java ... [and] affect[ing] 11 per cent of farming families in Indonesia and 10% ... on Java' by 1963.<sup>31</sup> But it is worrying that 'since 1965 there has been almost no land-reform activity'. Huge land hunger remains, with the poor population still mainly dependent on agriculture; but what is there to redistribute? By 1993 a fully implemented 10 ha ceiling on operated land would have released only 209,00 ha, and on owned land below 300,000 ha.<sup>32</sup> That seems to leave little scope to help the 14m farmers with below 1 ha, who averaged only 0.36 ha [FAO 2008: www.fao.org/ES/ess/census/wcares/INDO1990.pdf].

Prosterman and Mitchell [2002] recognise this problem, but – for the region of most acute land hunger – they advance an interesting idea. 'If the

government [tried] to distribute ... 0.25 ha to [half] the 14.3m agricultural families on Java [with below] 0.5 ha of cropland or agricultural labourer[s with none], this would require 1.79m ha ( $0.25 \text{ ha} \times 7.17\text{m families}$ ). [W]ith only 5.13m ha of cropland on all of Java, [that] would require the government to redistribute 35% ... an impossible task. [Even] to redistribute ... 0.10 ha ( $1000 \text{ m}^2$ ) to each of the 6.73m agricultural labourer households on Java ... would require 0.67m ha, [i.e.] 13% of all cropland on Java – [still] very difficult and [requiring] strong political will and large financial resources ... [Instead, target] basic home gardens for the poorest agricultural households ... [acquiring land] in appropriate locations, convert[ing it to home garden land] and redistributing 0.03 ha ( $300 \text{ m}^2$ ) [to each of] the poorest 5m households in rural Java. [R]esearch ... shows that garden plots can make a significant contribution to the nutrition, income, status and overall well being of ... poor rural households ... [Javanese home gardens] produce 44% of ... calories ... and 65% of fuel consumed by rural households. [Or] irrigated plots [of]  $400 \text{ m}^2$  can yield enough paddy rice to provide 40–60% of ... yearly nutrition ... for a family of four'. This would need 150,000 ha, at a cost in 2002 of \$1.5b (\$300 per family) with full compensation. Land reform can progress in this direction even in crowded agricultures with few huge farms, as in much of Indonesia and Bangladesh. Neither lacks peasant organisation, some political openness, and some past progress in land reform. Both have recently enjoyed strong non-farm growth, creating public resources, for which the rural poor can compete. The growth is partly based on oil and natural gas booms. These depress farming, increase rural unrest, and do not strengthen landed against landless.<sup>33</sup>

A careful analysis for the *Philippines* [Borras 2007: 87, 90; chapter 3; 113, 208, 213<sup>34</sup>] shows that – despite widespread evasion and overstatement – the Marcos reforms of 1972–86 brought 'actual, albeit limited, [classic] and tenancy reform and ... weakening of the political power of landlords of rice and corn farms'. Yet by 1988 some 3000 people (0.2 per cent of landowners) still owned over 100 ha each, averaging 570 ha, and together 24 per cent of farmland; while 1.0m (66 per cent) of owners had below 3 ha, averaging 1.2 ha, and together 16 per cent of farmland. Subsequent reforms claimed massive redistribution, but much was from public lands and/or 'non-redistributive'. Borras's best estimate of genuinely redistributive CLR is 1.5m ha from 1972 to May 2005. Further leasehold reforms affected some 850,000 ha and 425,000 renting households, but encouraged evasion via evictions and resumptions for personal cultivation, raising farm size and harming employment and probably output [Otsuka 1991]. The focus has shifted towards attempts, including ceilings, to help even poorer people by land redistribution that, by reducing farm size, increases employment per hectare [Hayami *et al.* 1990]. In 2008, the Philippines slightly resembles the (much more unequal) Brazil. Both feature (1) complementarity, despite verbal hostilities, among CLR, NWLR and peasant organisations (chapter 6 (e) (ii) IV); (2) past progress in land redistribution, despite evasion – both giving hope for land

reform; (3) also scope for it, though past reforms, plus agricultural modernisation, have in part extricated the Philippines from the 'Latin American' mould of extreme land inequality based on Hispanic colonisation and inheritance. If operated farms over 25 ha in 2003 were reduced to that ceiling, it would release 560,000 ha – enough to provide the 350,000 ha needed to bring all farms below 0.5 ha (now averaging 0.24 ha) to a 0.5 ha floor and still leave 210,000 ha for the landless [FAO 2008: [www.fao.org/ES/ess/census/wcares/Philippines\\_2002F.pdf](http://www.fao.org/ES/ess/census/wcares/Philippines_2002F.pdf)]. Recent data for owned land are not available, but it is more concentrated than operated farmland, so reform options are at least as good.

**II. West and Central Asia and North Africa.** Leaving aside decollectivisations (on Algeria see p. 367, note 39), some land reform happened [el-Ghonemy 1998, 1999]. It has been underestimated, in part due to the glass fallacy. For example, in the three stages of reform in *Iran* in 1962–75, 53 per cent of villages were redistributed to 1.9 million families, 92 per cent of those eligible. Yet the careful analysts who have clarified these successes stress mainly that the landlords kept the best land; that many peasants received (as owners) small plots 'probably less than the holdings they used to cultivate' as pre-reform tenants; and that though 'land reform [gave land] to a large majority of the eligible peasants ... most of the remainder lost their rights and joined the landless' [Amid 1990: 93–99, 102–3]. In *Iraq*, the Gini coefficient of ownership holdings fell from 0.90 in 1958, to 0.57 in 1971, and 0.39 in 1982 [el-Ghonemy 1990: 220–21] – again, with a long and painful detour via collectivism, wound down in the late 1970s. In these and some other countries of the Middle East, considerable scope for land reform remains.

In *Egypt* a series of reforms, culminating in reduction of the land ceiling to 40 ha in 1961, led to the redistribution of *only* 15 per cent of farmland. With little left to redistribute below a 40 ha ceiling, the reform laws were gradually eased and are now abolished. But the ceiling was high, especially as in Egypt almost all farmland is irrigated. With agriculture as main income source for 25m people – a third of the population, though falling – pressure for new reforms cannot be ruled out. Land reform has lived, and is not dead.<sup>35</sup>

**III. Sub-Saharan Africa.** Is land reform irrelevant in sub-Saharan Africa, due to ample land and not-too-unequal forms of traditional or communal tenure? That is how the elderly remember Africa 50 years ago. Then – though land scarcity was already visible in parts of Kenya, Lesotho, the Sudan, Rwanda and elsewhere – unused land, almost as good as land already farmed, was indeed available in much of Africa. However, tripled rural populations, and land loss to erosion, depletion and urbanisation, have turned memory into myth. Spreading land scarcity has eroded not only soil but communal tenure systems, partly by

creating demand for their replacement by private systems, but more by increasing the pressures to bend or exploit rules of communal tenure systems to concentrate land control on influential people from politics (including chieftancy) or business. Further, much of Eastern and (especially) Southern Africa is marked by unaddressed, severe post-colonial land inequality that is only now being challenged. Far from being irrelevant to land reform, Africa is much of its future.

That future has been delayed and distorted by civil conflict, often among ethnic groups, in several of the African countries with the largest farm populations: in the past in Ethiopia and Nigeria, and still DR Congo and the Sudan. War, especially civil war, makes land reform (and much else) non-administrable. Civil and ethnic conflict, even well short of war as in 2007–8 in Kenya, poisons land reform with deep ethnic suspicions and hostilities around past, and feared future, land grab and ethnic cleansing. The thrust to titling, in several African cases, has more often allocated land to the rich than to the poor (chapter 4(c) (i) (II)). Some so-called ‘land reform acts’ such as Nigeria’s in 1978 sought mainly to confirm land allocations, securitise tenure, and formalise legal relationships between still-prevalent communal tenure systems and local and national authorities (and, as in Nigeria, generally failed in those aims) [Olayiwola and Adeleye 2006].

In this context it is surprising how much land reform has happened. In *Ethiopia*, with Africa’s highest farm population (67m in 2005), Mengistu’s 1975 reform gave local Peasant Associations allocative power, with guidelines to distribute land roughly according to population. This radically transformed feudal tenure. Crudely, the reform was popular for making land rights much more equal in the South, where extractive forms of labour tenancy had dominated, but unpopular in the North, for freezing and bureaucratising what had been systems of not-very-unequal land inheritance from both parents [Library of Congress 1989]. The reform (and agriculture and life) were later terribly disrupted by civil and foreign war, and by locally enforced collectivisation. Mengistu’s overthrow reversed that, and made land allocation systems less rigid, but aspects of the 1975 reform – especially Peasant Association controls, and population-based land reallocations – remained. Kebede [2008], using 1995 household surveys, shows that (1) land in Ethiopia in the mid-1990s was not specially equal (land Ginis being similar to those found in Kenya, Rwanda, Mozambique and Zambia), (2) while radical, the 1975 reforms built on local, pre-reform land distributions, (3) much current land inequality is inter-regional. This cannot be tackled by land reform (as opposed to settlement schemes, but these have been ‘poisoned’ by Ethiopia’s recent ethnic disputes). However, the 1975 land rules, partly retained today, do show a huge African agriculture reforming traditional tenures in a substantially equalising direction, though with population-based land redistribution having its usual harmful effects (chapter 5(b) (iv) (VI)).



In *Malawi*, a growth path without land reform was increasingly unviable as land scarcity and labour-surplus pressed harder [Sahn and Arulpragasam 1993: section 4]. 'The Malawi National Land Policy [of] January 2002 has ... been transposed into a costed, prioritised Land Reform Programme [including] the buying out of estate owners and re-vesting land in land poor, small-holder cultivators. Support for the Land Reform Programme amongst government, private sector and donor élites has been consolidated over the past year by ... consultations [and] implementation ... has also accelerated' [Oxfam 2005].

In *Kenya* [Hunt 1984; cf. Migot-Adholla *et al.* 1991] the colonial reform (the Swynnerton Plan) aimed to individualise land titles and to set up a class of African yeoman farmers (alongside landless labourers). This was partly because Swynnerton assumed (wrongly) that traditional tenures embedded incentives inconsistent with growth, but partly in the hope that substantial new landowners could be co-opted to support British rule. After Independence, the government continued to seek individual title, but incorporated a 'Million Acre Plan' to transfer to Africans, including smallholders, land abandoned or no longer cultivated by whites. This and subsequent government land interventions carried over Swynnerton's dubious assumption that traditional tenures were inefficient; increased regional inequalities; became less and less poverty-focused locally, instead steering some emerging modern land-rights towards a 'class' of absentee yeoman politicians; and, most damaging of all, allowed, perhaps sometimes encouraged, land changes to be caught up in politicised tribal disputes [Heyer *et al.* 1981; Hunt 1984; Sayer 1998; Syagga 2006; Ochieng 2007]. In 1991–97 alone 'some 250,000 Kenyan smallholders [were] driven off their farms ... and at least 1000 people killed' [Sayer 1998]. Yet the Million Acre Plan, together with subsequent tendencies by recipients of individual title to subdivide, reduced colonial land inequality and got some land to smallholders. This was a sort of land reform.

*South Africa, Namibia and Zimbabwe* are discussed in chapter 4(d) and elsewhere. Whatever one thinks of land reform efforts so far, dead it isn't. Zimbabwe shows the dangers of neglecting land reform for decades (one of them after Independence) and then imposing a scheme that, while including some genuine redistribution, is violent and focused on political pay-offs, and ignores the interests of employees. That twenty-first-century Zimbabwe should be loathed (or, worse, loved) as a land-reform exemplar is especially sad, given the success of smallholders during the slow, hesitant experiments in consensual reform that preceded the violence [Kinsey 2004]. But it is unlikely that, after the event, the period 1990–2020 will *not* be seen as one of substantial land redistribution to poor smallholders.

#### (v) *The life of land reform*

This developing-world tour, while inevitably breathless and selective, gives very little support to the gravediggers' case. Land reform is not dead or dying.

Much has happened; some is happening now; more remains relevant and likely. Globally, and in particular areas, land reform recedes and advances, is fulfilled or abandoned, inspires new pressures and programmes or becomes dormant with old ones. Land reform may also come to rank behind other priorities. For example, to develop agriculture-based African economies, governments (and aid donors) must redress decades of deepening neglect of infrastructure, water control, appropriate science, and seed/fertiliser access for farms of all sizes. But land reform, as a central poverty-reducing idea for very unequal farm-based economies, does not 'die' until they become either much less unequal or much less farm-based.

There remains the claim that land reform *ought* to die because it is a bad idea. That depends on whether land reform ossifies into 'homogeneity fetishism', in which – at the extreme – each agriculturist forever enjoys identical farmland rights. Such homogeneity is never achieved, so its advocates always see actual, achievable land reform as incomplete (one reason for the glass fallacy). However, after reform, governments have sometimes tried to avoid re-emergence of land inequalities (even modest and efficiency-oriented ones). This has led to land redistributions to larger families; laws against land sales, even by farmers wanting to migrate; and restricted tenancy. Such extreme readings of the requirements of land reform indeed ought to die (and are doing so), being inefficient and without mass support. However, land reform on our definition – an attack on gross inequality, poverty and lack of status that are due to severely unequal land rights – is not dying, and ought not to.

## **(b) The opponents' case: land reform, even if not dead, ought to be**

### ***(i) Why might land reform be a bad thing?***

The case for rural development without land reform (chapter 6(d) (iii–iv)) is that compared with 1950–80, land rights – and therefore reforms – matter much less in the fight against poverty, in the quest for efficiency and growth, and in the construction of politically credible coalitions. This is based on two claims. The first is that agricultural innovation and rural infrastructure massively raised farm output and reduced rural poverty through a 'green revolution' in many countries, especially in South and South-East Asia in 1960–85; and that, despite the arguments of section 6(d) (iii–iv), land reform was not very important. The second claim (not fully consistent with the first) is that rural progress and poverty reduction depend not on land reform, but on liberalised macro-economic policy, plus mass access to health and education.

Both claims are used to suggest that land reform is not useful against rural inequality, poverty or stagnation, and that other tools work without it: infrastructure, markets, new seeds, etc. The claimants give eight main reasons. 'There are not ten good reasons for anything' [Stigler 1969: 226], nor even eight; and some contradict others. Yet if just one applies, it harms the case for land reform. The eight are as follows.

- That land rights inequality – partly due to past land reform – is less, or has fallen more, than was once believed (section (ii)).<sup>36</sup> This is the main argument used to claim that land reform is no longer needed.
- That land reform matters less to the poor as they come to depend on urban incomes (section (iii)).
- That even the rural poor rely increasingly on non-farm income, rather than on access to land rights (section (iv)).
- That, even in agriculture, the rural poor rely increasingly on hired labour, as ‘semi-proletarians’ [de Janvry 1981] or employees; and that land reform is irrelevant, or harmful, to such income (section (v)).
- That land reform, overall, has brought the poor only a small a share of any gains from it (section (vi)).
- That, even for poor rural farmers, progress depends on agrotechnical advance, not on land reform. A key claim is that the green revolution has spread to farmers irrespective of size or tenurial status, usually with the non-poor as the innovation leaders. Does this mean that, despite the persistent inverse relationship (chapter 2), technical progress drives out any need for land reform? (section (vii)).
- That it is pointless to debate land reform, because other things than intellectual conviction determine its fate. For some practitioners of ‘new institutional economics’, scarcity of land and labour, and transaction cost of managing them, determine farm institutions such as farm size and tenure. In the ‘new political economy’, these institutions result from self-seeking (including rent-seeking) by the powerful, and their incentives and costs in organising group pressure. If such things determine land ownership, analysts can do little to help or hinder land reform. Nor, if induced, would it greatly alter power or income (section (viii)).
- That the balance of power, intra- and international, is less favourable to land reform now than in 1950–80. Allegedly, the end of the cold war has freed aid donors, and the decline of communist parties has freed developing-country governments, from the threats that once induced them to back land reform. Reform is intermediary between the status quo and revolution. When revolution no longer threatens the *status quo*, reform allegedly loses its appeal to élites (section (ix)).

*(ii) Is access to land rights less unequal than it seems?*

**I. Impact on whether land reform ought to die.** Inequality of land rights may be smaller than suggested by distribution of owned land among households. If so, need and demand for reform land, and reformable land available to meet demand, are less than they seem. Often, larger owned holdings tend to support larger households than do larger ownership holdings; to be on lower-quality land; and/or to be owned by households that rent less land in, and/or rent more land out.<sup>37</sup>

If a problem (e.g. gross land-rights inequality) is smaller than was once thought, that points two ways. It can mean that a solution is *less* urgent (e.g. because the gap between micro-owner or landless and highly landed households is less than it seems), or *more* easy or swift<sup>38</sup> (e.g. because poverty- and inequality-reducing goals can be attained with less land redistribution, and hence less cost and political difficulty). Which is correct for this problem, land inequality, and the proposed solution, land reform? The answer depends partly on the nature of inequality in land rights.

- To the extent that inter-household distribution of owned land overstates land inequality, the credibility of land reform is not much affected by the three main causes of such overstatement – bigger farms' linkage to larger families, (in some countries) worse land, and more net renting-out (hereafter called the 'features') – as they apply to the *top 1–3 per cent* of farmland-owning households. These remain land-rich before reform even with full allowance for the features. Such allowance will not much reduce the land that – given the political balance, the level of compensation, and the owners' options – can be obtained from this group (though it will make for fairer burden-sharing within it).
- Land reform becomes harder to the extent that the 'features' characterise, say, the *next 10–20 per cent* of farmland-owning households. Then the land surplus is less than it seems, and mobilising a given surplus involves reaching further down the wealth scale than had appeared, and making more enemies. This strengthens the case for seeking reform land mainly from the top 1–3 per cent. Allowing for the 'features', many of the next 10–20 per cent are poorer than the city élites who make laws to expropriate them.
- Hence the 'features' usually<sup>39</sup> make land reform harder if unequal land ownership is due to concentration with the top 25–40 per cent of households, rather than to concentration just with the top 1–3 per cent.
- However, land reform becomes easier to the extent that the *10–30 per cent of agricultural households owning no, or least, land* have more favourable 'features' (better land, smaller families, more renting-in). With less need for redistributed land, land reform can more credibly address that need. The 'features' of the land-poor mean that land hunger, or a given part of it (say half), can be removed by acquiring less land, with less conflict, less administration, and hence fewer political and economic costs, than the crude distribution of owned land among households suggests. Also, if prior to reform there is less bottom-end inequality of land rights than had been believed – especially if, as is the case, part of the reason is that the landless tend to have fewer family members – this means that fewer of the poor are likely to be landless. Hence a larger proportion of poor land-reform beneficiaries has farm experience (and assets, such as a plough or even an ox), cutting the costs and problems of post-reform disruption and service provision.<sup>40</sup>

Let us assume, however, that revising, downwards, an overestimate of land inequality weakens the case for land reform. Is land inequality really much less than it seems, due to the three 'features'?

**II. Smaller owned holdings support smaller<sup>41</sup> households.** This *household-size feature* has long been documented for many countries [Lipton 1983, 1985].<sup>42</sup> It affects the arithmetic of specific reforms (pp. 137–8) and of the inverse relationship (pp. 76–7). For simplicity, we explore the effect on reform viability only with classic land reform.<sup>43</sup> Suppose this is thought feasible with a 20 ha household ceiling and a 2 ha floor, but that it is decided – on grounds of fairness, acceptability or implementation – to allow for household size (on average five, but varying among farm households) and to impose a 4 ha-per-person ceiling and a 0.4 ha-per-person floor. Because land owned varies with household size, a per-person ceiling will normally reduce land availability as compared with a per-household ceiling.<sup>44</sup> By a symmetrical argument a per-person floor of 'land-poverty' – as against a per-household floor – normally reduces land requirement to bring all households above that floor, since household size tends to fall as land poverty rises.<sup>45</sup> Analogous arguments apply to land rights redistribution by other means than CLR. Does this give land reform less right to life? Well, it means that land reform has less to do, but also that it is more doable.

It is fairer to set ceilings and floors in terms of land per person – or, better, per adult equivalent, modified to allow for scale economies in consumption (see below). The case is stronger because the small household with little land, and the bigger household with more land, are often not distinct, but successive phases of one family's life-cycle: today's two-person household, a recently married couple, will in 15 years tend to have more members due to children, and more land due to inheritance or transfer from parents.<sup>46</sup> An extreme classic reform that did not allow for this – and therefore transferred land from parents' households to just-married children's – might, while reducing land-ownership inequality among households now, increase it over their lifetimes. Also, taking land from big households with big holdings, to give it to very small households with somewhat smaller holdings, could damage efficiency, by increasing the disparity among households in acreage *per family worker* [Forster 1992: 579].

So the household-size feature argues against land reform that: disregards household size; is extremely equalising; *and* is imposed on landholdings initially not grossly unequal. Household size has often been deliberately disregarded in classic reforms, partly to make it harder for a big landowner to avoid ceilings through bad-faith transfers of land to relatives and clients whom she intends subsequently to control; partly because of a sense, largely unfounded, that more land ownership *causes* larger families; and partly because, although land-rich households are bigger, they also enjoy

'economies of scale in consumption'. To reach the same level of well-being, Household A, with twice as many members (of each age) as B, needs and has *less* than twice B's total consumption, mainly because twice as many household members need and have less than twice the value of 'household public goods' such as the house, a refrigerator, or private leisure space.<sup>47</sup> In developing countries this is a small effect for the poor, whose consumption comprises mainly food – two can live as cheaply as, perhaps, 1.8 – but substantial in wealthy (e.g. landed) households, where the figure is nearer 1.4 [Deaton and Muellbauer 1986; Vleminckx and Smeeding 2001: 324; Browning *et al.* 2006].<sup>48</sup> Where household size is allowed for in a ceilings-based reform – or, more generally, in any reform seeking to reduce land-rights inequality – that reduces the amount of land released by a given ceiling; but the reduction is less than it seems, because scale economies in consumption are more for richer than for poorer households.

The household-size feature is a weak argument against land reform if farmland ownership is very unequal: in Brazil, say, or South Africa. And less land-unequal countries – India, Indonesia – have some big owned holdings that support few people, and some that would make their owners very consumption-rich at any credible household size. To some extent, moreover, the harm done to the prospects for land reform by the land-household size link is self-correcting. It curtails land *available* above a ceiling of given rigour because big farms support more people, but because small farms support fewer people it also curtails land *needed*, i.e. the strain or requirement on such a reform. A classic reform need not distribute land to all rural land-poor households, but only to those big enough to be consumption-poor given their ownership of land. Conversely, the land-poor who *do* have large households are very likely to be consumption-poor.<sup>49</sup>

Leaving aside the control of evasion (*mala fide* transfers), it is fairest in CLRs to measure land ownership per person, worker, or, best, adult-equivalent. This is defined in terms of consumption needs, but also partly captures labour contribution.<sup>50</sup> Fairness is enhanced (due to scale economies in consumption), and evasion incentive is reduced, by 'discounting' less than fully for household size when setting ceilings.<sup>51</sup>

**III. Smaller holdings are often on better land.** This 'quality feature' tends to apply in much of Asia and parts of Latin America, but to be reversed in Southern and Eastern Africa, and unclear elsewhere.<sup>52</sup> Here we review how the quality feature influences land distribution, and hence the case for (and feasibility of) land reform. Most evidence on quality differences by holding size is for *operated* farms; here, we assume that it also applies to *owned* holdings. That is usually plausible.<sup>53</sup> A quality feature then means that owned land in 'efficiency units' (reflecting contribution to potential or optimal output) is less unequal than land measured in hectares. Big owners have less farmland by value, and small ones more,<sup>54</sup> than area inequality suggests. Reverse quality effect has the opposite

impact. Does this make land reform easier and more needed in Southern and Eastern Africa, but harder and less needed in Asia?

There are two forms of quality effect, distant and local. In India, 50 ha of fringe semi-desert such as the Thar of Rajasthan – near-arid scrub, suitable only for very sparse grazing – may be too little to stop household poverty. Such land provides no *availability* of surplus land for redistribution.<sup>55</sup> Far away, mini-owners of fertile land may show little demand or *need* for land redistribution. In India, a household with only 0.5 ha of prime tubewell irrigated land in parts of coastal Andhra Pradesh can take three high-value crops of vegetables yearly, and is far from poor. Land transfers from 50 ha to 0.5 ha households are infeasible in this case, and if feasible might increase inequality and poverty. 100 ha to 0.2 ha might still be land reform, but this *distant* quality effect means little. Probably no land reform would induce many landless rural poor of coastal Andhra to acquire cash, knowledge or risk-bearing capacity to migrate to dry grazing land around the Thar, in a different linguistic and cultural zone almost a thousand miles away.<sup>56</sup> Distant quality effect is a red herring, reducing the scope for long-distance redistributions that are usually infeasible anyway.<sup>57</sup>

Much more important is local quality effect. In Asia especially, smaller ownership holdings in a village, or locality, tend to be on worse land. Does this reduce the scope for local land reform, because big farms have less land, and nearby small farms have more land, in true value (efficiency-units) than meets the eye if one just measures acres? That applies only to the extent that the small farmers' land is better for 'exogenous' reasons: because of superior natural powers of soil, water and terrain (chapter 2(e) (iii)). If there are reasons 'endogenous' to farm size why small farmers' land is better than the nearby large farm – e.g. because they work harder to improve their land – then, assuming they stay small farmers, they will do so also after land reform. As a rule, big, poor households with little land – i.e. much need, and many family workers, per hectare – are likelier than commercial farmers to use 'spare' labour, especially in the slack season, to upgrade land and water, e.g. by making channels or terraces. If the local quality effect is exogenous, it reduces the scope for land reform. If endogenous, it increases the gains from land reform.

Local quality effect is seen in El Salvador, Kenya and India [Seligson 1995: n. 20; Hunt 1984: 257; Bhalla and Roy 1988]. However, it is often endogenous (chapter 2(e) (iii)), springing from actions likelier to be taken by owners of smaller farms, and thus suggesting that land transfer to them will increase land quality.<sup>58</sup> Exogenous local quality effects sometimes happened where colonists or politicians seized the best land or allocated it to clients: in the Philippines, much of Latin America, and much of Southern and Eastern Africa; but these effects tended to be in reverse. Locally as well as nationally, land was selected, for seizure and conversion to privileged large holdings, in areas with good soil-water conditions. So large ownership holdings tend to

have more irrigation and better soils than nearby small 'peasant' farms. That favours land reform, including patrilisation: less area need change hands to achieve a given local redistribution; post-reform gains, from more labour-intensive small farms after reform, have more leverage to raise output.

Apart from the (spotty) evidence, reasoning suggests that local quality and reverse-quality effects seldom much reduce, and may often improve, the prospects of land reform. Land *within a nation*<sup>59</sup> tends to be least unequal, in efficiency-units per person, where soil-water productivity is lowest and land least valuable. The scarcer land is (or becomes), the likelier are land-rights to be judged worth accumulating by people with political or economic power, and thus to be locally unequal. Among five villages in the Philippines, the Gini coefficients of household income were higher in irrigated villages with fertile soils, and the proportion of inequality attributable to income from land was also highest there [David *et al.* 1994]. Comparable cross-village effects were found twenty years earlier in India [Dasgupta *et al.* 1977]. If land inequality is greatest where land is of the highest quality, then any possible local contribution to a nationally observed quality effect is likely to be fairly small, because there is a tendency at the top end for good and large land-holdings to be found in very productive areas. Yet a non-endogenous, local quality effect would reduce land available, and land needed, for a reform. What might explain such a local size-quality effect: inheritance, migration, or economics of farm size?

The inheritance argument is that local quality effects arise because parents seek to pass on land in 'viable' units, sufficient to support the inheriting family. Such units need to comprise more land if it is low-quality (and parents are less likely to split land among offspring) than if the quality is good. However, where agriculture is the main occupation, part-time farming is increasingly the norm among smallholders. This suggests that inheritance practices do *not* rapidly adapt so as to maintain 'viable' holding size. And why should they? Most sub-viable, part-time farms are at least as efficient, and no less likely to support households at adequate or rising levels of living, than just-viable farms where owning households have very little non-farm income (leaving them, almost by definition, especially risk-prone). Even if parents do prefer full-time farming, that preference needs to be very strong before they bequeath all their land – perhaps all they have – to one or two children, leaving the rest with nothing.<sup>60</sup> Further, even if parents want to respond to changing land endowment through bequests – e.g. splitting higher-quality land into smaller units for each child, but leaving larger areas of lower-quality land undivided – custom or law usually fixes inheritance practice in the medium term.<sup>61</sup> A community tends to retain either partible inheritance or primogeniture, either male or gender-neutral descent, either patrilineal or matrilineal structure, etc.

Migration out of rural areas might induce local quality effect, from a particular area, (1) if farmers with small amounts of low-quality land were especially likely to migrate, and to sell or rent their farms to larger holders of land



of similar quality; or (2) if farmers with a lot of good land were especially likely to migrate, and in the process to sell or rent in small sub-units to the landless or to micro-farmers.

Point (1) runs against the logic of the IR, and raises three other objections. Migration among the very poorest (numerous among mini-land-owners in bad terrain-soil-water conditions) is less likely to be permanent, due to its fixed cost; want of contacts at the recipient end; and incapacity to bear risk [Connell *et al.* 1976]. Second, big landowners tend to sell to each other; small ones do likewise; and rentals are typically from rich to poor. Third, migrants from rural areas often retain land; if they migrate as individuals, the farm is run by parents, offspring or siblings; if as a household, it is loaned or leased to extended kin.

Point (2) works with the IR *if* migration is likelier among rich farmers. That does not seem plausible (there is little evidence), but where it is the case that might help explain local quality effect.

Do the economics of optimal farm size (chapter 2) suggest that initially low (high) owned-farm size might mean small (great) incentives to improve land quality? Transaction cost of labour supervision, per hectare and even more per efficiency-unit of land, looms large in determining optimum size of operated holding; and transaction cost in land markets, especially the difficulty of repossession, reduces the extent of tenancy and therefore the gap between owned and operated holding size. Will such transaction cost create a local quality effect or a reverse quality effect? Labour supervision costs increase with the number of employees relative to the number of family workers; with the total number of workers; and with the area over which these workers are engaged, i.e. the travel time involved in supervision, especially in peak periods. Dry or low-yielding land requires fewer workers per hectare to reach the optimal production level than good irrigated land, but the distances, and hence the costs of supervising a non-family worker, are typically greater; so is the seasonality and concentration of production, and thus the likelihood that in peak farming seasons the proportion of hired-in labour may have to rise sharply (bidding up the wage-rate, as well as supervision costs) unless the holding remains small enough to manage with family labour even in the peak. These are offsetting factors. While labour-linked transaction cost tends to reduce optimal size, one cannot infer that it either creates or destroys local quality effect.

What about land-linked transaction cost, another determinant of the scope for tenancy and hence of optimal size of owned and operated holding? Tenancy is rarer on 'bad' (plentiful) than on 'good' (scarce) land, probably because on 'bad' land the gains from it (especially avoidance of cost of labour supervision) are less likely to be worth the transaction cost and risk of separating owned from operational holding. So on 'bad' land it matters more that owned size be close to optimal operated farm size, unless the difference made by non-optimal size is itself much smaller on 'bad' land, e.g. because the farmer needs less hired labour per hectare. Again, no conclusive argument for a local quality or reverse-quality effect emerges.

**IV. Tenancy and owned-land redistribution.** Chapter 4(b) explored the effects of tenancy on the poor, and whether its reform was desirable. Here we ask: does tenancy affect the importance or difficulty of land redistribution because inequality of *owned* land mis-states inequality of *operated* land, due to leases between big and small owners? Is the proportion of landless persons in the farm population much reduced if we deduct those who own no farmland, but rent in some? There are three cases [chapter 4(b); Singh 1990; Lastarria-Cornhiel and Melmed-Sanjak 1999].

- In parts of Africa and in some tribal areas of Asia, tenancy is rare or absent. Land is not scarce enough, and/or is farmed by individuals under rules of 'communal tenure' that often impede renting-out [Noronha 1985].<sup>62</sup> These areas are dwindling. As population (and migration) grow, the gains to all parties from rental increase, and rentals, often surreptitious, often emerge. 'No tenancy' situations are now quite rare.
- At the other extreme, as in parts of the Indian Punjab, many very small owners rent out their holdings to bigger farmers, becoming 'pure' workers rather than continuing to farm. In such circumstances, which are becoming less unusual, tenancy can come to make land control more unequal, i.e. the distribution of owned holdings is more equal than that of operational holdings.
- The third situation typifies perhaps two-thirds of farming areas and peoples in Latin America and Asia,<sup>63</sup> and is increasingly found in Africa. Tenancy typically involves, say, 5–15 per cent of farmland and 10–30 per cent of farming populations. In India 'the share of leased-in land in operated area [fell] steadily from 10.7 per cent in 1960–61 [to] 6.5 per cent for the kharif season of 2002–3', with about 11.5 per cent of rural households leasing in and 2.8 per cent leasing out, but the true scale of tenancy among the poor is somewhat higher.<sup>64</sup> As these data suggest, a large majority of tenanted land passes from big owners to small, even sometimes to non-landowners. It pays both landlord and tenant for the size of farms, *owned* rather unequally, to be *operated* closer to an optimal, smallish size.<sup>65</sup> Owners avoid supervision costs; workers, by becoming farmers, reap rewards for management skill, not just for farm labour. Such tenancy makes operational-landlessness less than owned-landlessness, and makes operational holdings more equal than owned holdings [Singh 1990]. Like household-size and land-quality effects, big-to-small tenancy appears to cut numbers needing owned farmland to escape poverty and oppression, easing the task of land reform and reducing demand for it. However, this is far from clear-cut, as the persistent demand from many poor rural people for tenancy reform suggests. Whether widespread big-to-small tenancy increases or decreases the need for land redistribution depends on whether local landed power, due to severe ownership inequality, 'poisons' tenancy as a means of redistribution by allowing one or a few big landowners to dictate local terms. How can that be handled?

Tenancy reform alone sometimes helps, but has often been counter-productive, inducing big landowners to resume tenanted land for self-cultivation (chapter 4 (b)). That is one of the reasons why, in India and other Asian (and Latin American) countries, the proportion of farmland rented – especially by sharecropping, the contract most suitable for the risk and supervision requirements of the rural poor – is much smaller than 20 or 50 years ago, despite rising person/land ratios, land hunger and hence demand for tenancies. Remaining tenancies tend to be informal and on terms less favourable to the tenant, especially in respect of enforceable security of tenure, than would be the case if the landlord were not afraid of tenancy restrictions, including loss of land to tenants who could prove long periods of tenure. This is unlikely to change soon, being rooted in landowners' long-term fear of tenancy reform, and *lack* of fear of ceilings on owner-farmed land. CLR – actual or potential ownership ceilings – may be a precondition either for making rental markets 'fair' or making tenancy reform work, as proved to be the case in West Bengal.

The great potential contribution of tenancy to redistribution of land rights is shown by Deininger and his colleagues in China and Ethiopia. However, badly planned 'tenancy reforms' and restrictions *without* effective land ceilings – alongside other factors – have reduced the supply of land to rent, especially to the poor. The practical contribution of tenancy to reducing inequality of land rights in most of Asia or Latin America remains, but is declining, and clouded by landlord power where ceilings legislation is unlikely to happen, or has happened but with little prospect of enforcement.

It is in irrigated, high-quality farmland in Latin America, South-East Asia, and South Asia, where land is scarcest, that tenancy is most prevalent [chapter 4(b); Lastarria-Cornhiel and Melmed-Sanjak 1999], but in a few of the fastest-developing farm areas there is a trend away from classic rich-to-poor tenancies that reduce land inequality, towards reverse tenancy to cut the costs of getting or managing capital and credit.<sup>66</sup> Even on the other side of the fence as micro-landlords, the poor benefit from tenancy – else why choose it? – but, in these few leading-edge areas of Asian agriculture, tenancy does not equalise land rights or access to income from farm management. Rich-to-poor tenancies still predominate in number and area, but there is a trend for them to decline, and for fixed-share rentals by large farmers to increase.

Tenancy helps equalise land rights in South and South-East Asia, and more so in Latin America (where land ownership is far more unequal), but its contribution is clouded by landlord power, and declining as tenancy gradually gives way to owner-operation, rich-to-poor to reverse tenancy, and sharecropping to fixed rentals less suited to the needs of the poorest.

**V. Despite these effects, many countries' high owned-farmland inequality requires reform.** Land quality, household-size and tenancy effects somewhat reduce the extent to which inequality in *amounts* of land *ownership* per *household* are transformed into inequality in *values* of land *rights* per *person*, and hence into the possible causes of rural poverty or tyranny

that underlie the case for land reform. However, the reduction is modest. Despite these factors – and despite major land reforms – severe inequality of owned farmland in many developing countries is an important, remediable cause of rural poverty, and – because rental markets do not prevent strong overlap of land ownership, occupancy and operation – of lower output per hectare and per litre, and of slow farm and economic growth (chapter 2). Land inequality continues to be mainly built, not on transfers of land from the less active or skilful to those better adapted to run farms, but on inheritance from ancestors who worked or saved (or, often, stole or bribed) to get the land. That harms incentives that modern market societies need: in general, because national product or income top-sliced to meet the claims of inheritors is unavailable to meet the claims of enterprise, management and labour; in particular, because the powers of landed inheritors impede some of those best equipped to farm from owning farms that they could develop better.

There are two standard objections to this line of argument. First, it is claimed that – precisely because economic growth (and perhaps the good society) requires saving as well as effort and enterprise – States must ensure rights to property, including land, acquired by saving the incomes earned by effort or enterprise. The property right conflicts with other rights, which is one of several reasons why all States abridge it. Further, the right to property acquired by effort, enterprise, or purchase from saved income due to these, is irrelevant to land acquired by force, fraud, colonial conquest *or inheritance*. Indeed it is a form of tax on rewards of effort and enterprise – and therefore a drag on economic growth – if GNP is pre-empted, away from incentives to work and to do business, towards rewards for being a descendant. This pre-emption is greater, the more the share of agricultural production in GNP – and the larger the monopoly power of landowners (i.e. the inequality of owned farmland), because such power enables them to raise their proportion of agricultural GNP, whether as landlords or as farmers.

Second, it is claimed that market forces will put things right, because it will pay large landowners – unless themselves exceptionally efficient commercial farmers – to rent out land for cultivation in small, efficient family holdings. This will transfer some agricultural GDP to those of the poor who are skilled at farming, and raise output per hectare and per litre, and employment (chapter 2). That helps development and cuts poverty. This second claim, that tenancy markets reduce the damage from inequality of owned land, has force, and creates a presumption against laws to restrict tenancy (chapter 4(b) (iii)). However, the inequality of operated farmland in many poor countries remains severe, and despite the thrust to smaller farms (Tables 2.2–2.4) has become much less so only where substantial land reforms have taken place. This suggests that the renting process is a slow, uncertain and incomplete remedy for farm size inequality. Further, as we have seen, tenancy, especially to small tenants, is in some decline. But tenancy law, or the fear of it, is only one

reason. Another is that owners often keep farmland, not mainly for farm or rental income, but as a liquid asset, to be sold when convenient – a hedge against inflation, or a real-estate speculation. Most important, markets in rented land are thin; in a village, will several landlords competitively seek to rent out farmland of the sort that several potential tenants want, in the right places and for the right time-periods? Also, tenancy markets are often imperfect and costly to operate. Landlord and tenant often know little about each other's skills, resources, intentions, or even reputations. Whatever the reason,<sup>67</sup> in few poor countries is even 20 per cent of farmland under tenancy.

Despite quality, size and tenancy effects, few argue that the prevailing degree of owned-farm-land inequality in Paraguay or South Africa, or even in less extreme cases such as Pakistan, is efficient or fair. Some people, however, believe that land reform is not desirable because farmland inequality is not great; or has fallen sharply, so that land reform is not needed; or exists largely where land is so scarce that there is little scope for redistribution. To explore this over the post-1945 land-reform period, we need a bigger data base on land inequality, stretching further back than Table 2.4. So Table 7.2 (p. 285) lists 49 developing countries,<sup>68</sup> 44 in decreasing order of operated hectares per holding. We use mean holding size for the early 1980s, which has most widely available data; the size is smaller today, but would not much affect the ranking.<sup>69</sup> Data limitations force us to use *operated* farmland Ginis (OFGs), which probably understate owned farmland Ginis. The countries fall into groups, with discontinuities of mean holding size.

- Group 1: in 11 countries, mean holding exceeds 20 ha. They include all seven South American countries with known OFGs, and four Central American/Caribbean (CAC) countries. The latest post-1990 mean OFG, available for eight countries, is 0.85 and the range is 0.72–0.93.
- Group 2: eight countries, four each in CAC and the Middle-East/North Africa (MENA), have mean holdings of 9.0–15.4 ha. Four have a Gini for 1990–2005; the most recent average 0.75 (range 0.64–0.85).<sup>70</sup>
- Group 3: seven countries have mean holdings of 4.6–7.8 ha. Four are in MENA, one is next door in South Asia (Pakistan), and two are in CAC. The five post-1990 Ginis recent average 0.66 (range 0.59–0.78).
- Group 4: 10 countries have mean holdings of 2.0–3.7 ha, including five of the eight sub-Saharan African countries, three in East/South-East Asia and one each in South Asia and CAC. Six post-1990 OFGs average 0.58 (0.47–0.77).
- Group 5: eight countries have truly mean holdings – even in the 1980s only 0.9–1.4 ha. Three are in South Asia, two each in East/South-East Asia and sub-Saharan Africa. Seven have known post-1990 OFGs; they average 0.46. If recent data existed for China, it would be in this group, cutting its mean OFG to below 0.42.

Developing countries with relevant data fall into five suspiciously neat, but unpremeditated, groups of seven to eleven members, clearly distinct in

average farm size and inequality. The large-holding group I tended in the 1980s to average 20–90 ha holdings, with OFGs typically in the mid-80s; the next-largest (9–15 ha) group II had Ginis in the mid-70s; and so on to the smallest-farm group V, averaging below 1.4 ha, with OFGs around the mid-40s (China and Vietnam, not listed for lack of data, have even less land per head *and* almost certainly lower land Ginis still). Estimates in Eastwood *et al.* [2009] show a strong relationship between mean farm size and both the OFG and other measures of inequality, and show that this relationship is only partly linked to the higher proportion of grazing land in countries with larger mean farm size. Without speculating about causality, therefore, we can conclude that countries in groups I and II, and probably similarly endowed countries with weaker data (notably in Southern and parts of Eastern Africa), (a) have the most severe land inequality, (b) tend to have more farmland (even allowing for household size and land quality), absolutely and as a proportion of total land, in the largest 10–20 per cent of farms. These are therefore much larger than in, say, group V countries. *The countries where very unequal land most suggests continuing need for land reform are also the countries with a lot of land available for it.*<sup>71</sup>

The numbers, while almost all derived from a globally standardised agricultural census, are subject to much error and, as Table 7.2 (p. 285) shows, some disagreement.<sup>72</sup> The OFGs *understate* land inequality for two reasons. Since owned land is more unequal than operated land [Singh 1990; Sanyal 1988],<sup>73</sup> and leased-in land contributes less to net income, the Ginis ‘overstate’ the equalising impact of leases: they equalise farm income less than operated land.<sup>74</sup> Second, the table excludes farm-labour households operating no land, usually the poorest. Offsetting this, the OFGs *overstate* land inequality by not allowing for quality or household-size effects. The overstatement offsets the understatement, but they do not ‘cancel out’ (indeed, on balance the table probably understates land-rights inequality).<sup>75</sup> Further, while owned-land Ginis (and hence pressure and capacity for reform) are likely to exceed even the high OFGs in groups I and II and similar countries, any land Gini is a summary statistic. It increases with top-end and bottom-end, but most with middle-range, inequality. It is top- and bottom-end inequality that determine need and feasibility of reform. For these and other reasons, small Gini differences between two countries (or two dates in one country) mean little.

Nevertheless, the pattern of differences in Table 7.2 (p. 285) tells a clear story. The case for a land-reform response is stronger because high OFGs correlate well, not only with slower agricultural and overall growth in low-income countries (chapter 2(h)), but also with rural poverty. el-Ghonemy [1990: 167–77, 304–11] regressed, for the 24 countries with available variables, the proportion of rural people in absolute poverty<sup>76</sup> (1978–86) upon OFGs (1973–84). The result (significant at 1 per cent, i.e. almost certain not to be a chance occurrence)<sup>77</sup> is that 69 per cent of variance in rural poverty incidence is linked to variance (at about the same time) in inequality among operators of farmland; and that a difference of 0.1 between two countries in their

OFG – roughly the difference between a typical group I and a group II, or a group IV and a group V, country in the table – is linked to a huge difference, 7.8 per cent, in the proportion of rural people in poverty.<sup>78</sup> While a first step only, this work is highly suggestive. New work by Besley and Burgess [2009], multivariate and using a more complex causal model, shows that the land-reform achievement of an Indian State has a big role in predicting its success in reducing poverty. The aggregate links of asset inequality to slower growth (chapter 2(e) (iii)) support the favourable international backdrop in Table 7.2 to country-specific land reforms in group I and II countries, and other countries (or parts of countries), often with absent data, but with both similarly high OFGs and substantial land in large holdings. Inter-country or inter-area regressions alone cannot imply statements about a particular country, let alone predictions for the effects of policy there. However, the evidence is that great land inequality remains in the developing world, is associated with rural poverty, and probably retards growth.

*(iii) Is land reform dying as urbanisation reduces priority for addressing farmland inequality?*

Rural-to-urban migration has helped to cause substantial poverty reduction in the last few decades, mainly in rural areas [Ravallion 2007; Ravallion *et al.* 2007]. The rural poor have benefited both from remittance inflows,<sup>79</sup> and from alleviation of the downward pressures on wages due to population-induced labour-supply growth – especially important as farmland became increasingly scarce. Townward migration reduces urban poverty incidence through its association with acquiring more urban education, and making more income-enhancing use of education in general; but this is offset by the fact that townward migrants swell the labour supply, which tends to reduce, or at least restrain, real income for the urban poor.

Despite migration, some 75 per cent of the very poor (below \$1/day at internationally standardised purchasing power) lived in rural areas in 2002 – a rather slow decline, from 82 per cent in 1993.<sup>80</sup> Though the dollar-poor are urbanising faster than others, the rural share of the world's dollar-poor in 2030 is projected at 58–61 per cent – even more, 69 per cent, if we correct for probable UN overestimates of urbanisation rates. While 'these projections depend on the extent and pattern of future economic growth' – and on the poverty line and the definitions of 'urban' and 'rural' – 'it appears very likely that the bulk of the [dollar-]poor will still be living in rural areas for at least a few decades to come' [Ravallion *et al.* 2007].

In most of Asia and Africa, mass poverty remains overwhelmingly rural. Urbanisation will not soon shunt aside the priority for land reform (or effective substitutes, if any) where land is very unequal. But might that happen in Latin America and the Caribbean (LAC), where by 2002 only 41 per cent of the dollar-poor were rural? Probably not. LAC – like South Africa – has much more poverty, especially rural poverty, than would be expected at its

mostly middle-income levels of living. That upgrades the anti-poverty role of land reform in two ways. First (though in 2002 most LAC poor were already urban) there were 26m rural poor, more than one in five rural people, compared with one in eleven urban people. That suggests a big rural poverty problem, requiring redressal. Second, LAC's higher-than-expected poverty – not only rural poverty – is linked to its extreme land inequality (Table 2.4; Table 7.3). Even where quite low proportions of population remain in rural areas or in farming, the most land-unequal countries are those least successful at reducing poverty and income inequality. In Latin America especially, efforts to do so constantly trip over the long politico-economic 'tail' of power based upon gross, hierarchical and inherited land inequality [de Janvry 1981; de Janvry and Sadoulet 1991; compare Moore 1966].

Further, in all countries, we should ask whether land reform can *improve* the contribution of rural–urban migration to poverty reduction. One should distinguish the migration of hope from the migration of despair. To oversimplify: the better-off are largely 'pulled' to migrate with, or for, higher educational levels to planned urban careers; the poor are 'pushed' by land hunger and job hunger into a wandering search for any source of income, even if insecure [Connell *et al.* 1976]. Extreme land inequality, concentrating land ownership in large and low-employment farms, pushes the poor into the migration of despair. It also impedes the migration of hope, because low and insecure income makes it harder for households to move children of 10–18 out of production and into education. Reforming Latin America's still-extreme land inequality is an engine, not an alternative, for constructive urbanisation as a source of poverty reduction.

Asian experience raises a new issue. Urbanisation may require that land reform, to meet the definition of land-rights transfer against poverty and inequality, confronts new issues and adds new rules. In parts of India, China, Cambodia and elsewhere, rapid urban growth – of population, area and output – sharpens conflict at the urban peripheries between farmers and developers, seeking to acquire land for power plants or factories. Rarely, agriculturists want to hang on to land (especially tribal land) for farming, and resist all change. More often, though, they want only time, resettlement options, and cash for land: all aspects of 'proper' compensation. But what is that? Developers and their industrialising clients want the land as cheaply as possible, at prices reflecting only its past low, often insecure farm productivity, not its future use, returns and therefore development value. Local authorities often collude, sometimes corruptly but often to provide nearby space for factories, power supplies and other sources of development. Large, rich farmers with justiciable land rights have power to resist. So to some extent – in not-too-repressive, fairly democratic and open societies – do poor but organised agriculturists, even sharecroppers, farm labourers and those with unrecorded land claims (see pp. 169–70 on Nandigram). Often, however, land rights redistribution requires specific protection against these new threats, especially for poor agriculturists now lacking written claims to the land they work.



Formal titling, often in the past a weapon of the strong, can in the context of such reform be turned into a weapon of the weak (chapter 4(c)). Even modern, industrialising urban growth need not rapidly make land reform less important, but does change its modalities.

***(iv) Does rising non-farm income reduce the poor's need for land rights and land reform?***

Tables 7.3 and 7.4 show, for selected developing countries and regions, the 1961, 1981 and 2005 proportions of people in households with agriculture as the main single income source.<sup>81</sup> In 2005, over half the people of South Asia, 60 per cent in East Asia and 65 per cent in sub-Saharan Africa<sup>82</sup> were in such households. So were, respectively, 51 and 60 per cent in the populous fast-growers, India and China; the proportions of economically active people were even higher, respectively 57 and 64 per cent [FAOSTAT 2008: at <http://faostat.fao.org/site/550/DesktopDefault.aspx?PageID=550#ancor>]. Especially in rural areas, many of the remaining 35–40 per cent of people have substantial subsidiary income from agriculture. So its role has been falling, but remains dominant.<sup>83</sup> The poor are even more heavily dependent on agriculture, mainly as small farmers in East Asia and most of Africa, somewhat more as farm workers than as small farmers in much of Latin America and South Asia. Non-farm activity will not soon replace farming and farmland as the main critical area for poverty reduction, at least in Asia and Africa.

That is not to deny the large, growing anti-poverty role of non-farm activity. For some poor households it is the main income source, and for many more a growing source of subsidiary income, raising and helping to stabilise living levels for households still dependent mainly on farming and farm labour. We reviewed this in three contexts: how non-farm activity affects the poverty-reducing goal of reform (chapter 1(b) (ii) (II)); how equity in classic reform can be preserved, though reform beneficiaries (and land losers too) have different access to non-farm incomes (chapter 3(d) (vi)); and the 'aggregate IR', in which land distribution based on less-unequal, smaller farms stimulates non-farm production and income, often employment-intensively (chapter 2(b) (ii)). We conclude that, even with rapid non-farm growth, equitable land distribution remains central to poverty reduction, not only because most of the world's dollar-poor still rely heavily on agriculture and farmland, but also because less unequal farmland increases non-farm income of the less well-off.

***(v) Shifts from farming to farm labour, and the employment base for land reform choices***

In some developing countries, even for those who stay in rural areas and practise agriculture, income increasingly comes from farm labour rather than farming itself. In the late 1970s de Janvry [1981] collated evidence of such

'semi-proletarianisation' in Latin America. In India, hired labour overtook own-account farming as the main single income source for rural households in the 1980s, and has since pulled further ahead, most sharply for poor rural households [Sundaram and Tendulkar 2002: 43]. In Zimbabwe, land-reform transfers of white-owned farmland after about 2000 led to loss of work for many farm employees. Is land reform decreasingly useful, perhaps harmful, for poverty reduction in such cases?

This is a strange argument. First, it is gross land inequality (alongside rural population pressure on limited land) that forces so many rural people to rely, for income, increasingly on landless labour rather than on working their farms. So it is odd, morally as well as logically, to invoke their landless-worker status as a reason for not doing land reform. Second, while reform land transfers are sometimes limited to (or at least prefer) experienced farmers, they can, and often do, include labourers who neither own nor operate land. Third, even in a very land-scarce country such as Bangladesh, many households with farm labour as their largest income source also operate a tiny farm, perhaps 0.2 ha or less, supplying 10–30 per cent of income.

Fourth, and foremost, even 'pure' labour households – operating no land, and receiving none in a reform that redistributes land rights to small farms and thus to the poor – normally gain from such reform. The 'mental model' of dualistic agricultures, with big farms engaging large hired workforces and small farms relying largely on family labour, even if correct,<sup>84</sup> does not mean that a shift to more equal or smaller farms (e.g. via land reform) cuts demand for hired labour. It means the opposite. We can show this in two ways: by looking at the poor as a total workforce, or at total land area as a source of labour income.

- To achieve minimally acceptable living levels, the poorest 40 per cent, whether or not they own or operate land, typically show high workforce participation, well over 90 per cent for prime-age adult men. They work, in busy seasons, near-maximum sustainable hours and – whether hired or self-employed – for the best available return, even if very low.<sup>85</sup> So they experience little unemployment, rarely above 5 per cent [Lipton 1983]. Land redistribution raises demand for labour (partly because smaller farms are more labour-intensive), further cutting unemployment, and/or raising wage-rates. Where is the extra labour supply to come from? The small-farm reform beneficiaries, being poor, worked close to the limit before reform; if they afterwards work their reform land themselves, they must take hired-labour supply off the market. That must raise demand (employment or wage-rates) for any workers who remain landless.
- A fixed land area requires labour depending on choice of product-mix and technology. Both choices are more labour-intensive on smaller farms (chapter 2). Hence 'reforming' land into smaller, more equal ownership holdings – and hence, usually, smaller operated farms as well – means extra demand for labour, some of it hired, unless reform leaves land per worker completely equal among the rural workforce.

*Semi-proletarianisation does not disable land reform as a weapon against poverty and gross inequality, but makes the weapon work differently: less by direct land transfers to the poorest, more by raising demand for their labour.* That should be set into the context of small-farm development as the initiator of accelerated growth and poverty reduction. The context is clearest in the 'green revolution' areas of Asia in 1960–95. The poor's income depends largely on labour; increasing that income, on extra investments (tubewells, roads, farm research) raising demand for such labour. In early development, saving, to finance such extra capital spending, is hard to come by. Workplaces – whether self-employed or hired – per extra \$1m of capital spending are normally more in small-farm agriculture than in other sectors. Hence accelerated agricultural growth was the key to development paths that slashed mass poverty by bidding up employment and wage-rates. This works better if, through land reform or otherwise, farm development is based on small, not-too-unequal, and hence labour-intensive farms. But – unless, as in China and Vietnam, a 'terrible detour' has created the unusual conditions for almost completely equal land redistribution – the poverty-reducing process has to work by including hired workers, not omitting or harming them.<sup>86</sup>

In Pakistan in 1972, farms above 60.7 ha used 0.12 workers per ha (hired or self-employed), and farms of 20.2–60.7 ha used 0.22; but farms below 0.4 ha used 9.15, and farms of 0.4–1.0 ha used 3.32 workers per ha.<sup>87</sup> Data for Bangladesh, Thailand, Indonesia and India were comparable. Simulations showed that egalitarian land distribution would raise labour demand and use by only 9 per cent in Java, but by 19–24 per cent in Bangladesh, Pakistan, Thailand and the outer islands of Indonesia.<sup>88</sup> In 1978, plausible partial land redistribution on Brazil's estate sub-sector would have raised person-years of farm labour use from 2.6m to 3m; and evidence from the 1970s showed 'employment per hectare higher ... in those countries that have ... more equal distribution of land ownership' [Kutcher and Scandizzo 1981: 37, 201]. Few researchers have updated these numbers, partly because higher labour-intensity on small farms (other things roughly equal) is hardly contested, resting on widespread observation and sound tested transaction cost theory (chapter 2 (c)). This 'labour argument' for small-farm emphasis in poverty reduction does not rest only on small farms' greater capacity to generate income-per-hectare for self-employed family farmers. Smaller, more equal farms usually mean more demand for *hired* labour per hectare, despite a lower ratio of hired to family labour [Booth and Sundrum 1985]. Land transfer to families with very small farms also gives them incentives to shift labour *supply*, from hiring-out to the family farm; this raises the proportion of work in the hired-labour market available to the landless, and thus their employment and/or wage-rate.

The reliance of the poor on rising demand for labour, including hired labour, for poverty reduction – and also for bargaining power and dignity – is at the core of the case for agriculture as the leading source of early mass poverty reduction. Setting agricultural growth mainly into a context of small,

labour-intensive farms strengthens that case, and much worldwide experience shows that it can be done. This is strongly complementary with land reform. If it is deferred until a green revolution begins, it is impeded fiscally by higher land values and politically by better-financed and keener opponents [Bell 1990], but even then progress has sometimes been possible: governments are less cash-strapped and demand may be stronger.

Yet, even in labour-intensive economies, large farms may prosper because suited to some product-mixes and technologies. Economies can be warped towards such outputs, methods and farm sizes, against both equity and efficient factor use. Powerful farmers (as in Latin America) may obtain government subsidies – for tractors, farm electricity and diesel, loans to buy them, and capital-intensity in general [Binswanger and Elgin 1989]. That outcome, while politically plausible, subverts an attack on poverty by the most credible means: raising demand for labour, and hence the poor's income and power. Perhaps large farms *can* create demand for labour (whether hired or self-employed) as effectively as post-reform, fairly equal smallholdings. However, opponents of small-farm approaches have so far seldom specified, let alone quantified, the employment impact of policies for doing this. In debates on land reform in South Africa and Latin America, advocates of larger units – whether traditional, capitalist or co-operative – need to show how their advice is consistent with reducing poverty by raising demand for the poor's main asset: hired or self-employed labour.

The slowdown in population growth may, surprisingly, strengthen the employment-related case for land reform as a route to small-farm-centred poverty reduction. Workforce growth reflects birthrates 15–20 years ago, so it remains fast, well after child population growth slows or stops. The falling dependency ratio (dependants/workers: chapter 5(b) (iv) (VI)) is a 'demographic window' for families, and nations, to work and save their way out of poverty. But that happens only if labour demand expands, affordably, at least as fast as workforce. In East Asia in 1960–90 that was based on small-farm growth, often after land reform: the growth effect of new small-farm technologies in reducing poverty was amplified by the distributional impact of lower fertility and hence dependency ratios [Bloom and Williamson 1997; Eastwood and Lipton 2001]. Slow-growing or static numbers of dependents were supported by fast-growing numbers of workers on labour-intensive small farms; for many such workers, self-employed or hired, the new farm technology provided rising employment income. The fertility reductions triggering this process came somewhat later to South Asia and Africa, but are now cutting dependency ratios there too, sharply in South Asia, more tentatively and variably in Africa. In 2000, there were 99 dependants for every 100 people of prime working age in Ethiopia; the projection for 2030 is 72. For Nigeria the dependency ratio is projected to fall from 99 to 67;<sup>89</sup> for Bangladesh from 79 to 55; and for India from 71 to 58.<sup>90</sup> In 1990 there have been signs in South Asia of rapid acceleration of growth, and to a lesser extent of poverty reduction, that in East Asia after the mid-1960s was associated with the 'demographic

window'.<sup>91</sup> The policy known to achieve this is to provide incentives and infrastructure for accelerated growth on not-too-unequal smallholdings, thus bidding up demand for labour, even for those who remain landless.

*(vi) Is land reform dead because it has failed the poor?*

Much of this book addresses, and largely refutes, aspects of this claim. It is related to our old friend DDATYCDE (don't do anything till you can do everything). We do not discuss the claim in detail here, but review a few points of principle.

First, most tenancy reform can help only sitting tenants. Usually it deters owners from offering land to rent. Those of the poor who wish to rent in land, or who are at risk of non-renewal or eviction, may therefore be harmed.<sup>92</sup> The poor may also be harmed in respect of their paths of advance, if an important route out of their poverty had previously been via an (unreformed) tenancy [Hayami *et al.* 1990]. However, there is little hard evidence for such an 'agricultural ladder'.

Second, CLR and perhaps NWLR, to the extent that they are implemented (or reduce large-farm size and power via indirect responses), help the poor directly if they obtain extra land, and indirectly because the demand for labour, even for hired labour, per hectare is usually greater on small farms than on big ones.

Third, one needs to be wary of claims, based upon particular indirect effects, that 'the poor' gain far less from a land reform than the crude data indicate. These claims are usually, in every sense, partial. For example, many beneficiaries of distributive reform sell their land. That is frequently presented as evidence that the poor cannot retain much benefit from land reform. However, data for land sold by land reform beneficiaries are usually presented gross of purchases by them; without evidence that land sellers are likelier to be poor; without record of whether the sales are made by choice or in distress; with no information about whether any such sales are to other poor people; and, above all, without discussion of whether the initial beneficiaries, after selling their land (and perhaps investing, migrating, or buying education with the proceeds), become or remain better off. Another example: the failure of the poorest to obtain land, in a reform, is quite consistent with gains for them via extra wage-employment.

Fourth, let us agree that some land redistributions, while helping the moderately poor, have indeed left out – and may even have harmed – the poorest via their direct and indirect economic effects, as between pre-reform and post-reform static equilibrium, on land ownership, use, and employment. But a major land reform is more than a land redistribution; it is also a social restructuring, reducing the political and market power of the 'big man'. The effect on poor people's freedom and mobility, and hence long-term real income, may be more important than the (perhaps small) net balance of short-term gains and losses. However, this cannot justify reforms that destroy output and employment, as some collectivisations have done.

*(vii) Does farm science drive out the need for land reform?*

In South Asia, despite some land reform, much land inequality remains (though less than in Latin America). Yet poverty has tumbled in most regions with green-revolution advances. Though first adopted on middle-sized farms, these advances usually spread to farms of all sizes and tenures, and benefit the landless working poor too. There are caveats. Systems with dominant 'rural tyrants' sometimes impede changes, needed for a green revolution, in capital markets [Bhaduri 1973] or water management [Boyce 1987]. If green revolutions work, they raise land productivity and value, giving the biggest (and least employment-intensive) landowners the biggest *absolute* gains; those with little or no land gain something, but not much; for example, the wheat green revolution in north-west Mexico in 1960–80 cut rural poverty modestly, and not inequality. Yet most green revolutions, *where they happened*, did help the poor, proportionately often no less than the rich (chapters 2(f), (j); 6(d) (iv)).

Does this shift the priority against poverty or inequality, away from farm inequality and land reform, towards crop science, especially if smallholder-friendly and labour-intensive? In particular, extreme rural poverty is increasingly – in China substantially – traceable to agro-technically lagging regions, and hence inter-regional inequality, rather than to the sort of local inequalities most readily addressed by land reform. Should priority shift from land reform to better farm science for lagging regions?<sup>93</sup>

This formulation is tempting, frequent, and wrong. First, the fact that usually small farms, and the poor generally, gain from green revolutions where they happen – perhaps, proportionately, at least as much as than the rich – cuts both ways. One can conclude that this makes land reform less necessary, because mini-farmers, tenants and even landless labourers can gain from the green revolution *instead*. However, one can also conclude that doing a land reform *as well* enables the poor to gain more because they have more land, need not impede a green revolution, and may help it. The formulation 'land reform versus farm science' is a false dichotomy (chapter 2(j)).

Second, the formulation abstracts from huge differences among cases. In China and Vietnam, classic land reform (after a detour), and in lead areas the first green revolution (based mainly on short-strawed varieties of rice and wheat with water control and heavy fertiliser use), are both complete. *Farm-based* inequality within localities is small. Yet *overall* inequality is burgeoning. The land-reform dynamic is still required, to defend the poorer groups from land grab; but a more important task is to accelerate appropriate farm growth in neglected regions, where land distribution is not very unequal, but for which farm science has so far achieved little. This is true to a lesser extent in a few other countries, some (such as Ethiopia) requiring major efforts in farm infrastructure, science and technology in most rural regions, not just laggard ones.

However, in most other developing countries, land reform cannot be downgraded. Science-based growth for hitherto neglected regions is possible, necessary and exciting, but a long, hard haul. In a few cases, including India,

it is in part a matter of building on a large science base to correct past research biases against remoter and less-irrigated, but often promising, agricultural areas. In much of Africa, decades of anti-agricultural incentives have led to the loss, to emigration and non-agriculture, of most of an anyway small base of qualified researchers. Yet for 'laggard' regions in almost all developing countries – absent lucky and well-managed mineral finds – agriculture will remain the starting-point for poverty reduction. These regions, being mostly remote, seldom enjoy comparative or competitive advantage in non-farm activity. In most, education and 'contacts', and often language and ethnicity, militate against successful emigration. In many developing countries, fast development in 'lead' regions is switching investment, work and land use away from farming, leaving an opening for 'laggard' agro-ecologies, countries, and even continents.

However, to benefit many such regions in the medium term – as water becomes scarcer, nitrogenous fertiliser and farm energy costlier, and arid and semi-arid environments hotter – the old green revolution inputs must be supplemented with new scientific directions. This justifies massive investment, especially by African and Central Asian countries and supportive aid donors, but it is long-term and uncertain. It is not a sensible excuse to defer land reform where it promises significant, politically feasible gains for the rural poor. Further, most of the rural poor in South Asia and Latin America are *not* residents in 'laggard' areas (these are often sparsely populated), but landless or near-landless people in densely settled, fairly advanced areas. Owing to their lack of land and skills, the green revolution – while helping them – has left their level of living below even the dollar-a-day poverty line. Their scope for large benefits from urbanisation, or from the sort of non-farm growth that happens if farmland is very unequal, is not great. It is stupid or cynical to ask the rural poor of South Africa, Bolivia or Sind (Pakistan) to wait for the spread of new farm science, while doing nothing about the fierce concentration of owned land in large, low-employment farms.

*(viii) Is land reform 'dead to debate'? (A) Normative discussion pointless as land reform 'endogenous'?*

Some argue that whether or not there is a land reform, and what form it takes, have little to do with the arguments for or against it. If so, the stance of an 'outside analyst', trying to discover where various sorts of land reform promote equity or poverty reduction or efficiency, is at best pointless and at worst deceptive. Land reform may be largely 'determined' in one of two ways. It may be endogenously determined *in* a country or region: given the level of key economic variables and/or the power of key conflicting groups, this or that land reform happens or does not happen, and no institution or individual – Zapata in Mexico, Ladejinsky in East Asia, Movimento Sem Terra in Brazil – makes much difference. Second, land reform may be exogenously determined *for* a country or region: the power and perceived self-interest of

élite groups in the USA or the former USSR drive the path of land distribution in rural Chile, Cuba, or Sri Lanka.

Endogenous and exogenous land-reform determinism are incompatible, barring a fanciful theory of total global interlocking. Further, even if one of them is right, that does not make land reform 'dead to debate'. The options and effects are interesting and important, whether it is determined or not. If it is, that does not remove the policy importance of knowing the effects of doing, or not doing, this or that land reform (just as, if severe global warming is by now determined, and thus unavoidable by human action, we still need to know its timing, nature and above all effects and the cost of mitigating or adapting to them). However, people are interested in land reform *partly* because they think that, by showing the likely effects of this or that reform, one can persuade people to change their conduct, and thus promote or retard a particular reform proposal. Land-reform determinism undermines this belief, though it does not wholly destroy it.<sup>94</sup>

One might think that Marxists, who believe that social change is determined by material conditions and class struggle, would also be land-reform determinists. In practice, Marxists clearly do not think that the land reform debate is unimportant, let alone dead, since they actively participate in it. Just like social democrats, liberals and conservatives, Marxists advocate some land reforms, oppose others, disagree among themselves, and change their views (even about the past, not just because new facts change the future). In particular, thirty years ago most Marxists believed that some form of large-scale State, collective or cooperative farming<sup>95</sup> was required – for efficiency and equity, and to deliver a surplus for industrialisation – and that individual, equalising land reform was at best a diversion on the path, and more usually a retrograde step. Emerging facts about collectivist agriculture (chapter 5 (a)) and about farm size and performance (chapter 2) have made this view almost untenable. Few Marxists now argue for it. Many – some cited in this book – use evidence to argue for, or against, say, classic or new-wave reform, overall or in particular times and places. The debate, they must believe, makes a difference and affects decisions and outcomes, else why bother? Marxists certainly do not act as if they were determinists about whether land reform happens, or what sort happens, in specific conditions or in general.

Two trends in recent political and economic thought might, however, might be thought to predispose to land-reform determinism. For some practitioners of 'new institutional economics', scarcity of land and labour, and transaction costs of managing them, largely determine institutions such as farm size and tenure. However, the leading exponent of new institutional economics (NIE), Douglass North, is by no means a crude determinist, but stresses the significance of the individual and the moment,<sup>96</sup> and the clinging capacity even of inappropriate institutions [North 1993; Ménard and Shirley (eds) 2005]. That view is shared by economists who, in the NIE tradition, seek to explain farm size and tenure by 'behavioural and material determinants' [Binswanger and Rosenzweig 1986; Binswanger and McIntire 1987]. Binswanger is a



thoughtful advocate of NWLR (chapter 6(e)). He would hardly bother if he believed that NIE implies land-reform determinism.

An alternative 'grand theory' is public-choice economics or 'new political economy' (NPE). NPE postulates that politicians and civil servants act as maximisers of some mix of their own income, power, security and status. On this reading, what matters is to constrain these agents with appropriate constitutions and voting rules [Sandmo 1990; Buchanan 2003]. By implication, to advocate or oppose a particular policy (such as a land reform) on grounds of public benefit is a largely a waste of time. An independent but associated approach sees political interventions, especially but not only if thus motivated, as creating opportunities for 'rent-seeking' by producers (including farmers) and owners (including landowners). These find it pays to divert time and money from production and enterprise, towards obtaining forms of monopoly rent by influencing the creation or interpretation of political rules, such as tariffs or allowances of rationed foreign exchange [Papanek 1969; Krueger 1974]. Analysts of NPE or rent-seeking see political interventions to create, remove or change institutions – including those affecting farm ownership, tenure and size – as outcomes of self-seeking by politicians and those who influence (or bribe) them, and of the incentives and costs of applying pressure. As with NIE, so with NPE: if such things determine land ownership, tenure and reform, analysts have little scope to affect them; nor will land reform laws affect outcomes much.

New political economy, like NIE, is a useful 'thought cleanser' and preventive of naivety, but if taken to extremes becomes almost ridiculous. We know people do not behave always and only like that. In general, the prospects for a proposed land reform *are* affected by evidence or analysis regarding its impact on poverty, inequality and growth. But assume some awful island where the public space comprises only pure self-seekers; NPE applies literally and in full; and hence the choice among alternative land reforms (or anti-reforms) is predetermined. Even there, the *outcomes* of alternatives are still worth investigating. Such investigation can even change legislative action, unless everyone perfectly predicted its results – was perfectly prescient as well as perfectly selfish. Laws, even if made solely to create economic rent for politicians to divide with clients, may have unforeseen consequences. Incentive-incompatibilities, and the gains from knowing about them, are not confined to good laws enacted for good reasons!

***(ix) Is land reform 'dead to debate'? B: Normative discussion pointless as land reform non-domestic?***

Some claim that the progress of land reform depends substantially on the distribution of power among nations, and among political groups inside a nation seeking overseas help, financial, ideological or in the last resort military. This would leave debate about land reform in any affected developing countries, while of academic interest (and that matters), dead of consequences, to

the extent that the key decisions were taken in other, stronger countries. If these too were not motivated to back land reforms abroad, the land reform debate globally would lose much of its practical interest. In particular, many claim that the end of the cold war has pulled the rug from under land reform.

The cold war period, 1946–90, is often seen as having especially favoured land reform of one sort or another. The stronger or less poor communist countries, above all the USSR, allegedly supported State-centred collectivism in all sectors, including agriculture, with money, ideas, technical help, and sometimes the ultimate threat of force to back governments facing internal opposition or external threat while seeking to break up large private land-holdings. Liberal capitalist countries, especially the USA, allegedly supported ‘reform that you may preserve’ strategies in similar ways. In East Asia in the 1940s and 1950s, Wolf Ladejinsky, a hugely influential US public employee, advanced radical individualist-egalitarian land reforms in Japan, Taiwan and South Korea [Walinsky ed. 1977]. In Latin America in the 1960s, the US-backed Alliance for Progress supported more modest land redistribution in Latin America, partly to counter the spread of communist approaches based on Cuba. These stories are used to claim that the post-cold war climate has been much less favourable to land reform. Hardly any country now spreads agricultural collectivism abroad; it has been largely dismantled at home, even in China and Vietnam, still nominally communist countries. As for Western countries, modest aid continues to flow into new-wave land reforms, but there is little for classic land reform, or tenure reform. Allegedly, the end of the cold war has freed aid donors, and the decline of communist parties has freed national governments, from the threats that once induced them to back land reform. Reform is intermediary between the status quo and revolution. When revolution no longer threatens the status quo, reform allegedly loses its appeal to élites.

There are three objections to this tale. First, it grossly overstates the commitment and support for land reform prior to 1990 from cold-war leaders. *Opposition* to land reform was the main motive for US support to overturn the Arbenz government in Guatemala in 1954 and a powerful contributor to similar action against the Allende government in Chile in 1973; admittedly the reforms were partly collectivist but they involved substantial small-scale private farming. Direct US sponsorship of land reform, almost absent where US companies owned large farms, was elsewhere at best intermittent and arguably exceptional: the post-war East Asian experience was a unique exception, significantly motivated by the wish to solidify local opposition to renewed Japanese militarism rather than by a still-nascent Cold War. As for the USSR, while it indeed supported, even with tanks, East European regimes imposing collective agricultures on a largely unwilling populace, it tolerated a large (and far from fully equalised) private peasant sector in Poland, and even the reversion from collectivism to peasant farming in Yugoslavia in 1953.

Second, the above story understates the continuing support from abroad for land reform. NWLR (chapter 6(e)) has consistently been supported by

Western donors, including the USA. True, some NWLR is not genuine or, even if it is, not a contribution to land redistribution; but in other cases it is. Consistently since 1994, the World Bank and Western bilateral aid donors have offered support for programmes of land redistribution in South Africa far more radical than the nominally socialist African National Congress government was willing to implement. In Brazil and the Philippines, aid-backed NWLR has complemented both classical land reform and peasant movements (chapter 6(e) (ii) (IV)), while programme support from aid donors has furthered Government ministries and programmes involving, or at least exposed to, all three.

Third, to see land reform as dependent mainly on breezes from abroad, which blew hot in the cold war and have since cooled, is to exaggerate the role of foreigners, even superpowers, in the land reform dynamic of particular countries. Even in the cold war, neither the USSR nor (except when national agribusiness was directly involved) the USA gave land distribution in allied countries top priority. Yugoslavia's decollectivisation in 1953 was not remotely perceived as a cause of intervention, either in support by the USA or in opposition by the USSR. We may well again see a world where 'spheres of influence' of large powers or bloc leaders – the USA, the EU, Russia, China, even India or Brazil – dominate much of the domestic policy of their allies; but unless an ally is a powerless satellite, such relationships seldom dominate its land-reform path. Its domestic power-structures, initial inequalities, and alternatives to land reform – and its domestic perceptions and beliefs about these – matter much more.

#### *(ix) Closing words*

In many developing countries, land reform is a live, often burning, issue twenty years after the end of the cold war. The debate about land reform is alive and well. So is land reform itself. And so they should be.

# Appendix

## Defining land reform

### (a) Describing, prescribing, or agreeing about aims?

How should one define terms such as ‘reform’ or ‘land reform’? Describing usage, as in dictionaries, gives limited help.<sup>1</sup> Prescribing usage guarantees disagreement, if a word seems to imply approval (‘reform’) or disapproval (‘deformation’). There is a third path. A large majority of people agree on the main aim(s) that they want land reform to achieve, and on its main method. We define ‘land reform’ as actions towards that largely agreed aim, using the largely agreed method. Chs. 1–2 discuss the linkage of land reform to its supporters’ main aims, and to other policy aims. Chs. 3–6 ask to what extent the main types and examples of so-called ‘land reforms’ achieve the main aims and therefore conform to this definition.

Descriptive definition of X is non-controversial if almost all normal and capable adults<sup>2</sup> agree on what can, and what can’t, be *pointed to* as an X. This is an elephant, that isn’t; this is walking, that isn’t. However, we may never approach universal agreement on exactly what can, or cannot, be pointed to as an example of social, political or economic reform. That is mainly because people use ‘reform’, in part, to persuade: to support past laws, or advocate future ones. Groups of people want different laws, so they point to different laws as examples of reform. Ostensive (i. e. pointing) definitions of ‘reform’ by different groups, therefore, are ‘persuasive definitions’ [Stevenson 1938]: used by different groups to *point to and advocate* different things. In such cases, a descriptive definition cannot state an agreed usage, but only list contested usages.

However, a purely prescriptive definition is contentious. On its own, neither purely prescriptive nor purely descriptive definition is helpful with contentious or persuasive words, especially if the balance of usage is changing, as with ‘reform’. It is more helpful first to explore the extent of agreement, about aims and methods, in reform and land reform.

There is some hope of success, because most contention about defining ‘reform’ does not arise because of *absolute* disagreements on policy goals. Almost everyone agrees that, to be called a reform, a law should advance towards ‘fairness’ goal and, at least, not harm ‘efficiency’. People disagree about:

- *meaning* of 'fairness' and 'efficiency' (is it fair to transfer by law, with perhaps incomplete compensation, from a 'decent' owner of 6,000 ha of farmland, 1 ha each to 5000 poor people?);
- *balance* of goals (how to weight fairness, efficiency, and, say, environmental impact);
- *effectiveness* of a law in achieving its claimed goals; and
- *instrumentality*: even if instrumentally effective towards balanced, agreed goals, might a claimed reform be morally repugnant in itself?<sup>3</sup> Even if not, might it be a bad use of scarce resources?

On each of these areas, disagreement is far from total. Much of it is due partly to personal or group self-interests, but these overlap, and people are often ready to set them aside, in whole or in part [Rawls 1971], especially if there is a procedure for experiencing the advantages of co-operation [Axelrod 1987]. So there is a basis for reasoned, perhaps negotiated, agreement on a definition of reform. A descriptive list of current, disputed definitions will not help, being a mere agreement to disagree: reform can mean A (my view), B (yours) or C (hers). A prescriptive definition states that A is best. Can we seek an agreed definition derived from the goals of advocates of A, B, C, etc?

For descriptive definitions of 'reform' or 'land reform', the words apply to *any* action often pointed to as an example. Does that make 'land reform' a family-resemblance word, like 'game' [Wittgenstein 1946]? We point to John and Mary as members of the same family; John's face does not look much like Mary's, but his nose looks like his sister Mabel's, whose eyes are like cousin Dora's, whose mouth looks like Mary's. Similarly, games that seem very different – a solo, non-competitive mental game like a card patience and a physical, fiercely contested football cup final – may all be defined as 'games' only by family resemblance, via intervening examples.<sup>4</sup>

One problem with using 'land reform' to describe any member of a family is that the term is used for apparently opposite actions: laws to distribute giant farms to smallholders, or to remove ceilings on farm size; to collectivise, or to decollectivise; to limit rents, or to deregulate rents. These pairs are not managably dissimilar members of the same family (as games are), but squabbling opposites. A family-resemblance descriptive definition of 'land reform' would be at best mere amiable anarchy. 'Reform' is a term of commendation, and people use 'land reform' to commend inconsistent, even opposite, proposals. To *define* land reform to cover all of them is useless for social analysis. Other objections apart, the prevailing denotation of 'reform' changes, alongside the consensus on what is commendable: half-conscious changes in social, economic and cultural judgements (the 'Zeitgeist'). If all uses are legitimate members of a defined family named 'reform', (a) they are *equally* commended as reform or (b) the latest predominant usage is the right reform, ruling the roost and heading the family. Now (a) is absurd, if reforms favoured by different people have inconsistent aims or methods; and (b) is always time-serving (literally), and self-refuting once prevailing opinion changes.<sup>5</sup> For example, is 'new wave land

reform' as in Brazil or South Africa genuine land reform or not (ch. 6(e))? This serious debate is trivially evaded, not resolved, by establishing whether or not people (or members of a 'culture-circle') call them land reforms.

So a better procedure is, first, to list the main candidates to join the land reform group, and, second, to ask, not if each counts as part of a family, but if each is a suitable member of a political club. That does not depend on whether a candidate reform is enough like other members of the Club of Reforms – has enough overlapping ('family') characteristics with other past or proposed reforms. Suitability to join the Club of Reforms, if advocates of proposed reforms agree on **main aim** and **normal method**, depends on whether the proposed candidate reform is close enough to that consensus to join the club.

For example, 'Is collectivisation land reform?' means: has it, with its normal procedures in most situations, followed the main aim and method of land reformers? That main aim<sup>6</sup> is to transfer ownership, rights, or claims on substantial areas of farmland to the rural poor, especially the landless or micro-farmers, thus raising their power, status, opportunities or income, absolutely and relatively to the landed élite. Land reformers' normal method is to change laws or rules affecting land ownership, claims or rights. Other public laws or actions, from health reform to war, may lead to land redistribution, as may private (sometimes co-ordinated) actions, from land purchase to land invasion.<sup>7</sup> These are not land reform, though they may sometimes complement land reform to reach the main aim.<sup>8</sup>

## **(b) Land reform in the context of changing meanings of 'reform'**

### ***(i) Proto-reforms, redistributive reforms and market reforms***

The main aim of land reformers must be understood in a context where socio-economic 'reform' has several times shifted its conventional or majority meaning, with each new meaning haunted by ghosts of past meanings [Lipton 1995]. In Europe in 1760–1870, reforms connoted laws that gave many, or most, people political or civil rights or powers previously confined to a few. Access to status, income or power became less arbitrary: less hereditary or confined to aristocrats, members of guilds of professionals or craftsmen, royal or governmental favourites, or persons of a particular faith, age, race, or gender. Such reforms spread, especially after decolonisation: to parts of Latin America in the nineteenth century, and of Africa and Asia after 1945. Before reform, access to production and capital, and entry to electorates, legislatures, civil services, universities and professions had been limited to people *both* wealthy *and*, because their control of resources was due less to skill than to privilege, often bad at managing them. By attacking privileged access, these first-stage, proto-reforms both reduced poverty (and inequality, of the form that rewarded privilege) and enhanced market functioning, competitive efficiency and growth.

In 1860–1975 in Western Europe, and in many ex-colonies by 1990, such 'win-win' proto-reforms – to the extent they were politically feasible – were completed. Further reforms therefore had increasingly to concentrate on

*either efficiency/growth or redistribution/poverty-reduction.* Meanwhile, partly due to the proto-reforms themselves, poor and formerly excluded groups gained strength and pressed for further action in their favour. Hence 'reform' increasingly acquired a more purely redistributive connotation. Second-stage, redistributive reforms involved government action requiring the better-off, not just to abandon inherited privilege, but to share – largely at their own expense – services or assets. Universal 'free' education, social security and progressive income tax typify this second stage. So do land reforms from Ireland via Mexico to Russia in 1870–1914, and since 1945 in much of the developing world. Supporters of such reforms seek mainly to reduce poverty and/or inequality.<sup>9</sup> They hope also to increase efficiency or growth, but may advocate, as reform, even laws that reduce them, if they cut poverty and extreme or particularly 'unjust' inequalities.

Since the 1970s, there has been a shift to third-stage, market reforms.<sup>10</sup> Freer trade and capital flows, market exchange-rates, privatisation and deregulation are the watchwords. Their supporters aim mainly to increase efficiency and growth. They hope also to cut poverty, and gross or unearned inequality; but they may advocate, as reform, laws that increase inequality, or even poverty, if they raise growth and efficiency. A cynic bitterer than Bierce [1911] might amend his definition of reform to:

*Reform*, n. (Before about 1980): a change in the law, damaging efficient market functioning, but advocated in for the name of shifting resources from rich to poor. (After about 1980): a change in the law, shifting resources from the poor to the rich, but advocated name of efficient market functioning.

***(ii) Can one definition accommodate proto-, redistributive and market reforms?***

Proto-reforms increased both efficiency and equality. But can one define, as reform, second-stage actions reducing reduce gross or 'unearned' inequality even at the cost of efficiency, *and* third-stage actions improving efficiency even if they widen inequality? That is mere descriptivist endorsement of all propaganda uses of 'reform'. Yet, surprisingly, experience of the second and third stages of 'reform' suggests a way forward, towards an agreed definition.

Market reform (even if sometimes deepening inequality or even, temporarily, poverty) and redistributive reform (even if sometimes reducing efficiency) need each other. In the 1960s and 1970s, redistributive reform often did little – in much of Africa almost nothing – to raise the absolute incomes of the poor, because markets remained blocked, distorted or biased.<sup>11</sup> Yet market reform, without concern for distribution of access and income, also does little for the poor. Economic response to market reform was restricted for want of redistributive reform. Around 1990 in Brazil, adults in the poorest one-fifth of households averaged only 2.1 years of schooling, as against 8.7 years for the richest one-fifth

[World Bank 1995:42]. So, even if market reforms improved incentives to make manufactured exports, most poor people lacked relevant skills. In many countries, farm output responded sluggishly to reforms that reduced State involvement in agricultural markets – reforms that on balance reduced anti-farmer bias – partly because, absent effective land reform, access to farmland (and rural power) was largely restricted to a few people, whose wealth was often due not to competitive competence but to inheritance.<sup>12</sup> Redistributive reform may be needed not only to reduce poverty and inequality, but also to create the economic base for a broad, efficiency-raising response to market reforms. Redistributive reform, including land reform, may also be needed to sustain the political viability of market reforms. This is especially at risk if these make significant groups of the poor worse off (even if temporarily) while a small elite gets richer.

So market reforms with efficiency goals, and redistributive reforms with equity goals, often need each other to succeed. Hence a definition of reform should not automatically exclude a proposed law of either type: on this the descriptivists are right. However, ‘reform’ should not be a catch-all for anything with a family resemblance to an existing reform. As the prescriptivists insist, there should be limiting conditions. An established member of the Land Reform ‘policy club’, with an agreed aim and method, should not be displaced by a new member with a different aim or method, especially if the replacement is surreptitious or manipulative (use ‘reform’ to commend the new proposal often and authoritatively, and an older meaning will be superseded). Let those with a wholly new aim or method join, or form, a new policy club! A definition of ‘land reform’ should specify its redistributive core: land reformers aim, by changing the law, to cut poverty via more equal distribution of land rights. Unless conducive to that, changes of laws with other aims (e.g. to free up land markets), while often desirable, should not be defined under ‘land reform’.

### **(c) The need to define land reform narrowly: DDATYCDE**

We use a narrow definition of land reform, in terms of its main aim and method (see p. 388, note 1). A broad definition encourages people to interpret ‘land reform’ differently, and to talk past each other. With a definition like ‘a basic change in relations between people and land’, too many actions, whatever their aim or method, qualify: any law seeking rural poverty reduction in India, popular rural organisation in Chad, land privatisation in the Ukraine... It is too easy, with a broad definition, to exploit the positive emotional charge behind ‘land reform’, and use the words to seek support for one’s proposed cure – whatever its content, whatever the disease. Since even a propagandist usage of ‘land reform’ cannot cover more rural credit or research, their advocates sometimes go further and replace ‘land reform’ by ‘agrarian reform’ (retaining the approval value of ‘reform’).<sup>13</sup> Supposedly, agrarian reform is land reform plus, and covers ‘provision’<sup>14</sup> of credit, research, extension, infrastructure, and marketing services for land reform beneficiaries. If *any* of these can be part of



‘agrarian reform’, the slogan can be used to sell almost any rural change that the speaker wants to advocate. If *all* are needed for a ‘genuine’ land or agrarian reform, that inclusive definition is a licence for DDATYCDE, ‘don’t do anything till you can do everything’. This involves arguing that, where not everything in a suitably obese definition of reform – credit, extension, etc. – is, or can be, made available to all farmers, or provided by an all-encompassing State, there should be (or has been) no ‘genuine’ land reform. Some use DDATYCDE to attack past reforms as useless, or to delay future ones as infeasible; others, to advocate huge swelling of the State in the guise of land reform.

No analysis is possible with such definitions. The term ‘agrarian reform’, except in citations, is not in this book. Our definition of ‘land reform’ is fairly narrow, concentrating on the core aims and methods of land reformers, at the cost of excluding things, and methods, that may well be desirable. ‘The salient reform issue...is and has always been redistribution of agricultural lands’ [Dorner 1992: 4]. To be land reform, a law must intend land redistribution, and must be likely to achieve it. Tenancy reform or land use reform sometimes meets both requirements, but often meets neither.<sup>15</sup>

#### **(d) The preferred definition of ‘land reform’**

We define land reform as **legislation intended and likely to directly redistribute ownership of, claims on, or rights to current farmland, and thus to benefit the poor by raising their absolute and relative status, power, and/or income, compared with likely situations without the legislation.**

- ‘Legislation’ excludes revolutions (seizures of State power), land invasions (which break laws), and voluntary land gifts. These may complement land reform, but are not the same thing, even if the State or its agents encourage them. However, ‘land reform’ includes new laws made, or old laws enforced,<sup>16</sup> that meet the above definition by validating previous revolutions, land invasions or land gifts.
- ‘Intended and likely’: Before we call a law land reform, we need reason to believe that (i) its proponents intend it to redistribute land rights and thus benefit the poor, taking into account likely responses (including legal avoidance and illegal evasion) by large landowners and others to the proposals, and the reactions of private individuals and implementing authorities to such responses; (ii) there is evidence that such laws have the intended effects.
- ‘Directly’ provides a screening mechanism. Some laws may shift land and benefits to the poor, on certain conditions. For example, many advocate, as land reform, laws to improve land-market or titling arrangements. Does that shift land to the poor, and hence benefit them? Only if institutions or laws exist, or are created, such that the change of arrangements favours the poor more than the powerful. Only then is the process ‘direct’, and hence land reform.

- ‘To redistribute’ implies that land rights move from richer to poorer people. It need not shift land rights to all, or even most, of the very poorest, or away from the very richest. Laws that fail to do any of that are not ideally equitable, but even distribution of land from rather big to rather small farmers may be land reform if there are substantial favourable effects on the poor. For example, such a shift almost certainly increases demand for the labour of the very poor (chapter 2). A law is land reform if ‘the poor’ as a whole (not just recipients of land rights) are likely to benefit.
- A land reform may redistribute ‘claims on, or rights to’ land, or ‘ownership of’ land itself. It is an empirical question whether non-ownership reform – involving tenancy, registration of title, or collective or co-operative farming – raises poor people’s land claims or rights, and is thus land reform.
- ‘Current’ says that settlement schemes for poor rural people on new, waste or abandoned farmland, initially claimed by nobody, are normally not land reform.<sup>17</sup>
- Land reform must ‘benefit’ the poor. To raise their share of land, but in ways that make them poorer, is not reform. Getting land ownership to some poor people can cut income for others who do not receive land, e.g. if farmland, once divided into smaller units, creates less demand for hired labour, or supply of tenancies. Getting land ownership to *many* poor people, however, may outweigh such damage, e.g. by reducing reliance on hired work and tenancy, so that even if they decline there are net benefits for the poor.
- ‘Benefit’ means an improved flow of something that people want. ‘Benefit’ from land reform can mean better self-esteem, autonomy, range of choice, status, power – not just income. Many people in poor countries suffer the pervasive power of a rural tyrant [Bell 1990], whose local dominance over land interlocks with power over politics (and often policing), jobs, credit or trade. Even if he is benevolent, such powers constrain poor people’s power and choice. Any change in land law that fails to weaken tyrant-like powers based on land inequality, or merely transfers them from landowner to State farm manager or vice versa, is dubious as land reform (though if it substantially raised income or status among the poor it might qualify). Further, people want stability and sustainability of benefit as well as sufficiency. Land reforms that make poor people less poor and powerless, but more vulnerable, are also flawed.
- ‘The poor’ [Lipton and Ravallion 1995] refer to the absolute poor, normally those below the international extreme-poverty line (now \$1.25 per person per day in purchasing-power equivalent of 2005: p. 345, note 1). A ‘relative poverty’ definition would be especially misleading here, since the impacts of land reform on inequality and on poverty need treatment as separate, though related, issues.
- The definition confines land reform to actions that bring benefit to poor people both absolutely, and relatively to the non-poor. The land reformer’s main aim is – by State action to raise poor people’s land shares, claims or rights – to reduce their poverty and exposure to rural monopoly and local

tyranny.<sup>18</sup> Land reform can and should raise output or efficiency, but that is not why it is done. Things done for that purpose, but raising or consolidating rural élites' *share* of income or power, are not land reform. Conversely, unwise land law, though reducing that share, may, e.g. by slashing land productivity, cut the poor's *absolute* income, autonomy or power. That, too, is not land reform.

- Finally, 'compared with likely situations without the legislation' requires that a law, to be land reform, should benefit the poor vis-à-vis credible alternatives, not necessarily vis-à-vis the recent past. In some of the former Soviet Union, Eastern Europe and Southern Africa, land redistribution since 1990 has accompanied cuts in farm subsidies. That package may leave some or most of the poor worse off, or less secure, than the pre-reform package 'neither land redistribution nor cuts'. However, that is irrelevant if the cuts are inevitable. The right comparison is between cuts plus land redistribution and cuts without it. If and only if the latter is better for the rural poor, and meets the other criteria, it is land reform.<sup>19</sup>

The words 'intended and likely' require a *reasonable presumption* that the change in law, to be land reform, will create land-based benefit for the poor. That deals with three Frequently Asked Questions.

1. Is it land reform, if land transfers are agreed or welcomed by, rather than imposed on, big farmers who lose land, e.g. if there is full compensation? (Yes. The poor, or rural poor, can enjoy redistribution from a land reform even if big landowners get compensation, provided that the poor do not pay a large part of the compensation. *Not* to compensate some or all those who lose land rights may be fair or efficient. But land reform as defined can happen, and has happened, with no, partial, full, or excessive compensation.)
2. Is it land reform if laws 'merely' increase incentives for big owners to transfer land to the poor, e.g. by imposing heavier land taxes on larger holdings, or by shifting incentives to favour smallholdings, e.g. by changed arrangements for acquiring inputs or selling farm products? (Disputed. Sometimes this can cut poverty or inequality more than alternative land reforms; more often it complements them.)
3. Many proposed changes in landholding rules are intended or claimed to redistribute land rights or claims to the rural poor, but on the evidence are unlikely to do so; are such changes land reform? (Now, no. Collectivisation, privatisation into large holdings, enforced registration, laws against sharecropping, consolidation of fragments, laws requiring a particular land use: all were once thought likely to benefit the poor by enhancing their land rights or claims. This is very unlikely on today's evidence. Next year's may show that some such 'reforms' *do* sometimes move land rights to the poor. New evidence on effects can change the verdict on which 'objects' fall under the 'concept' of land reform [Frege 1951].)

# Glossary and list of acronyms

**AGRA** Alliance for a Green Revolution in Africa

**AMUL** Anand Milk Union Ltd (Indian co-operative processing and marketing scheme)

**b or bn** billion

**bih** basic irrigated hectare(s) (Chile)

**CAADP** Comprehensive African Agriculture Development Programme

**CAC** Central America and Caribbean

**CARP** Comprehensive Agricultural Reform Programme (Philippines)

**CEE** Central/Eastern Europe (ex-Communist European countries outside the former USSR)

**CIS** Commonwealth of Independent States (i.e., the states in the area of the former USSR) excluding Estonia, Latvia and Lithuania

**CLR** classic land reform

**DDATYCDE** don't do anything till you can do everything

**DR** direct relationship (between farm size and output value per hectare)

**EEA** exemption, evasion and avoidance

**EU** European Union

**FAO** United Nations Food and Agriculture Organization

**FELDA** Federal Land Development Authority (Malaysia)

**FRIS** farm and rural infrastructure and services

**GDP, GNP** gross domestic product, gross national product

**ha** hectare(s)

**HR(S)** household responsibility (system) (China)

**IFPRI** International Food Policy Research Institute

**ILO** International Labour Office

**INCORA** Instituto Colombiano de la Reforma Agraria (Colombia)

**INCRA** National Institute for Colonisation and Agrarian Reform (Brazil).

**IR** inverse relationship (between farm size and output value per hectare)

**IRD** Integrated Rural Development Programme (India: loan programme providing subsidised non-farm assets for poor)

**L&G** liberalisation and globalisation

**LAC** Latin America and the Caribbean

**LAA** Latin America(n) and Africa(n) (cases of collectivisation or decollectivisation)

**LI** legitimate incumbency

**MENA** Middle East and North Africa

**MST** Movimento Sem Terra (Brazil)

**NEO** non-owners' access to equal opportunity

**NGO** non-governmental organisation

**NIE** new institutional economics

**N-land** land sold by big landowners to small landowners or the landless

**n.d.** not dated

**NPE** new political economy

**NSS(O)** National Sample Survey (Organisation) (India)

**NWLR** new-wave land reform

**OFG** operated farmland Gini

**PPP** purchasing-power parity

**RNFE** rural non-farm economy

**RSO** residual State ownership (mainly during or after decollectivisation)

**sha** standard hectares

**TFP** total factor productivity

**UPC** production cost per unit of output

**UTC** transaction cost per unit of output

**WCA** World Census of Agriculture (FAO)

# Notes

## Introducing land reform

- 1 We call these people ‘dollar-poor’ to reflect the UN Millennium Development Goal (set in 1996) of halving, in 1990–2015, the numbers below \$1 PPP/day in 1985 prices. Successive revisions and updatings, by 2008, re-set the extreme poverty line to \$1.25 PPP in 2005 prices. In 2005, 1.4bn people lived below this line; 25 years earlier there were 1.9bn. ‘The poverty rate in East Asia fell from 80% to under 20% [but] stayed around 50% in sub-Saharan Africa’ [Chen and Ravallion 2008; also for PPP methods, and reasons for revised poverty lines and national poverty estimates]. \$1.25 PPP ‘is the average[, for] the poorest 15 countries[, of] national poverty lines that attain stipulated food energy requirements with allowances for essential non-food spending’ [Ravallion 2008].
- 2 Of the 1.4bn dollar-poor, 76% are rural. Despite urbanisation, even in 2040 over half will be rural [Ravallion 2007; Ravallion *et al.* 2007]. Despite rural non-farm growth, farming and farm labour yield the main income for a big majority of the rural, and many urban, poor (chapter 7(b) (iv)).
- 3 In 1961–2005, agricultural value-added per person *fell* 17 per cent (0.4 per cent per year) in sub-Saharan Africa; rose 20% (0.4%) in Latin America and the Caribbean, 25% (0.5%) in South Asia, 43% (0.8%) in the Near East and North Africa; and rose fast enough to cause big farm income rises – at 2.2 per cent per year – only in East Asia. There, too, land reform induced a more equal land distribution, and hence more poverty-reducing gains per unit of farm income growth. In 1961–2005 world ‘prices of agricultural commodities ... relative to those of manufactured goods declined ... almost 2% per year’ [FAO 2007: 121, 127]. (In 2005–07, food price rises reversed almost a third of the 44-year fall, before declining again from spring 2008.)
- 4 This may mean that past reforms were illusory or ineffective, that reform has stopped, or that it ought to stop. See chapter 7.
- 5 On 21 September 2008, the precise term ‘land reform’ led to some 1,260,000 Google results (compared to 1,090,000 for ‘green revolution’).
- 6 Effects on labour income, not land income, increasingly form the main anti-poverty case for land reform (chapter 7(b) (v)). More of the poor depend on hired farm labour than on farming as main income source in South Asia, and far more in Latin America and Southern Africa.
- 7 Even demand for *hired* farm labour is more on small farms than big ones (p. 53). To the extent that land reform beneficiaries use family labour on the farm, they reduce *supply* of market labour, which still bids up the income of remaining landless workers.
- 8 Technically the large majority of Chinese farmers do not have full land ownership rights, but the household responsibility system accords them rights to the usufruct, and they can determine land use and have increasingly long leases.

- 9 These benefits indicate the importance, promise, and achievement of genuine land reform. However, people use the words to advocate many policies. Some will not achieve the goals of land reform, or can do so only in special circumstances. Many errors, and some crimes, have been committed in the name of land reform. So we need agreement on definition (Appendix) to sort out, in chapters 3–6, what ‘really’ is land reform.
- 10 His unease with the classic Benthamite utilitarian view – that the moral merit of an act or outcome was identical to the effect of its consequences on some aggregate, dubiously claiming to measure ‘happiness’ – prevented Mill from falling into the now-common error of assuming that the case for or against a land reform depended *only* on its impact on a narrow indicator of ‘welfare’ such as efficiency or GDP.
- 11 Chinese decollectivisation in 1977–84 created highly equal family farms, typically well below 1 ha in area (since made even smaller in many areas by population growth and further redistributions). This helped induce rapid farm growth. In 1984–2004 this fuelled a tenfold multiplication of GDP per person, and rapid urbanisation. So now labour is scarce in some rural areas, where many farms may now be somewhat below efficient size. It has also induced some local authorities to divert or seize farmland and dispossess owners. See below, p. 360, note 40.
- 12 In general, faster-growing countries do *not* get more unequal faster than slower-growing countries [Dollar and Kraay 2002]. Also, where liberalising reform induced much faster growth – as did the largely home-grown programmes of China from 1977 and India from 1990 – some rise in inequality was consistent with large *absolute* gains for poorer people (despite setbacks for some poor groups and areas). Where induced growth was slow or absent, as in much of Africa, the poor often lost absolutely.
- 13 This has specially grave effects on human happiness and political stability if the disadvantaged people, made more so after ‘reform’, are heavily concentrated into areas – or groups (ethnic, tribal, caste, etc.) – from which mobility is difficult or impossible.
- 14 Almost everyone agrees that liberalised markets sometimes work badly. (1) They under-supply public goods, whose value to the user cannot be recovered by charges, and where more for one user does not mean less for another. Adam Smith’s example is the signal from a lighthouse. Others include research into improved seeds whose offspring farmers can use next season without (much) yield loss; and information on quality of marketed land. Events since Autumn 2008 confirm the risk of governmental underinvestment in the public good of financial regulation and disclosure. Taxation limits property rights, but is needed to pay for public goods needed to keep property-rights systems working. (2) Free markets lead to wrong levels of use of products with external effects on non-users, such as oil that produces carbon emissions, or land used in ways that, by overexploiting or under-draining water, harm downstream water users. Regulation, too, limits property rights yet is needed for them to function well.
- 15 The original codifier of the liberalising ‘Washington consensus’ recently wrote: ‘To earn a decent living the poor must have the opportunity to offer something that others want and will pay to buy ... This means [among other things] land reform ... The Brazilian program of recent years to help peasants buy land from latifundia landlords provides a model’ [Williamson 2003: 17].
- 16 Fast, efficient growth of output and income is so important, and its link to land reform so controversial, as to need separate treatment (chapter 2).
- 17 Redistributing owned land is only one way to get *operated* farmland to smaller farm operators. Other ways – tenancy (perhaps reformed), or secure land title – may be better (chapter 4). But this transaction cost argument means that redistributing owner-operated land will not harm farm output.
- 18 The ‘tax’ rises if rising land values absorb more gains from agricultural improvement, or from land-using development, as argued respectively by Ricardo [1817:

- ch. II] and George [1871] (who advocated capturing the gain for public purposes by a 'single tax' on land value accretion).
- 19 Liberalisers point out that freer labour markets, including reduced controls (or trade union influence) on formal sector wage rates and practices, can reduce unemployment without land reform. However, this may cut formal sector unskilled wage-rates, diluting – perhaps swamping – poor people's gains from lower unemployment. Land redistribution to smaller farms bids up the real wage-rate as well as the level of employment.
  - 20 These vary among agricultures, and include: land-water conditions and scarcities; farm technology; institutional and political conditions; and power structures. Some actions, e.g. titling, are land reform in some circumstances; complement it in others; and are anti-reform (land-unequalising or poverty-increasing) in yet others.
  - 21 It is likely to become more so due to both demographic and technical change – and its prospects interact with liberalisation (chapter 7(a) (ii) on Latin America; compare chapter 5(b) on decollectivisation, and chapter 2(f) (iii) on farm size).
  - 22 Of the world's 1.4bn dollar-poor in 2005 (< \$1.25 PPP/person/day; similar to \$1 in 1993), 24.1 per cent were in East Asia (poverty incidence 17.9 per cent) – 14.8 in China (15.9); 42.5 in South Asia (40.3) – of which 32.5 (40.6) in India; 27.5 (50.4) in sub-Saharan Africa; 3.2 (8.2) in Latin America/Caribbean; 1.7 (5.0) in Central Asia/Eastern Europe, and 1 per cent (4.6 per cent) in Middle East/North Africa [Chen and Ravallion 2008].

## 1 Goals

- 1 Moralities that weight legitimacy very highly compared with equality of opportunity (pp. 26–33) – if they permit land reform at all – will insist on 100 per cent compensation. Politically it may be less, due to land losers' fear of alternatives, pressure on the fisc, and/or majority power. The point here is that output gains from land reform permit full compensation, yet leave extra GDP for both land beneficiaries and taxpayers.
- 2 This was originally [Kahneman and Tversky 1979], and is still usually, attributed to 'loss aversion'. It can as well be due to inertia ('propensity towards the *status quo*' plus fuzzy preference ordering) [Gal 2006]; unfamiliarity aversion; or even rapidly diminishing marginal utility of income.
- 3 This issue is so important, and so much debated, that it is treated separately in chapter 2.
- 4 Further, there is disagreement about where there *is* trade-off between more equal land and more output. 'Land reform in China has emerged as a difficult trade-off between social equality ... and economic efficiency' [Chen and Davis 1998], yet 'successful land reforms in Taiwan, South Korea, China and Vietnam contributed subsequently to rapid economic growth ... more equal distribution of land leads to faster growth' [Griffin *et al.* 2004] and, even in today's China with its rather equal land distribution, larger farms would seldom be conducive to greater efficiency or faster growth [Prosterman *et al.* 1998; Zhou 2000; Bi *et al.* 2007].
- 5 Within a country, richer people report that they are happier than poorer ones, but average happiness does not rise as average income rises. This supports other evidence that self-reported happiness is reduced less by low income or leisure, than by income or leisure below other people's. This strengthens the case for redistribution. However, inability to meet basic needs reduces happiness, independent of distribution: self-reported happiness varies little among OECD countries, but is considerably less in counties with average income below \$15,000 a year and hence, usually, with widespread poverty [Bruni and Porta; Easterlin; Frank; Layard; all in Bruni and Porta (eds) 2005].
- 6 The poor spend a much larger part of income (often over two-thirds) than the non-poor on farm products. Food staples often absorb over half the income of the



- poorest fifth of people in Asian and African countries. Since such products often have high weight/value ratios, their price is often greatly affected by local output and delivery costs rather than world prices.
- 7 It is not possible when (a) rural hardship is seen as 'blameable' poverty [Prosterman and Riedinger 1987] in the sense that the government is blamed for it if land reform is not enacted, yet (b) landowners are numerous, strong and fearful enough to block reform unless fully compensated, and (c) efficiency gains from reform are insufficient – or insufficiently 'capturable' via taxes or loan interest – to permit full compensation.
  - 8 Unless there are overriding harms to stability or sustainability.
  - 9 Memorably in his remark that most 'practical men' were 'the slaves of some defunct economist', but surprisingly in his assertion of the claims of the Bloomsbury set: the 'we' who 'have to invent a new wisdom for a new age' [letter to Ramsay MacDonald, 1932] and to whom, it is assumed, politicians will come to defer.
  - 10 Captain Charles Boycott (1832–97), land agent in County Mayo in 1880, gave his name to the English language as one of the first victims of the 'social excommunication' that, under Parnell's leadership, proved an effective weapon in the campaign for Irish land reforms.
  - 11 Rawls [1971] suggests the following objective standard for ranking outcomes: which would you prefer if you knew that, as soon as you stated a preference, you would be reassigned to a position – to be decided by (random) lottery, e.g. by one's own random and instant (adult) reincarnation – in the society affected by the preference that you chose? You then select the preference behind what Rawls terms 'the veil of ignorance' about its effect on yourself, and can thus select on unselfish grounds. See also Lipton [1968: 102].
  - 12 There is conflict. Sen [1984] judges outcomes by effects on capabilities; redistributing 1 ha each from a 5000-ha landowner to each of 500 landless persons, other things equal, increases choice. Nozick [1974] stresses that legitimate expectations underpin free choice. See section (b) (iii) below.
  - 13 However great one's belief in participatory policy-making, there is reason not to ask this question first. Rural people are often deeply split in their interests on land reform. Unless land rights start very unequally, quite a large proportion will lose from some reforms. Public agencies should consult and establish views, while outsiders work out a reform which, together with incentive-based responses to it, best advances the goals.
  - 14 Clear separation from the goal of reducing inequality requires a goal to reduce absolute, not relative, poverty. Measures of absolute poverty – capacity to meet basic needs, perhaps linked to dietary energy requirements – should assign value to reducing (a) numbers below the line, (b) their average depth of poverty, and perhaps (c) inequality among the poor [Ravallion 1994; Lipton and Ravallion 1995].
  - 15 Further, lower development levels in remote areas raise agriculture's shares in output and employment, and hence the salience of land reform. With the reverse effect, high unit transport costs to and from remote rural areas compel some diversification out of agriculture there.
  - 16 Some households below the poverty line get sufficient dietary energy (calories), because (a) they spend unusually little on non-food items (e.g. fuel, cigarettes), (b) their nutritional practice is atypically 'good' (including below-average food discrimination against girls), and/or (c) their household energy requirements, e.g. for farmwork and for walking to fetch water, are unusually low. For converse reasons some above-the-line households get too few calories. The poverty line is the consumption (or income) level at which expected dietary energy deficiency is zero.
  - 17 In Masvingo (south-east Zimbabwe), 60 per cent of 'fast track land reform' beneficiaries were 'ordinary farmers', 5 per cent business people, 14 per cent civil servants and teachers, and 3 per cent 'security services' (police, army, intelligence

- officers with strong political connections' – with the last three groups, especially security services, tending to receive larger allocations of better 'commercial' land [Scoones 2008; compare Marongwe 2007].
- 18 'Right-libertarians' like Nozick [1974] largely reject the requirement to minimise unfair discrimination, but 'left-libertarians' do not: Otsuka [2006], esp. n. 4: 'A defensible principle of justice in initial acquisition would render bequests impossible' on grounds of equal opportunity.
  - 19 That 'property is theft, because it allows one who has not produced to consume the fruits of other men's labours' [Proudhon 1840, probably citing Lassalle: see Henderson 2006/1961: 125] is accepted by very few in personal practice, and few even in social theory.
  - 20 Apart from legitimacy of incumbency and of expectations is legitimacy of government, i.e. consent by, and accountability to, the governed.
  - 21 It can be credibly claimed (a) that some landowners (though not their descendants) acquired land through legitimate use of their equal opportunity, (b) that a redistribution process that singles out big owners of farmland denies them equal opportunity with others similar in relevant respects, e.g. big urban property-owners. Arguably some of the land transferred should be compensated by taxes on such 'others'.
  - 22 Obviously, the likely impact of the reform itself matters too. Does (some) compensation go to losers to the extent that they had legitimately acquired land rights? Will gainers from reformed land rights tend to be poor households that start with little opportunity and/or have the best prospect to use those rights to escape poverty? Will other goals of reform – growth and efficiency, stability, sustainability – be advanced?
  - 23 In England, Vikings seized land from Anglo-Saxons in the ninth century, mostly different Anglo-Saxons from mostly different Vikings in the tenth, Normans from Anglo-Saxons in the eleventh, and barons from each other for long afterwards. If land is restituted, or not redistributed, on grounds of legitimacy, who is the legitimate owner?
  - 24 If it is proved that I seized land by force or fraud yesterday, and registered myself as legitimate owner, in all legal systems I must return it to the original owner or the State. However, if the proof is for land seizure 50 years ago, or by my grandparents, country laws vary, partly due to different statutes of limitations. Many such seizures were by large farmers from areas formerly shared among many small users (as with the English enclosures); reversing such seizures would be land reform. The maxim 'possession is nine points of the law' counts for much more, in defining legitimacy (and opposing land reform?), in some legal systems than in others. That confirms the absence of a clear moral ranking for such legitimacy.
  - 25 Early colonial land-grabbers in North America used the dogma of *terra nullius* (p. 248), allied to Locke's maxim, to justify land theft from hunter-gatherer groups of Native Americans. 'The words of the great political philosopher John Locke (who was also Secretary to the Lords Proprietors of Carolina) [meant that], put simply, if land was not already being fenced and farmed then it was up for grabs' [Ferguson 2004: 64–65].
  - 26 However, much of this land comprised former hunting grounds of Native Americans expelled by advancing whites. The 1862 Homestead Act also did not enshrine equal opportunity because, though African Americans were entitled to claim homesteads, many could not, until the end of slavery in 1865 (by which time some of the best land had been claimed). Even then 'promised land reforms to rehabilitate former slaves as citizens were abandoned [inducing] an agrarian structure, and attendant political economy, which perpetuated abject dependency' [Herring 2005].
  - 27 Attributed by him to Nozick [1974].
  - 28 'Initial conditions of colonization led to institutions that served to maintain high levels of wealth concentration in Latin America ... [D]uring the nineteenth century

- liberal élites tried to implement progressive policies across the region [and] reduce land concentration, but failed dramatically...sometimes. By the early twentieth century, the institutionally ingrained patterns of social exclusion in Latin America prevented the region from joining the trend toward greater equality experienced in Europe and the USA and led to the persistence of high asset concentration’.
- 29 Apart from being unjust, horizontal inequity can lead to evasive market actions that destroy the effects of a land reform, or create unacceptable side-effects. Suppose a reform in which inherited farmland is confiscated for distribution, but legacies of city land escape. Big farmowners will seek to sell farms and buy city land. Farmland prices will collapse, urban land prices will rise, and farmland will be converted to other uses.
  - 30 Who, by effort, skill, and meeting demand, have earned outcomes – including income (or, if any, farmland bought with it) – that keep them much ‘more equal than others’? There is an argument even from equal opportunity for Bill Gates; a far weaker one for a British banker, paid a £10m bonus for negotiating borderline loans in 2004–07, who changed employer before the 2008 recession proved them unsound; and no argument for children, let alone grandchildren, of either (even grandchildren argue for keeping all they have due to legitimate incumbency).
  - 31 If farm efficiency or growth rise in reform areas (chapter 2), these aspects of the inequality goal are (modestly) advanced indirectly.
  - 32 The Gini coefficient is much the most usual measure of overall inequality, but gives most weight to inequality in mid-range, not between the richest and the poorest. Changes in the Gini (of land, wealth or income) are not, therefore, an ideal measure of the impact of land reform on its equality target, normally the gap between the poorest – and/or the rich, powerful local Big Men – and the average or median.
  - 33 The proportion in poverty, and the gap between the income of each of these people and the ‘poverty line’, can be seen as the upshot of (a) low average income per person (or, allowing for the smaller needs of children, per adult-equivalent), and (b) distribution of income between poor and non-poor persons. The indices of inequality that weight ‘bottom-end’ inequality heavily, therefore, are correlated with poverty via (b) above. They may also reflect (c) maldistribution among the poor, which worsens the impact on poverty of given levels of (a) and (b) above.
  - 34 Some large-farm systems in Latin America have recently (atypically) proved capable of efficient growth.
  - 35 If a nation’s Gini coefficient first rises, then falls, with growth (the ‘Kuznets curve’; but see [Anand and Kanbur 1993; Li *et al.* 1998]), it is due entirely to the changing share in income of the top 5 per cent, i.e. hardly relates at all to the relative position of the poor [Lecaillon *et al.* 1984].
  - 36 ‘1 per cent [de]crease in land Gini is associated with 0.1 per cent [low]er growth rate of per capita consumption [and higher] poverty incidence [of] roughly 0.16 per cent’ [Balisacan and Fuwa 2004, and pers. comm.]
  - 37 Despite good recent performance, Bangladesh – with no spare land, and low initial average income per head – faces rapid population growth, high dependence of employment on agriculture, and diminishing returns to farm investment and innovation.
  - 38 For a brilliant account of why much land equalisation may be required in a libertarian State, see Otsuka [2006].
  - 39 In CLR the government declares a Land Authority; a ‘ceiling’ on owned farmland; a ‘floor’ of owned land to which recipients are to be raised; dates for the Authority to take and distribute above-ceiling land; and rules for compensation, and for payments by (and loans to) land recipients.
  - 40 Such landlords are more readily *located* than key potential gainers who can be persuaded to back reform. Here the issue is organisation of peasants and farm-workers as potentially powerful pro-reform coalitions (but note the Olson effect above).

- 41 'Chaos theory' and 'fuzzy logic' are fruitful branches of mathematics. We need a mathematics of ill-defined problems: mess theory?
- 42 Suppose a policy *advances* towards goals A and B. Multiple goals still usually create policy conflict because different formulations, timings etc. of a policy *maximise* progress towards A and B. A land reform may well accelerate both poverty reduction and growth, but growth will usually benefit more – and poverty reduction less – from a somewhat more modest and consensual pace of land redistribution.
- 43 Also assuming the same initial population growth, agro-ecology, and technical options.
- 44 Methane, mainly from cattle, contributes significantly to global warming, a form of atmospheric *pollution*. In 2004 about 14 per cent of greenhouse gas emissions came from agriculture [Rogner *et al.* 2007]. Agricultural options, including farm size (in large part through its impact on the crop/cattle mix), play a major role in atmospheric enrichment (e.g. by carbon sinks) and pollution, notably via the nitrogen and carbon cycles.
- 45 Yet they may also arise from (a) policies discriminating among farms by size, (b) factors affecting both farm size and environmental outcomes.
- 46 In 2002–03 '85% of African farmland (185m ha) had nutrient mining rates of more than 30 kg/ha of nutrients yearly, and 40% had rates greater than 60 kg/ha yearly. About 95m ha of soil have reached such a state of degradation that only huge investments could make them productive again. Nitrogen losses range from 4.1 kg/ha/year in South Africa to 52.3 kg in Somalia and the Sudano-Sahelian region of East Africa. Losses of phosphorus range from none or minor losses in the Mediterranean and arid North Africa to 9.2 kg/ha/year in Burundi and Somalia in East Africa. Potassium losses range from 6.5 kg/ha per year in Algeria to 30.4 kg in Equatorial Guinea and Gabon in humid Central Africa' [Henao and Baanante 2006]. Worse still, in Ethiopia 'full nutrient balance results indicate depletion rates of 122 kg N/ha/year, 13 kg P and 82 kg K. Soil nutrient stocks in all regional states were decreasing with the exception of areas under permanent and vegetable crops' [Haileselassie *et al.* 2005].
- 47 Further, they must pay more to borrow (it is costlier to make and supervise small loans to poor small farmers, and riskier as they have little collateral), so they need a big future gain from conservation to compensate for even a small loss of income now. Against this capital-market disadvantage, small farmers have less costly, more readily supervised labour for off-season conservation work than do bigger, richer farmers.
- 48 See Eckholm [1979: 30]. Neither here, nor in the case of southern Honduras cited below, can we be confident that the sequence is from tenancy, even insecure tenancy, to resulting resource degradation. It is just as plausible that landlords chose to go for high rents quickly – irrespective of whether insecure tenants would conserve – on precisely those lands where conservation was a lost cause anyway.
- 49 This illustrates the theorem of Coase [1960] that, absent transaction costs, parties affected by an externality will so manage resources as to maximise joint income, whatever the rules for distributing it. A typical such management arrangement is renewable-lease sharecropping.
- 50 In general, villages with more unequal land and income also have high emigration of both the better-off ('pull') and the worse-off ('push'). The latter is likelier to be to other farm areas [Connell *et al.* 1976].
- 51 Most would prefer £1000 each year to random fluctuations (with same mean and expected value) between £200 and £1800. Governments might prefer instability if the high incomes appear just before elections, but seldom if the timing is unpredictable.
- 52 Traditional kin-group arrangements of this sort were weaker than is usually believed, and less important relative to State provision; they are under stress, due to population growth and transitions of trust from traditional power-holders See Lipton [1985], Platteau [1992].

- 53 It has been suggested that governments of developing countries could avoid the costs by operating in forward or even options markets for cereals. Such a policy would seem more attractive if aid donors guaranteed against non-delivery, and if ancillary policies were identified to allow for the possibility that, as in 1972–74, a period of worldwide grain shortages and high prices extended beyond the normal span of forward contracts.
- 54 Usually measured by coefficient of variation, or downward semi-variance; more relevant is risk that income falls below some disaster level.
- 55 This is clearly true for a £10 decline in income, and probably so for a 10 per cent decline in income – although this is, of course, a smaller absolute amount at lower incomes.
- 56 The extreme assumptions do not affect the argument.
- 57 A stronger stabilising role, indeed a form of obligation to insure the small and poor, may apply to a co-operative or collective farm. When this is split into smallholdings, as in the reforms of the 1990s in parts of the former Soviet Union, ‘clear incentives for individual parcel-holders comprise [an efficiency] benefit against which must be balanced the disappearance of the implicit insurance’, which means that, in search of income stability, peasants accept safer but less productive decisions, implying output loss. When a big farmer-patron, or a collective, disappears, smallholders ‘may self-insure by pursuing safer, and perhaps less remunerative, cropping strategies’ [Carter and Alvarez 1989: 162–63].
- 58 Such economies of scale to particular activities do not imply that they exist for farming as a whole; they seldom do (chapter 2).
- 59 ‘Employment rates are negatively affected by the *patta* [land distribution] program, possibly owing [partly] to supply-side effects. Distribution of land titles to the landless would tend to reduce the supply of agricultural labor (and raise wage rates, as was the case, though not statistically significant)’ [Bardhan and Mookherjee 2006]. They add: ‘On the other hand, the *patta* program accelerated [new seed] adoption rates, which tended to substitute hired labor with family labor. The net effect of these changes on the fortunes of landless workers is difficult to decipher’, but many farm labourers got some land, and gained doubly, working new seeds on their own farms instead of old seeds on other people’s.
- 60 The problem of getting reform land to the *poorest* in Bolivia, and much of Latin America, is less that they are labourers than that many of them have homes, and farm experience, far from the areas with large, reformable, possibly underfarmed holdings.
- 61 At the \$1.25 PPP 2008 poverty line, corresponding in value to the earlier dollar-a-day PPP measure [Chen and Ravallion 2008: Table 6].
- 62 Leavy *et al.* [2006] make useful recommendations, especially for raising farm-workers’ wage-rates through ‘productivity pull’ from extra demand by employers, extra skills for workers, and alternative opportunities for them, notably due to extra land rights. More doubtful are proposals that would raise unit labour cost through ‘organisational push’, which often accelerates replacement of workers by tractors, combines, etc.
- 63 ‘In Peru the progressive military government of Velasco Alvarado undertook a sweeping agrarian reform in the expectation that it would help the country’s industrialization process. However, the government was unable to persuade expropriated landlords to invest their agrarian reform bonds, paid out as compensation for expropriated land, in industrial ventures. In [some] countries political parties and other organizations used a reformist opening in the country’s political system to strengthen peasant organizations and assist their social mobilization’ [Kay 1998].
- 64 A typical indicator is farm sales, times excess of world prices over prices paid to farmers by procurement agencies. However, if much of the farmers’ sales are in illegal or parallel markets, and/or are bought by other rural people (including other farmers), this estimate is far too high.

- 65 Not necessarily, or even usually, 'public goods' in the textbook sense.
- 66 See chapter 5 (a). The events following the 1917 Russian Revolution are indicative [Wolf 1969]. At first, it speeded an ongoing process in which poor peasants seized, and farmed privately, land formerly held by big farmers or the community. In 1923–24, Lenin began restituting many such lands to medium-scale farmers, reversing the 'reform'. Then in the 1930s came the terrible 'land deform' of forced collectivisation.
- 67 Evidence in many parts of this book, however, suggests more-than-modest benefits to the poor from less-than-transformative land reform.
- 68 Unless Islamic governments are perceived by donors as serious threats, and prove as ready as in Iran after 1978 to return reformed lands 'to the religion from which they had been confiscated' [Powelson and Stock 1987: 81].
- 69 Bolivia, South Africa and other countries can learn from Namibia, where 'as well as being primarily about race, land redistribution is a race against time. [Its] slow pace [in the view of the ruling party and the Prime Minister] "has the potential to cause civil strife"' [Sherbourne 2004].
- 70 This evolution recalls, yet contrasts with, a revolutionary account: 'The feudal organization of agriculture and manufacturing industry – in one word, the feudal relations of property – became no longer compatible with the already developed productive forces; they became so many fetters. They had to be burst asunder; they were burst asunder' [Marx and Engels 1848].
- 71 Different 'outside observers' would move different distances along this path – from consultation to land reform by village meetings.

## 2 Output, efficiency and growth

- 1 (1) This is valid only if it is farm smallness itself, or its results, that raises average farmland productivity (sections (d–e)). (2) Small farms' higher average land (and capital) productivity is offset by lower average labour productivity. (3) Economics predicts that – absent transaction costs – workers (seeking higher returns) shift among farms until their *marginal* product is equal on large farms and small; and that landowners sell or rent farmland, of given quality, until its marginal product is equal on large and small farms. Yet big discrepancies in *average* product remain. Transaction cost means that even marginal product is not fully equalised, remaining lower for land (and higher for labour) on large farms. (4) Just as it pays smaller, more equal farms to apply more labour to *land* and raise its productivity in developing countries, the same applies to *water*. Home gardens in particular can recycle otherwise wasted household water [Mitchell and Hanstad 2004]. There is growing pressure to cut the 75–95 per cent of water offtake used in developing countries by farms, often unsustainably or with subsidies. Domestic and industrial water needs, and populations, are growing. Yet land inequality underpins water inefficiency. For 26 canal-irrigation systems in eight Asian countries, more value is added per litre where more land is in small, not-too-unequal farms [Hussain and Wijerathna 2004, Lipton 2007a]. Though the *main* reasons for land reform are justice and poverty reduction, efficient water use may be as important a supporting reason as efficient land use.
- 2 The spread of cropping into unsuitable marginal lands has degraded and exhausted them in much of Africa. Yet in September 2008, following the food price surge, Sudan and Angola were mulling heavy foreign investment to break in new, recalcitrant semi-desert, scrub or forest, at huge capital cost, for large-scale, capital-intensive agriculture. This may help food security in Saudi Arabia, or banana supply stability for Chiquita, but past experience with this approach in Africa suggests poor prospects for sustainable land-water use. Also – though with enough

- capital one can farm Antarctica – Sudan and Angola have huge, poor rural populations. The *oilisation of agriculture* will do nothing to employ or feed them.
- 3 'Great landed estates which have once been divided never come together again; for the small farmer draws from his land better revenue in proportion, than the big owner does from his. [Not] that the small proprietor cultivates his land better, but with more ardour and care' [de Tocqueville 1843: 37]. 'Those who still believe that small properties are...detrimental to agriculture...are discreditably behind the state of knowledge' [J. S. Mill 1868, in Hollander 1985: 854].
  - 4 Under open-field agriculture, many, usually small, farmers owned strips in several fields. One field (rotating yearly) was left fallow for common grazing. Though rotations had to be consensual – and despite claims by Young, the enclosers, and some economists – open-field farming was as innovative and at least as high-yielding as large-scale private farming, perhaps because each farmer's multiple strips reduced risk [Allen 2001].
  - 5 This was a sharp reversal of policy. Only eight years earlier, the USA had induced the forcible overthrow of Guatemala's Arbenz government, which had sought to take over (with compensation), for transfer to poor farmers, part of the land owned by the US-based United Fruit Company.
  - 6 Text continues: 'devoting little attention to the importance of land rights for empowering the poor and improving local governance, the development of the private sector outside agriculture, the gender and equity aspects associated with land, and the problems arising in marginal areas and at the interface between rural and urban areas'. These words strengthen, not weaken, the case in the 1975 World Bank Policy Paper for ceilings-based reform. Nor does the 2003 paper cite, to justify resiling from such reform, any evidence that the IR has turned into a DR.
  - 7 The World Bank's support for new-wave land reform (chapter 6(e)) uses IR evidence [Deininger 1999; van den Brink *et al.* 2006], yet such evidence casts doubt on the Bank's apparent tolerance for ceilings increases (or abolition), both by [Deininger 2003] and in India, where Singh [2005] concludes: 'There is no case for removal of ceilings on landholdings for corporate business ... or for farmers to reap economies of scale ... provided there exists a freer land-lease market'.
  - 8 By 'pro-large' incentives and other policies on agricultural research, irrigation, services and costs. Such camouflage seldom wholly suppresses the IR, even in such an extreme case as apartheid South Africa. There, 'within the commercial, formerly "white" farm areas, smaller farms have consistently higher profits and employ far more labour per hectare than large farms. [I]t would be unfair ... to compare [these] areas with the formerly black areas ... because of the centuries of suppression of black farming [but case studies comparing] small black farmers benefiting from support services under contract farming to their large-scale counterparts ... confirm the higher [social efficiency due to the IR] of the small farms. Moreover, in dry-land cotton, small black farmers were more efficient than [large] white farmers, even under apartheid' [van den Brink *et al.* 2006].
  - 9 Japan's post-1945 reforms created very small farms, below 3 ha, suiting the high ratios of labour to land and capital and speeding efficient farm growth. As Japan developed and rural labour became scarce and capital less so, larger farms became appropriate. Yet many tiny ones survived due to huge subsidies. The policy error was not land reform, but politicised freezing of small farm size after transition made it inappropriate. Analogously, in Mexico until 1993, *ejidos* could not sell land, 'fixing', late into development, farm characteristics perhaps appropriate earlier.
  - 10 *Smaller* farm size might not, in principle, go with *more equal* farm size. Farmland might be divided equally among a few élite farmers, employing many landless labourers. Or each household might farm a big area of bad grazing land. In practice, however, countries [Eastwood *et al.* 2009] (and regions and even villages within countries) rank rather similarly by indicators of typical farm size and of farmland inequality.

- 11 As in other occupations, a few lucky, or easily satisfied, farmers continue despite some inefficiency. This may be slightly more common among big farmers: there is some evidence that in India these have somewhat lower total factor productivity [Binswanger *et al.* 1995]. But such differences are too small to explain the rises in farm output associated with shifts of farmland into smaller farms [Bardhan and Mookherjee 2006].
- 12 A one in five risk of losing £10 is more damaging to people with low income, e.g. small farmers. Arrow's theorem, and some evidence [Binswanger 1980], show that poorer people are (somewhat) more averse from a given risk than richer people. Since inputs are sunk costs, does climatic risk to output induce small farmers to reduce inputs (including labour), and hence output, per hectare relative to big farmers? Section (d)(viii) shows why, on the contrary, risk may give advantages to *smaller* farmers. Further, some inputs – pesticides, purchased irrigation water – *reduce* risk.
- 13 A few studies [e.g. Rosenzweig and Binswanger 1993] show some linkage of total factor productivity or profitability to small farms in developing countries, and large in developed.
- 14 In developed countries, where rural labour is increasingly scarce and rural capital relatively cheap, the opposite is the case, leading to a DR.
- 15 Conversely, if land in India shifts from small to big farms, saved labour costs count for less than the wage-rate suggests, because the 'retrenched' farm labour is unlikely to be fully employed. However, where land *and* capital are plentiful and rural labour scarce – in much of North America – big farms have the edge. Not only do they get higher yields on existing land (because cheaper management of much-used capital counts for more than cheaper supervision of little-used labour); readier capital access and management help larger farms to develop new lands.
- 16 This evidence appears to refute claims [e.g. Lele and Agrawal 1989] that persistent access advantages have turned average *single-crop* yields higher on estates than on smallholdings for tea and coffee in Kenya, and for tobacco in Malawi. See, however, Dorward [1999].
- 17 The range of values is due to participation, or non-participation, in an extension scheme. Surprisingly, the authors nevertheless claim that 'larger size holdings perform (with regard to income and food production) better than smaller size holdings... Room for sustainable intensification is...limited where peasant agriculture is characterized by mini-[farms] of uneconomic size.' They mean that small farms produce less *total output* than big ones – hardly news – but overlook the implication of the strong IR that they identify. Compare Lenin [1899]: 106, 110 for a similar error.
- 18 Kinsey [2004] documents the success of small private farms in Zimbabwe's land settlements in 1981–94, yet writes: '[I]t is unlikely that [an IR] would be discovered because large-scale farms have always benefited from vastly superior access to inputs and technical services.'
- 19 Lipton [1974] and Binswanger *et al.* [1995: 2703–4] attribute this, respectively, to fixed costs and credit constraints for the very smallest farms.
- 20 Of course, no observed IR can tell us what *would* be the land productivity of people who have never yet farmed. However, most landless labourers take some quasi-managerial farm decisions. Also, many of them, and many relatives in their households, have run farms.
- 21 One gain is that extra farm output means extra GDP, easing land reform if some GDP can be used, if desirable, to compensate the losers.
- 22 A small minority of careful developing-country studies finds no IR, or even (for a group of tobacco growers in Malawi [Dorward 1999]) a DR. Usually such findings are from places with large subsidies (or tax breaks) on inputs or outputs, available selectively to big farmers.
- 23 There is sometimes a hidden yield IR, because often only the yield of the main crop is measured. Even if small and big farms have the same maize yield, small farms are much more likely to intersperse a minor crop on, say, 10–30 per cent of



the area (e.g. beans with maize, bean sprouts with millet). Intercropping (a) allows small-farm households to eat a mix of crops without transaction cost of purchase, but compels big farms to *incur* extra transaction cost of sale; (b) cuts risk from pest attack (poorer farmers are more risk-averse and less able to borrow for pesticide); (c) permits nutrient cycling, which cuts fertiliser needs; (d) may allow selection of a secondary crop at lower risk from moisture stress.

- 24 For corroboration see [Lipton with Longhurst 1989: 135; Barrett 1996 for Madagascar; Bharadwaj 1974 for India].
- 25 See Kay [1998]. In 1952, on the eve of Arbenz's reforms in Guatemala, the average large landowner cultivated only 19 per cent of his personal holdings. Despite laws permitting expropriation of long-idle land, by 2002 little had been taken: 'the process for determining what land is "idle" is complex, laborious, and based on declarations of current owners' [Tanaka and Wittman 2003].
- 26 Only part of this is due to the fact that in India (unlike Africa) smaller farmers have a larger proportion of irrigated land. Anyway, some of that is because they face lower transaction cost of (often family) slack-season labour to construct and maintain irrigation. See section (d) (iii).
- 27 This may be the purchase price, the hire price, or (with family labour) the wage that on-farm workers might have earned elsewhere.
- 28 See Schultz [1964]. This is supported by competitive selection pressure on farmers, and by their option to transact in land or to work elsewhere. However, the process is long-run, imperfect and incomplete. Some farmers, some of the time, make mistakes, are feckless, and (above all) avoid risk. However, all this does not clearly favour farms of a given size, nor therefore is it conducive to an IR or DR (but see section (d) (viii) on risk).
- 29 Small family farms face lower UTC to hire and supervise labour to form 'labouresque' capital [Sen 1968], e.g. dug wells, canal maintenance.
- 30 Unit costs of input transport may be slightly lower for larger farms due to packing economies, but this is offset by smaller farms' greater reliance on nearby (farm and home) inputs, e.g. of water and manure – and because for purchased inputs much apparent transport-cost saving on big farms is really just shifting of cost between farmer and supplier, or from off-farm to on-farm transport [Heady 1952: 356; Hunt, pers. comm.].
- 31 Why is not developed, capital-intensive agriculture in a region in one huge farm? Probably due to rising unit cost of co-ordination, as output [Kaldor 1934] and farm area become very large. This may be confirmed by a reversal of the DR, and a tendency for diminishing returns, among the very largest size-groups in developed farming [Hunt, pers. comm.; Hall and Leveen 1978; Hunt 1986; Binswanger *et al.* 1995a].
- 32 For tests showing IRs due to labour UTC rising with scale, see [Bardhan 1973; Feder 1985; Eswaran and Kotwal 1986; Taslim 1989; Frisvold 1994; Heltberg 1998; Sadoulet *et al.* 1998; Stifel *et al.* 2003]. Also big farmers, being more often formal (registered) with hired labour, are more likely to face labour-UTC of social security, education or housing. Common in developed countries, this effect is found in developing countries too.
- 33 Tiny farmers often cannot borrow at *any* interest, especially if tenants, who lack land collateral. Can't lenders just charge them more interest? They fear this will induce such borrowers to seek risky activities (promising higher profit), and to default if they fail [Stiglitz and Weiss 1981].
- 34 Even very small farmers, however, often sell after harvest and buy back later, and even in early development market substantial parts of product. Already in the 1980s, in Brazil, even for the smallest farmers (below 1 ha), 82 per cent of farm output was marketed [Thiesenhusen *et al.* 1990]. Already in 1950–51, most small farms in India sold substantially after harvest and bought back later [Narain 1962].
- 35 And to more inputs complementary with labour, such as fertiliser. By the same argument, in labour-scarce developed economies such costs might produce more extra GDP were they applied outside agriculture.

- 36 To cite [Eastwood *et al.* 2009]: ‘Scale economies are normally assessed by fitting production functions to farm-level data so as to measure differences in total factor productivity between big and small farms [Mundlak 2001]. As in Binswanger *et al.* [1995] assessment of efficient scale ideally requires a measure of profits net of the cost of family labour, per unit of capital invested [, allowing] for transaction costs and scale economies, but also for...optimal factor proportions var[iable] with scale ([implying] that narrowly-defined scale economies would vary according to the factor-proportions “ray” along which they were being measured)’.
- 37 ‘Fair’ land reform would redistribute land from households with much land *per family member or worker*, to those with little or none (chapter 3(b) (vi–vi)). The IR’s even greater strength, with farm size measured per family member or worker, favours such reform. Per worker or per person, instead of per household, ceilings release – but also require – less land for redistribution: inequality of land per family member is substantially less than of land per household. In a Punjab village, the per person Gini of operated farm size was half the per household Gini [Julka and Sharma 1989].
- 38 Benefits to children’s nutrition, given income, from mothers’ *not* taking hired work, are quantified in Kumar [1979].
- 39 This paragraph is based on Carter [pers. comm.]. His perspective suggests that the empirical literature on IRs and DRs needs rethinking, to incorporate the complex, different market situations confronting different sorts of farmer, and perhaps changing over time [Carter and Zimmerman 2000].
- 40 There are two ways to measure risk to income: income variability (e.g. coefficient of variation, or downward semi-variance); or likelihood of falling below a disaster level. On either measure, on reasonable assumptions, two (Arrow–Pratt) theorems – supported by evidence from Indian farmers [Binswanger 1980] – can be proved. (1) Absolute risk aversion decreases with income, implying that ‘willingness to engage in small bets of a given size [increases] as income increases’. (2) Relative risk aversion increases with income, implying that ‘if both the size of the bet and income are increased in the same proportion, the willingness to accept the bet decreases’ [Srinivasan 1972, citing Arrow].
- 41 That is not to deny counter-examples [e.g. Dorward 1999], interpretation problems, or transformation in developed countries of IRs into DRs.
- 42 Illustrating these truths, Hill [1986] ranks a set of households in her study area in increasing order of farm size. Output per hectare is all over the place, any DR or IR being quite unobservable. This indicates, not as she argued that the DR and IR are phoney economic constructs, but that anthropological field insights should be used much more in multivariate, causally sophisticated statistical analysis.
- 43 For simplicity we delay the fourth – a ‘threshold condition’ on missing variables, which hardly ever raises a problem for the IR – to p. 81.
- 44 Secure small-farm land rights granted after independence, and nearby markets, induced ‘sweat labour’ investments in terracing, tree planting and manure spreading (plus stallfeeding). Population grew fast, yet land quality improved [Tiffen *et al.* 1994; Paarlberg, pers. comm.].
- 45 These are sometimes called ‘sub-family’ farms. The term wrongly suggests incompleteness or inadequacy, and is avoided here. There is no evidence that part-time farms are less efficient. They may be preferred for many reasons and have many functions. In Colombia ‘it is not clear that government needs to make the award of grants conditional on purchase of a “family-farm size” holding or to restrict the scope for subsequent subdivision of such holdings [denying] the option to the poor of buying a “subfamily farm” and supplementing farm revenue with income from off-farm sources. Arguably, there is no need to fix a minimum acceptable holding size’ [Heath and Binswanger 1998].
- 46 The characteristics are so interlocked that it is pointless to discuss, for example, whether a farm is small ‘because’ it is family, or *vice versa*.

- 47 The possibility is remote. First, while part-timeness, subsistence and family-ness are more likely in 0–0.5 ha farms than in 1–2 ha farms, even in the latter group they are remain very likely. Second, few reforms have in practice cut the share of land in the smallest size-group.
- 48 Strictly, isolation varies among *plots*, not farms; Stifel *et al.* [2003] rightly measure land productivity and isolation at plot level. Nkonya *et al.* [2004; cf. Eastwood *et al.* 2009] find a strong IR between farm size and *plot* land productivity, controlling for plot size, land quality and other factors. Fragmentation into plots deters input use similarly to isolation, but (unlike it) is more on smaller farms (p. 240); with consolidation, shifting land to smaller farms would raise land productivity more than the IR suggests, and the joint effect would exceed the sum of the two individual effects.
- 49 The very high productivity of tiny home gardens also casts doubt on any minimum size, or turning point, below which the IR turns into a DR.
- 50 For issues related to this topic other than the IR, see chapter 3 (b) (vi); chapter 7(b) (ii).
- 51 Low-quality extensive grazing covers a larger share of land in bigger farm-size groups, but (a) most IR/DR empirical tests compare crop farms, (b) for those that do not, endogeneity is crucial: do big farms graze larger shares of potentially sustainable cropland, e.g. to save labour UTCs?
- 52 (1) Bhalla and Roy [1988: 58] are right that tubewell and pumpset uses depend on ‘investment decisions of individual farmers and are endogenous’. (2) However, they wrongly infer that ‘larger irrigation works are typically [exogenous]’ from the fact that they ‘arise from investment by the government or the village group’. Once they are in place, will their use pay the farmer? That depends, in part, on access to low-UTC labour per hectare (a) to dig, maintain and clear field channels, (b) to grow profitably a high-value, labour-intensive irrigated crop-mix – both choices more likely for small (family) farms. (3) Similarly, Bhalla and Roy’s soil variables (texture, colour, depth) are classified as exogenous to farm size, but lower UTC gives small farmers more incentive to improve them with labour, e.g. to manure and maintain topsoil, and to bund. (4) Another claimed ‘exogenous quality variable’ is neither: big farms have more fragments per farm (but fewer per hectare), partly due to farm-level decisions. Only if fragmentation increases *linearly* with farm size will the *t*-statistic ‘show up’ collinear effects on output per hectare.
- 53 (1) Bhalla and Roy point out that, when the claimed ‘exogenous land quality variables’ are included on the right-hand side of the regression equation, the proportion of regions with a negative size–productivity relationship significant at 5 per cent (although steady at 94 per cent when the regions are States) falls from 69 to 56 per cent when the regions are agronomic zones, from 51 to 37 per cent at sub-zone level, and from 47 to 29 per cent at District level [*ibid.*: 65]. These falls are claimed to show ‘that areas with inherently high land productivity are characterized by small holdings’. That something is odd about the ‘exogenous quality variables’ is confirmed by the fact that the finer the unit of spatial disaggregation (i.e. presumably the more *similar* the ‘exogenous quality’ of holdings), the more is the reduction in the proportion of units with a significant IR when we include the ‘exogenous quality variables’ – nil for States, 4.8 per cent (7 of 69 per cent) for Zones, 27 per cent for sub-zones, 38 per cent for Districts. (2) Bhalla and Roy point out a steady decline in the proportion of relationships significantly (at 5 per cent) inverse, as disaggregation proceeds from State, via Zone and sub-zone, to District. But much of the decline is likely to be due to falling sample size, whether or not there is also rising homogeneity of land quality.
- 54 Panel studies track variables over time on the same farms. On any, *inherent* land-water quality, exogenous to farmer action, is a ‘fixed effect’ (absent climate or irrigation change). So panel data let us allow for the role of inherent land-water quality in the level of output per hectare.

- 55 However, Ethiopia in 1995 showed 'no strong significant correlation between landholdings of households and land quality' [Kebede 2008].
- 56 Large plantations almost always needed subsidies or other rules to fend off competition from smallholders: [Binswanger et al. 1995; Hayami 2009].
- 57 Skill per hectare, worker and unit of output, not absolute skill, affects output per hectare – and is learned by doing.
- 58 Even then his data suggest an IR being (re-)established in the most advanced green-revolution District, Ludhiana.
- 59 This conclusion is not affected by disagreements about interpreting the data problems in this paper (notes 52–3) because it applies at all levels of disaggregation, and whether or not quality variables are added to the regressions of farm size upon land productivity.
- 60 Rashid [2000] interprets the findings differently: 'The introduction of [HYVs] initially led to the disappearance of the [IR]; over time, as farm sizes changed, the IR [re] asserted itself at the new, larger farm sizes...[T]he desirable farm size changes with technology. Hence advocates of land reform may well have to advocate continual changes of land ownership'. But where are 'the new, larger' farms? In India, even in green revolution areas (except Punjab-Haryana), farm size fell during the green revolution, as it did elsewhere (section 2(g); Tables 7.2–3); so 'the market' believes that it should fall. After the early adoption period, the reassertion of the IR seems due to small farms' advantages (UTC?) at *existing* (or smaller) farm sizes.
- 61 As green-revolution seeds and methods become more familiar and hence subjectively less risky, small farmers' adoption lag declines – indeed, small farmers may even come to adopt sooner [Ruttan 2004; Paarlberg pers. comm.]
- 62 However, the IR operates mainly through factors other than single-crop yield (pp. 71–2). On impact of India's green revolution on the IRs, see [Singh 2005].
- 63 In agriculture (State withdrawal from rural infrastructure blunts farmers' response to incentives) and elsewhere: as widely predicted, reductions in State provision of the public good of financial regulation led, in Autumn 2008, to global economic contraction induced by bank failures.
- 64 'Core' or 'comparative-advantage-following' L&G free up markets in private goods and services, investment, and factors (land, capital, labour); phase out non-market influences on prices; and clarify property rights. Where infrastructure, public goods, and merit goods such as health and education are supplied reasonably adequately, core liberalisation normally accelerates growth. However, some advocate 'beyond-core' L&G, suggesting that the State withdraw from (or finance by user charges) a wide range of activity. Private-sector responses to core L&G are often *weakened* by beyond-core L&G, e.g. State withdrawal from providing public, merit, and some infrastructure goods, and from financial and other markets whose transparency is needed for efficient business; and State refusal to pre-announce and implement strategies, especially to cut negative externalities, prioritise disadvantaged groups, and advance human development [Lipton and Zhang 2008].
- 65 Winters *et al.* [2004] summarise theory and evidence on globalisation and poverty. Much of it applies *mutatis mutandis* to liberalisation.
- 66 Relatedly, before L&G relaxed India's restraints on trade, did these restraints help the poor and small? This is unlikely: 'licence raj' responded to, and helped, mainly the rich and strong. Hence Sen [1997], in a fine paper, rejects as pseudo-leftism the claim that India's L&G harms the poor.
- 67 Pressures towards such shifts are strengthened by increasing farmland scarcity in almost all of rural Asia and most of Africa, and abundance in much of Australasia and North America.
- 68 The next five paragraphs owe much to [Reardon *et al.* 2003; Reardon and Timmer 2005; Reardon *et al.* 2006; Reardon and Berdegue 2007].

- 69 Even though supermarket expansion into *domestic* vegetable markets is 'the slowest and the [latest] in starting' [Reardon and Berdegue 2007].
- 70 Tiny allotments are widespread in urban Britain (e.g. Brighton) and Austria (e.g. Salzburg), partly due to hobby labour and hidden subsidies.
- 71 The seven studies compared horticultural 'producers participating in [traditional versus] modern domestic market channels (in which supermarkets are key downstream actors)'. The other three were: Nicaragua (tomatoes) Mexico (guavas), China (horticulture) [Reardon and Berdegue 2007].
- 72 'Where the communities of indigenous smallholders had already been established, in much of Africa and the Caribbean, restraints "had to be" placed on new smallholders if plantations were to stay competitive' [Hayami 2009]. Compare late twentieth-century experience with tobacco in Malawi, and periodic restrictions of smallholder maize competition against large white farms in apartheid South Africa [Binswanger *et al.* 1995].
- 73 However, an efficient arrangement is for a barn to cure (and often also provide extension) for eight to 30 family farmers, each with 0.25–1 ha of tobacco; the cured tobacco is sent by the barn for later, larger-scale processing.
- 74 'Today AMUL competes successfully with the private sector that includes multinational[s] and domestic players, and provides handsome returns to farmers without receiving any form of subsidy from the government' [Chandra and Tirupathi 2002]. See also Baviskar [1997].
- 75 This is not free. It may be outweighed by the cost or 'disutility' of extra field labour (minus that of supervision, etc., labour saved); of extra water, fertiliser, etc.; and/or of land transfer. If so, the IR alone does not imply net gain from land reform. However, the UTC explanation for the IR does suggest genuine net gain. Part of labour-related UTC is due to B's largeness, and hence high proportion of hired, as compared with family, labour. Labour supervision is saved by land transfers to L. That permits and encourages more application of productive labour to land.
- 76 Economists at Chicago University have been leaders in developing, testing and sometimes advocating the view that productive resources such as land and labour are so allocated by their controllers (landowners, workers, etc.) as to maximise private, and often also social, net gain.
- 77 Even with external gains or losses, Coase [1960] argues powerfully that – absent transaction costs of sale, hire or negotiation – all parties, including external ones, acting in pursuit of private gain, produce results maximising social product, though the *distributive* results may be bad.
- 78 The recent emergence of 'reverse tenancy' (chapters 4(b); p. 251) shows only that – where successful development generates rural labour shortage, pressure on farms to replace labour with capital, and hence the need to save transaction costs of borrowing and managing capital rather than of hiring labour – both B and L change their market behaviour accordingly. Reverse tenancy in poor countries – suggesting a DR – remains rare: cf. the continuing national-level shift of farmland into smaller units (Tables 2.1–4, Table 7.2).
- 79 (a) Chapter 3(c) (v) (I) and chapter 7 (pp. 300–1) treat other implications of this. (b) In principle, the smallness of a farm should not be assessed – as it almost always is – per household, but per family worker (perhaps counting children less than adults). Output rises, if arguments from lower UTC have force, with available family labour per hectare operated, not simply with the reciprocal of operated hectares. If so, the IR will show higher  $r^2$ , and higher and more significant elasticity of output per hectare to smallness, if output per hectare is regressed upon land per family worker, not per holding. Also, if land per dependent is added as an explanatory variable, it too should show a negative and significant beta-coefficient, for reasons explained by Chayanov [1966] and tested by Hunt [1978]. Advocacy of land

- redistribution for *poverty reduction* relates to land per person or consumer unit; reforms often distribute land (and set ceilings) per person [e.g. Saxena 1990: 124]; but advocacy of land redistribution for *farm output* relates to IRs dependent on family workers per hectare. Testing of the IR should move away from the land-per-household-basis.
- 80 Indeed, many reforms (China, Vietnam) allocated reform land to households on a per person basis (giving rise to new problems: pp. 231–6).
  - 81 The repeal bill, tabled in 1998, has been awaiting formal approval ever since. In 2004, ‘farmers planning to subdivide their farms in order to sell off portions of their land [had to] seek approval for this subdivision from the Minister of Agriculture and Land Affairs’ [TAU South Africa 2004].
  - 82 The spirit of the Chicago question is that ‘cultivation spontaneously finds out the form of organisation that suits it best’ [Mill, in Hollander 1985: 842]. Not all that spontaneously, though, or why need Mill argue, as he does, against laws imposing primogeniture? Social norms do not at once adapt to allow land size to seek its optimum. They reflect custom – based in part on optimum size generations ago – and special interests.
  - 83 This is strongly suggested by the evidence that large landowners tend to transact with large tenants or buyers, and small with small.
  - 84 The fall reflects not a shift of private land to larger farms, but (a) exclusions of over half farm area from the 1989–92 Agricultural Census (including the autonomous regions of Tigray, Asab and Ogaden); (b) redistribution of collective and State lands between 1989–92 and 2001–02 Censuses, raising private farm area 2.3-fold, but holdings only 1.8-fold; many holdings below 1 ha in 1989–92 ‘grew’ to be above 1 ha by 2001–02 because they received such lands. So the falling share of land in holdings < 1 ha was outweighed by the rising share in 1–5 ha holdings. (In 1977–89/92, median farm size fell 46 per cent, and size of farm with median hectare 43 per cent: Table 2.4).
  - 85 We have no post-1994 median data yet. Table 2.4 omits post-1990 effects on farm size of faster farm commercialisation and globalisation.
  - 86 The sole exception is Korea. Like some Latin American countries (where the tables show mixed trends), Korea was an upper-middle-income country by the early 1990s, with capital/labour ratios and agricultural workforce shares approaching the levels found in high-income countries.
  - 87 FAO, [www.fao.org/es/ess/census/wcares/default.asp](http://www.fao.org/es/ess/census/wcares/default.asp). Singh [1990] shows trends to smaller farms throughout South Asia.
  - 88 FAO, [www.fao.org/es/ess/census/wcares/default.asp](http://www.fao.org/es/ess/census/wcares/default.asp). China’s only Agricultural Census (1997) does not show farm areas by size-group. We assume that the average farm in each group is halfway between the group bounds (0–0.2 ha at 0.1 ha, etc.).
  - 89 Even with China’s rapid development and initially small farms, such experiments may have been pushed too far. Intended for diversified and high-employment areas, they were extended elsewhere by over-enthusiastic and sometimes self-serving local officials [Prosterman *et al.* 1998].
  - 90 Of nine rich countries with data (Table 2.3), the proportion of farmland in above-20 ha farms stayed above 95 per cent in 1990–2000 in two (USA and UK); rose in six, usually sharply; and fell only in Austria.
  - 91 In rural areas that is consistent with higher income if outweighed because land productivity and/or the non-farm income share is growing, and/or family size falling.
  - 92 There remains a ‘proto-Chicago’ question: how did very unequal landholding *arise*, if labour UTC leads to an IR? On land grab, see pp. 31–2.
  - 93 UN [2005] gives India’s 2005 rural population as 786m in 2005, projected to rise to 857m in 2015 and to peak in 2025 at 875m. Sub-Saharan Africa’s rural population is 559m in 2005, projected to grow to 638m in 2015, 700m in 2025 and 721m in 2030.

- 94 2005–50 projected population growth is 1.7 per cent in Africa for 0–15s, but 2.0 per cent for 15–59s. For Asia the projections are 0.5 and 0.7 per cent [UN 2007].
- 95 Unless the ‘progress’ is due largely to labour-displacing capital. If that is the case despite the labour glut and savings scarcity prevailing in low-income farming, it is a market distortion, often largely due to market power caused by land concentration in big farms, and certainly not a justification for that concentration.
- 96 One of many examples: ‘Significant decline in black agriculture in South Africa [was partly caused by laws responding to] the concern of European farm[ers] that their profitability was being undermined by a more efficient black agriculture. In 1904 and 1907, the Agricultural Development Acts provid[ed] cheap credit and marketing assistance only to [white, in practice large] farmers. From 1948 the National Party added [more] discriminatory legislation. [Only in the] 1990s [were] many of these laws repealed’ [Bradstock 2005]. See also Hayami [2009].
- 97 Just as the converse Chicago question supports an IR in low-income agricultures, so the trend of farmland to larger holdings in rich countries confirms a DR. In the European Union, Canada and Israel, the smaller a farm, the more likely are farmers to leave agriculture [Findeis *et al.* 2001].
- 98 Logically, a nation might have (a) large but equal farms – because there are few would-be farmers and much farmland, or because poor agriculturists are ‘pure’ landless labourers; or (b) all farms small or smallish, but farmland inequality. In practice, these situations are not found. Whatever indicators are used, *inequality* and *size* of farms are strongly correlated (among nations, regions or times) [Eastwood *et al.* 2009].
- 99 The first group, before the land reforms of the 1950s and 1960s, had been largely owner-farmed (*ryotwari*). The second group had been largely farmed by tenants, whose landlords paid revenue to the state (*zamindari*).
- 100 The authors’ farm-level data also show the micro-IR, but, unlike their village panels, without allowing for soil-water effects on productivity.
- 101 Cross-area correlations between the Ginis of owned and farmed land are high (i.e. land-market transaction cost stimulates owner-farming).
- 102 Other studies (section (c)) show farm-level IRs mainly due not to smaller farms’ higher crop-specific yield, but to their more labour-intensive, and thus valuable, crop-mix. This is confirmed here in aggregate, for zones with more equal land (and so a higher proportion of it in small farms). In the multiple regressions, zonal yields of rice, wheat, bajra, jowar, maize, rape/mustard, sugarcane, and aggregate output were all negatively related to zonal Ginis, but only for jowar and rape/mustard were the betas significant at 5 per cent, and for rice and aggregate output at 10 per cent. (Positive relationships were found for cotton and groundnut, neither significant even at 10 per cent.) The  $r^2$  was above 0.62 for sugarcane and aggregate output; 0.52 for rice; and 0.28 for bajra, jowar, cotton and rape/mustard (all *F*-statistics significant at 1 per cent) [Vyas 1979: 15].
- 103 Though country-wide land productivity in China and Vietnam exceeds Latin America’s by well over 25 per cent, due to soil-water regimes.
- 104 The data and much of this section are based on an outstanding recent study [Haggblade *et al.* 2007].
- 105 Induced activity outside the sector is lower when the initial growth is outside agriculture – the reverse of the situation in rich countries.
- 106 Gersovitz [1988] questions whether smaller farmers *spend a bigger part of extra income* (i.e. save less) than large farmers. It is plausible, but not proven, that smaller farmers *direct a bigger part of extra spending to domestic producers* (i.e. less to imports), directly or indirectly, than larger farmers. Working the other way, poorer farm households with less land, having less adequate diets, *devote a smaller part of extra spending to non-farm goods and services* than big farmers. And more of such spending is on locally made RNFE products [Hazell and Ramasamy 1991].

- 107 'Consumption data are frequently collected by expenditure class rather than by farm size. In the end, resident farmers who consume and send their children to school in rural areas generate the largest [RNFE] linkages. If their hearts and spending remain focused in rural areas, they will generate growth in [RNFE] activity' [Haggblade *et al.* 2007: 168]. But such farmers overlap strongly with 'smaller farmers'.
- 108 Note that 'the common belief among [neoclassical economists that] redistributive state policies tend to be growth-retarding [is] now increasingly challenged among academic economists' on theoretical and empirical grounds [Bardhan and Mookherjee 2006, also for references].
- 109 In recent years, OECD countries have seen an explosion of top-end inequality, in part reflecting 'winner-take-all' arrangements, or self-certified bonuses or other directorial payments, rather than competitive market rewards. This retreat into ascribed inequality may well mean that later re-runs of Barro's inequality-to-growth estimates for developed countries will produce very different results.
- 110 As in much of Latin America and Southern and Eastern Africa with high land Ginis (Tables 2.4, 7.2).
- 111 'Initial land ownership inequality [reduces] subsequent growth, even control[ling] for country heterogeneity. [L]and ownership inequality creates low and insecure incomes for the rural poor, retarding human capital accumulation and growth. *These mechanisms could buttress high and potentially increasing income inequality* creating [Birdsall *et al.* 1995] *a vicious circle of growth and inequality*' [Carter 2004].
- 112 Latin America's usually much higher land (and hence income) Ginis than in Asia or Africa may signal a stronger link between very small farms and membership of indigenous ethnic groups [Paarlberg pers. comm.]. *Ethnic near-landlessness* may affect a larger share of landholders in Latin America, be more 'inherited' and linked to social stigma, and so leave less scope to adjust to more equal, nearer-optimal smaller farm size.
- 113 On surplus extraction as a goal of land reformers – or anti-reformers – see chapter 1(d).
- 114 A stronger stabilising role, indeed a form for obligation to insure the small and poor, may apply to a co-operative or collective. When this is split up into small-holdings, 'clear incentives for individual parcel holders comprise [an efficiency] benefit against which must be balanced the disappearance of the implicit insurance' [Carter and Alvarez 1989: 162].
- 115 In Tanzania's 1987/08 Agricultural Sample Survey, 71 per cent of land was cropped, 3 per cent in pasture and 18 per cent forested; for large farms (covering 29 per cent of land, for 9 per cent of farmers), the respective proportions were 24, 30 and 11 per cent [World Bank 1994: 20]. In Sri Lanka and many other countries, the proportion of land double-cropped rises as farm size falls, even among farms with similar soils and irrigation [ILO 1971; Lipton 1993].
- 116 This is fully consistent with the evidence for good answers to the Chicago question. Strong incentives push farm resources from privately inefficient to privately efficient farms. But market realities (section (g)) mean that farms with quite low land productivity can be privately efficient.
- 117 In practice, this optimum size differs according to which of these goals is specified. If all the IRs are real, this is merely a complication.
- 118 Probably both reasons and power are largely due to political, social, or cross-market gains from operating owned land despite low output per ha.
- 119 More population means more labour, but (as with capital and inputs) its marginal returns, with no new science, fall sharply as workforce grows.
- 120 'Scratch-a-patch' is a contemptuous term for small-scale farming, still used by many (of all races) among big farmers, officials, some academics, the better-off, and even the over-humble poor in South Africa.
- 121 Once the green revolution was established after about 1970, land reforms in Asia paid 'minor attention' to efficiency [Platteau 1992: 17 and n. 2].



- 122 That small farmers are as good as big ones at using green revolution inputs is 'Janus-faced'. Does it prove that the rural poor do not need land reform, because green revolution advances them even without it? Or that land reform is acceptable, because beneficiaries will be as able to exploit green revolution as big farmers?
- 123 This long-run trend for staples output, in successful green-revolution countries without land reform or other income redistribution, to outpace domestic demand has weakened and perhaps reversed, but (like big Indian public grain stocks, and despite temporary food price spikes (2008)) remains a brake on renewed farm growth. The export option is problematic: many countries' staples output is competitive against imports but not against exports (high transport costs, grades/standards, thin markets).
- 124 This assumes big, top-down dam/tank systems – gradually (if unsustainably) displaced in much of Asia by personal groundwater systems.
- 125 (a) Such constraints are less important in semi-arid areas, where plots (fragments) are larger relative to farms, and where co-ordination (among approximate equals) of drainage matters less. However, in those areas, bunding and vegetative barriers (for contour ploughing) – conservation investments, rather than productivity investments – may be constrained by unequal land rights. (b) Bhaduri [1973] claims a third systemic constraint: that the big landlord-*cum*-moneylender may find it more profitable to lend for consumption to impoverished small tenants, rather than to invest in agriculture, or to lend in support of investments that might get tenants out of debt. Bell, Bardhan and others have shown that the empirical and theoretical conditions, required for this constraint on farm growth to operate, may not be often met.
- 126 On the asset-distributing IRDP, see Drèze [1990]. On the public-works Employment Guarantee Scheme in Maharashtra, see Ravallion [1991].
- 127 Human calories from animal products need three to seven times more grain or pasture feed area than from staples. As the non-poor get richer in China, India and other fast-growing parts of the developing world, they shift from consumption of staples to dairy and meat, pushing up staples prices, even for the poor who can afford little else. Rising energy-based input costs, and shifts of land from food to biofuels, also impel staples prices upwards. While the sharp staples price spike of early 2008 is temporary, long-run factors have durably reversed the staples price downtrend of 1965–2000.
- 128 Staples supply-response and the prospect of world recession reversed the real food price uptrend after spring 2008, but the long-run trend – with less and less good land, and with water and fertiliser feedstocks (especially natural gas for urea) increasingly scarce – has to be up.
- 129 This should, except perhaps in the short term, be little affected by 2008's overdue, justified breakdown of the consensus for 'free' financial flows.
- 130 Fertiliser use (NPK nutrient equivalent) on cropland in sub-Saharan Africa is estimated at 9 kg/ha in 2002 (roughly static since 1982), as against 100 kg/ha in South Asia and 140 kg/ha in China (both roughly tripled since 1982). Farm GDP (i.e. value-added) per person in sub-Saharan Africa fell steadily in 1967–84 and roughly flatlined since, being about 16 per cent less in 2004–06 than in 1966–68 [FAO 2005: 125; 2007: 121].
- 131 For example, about 3.7 per cent of cropland in sub-Saharan Africa is irrigated (0.7 per cent excluding Madagascar, South Africa and Sudan) as against 35–40 per cent in China and India.
- 132 From the 2002 African average of 5 per cent to 10 per cent (itself below half India's level at the dawn of the Green Revolution).
- 133 Both are African-run and African-owned. CAADP, launched in 2003, is part of the African Union's New Economic Programme for African Development. AGRA was launched in 2006 with \$45m from the Bill and Melinda Gates Foundation.
- 134 The diversion of GNP from incentive incomes – wages and profits – into rewards for unearned ownership or power (rent) is no different, whether the rent accrues to a few rich owner-farmers or to a few rich landlords.

### 3 Land reforms: the types, and the classic paradigm

- 1 A group cuts and burns a bushy area A, and farms the rich ash–soil mix at initially high, but falling, yields for 1–3 years. Then the group moves to do the same in area B, then C, etc., returning to A to re-start the cycle after 3–25 years of fallow scrub/bush regrowth, regenerating A's soil. Most scholars once dismissed 'slash-and-burn' as environmentally unsustainable, with no incentive to good individual soil management. Most now recognise, in 'cyclic bush fallowing', complex, conserving methods, with assigned household rights to return to clearly located areas. This shift from contempt to veneration of the system comes, ironically, as rising person/land ratios shorten fallows and make it steadily less sustainable.
- 2 These juxtapositions of land institutions with areas have exceptions. 'Tribal' and/or sparsely populated areas of Thailand, Burma, north-east India (*jhum* in Assam) and parts of Latin America (e.g. Mapuche areas in Chile, 'Indian' areas of Amazonia in Brazil and Ecuador) feature cyclic bush fallowing. Rwanda and parts of Kenya and Nigeria are increasingly smallholder-farmed with emergent tenancy as person/land ratios grow. Sugar, coconuts and some fruits in the Philippines approximate *latifundia*–*minifundia* systems [Hayami *et al.* 1990], as do parts of Pakistan and Malaysia.
- 3 On 19 October 2008 'The Communist Party of China [allowed] farmers to "lease their contracted farmland or transfer land use right"' but 'did not say whether [they need] permission from their villages' [*China Digital Times* 2008] – which have undermined past experiments on such lines.
- 4 In much of the CIS this system, as a sort of collective feudalism, remains pervasive in 2007, despite much legislation (chapter 5(b) (i)(I)).
- 5 Per person, land quality-adjusted, graduated ceilings and floors – and participatory procedures – may be desirable modifications (pp. 134–44).
- 6 There are others, such as *retention* by current rights-holders as an overriding claim [Nozick 1974].
- 7 This requires that the Land Authority knows who owns what land, ideally via an accurate, up-to-date register. Big landowners have incentive to understate ownership, as do potential beneficiaries. Rich people may use poor clients as 'fronts'.
- 8 Decollectivisation sometimes followed a similar process for (1) to (6), notably in Armenia, China and Vietnam. Often (as in former Albania) *restitution* was a further criterion for getting land. Where (as in former Czechoslovakia) ex-owners were often non-poor, this prevented decollectivisation from being land reform on our preferred definition. On Romania and Bulgaria see [Brooks *et al.* 1991: 158–59].
- 9 In India, land reform is a state (province) subject. Though the Centre retains a watching brief, both through a ministry and through the Planning Commission, states have varied in their classical (and other) land reforms from radical (West Bengal), through largely hortatory, to minimal.
- 10 In South Africa, lack of information and qualified staff at provincial level proved a major obstacle to decentralising the design of the 1994–2002 land reform pilots – but participation in implementation, by consulting citizen groups, proved a good idea. In Latin America, participatory overview and policing has cost the lives of poor and landless persons in citizen groups tasked with exposing evasion among the rural rich.
- 11 This is not a common problem, but has affected classic reforms in plantation areas, and in sparsely settled areas of South Africa and Latin America.
- 12 With most gainers vulnerable, repayments should allow abatement in bad years. To permit recovery of the target proportion of land value, this means adjusting upwards the repayment taken in good years. Criteria for good and bad years should be exogenous (specifying, perhaps, weather, water, pest and/or price conditions) to avoid the 'moral hazard' of encouraging recipients to allege bad conditions so as to avoid repayment.

- 13 More accurately, those of taxpayers, aid donors, and/or (undesirably) inflation-hit consumers, if the government finances the reform by a deficit.
- 14  $S$  is the cost of extra services – credit, research, extension etc. – to land gainers, net of reduced cost of services to land losers. This is a net cost, because land gainers are post-reform smallholders, often with limited creditworthiness and/or farm experience. Part of  $S$  falls on the public purse because private providers otherwise undersupply some post-reform farm services to small farmers, as costs are hard to recover. These services may warrant public subsidy (perhaps tapering out 3–5 years after the reform), to help post-reform smallholders to pull out of poverty and ‘lead’ private providers towards unsubsidised supply later. Public provision of some  $S$  should save public money by reducing burdens from  $L$ , because land gainers with these services can better afford part-repayment for reform land.
- 15 Exemptions are loopholes allowing some large landowners to escape land loss. Or they may do so by evasion (illegal) or avoidance (legal, e.g. placing some land in a cousin’s name). EEA have counterparts on the side of land gainers, also reducing land release to the little-landed poor: loopholes in laws that allocate land to the non-poor, or people’s illegal or legal action to qualify as land gainers or raise their gains.
- 16 A typical arrangement: land gainers, mostly poor, get two-thirds of reform land at public expense, and repay the remaining one-third over 10–20 years. Average rate should be at market level, but abated in bad years for weather, pests and prices, and correspondingly increased in good years.
- 17 There are mixed effects on the cost of public administration of repayment, and hence on  $P$ . More gainers and more land probably mean increasing unit cost of loan recovery; but more acquired land also allows gainers to be extended above the very poorest, making recovery easier.
- 18 How many households can be brought up to the land floor, with ceilings and floors, respectively,  $C$  and  $F$  ha per household? Pre-reform, rank the agriculture-linked households, deemed eligible either for land acquisition or for land allocation, in decreasing order of land owned. They comprise:

(1)  $m$  landowning households,  $H_1, H_2 \dots H_m$ , with land respectively  $L_1 > L_2 > \dots > L_a > L_{a+1} > \dots > L_{a+b} > L_{a+b+1} > \dots > L_m$  ha

(2)  $r$  landless households  $H_{(m+1)1}, H_{(m+1)2}, \dots H_{(m+1)r}$

The ceiling,  $C$  ha, lies below  $L_a$  but above  $L_{a+1}$ , and the floor,  $F$  ha, lies below  $L_{a+b}$  but above  $L_{a+b+1}$ :

$$L_{(1, 2, \dots a)} > C > L_{(a+1, a+2, \dots a+b)} > F > L_{(a+b+1, a+b+2, \dots, m)}.$$

With no EEA, land acquired,  $A$ , is  $A = \sum_{j=1}^{j=a} (L_j - C)$ ; land distributed,  $D$ , is  $D = [\sum_{k=a+b+1}^{k=m} (F - L_k)] + Fr$ , and  $A = D$ . Given eligibility rules, a given  $C$  implies  $F$  and a given  $F$  implies  $C$ .

- 19 In Brazil, wealthy north-eastern farmers were compensated for reform land by publicly assisted irrigation on retained land [Tendler 1991].
- 20 As with the sale of drying/curing, seeds and extension by the Ceylon Tobacco Corporation were via barn-owners to tiny Sri Lankan tobacco farmers. Neglect to work for this is one of the many missed prospects in Zimbabwe’s tragic reform trajectory after 2000.
- 21 Exceptions are Nepal, Pakistan, the Philippines, Thailand and parts of West Asia. In China almost all farm households control well below 1 ha of farmland as

- workers-*cum*-quasi-owners (the modernising 'family responsibility system' is increasingly similar to ownership: chapter 5(b) (iii)(III)).
- 22 An ultra-low 3 ha was used in post-war Japan, South Korea and China (Taiwan), but the politics favoured unusually radical reforms.
  - 23 It may be better to legislate for a land gain rather than a floor. The reasoning below is unaffected.
  - 24 Though very incomplete information demands its improvement, minor gaps are weak excuses for delaying at least pilot reform.
  - 25 Only *vis-à-vis* unrealistic expectations have Indian ceilings have 'been ineffective [in] the break-up of large farms'; if they 'led to red tape, spurious subdivisions and corruption' [Deininger 2003] one should reduce these, not remove ceilings. As for landowner evasion by force or judicial subversion, in West Bengal 'agitations of the landless poor and small peasants [in 1977–87] maintained pressure from below ... strong enough to compel the government to implement land-reform laws ... mobilisation of the rural poor is a precondition for effective implementation. [Big landowners] adopted novel methods to evade ceiling laws ... where the peasant movement was weak' [Thiesenhusen 2003; cf. Mearns 1999].
  - 26 In Karnataka, the 1995 Land Reforms (Amendment) Act raised the ceiling range (from 4 ha irrigated double-cropped to 22 ha dry land) to 16–86 ha. Tamil Nadu set a 400 ha ceiling on 2.6m ha 'wastelands' leases to corporations, but the ceiling on private farmland stayed at 6 ha [Sen 2003].
  - 27 Moreover, even with big samples, numbers in key groups may be too small to design a reform. This sample has 2638 households (giving a sufficiently small sampling error for statements about the 7.02m in rural Rajasthan), but only 17 owning over 20 ha, representing a State estimate of 38,700 households. This is too few for accurate estimation of land available from >20 ha households by implementing (say) a 10 ha ceiling
  - 28 In the rows >20 and 10–20 ha, land owned above 10 ha is, respectively,  $(31.17-10)38,700 = 819,279$  ha and  $(14.33-10)246,600 = 1,065,180$  ha.
  - 29 For >20, 10–20 and 7.5–10 ha, respectively,  $(31.17-7.5)38,700$  ha,  $(14.33-37.5)246,600$  ha, and  $(8.261-67.5)90,700$  ha, i.e. 3,286,436 ha.
  - 30 Rows 1–6:  $(127,600)1 + 268,900(0.998) + (330,200)0.996 + (593,600)0.986 + (1,222,800)0.705 + (1,334,900)0.267 = 2,465,260$  ha.
  - 31 Rows 1–5:  $(127,600)0.5 + 268,900(0.498) + (330,200)0.496 + (593,600)0.486 + (1,222,800)0.705 = 2,528,623$  ha.
  - 32 Other related questions raised by household size and structure are considered in chapter 2, p. 76–7, and chapter 7, p. 300–1.
  - 33 For instance, every household owning 10–20 ha per household has  $(14.33/7.73)$  ha per person.
  - 34 Households above 20 ha own  $(38,700 \times 31.17) = 1,206,279$  ha and keep, with a 2 ha-per-person ceiling,  $2(38,700 \times 13.58) = 1,051,092$  ha for their members, releasing  $(1,206,279-1,051,092) = 155,187$  ha (other households have no land above 2 ha per household to release). Similarly a 1.5 ha-per-person ceiling releases from >20 ha households  $1,206,279 - 1.5(38,700 \times 13.58) = 417,960$  ha; plus from 10–20 ha households  $(246,600 \times 14.33) - 1.5(246,600 \times 7.33) = 815,013$  ha; totalling 1,232,973 ha. To attain a 0.2 ha-per-person floor, each of the first six rows of households in Table 3.1 needs 0.2 ha for each member, *minus* pre-reform land per member, *viz.*  $\{0.2(127,600 \times 2.59) + (268,900 \times 3.95)(0.2 - [0.002/3.95]) + (330,300 \times 4.52)(0.2 - [0.004/4.52]) + (593,600 \times 5.51)(0.2 - [0.014/5.51]) + (1,222,800 \times 5.02)(0.2 - [0.295/5.02]) + (1,334,900 \times 5.08)(0.2 - [7.33/5.08])\}$ , *viz.* 2,465,749 ha. To reach a 0.1 ha-per-person floor requires substituting 0.1 for 0.2 in the expression in curly brackets, and excluding the final, underlined component (as these households average above 0.1 ha-per-person before reform); the sum is 838,539 ha.

- 35 Other related questions raised by land quality are considered in chapter 2, pp. 84–3 and chapter 7, pp. 301–4.
- 36 A real-life reform authority must drop these assumptions and (i) estimate, by sample survey, net land productivity with each soil type on different terrains and with and without irrigation, (ii) find, by complete enumeration, *each* household's soil-type areas, terrains and irrigation status.
- 37 Let  $s$  be the value, i.e. sha equivalent, per hectare of sandy soil, and  $n$  the sha equivalent of non-sandy soil. We assume  $n = 2s$ . From the last row of Table 3.1, for total sha area to equal total crude ha area,  $0.356s + (1 - 0.356)n = 1$ . The simultaneous equations are solved by  $s = 0.608$ ,  $n = 1.216$ .
- 38 A 1-sha floor requires  $0.998(268.9) + 0.996(330.2) + 0.987(593.6) + 0.672(1222.8) + 0.182(1334.9) = 2,242,458$  sha (cf. 2.53m ha for a 1-ha floor). For a 5-sha floor:  $0.498(268.9) + 0.496(330.2) + 0.487(593.6) + 0.172(1222.8) = 797,096$  sha (cf. 0.91m ha). A 7.5-sha ceiling yields  $4.471 \times 246,600 + 21.533 \times 38,700 = 1,935,876$  ha [cf. 3.28m sha]. A 10-sha ceiling yields  $1.971 \times 246,600 + 19.033 \times 38,700 = 1,222,635$  ha [cf. 1.89m sha].
- 39 To estimate households (hh) brought to this support level, with this exemption line, in a self-balancing scheme use: (1) tax yield =  $\Sigma(\text{each taxed hh}) \times (\text{£}5000 - \text{hh income/person}) - \text{tax admin cost}$ ; (2) subvention benefits =  $\Sigma(\text{each receiving hh}) \times (\text{£}300 - \text{hh income/person})$ ; (3) (1) = (2).
- 40 Reformers believe that injustice to land losers (perhaps mitigated by compensation, or because their ownership was due to arbitrary seizure or inheritance) is outweighed by overdue justice meted out to land gainers. Before reform – where income, power and status depend heavily on land access, yet land ownership is very unequal – the landless and near-landless are denied equality of opportunity, not just in the weak sense, non-discrimination, but in the strong sense, a level playing field [Roemer 1997]. Rural 'Big Men' use land control to close options to the competing landless and near-landless, making it more likely that they cannot afford post-primary schooling for their children, or borrow to start a business.
- 41 Horizontal equity implies similar gain for persons of similar affluence, or similar loss for persons in similar need. Vertical equity implies higher losses for the more affluent, or higher gains for the needier.
- 42 Because rural power, status and per person income are usually closely correlated with land ownership. A typical result is for Brazil [Assunção 2006]: cross-household multiple regression shows 'a very tight relationship between income and land, statistically significant at 1% [and strong correlations also] between land and other components of household wealth [durable consumer goods and housing infrastructure]'.
- 43 The numbers of hectares, cut-off points, and group borders are merely examples; in any particular country, actual numbers (such that land distributed equals land obtained, with smooth graduation) depend on pre-reform land distribution.
- 44 For this to be possible, ceilings on owned land need to be either exclusive of, or not effectively enforced on, land rented out; and tenancy laws, to the extent they are enforced, must leave rentals sufficiently profitable.
- 45 On this effect in Taiwan, see Griffin *et al.* [2001]. On the contrast between the price-cutting effect of CLR and the price-raising effect of new-wave land reform in the Philippines, see de Guzman *et al.* [2004].
- 46 'In West Bengal, ceiling laws 'had no direct impact on the village of Rajoor because no land was declared as surplus and vested with the government for redistribution. [However,] large joint families, in an attempt to evade the land ceilings, separated into smaller proprietary units [, sowing] the seeds' of smaller and more equal farms and also reducing economic and political dominance of big landowners [Chattopadhyay 1992].

#### 4 Tenurialism: tenancy reform, titling, patrilialisation

- 1 This replaced a form of CLR (USSR 1917–23, China 1948–53) in which many households acquired small farms, often by land invasions, and revolutionary governments legalised this. This sequence also appeared in several other collectivising countries. See chapter 5(a).
- 2 Collectives in the USSR, and the commune-brigade system in China, were substantially centralised. They had to respond to orders for land use, technology, labour practices, product-mix, and deliveries, usually at extractive prices. Such collectives are sometimes likened to voluntary co-operatives or even traditional communal tenure systems, but especially in the USSR were more like State farms, with a little more freedom and much less security of payment (State farms offered a guaranteed wage, and were usually preferred to collectives by workers with a choice).
- 3 A *sharecropper*, to farm a plot, usually pays 25–75 per cent of harvest, typically half in Asia and Latin America. Sharecroppers sometimes receive inputs, tools or seed from the landlord; cost-share rules vary. A *share labourer* undertakes some job at a key stage of farming (usually harvest) in return for perhaps 5–30 per cent of crop. A *labour tenant* farms a (typically small) plot in return for – and revocable in default of – work done, typically for a big owner-farmer of a Latin American *hacienda*.
- 4 Many tenancies are intermediate – undertaken both for adjustment and for size transfer. Arguments below are unaffected by this complication.
- 5 In India [Singh 1990], West Java [Yokoyama 1995], China (where allowed), Ethiopia and Uganda [Carter 2003], tenancy is equalising. It shifts land rights, net, from richer/more landed to poorer or less landed persons, enabling the latter to earn from management and enterprise, not just labour. In Pakistan, Honduras, Mexico and Nicaragua, this shift happens only where credit markets are accessible to the poor [Carter 2003].
- 6 This helps the poor even – perhaps most – where the landowner is strongest and richest relative to them. In Latin America many landless households, working for plantation-owners and with no alternative jobs, also rent from them tiny plots, often 0.1–0.2 ha, for intensive farming. Such tenancy – often ‘labour tenancy’, paid for by work, not cash or crop-share – enables these workers to earn, not only from labour, but also from skills as farm managers. Also, rented land strengthens their bargaining position when they do sell labour, because they have an alternative (though modest) income source if they do not like the terms offered for hired work.
- 7 In East Asia and West Bengal, effective ceilings improved outcomes of tenancy reduction laws by impeding eviction (for personal cultivation) by big landowners. However, other issues apart, tenancy reduction laws, aimed at size-transfer tenancy, can unintentionally impede adjustment tenancy.
- 8 Some pro-poor laws distort incentives *to the poor* in ways that reduce impact, e.g. cash benefits conditional on low income *may* lead people to work and earn less. However, incentives to the poor from tenancy rebalancing are usually favourable. Such laws raise tenants’ share of farm income. Apart from raising their income given land area and labour input, that incentivises them to raise labour input, further boosting income.
- 9 Hirschman [1991] and Cornford [1908] deconstruct general claims that reforms are ‘perverse’, futile or premature, or jeopardise past gains.
- 10 Simplistic economics suggests that discrimination cannot last, because employers will prefer blacks or women in a free market as they offer the same work for less pay. However, employers are often willing to pay ‘costs of discrimination’ [Becker 1961]. Similarly, landlords, not only in developing countries, often discriminate against would-be tenants of the ‘wrong’ gender, ethnic group, tribe or caste. This is too seldom addressed in tenancy rebalancing laws, let alone in their implementation.

- 11 The case that rebalancing creates net gain for the poor, because gains to sitting and staying tenants outweigh losses to evicted and potential tenants, is analogous to the case for a minimum wage-rate despite lost employment. The loss to poor people who lose, or fail to get, jobs (tenancies) may be outweighed by the gain to poor people who keep them on better terms.
- 12 Some, however, are shifted from plot to plot by the landlord, to reduce their chance to establish rights.
- 13 Landowners are often compensated, fully or partly, for take-over of above-ceiling land in CLR, but not for losses in tenancy reform (partly because it is hard to establish damage, or its extent). Taiwan and South Korea were partial exceptions. Compensation for lost rent (as opposed to lost land) hardly ever comes from aid donors, and hence requires taxes paid, or imposed, by urban élites. These usually guide the reform process. If they are sufficiently worried about rural security to design such compensation and share in its costs, why not opt for CLR instead?
- 14 Bain [1993: 31–32] says that the 3 ha limit in Taiwan in 1953 was on tenanted land retained by a single landlord, not on owned holding size. Yet in 1972 a leading official advocated that ‘limits on the amount of cultivated land *cropped by each farm family* be lifted from 3 ha to 10 ha or totally abandoned’ [*ibid.* 115, my italics]. Though there was formally no *ownership* ceiling, it was unwise or risky to be seen *cultivating* over 3 ha, making landlords unlikely to resume land for personal cultivation. This must have increased the gains to the rural poor from tenancy reform. The combination of a perceived operational ceiling, a legal limit on retained land in tenancy, and tenants’ legal rights to buy land above the ceiling on favourable terms, amounted to the reinforcement of tenancy reforms by ownership ceilings.
- 15 Urbanisation and non-farm growth proceed; but farmwork will be the poor’s mainstay in most developing areas for decades (chapter 7(b) (iii–iv)).
- 16 The counter-reformers in Egypt in the 1990s reversed compulsory tenancy registration enacted in 1953, claiming that this had *reduced* the supply of tenancies [el-Ghonemy 2007] – presumably of those where landlords wanted to stay free to break verbal contracts. Legalising fraud by vendors of anything, including tenancies, encourages sales – but registration encourages *honest* landlords and tenants to transact.
- 17 Landlords, who had used frequent evictions (or the threat) to curtail poor sharecroppers’ claims and rights, now found this harder. Tenancy rebalancing or registration, to work as land reform, required politically organised sharecroppers and credible ceilings. Conversely, after sharecropper registration laws were reversed in the 1990s, frequent sharecropper turnover, often annual evictions, resumed. Probably Egypt’s changing political–institutional climate had long permitted landlords, despite registration, to take land out of tenancy. See el-Ghonemy [2007].
- 18 This discussion omits the causes of tenancy by large, fairly wealthy farm tenants.
- 19 Such tenancy may substitute for consolidation (chapter 6(a)). Much ‘absentee landlordism’ turns out, in small-scale surveys, to be tenancy-mediated exchanges of land over space and time [Ghose 1983: n. 88, 124–25].
- 20 The hire market in draught animals is almost everywhere imperfect and incomplete; there is great reluctance to hire them out, since their use and handling often cannot in practice be supervised.
- 21 Why, then, is much land in rich countries *not* rented to large farms? First, sale markets can *partly* substitute for rental markets. Second, reduced *loan completion* cost to lender and borrower on large farms is partly offset by higher *loan supervision* cost: tenants, even big ones, cannot pledge land as collateral, yet owners, even small ones, can.
- 22 In poor countries the main cost of farm production is the time-cost of family labour (wage foregone or disutility of effort).
- 23 ‘Shirking ... can be prevented in sharecropping with only partial supervision ... sharecropping is the optimum contract [minimising the sum of supervision cost and

- risk premia of the landlord and the tenant]' in many circumstances [Agrawal 1993] – though, for the landlord, reduced labour supervision costs are offset by the need to supervise the division of the harvest.
- 24 Of course returns to work vary greatly over the farming year, but almost always something can productively be done.
  - 25 'Even where sales markets are active ... trades rarely occur across different size classes ... [W]here confidence in property rights is still low, capital markets are imperfect and transaction costs high ... land [sales] markets alone will not ... equalise land ownership distribution [or thereby] overcome the structural difficulties plaguing rural [Latin America]' [Deininger 2003; for further evidence see references therein, and Carter 2003].
  - 26 The effect of restrictions on tenancy in its adjustment roles is less relevant here. These roles advance farming efficiency for rich and poor alike, but seldom much change the distribution of income, power or status.
  - 27 Causality can run both ways: tenancy institutions and laws may affect the time-paths of land scarcity or rural power.
  - 28 Sharecroppers range from 'labour tenants', where each worker at a key stage of farming (usually harvest) gets perhaps 5–30 per cent of crop, to full-scale share tenants typically getting 25–75 per cent.
  - 29 Pure and mixed households may, or may not, also derive income or employment from non-farmwork and/or hired farmwork.
  - 30 For Bangladesh [Hossain 1977: 315; Taslim 1993: 345–51]. Pure-sharecropped farms are usually smaller than pure fixed-rent or pure-owner farms, so we expect output per hectare to be higher in developing agriculture (chapter 2); if it is lower, sharecropping itself may be to blame.
  - 31 'The distributions of percentage differences in crop yields [, labour days and other inputs] per ha between share- and fixed-rent tenancies and between share tenancy and owner farming are bell-shaped with means not significantly different from zero' [Otsuka 1990: 10].
  - 32 However, if Marshallian disincentives are large (e.g. because input cost-sharing involves landlords in high transaction cost), a farmer with both owned and sharecropped land – induced to apply extra inputs by the fact that sharecropping reduces overall risk – may well concentrate them on *non*-sharecropped land, to escape Marshallian disincentives. This is analogous to the effect of Indian crop insurance in substantially increasing farmers' inputs to, and outputs of, uninsured, riskier, more profitable crops, and thus typical-year income, even if only less risky crops are insured [Mishra 1996]. Less *total* risk – whether on insured crops (or sharecropped land) or not – increases the farmer's *total* appetite for a riskier but more profitable output mix. Farmers, induced to apply extra inputs by overall risk-reduction due to insurance of less risky crops (or sharecropped land), respond by applying those inputs to riskier crops (or non-sharecropped land), where better return can be obtained by accepting more risk.
  - 33 Bargaining power affects the rental *level* obtainable, both for fixed and crop-share rents, but not the excess for per-hectare sharecrop (over fixed rental). In the long term that excess comprises landlords' (a) interest foregone due to later payment, (b) premium for risk of a bad harvest, (c) extra cost of collecting rent: the harvest must be monitored and weighed, and landlords normally rent sharecropped land in more, and smaller, units.
  - 34 Landless workers can always achieve at least as much risk-reduction, given effort and expected income, by a combination of fixed-rent farming and hired work as by sharecropping [Stiglitz 1974; Newbery 1977]. However, it does not follow that, if such workers prefer sharecropping, they are not motivated by risk. First, assuming unchanged risk, its sharing (via sharecrop, but not fixed rental, on land) motivates higher-profit, higher-risk farming on that land. Second, sharecropping is commoner, relative to fixed rent, in areas and crops with greater climatic and price risk.



- 35 Many villages contain much sharecropping and little fixed rental, or *vice versa*. This may reflect the different make-up of landlords.
- 36 The prevalence of the output half-share is a mystery, though many explanations have been advanced. Other aspects of the sharecrop contract, especially for sharing costs of fertiliser and other inputs, do vary [Cheung 1969].
- 37 In most of Africa, land scarcity is more recent, so that customary restrictions on tenancy are more widespread. Nevertheless, tenancy is emerging fast. For abundant evidence – as for other statements in this paragraph – see [Lastarria-Cornhiel and Melmed-Sanjak 1999], and a fine collection published as this book went to press: S. Holden, K. Otsuka and F. Place (eds), *The Emergence of Land Markets in Africa*, Washington, DC: Resources for the Future Inc., 2009.
- 38 Only 10 per cent of land was ‘directly affected’. So ‘direct [farm] incentive effects [cannot explain] a rise in the acreage devoted to HYV rice varieties from 10% to 66%. [However,] reforms could generate a range of spillover effects to other farms ... through patterns of social learning, changes in local prices or wage rates, or induced changes [due to] the threat of land reforms [e.g.] subdivision of large landowning households and of large farms[, with] productivity [gains] on lands transferred’ [Bardhan and Mookherjee 2006]. Bhaduri [1973] argues that, with unreformed sharecropping, big landlords invest little; it pays them better to use surplus for high-interest loans to sharecroppers. Also, to invest, landlord and sharecropper must agree to share costs and benefits: hard, with power unbalanced and arbitrary eviction feasible [Prosterman and Riedinger 1987: 36–40].
- 39 Individual rights to do *all* these things, for ever (freehold) or fixed periods (leasehold), are just one property-rights régime. In communal tenure, individual untitled users often, only have rights to do *some* of these things (e.g. bequeath), not others (e.g. sell) [Noronha 1985]. States retain ‘eminent domain’, i.e. the right to take land (often with compensation) for public need; often only for public interest; and sometimes for public purpose.
- 40 See [BBC News 2006, MacLeod 2007] on China; [Kazmin 2007, Hauter 2007, *Gulf Times* 2007] on Cambodia.
- 41 This may have happened in West Bengal. In November 2007, workers for the ruling Communist Party of India (Marxist) ‘returned to Nandigram, killing at least six villagers’, apparently to terrify the remainder into accepting eviction to admit a chemicals company [Johnson 2007].
- 42 Just as sharecropping rules tend to adapt [Cheung 1969] or give way to fixed rentals (p. 167) when and where this raises net product.
- 43 Seeking and getting title and ‘allocation of property rights is not random, but possibly related to a household’s wealth and family influence. Comparing outcomes in titled and untitled households, therefore, is not [enough to show] the effect of titling’ [Torche and Spilerman 2006].
- 44 Attributed by J. S. Mill [1862] to Arthur Young, an 18th-century cleric, agriculturist, and (unlike Mill) friend of large estates, not small-scale farming.
- 45 Earlier work in Ghana [Besley 1995] found a positive effect of land security on investment, but dependent on ‘complete markets’: if ill-functioning markets in credit, labour, inputs or products make farm investment unattractive, secure access to land alone will seldom induce it.
- 46 ‘6 per cent of paddy land in Sri Lanka is farmed in ... rotation, like *vesh* system in Pakistan ... Each landholder has a right to a plot in rotation. [If], say, two or more original families held distinct qualities of paddy land, their descendants would allow (1) all of the land to be farmed by one family in a year (Thattumaru), or (2) all land to be rotated over a multi-year cycle so that each descent group farmed each piece of land once (Kattimaru)’ [Heston and Kumar 1983: 208]. On ‘common land ... rotation [permits] equal treatment ... without fragmenting excessively’ and was probably prevalent in the ‘periodic repartition’ of some lands in seventeenth-century Europe [Hayashi 2006].

- 47 Where applicable, this makes IR among crop farms in common tenure more striking, as tests are normally on a one-year or one-season basis.
- 48 A fine discussion of the literature on common property, institutions evolved for its management, conditions for their success, and impact of rising population density remains Ostrom [1990]. See also Axelrod [1984], Leach and Mearns (eds) [1996].
- 49 Though typically over 66% of communal farmland is untitled for all size groups.
- 50 Under the Homestead Act, 1862, each adult in the US west who had built a house at least  $3.6 \times 4.3$  metres and lived there for 5 years could enclose, own and farm up to 65 ha of land around it. Some of this was at the cost of native Americans with only informal title. Such superficially egalitarian, but actually ethnically exclusive, titling echoed much colonial practice. The spirit (though seldom the racism) informs much titling today.
- 51 This implies *not* focusing policy on shifts between stylised tenure types. Cousins and Claassens [2006], drawing mainly on South African experience, argue: 'Where private property dominates and security of tenure is equated with exclusive ownership, but chiefs continue to be a significant political interest group, transferring private ownership to "traditional communities" under the jurisdiction of traditional councils, and without effective mechanisms for downward accountability, threatens rather than secures the land rights of the majority [and] entrenches a version of "custom" that emerged during the colonial era [and] continues to lead to abuses of power'. Formal private or group *title* affects forms of domination; yet traditional tenures often contain securitising elements, on which new law should build, vesting 'land rights in the people who occupy and use land, not in groups or institutions, while recognising that these rights are shared and relative within a variety of nested social units'.
- 52 Further, most 'rural poor on customary land probably [have secure] tenure' [Adams 2004].
- 53 In 2003 owned land averaged 0.77 ha per household for scheduled tribes; 0.72 ha for all; 0.30 ha for scheduled castes. Reflecting more equal land within the scheduled tribe, however (much of it in common tenure), respective proportions owning no, or below 0.04 ha, of land were 34.6, 40.3 and 48.5 per cent [NSSO 2006: 33. A-15].
- 54 In Cambodia, 15 per cent of rural households in the poorest quintile have title; 22 per cent in the next three quintiles; 29 per cent in the richest [Kazmin 2007].
- 55 Hauter has evidence that 'between 1993 and 1999 the Cambodian government sold concessions to more than a third of Cambodia's productive land, mainly to foreign companies engaged in commercial exploitation of forests, mineral resources, agriculture, fisheries and tourism'. Kazmin confirms that 'since 1992 57 companies, many with close connections to the ruling party, have been awarded "economic land concessions" covering nearly 1m ha' and that, though 'under the 2000 land law, farmers who have used land for 5 years peacefully and without dispute have the rights to it ... few poor farmers have undertaken the expensive process of obtaining full title, or are even aware that such a process exists'.
- 56 ' "Landlessness and land-grabbing create serious threats to the social and political stability of Cambodia" [he said in February 2007], vowing to punish any officials involved. But so far his approach has been ad hoc, merely forcing a pair of high-profile officials to relinquish some land' [Kazmin 2007]. *Mutatis mutandis* the same could be said of China and its central authorities [Lipton and Zhang 2008].
- 57 Foley [2006] usefully discusses land-rights issues in the context of post-conflict settlement in Liberia. Further valuable studies of post-conflict land policy, as we go to press, are Putzel [2009], Debroux et al. [2009] on the DR Congo, and Stigall [2009] on Iraq.
- 58 Frequently, however, colonies were seized for reasons unrelated to farming, and colonists did not acquire much farmland. When the colonial powers left India and

- Nigeria, for example, patrilisation of farmland was a minor issue, confined to a few plantations.
- 59 Claims that the seized land belonged to nobody – was ‘terra nullius’ – are sometimes based on failure to ‘see’ shifting cultivation or hunter-gathering as a land use establishing rights of possession, but are more usually simple self-serving [Bennett and Powell 1999, Reynolds 2003]
  - 60 We exclude, as pseudo-patrilisation, the terrible land seizures that ‘ethnic cleansing’ has brought, often all too literally, in its wake. There is no credible pretence that the cleansed are less patrilial, with weaker land rights, than the cleansers. *Lex talionis* by ethnic seizure is not restitution.
  - 61 This can vary greatly within a country. In Namibia, colonisers had annexed 72 per cent of land by 1902, yet only in the mid-1960s was ‘racially structured access to land’ completed [Werner 2003]. In South Africa, patrilisation applies only to land grabbed *after* the 1913 Land Act.
  - 62 ‘Ethnic cleansing’ is pseudo-patrilisation, not land reform. Religious and ethnic victory – not efficiency, equality or poverty reduction – were the motive when Serbs ejected Bosnian and Kosovar Moslems in the 1990s from land long farmed legally, and when the ejections were reversed.
  - 63 Arable land in Namibia [Werner 2003], irrigated land in South Africa and fertile land in Latin America are even ‘whiter’ than farmland overall.
  - 64 Sherbourne [2004] perceptively writes: ‘In their hearts most people know that the land question is about race ... everything else – agricultural output, the treatment of farm workers, poverty reduction, environmental sustainability – is very much secondary. Just imagine how much discussion there would be of land reform if most commercial land was owned by black Namibians. [C]ommunal land reform generate[s] little discussion[.] though most of Namibia’s farmers work in the communal sector.’ Patrilisers may not *aim* to cut poverty, but patrilisation probably does.
  - 65 Extreme cases of the ‘Latin American’ type exist far away, in parts of Australia and North America. Original patrilals were almost wiped out in the eighteenth and nineteenth centuries by disease, land theft, war, and in some cases (e.g. Tasmania) murder. Remaining patrilals were largely urbanised. With bitter irony, that allowed, much later, generous patrilisation of rural land for the few left.
  - 66 Animal disease in parts of Africa, such as Namibia, led colonists, seeking pasture, to expel patrilals from it; their descendants now survive to reclaim patrilal pastures [Werner 2003]. In contrast, Latin American *indigenos* were not pastoralists, and many died of animal-related diseases (to which they lacked immunity) from Europeans who had lived close to herds [Diamond 1997] – another reason why land reform in Africa is much more patril-centred.
  - 67 This was done by various means, ranging from near-slavery to head-taxes on people or cattle, payable only in cash, which compelled peasants to earn money by working for colonist farmers.
  - 68 Services will have been supplied to meet small-farm tenant demand, even if less so than in a non-colonial polity more responsive to their needs.
  - 69 There is no evidence that part-time farming is inefficient or unusual. Small farmers the world over mix ‘subsistence’ and for-sale (commercial) production; neither is less efficient, and both generate more output per hectare, but less per worker, than on large farms. See chapter 2.
  - 70 Especially in skills needed to prepare farm budgets for small farms; the Ministry of Agriculture and Lands has prioritised expertise in law and sociology, cutting and ‘ghettoising’ agricultural research, which has minimal resources or guidance to support small reform beneficiaries.
  - 71 In South Africa a notable such voice was Derek Hanekom, South Africa’s first post-apartheid Minister for Agriculture and Lands.

- 72 This also relevant to whether privatisation of formerly collective and State farms is land reform, if farmland is restituted to ex-owners, rather than redistributed to ex-workers on the farm concerned (chapter 5(b) (iv)(II)). Such restitution is normally not to communal tenure (as often in southern Africa), but to former private owners. It is land reform if these are poor (as in Romania), not if they are wealthy (as in the Czech Republic).
- 73 Bosworth [2003]; Sherbourne [2004]; my italics. See also Aliber [2003] on similar effects in South Africa and Zimbabwe.
- 74 This is a commercial holding, typically of 10–250 ha, within an area where anything from a dozen to a few hundred families are farming perhaps 0.5–5 ha each. The nucleus estate sells the family farms services, often including some or all of: planting materials, extension, research, inputs, processing, transport and marketing. The nucleus estate may also farm commercially on its own account.

## 5 The terrible detour: collectivisation and decollectivisation

- 1 However, despite State or collective *ownership*, many post-reform farmers in Latin America (except Cuba) were free to *produce* as smallish family farms. In Mexico's *ejidos* 'farming is largely carried out on a household basis'. In Peru 'about half the agricultural land in ... collective and State farms was cultivated on an on an individual basis. In Chile and El Salvador the figure was about one-fifth' [Kay 1998].
- 2 East European countries called non-voluntary collectives 'co-operatives' [Lerman 2002]. Despite widespread (though seldom successful) private attempts at voluntary co-operative farm production, State efforts to induce it have failed. The Israeli kibbutz (with big subsidies), after the early period of State-building, largely withered. Tanzania's *ujamaa* experiment, 'at first a voluntary programme ... was made compulsory in 1973 [but] the strategy failed' [Schech and Haggis 2000]. India's declared 1959 policy that every village should have a voluntary co-operative farm proved impossible to implement (note 9).
- 3 In the USSR and ex-Communist Eastern Europe, 'on State farms the State owned all the productive assets and the farm workers were salaried state employees. On collectives ... members owned the productive assets jointly. They provided the labour, and in principle were compensated through the distribution of farm earnings ... [However, even if] termed collectives or cooperatives ... [t]he main [co-operative] principle of voluntary association for mutual benefit was abandoned during Stalin's forced collectivisation campaign in 1929–30. Instead, the creation of all collective and cooperative farms often relied on coercion' [Lerman *et al.* 2002].
- 4 This is a paradox. In the CIS and much of Eastern Europe, farming engaged a much smaller share of workers than was normal or efficient at their levels of average income [Eastwood *et al.* 2006], due to (a) incentives under collectivisation, and associated (b) over-large farms and (c) excessive labour-displacing machinery. Yet Communist governments – having initially taxed collective and State farms almost to exhaustion – later subsidised them and their successors to retain members and employees, and in most of the region such policies survive the collapse of Communism (pp. 214, 221). Hence the paradox: the share of farm employment is too *low* given these nations' income levels, abundant labour and scarce savings; yet too *high* given the farms' size, equipment, and capital-intensity.
- 5 Farm area, and share in collective farms *only*, around 1970 was: China 112m ha (96 per cent); USSR 223m ha (49 per cent, with most of the rest in State farms); Tanzania 8m ha (15 per cent); Mexico 24m ha (43 per cent) [McHenry 1976]. In Mexico, however, some 100m ha had been reformed into semi-collective *ejidos* and agrarian communities in 1910–80 (mostly in 1924–40), but by 1980 were largely farmed by individual *ejido* households [Quintana *et al.* 1998]. In Vietnam, 4m ha was in collective holdings in 1987 [Ravallion and van de Walle 2001]. In European

communist countries around 1980–90, ‘60,000 [State and collective] farms controlled 95% of [crop]land ... [averaging] 2000–3000 ha ... and 300–500 workers’ [Lerman *et al.* 2002]. In China in 1970–75, ‘the average commune included about 5000 households [and] 4000 ha of cultivated land’, so the few communes farmed at that level were as big as in the USSR, though more labour-intensive; the more ‘typical commune consisted of 10–15 production brigades ... subdivided into about ten [farming] teams of 20–30 households each’, i.e. 15–25 ha per team. In Latin America’s large reform sector, Kay [1998] shows the dominance of collectivisation in land reforms by both Socialist and Christian Democrat régimes, with little land ‘distributed directly as private peasant family farms’ in Chile (1964–73), Mexico, Nicaragua (1979–90), Peru (1969–80), or el Salvador (1980–89). In Ethiopia, collectivisation was public policy but went slowly, yet the sector diverted disproportionate commercial inputs from peasants; ‘the government [gave] producers’ cooperatives ... priority for credits, fertilizers, improved seed, and ... consumer items and building material ... [When peasants proved unwilling to join co-operatives] the Derg converted [most] of the estimated 75,000 ha of large commercial farms ... into state farms. By 1987/88 there were about 216,000 ha of state farmland [or] 3.3% [of] cultivated area [, planned to] expand to 468,000 ha by 1994, [or] 6.4% of the cultivated land ... State farms received ... from 1982 to 1990 ... 43% of [public farm] investment [and in] 1983 ... 76% of ... chemical fertilizers, 95% of the improved seeds, and 81% of agricultural credit [, and] between 1982/83 and 1985/86 ... more than 90 million birr in direct subsidies, [yet] accounted for only 6% of [farm] output in 1987 (although meeting 65% of urban needs)’ [Ofcansky and Berry 1991].

6 Colonial powers under nationalist challenge, hoping to maintain rule with concessions, created or strengthened indigenous claims to ‘native reserves’ (thereby angering settlers). The USSR in 1953–90 moved from extracting surplus and subsidising farm machinery to subsidising collective employment. China in 1962–66 decentralised land ownership from communes to small teams and replaced equal distribution by workpoints.

7 Since 1994, land reform has been undermined in South Africa by quasi-collective group-farm approaches; only the exception, private distribution of land to former ‘labour tenants’, was relatively successful [Valente 2008; Aliber 2003]. Many families have abandoned the group farms. That is also true of Venezuela, after the post-2001 redistribution of 3–4m ha of *latifundio* land, much of it to ‘state-financed production cooperatives’ or State farms (‘social production units’) [Suggett 2008; cf. Romero 2007]. Venezuela’s post-reform land trajectory is due to reform *and* non-reform factors (disruption after land invasions; lack of farm plans; an oil boom fuelling both ‘Dutch disease’ and cheap and unrepaid credit; state-induced shifts from sugar to staples production) [somewhat politicised accounts are Malapanis 2004, Cordoba 2007; better is Carroll 2008]. Venezuela and South Africa each needed to get away from one of the world’s most unequal land distributions. Both were unwise to repeat, yet again, the often-failed effort to steer farm production towards cooperative management, for which it is unsuited.

8 For MST ‘agriculture should be ... based on family production’ but with ‘co-operative relations ... to meet the reality of each settlement and community of producers. While [stressing] division of labour, the socialisation of benefits should be the primary objective’. Hence ‘settlement is organized on a cooperative basis ... with families sharing resources’ [Domingos 2003]. MST has ‘established 49 cooperatives, employing 20,000 families, for meat, dairy and ... agricultural products ... Typical of an MST settlement, the Porto Alegre settlement is organized on a cooperative basis with families sharing resources. The farm work is shared’ [Frank 2002].

9 This applies also to many colonisers! The myth of return to an *alternative* or *remote* past with fair and efficient farming, often co-operative, also underpinned much advocacy of colonisation, collectivisation, *and their reversals*. On the

- Populist view of the Russian village-farm society (*obshchina*) as a stepping-stone to collectives, see [Radkey 1958: 8–10]. On peasants' own astute views of the near past, and myths of the remote past, in Russia in 1860–1917, see [Lewin 1968: 57]. On the myth of low inequality in pre-colonial India, see Kumar [1992]. A view of return to this, and of traditional farm co-operation in the 'Hindu joint family', probably underlay the India's ruling Congress Party's 1958 Nagpur Resolution proposing voluntary co-operative joint farming; yet traditional joint-family farming had never exceeded 10–15 per cent of Indian farmland, confined largely to the better off [Shah 1998]. On 'Merrie Africa' see [Throup 1987; Seekings 2003] and compare [Ranger 1983]. Here, the tale of an equal and co-operative past was usually false, and where half-true, irrelevant. 'In creating nucleated settlements ... to depend for the bulk of their production on collective farming, Tanzania was not simply extending "traditional" procedures in new directions [but] creating completely novel forms of social and economic organisation ... totally strange and alien to the vast majority' [Kitching 1982, cited in Schech and Haggis 2000: 49].
- 10 The male chauvinism is timebound and probably unintended. Citations: the 'Canoe Song' (Paul Robeson) in the 1936 film *Sanders of the River*; and Herbert Read, *Song for the Spanish Anarchists* (1937). Note also that, when J. S. Mill in old age (and for once without evidence) reversed his long denial of agricultural scale economies, his support shifted from equal family farms to voluntary co-operatives [Hollander 1985].
  - 11 To make extraction easier (by imposed party/State farm management) and because leaders believed in scale economies in peasant agriculture.
  - 12 'Before [1914] half [Russia's] grain production [and over 70% of grain for the market] had come from the big private estates and the kulak farms ... The big estates, and some [kulak] land, passed [to] the peasants; but by 1928 [they were] no longer 16m, but 25–26m ... [T]he peasantry who had formerly produced 50% of the grain and consumed 60% of that, was now producing 85% (excluding the kulaks) but consuming 80% of what he produced ... By 1926–27 State procurements were below half pre-war levels' [Lewin 1968: 175–76].
  - 13 In 1945 a Communist-led coalition in Romania undertook radical CLR to obtain peasant support, alongside 'a government strategy to convince the peasants that their possession was definitive; all mention of collectivisation was avoided ... of 1.44m ha expropriated from 143,000 owners ... by April 1948 917,777 families had received a total of 1.11m ha ... The peasants did not long enjoy their new properties, as collectivisation was launched in 1949' [Hitchens 2008]. Some incoming communist régimes in Eastern Europe in the late 1940s began enforcing collectivisation without earlier classic reform. The régimes had less need for peasant backing due to (a) a smaller proportion of peasants, (b) the USSR's military power.
  - 14 'The government provided ... inducements to producers' cooperatives, including priority for credits, fertilizers, improved seed, and access to consumer items and building materials. According to the ten-year plan, more than half of the country's cultivated land would be organized into producers' cooperatives by 1994 ... Farmers [resisted this] as a prelude to the destruction of their family farms. By 1985/86 there were only 2,323 producers' cooperatives, of which only 255 were registered ... [A]fter the 1975 land reform, the Derg converted [most of the] 75,000ha of large commercial farms ... into state farms [and later] expanded their size ... In 1987/88 ... 216,000 ha of state farmland [comprised] 3.3% of total cultivated area'. Over 600,000 people had been moved to three resettlement areas and over 13m villageised by 1989' [Ofcansky and Berry 1991: 184].
  - 15 In Tanzania and elsewhere, prodding towards collective farming was a major motive for much villageisation – though some colonisers had been as keen on the latter as collectivisers, partly for similar reasons (cheaper service provision, control [Scott 2002], extraction of food surpluses).

- 16 Because forced surplus extraction, so convenient for the government from big State or collective farms, removed much of whatever incentive remained for them. In 1928–32 the fall in output per hectare-year, as ex-family farmers were corralled into collectives, outweighed the higher proportion of that output that they (by force) marketed, so the value of grain and fuel movements from rural to urban areas fell [Ellman 1975].
- 17 The irrigation, infrastructure and research base created by the Communist state was, however, a precondition for (egalitarian) land decollectivisation to generate a surge in farm output and efficiency in China, Vietnam, and some of formerly Communist Europe and perhaps even the USSR.
- 18 Amartya Sen [1981] further shows that famine seldom follows even severe food production and availability failures – unless governments are insulated, by a repressed and compliant press, from public hunger and protest.
- 19 Kay adds: '[T]he Mexican and ... Bolivian agrarian reforms did redistribute [some] land to indigenous communities [, as did] Peru after a decade of protests and land invasion'; but not much land, to judge by Mexico's Chiapas movement, or Morales's indigene-based election in Bolivia.
- 20 See notes 11–12, 16: output losses in the USSR (and China?) were such that, despite the enforced rising *share* of output urbanised, the *amount* fell.
- 21 'Prior to the 1978 reforms, China ... imposed a compulsory procurement policy, obliging agricultural households to sell ... at government-set prices ... The communes were both government bodies and compulsory cooperatives that implemented state directives' [FAO 1994].
- 22 The woes of collectivisation are much reduced by State *moderation* as in most Latin American cases, or State *weakness* as in Mengistu's Ethiopia, with too little State power, or administrative capacity, to press many of the peasantry into State and collective farms, or to enforce excessive scale, mechanisation, or even extraction on a peasantry that had just acquired land.
- 23 Tauger [2004] gives a sense of the USSR's brutality and rush. Forced removal of *kulaks* from villages permitted the State USSR to corral 60 per cent of remaining peasants into collective farms in 1930–31.
- 24 It is probably just as crude and silly to blame the 'enforcers', morally anaesthetised as they seem to have been, for deliberately using collectivisation to crush enemies by engineering famine for political or ethnic reasons. See Davies and Wheatcroft [2004]; Tauger [2004].
- 25 'Prior to reform, large-scale farming prevailed in ... plantations, haciendas and *estancias*. Governments feared that subdividing [into] family farms might lead to a loss of economies of scale, reduce foreign exchange earnings ... impair technological improvements, limit the number of beneficiaries and reproduce the problems of the *minifundia*. Such myths arose partly because, relying on inaccurate censuses, 'policy-makers ... greatly underestimated the relative importance of peasant farming, such as sharecropping and labour-service tenancies, *within* large landed estates'. But the sense that collectives 'allowed more direct government control over production and ... marketing' also played its part [Kay 1998].
- 26 Parents, like farmers, *do* usually choose to benefit from joint work in some activities through a tiny co-operative with ready, low-cost mutual observation and, with luck, trust: the nuclear, or rarely the joint or extended, family. Idealistic efforts to secure and induce larger-than-chosen co-operative units (collective child-rearing) in some early voluntary co-operatives in the USSR, and in Israeli *kibbutzim*, hardly ever lasted long.
- 27 The conditions are: production activities reward collective action – perhaps even easy oversight, ownership, work, production or management – to the extent that products and techniques have low requirements for trust, and low penalties on those who trust wrongly. Meeting *community* conditions that enhance trust – reasonable equality, cohesion, face-to-faceness and mutual knowledge – helps too; but it

- is a golden-age myth that such conditions are met by most agro-rural communities (often fast-changing, unequal and/or faction-ridden) or post-collectivisation arrangements (where, even if fairly equal, State or collective farmers face State, party, or management with mutual distrust and attempted exploitation).
- 28 Several papers in Thiesenhusen (ed.) [1989] show that, after decollectivisation in Latin America, private farmers chose to continue joint operation of several off-farm activities, and small parts of farming, where advantages to scale exceeded costs of collective action.
  - 29 FAO [1994] points out that China's commune system 'achieved most of the goals for which it was established. The communes constructed and operated rural infrastructure (irrigation facilities, transportation networks, etc.), organized and managed economic and social welfare services (including health care and education), and maintained food self-sufficiency for the rural sector'. Outside farming, this is fair. But 'food self-sufficiency' strikes a raw nerve. It meant cuts in the food surplus for the cities, and in 1958–62 reduction of rural living standards to famine levels.
  - 30 This may help explain the tendency of governments, concerned about employment and rural unrest, to subsidise employment on such farms.
  - 31 Each farmer may refuse to contribute to management costs of (say) an irrigation co-operative, for fear that other members will free-ride, raising his own cost: the contributors' dilemma [Olson 1982]. Co-operative outcomes may also be frustrated in prisoner's dilemma situations – e.g. each farmer may overgraze the commons – if that situation (or 'game') is unlikely to be repeated in similar form, so that a tit-for-tat cooperative equilibrium [Axelrod 1984] does not emerge. In such cases, co-operatives benefit all, but can be imposed only externally. There is then a case for seeking 'agreement to enforcement', perhaps by subsidies, to *some* sorts of co-operative.
  - 32 For illustrations, see Thiesenhusen (ed.) [1989: 497] on the *ejidos* of Atencingo, Mexico; Powelson and Stock [1987: 241]; Howard [1988: 5–14]; Dorner [1992: 37, 41]; Forster, [1992: 575] on China; FAO [1991: 20] on Nicaragua; and Zevallos [1989: 50] on Ecuador.
  - 33 Yugoslavia pioneered decollectivisation in 1953 [Samary 1998]; only from 1970 did vast areas and populations in dozens of countries follow.
  - 34 Only Laos and Poland kept most farmland in private smallholdings, and Yugoslavia reverted to these after 1953.
  - 35 South African land reform in 1994–2004 was shot through – and shot to pieces – by collectivist approaches and illusions (p. 364, note 7).
  - 36 94 per cent of China's teams had moved to the Household Responsibility System by end-1983 [Lin 1987], with cropped area of 95m ha [FFTC-ACP 2006: Table 3]. Another estimate for end-1983 is 90m ha: '200 million family farms [adopted] HRS', average size 0.45 ha [FAO 1994].
  - 37 This extended and legitimised '*de facto* decollectivisation' of many assets in 1982–83 after removal of the Khmer Rouge [World Bank 2007: 28].
  - 38 This excludes issuance of shares without corresponding plots, where there is little real change from the collective corporate form (section (b) (iii) (III)).
  - 39 This was mainly land abandoned by departing French *colons*, taken over for State or collective farms from the early 1970s. In 1980–84, 700,000 ha were decollectivised as 5 ha holdings, and in 1987 a further 2.4m ha as larger holdings, averaging 80 ha [Metz 1994]. 3139 state farming enterprises went to 5677 individuals and 22,356 groups and 273,000 ha to 66,945 beneficiaries [FAO 1991].
  - 40 *Ejido* (farm community) farmers got rights to rent or sell their parcels, but had mostly been farming them individually (and often renting out) before Salinas's 1992 privatisation. Sales moved slowly afterwards, save in a few areas with peri-urban speculation. Mexico's decollectivisation was no sharp shock, good or bad; in 1985–2004 agriculture experienced 'gradual change' [Taylor *et al.* 2005: 112, 105; cf. Gil-Garcia 1998].



- 41 Under Frei and Allende '43% of Chile's agricultural land [in irrigated-land equivalents or basic irrigated ha, i.e. 0.90m basic irrigated ha] was ... expropriated ... [or, measured in physical ha, 52% or 10.00m ha]'. By 1972 this was collectivised. By 1979, after Pinochet's decollectivisation, only 10.9% of this land by area (10.7% by basic irrigated ha) remained with co-operatives – and a further 17.5% (9.5% by basic irrigated ha) with non-profit institutions [Jarvis 1986]. Even if all were collective and there was no later decollectivisation, (100–110.9–17.5) per cent, i.e. 71.6 per cent, of the 10m ha collectivised by 1972 was decollectivised.
- 42 Peru collectivised 8m ha by 1980 (about 1.5m ha arable and 6.5m ha pasture). Since 1981, about 80 per cent of arable (1.2m ha) and 20 per cent of pasture (1.3m ha) have been decollectivised (the rest of pasture reverted to communal tenure) [Figueroa 1977: Table 7, and pers. comm. 2008].
- 43 In 2002, 'collective, cooperative, and corporate forms of farm organisation [still ran] nearly 40% of [farm] land in CEE and 80% in the CIS ... Most large CIS farms continue to operate like the old collectives ... The corporate farms in CEE ... are substantially smaller than the original collectives ... and are beginning to show greater sensitivity to market signals ... The CEE corporate farms [are] developing the basic attributes of market-oriented operations that are still not apparent for most large farms in the CIS' [Lerman *et al.* 2002]. Such tendencies continued in 2002–08.
- 44 Many [e.g. Lerman *et al.* 2002] claim that full privatisation increases investment, compared even with long-lease usufruct rights. The evidence is mixed, even within the same country [on Vietnam see Ngo 2004]. Rural surveys in China, Ukraine and Ethiopia show most decollectivised farmers preferring 20–40-year leases (from State or community) to full ownership, which, they often fear, will lead to land concentration.
- 45 These exclude State policies to make farmers pay the full marginal social cost of their actions; e.g. liberalisation usually involves moving water charges closer to true marginal cost. However, farmers' choice of crops, and of water use per crop, often cuts (or raises) the value of water to farmers downstream. It is liberalisation, not the reverse, if governments raise/tax (or cut/subsidise) upstream users' water charge to reflect this.
- 46 Privately undersupplied due to weak incentive are (i) *Public goods*, e.g. signals from a lighthouse (Adam Smith's example): non-rivalrous (a user does not divert the good from another user) and non-price-excludable (users cannot feasibly be charged for use). (ii) *Merit goods*, e.g. education, widely judged to create over-riding social benefit if provided to all, even those who (or whose parents) cannot or will not pay. (iii) Goods with *positive externalities* (e.g. maintaining my bit of an irrigation canal, to reduce seepage and increase flow downstream to you).
- 47 In *Kyrgyzstan* the 1994 land reform cut State and collective farms 'from 504 to 54. Their dismantling led to the progressive degradation of rural infrastructure. The government saw the empowerment of local institutions as key to fill the void without establishing costly centralized social systems' [World Bank 2004]. In *Mongolia*, collectives were not replaced with revived community institutions to limit pastoral land degradation. Also there was 'an institutional vacuum [for] livestock and livestock product marketing, regulation of access to seasonally-specific pastures, and the organisation of transport for making nomadic moves' [Unurborgil 2001]. In the *Baltic republics* State and 'collective farm directors [ran] rural institutions, rather than just [farms, including] ... processing and social services ... Collective farm workers would draw on the assets and tradable inputs supplied to the collective farms (through formal, informal and illegal means) for use on their individual plots [, and] on the social services provided by the collective farms ... [Their] low output per employee was [partly because] up to 30% of employees [worked] ... in kindergartens, schools, village halls and restaurants run

- by the collective farm. [Such] redistribution ... financed much ... rural infrastructure (village halls, piped water etc.) ... but made agricultur[e] appear more inefficient as critics drew attention to low profitability' [Gorton and White 2002].
- 48 'Many [State and collective farms] performed important social functions, and *viable local governments to take ... over* emerged only slowly. Second, establishing infrastructure and supporting institutions [for] smooth operation of other markets needs time' [Deininger 2003, my italics].
- 49 Weak and deteriorating 'enabling' State action (*viz.* agricultural support and rural social services) probably explains why, despite productive and clearly pro-poor distributive decollectivisation, farmers in Azerbaijan perceived worse trends, and no higher levels, of well-being than did farmers in Moldova, where decollectivisation had been less pro-poor (though also efficiency-increasing) [Dudwick *et al.* 2005: 33–35]. On the poverty impact of quick disengagement from providing public and merit goods by corporate farms in the Baltic states, see Alanen [2004]: 48–50.
- 50 Public FRIS – needed as collective/State farms faded out – is too often left till land privatisation exposes poorer farmers' lack of it.
- 51 'The reform framework called for eliminating central controls, liberalizing prices, and introducing hard budget constraints [and] shifting from collective to individual [and] corporate farms and downsizing farms in line with the experience of market economies. The abolition of collective agriculture was to be *accompanied* by the privatisation of land rights, which *according to Western thinking* implies transferable property rights and functioning land markets. [Land and] all other movable and immovable [farm] property had to be privatised *as part of* the transfer of all factors of production from collective to individual responsibility ... to *change the entire system* of producer incentives to achieve a more efficient and ... competitive sector. Despite far-reaching commonalities imposed ... by the communist régimes, the agriculture sectors in CEE and the CIS are following divergent market reform paths ... associated both with differences in the policies adopted and in the specifics of implementation stemming from cultural, social, and political differences that persisted throughout the Soviet era' [Lerman *et al.* 2002, my italics].
- 52 Lerman [2002] states the position (not vastly changed today) in the former Soviet Union (CIS) and CEE. Farmland 'remains largely state owned only in Belarus and parts of Central Asia. Private ownership, however, is not synonymous with the right to transfer ... The 10 CEE countries and the 4 smaller CIS countries (Armenia, Azerbaijan, Georgia, and Moldova) have no legal barriers to land transactions ... Russia and Ukraine, [with most] of the region's farmland, legally recognise private land ownership, but the buying and selling of land is restricted in practice, and land transactions are mainly limited to leasing. The Kyrgyz Republic recognised private land ownership in mid-1998, but immediately imposed a five-year moratorium on land transactions ... Belarus and [most] other Central Asian countries ... do not recognise private land ownership, but ... use rights are transferable in Kazakhstan and Tajikistan, but [not] Belarus, Turkmenistan and Uzbekistan'.
- 53 Where they could choose, most Soviet agriculturists preferred to work and farm on the *sovkhoz* (with its guaranteed employment) rather than on the *kolkhoz* (with its largely cosmetic devolved decisions).
- 54 State and collective agriculture initially (e.g. in the USSR in 1928–35) served the purpose of massive taxation of, and extraction from, farmers, to support growth in the State-owned industrial sector ('primitive socialist accumulation'). From the early 1960s, this was reversed, and State and collective farms in the USSR and Eastern Europe were subsidised to keep excess workers on the land.
- 55 By 1995–97, subsidy cuts had already made government support to farmers negative in Ukraine (–10 per cent of gross farm receipts) and Bulgaria (–33 per cent), but it recovered to +3 and +9 per cent, respectively, by 2003–05. Reversal of subsidy in Romania and tax in China left farmers roughly in balance by 1995–97,

- with net support of 6 and 3 per cent, respectively, but this rose by 2003–05 to 27 and 9 per cent. In Russia, the substantial net farm support of the Soviet era fell, but was still 20 per cent by 1995–97, and 16 per cent by 2003–05 (when the OECD average was 30 per cent) [Bagherzade *et al.* 2007: 7, 19].
- 56 In LAA-type cases this is usually consistent with efficiency and growth, but in East Europe-type cases only sometimes so: see below.
- 57 In 1998, Moldova ‘dissolved former collective farms and distributed land and non-land assets to farm employees in a fair and transparent manner’. By 2002 family farms (typically below 5 ha) operated 58 per cent of land and produced 71 per cent of gross farm output, at over triple the total factor productivity of corporate farms (typically over 200 ha) [Dudwick *et al.* 2005: xi–xiii, 17, 63] – pensioning off the view [Gorton and White 2002] that ‘reforms have created a subsistence-based agricultural sector ... Collective farm managers ... have become the main agents of much-needed land consolidation’.
- 58 These are special cases, late in collectivisation (brutally enforced by Stalin’s repression in 1949); decollectivising after 1990 with large ethnic Russian minorities; and doing so under the eyes of Russian troops. Much land was restituted to ex-owners – not (except in parts of Estonia) big farmers, but recently collectivised smallish farmers [Gorton and White 2002; Davis 1997]. This consistency of restitution with egalitarianism was mixed with ‘Russia-style’ maintenance of some collectives, split into sub-village units. This reflected these countries’ ‘East Europe-style’ case for capitalisation above family scale, and need to compete as EU accession countries [Alanen 2004: 14, 46–47].
- 59 In pre-1998 Moldova, ‘during share [decollectivisation] assets were stripped from large farms and production fell continuously. [Moldova did not] (1) sufficiently encourage large farms to reduce costs of production (i.e. usually ... only “changed the sign on the door”), (2) change the soft budget constraint ... (3) *resolve the barriers to exit from collective or state farms*. Neither farm directors nor collectives [favoured] allowing their employees to leave the farm. Moreover, many details of the process of exit (allocation of land and property shares, methodology for identifying [plots] and division of large farm assets) were worked out only years after the initial decrees authorising farm exit ... A [further] barrier to exit [was] overdue debt by agricultural enterprises ... neither land nor property of [collectives] with unresolved debts could be distributed because of creditor claims’ [Dudwick *et al.* 2005: 16–17, my italics].
- 60 In 2000, only 11 per cent of farmland in Russia was in private farms (mostly in middle-to-large units), plus 2 per cent in household plots. Comparable figures in Ukraine were 15 per cent (13 per cent in household plots), Belarus 16 per cent (15 per cent in household plots), and Moldova 20 per cent [Giovarelli and Bledsoe 2001].
- 61 ‘By 2002 ... 40% of land ... was in individual farms [averaging 312 ha, but] actual land plots were distributed much more narrowly. Of the households [in the] World Bank farm survey only 37% ... received physical land plots [totalling] on average 49 ha ... About 14% of households [who received land] used at least some ... , while 16% leased [some out] ... 24% left some of the land unused and 43% left at least some ... for someone else to use without payment. These results are consistent with the results of other surveys in Kazakhstan’ [Dudwick *et al.* 2005: 44].
- 62 ‘In Kazakhstan ... scale economies [are] used to justify and support the maintenance of vertically coordinated corporate farms ... far larger than such considerations would merit, many of which operate at a loss. An average corporate farm in Kazakhstan in 2002 was 12,000 ha ... far larger than the largest category [in the USA] (798 ha). Farms of such size would normally be expected to suffer from extreme diseconomies of scale connected with difficulties of governance[, as] seems to be borne out by the profit performance of such farms’ [Dudwick *et al.* 2005: viii].

- 63 Lerman [2002] summarises Aspect 3 in CEE and CIS countries (see note 52 above). Some law, but less on the ground, has changed since.
- 64 Despite some restitution and redistribution, by 2000 in 'Hungary ... collective-style farms [we]re still prevalent' [Giovarelli and Bledsoe 2001].
- 65 Hungary and Romania combined restitution and redistribution [Brooks and Lerman 1994a: 27]. They can reach similar results if, as in Bulgaria [Kopeva *et al.* 1994: 203–4], pre-communist farm ownership had been fairly equal and most rural families under Communism continued to farm on *local* State or collective farms. In Romania, where most ex-farm families had urbanised, restitution is more contentious but still equalising.
- 66 In Bulgaria 'agricultural and macro policies between 1991 and 1998 heavily taxed agriculture after many years of subsidies. Producer support as [a percentage of value added] was –40 in 1991 and was negative each year *until 1998* [Dudwick *et al.* 2005: 4; my italics].
- 67 'Large farms, where they had hard budget constraints, laid off labour, inducing massive outflow of labour from agriculture' in Slovakia (where 'almost all land is used by large farming corporations'), Czech Republic, Hungary and Estonia [Swinnen 1998; cf. Dudwick *et al.* 2005: vi–vii].
- 68 Albania, Romania, Bulgaria, Armenia and Azerbaijan, where most 'state-owned land was distributed to rural residents', and Georgia, where some was, while some 'portion remained in state ownership for lease to larger, market-focused farms' [Giovarelli and Bledsoe 2001].
- 69 Then, 'raising the level of ownership from the team to the brigade remained the ideal' [EACP n.d.].
- 70 See Qiucheng Tan [2000]. Local experiments with HRS date back to 1961, some stopped from the centre [Christensen and Levinson 2002]. In 1978 'the government allowed production teams to experiment with ... payment systems ... A group of farmers in Anhui Province adopted ... the most successful [one. It] divided up the production team's land, assets and quota among households. After fulfilling the quota obligations [plus part] of output or revenue to the production team as a tax ... each household could [use] surplus production as it wished ... At first, the government did not support [this HRS], insisting that the production teams remain [managers and collective owners] of land and assets, [but in 1982 it] allowed the HRS to become the dominant rural institution ... Households established fixed-term land-use contracts with production teams. Initial contracts granted land rights for three to five years; by the late 1980s, contracts were extended to 15 [years and] by 1993 ... 30 years' [FAO 1994].
- 71 A crude rule: collectivist régimes with over 60 per cent of workers in agriculture distort it by price repression; those with under 20 per cent, by subsidy. So do individualist régimes, but leaving the freedom to evade or exit. That cuts economic harm somewhat, and oppression and misery more.
- 72 Economic actives, percentage in agriculture, nearest *available* date to start of transition (unless otherwise stated, *c.* 1990 but *c.* 2000 for CIS): Albania 54 per cent; Algeria 26; Armenia 13; Azerbaijan 27; Belarus 13; Bulgaria 13; Cambodia 74; Chile 21 (1979); China 74 (1980); Czech Republic 8 (2000); Estonia 11; Ethiopia 89; Hungary 15; Georgia 20; Kazakhstan 18; Kyrgyz Republic 26; Laos 78; Latvia 12; Lithuania 12; Mexico 28; Moldova 23; Mongolia 32; Romania 24; Russia 10; Tajikistan 34; Turkmenistan 33; Ukraine 14; Uzbekistan 28; Vietnam 71 per cent [FAO 2007: 2/1, Table A3].
- 73 Chinese income distribution worsened *after* the agricultural phase of liberalisation, due partly to widening regional disparities [Lipton and Zhang 2009].
- 74 The share of land in holdings below 5 basic irrigated ha rose more modestly, from 9.7 per cent in 1965 to 14.0 per cent in 1979. Tax and price changes, and other non-land-reform issues, also affected these numbers [Jarvis 1986]. However, the

- Frei–Allende collectivisations and the Pinochet decollectivisation, together, greatly raised the share of land with poorer groups. Reduced farm size inequality must also have raised demand for their labour.
- 75 This is due to policy biases, not the land market, which is essential, not just for the 'neoliberal paradigm ... to [create] ... large-scale capitalist productive structure [but also for] alternative land reforms [to] favour a smallholding structure ... related to the factors of production ... The land market can answer to values that have deep cultural roots [within] a land reform strategy [, which] could be designed from the bottom to the top and consider the diversity of the rural communities' [Quintana *et al.* 1998]. Were Mexico's land market *not* distorted by institutional and price biases towards large farmers, high rural labour/capital ratios would lead *ex-ajidatarios* to farm, and rent in, not rent out as is increasingly the case.
- 76 This was one aim of enforced surplus extraction under collectivisation in the USSR, China and elsewhere, but surpluses in fact did not rise [e.g. Ellman 1975], partly because collectivism and extraction, via misincentives and inefficiencies, depressed total factor productivity in agriculture.
- 77 This choice applies not only to decollectivisation, but also to patrilisation, and to other claimed land reforms that do not, by their nature, specify the group of land gainers (such as the landless and land-poor with classical reform, or sitting tenants with tenancy reform).
- 78 State rights may then be substantial, or may be no more than justiciable powers to purchase and use for proven public need, 'eminent domain'.
- 79 From 0.36 ha in 1990 to 0.53 ha in 1993 in the Ukraine, and at similar pace to 0.28 ha in Russia, where they provided 25–50 per cent of income for farm employees [Brooks and Lerman 1994; Lerman *et al.* 1994]. Many commentators see the 25–50 ha (or larger) private farm as the competitive standard-bearer, dismissing household plots as not serious – for subsistence, not the market. Is subsisting bad? Household plots probably kept hundreds of thousands alive in the 1990s, e.g. in the Ukraine's harsh inflationary transition, and in Armenia, Azerbaijan, Moldova, Georgia and Tajikistan during unrest. Such plots' contribution to income and output, before and after Communism, far exceeded their share in land or inputs.
- 80 A 2002 survey in an advanced area showed the largest farms (mixed rice and vegetables) averaging 0.6 ha [van den Berg *et al.* 2007]. In 1996–2006, farms' share of rural labour fell only from 76 to 71 per cent [Thaindian News 2008], confirming that land remains in tiny labour-intensive farms.
- 81 Despite a steady downtrend in staples prices in 1960–2006, there were periods of sharp price rises, e.g. in 1971–74 – and from April 2006 to April 2008 almost a doubling, as dearer oil and gas (and therefore nitrogenous fertilisers) combined with an upsurge in Asian demand for meat and dairy products; these need three to eight times as much grain per human calorie, as does direct human consumption of cereals.
- 82 Allina-Pisano [2008] shows how local authorities in the Russian and Ukrainian black-earth areas in 1989–2005 helped managers of collective farms to cut members' few rights, behind a façade of share privatisation. She likens the pseudo-decollectivised countryside to the 'Potemkin villages' allegedly prepared by Czar Catherine II's minister, Potemkin, in 1787 to mislead her that the rural Crimea was thriving.
- 83 Swinnen [2006, my italics] illuminates pseudo-privatised large farms' corporate power in north Kazakhstan: 'In a very tight capital market [they] control liquid financial resources [enabling] them to farm when [others lack] assured access to *inputs* ... Their vertical ownership ... allows them to purchase inputs at the source (e.g. the refinery for fuel) and to avoid barter terms. [As for *outputs* their greatest difference from smaller farms is the latter's] difficulties ... in marketing their output. [The huge farms enjoy] *bargaining power with the (local) authorities*

- [oblasts], which continue to [intervene] in agricultural commodity markets ... [This is] open to abuse, with favoured (large) operators allowed to export grain to neighbouring oblasts or to Russia while smaller producers are prohibited ... The continued dominance of the [grain] seed industry based on state farm production places farms under the control of the local authorities which continue to determine [movement] of seed grains ... Most farms continue to depend on the local authorities to supply [and finance] key inputs [by] guarantees [of] seed and fuel ... on a barter basis against the season's production. *The increased size and financial wealth of the large, integrated, grain companies protects them against these state interventions.*'
- 84 Evidence is summarised in Nagayets [2005] and Eastwood *et al.* [2009].
- 85 In Russia 'the Orel Niva holding ... controls 337,000 ha and employs 16,000 workers' [Swinnen 2006]. Despite some devolution to 102 large farms, efficient co-ordination [Kaldor 1934] of such a locally specific practice as farming ensures scale inefficiencies over such a vast space. See note 62 for similar hugeness in Kazakhstan.
- 86 Between 2003 and 2005, average size of 'private (family) farms' rose 5.6 per cent, from 48.3 to 51.1 ha, while that of 'economic organisations' (corporate, normally ex-collective/State, farms) fell 25.2 per cent, from 526.8 to 394.8 ha [Hubbard *et al.* 2007]. (In England farms average about 50 ha.)
- 87 On the links between such views and Fascism, see Sciamia [1995].
- 88 Ukrainian household plots average 1.7 ha, occupy a third of farmland, and 'on average sell only 20% of their output [but are not] pure subsistence operations: nearly two-thirds ... report farm sales and 10% sell more than half their output ... Household plots are in fact semi-commercial farms' [Lerman *et al.* 2007]. Why should stigma attach to consuming some of one's product, avoiding transport, sale and purchase cost?
- 89 Though among 789 Polish farms in 2000 the average score for 'technical efficiency' fell from 0.41 for the 28 smallest farms surveyed (0–1 ha) to 0.19 for the 248 7–10 ha farms, it then rose with scale, reaching 0.43 for the 11 60–100 ha farms and 0.62 for the six farms over 100 ha [Lerman 2002] (though the latter two small sub-samples discourage strong inference). This is not a result of decollectivisation: in Poland, exceptionally, most land, and a big majority of smallholdings, stayed private even under communism. Latruffe *et al.* [2002] confirm economies of scale for both livestock and crop farms, attributing them to the Polish pensions system's incentives to farm small holdings, whether economic or not.
- 90 Sample size in Bulgaria was only 57, less than in the other three countries, and (as in Azerbaijan and Georgia) contained no farms below 5 ha; in Moldova the 133 sampled farms below 5 ha (out of 200 total) had over double the TFP of farms in any of the six larger size-groups.
- 91 Lerman and Sutton [2006] confirm 'that small individual farms in Moldova are more productive and more efficient than large corporate farms. [A] similar result has been obtained ... in Russia [Uzun 2005] ... Policies encouraging a shift from large corporate farms to smaller individual farms ... can be expected to [improve] Moldovan agriculture and the economy ... The government ... should abandon its *inherited preference* [my italics] for large-scale corporate farms and concentrate on policies to improve the operating conditions for small individual farms. At the very least, the government should ensure a level playing field ... and desist from biasing its policies in favor of large farms'.
- 92 In the Ukraine and Belarus, Lerman [2006] shows greater efficiency on restructured farms, but warns that it need not be 'an outcome of restructuring: [they] may have performed better also under the old régime [such] farms have a greater incentive and a higher tendency to restructure'.
- 93 Such 'household plots' gained land in most decollectivising countries, even if otherwise following a large-farm path – and provided shares of farm output far above their shares of land. They were instrumental in preserving household food

- security, perhaps preventing famine as incomes fell in the difficult early years after the collapse of communism (e.g. in the Ukraine) and during hostilities (e.g. in Azerbaijan and Armenia).
- 94 Moldova and the Ukraine, after prolonged share (pseudo-)decollectivisation, switched to direct distribution, partly to large farms but partly, redistributively, to ex-State/collective farmers. Unlike the Baltic States, 'no notion of a preferable inter-war smallholder idyll could be invoked and in [Moldova] there was a desire for a more consensual reorganisation against a back drop of "low-level" civil war' [Gorton and White 2002].
  - 95 85 per cent of land in Romania, and most in Bulgaria, had been collective and was restituted to members, many of them ex-owners and descendants who had stayed in local farming. State land was privatised by sales, leases and concessions; this is still incomplete in Romania [Bagherzade *et al.* 2007].
  - 96 Albania mixed redistribution based on family size with restitution to *local* ex-owners [Giovarelli and Bledsoe 2001]. Village collective land in 1991, and State land in 1992, 'graded on the basis of irrigation, slope, and quality' [Allison 1997], was allocated to families proportionately to size. By mid-1995, 365,000 families had received 426,000 ha of ex-collective and 101,000 ha of ex-State farmland: about 1 ha each, on average in four plots. Some 106,000 ha remained to be distributed. Farmland was not 'returned to those who owned [it] before collectivisation [because] concentrating [it] among heirs [would leave too many landless, and] old boundaries and documentation ... were virtually non-existent' [Allison 1997].
  - 97 Apart from cutting the risk of restoring former oppressive rural social relations, cash rather than land restitution has other advantages. Restituted farmers often wish to resume their old family lands, partly so as to use acquired but often outdated knowledge to reduce risk, but partly for sentimental reasons [Stanfield *et al.* 1992: 13]. This leads to fragmentation (or to the need for further costly consolidation) and disputes.
  - 98 The final words of Bertolt Brecht's *The Caucasian Chalk Circle*, echoing the prologue, in which herders and fruit farmers each claim a valley recaptured from the Germans in the Second World War. The herders argue that they owned the land before the war and should keep it. The fruit farmers show that they could put it to better use. The Soviet 'Delegate' persuades the herders to give it up. A US study guide [Gradesaver, n.d.] argues that this is 'extremely Communist in its message. Any capitalist society would argue that whoever originally owned the land should get it'. No; it would argue that it pays landowners to sell and lease to the best farmers in the most productive unit sizes; and that decollectivisation should enable that. Land restitution to original incumbents involves profound, often disabling, moral, logical and historical problems (chapter 1(b) (iii)).
  - 99 'Share privatisation of farms in Kazakhstan had the same problems as [until 1998–99] in Moldova, including maintenance of the soft budget constraint, little difference in cost management and preservation of barriers to forming family farms.' [Dudwick *et al.* 2005: 41]
  - 100 In Georgia, 'citizens received vouchers to be exchanged for securities of state-owned enterprises [such as vineyards] being transformed into joint stock companies. However ... the most connected acquired state assets at "symbolic prices" while ... discouraging competit[ive] bidding ... The main purchasers ... were ... wealthy individuals with strong connections to the Ministry of Finance ... [and] little experience with wine production [or] ... knowhow ... Many wineries turned to falsification of their wines.' In Moldova, after 'privatisation of land ... wineries found their grape-producing sector in shambles. While total vineyard area shrunk to 75 per cent of its 1995 level, average ownership size was around 1.5 ha ... in up to 8 different pieces. Yet production would still not collapse [as in Georgia] ... Today, small-medium scale wine producers are starting to emerge in Moldova [for]

- the domestic market [while] recent land consolidation statistics point to the emergence of extremely large “agro-holdings” ... externally owned and managed by corporations connected to wine commodity chains’ [Patterson 2007].
- 101 In countries decollectivising into large farms, even if these can achieve higher efficiency, turning it into (a) GDP gain depends on absorbing shed labour, (b) poverty reduction depends on sufficiently labour-demanding non-farm growth paths to raise the real wage. This dependence is not there if decollectivisation is to labour-absorbing, land-saving small farms.
  - 102 In China, Ethiopia, etc., periodic land reallocation from smaller to larger households normally followed usership-only decollectivisation (section VI).
  - 103 This may be especially important when, as in China, the sources of agricultural growth shift from seeds and fertilisers, the benefits of which can be obtained in the same season, towards longer-term investments requiring long-term possession to reap full profit [Prosterman and Hanstad 1994: 30] – just as insecure tenure in West Bengal and Bangladesh [Boyce 1987] deterred farmers from sharing the costs of irrigation investment.
  - 104 Similar charges were made against communal land tenure systems. In both cases the poor’s weakness and political suppression, and the group alliances of the State, are more ‘to blame’ than the tenure system.
  - 105 This refutes the government’s report [FAO 2008] that in 1999–2000, of the 3.9m ha of farmland, only 4.7 per cent was in holdings above 10 ha.
  - 106 This is likelihood, not certainty. Some States use RSO not against the poor, but to weaken stubborn barons by seizing their land, as English monarchs did in 1066–1215 and sometimes later. In the twentieth century, some governments were anti-*kulak* and genuinely in favour of poor farmers. Such favour often vanished (as in China in the early 1960s and the USSR in 1928–35: section (a)) as governments – to extract farm surplus and enforce their will on rural people – asserted RSO to collectivise farming; but that sequence of events is not universal or necessary.
  - 107 Monbiot [2008] identifies a recent State threat to small farmers: ‘Saudi Arabia wants to set up a series of farms abroad each of which could exceed 100,000 ha. Their produce would be ... shipped directly to the owners ... Both Ethiopia and the Sudan have offered the oil states hundreds of thousands of hectares. This is easy ... in *Ethiopia the State claims to own most of the land*. However, the problem is not RSO, but State power unrestrained by responsibility to, or effective civil-society organisation of, the farming poor.
  - 108 In Armenia in 1991–92, allowance for land quality meant that many families received a plot for each of several grades of land (increasing fragmentation). Location of parcels within a village was decided by lottery! Unusually, per-person allocation was stepped: a family with one, two or three members received one unit of quality-adjusted land; one with four to six members, two units; and one with seven or more members, three units [Giovarelli and Bledsoe 2001].
  - 109 For theory and evidence on the issues in this paragraph, see [Chayanov 1966; Hunt 1978; Attwood 1979; Shanin 1986; Lipton 1998].
  - 110 When some families grow more quickly, land rentals can restrain inequality of *operated* land per person, as small families rent land to large ones. But major *owned* land inequality (and rents) also induces resentment. Hence, and for other reasons, decollectivisers often restrict land sale *and* lease.
  - 111 Similarly, in Ethiopian land reallocations ‘size of family workforce ... is not given as much prominence as family size. Hence, there are farmers who hold equal size of land per household, but with significant variation in ... land per adult labourer’ [Nega *et al.* 2003].
  - 112 ‘Deeply felt historical sensitivities to extreme inequality (going back to pre-revolutionary times) continue to resonate in the debates about Vietnam’s agrarian transition’ [Ravallion and van de Walle 2008: 172].



- 113 Best measured by the *dependency ratio*: dependants (persons aged 0–14 or over 65: in poor countries overwhelmingly children, but in less-poor countries increasingly also the old) as a proportion of *prime savers and workers* (persons aged 15–64).
- 114 In China, too, despite a 2003 law, ‘there is virtually no administrative organisation ... nor competent personnel ... Without a registration system, potential transferees must limit market search to persons they know and parcels on which they know encumbrances do not exist’ [Ping Li 2003].
- 115 Except in parts of CEE where rising capital/labour ratios are making very small farms gradually uncompetitive; there, too, decollectivisation into larger farms does not greatly harm employment, because agriculture’s share of workforce is at most 10–15 per cent.

## 6 Alternatives, complements, diversions, ‘new wave’ land reform

- 1 After decollectivisation in Bulgaria, the Czech Republic, Hungary and Romania, consolidation required reforming ‘land administration [and] agriculture [but also] territorial organisation, land management, farming systems ... regional development and village improvements [, all needing] active participation ... at local and regional levels ... [Parcels] were too small or badly shaped, e.g. in length-to-width ratio. [In Bulgaria in 1999 farms] averaged 2 ha [in four to five] parcels ... [By 2002, due to] subdivision ... among heirs, average plot size may fall to less than 0.3 ha’. In Romania in 2000, farms averaged 2.3 ha in ‘4–5 parcels ... [Some] former cooperatives were divided into rectangular ... parcels as narrow as 3 m and up to 1 km long’ [Rembold 2003]. In Moldova in 2003 [Lerman and Cimpoieş 2006] peasant farms averaged 1.9 ha, 55 per cent with three to six parcels and 19% with more. In Vietnam’s decollectivisation, by 1992 ‘plots allocated per household [averaged] 8.8 though the average [household farm was] 0.3 ha’ [Tanaka 2001]. Consolidation schemes soon after decollectivisation can be less costly and contentious than for long-established peasant areas [Deshpande 2003] – but not if the authorities (disliking, or seeing as inefficient, part-time or ‘subsistence’ farms) also seek *farm* ‘consolidation’.
- 2 ‘[Allegedly] 7–10% of land in rural India was lost to boundaries in 1957, [suggesting] 3–10% of net returns to farming, [but] farm management studies [with] field observations show that adaptive farming practices significantly reduce these potential costs in practice’ [Mearns 1999].
- 3 If all farms near a village are ‘consolidated’ into a big farm, it can be run as one consolidated plot. Also larger farms tend to have bigger (but more) fragments than smaller ones. However, plot consolidation normally has very different aims, methods and results from farm ‘consolidation’.
- 4 In Pakistan, smaller farms are at least as efficient and technically advanced as big farms, which provide fewer livelihoods and wages per hectare [Heltberg 1998].
- 5 ‘In CIS countries very large (corporate) farms are less efficient ... than the much smaller individual farms [as shown in several surveys] in Moldova ... It is therefore impossible to recommend consolidation of hundreds and thousands of small farms into large agricultural production cooperatives or other “farm enterprises” [as] advocated by the Ministry of Agriculture ... [Three 2000–03 surveys in Moldova] showed TFP on large corporate farms 0.47, 0.48 and 0.74 of small individual farms ... [In a 2003 Georgia survey controlling] for fragmentation and specialization ... with a quadratic regression model TFP initially rises as farm size increases, but eventually peaks out and starts decreasing (the turnaround point ... falls near 3.5 hectares). *If similar trends are applicable to Moldova (which still remains to be shown)*, this evidence can justify consolidation efforts aimed at enlarging very small individual farms to about 5 or possibly 10 hectares, not more’ [Lerman and Cimpoieş 2006; my italics].

- 6 In Slovakia, Czech Republic and Hungary, much 'fragmentation of ownership ... has not led to fragmentation of land use, quite the contrary; farmland is very consolidated through rental agreements' [Swinnen 2006] – as in Ukraine since the 1999 reform [Lerman *et al.* 2007].
- 7 However, in CEE countries restituting to large former owners (or descendants), larger farms have emerged, due less to efficiency considerations (unit production cost on large versus small farms; income of small landowners from farming versus renting-out and moving to non-farm work) than to transaction cost. For restitutees, often without recent or relevant farm (or even rural) experience, transaction cost has been lower from renting to an ex-manager of collective or state farms rather than to many small farmers, whatever their farm or non-farm efficiency [Swinnen 2006].
- 8 Often, farmers divide each fragment, so each child gets a 'mix' and relies less in any year on soil-water conditions in one or two fragments.
- 9 When Moldova moved from share pseudo-privatisation to land decollectivisation 'all peasants had equal access to land of different types [in] three separate parts: a share of arable land, a share of orchards, and a share of vineyards ... [In 2003] 53% of [household plot owners] had more than three parcels. [Among] peasant farmers, 55% had 3–6 parcels and 19% more than 6' [Lerman and Cimpoeş 2006].
- 10 'A land consolidation exercise [in a North Indian village] in 1985–86 [reduced] fragmentation, but had adverse distributional effects, as money and influence enabled larger farmers to get better quality land' [Jayaraman and Lanjouw 1998].
- 11 These sources and [Dudwick *et al.* 2005] confirm productivity gains from consolidating *fragments*, but not from larger *farm* size. In Georgia, a quadratic specification showed output per hectare peaking at 3.5 ha, but clear gains to reducing fragments given farm size [Lerman 2005].
- 12 There as elsewhere, the process is still expensive; even in a single village, as I have seen in India (Maharashtra), months of the time of a skilful official, trusted and trustworthy, are needed to gain acceptance for the numerous complex exchanges of land required. Bain [1993: 128–39] shows the high cost of consolidation in Taiwan (where it was used by officials eager to raise the size of farms, not just to consolidate fragments).
- 13 The *forms* of fragmentation, as a measure to preserve diversity in face of risk, may also carry agronomic drawbacks. In Kavathe village, Maharsashtra, India, farmers bequeathed strips of land from top to bottom of slopes, so each legatee would have a mix of high and low land and thus diversify against risk [Lipton 1968]. Over the generations, this leads to ever-thinner strips, which must be ploughed up and down the slope because animals (or tractors) cannot turn in a very narrow space. The result is increasing erosion.
- 14 This applies especially strongly to the non-settled poor, practising herding or cyclic bush fallowing with few or no written rights to land.
- 15 Brazil's 1971 Act created 'the National Institute for Rural Settlement and Agrarian Reform [as] a means of dissuading the pressure for land redistribution [from] social movements, especially the peasant leagues, and the emerging activism of Catholic priests' [Assunção 2006].
- 16 In the Orissa (India) Tribal Development Project (1987–97), *dongar* (hill) land was distributed to tribal people in Kashipur block. Until then the lands had been used for trees or shifting cultivation; productivity was low. Land title was registered to both spouses in 12,500 households. Shifting cultivation decreased, allegedly improving environmental management and helping restore ecological balance; land productivity rose; new opportunities (vegetables, livestock) raised women's status; and settlement (via schooling) improved literacy. 'The ownership of even a tiny piece of land has improved the economic conditions of those concerned.' However, community overview of forest lands and water, an important element of social security for the tribals, suffered: 'the community as a whole ceased to protect their dongar lands' [IFAD 1998].

- 17 'Fair and just handling of land tenure questions will often be a central component ... both to maintain the peace and [to] provide conditions under which economic growth can be re-established. Major factors ... include redefining the basis on which people can claim rights over land, resolving disputes over land that has been abandoned or taken over by others, and finding ways of providing secure rights for refugees in areas of new settlement [and] security for local/customary rights and common property régimes. The cases of Sri Lanka or Cambodia [illustrate] how the resolution of land claims have supported post-conflict recovery in rural areas' [EU 2004].
- 18 Hypothecation (restricting the funds raised by a given tax to a specific aim, e.g. using land tax revenues only to assist the poor in obtaining new land) may win friends for a tax, but is often bogus due to fungibility (who can tell whether the aim would have been financed anyway?) and arguably undesirable even if not. Anyway, land taxes are seldom hypothecated.
- 19 In Asia, where land is usually less unequal and more valuable, land tax needs to start at a lower area, and/or be higher or more progressive, if it is to stimulate much redistribution. Senator Osmena proposed rates for the Philippines: < 7 ha, 0 per cent; 7–25, 1%; 25–75, 2%; > 75, 3% [Senate of the Philippines 2004].
- 20 If land yields 10 per cent of value in net annual income, a 2000-ha vendor of half her land escapes the equivalent of 15 per cent tax on income (i.e. 1.5 per cent of land value), and can invest the capitalised value to get 15 per cent more than was earned from the land. Buyers ending with below 20 ha escape land tax.
- 21 This has often proved, notably in India, to be at least as problematic as land taxes: no less costly to collect, easy to avoid, or hard to administer.
- 22 'In 1940 agricultural land taxation as a fraction of central government revenue in Egypt was 23%, in India 19% and in Chile 5%. However, in the late eighties in none of these countries did land taxes account for more than 1% of *central* government revenue' [Sarris 1994; my italics].
- 23 This is one of several ways to meet the objection [Binswanger and Elgin 1998: 325] that 'progressive land tax at best redistributes land from the rich to the middle class' because, even if it induces the rich to sell land to avoid tax, 'the truly poor' cannot afford it.
- 24 If administration is weak or unduly influenced, rich farmers may successfully lobby to reduce the progressiveness of a land tax, or even reverse it, so it is a disincentive to market redistribution of land. In Brazil in the 1980s and early 1990s, '*minifundia* tax collection was 68.7% of assessment, [but] *latifundia* [was] only 18% ... Most large landowners simply did not pay any taxes, or ... insignificant amounts' [da Silveira *et al.* 2008].
- 25 In Marcel Pagnol's films *Jean de la Florette* and *Manon des Sources*, Provençal villagers, jealous and suspicious of a farming newcomer from the city, divert his water source and misinform him about why his farm is failing.
- 26 Similarly 'in Slovakia, the transfer tax on a transaction is 4–20% of the price or valuation of the property, discouraging registration' and hence freezing distribution. However, in Bulgaria, such freezing *increased* land inequality; after land restitution (mostly to big owners) 'was completed in 2000 ... there was little incentive to sell land, because the land tax was forgiven on restituted land for five years' [Giovarelli and Bledsoe 2001].
- 27 Impact is not the same as incidence because, depending on market conditions, firms (including farms) whose product, land, or other input is taxed can shift part of the burden back to employees as lower wages, or forward to consumers as higher prices.
- 28 Since 1980, market reformers have sought to shift the denotation of 'tax reform' to tax reduction; 'broadening the tax base' by a shift to indirect taxes; or user taxes on recipients of public services. This discussion uses the standard, equalising denotation.

- 29 All three conditions were met in Vietnam, and around 2007 the poor's sales of food staples were about 50 per cent more than their purchases; but their sales were over 80 per cent *less* than their purchases in Bangladesh, Ethiopia and Zambia [World Bank, cited in Beattie and Blas 2008]. Even there, reduced staples price repression may help the poor in the longer term, making it pay some of them to move into staples surplus farming, and/or stimulating a rise in activity in the (relatively employment-intensive) farm sector.
- 30 See discussion of tables in chapter 2, and Table 7.1.
- 31 In India and China, returns to irrigation, agricultural research and education have become higher in some 'backward' areas than in the main 'lead' areas [Fan et al. 2000, 2000a].
- 32 This may weaken opposition to land reform as the incomes of the rural rich come increasingly to depend on non-farm or urban sources. However, it is often land-based power that enables the rural rich to afford, or to dominate, such sources.
- 33 'To require the payment of market prices to the landowners would mean to make redistribution impossible ... Attempts at land reform without massive political upheaval have rarely succeeded in transferring much of a country's land ... Land reforms in Taiwan, Japan and South Korea ... were based on expropriation with small compensation' [Paasch n.d.] Yet in Taiwan landowners received 30 per cent of compensation in inflation-proofed land bonds [Harrison 1980] and 70 per cent in industrial stocks; most ex-landowners did badly *not* because there was a large expropriation, but because they sold the shares fast (cutting prices) and were 'neither willing nor able to change occupations' [Simon 1990: 147–48].
- 34 'To call [NWLR] "redistributive" is simply false. It does not redistribute wealth. In the best case, it facilitates land sales from willing sellers to willing buyers, forcing (poor) buyers to pay full market prices to the (rich) sellers. Land might be transferred, wealth will not' [Paasch n.d.].
- 35 A consensual transfer price may be negotiable; management time has higher opportunity cost for big owners than for (poorer) land recipients.
- 36 For Borras [2008], 'The Via Campesina campaign is a direct reaction to the neo-liberal model, the "market-led agrarian reform".' In the Philippines, Reyes [1999] sees NWLR as 'a gambit to replace CARP [the Comprehensive Agricultural Reform Programme]', the ongoing CLR and tenancy reform programme. de Guzman *et al.* [2004] concur: 'Now more than ever CARP has been relegated to a low priority by the government. The state's bias for free enterprise, liberalisation, privatisation ... shows that it has chosen to focus the nation's resources toward the international market. Instead of alleviating the centuries-old problem of land, the government has placed itself in the service of powerful international financial institutions like the World Bank.' Yet Borras [2007] documents substantial achievements by CARP during this period, and claims failure with NWLR.
- 37 Still less are they pseudo-neo-liberals, pressing the developing world for free markets as a lever to insert EU or US exports, investment or power, but rejecting them when it comes to EU or US policy on agriculture or inward investment.
- 38 Cousins [2007], in a thoughtful discussion, writes: 'I locate myself ... within the Marxist tradition [and therefore] am skeptical that "market-assisted" approaches to land reform have much to offer.' However, the key Marxist insight here is surely that – unless, exceptionally, there is a prospect of revolutionary change in class structure – this structure, together with the ruling class's interests and felt need (or not) to compromise, will decide the impact of either CLR or NWLR. For Marxists as for others, the question in normal, non-revolutionary conditions is whether the balance of class interests and power, in a given country and time, means that poor can get most from CLR or from NWLR.
- 39 Domingos [2003] argues: 'The market tendency is to concentrate rural property ... Land negotiation is carried out in a context of inequality ... By passing the

responsibility to democratise land to the market, [politicians relieve] the State of its ... responsibilities ... in the Brazilian constitution: the distribution of land for social interests. Market-assisted land reform is really just a means of disguising state aid for large property-owners.'

- 40 Some policy errors discourage *all* land transfers cut; land prices and so deter wealthy sellers; or cut the proportion of land sales that are from rich to poor. In Colombia 'market segmentation and inflated prices of land [, partly due to weak] collection of agricultural income taxes and capital gains taxes on farmland [, raise] the attractiveness of land as a tax shelter, therefore tending to lower its price' [Heath and Binswanger 1998]. If (and only if) some form of IR prevails, such tax policy improvements will induce market distribution of land towards smaller farms. See section (c).
- 41 'Since [1945] landlord estates in Bolivia, [much] of China, Eastern India, Ethiopia, Iran, Japan, Korea, and Taiwan have been transferred to tenants in ... successful land reforms. By contrast, LR in haciendas, i.e. systems where tenants had a small house-plot for subsistence but worked [mostly] on the landlord's home farm, has been very difficult ... In [most] cases large landowners responded to the threat of LR with large-scale evictions long before governments [could] implement ... tenant protection or LR [and] resumed extensive [and/or] mechanised self-cultivation ... [There are three hacienda-]specific difficulties. First, the transfer ... to small farmers requires a change in the pattern of production, construction of complementary infrastructure, subdivision of the farm, and settlement of additional beneficiaries ... Farms acquired for LR had generally not been farmed at full capacity, were run down or decapitalised, or highly mechanised[. So] failure to bring in additional beneficiaries, to provide resources for simple works ... during the startup phase, and to [facilitate] productive assets and technical assistance to go with the land often contributed to the failure of reform efforts. Second, LR beneficiaries ... are rarely accustomed to making independent entrepreneurial decisions ... [so] programmes [of] mere transfer of land, without training and technical assistance ... may have [cut] agricultural productivity. Third ... with multiple market imperfections, providing beneficiaries with access to land but not ... to markets for output and credit may fail to make them better off' [Deininger 1999].
- 42 Even if we exclude the detours to delayed but massive CLR in decollectivisation in China and elsewhere (chapter 5(b) (i); (iii) (III)).
- 43 Indeed, if redistribution degenerates into arbitrary seizure from this or that group, the richest and strongest are best placed to avoid it.
- 44 Subject to not burdening new farmers with unmanageable debts or service costs.
- 45 Assuming (reasonably) that only 50–65 per cent of the cost can be recovered from beneficiaries' repayments of land purchase loans.
- 46 Unless land markets are perfect with no transaction costs, N-land prices will rise faster.
- 47 Or from donors, or if the government prints money from victims of inflation, mainly the poor, who consume more of their income than the rich.
- 48 Not all the poor are lucky and get NWLR vouchers, grants or subsidies; these raise demand for land, pulling up the price for the less lucky.

## 7 The death of land reform?

- 1 The land reforms of Tiberius Gracchus (which may have created some 75,000 smallholdings) and their aftermath raise many twenty-first-century issues, e.g. whether land should go to 'war veterans', or farmworkers of minority ethnic groups.
- 2 FAO 1991: iv. Iran, Zimbabwe and the Philippines are noted as exceptions. Using public land, in '1984–89, Indonesia transferred 400,000 families from densely populated areas to ... uncultivated lands ... Thailand allocated 650,000 ha ... to

- 170,000 households in 1987–90 ... Morocco reported distributing 320,000 ha to 23,600 beneficiaries ... in Algeria 3139 state farming enterprises [were allocated to] 5677 individual[s] and 22,356 groups [and] 273,000 ha to 66,945 beneficiaries ... Iran ... distributed [564,000 ha] [*ibid.*: 17].
- 3 In brief, 'don't do anything till you can do everything, so do nothing'.
  - 4 It would be a cheap shot to object that the financial crisis and impending depression of late 2008 will un-spread neo-liberalism. First, wait and see. Second, neo-liberalism, despite absurdities and extremisms, has corrected many anti-poor features of developing economies [Sen 1997].
  - 5 In 1954, the USA induced the overthrow of Arbenz's land-reforming regime, which threatened the interests of the United Fruit Company. US involvement in the overthrow of Allende's land-reforming regime in Chile in 1973 is also well documented.
  - 6 The main foreign power strong and motivated enough to meddle, the USA, will be less disposed to intervene against land reform in 2008–20 than in the 1950s or 1970s. First, it is currently committed to, and arguably fixated on, 'wars against terror' far from Latin America. Second, US policy concern – including among Hispanics – to slow down immigration will increase its sympathy for land reform.
  - 7 From traditional underfarmed largeholdings, incorporating workers in 'total institutions' as more or less tied labourers with tiny plots of their own, to farms intensified with capital and 'free' but very low employment.
  - 8 In Santa Cruz and Beni '14 families of businessmen and opposition politicians own around 313,000 ha'
  - 9 Kearns [2008] reports that the Morales government was committed to distribute 810,000 ha of idle land on largeholdings to the rural poor, mainly *indigenos*, and that 81,000 ha was distributed in 2006, and a further 605,000 ha in January 2008. These are mainly border areas; the seriously (and violently) disputed areas in Santa Cruz are much larger and more contentious.
  - 10 What follows builds on chapter 5(b). Footnotes and references to materials cited there are omitted, and cross-references are minimised.
  - 11 Negatively, it left farm members with no problem of marketing, and private suppliers of market services with few openings. Positively, institutions and personnel *within* former State and collective farms, while usually unsuited to private farming, may usefully adapt to sell private farmers services, including processing, bulking-up and marketing.
  - 12 Post-land-reform effects apart, do globalised capital markets make it harder to *do* land reform than in the 1970s? It is easier for foreign and domestic owners of capital to move it swiftly out of countries deemed to have bad or uncertain 'investment environments' (if the capital is physically fixed in place, after selling it for cash). To attract capital, governments have greatly liberalised such flows; and capital owners are better informed and have better communications technology than in the 1970s. Hence, more than then, *land* reform should be done in ways that curtail, offset, compensate or mitigate fear of *capital* expropriation. However, the problem is usually exaggerated. Except in plantation economies, only a tiny – in decommunising countries negligible – proportion of foreign assets comprises farmland. A country's 'investment environment' can be *improved* by careful, even partly non-consensual, land reform that softens discontent by giving the poor a stake and reducing gross inequality.
  - 13 (a) In some East European countries – Romania, Albania and to some extent Bulgaria – land was restituted *and* redistributed, largely to those who had worked it as a collective or State farm. That constituted distributive land reform, largely successful. (b) Other East European agricultures had little need for land reform. Under Communism they had avoided (Poland) or long reversed (former Yugoslavia) collectivisation, and they continued to be based on small family farms. (c) As both these country groups accelerate industrialisation and integrate into the

European Union, efficient farm size rises, alongside rural investment. On its own this might raise rural unemployment, inequality and poverty, but, once the economic momentum of 1995–2007 is retrieved, that will again be outweighed by the poor's improving non-farm prospects.

- 14 In most of Africa or Asia, this would reduce farm output and employment; in some Eastern European countries the case is less clear. Despite urban unemployment, they face growing rural labour shortages, and have good farmland awaiting improvement that often requires capital equipment. To that extent, they bear resemblances to North American and European farming, where the advantages of large farmers (lower transaction cost of capital; labour-saving) outweigh those of small (lower transaction costs of labour; land- and perhaps capital-saving).
- 15 'Agricultural' population – i.e. with agriculture as the main source of income or gainful work (definitions differ somewhat across countries and surveys in Tables 7.2 and 7.3) – in 2005 were about 853m in East Asia (excluding Japan), 787m in South Asia, 260m in South-East Asia and 483m in Africa. These 2.4bn agriculturists dwarf the 0.2bn in Latin America and the Caribbean (103m), West Asia (44m) and Eastern Europe with former USSR (33m) (Tables 7.3 and 7.4; the last two regions contain the CIS and CEE decollectivisers).
- 16 Defined broadly, to include all Africa, Asia except Japan, Latin America and the Caribbean, and Eastern Europe with the former USSR.
- 17 Tables 7.3 and 7.4; FAOSTAT source cited there for agriculture's share of economic actives.
- 18 This was also true of the further 0.9m ha land-gifted privately in 1952–54 in the *Bhoodan* movement [Saxena 1990: 116–17].
- 19 Including 12–18m members of scheduled castes and tribes, most of them poor, by the mid-1980s [Saxena 1990: 124–26].
- 20 Tenancy restrictions had perverse indirect effects: some farmers expelled tenants and resume land for personal cultivation (chapter 4(b) (iii)).
- 21 Others were profit-seeking responses to the IR (chapter 2(g)) and partible inheritance to rising populations with imperfect rental markets
- 22 Besley and Burgess [2009] build on Besley and Burgess [2000] to show that, among 18 Indian States, the extent of *implemented* (not just legislated) land reform accounts for significant parts of variance in the success of poverty reduction.
- 23 Land leased-in, *net* of leasing-out, by marginal farm households fell from 19.4 to 10.7 per cent of their farm area between 1971–72 and 1982 [Swamy 1988: 561]. Precisely comparable later data are not available, but the trend continued: by 2002–03 only 8.6 per cent of area in marginal farms was leased in, even before netting out the leased-out area [NSSO 2006: 30].
- 24 Land inequality in 2002–3, while still large, was less than these data suggest, since the average household owning 20 hectares or more had 11.3 members (2.75 ha per member) as against 5.0 members (0.15 ha per member) for all rural households together, including the landless [NSSO 2006a: 22].
- 25 The rise in land equality admittedly excludes the landless, but in India the proportions of rural people who *own* no land, who *neither own nor operate* land, and even – in some States – who *operate* no land, all fell between 1960–61 and 1970–71 [Singh 1990: 72–73] and probably since [NSSO 2006, 2006a].
- 26 'It is conventionally thought that ceiling-redistributive reforms in India have achieved little ... [because] exemptions and loopholes ... allowed landlords to retain control over land holdings ... However, the threat of ceilings does seem to have prevented the further expansion of large holdings, and ... the redistribution of even very small plots of homestead land has brought substantial benefits to the poor' [Mearns 1999].
- 27 See [Akella and Nielsen 2005] on Andhra Pradesh. In India land reform is a State subject, but a national lead (and money) matter too.

- 28 This assumption takes a pessimistic view of reform prospects. In fact, owned land is more unequally distributed (see above, and [Singh 1990]). A 20 ha ceiling on owned land would release more than is suggested here on the basis of operated-land distribution (the only data available).
- 29 In India a 2003 20 ha ownership ceiling releases similar area, sufficing to raise the 25m ha in sub-1-ha holdings by a mere 6%! [NSSO 2006a]
- 30 Ayub and Bhutto represented the two political forces dominant in Pakistan for 60 years: military élites, often landed or using land to reward officers; and populists, but often (as in the case of the still powerful Bhutto family in Sind) large land-owners.
- 31 'The most vulnerable group, seasonal agricultural-labour families, were largely excluded' from benefits. If landless labour families are included in the number of potential gainers, as they should be, the proportion of actual beneficiaries falls to 7 per cent for Indonesia and 6 per cent for Java.
- 32 A generous estimate. Only 13.5 per cent of farmland in 1993 was rented [FAO 2008 at [www.fao.org/ES/ess/census/wcares/INDO1990.pdf](http://www.fao.org/ES/ess/census/wcares/INDO1990.pdf)]. Also, that proportion, and the share of land in operated holdings above 10 ha, are probably smaller now.
- 33 Vietnam, with SE Asia's largest farm population (Indonesia apart), had its most equalising land reform (decollectivisation after detour) and has minimal scope for more.
- 34 With a fine mix of analysis of macro-data and field discussions of farms, Borras's study conveys a unique sense of the conflict between landlord evasion and peasant mobilisation; political response (populist or corrupt); and hence reform outcomes hugely differing over space and time.
- 35 Egypt's 1999–2000 Agriculture Census (as reported at [www.fao.org/ES/ess/census/wcares/2000egyptweb.pdf](http://www.fao.org/ES/ess/census/wcares/2000egyptweb.pdf)) has serious arithmetical inconsistencies, e.g. average size of operated holdings of 12.6–21 ha is reported as 26.5 ha; so recent land distribution cannot be deduced.
- 36 That therefore land reform *should* die, and (section (a)) that it never got much land to the poor, cannot both be right; but both can be wrong.
- 37 Smaller holdings might also get more non-farm or urban income, again reducing demand or need for reform land (sections (iii)–(iv) below).
- 38 For example, the evidence that apartheid in South Africa was weakening was used, in 1986–92, to make two opposite cases: that sanctions could be removed, as the problem was being solved; and that they should be intensified, to speed up the solution to a now smaller problem!
- 39 Sometimes, a lower level of *top-end* inequality may ease the path to land reform. A really huge landowner, especially if a senior politician or ruler, may have more power to block reform than would numerous middle farmers – especially in a very undemocratic environment with non-accountable government and weak or repressed civil society. More generally, Olson [1982] shows how large and dispersed groups, such as middle farmers, incur heavier costs of organization than small, coherent groups (e.g. giant farmers) – and greater probability that each member will free-ride, leaving colleagues to bear those costs, so that the organization collapses.
- 40 Many estimates of land distribution exclude the landless and therefore *under-*estimate land inequality, and the need for reform land. However, this is usually (a) outweighed by household-size and land-quality effects, (b) allowed for when land-rights distribution is planned.
- 41 This remains true when household size is calculated in consumption-based adult-equivalents (counting children less).
- 42 In India in 1981, rural households *operating* no farmland, or below 0.2 ha, averaged 2.7 persons; at 4–5ha, 6.5; and above 20 ha, 8.7 [Krishnaji 1984: 893]. In 1981, Bangladeshi households *owning* below 0.4 ha. averaged 4.7 persons, compared with 11.2 for those above 6 ha [Singh 1990: 71].



- 43 These arguments follow through, *mutatis mutandis*, to other methods of redistributing land rights and claims. However, if the poorest depend more on tenancy, the positive *and negative* effects of tenancy reforms are specially important (chapter 4(b)).
- 44 Suppose average household size is five. It is proposed, instead of setting a 100-ha household ceiling of owned farmland, to allow 'fairly' for household size and set 20-ha-per-person. (1) Some households above 100 ha lose no land, or less than with a 20 ha-per-person ceiling, reducing redistributable land. (2) But, increasing redistributable land, some households with *fewer* than five members (i) have, say, 60–100 ha, escaping a 100 ha-per-household ceiling but losing land to a 20 ha per person ceiling or (ii) have over 100 ha, so lose more to a 20 ha-per-person than to a 100 ha-per-household ceiling. *The fact that household size increases with area owned means that (1) outweighs (2) and its analogues*: a 100 ha-per-household ceiling releases less land than a 20 ha-per-person ceiling if average household size is five. For a numerical example see chapter 3(b) (vi) (I).
- 45 This is *not* to say that, as household size falls, consumption poverty rises; the reverse is true. Consumption-poorer people have larger families (even in adult-equivalents, despite higher child/adult ratios) [Lipton 1998; Eastwood and Lipton 2001]. They also tend to have less land per household and per person. Therefore, *within* each land-size group, the link between poverty and larger household size is extremely strong.
- 46 The link of land to household size arises although poverty, in the sense of income per person too low to afford sufficient dietary energy (ultra-poverty) or any savings (moderate poverty) on a reliable basis, *increases* with household size. On the 'family size paradox' – that poverty goes with *less* land and (in today's developing world, though not in pre-industrial Western Europe) with *larger* households, although the latter tend to go with *more* land – see Lipton [1983]; Krishnaji [1984].
- 47 In an interesting interlock of production and consumption assets, this is provided for large landowners by the land itself – for playing, walking, swimming, or privately enjoying one's lands: what rich (mostly Afrikaner) farmers in South Africa call 'sitting on the stoep'.
- 48 This may largely explain why 'land-per-household-contingent poverty targeting' is so error-prone [Ravallion 1989].
- 49 This discussion assumes no non-agricultural income sources. Some land-poor rural people have adequate income from such sources, and some land-rich people have no other income. These facts further reduce, respectively, the need and the scope for land reform. However, non-farm incomes may also increase the gains from land reform; see section (iv) below.
- 50 The logic of the inverse relationship is that output per ha is more with plentiful, easily supervised labour per hectare (chapter 2). So – assuming mainly owner-farming – output effects of land redistribution are best if it transfers land from those with much to those with little initial land owned per household worker, followed by land per adult equivalent (closely correlated with land per worker), per person (somewhat less closely), and, last, per household (still correlated, but less so). On grounds of fairness, adult-equivalents are preferred to workers.
- 51 So the ceiling is not 20 ha, nor 20 ha per household size, but, say, 20 ha/(household size<sup>0.7</sup>), ideally with household size in adult-equivalents.
- 52 See chapter 2(e) (iii) for evidence, and impact on relative performance of small and large farms, and chapter 3(c) (vi) for a worked example.
- 53 It works unless (a) there is a high proportion of tenanted land, and (b) the quality-mix differs greatly either between owned and rented land, or between land rented to small and to large owners.
- 54 Note that the second part of this argument does not apply to those who have no land of any quality. Indeed, if big farmers' land is bad, the landless need *more* of it to reach a given level of income-earning capacity!

- 55 Also, it affects the interpretation of different farm yields, or farm efficiency, as between different size-classes of holding.
- 56 This is one reason why provincial authorities – e.g. in India States, not the Centre – oversee most land reforms.
- 57 It may sometimes justify State action to improve access, information, or credit for migrants to remote lands. Also, rarely, remote lands are reformed (or otherwise made available) to reverse the interregional size-quality effect; though initially sparsely populated, they have high potential, and absorb poor migrants from lower-potential areas far away. The movement of south Brazilian farm migrants to Rondonia is an example.
- 58 Some indicators, claimed to measure natural (exogenous) land superiority – soil texture and colour; access to major irrigation – are in fact partly endogenous to farm size: improvable by labour-intensive behaviour likelier to be found on small farms than on big (chapter 2(e) (iii)).
- 59 This rule also applies very broadly to comparisons between nations, but there are strong exceptions [Eastwood *et al.* 2006, 2009] due to political histories and power-structures. In South Africa prior to 1994, because of apartheid-based land assignments dating from the 1913 Land Act, farmland ownership, for the 95 per cent of rural population who were black, was restricted to 13 per cent of farmland. Hence South Africa had much more unequal farmland rights than many countries with, on average, far higher-quality land.
- 60 Parents will be influenced against that approach if they feel roughly similar affection or responsibility for each child, and if each has similar (and similarly diminishing) marginal utility of real income or assets. (If rental is feasible, smaller ownership farmholdings as population rises between generations do not explain declining size of *operated* farms unless such smaller-scale farming is also efficient (p. 100).
- 61 The ‘new institutional economics’ suggests that such practices, like other institutions, shift in the long term, responding to changing incentives.
- 62 The rules of communal tenure are highly variable among situations. Most of the time, some tenancy is allowed, often restricted to short leases and/or to a particular tribe or clan [Noronha 1985].
- 63 Except in highly equal post-reform China and Vietnam, but tenancy is spreading following market reforms, especially in Vietnam.
- 64 [NSSO 2006: i; NSSO 2006a: i]. Farmers operating below 1 ha rent in over twice this proportion. Informal tenancy is often concealed; village studies suggest NSSO understates tenancy by 10–20 per cent, and overstates its fall [Mearns 1999; Jayaraman and Lanjouw 1998].
- 65 Some land is tenanted for adjustment to location or timing of household farming, e.g. *vis-à-vis* urban work or other land (chapter 4(b) (vi) (I)).
- 66 This often happens not because sharecropping is unsuited to modern intensive farming, nor because of economies of scale, but because of capital and credit subsidies that reward size and penalise labour-intensity.
- 67 Where sharecropping prevails, landlords often strongly prefer tenants with draught-power and/or little land of their own; such preferences (and sometimes ethnic ones) make land markets even thinner and less perfect.
- 68 Japan and Venezuela are included because they were not high-income countries at the start of the period which the table covers.
- 69 (1) Median farm size has risen slightly with urbanisation in some countries of groups I and II, but fallen in groups IV and V, indicating (we argue in chapter 2) the force of the inverse relationship there. This will tend to make inter-country differences sharper now than in the 1980s, but not to change the rankings much. (2) They *would* change between the 1950s and today if we had, and could add to the table, comparable data for CIS and E European countries. Decollectivisation

and its aftermath changed their farm size paths, often radically, and very differently (chapter 5(b)).

- 70 If we use the latest OFG for all six countries in this group that have data after 1980, the average is 0.71.
- 71 This is not a tautology. It might have been otherwise: the countries with least land per farmer might also have been the most unequal.
- 72 Also (a) some recent Ginis in this table were followed by reforms that cut them; (b) for want of data, Table 7.2 under-represents countries where radical reforms, initially collectivising but in the medium term privately redistributive, slashed the Ginis of operated farmland; countries with new wave reforms; and small-farm decollectivisers; (c) giving equal importance to all countries in the table overstates Third World land inequality: the farm populations of China, India, Indonesia, Pakistan and Bangladesh dwarf those of the group I countries and show much lower Ginis.
- 73 Lease is almost compelled (absent slavery or high-order mechanisation) by extreme owned land inequality, as in these cases: (a) In 1300 villages in Teheran and Demuvand, Iran, in 1949, 60 per cent of families owned no land, but 1 per cent (with over 20 ha) owned over 56 per cent [Amid 1990: 30]. (b) In Pakistan in 1972, the bottom 66 per cent of landowners had 17.6 per cent of farmland, but the top 1 per cent (over 10 ha) owned 18 per cent [Singh 1990: 60]. (c) In Guatemala in 1980, 2 per cent of rural population owned 70 per cent of farmland [Thiesenhusen (ed.) 1989: 3]. (d) In Chile, before Frei's reforms of the 1960s, 37 haciendas averaged over 2750 ha; 'a few were truly enormous ... One expropriated owner acknowledged that a conservative estimate would be more than 150,000 ha.' [Brown 1989: 224–25].
- 74 Because not all – e.g. in 50–50 sharecropping, about half – the value of output from tenanted land accrues to the tenant. One might, as argued by David Penney (pers. comm.), measure land held as hectares owned *and* occupied, plus half hectares owned *or* occupied but not both.
- 75 Not least because reverse quality effects appear to be as common as quality effects (chapter 2(e) (iii)).
- 76 The 24 countries sampled averaged rural poverty at 46.4 per cent and OFG at 0.68. A country with OFG 0.1 above (below) 0.68 could expect rural poverty incidence above (below) 46.4 per cent by 7.8 per cent. If all we know is that a pair of developing countries have OFGs of 0.63 and 0.73, and we are asked to predict their rural poverty incidences, the best estimates are, respectively, 42.5 and 50.3 per cent; 69 per cent of the variance of poverty incidence is associated with variance of the OFG. *Such data, as always, prove nothing about direction of causation.*
- 77 el-Ghonemy realises that the approach is largely bivariate and causally over-simple, but it remains highly suggestive.
- 78 Further, el-Ghonemy finds  $r^2 = 0.36$  between landlessness and rural poverty incidence across 21 developing countries with usable data. However, we cannot infer that reducing the OFG (or landlessness), e.g. by land reform, will make rural poverty fall by an amount measurable by the appropriate beta-coefficient. (1) el-Ghonemy's comparisons are cross-national, not *country-specific time-series* – which we need, to assess, for a particular country, the link between OFGs (or landlessness) and subsequent rural poverty incidence. (2) el-Ghonemy concentrates on bivariate regressions of poverty on OFGs (or landlessness); policy analysis must analyse its *multivariate* links. el-Ghonemy's beta reflects the Gini's link, not only directly to poverty, but also to other variables associated with poverty. (3) Without further structuring, regression can establish only links, not the *causation*: the beta may arise partly or wholly because poverty causes a high OFG (e.g. by stopping the poor from raising enough money to buy land), not *vice versa*; or a third variable, e.g. gender discrimination, may increase both poverty and the OFG. *Note that all this may as well raise as lower el-Ghonemy's estimate of how much a (land reform-induced) fall in the OFG would cut rural poverty.*

- 79 Much local research, though not all, however suggests that the better-off gain more from migration – and are more prone to settle in urban destinations – than the worse-off, and that the poorest migrate less than the moderately poor [Connell *et al.* 1976].
- 80 These are much higher than the rural proportions of *total* population: 58 per cent in 2002 and 62 per cent in 1993 [Ravallion *et al.* 2007]. These data are based on nationwide household surveys covering over 90 per cent of the population of developing countries,
- 81 Many also have non-farm and/or remittance income conversely, most having this as the main income source also have farm or farm labour income.
- 82 In Table 7.4 (p. 291), East, Central and (allowing for the underestimate in Nigeria: note (e)) West Africa.
- 83 In recent household surveys agriculture provides 57 per cent of *rural household income* in Africa, 68 per cent in Asia, 61 per cent in Latin America. Agricultural exceeds non-agricultural income; for about 89 per cent of *rural workforce* in Africa, 75 per cent in Asia, and 64 per cent in Latin America [Haggblade *et al.* 2007].
- 84 It is over-simple in ways that understate small farms' use for hired labour: (a) in seasonal peaks, if similar for all small farms, they hire the landless, and if different, also one another; (b) most hire some specialised labour, e.g. for rice transplanting, anyway.
- 85 The lower bound is that work is not sought if (expected earnings) < (expected cost [job search + calories needed for work-plus-search]).
- 86 For an excellent localised account of the special gains from the green revolution to hired labourers, see [Hazell and Ramasamy 1991].
- 87 Workers per ha in other size-groups: 1–2 ha 1.72; 2–3 ha 1.12; 3–5.1 ha 0.82; 5.1–10.1 ha 0.52; 10.1–20.2 ha 0.32 [Booth and Sundrum 1984: 101].
- 88 *Ibid.*: 100–109, 279–80.
- 89 This UN middle projection, however, assumes – probably optimistically – that 'Asian' patterns of fertility reduction, commenced in Southern and some of Eastern Africa, will spread (with a delay) to West and Central Africa too.
- 90 These data allow for HIV/AIDS. It hits mainly (i) persons aged 15–30, (ii) infants – with offsetting effects on dependency ratios.
- 91 It is a temporary 'window' because after 2020–50 – the date varies by country – rises in the proportion of over-60s will put the dependency ratio into reverse (i.e. it will start to rise). Until that happens, if crop-science and farm-size policies do *not* allow the extra workers (relative to dependants) to achieve extra labour income, the 'window' opens, not onto poverty reduction, but onto falling rural wage-rates or employment.
- 92 There is an analogy to the minimum wage. Artificially lowered prices for tenancies raise the income of sitting tenants (including poor ones), but lower the income expectations of evicted or potential tenants (including poor ones). Similarly, new or increased legal minimum wage-rates benefit workers who keep their jobs, but may well harm those who lose them (or who would have obtained them at the previous, lower, wage only). In both cases the net effect on 'poverty' may be good or bad.
- 93 Especially if, after many years of high investment in lead regions in both research and infrastructure, these both show lower returns, and less poverty reduction per marginal dollar, in lead regions than in several non-green-revolution regions – as is the case in China and India [Fan *et al.* 2000, 2000a].
- 94 Suppose land reform is determined by the clash of self-interested groups with power. One such group, strong enough to stop a reform, may be persuaded that its interests are not served by doing so (unless persuadability too is determined – not implicit in land-reform determinism as such).
- 95 Non-Marxists too change their minds on these matters. J. S. Mill came to advocate co-operative farming in late life, abandoning his earlier support for small-scale

equal farms because he came to believe in economies of scale in agriculture – on what grounds is not clear.

- 96 As did Marx: 'Man makes his own history, but he does not make it out of whole cloth; he does not make it out of conditions chosen by himself, but out of such as he finds close at hand' [Marx 1852]. Marxism, NIE and other 'grand theories' should not be judged by crude simplifications.

## Appendix

- 1 The main definition of 'reform' in the *Oxford English Dictionary* is 'amendment, or altering for the *better*, of some *faulty* state of things, especially of a *corrupt* or *oppressive* political institution or practice; the removal of some *abuse* or *wrong*'. To make this a useful descriptive definition – identifying what is and isn't reform – we need to agree on how we use the italicised words, i.e. to resolve the main problems of moral philosophy! 'Land reform', being narrower, offers more hope. Yet 'land reform' – despite J.S. Mill's 1871 'explanatory statement' for a Land Tenure Reform Association [Hollander, vol. 2: 836] and Gladstone's 1886 speech stressing 'reform of the [Irish] Land Laws' [Park 1916] – is not mentioned in the *OED* until the 1987 *Supplement*. It claims first use in 1940, but still offers no definition (though many compounds starting with 'land' are defined). *Merriam-Webster* and *Encarta* are close to our definition, *Merriam-Webster* broader ('measures designed to effect a *more equitable* distribution of agricultural land especially by governmental action'), *Encarta* narrower 'the redistribution of agricultural land, especially by government measures, so that *those owning none* receive some of it' [my italics].
- 2 'Pointing' definitions are called *ostensive*. Blind, paralysed or deluded people cannot point accurately to an elephant. 'Normal adults' may dispute borderline cases, but usually agree which cases are borderline (perhaps after new research) and may then agree to use another word for them.
- 3 Nozick [1974] argues that the case for acts with agreed good 'consequences' (emphasised by utilitarians) should often be overridden by the case for respecting 'rights', such as the right to property.
- 4 For example, card patience; family bridge game; formal bridge tournament; football cup final.
- 5 Winners' definitions, like 'winner's history' [Carr 1961], fail us, unless we believe in one-way progress to an 'end' of history or theory.
- 6 For precise definition of 'land reform', see p. 328. The 'aim' may be to reach a goal, which may be supra-personal (e.g. less poverty; more 'justice', perhaps via diminution of gross inequality; more economic growth and/or efficiency) or may reflect individual or group interest. Chapters 1–2 review these goals, and enquire whether land reforms, by achieving aims, make progress towards them.
- 7 Invasions have sometimes been used to pressure governments to enforce existing, or to enact new, land reform. However, invasions often seek revolutionary goals beyond land transfer; are violent; and/or provoke violent responses by or on behalf of big landowners. All this often leads governments to abandon land reform as too dangerous, sometimes with a switch to repression.
- 8 Laws to change markets so more land is transferred privately to the poor, however, may sometimes count as land reform.
- 9 To safeguard the status quo, political (Stolypin's 1910 Russian land reform) or regional (1890–1903 Irish land reform), is the goal of some political *backers* of land reform, but seldom is preventing revolution the main aim of analysts or exponents of reform.
- 10 This preceded (but was speeded by) the collapse of Communism, and was due mainly to a growing sense that some redistributive reform – or its political context or side-effects – increased State power and restricted efficient production and exchange.

- 11 Chile in 1960–73 implemented much land reform, but arguably the poor gained little because anti-market interventions continued to repress crop prices, and hence farm labourers' employment and small farmers' income.
- 12 Other factors were also involved. The anti-State bias of much third-stage reform speeded the reduction of domestic funding for agricultural research in much of Latin Americas and Africa. Price and market reforms of agriculture, given the fiscal pressures on governments, too often meant much more expensive fertilisers but little or no improvement in farm output prices.
- 13 'Agrarian reform' mistranslates the Spanish 'reforma agraria', which means – land reform! ' "When I use a word", said Humpty Dumpty ... "it means just what I choose it to mean – neither more nor less..The question is ... which is to be master, that's all"' [Carroll 1871: Ch. 6].
- 14 Users of the term 'agrarian reform' are often unclear whether 'provision' of services means (a) State production, (b) State subsidies for their private provision (paid for, in each case, out of taxation, aid or inflation?); or (d) laws or (e) incentives for private provision of these services.
- 15 *Tenancy reform* seeks to improve the terms on which tenants hold their farmland (chapter 4(b)). Some tenancy reform is not land reform, due to incentive effects that harm the rural poor, including would-be tenants and labourers. *Land-use reform* seeks to improve farmers' deployment of resources or mix of outputs, e.g. consolidation of fragments (chapter 6(a)). Since most land-use reform does not redistribute, it is not land reform.
- 16 'Bolivian peasants in the early 1950s took possession of much of the [highland; this] was gradually legalized in the following decades' [Dorner 1992: 34; on Honduras, *ibid.*: 43]. In India invasions induced partial implementation of *past* land reforms in West Bengal [Bandyopadhyay 1995] and (following the Land Grab Movement of August 1970) in Bihar [Iyer 1993: 93–95; Bharti 1993: 133]. In the 1990s Brazil, and in the 2000s Zimbabwe, changed laws to validate recent land invasions – shifting land and power, respectively, mainly to the poor and mainly to political clients.
- 17 Laws for settlement of virgin lands – privately or under a settlement scheme (chapter 6(b)) – are not land reform, except perhaps if their poverty and distribution impact is much better than that of existing lands. Sometimes, alleged virgin land is not truly unused, but farmed by people with unwritten, informal, or customary-law claims; most such pseudo-settlement is land *deform*, moving land rights away from the poorest.
- 18 This is one reason why consolidation of fragments is not normally land reform.
- 19 To be politically *sustainable* a policy – land reform or not – must usually offer absolute medium-term gain to many of the poor as compared to the recent past, not only to credible alternatives; but that is a separate issue.

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