

Non-Farm Diversification, Poverty, Economic Mobility and Income Inequality

A Case Study in Village India

Himanshu
Peter Lanjouw
Rinku Murgai
Nicholas Stern

The World Bank
Development Research Group
Poverty and Inequality Team
May 2013



Abstract

This paper assembles data at the all-India level and for the village of Palanpur, Uttar Pradesh, to document the growing importance, and influence, of the non-farm sector in the rural economy between the early 1980s and late 2000s. The suggestion from the combined National Sample Survey and Palanpur data is of a slow process of non-farm diversification, whose distributional incidence, on the margin, is increasingly pro-poor. The village-level analysis documents that the non-farm sector is not only increasing incomes and reducing poverty, but appears as well to be breaking down long-standing barriers to mobility among the poorest segments of rural society. Efforts by the government of India to accelerate the

process of diversification could thus yield significant returns in terms of declining poverty and increased income mobility. The evidence from Palanpur also shows, however, that at the village-level a significant increase in income inequality has accompanied diversification away from the farm. A growing literature argues that such a rise in inequality could affect the fabric of village society, the way in which village institutions function and evolve, and the scope for collective action at the village level. Failure to keep such inequalities in check could thus undermine the pro-poor impacts from the process of structural transformation currently underway in rural India.

This paper is a product of the Poverty and Inequality Team, Development Research Group. It is part of a larger effort by the World Bank to provide open access to its research and make a contribution to development policy discussions around the world. Policy Research Working Papers are also posted on the Web at <http://econ.worldbank.org>. The author may be contacted at planjouw@worldbank.org.

The Policy Research Working Paper Series disseminates the findings of work in progress to encourage the exchange of ideas about development issues. An objective of the series is to get the findings out quickly, even if the presentations are less than fully polished. The papers carry the names of the authors and should be cited accordingly. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.

Non-Farm Diversification, Poverty, Economic Mobility and Income Inequality: A Case Study in Village India

Himanshu, Peter Lanjouw, Rinku Murgai and Nicholas Stern¹

Keywords: Rural diversification, non-farm employment, village study, income inequality, poverty, income mobility,

JEL: O18, O15, I32

¹ The authors are respectively at Jawaharlal Nehru University, World Bank, World Bank, and London School of Economics. This paper arises out of an ongoing project to resurvey the village of Palanpur in 2008/9 funded by the UK Department of International Development. The Palanpur project is a collaborative effort based at the Asia Research Centre, London School of Economics and at the Centre de Sciences Humaines, Delhi. We wish to thank Jean Drèze, Ruth Kattumuri, Naresh Sharma, Dipa Sinha, Dinesh Kumar Tiwari, Abhiroop Mukhopadhyay, Ashish Tyagi, Neeraj, M. Sangeeta, Rosalinda Coppoetta, Loic Watine, Camille Dufour, and Florian Bersier, for their invaluable contributions during the course of this work, and are also grateful for comments received at the International Association of Agricultural Economists Meeting, at Foz do Iguacu, Brazil, 2012, UC Berkeley, 2011 and Jawaharlal Nehru University, 2012. The views in this paper are those of the authors and should not be interpreted as those of the World Bank or any of its affiliates. All errors are our own.

Introduction

Rural India is home to 70% of the nation's population and about the same proportion of poor people in the country. Most of rural India's workforce (60%) remains primarily involved in agriculture, but in recent decades this sector's growth has lagged other sectors in the economy. While there is no escaping the need to galvanize agriculture, it is also clear that India needs to manage a transition of people out of agriculture. The gap between the number of new rural workers and the number of new jobs in agriculture is growing; agricultural advances alone will not meet the rural employment challenge. Migration to urban areas will be important, but the rural non-farm economy will also have to be a key source of new jobs.

The aim of this paper is to study the impact of an expansion of non-farm income opportunities on poverty, economic mobility and income inequality at the village level in rural India. The paper starts by assembling various National Sample Survey Organisation (NSSO) employment surveys in order to track changes in poverty and the non-farm sector at the all-India level since the early 1980s.² It then supplements survey-based evidence with insights arising from the detailed study of long-term economic development in a single village, Palanpur, located in western Uttar Pradesh. This village study points to an accelerating impact of rural non-farm diversification on poverty reduction, and rising income and occupational mobility at the village level in India. But the study also indicates that non-farm diversification is associated with a sharp increase in village-level income inequality.

The paper begins by examining NSS survey data to look at the transformation of India's countryside currently underway. We provide detailed evidence covering the period between 1983 and 2009/10, documenting a process of diversification out of agriculture that is slow but accelerating.³ Section 2 also shows that with growth of the non-farm sector there is also evidence of declining "quality" of non-farm jobs, notably in the direction of increased casualization of non-farm employment, away from regular, salaried, employment. The section further documents a persistently high share of the overall non-farm workforce engaged in self-employment activities. The section ends with the observation that since the 1980s, rural poverty in India has been falling and points to analysis in support of the contention that casualization of non-farm employment opportunities has translated into improved access of the historically disadvantaged segments of rural society to non-farm employment. As returns from casual non-farm employment are higher than from agricultural labor (though markedly lower than from regular non-farm employment), the growing participation of disadvantaged groups in this (sub) sector is likely to have been a positive force for poverty reduction.

² The survey based analysis in this paper draws primarily on five "thick" rounds of the NSS—1983, 1993-94, 1999-2000, 2004-05, and 2009/10. We do not report data from the 1987-88 thick rounds because the unit record data do not produce wage rates that are comparable to wage estimates for that year published by the NSS itself. In addition, because of well-known comparability problems of the 1999-00 consumption aggregate with other rounds, in regression analysis of impacts on poverty, we exclude the 1999-00 survey round.

³ We are concerned in this paper with the rural non-farm sector defined in terms of all rural economic activities outside of agriculture. Non-farm activity may occur in the home or in factories or be performed by mobile traders. Our definition can be contrasted with a broader notion of "off-farm" activity which also considers economic activities that occur "off of the owner's own farm" but that could for example include wage-employment in agriculture earned on a neighbor's farm, or the renting out of the services of a tractor to neighboring farmer, along with nonfarm earnings from the owner's nonfarm enterprises or from nonfarm wage earnings. Chapter 1 in Hagglade, Hazell and Reardon (2007) provides a valuable discussion of definitions and concepts.

We then turn to the specific context of Palanpur, a village in western Uttar Pradesh. Palanpur has received intensive scrutiny by economists, based on very rich data on a wide array of economic activities covering the entire village population, from the late 1950s through to the present day. A detailed survey of the village was undertaken most recently during May 2008 to April 2010, and these data can be scrutinized alongside evidence collected during previous decades. The data indicate that many of the all-India patterns and processes seen in NSS surveys are clearly underway also in this single village setting. In Palanpur, poor people were historically sharply disadvantaged in terms of access to a non-farm sector that started to become significant for the village economy in the 1970s. The poor lacked the social status, education, networks, and ability to pay bribes necessary to obtain employment in outside jobs – particularly in those that provided regular, salaried, employment. An important finding from the most recent round of Palanpur data is that as the non-farm sector has seen some further expansion into the village economy, access to non-farm jobs has become noticeably more broad-based. Although the trend towards casualization, pointed to by the sample survey data, can also be clearly observed in Palanpur, it remains that such non-farm employment has translated into upward mobility for a significant number of households that had previously appeared mired in absolute poverty at the bottom of the village income distribution.

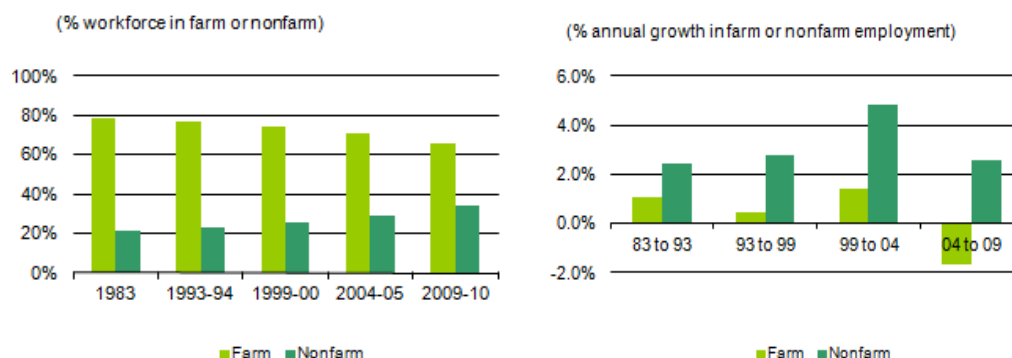
Analysis of income trends in Palanpur documents a steady decline in poverty, alongside the expansion of non-farm employment. However, there has also been a sharp increase in income inequality. At first glance, this appears puzzling, because the evidence cited above points to diversification leading to an expansion of economic opportunities even for the poorer segments of the village population. A closer examination of the income data indicates however, that indeed, while greater income mobility may be associated with some equalization of economic opportunities in the village, rising incomes from non-farm sources have nonetheless been strongly associated with rising inequality. The explanation comes from the recognition that non-farm jobs remain far from universally accessible; and as long as some households remain excluded it is not surprising to observe overall inequality to rise. The process is not dissimilar to the story of inter-sectoral transfer described by Arthur Lewis (1954) in which growth takes place against a background of labor transfer out of traditional subsistence cultivation and agricultural wage labor toward a modern sector. Fields (1980, 2000) demonstrates that such a process is able to generate the well-known “inverted U-curve” of first rising and then falling inequality, first described by Kuznets (1955, 1963). What is interesting to observe from the Palanpur context is that this process can occur within a village, as a result of the modern economy entering into the village economy via employment opportunities outside of agriculture. It need not involve wholesale migration from rural areas to urban areas – the more conventionally used narrative to describe the Lewis (1954) process.

Economic Diversification and Rural Poverty: All-India Trends

After a long period during which the share of agriculture in the Indian labor force remained constant, its share started declining in the mid-1970s, a trend that continues to this day. The share of the rural non-farm sector (all rural employment activities other than agriculture and

its associated enterprises) has been increasing ever since. By the late 2000s the sector employed nearly 40% of India's rural workforce (Figure 1).⁴

Figure 1: The rural non-farm sector is expanding, at a pace that exceeds that of agriculture



Notes: Employment defined on the basis of principal-cum-subsidary ('usual') status. Farm versus nonfarm assignment is based on workers' reported industry, occupation, and employment status. Number of farm and nonfarm worker are calculated using (a) estimated proportions from unit level data, and (b) total rural workforce as in Sundaram (2007). *Sources:* Estimates based on 'Employment and Unemployment Survey' (EUS) of respective NSS rounds for 1983, 1993-94, 1999-00, 2004-05, and 2009-10.

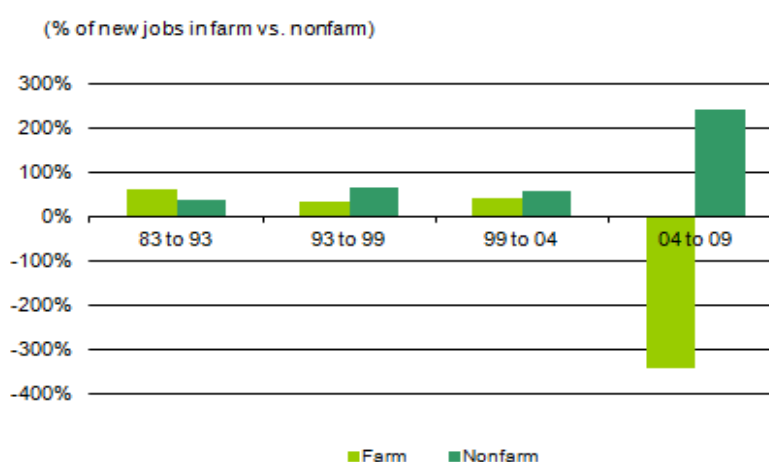
In fits and starts (with a slowdown immediately following the reforms in the early 1990s) the pace of diversification away from agriculture further picked up pace in the 1993-2004 decade, especially after 1999.⁵ Over the first period, 1983 to 1993-94, the average annual growth in non-farm jobs was just over 2%. Between 1993-94 and 1999-00, this increased to 3%, and from 1999 to 2004-05, this increased again to 4%, before slowing back down to a little bit over 2% in the second half of the 2000s. In the eighties, of the nearly 40 million additional rural jobs generated, the majority (6 out of every 10) were in the farm sector. Subsequently, between 1993 and 2004, non-farm employment growth outstripped agriculture: of the 56 million new rural jobs created over this period, 6 out of every 10 were in the non-farm sector (Figure 2). After 2004-5 these trends become more dramatic as there was a significant net decline of employment in the

⁴ Unless mentioned otherwise, the NSS-based employment data presented in this paper refer to the Usual Principal and Subsidiary workers ("usual status") definition of employment. A worker's principal status is determined by the activity the worker spent most of his time doing in the year preceding the survey. Principal status workers are those who spent most of their time either employed or looking for jobs. Any activity other than the principal status constitutes a worker's subsidiary status. Usual status workers include principal status workers, and subsidiary workers who spent part of their time working or looking for jobs in the year preceding the survey.

⁵ Lanjouw and Murgai, 2009; Himanshu, 2008; Eswaran *et al.*, 2009. Sen and Jha 2005 contend that there was no acceleration in the first half of the nineties due to a decline in public expenditure in large parts of rural India in the post-reforms period. Accelerated diversification of the rural workforce towards non-farm activities is due to recovery in the sector since 1999-00 as well as a shift of workers out of agriculture due to a series of droughts in the early 2000s that placed a great deal of pressure on agricultural incomes (Himanshu, 2011).

farm sector, and the non-farm sector thus accounted for the entirety of new employment in rural areas.

Figure 2: The non-farm sector is the source of most new jobs



Notes and Sources: See Figure 1

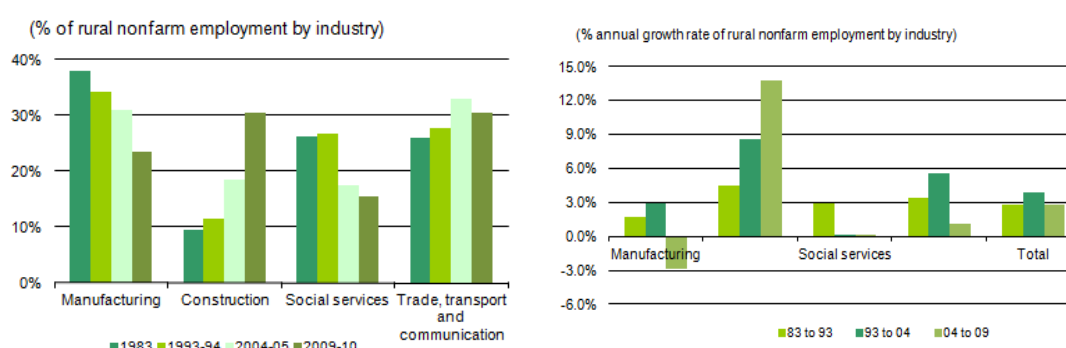
Nationally representative data on rural non-farm income are not available over time. But, according to the 2004 NCAER-University of Maryland India Human Development Survey, nearly one-half (48%) of the income of the average rural household came from non-farm earnings in the early 2000s (Dubey, 2008). This is true also of farming households for whom the share of their income from non-agricultural activities (46%) matches the contribution of agricultural incomes (Cai et al., 2008).

The rural non-farm sector displays enormous heterogeneity, both in terms of sectors, and in terms of type of employment. The evidence points to a growing, but increasingly casualized, rural non-farm sector. The casualization of non-farm work is evident in the types of sectors where jobs are being created and the types of jobs generated.

While manufacturing activities are often the first that come to mind when discussing the non-farm sector, by 2009-10 services (Transport, trade, communications and social services) provided employment for nearly half of the rural non-farm workers (Figure 3). Less than a quarter was in manufacturing; the remaining 30% in construction. These shares have changed significantly over time. In particular, note the rapid rise of construction since the early 1990s:

from only 11% of rural non-farm employment in 1993 to 30% in 2009-10. The share of social services (which includes public administration and community services, as well as health and education) shows a corresponding decline over the same period: from 26% to 15%.

Figure 3: Rural non-farm is manufacturing but also services and construction



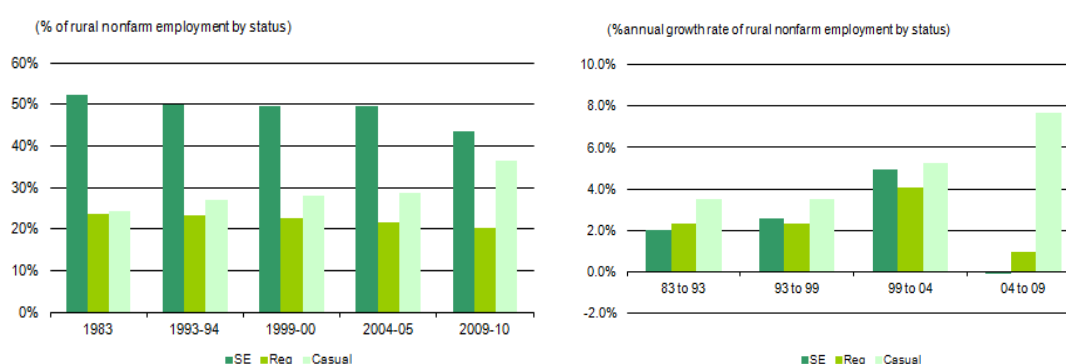
Notes: (a) Social services include public administration, defense, education, health, community and other personal or household services. (b) Trade, transport, etc. include wholesale and retail trade, hotels, restaurants, transport, storage and warehousing, and communication. Rest as in Figure 1.

Non-farm activities can be crudely divided into three sub-sectors representing very different types of employment: *regular, salaried employment* where the worker has a long-term contract that does not require daily, weekly or monthly renewal; *casual wage labor* that entails a daily or periodic renewal of work contract; and *self-employment* where the worker operates her own business.

Regular non-farm employment is typically highly sought after and most clearly associated with relatively high and stable incomes. But only 20 % of the non-farm workforce held regular salaried jobs in 2009-10. Nearly 40% of the rural non-farm workforce was employed as casual laborers. While it is generally thought to be less demeaning to a worker than agricultural wage labor, and it pays better, casual work may be both physically demanding as well as hazardous (construction, rickshaw pulling, industrial workshops, etc.). In 2009-10 the remaining two-fifths of the non-farm rural workforce was involved in self-employment. Non-farm self-employment activities can be residual, last resort options (e.g., unpaid family labor and wage work concealed as self-employment under different forms of contracting out tasks) as well as high return activities. Whether they are of the former or latter variant generally depends on the skills and capital available for deployment.

Casual employment growth accelerated between 1983 and 2009-10, dramatically so between 2004-05 and 2009-10 (Figure 4). Between the last pair of years, employment growth in regular non-farm employment tapered off, and self-employment growth halted altogether. The share of the self-employed fell to just over 40% while that of casual employment grew from 24% in 1983 to 29% in 2004 and continued to rise to just under 40% in 2009-10. The share of regular employment fell slowly but consistently from 24% to 20%.

Figure 4: Growth of all three types of non-farm jobs, 1983 to 2009-10



Notes and Sources: SE – Self-employment, Reg – Regular Salaried/Wage Employee. Rest as in Figure 1

The declining share of regular employment between 1983 and 2009-10 is surprising since, in the normal course of development, one would expect the share of regular jobs to increase. The slower growth of jobs in the regular sector since 1993 would seem to be linked to absence of growth in the social services employment, in which regular jobs would be more common, and the very rapid growth of construction and other services, in which casual jobs would predominate.

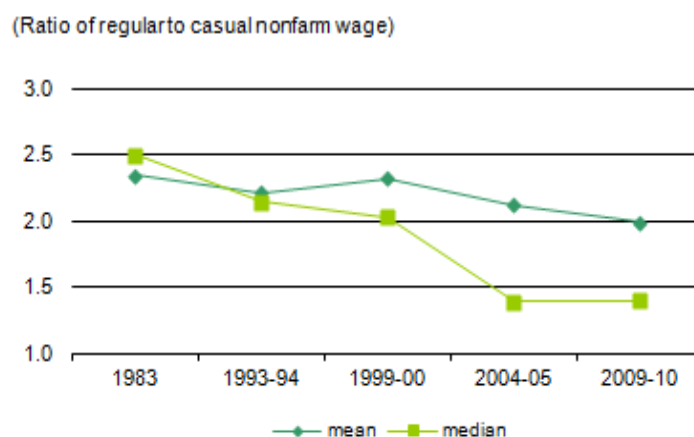
Indeed, the puzzle becomes why the number of regular jobs has gone up at all, rather than down in recent years. The contraction of jobs in the public sector, which has historically been the primary source of salaried work in rural areas, has been offset by a growth in private sector jobs. Public sector jobs are highly coveted for the job security and the wage premium they provide over private sector jobs. Private sector jobs share few of these characteristics.⁶

⁶ Using the ARIS-REDS panel data set (1969-1999), Foster and Rosenzweig (2003 and 2004) report very rapid growth in rural factory employment. In their data, rural factory employment increased tenfold between 1980 and 1999, about half the villages in their sample were located near a factory, and in those villages, 10% of the male labour was employed on a factory. NSS data over the same period do not show any such growth although they do confirm the importance of manufacturing as the next most important source of salaried jobs after the public sector.

Unfortunately, the NSS does not collect data on income from self-employment. Since the self-employed make more than 40% of the rural non-farm workforce, this makes it impossible to analyze changes in the income of the non-farm workforce. Our discussion is perforce restricted to the *employed* non-farm workforce.

While regular jobs are still much better paid than casual ones, the gap between the two is falling as a result of the casualization of the non-farm sector. Figure 5 shows the gap over five of the surveys between 1983 and 2009-10 using both the mean and the median to compare wages in regular and casual non-farm employment. Both ratios show a declining trend.

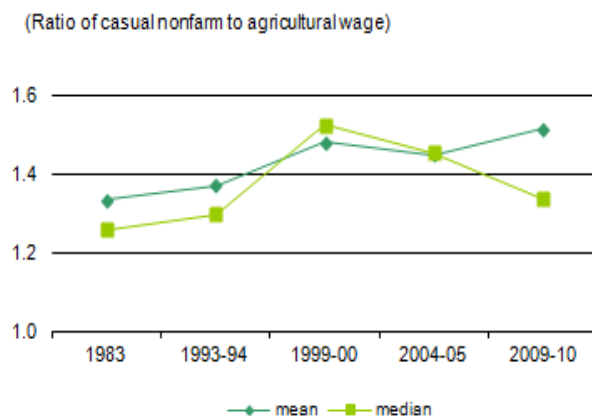
Figure 5: The declining premium of regular over casual non-farm wages



Notes: Mean and median daily wage (Rs.) are calculated for 19 major states of India. *Sources:* See Figure 1

The premium embedded in the casual non-farm wage over the agriculture wage rose from 25-30% (depending on whether it is based on a comparison of means or medians) in 1983 to about 45% in 2004-05, and then diverging depending on whether one considers the mean or median. The premium in the mean casual non-farm wage rose further to roughly 50% by 2009-10, while it declined back to roughly 35% when considering the median (Figure 6).

Figure 6: The increasing premium of casual non-farm over agricultural wages



Notes and Sources: See Figure 5 and Figure 1.

Against the background of a growing rural non-farm sector, poverty in rural India has been falling. A complicating factor in tracking the evolution of poverty from the early 1980s all the way through to 2009-10, is that official poverty lines have changed. World Bank (2011) documents poverty trends between 1983 and 2004/5 as having declined from 46.5% of the population in 1983, to 36.8% in 1993-94 and declining further to 28.1% in 2004/5. These estimates are based on the report published by the 1993 Planning Commission Expert Group on Estimation of the Proportion of the Poor. In 2012, the Planning Commission published new official poverty lines for 2009-10 in its Press Note on Poverty Estimates. These new poverty lines address a number of concerns that had been raised with respect to the earlier series, but it has not been possible so far, to back date these poverty lines all the way to 1983. Based on the new poverty lines, poverty in rural India declined from 50.1% in 1993-94 to 41.8% in 2004-05 and 33.8% in 2009-10. Both sets of poverty lines document a steady decline in rural poverty, although the new lines indicate that even at the end of the 2000's more than a third of the population in rural India remains below the poverty line. This conclusion also resonates with estimates published by the World Bank on poverty in rural India based on an internationally comparable poverty line of \$1.25 in PPP terms. Indeed, the World Bank series can be scrutinized for trends all the way back to 1983, and documents that in terms of both percentage points, and percent declines, poverty has fallen at an increasing pace over time (Table 1).

Table 1: The Incidence of Poverty in Rural India: 1983-2009/10 (Percent of Population Poor)			
	1993 Expert Group Poverty Lines	2012 Expert Group Poverty Lines	Global Poverty Line (PPP \$1.25 per day)
1983	46.5	<i>na</i>	57.8
1993-94	36.8	50.1	52.3
2004-05	28.1	41.8	43.8
2009-10	<i>na</i>	33.8	34.3

Source: Quinquennial rounds of the NSS Consumption surveys 1983-2009-10. *PovCalNet* calculations for the global poverty line estimates.

In an earlier companion paper, Himanshu et al (2011) document that the expansion of non-farm employment in rural India has increasingly been drawing from ranks of the socially disadvantaged. This is in large part due to the fact that the sub-sector that has seen the most rapid growth in recent years has been casual rural non-farm employment. This is the segment which has the highest participation by the socially disadvantaged (lower caste) and the illiterate. Given that casual non-farm employment, though worth considerably less than regular employment, still pays considerably better than agriculture (the wage premium is around 35-50% in 2009-10) the direct impact of non-farm growth on rural poverty in India has thus been positive. Himanshu et al (2011) also point out that direct effects are likely to be reinforced by indirect effects. Notably, they find evidence from regression analysis based on a region-level panel covering the period 1983-2004-05 that expansion of the non-farm sector is accompanied by general labor market tightening. This has the effect of raising wages amongst agricultural laborers – typically the poorest of the rural poor - and thereby contributes to poverty alleviation even amongst those who are not directly employed in the non-farm sector.

Poverty, Mobility and Inequality in Palanpur

The Village Setting

The village of Palanpur, in Moradabad District in west Uttar Pradesh, has been the subject of study since 1957-8, when it was first surveyed by the Agricultural Economics Research Centre (AERC) of the University of Delhi. The AERC resurveyed the village in 1962-3. In 1974-5 Christopher Bliss and Nicholas Stern selected Palanpur as a village in which to study the functioning of rural markets and the behavior of farmers. They spent just under a year residing in the village and collecting quantitative data, based on a set of questionnaires they designed and fielded, as well as qualitative information emerging out of informal discussion and

observation. Bliss and Stern published a book based on their investigations (Bliss and Stern, 1982), which has a primary focus on the 1974-5 survey year.

A fourth resurvey of Palanpur took place in 1983-4 when Jean Drèze and Naresh Sharma, assisted by V.K. Sharma and S.S. Tyagi Jr. (whose brother S.S. Tyagi Sr. had been in charge of data collection during the 1957-8 survey round) lived in the village for fifteen months, once again collecting data for the entire village population and liaising closely with Stern. The further re-survey of the village, once again by Drèze and Sharma, was conducted in 1993. This survey was carried out over a shorter period and is consequently somewhat less comprehensive. The shorter duration of the 1993 survey prevented collection of the detailed economic information necessary to construct an income measure for 1993 which is comparable to that of the earlier survey years. In the period between May, 2008 and April 2010, Himanshu of Jawaharlal Nehru University in Delhi led a team of researchers to resurvey Palanpur for a sixth time. The fieldwork was organized in close consultation with Nicholas Stern, Jean Drèze, Peter Lanjouw and Naresh Sharma and was structured and carried out in such a way as to maximize comparability with the earlier waves of data collection. Data from this most recent round of fieldwork are now available and underpin the present discussion of non-farm diversification and its distributional impacts. While the 2008-10 data have largely been entered and processed, analysis of these data is still ongoing and the results presented should thus be regarded as preliminary.

In early 2008 Palanpur had a population of 1,270 persons, divided into 236 households (Table 2). In this year, Hindus represent 85.2 per cent of the village population, and Muslims the remaining 14.8 per cent. Hindus are divided into six main castes, with a few additional castes numbering three households or less. The shares of Hindus and Muslims in the total population, and the relative sizes of the main castes, have remained fairly stable since the start of the Palanpur project in the late 1950s.

Table 2: Palanpur Village Profile 1993 and 2008

		1993	2008
Location		13 kilometers north of Chandausi a small town in Moradabad district; 31 kilometers south of the city of Moradabad	
Population		1,133	1,270
Number of Households		193	236
Average Household Size		5.93	5.42
Female/Male Ratio		0.85	0.98
Main Hindu Castes	Thakur, Murao, Dhima, Gadaraia, Passi, Jatab		
Main Muslim Castes	Dhobi, Teli		
Proportion of the population in different caste groups	Thakur	25.0	22.9
	Murao	25.9	24.4
	Muslim	12.5	14.8
	Jatab	11.7	16.2
	Other	24.9	21.7
Main economic activities	Agriculture, livestock, wage employment outside the village		

Percent Landless Households		23%	27%
Main Crops	Wheat, rice, mentha, sugarcane, bajra, pulses, jowar, potatoes		
Main Public Ameneties	Primary school, railway station, temples, wells, pond		

Throughout the survey period, the economy of Palanpur has essentially been one of small farmers. The proportion of landless households is relatively small by Indian standards and there are no clearly outstanding large farmers. The bulk of economic activity is in agriculture, and since the late 1950s the village has seen agricultural practices transformed in connection with the spread of irrigation, the introduction of new seed varieties, fertilizers and pesticides, the emergence of rental markets for agricultural equipment, and the introduction of new crops. Nonetheless, in the face of ongoing population growth and roughly constant village land availability (village lands cover about 400 acres), a growing share of village income comes from non-agricultural wage employment outside the village. The economy is by and large a market economy with few restrictions on production and exchange. However, the village's economy does differ from standard textbook models of market economies due to factors such as incomplete markets, imperfect information, transactions costs, and extra-economic coercion (see Lanjouw and Stern, 1998).

Caste

In Palanpur, caste exercises not only an important social function but also has a bearing on economic behavior and outcomes. In Palanpur there are three main castes in the village accounting for about two-thirds of the population: Thakurs, Muraos and Jatabs (see Table 2). Relations between these three castes evolved in significant ways between 1957-8 and 2008-10.

Highest in the village social hierarchy are the Thakurs, who traditionally had the largest landholdings in the village which, because of an aversion to manual labor, they usually leased out or cultivated with hired labor. Declining land endowments and rising real wages have gradually compelled most of them to take up cultivation. Thakurs are also keen to take advantage of employment opportunities outside the village. Politically, the Thakurs remain the most powerful caste in Palanpur in 2008-9, but they have become less and less the unquestioned leaders of the village. Political reforms introduced in Uttar Pradesh in the 1990s, reserving the position of village headman to Scheduled Castes, have prevented the Thakurs from directly exercising their political power. This has not resulted in a withdrawal from village politics, but has required the Thakurs to engage in coalition building and in enlisting proxies to act on their behalf. In economic terms, Thakurs have seen their supremacy challenged by Muraos, whose rising prosperity – particularly during the 1970s and 1980s - has inspired much respect in the village.

The Muraos are the only caste in Palanpur whose traditional occupation is cultivation. In 1957-8 their per-capita land endowments were roughly the same as those of the Thakurs, but over the survey period they have accumulated land, and have ended up with the best land endowments in the village. Good land, hard work, sustained thrift and excellent farming skills enabled the Muraos to take advantage of technological change in agriculture. They have generally been so successful in this regard that they have tended to eschew involvement in non-agricultural activities. The economic status of Muraos improved considerably over the survey

period, and this carried over into some rise in their social status as well. The most recent round of survey data suggest that by 2008-9 agriculture may have become somewhat less potent a driver of income growth and that this may be contributing to an erosion of the Muraos's economic status.

An examination of evolving caste relations based on scrutiny of the Muraos and Thakurs would suggest considerable caste dynamism in Palanpur, with the Muraos gradually coming to rival the Thakurs at the top of the village hierarchy. At the bottom end of the hierarchy, however, the situation of the Jatabs had long seemed frozen in place. Historically, the Jatabs were socially and economically the most deprived caste in Palanpur. They owned little land, lived in a cluster of shabby mud dwellings, and earned most of their income from casual labor and subsistence farming. Illiteracy among Jatabs had been near universal throughout the survey period, and up to 1993 few Jatabs had ever succeeded in obtaining regular employment outside the village. Indeed, Lanjouw and Stern (1998) indicate that in the period up to 1983/4, even after controlling for wealth position and education levels, Jatabs were unlikely to find regular employment in the non-farm sector. In these earlier survey rounds, there was little sign of growth in per-capita income for the Jatabs. So, in relative terms, their incomes were declining: in the 1957/8 and 1962/63 survey years the average per-capita income of Jatab households was about 70% of the village average. In the 1974/5 and 1983/4 survey years the corresponding proportion had declined to barely 50%. In terms of access to land the Jatabs also experienced little advancement. Even though Jatabs were as involved in cultivation as the Muraos and Muslims, unlike those two groups they did not succeed in increasing their land endowments. In fact, between 1983/84 and 1993 Jatabs lost 10 per cent of their land, mainly due to one household selling most of its land to repay mounting debts.

One of the key findings emerging from the 2008/9 survey data is that the circumstances of the Jatabs is showing significant improvement, both absolutely and relative to the rest of the village. This process is paralleled by a clearly discernable expansion of non-farm employment in the village economy. What is key is that Jatabs appear now to be enjoying greater access to non-farm opportunities than in the past, and this is translating into rising per capita incomes and upward mobility. We provide some preliminary documentation of this trend further below.

Expansion of Non-Farm Employment

In their account of Palanpur's growing inter-connectedness with the wider economy of Uttar Pradesh, Lanjouw and Stern (1998) documented a process of expanding non-agricultural wage employment amongst villagers. In the period up to 1993, much of this took the form of regular or semi-regular employment outside the village (distinguished from "casual" daily wage employment by a modicum of employment security, and usually involving weekly or monthly, as opposed to daily, wage payments). Between 1957-8 and 1993 the number of villagers with regular or semi-regular employment outside of agriculture rose from 11 to 49.⁷ Most of these jobs occurred outside the village, within commuting distance for Palanpur's inhabitants. The range of activities gradually expanded over time, but one clear pattern was that employment opportunities tended to cluster around well-defined locations and socio-economic groups. Employers that accounted for a significant number of jobs include the railways, a cloth mill in

⁷ The number of outside jobs in 1993 was somewhat lower than in 1983-4 due to the closure of some local cloth mills.

the nearby city of Moradabad, bakeries in the neighboring town of Chandausi, a liquor bottling plant, various marble and steel polish shops in Moradabad, and brick kilns in the surrounding areas. Lanjouw and Stern (1998) noted that the growth of non-farm jobs in Palanpur was associated with commuting of some household members out of the village and a shift in the balance of activities in the household.

Data on employment patterns in Palanpur over the period between 1993 and 2008-09 have recently been subjected to detailed scrutiny in Mukhopadhyay (2011). Between 1993 and 2008, the number of non-farm jobs (primary and secondary combined) continued to grow significantly (Table 3). In 2008-09, 200 non-farm jobs were held by villagers, up from 107 in 1993 (and 125 in 1983/84), while the population of the village grew only from 1133 in 1993 to 1270 in 2008-9. An important change in employment trends, however, and one that echoes the NSS-based findings discussed above, is that non-farm employment expansion between 1993 and 2008 occurred mainly as a result of expansion of self-employment activities and casual wage labor outside of agriculture. The number of self-employment activities tripled (from 23 to 71), and casual wage jobs more than doubled (from 35 to 78). But regular (and semi-regular) jobs increased marginally from only 49 to 51. Mukhopadhyay points to two explanations for the slow growth of regular non-farm employment. First, it appears that closure in the late 1980s of the cloth mills in the vicinity of Palanpur, was not reversed in the years after 1993. Second, his analysis reveals that an important number of households and individuals who reported regular non-farm employment in 1983-84 were no longer residing in the village by 2008-09. Regular employment in the 1980s had been concentrated amongst villagers belonging to the Passi caste in the earlier survey years. By 2008-09, as a result of selective migration, no Passi villagers reported any regular non-farm employment, and indeed, the size of the Passi community had declined significantly as well.

The range and radius of non-farm jobs has continued to increase progressively. Palanpur villagers' involvement in the labor market of Moradabad has become particularly noteworthy. For example, the Moradabad Railway Yard currently provides employment to anywhere between 10-50 villagers, with the number fluctuating in accordance with labor requirements of the agricultural cycle, and the availability of other non-farm jobs. Villagers join groups of laborers that unload rakes of cement and fertilizer bags, receiving payment on a per-sack-unloaded basis. On an average day, earnings for the members of the group come to around Rs 200 each. The work is very difficult and tiring, and not everyone can do it. But on average, the work is much more rewarding than agricultural labor (where the daily wage in 2008 was Rs. 100) and, importantly, is also considered to be much less demeaning than working as an agricultural laborer.

Table 3: Occupation Status in Palanpur 1957-58 to 2008-09

	1957		1983		1993		2008	
	Prim	Sec	Prim	Sec	Prim	Sec	Prim	Sec
Cultivation and Livestock	141 (81)	12	141(50)	32	187 (55)	13	184 (48)	122
Self Employment								
(Non Farm)	6 (3)	2	17 (6)	6	16 (5)	7	45 (12)	26
Skilled Self Employed	6	2	5	3	9	5	13	3
Unskilled Self Employed			12	3	7	2	32	23
Wage Employment								
(Regular/Semi Regular)	5 (3)	6	72 (26)	2	46 (14)	3	43 (11)	8
Regular (Skilled)	1		7	1	7		13	
Regular (Unskilled)	4	4	48		21	1	17	
Semi Regular (Skilled)			1		1		6	3
Semi Regular (Unskilled)		2	16	1	17	2	7	5
Wage Employment								
(Casual)	22 (13)	24	23 (9)	36	34 (10)	34	36 (9)	74
Agriculture Labor	22	7	10	21	16	17	2	30
Non farm Casual Labour	0	17	13	15	18	17	34	44
Study	0 (0)		9 (3)		28 (8)		46 (12)	
Other	0 (0)		5 (2)	2	4 (1)		9 (2)	1
None	1 (1)	131	17(6)	206	25 (7)	280	24 (6)	156
Total	175 (100)	175	284 (100)	284	340 (100)	340	387	387

Source: Mukhopadhyay, 2011.

Alongside the expansion of non-farm jobs has come a significant increase in the contribution of non-farm income to village income (Table 4). In 1983/4, non-farm sources accounted for roughly a third of village income. By 2008-9 this had increased to more than half. Of particular interest, in light of the discussion above about differential access to non-farm opportunities across caste groupings, is the evidence that suggests that Jatabs have seen a particularly significant increase in the share of income deriving from non-farm sources. In 1983-4, non-farm income accounted for only 17% of the total income of Jatabs. This had more than doubled, to 40%, by 2008-9. While Table 4 shows that most castes have seen a significant rise in income from non-farm sources, the increase amongst Jatabs has been particularly dramatic.

Table 4: Share of Income from Non-Farm Sources 1983/84 and 2008/09

	Number of Households		Per Capita Income (1960/1 Rs.)		Share of Income from Non-Farm Sources	
	1983/4	2008/9	1983/4	2008/9	1983/4	2008/9
Thakur	30	56	200	488	32%	67%
Murao	27	58	231	430	14%	35%
Dhimar	13	18	181	262	51%	60%
Gadariya	12	16	202	533	41%	63%
Dhobi	4	8	159	141	2%	30%
Teli	16	21	147	421	47%	60%
Passi	14	6	218	370	69%	55%
Jatab	19	38	85	180	17%	40%
Other	8	9	185	396	58%	52%
Total	143	230	194	382	34%	52%

Income Mobility

We turn now to a further examination of the improving circumstances of the Jatabs. In Tables 5-8 we divide the village population, in turn in 1983-84 and 2008-9, into fractiles of economic well-being, and consider how over time Jatabs have lifted themselves out of the lowest margins of the welfare distribution. We proceed in two steps. We first revisit a concept of “observed means” described in Lanjouw and Stern (1991, 1998) whereby Palanpur households are ranked on the basis of their “apparent prosperity” by the field investigators directly involved in the intensive fieldwork for each respective year. The point of departure here is that the affluence of a household in a small Indian village is, to some extent, a matter of common knowledge in the sense that its asset position and purchasing power is widely known. For the 1983-4 data, Jean Drèze and Naresh Sharma, first classified households into seven ‘groups’ of increasing prosperity labelled ‘Very Poor’, ‘Poor’, ‘Modest’, ‘Secure’, ‘Prosperous’, ‘Rich’, and ‘Very Rich’. The investigators classified households in this way independently, without consultation. It is of some comfort that Drèze and Sharma agreed to a considerable extent in their ranking of households, confirming the view that the relative position of households in the scale of economic affluence is in many cases fairly clear to informed observers. A final stage of

classification consisted of reclassifying the households into five quintiles of roughly equal size, designated ‘Very Poor’, ‘Poor’, ‘Secure’, ‘Prosperous’ and ‘Rich’.

This exercise was repeated in 2008-9, this time by four investigators involved in the detailed fieldwork covering a period of nearly two years. While the same five fractile headings were employed, it was decided not to impose the requirement that the village population be divided evenly into each group. In this sense there was some attempt to allow the investigator’s assessment to also accommodate an overall improvement in living standards.

Tables 5 and 6 present the results of the “observed means” classification for 1983-4 and 2008-9, respectively. Table 5 indicates that in 1983-4 90% of Jatab households had been classified by Jean Drèze and Naresh Sharma as being either ‘Very Poor’ or ‘Poor’. There was not a single Jatab household that could be categorized as ‘Prosperous’ or ‘Rich’ in this year. By 2008-9 this assessment had changed somewhat (Table 6). Although half of the Jatab households were still being assessed as ‘Very Poor’ or ‘Poor’ in that year, the other half of Jatab households were being judged as either ‘Secure’ or ‘Prosperous’ in that year. On the basis of this subjective assessment of well-being the evidence points to a significant improvement in the relative position of Jatabs by 2008-9.

Table 5: Observed Means Classification of Palanpur Households by Caste in 1983/4

	Very Poor	Poor	Secure	Prosperous	Rich	% (No. of hhs)
Thakur	0.0	0.267	0.233	0.267	0.233	1.00 (30)
Murao	0.0	0	0.222	0.370	0.407	1.00 (27)
Dhimar	0.154	0.462	0.308	0.077	0.0	1.00 (13)
Gadariya	0.0	0.250	0.25	0.167	0.333	1.00 (12)
Dhobi	0.250	0.250	0.250	0.0	0.250	1.00 (4)
Teli	0.375	0.313	0.188	0.063	0.063	1.00 (16)
Passi	0.400	0.067	0.133	0.200	0.200	1.00 (14)
Jatab	0.737	0.158	0.105	0.0	0.0	1.00 (19)
Other	0.286	0.143	0.0	0.429	0.143	1.00 (8)
% of households	22%	19%	20%	19%	20%	100% (143)

Table 6: Observed Means Classification of Palanpur Households by Caste in 2008/9

	Very Poor	Poor	Secure	Prosperous	Rich	% (No. of hhs)
Thakur	0.052	0.121	0.345	0.259	0.224	1.00 (56)
Murao	0.036	0.200	0.400	0.182	0.182	1.00 (58)
Dhimar	0.136	0.364	0.273	0.091	0.136	1.00 (18)
Gadariya	0.0	0.133	0.533	0.267	0.067	1.00 (16)
Dhobi	0.250	0.250	0.250	0.250	0.00	1.00 (8)
Teli	0.273	0.182	0.273	0.136	0.136	1.00 (21)
Passi	0.0	0.167	0.667	0.0	0.167	1.00 (6)
Jatab	0.077	0.436	0.410	0.077	0.0	1.00 (38)
Other	0.182	0.182	0.182	0.455	0.0	1.00 (9)
% of households	8%	23%	37%	19%	13%	(230) 100%

We turn next to repeat of this exercise using per capita income, rather than ‘observed means’, as our indicator of economic status. Table 7 reveals that on the basis of an income criterion, as was seen with the ‘observed means’ classification, roughly 90% of Jatab households in 1983-4 were counted in the bottom two quintiles of the per capita income distribution. Again, this picture had evolved markedly by 2008-9 (Table 8). Although 60% of Jatab households were still counted among the bottom two quintiles of the per capita income distribution, the other 40% were now at less risk. Indeed, 12% of Jatab households in 2008 were counted among the richest quintile in per capita income terms.

The evidence for Palanpur thus points to a significant improvement in the relative position of what has historically been a particularly vulnerable and disadvantaged group of households. These households are also, for the first time, actively engaged in the non-farm sector, earning roughly as much from non-farm sources (as a percentage of total income) as the other castes. The picture is one of an expanding non-farm sector generating returns that appear to exceed those from agriculture, slowly becoming less exclusively the preserve of the well-off, and therefore representing an increasingly important engine of rural poverty reduction.

Table 7: Per Capita Income Classification of Palanpur Households by Caste in 1983/4

	Very Poor	Poor	Secure	Prosperous	Rich	% (No. of hhs)
Thakur	0.067	0.233	0.267	0.233	0.200	1.00 (30)
Murao	0.037	0.222	0.111	0.333	0.296	1.00 (27)
Dhimar	0.231	0.231	0.154	0.231	0.154	1.00 (13)
Gadariya	0.083	0.250	0.333	0.083	0.250	1.00 (12)
Dhobi	0.250	0.0	0.500	0.250	0.0	1.00 (4)
Teli	0.375	0.063	0.250	0.250	0.063	1.00 (16)
Passi	0.267	0.133	0.067	0.067	0.467	1.00 (14)
Jatab	0.632	0.263	0.105	0.00	0.00	1.00 (19)
Other	0.143	0.143	0.286	0.286	0.143	1.00 (8)
% of households	22%	19%	20%	19%	20%	(143) 100%

Table 8: Per Capita Income Classification of Palanpur Households by Caste in 2008/9

	Very Poor	Poor	Secure	Prosperous	Rich	% (No. of hhs)
Thakur	0.075	0.207	0.264	0.264	0.189	1.00 (56)
Murao	0.217	0.239	0.217	0.174	0.152	1.00 (58)
Dhimar	0.333	0.111	0.111	0.222	0.222	1.00 (18)
Gadariya	0.0	0.083	0.167	0.250	0.500	1.00 (16)
Dhobi	0.333	0.333	0.333	0.00	0.00	1.00 (8)
Teli	0.125	0.250	0.125	0.250	0.250	1.00 (21)
Passi	0.0	0.600	0.200	0.0	0.200	1.00 (6)
Jatab	0.520	0.080	0.200	0.080	0.120	1.00 (38)
Other	0.250	0.250	0.00	0.250	0.250	1.00 (9)
% of households	20%	20%	20%	20%	20%	(230) 100%

Income Inequality

While rising incomes, falling poverty and increased mobility of the historically disadvantaged Jatabs all represent genuinely encouraging distributional trends in Palanpur, one less positive development has been a marked increase in income inequality. Table 9 documents that between 1983/4 and 2008/9, income inequality as captured by the Gini coefficient increased from 0.307 to 0.427. Although absolute values of the Gini coefficient cannot be easily interpreted, such an increase is not commonly observed and would generally be viewed as a very significant increase in inequality. An alternative measure, such as the Theil L, which is particularly sensitive to changes in incomes amongst poor people, also records a dramatic increase – indicating that the assessment of rising inequality is not an artefact of the use of a specific measure such as the Gini coefficient.

Table 9: Income Inequality has Risen Sharply in Palanpur

	Theil L Measure	Gini Coefficient
1957/8	0.188	0.336
1962/3	0.282	0.390
1974/5	0.169	0.253
1983/4	0.174	0.307
2008/9	0.336	0.427

Analyses of inequality in rural India commonly focus on social stratification – particularly differences between castes – as an important source of income inequality. Caste-based inequality is considered notoriously durable and has been the subject of a lot of work across the social sciences (e.g. Dumont 1966, Deshpande 2000). In light of the evidence presented above pointing to a noticeable increase in social mobility amongst Jatab households since 1983, one might expect that a decomposition of inequality in Palanpur by caste, would reveal that between-caste differences have come to account for a significantly lower share of overall inequality in 2008/9, relative to earlier years.⁸ Some support is given to this contention in Table 10 where it can be seen that the contribution to total inequality of between-caste differences is 17% in 2009/9, down from 29% in 1983/4. More surprising however, is that from this decomposition analysis differences between castes have never appeared to be particularly significant in Palanpur: even in 1983/4 more than 70% of income inequality can be attributed to within-caste differences between individuals. This is unexpected in light of the strongly caste-based narrative offered above to explain both the organization of economic activity in Palanpur and the evolution of living standards over time across different groups in the village.

Table 10: The Contribution To Inequality of Caste Differences Has Changed Little

	Theil L Measure	Within-Caste Contribution	Between-Caste Contribution
1957/8	0.188	77%	23%
1962/3	0.282	82%	18%
1974/5	0.169	69%	31%
1983/4	0.174	71%	29%

⁸ Following Bourguignon (1979), Cowell (1980) and Shorrocks (1980) inequality by population sub-groups is a basic tool of inequality analysis, permitting the quantification of the “contribution” to overall inequality of differences in average incomes across a given set of population sub-groups.

2008/9	0.336	83%	17%
--------	-------	-----	-----

There has long been some dissatisfaction with inequality decompositions based on the conventionally applied decomposition methodology.⁹ Elbers, Lanjouw, Mistiaen and Özler (2008) point out that the standard procedure for decomposing inequality into a between- and a within-group component fails to capture a particular feature of group differences that might be highly relevant to an assessment of their importance. Standard decomposition procedures assess the extent to which group divisions contribute to inequality by giving everyone within a group the average income of the group and then asking how much of overall inequality can be attributed to the inequality accounted for by the inequality in these group-average income levels. By comparing group-average income inequality against total inequality, the procedure in effect compares observed group differences against the extreme benchmark where each individual in the data is treated as a separate group. As a result, the proportion of between-group inequality is always rather low, in comparison with the benchmark. Furthermore, standard measures have the mathematical property that between-group inequality will increase (or more precisely - never decrease) with a greater number of groups.

Elbers et al (2008) propose a relatively minor adaptation of the conventional procedure to produce an alternative statistic that overcomes some of these issues. Suppose that a given population is divided into two groups. The approach proposed by Elbers et al (2008) compares the extent of between-group group inequality against a new benchmark, namely the extent to which these two groups are completely “separate” from each other in income terms; i.e., whether the richest person of the poorer group is poorer than the poorest person in the richer group. The standard decomposition procedure is entirely silent on this question. Yet, from the perspective of assessing the importance of, say, caste differences in a village such as Palanpur, the Elbers et al (2008) index is arguably quite relevant. If two population groups divide the income distribution into two entirely non-overlapping partitions, but there exists a high level of inequality within each of the two groups, overall between-group inequality - conventionally calculated – would be relatively low. Yet a fairly strong statement about the relevance of the contribution of groups to inequality would remain unstated; namely, that the two groups “stand apart” in income terms – they are somehow economically “excluded” from one another.¹⁰

Lanjouw and Rao (2012) compared the Elbers et al (2008) statistic with standard inequality decomposition measures to study dynamics of caste-inequality in Palanpur, drawing on data covering the survey period up to 1983/4. They found that when Jatabs are compared to the rest of the village population taken as a single group, the Elbers et al (2008) statistic reveals that Jatabs in 1983/4 were 50% of the way of standing fully apart from the rest of the village, up from 39% in 1974/5 and even lower in the earlier survey years. There was clear evidence, consistent with the narrative offered above, that over the decades since the 1950s, Jatabs as a

⁹ See for example, Kanbur (2000).

¹⁰ Elbers et al (2008) illustrate this point with reference to South Africa. They show that when inequality is decomposed by racial group defined in terms of a “white/non-white” classification, the conventional decomposition suggests that only about 27% of inequality is attributable to between-group differences. Their alternative statistic, on the other hand, shows that two groups are 80% of the way towards a completely partitioned South African income distribution.

group were steadily falling further behind the rest of the village in terms of their living standards – even though within the Jatab community there existed differences across individuals and households. The analysis in Lanjouw and Rao (2010) thus found strong support for the perception that caste based inequality in Palanpur was significant and durable.¹¹

Table 11 revisits the calculation undertaken in Lanjouw and Rao (2010) and updates the analysis to include the 2008/9 data. The evidence points to a clear turnaround with the Elbers et al (2008) statistic registering a significant decline between 1983/4 and 2008/9, from 50% to 29%. Whereas in the survey rounds leading up to 1983/4 the picture is one of the Jatabs as a group falling ever further behind the rest of the population to the point where even the richest Jatabs have lower incomes than the poorer most non-Jatab households, the 2008/9 data indicate a substantial attenuation of this pattern. The evidence from this decomposition exercise thus accords well with story offered earlier in this paper, of the Jatabs registering significant upward mobility since 1983/4, the result of markedly improved access to non-farm earning opportunities for at least a subset of Jatab households.

Table 11: Growing “Isolation” of Jatabs Has Reversed Since 1983/4

Jatabs versus the rest of the village	Overall Theil L Measure of Inequality	Elbers et al (2008) partitioning index	Inequality Contribution from “Classic” Decomposition
1957/8	0.188	7%	3%
1962/3	0.282	10%	4%
1974/5	0.169	39%	9%
1983/4	0.174	50%	22%
2008/9	0.336	29%	12%

The Contribution of Non-Farm Income to Overall Inequality

The analysis above confirms that widening group differences are unlikely to explain the significant increase in income inequality between 1983/4 and 2008/9. Much more plausible is

¹¹ Lanjouw and Rao (2010) also documented that while caste based inequality in Palanpur was significant, preliminary analysis based on other criteria for group differentiation – education of household head, and household landownership – failed to reveal sizeable between group differences, whether based on the Elbers et al (2008) statistic or the standard between group decomposition.

the impact of the expansion of, and growth in, incomes from non-farm sources in the village. This conjecture can be investigated on the basis of an inequality decomposition by income sources. Following Shorrocks (1982) the Gini coefficient G , can be obtained as a weighted average of 'pseudo-Gini' coefficients G_i^* for each component, where the weights are given by the share α_k of component income in total income:

$$G = \alpha_1 G_1^* + \dots + \alpha_k G_k^* + \dots + \alpha_n G_n^*$$

The 'pseudo-Gini' coefficient for an income component is similar to the Gini coefficient for that component but with the modification that individuals are ranked in terms of their total income rather than component income. In general, the change in the overall income inequality brought about by an increase or a reduction of income from a given source will be smaller the closer the pseudo-Gini coefficient for that source is to the overall Gini (Lanjouw and Stern, 1998 and Elbers and Lanjouw, 2000).

Table 12 shows that in Palanpur the contribution of non-agricultural income inequality to overall inequality in 2008/9 is 67%, compared to 28% for farm income. Based on this statistic more than two thirds of overall inequality is attributable to the distribution of non-farm incomes, a significant increase over the preceding survey year, mirroring the significant increase in total income inequality. It thus seems clear that the expansion of non-farm income sources into the village is associated not only with falling poverty and increased income mobility, but also with rising overall income inequality.

Table 12: The Growing Contribution of Non-Farm Incomes to Inequality

	Gini Coefficient	Contribution from Non-Farm Income	Contribution from Agricultural Income	Contribution from Other Income Sources
1957/8	0.336	8%	92%	0%
1962/3	0.390	13%	81%	6%
1974/5	0.253	4%	105%	-9%
1983/4	0.307	49%	53%	-3%
2008/9	0.427	67%	28%	5%

Concluding Remarks

This paper has assembled data at the all-India level and for the village of Palanpur, Uttar Pradesh, to document the growing importance, and influence, of the non-farm sector in the rural economy. The suggestion from the combined NSS and Palanpur data is of a slow process of non-farm diversification, whose distributional incidence, on the margin, is increasingly pro-poor. The rich insights offered by a detailed village study suggest that the non-farm sector is not only increasing incomes and reducing poverty, but appears as well to be breaking down long-standing barriers to mobility amongst the poorest segments of rural society. Efforts by the government of India to accelerate the process of diversification could thus yield significant returns in terms of declining poverty and increased income mobility. It is important to recognize however that rising income inequality could, at least initially, accompany the declining poverty and expanding social mobility. At the all-India level this process may not be so apparent as rising rural incomes, even if they are associated with increases in village-level inequality, could contribute to a narrowing of the gap between rural and urban areas, and thus a reduction in inequality at the all-India level (see Elbers and Lanjouw, 2000). What this paper has documented, however, is that at the level of the village, non-farm diversification could well be associated with significantly higher income inequality.

Rising village-level inequality can be of potential concern as a growing body of evidence shows that inequality can shape the fabric of village society, the way in which village institutions function and evolve, and the scope for collective action at the village level (Mansuri and Rao, 2012, provide an extensive review). Going forward it will be important to monitor distributional outcomes at the local level, and there may be a need to adopt measures to counter the more adverse impacts on local level inequality. The concern is that failure to keep such inequalities in check could threaten the pro-poor impacts that we currently see from the ongoing process of structural transformation underway in rural India.

References

- Bliss, C. and Stern, N. (1982) Palanpur: the Economy of an Indian Village (Oxford and New Delhi: Oxford University Press).
- Bourguignon, F. (1979) "Decomposable Income Inequality Measures" *Econometrica* 47, 901-920
- Cai, J., A. de Janvry, and E. Sadoulet. 2008. "Rural Households in India: Sources of income and incidence of burden of rising prices." Background paper prepared for India Poverty Assessment Report.
- Cowell, F. (1980) "On the Structure of Additive Inequality Measures" *Review of Economic Studies*, 47, 521-531.
- Deshpande, A. (2000) "Does Caste Still Define Disparity? A Look at Inequality in Kerala, India" in *American Economic Review, Papers and Proceedings of the 112th Annual Meeting of the American Economics Association*, May, 322-325.
- Dubey, A. 2008. "Consumption, Income and Inequality in India." Background paper prepared for India Poverty Assessment Report.
- Dumont, L. (1966) Homo Heirarchicus: The Caste System and Its Implications (Chicago: University of Chicago Press).
- Elbers, C. and Lanjouw, P. (2000) "Intersectoral Transfer, Growth and Inequality in Rural Ecuador" *World Development* 29(3), 481-496
- Elbers, C., Lanjouw, P., Mistiaen, J. and Ozler, B. (2008) "Re-Interpreting Sub-Group Inequality Decompositions" *Journal of Economic Inequality* 6(3), 1569-1721
- Eswaran, M., A. Kotwal, B. Ramaswami, and W. Wadhwa. 2008. "How Does Poverty Decline: Suggestive Evidence from India, 1983-1999." Bread Policy Paper, No 14.
- _____. 2009. "Sectoral Labour Flows and Agricultural Wages in India, 1983-2004: Has Growth Trickled Down?" *Economic and Political Weekly*, July 10.
- Fields, G. (1980) Poverty, Inequality and Development (Cambridge: Cambridge University Press)
- Fields, G. (2000) Distribution and Development: A New Look at the Developing World (Russell Sage Foundation and MIT Press)
- Foster, A. and M. Rosenzweig. 2003. "Agricultural Development, Industrialization and Rural Inequality." Mimeo, Brown University and Harvard University
- _____. 2004. "Agricultural Productivity Growth, Rural Economic Diversity, and Economic Reforms: India, 1970-2000." *Economic Development and Cultural Changes*, 52: 509-542.
- Haggblade, S., Hazell, P. and Reardon, T. (eds.) (2007) Transforming the Rural Nonfarm Economy: Opportunities and Threats in the Developing World (Baltimore: Johns Hopkins University Press).

- Himanshu. 2008. "Agriculture and Non-farm employment: Exploring the inter-linkages in Rural India." Background paper prepared for India Poverty Assessment Report.
- _____. 2011. "Employment Trends in India: A Re-examination", *Economic and Political Weekly*, September 10..
- Himanshu, Lanjouw, P., Mukhopadhyay, A. And Murgai, R. (2011) "Non-Farm Diversification and Rural Poverty Decline: A Perspective from Indian Sample Survey and Village Study Data" Asia Research Center Working Paper, No. 44, London School of Economics.
- Kanbur, R. (2000) "Income Distribution and Development" in Atkinson, A. B. and Bourguignon, F. (eds) Handbook of Income Distribution (North Holland: Elsevier Science Publishers).
- Kuznets, S. (1955) "Economic Growth and Income Inequality" *American Economic Review*, March 1-28.
- Kuznets, S. (1963) "Quantitative Aspects of the Economic Growth of Nations: VIII, Distribution of Income by Size" *Economic Development and Cultural Change*, January, Part 2, 1-80.
- Lanjouw, P. and R. Murgai. 2009. "Poverty decline, agricultural wages, and non-farm employment in India: 1983-2004." Policy Research Working Paper, No.4858. World Bank, Washington, DC.
- Lanjouw, P. and Rao, V. (2010) "Revisiting Between-Group Inequality Measurement: An Application to the Dynamics of Caste Inequality in Two Indian Villages" *World Development*, 39(2), 174-187
- Lanjouw, P. and Stern, N. (1991) *Poverty in Palanpur* World Bank Economic Review, January, 5(1), 20-60.
- Lanjouw, P. and N. H. Stern. (eds). 1998. "*Economic Development in Palanpur Over Five Decades.*" New Delhi and Oxford: Oxford University Press.
- Lewis, W.A. 1954. "Economic Development with Unlimited Supplies of Labour." *The Manchester School*, 28(2): 139-191.
- Mansuri, G. and Rao, V. (2012) Localizing Development: Does Participation Work? (Washington D.C. : World Bank).
- Mukhopadhyay, A. (2011) "Stepping Out of Palanpur: Employment Outside Palanpur, from Short Visits to Long Term Migration and how they are Linked", mimeo, Planning Unit, Indian Statistical Institute (Delhi) and Institute of Economic Growth.
- Sen, A. and P. Jha. 2005. "Rural Employment: Patterns and Trends from National Sample Survey." In *Rural Transformation in India – The Role of Non-farm Sector* eds. Rohini Nayyar and A. N. Sharma. New Delhi: Institute for Human Development.
- Shorrocks A. (1980) "The Class of Additively Decomposable Inequality Measures" *Econometrica* 48,613-625.
- Shorrocks, A. (1982) "Inequality Decomposition by Factor Components" *Econometrica* 50(1): 193-211.
- Sundaram, K. 2001. "Employment and Poverty in 1990s: Further Results from NSS 55th Round Employment-Unemployment Survey, 1999-2000." *Economic and Political Weekly*, August 11, 2001.

World Bank, 2011. *Perspectives on Poverty In India: Stylized Facts from Survey Data* (Washington D.C. and Delhi: World Bank and Oxford University Press India)