* We are not arguing against subsidizing any electricity consumption no matter what the circumstances. There may be a good case, for example, for subsidizing the power consumption of poorer households. Price discrimination and differentiated tariffs (including what are known in India as 'telescopic tariffs') are common features of electricity pricing in many countries, and are not difficult to implement if electricity consumption is properly metered. In some Indian states, differential pricing has been used with relatively good effect to enable poor households to use electricity. Our argument is that all such subsidies have to be carefully scrutinized and accountably assessed. There is no convincing justification for regressive consumer subsidies for privileged power users, resulting from pressures by users of electricity who wield influence across India today.

* See Gurcharan Das's (2012) *India Grows at Night* for an insightful analysis of the contribution of the 'license Raj' to generating corruption. Das is quite correct when he says, 'The lesson is to raise the capacity of the state or to limit its ambition' (p. 438). For reasons discussed extensively in this book, including the critical importance of well-functioning public services, the former cannot but remain a critically important engagement in India. That there is no inherent impossibility here is evident from the fact that most of the countries rated as 'least corrupt' in international comparisons (on which see Das, p.226), such as Sweden, Denmark, Canada and Singapore, have a significantly larger public sector as a proportion of the economy than India has.

* On this see Adam Smith, *The Theory of Moral Sentiments* (1759, 1790). The quotation from Smith comes from page 162. See also the essays included in Sen (2002a).

* One of us had the privilege of serving as an official advisor to the Italian Parliament's 'Anti-Mafia Commission', chaired by Luciano Violante, in 1992–4, dealing, among other things, with the causation of rampant corruption and its connection with the world of crime. It was striking to see how the justifications of crooked financial behaviour that were most frequently offered by the perpetrators were (1) 'everyone does it – not just me', and (2) 'I could not survive in a competitive world unless I too follow the same kind of behavioural rules as others do.' As the behavioural norms moved on, the spread of compliance to reformed behaviour proved to be considerably faster than had been feared, even in a country with a continuing reputation for the presence of corruption.

5

The Centrality of Education

In a powerful diagnosis, Rabindranath Tagore said: 'in my view the imposing tower of misery which today rests on the heart of India has its sole foundation in the absence of education'.[1] The remark is somewhat extreme, in separating out just one factor among many problems that India faces. And yet Tagore offers a judgement that is deeply insightful.

The role of basic education in the process of development and social progress is very wide and critically important. First, the capability to read and write and count has powerful effects on our quality of life: the freedoms we have to understand the world, to lead an informed life, to communicate with others, and to be generally in touch with what is going on. In a society, particularly in the modern world, where so much depends on the written medium, being illiterate is like being imprisoned, and school education opens a door through which people can escape incarceration.

Second, our economic opportunities and employment prospects depend greatly on our educational achievements and cultivated skills. The ability to understand written information and to keep track of the numbers involved in particular tasks can be necessary qualifications for even simple jobs, especially with increasing specialization in production and distribution. The need for education has particularly expanded in the world of globalized trade and commerce, and the success of economies like China has been based substantially on the ability of a reasonably well-educated workforce to meet the demands of quality control and skill formation involved in producing goods and services for the world at large.

Third, illiteracy muffles the political voice of people and thus contributes directly to their insecurity. The connection between voice and security is often underestimated. This is not to deny that democracies can be effective even when many people are still illiterate: that point certainly needs emphasizing because it is missed in the deeply reactionary argument which is often aired, that an illiterate population has no use for democratic rights. It is nevertheless the case that the reach of people's democratic voice can be much greater when political opportunities are combined with social empowerment, including the ability to read newspapers, periodicals and books, and to communicate with each other. The issue is not whether democracies can be at all effective, but how much more effective they can become if the voices of people muffled by illiteracy can be liberated from the smothering that inadequate school education produces.

Fourth, basic education can play a major role in tackling health problems in general and public health in particular. It is easy to see the importance of specialized health education (for example, about the ways in which infections spread and how diseases can

be prevented). But even general education can develop an individual's capacity to think, and can generate social understanding in ways that may be extremely important in facing epidemiological problems. Indeed, some studies suggest that general school education can have a bigger impact on health than specialized health education itself. School education also tends to facilitate the implementation of public health measures, related for instance to immunization, sanitation or the prevention of epidemics.

Fifth, educational development has often been the prime mover in bringing about changes in public perceptions of the range and reach of what can be called human rights, broadly defined.[2] For example, the educational development in Kerala – and more recently in Himachal Pradesh – has been a major factor in the increased demand for health care, based on a clearer perception of the importance of health and the role of the society in providing health facilities and services. The understanding of what can be seen as human rights – and health care would certainly figure in the global perception of human rights today – tends to be much sharpened by the spread of school education and literacy.

Sixth, education can also make a difference to the understanding and use of legal rights – the already legislated rights that people may already have, but which they are, sometimes, not able to utilize. When people are illiterate, their ability to understand, invoke and use their legal rights can be very limited. This applies in particular to women, as Salma Sobhan brought out many years ago in the context of Bangladesh, where illiteracy was one of the major barriers to the realization of women's rights.[3] Lack of schooling can directly lead to insecurities by distancing the deprived from the ways and means of resisting the violation of established legal rights.

Seventh, there is now extensive evidence that the schooling of young women can substantially enhance the voice and power of women in family decisions. Aside from the general importance of equity within the family, the voice of women can also lead to many other social changes. One of the most important to consider relates to the fact that women's empowerment tends to have a strong downward impact on the fertility rate. This is not surprising, since the lives that are most affected by the frequent bearing and rearing of children are those of young women, and anything that enhances their voice and increases the attention that their interests receive tends, in general, to prevent over-frequent childbearing. Furthermore, women's education and literacy tend to reduce the mortality rates of children. There is, indeed, considerable evidence of a close relationship between female literacy and child survival in many countries.[4]

Eighth, even though education is no magic bullet against class barriers, it can make a big contribution to reducing inequalities related to the divisions of class and caste. As was discussed in Chapter 1, stratification remains a major barrier to India's economic and social development, and the spread of education is one of the important means for tackling that debilitating feature of Indian society.

Last but not least, learning and studying can be immensely enjoyable and creatively engaging activities, if they are well arranged and well supported, and the process of schooling itself can add greatly to the quality of life of young people, quite apart from the long-run benefits they receive from it. This may not be obvious to the average

Indian schoolchild, who often studies in a drab or hostile environment, and may be exposed, in many cases, to physical punishment. And yet, for most children, schooling not only is greatly preferable to child labour, domestic work, or other alternatives, but it can also make their lives fun as well as rewarding.

The difference that basic education can make to human life is easy to see. It is also readily appreciated even by the poorest of families. Contrary to a common anecdotal story that Indian parents are often uninterested – or even opposed – to the schooling of their children, especially girls, it is striking to see how easily the importance of education for all children is perceived even by the poorest and the most deprived of families in India. This was one of the main findings of the *Public Report on Basic Education* (known as the 'PROBE report'), published in 1999, and also of more recent investigations, for example by the Pratichi Trust.[5] And contrary to claims often made, systematic empirical studies have not found any serious reluctance by parents to send their children – daughters or sons – to school, provided that affordable, effective – and safe – schooling opportunities actually exist in their neighbourhood. In those cases in which some reluctance exists, it tends to come from the nature of the schooling arrangements, for example concern about the safety of children, particularly of girls, when the schools are located at a considerable distance from where the parents work, or when the school has only one teacher who may, on some days, be absent.[6]

DEVELOPMENT AND EDUCATION

The connection between education and development, including the crucially important role of public services in bringing about an educational transformation, was very clearly seen more than two hundred years ago by Adam Smith, who provided the classic analysis of how the market mechanism can work successfully. He wanted much greater use of state resources for public education and argued:

> For a very small expence the publick can facilitate, can encourage, and can even impose upon almost the whole body of the people, the necessity of acquiring those most essential parts of education.[7]

The experiences of Europe and America, which have been extensively studied, bring out most forcefully the pervasive role of education, led typically by governmental initiatives, in facilitating and sustaining economic and social development.

Those lessons also inspired the rising economic powers in Asia from the nineteenth century onwards. Already in the mid-nineteenth century, the transforming role of school education was seen with remarkable clarity in Japan – the pioneering country to undertake modern economic development in Asia.[8] At the time of the Meiji restoration in 1868, Japan already had a higher level of literacy than Europe, even though the country had not yet undergone any industrialization or modern economic development, which Europe had experienced for a century. As we noted in Chapter 2, the Fundamental Code of Education issued in 1872 expressed an unequivocal public commitment to make sure that there must be 'no community with an illiterate family, nor a family with an illiterate person'. It was the constructive – if authoritarian – state

that powerfully led the universalization of schooling in Japan.

The focus on education was intense in the early period of Japanese development, during the Meiji era (1868–1912). For example, between 1906 and 1911, education consumed as much as 43 per cent of the budgets of the towns and villages, for Japan as a whole.[9] In this period, the progress of elementary education was particularly rapid, and the recruiting army officers were impressed by the fact that whereas in 1893 one third of the army recruits were illiterate, already by 1906 there was hardly anyone in that condition. By 1910 Japan was almost fully literate, at least for the young, and by 1913, though still very much poorer than Britain or America, Japan was publishing more books than Britain and more than twice as many as the United States. The concentration on education determined, to a large extent, the nature and speed of Japan's economic and social progress.

The fact that human development in general and school education in particular are first and foremost allies of the poor, rather than only of the rich and the affluent, is an understanding that has informed the Japanese strategy of economic development throughout its entire modern history. Later on, South Korea, Taiwan, Singapore, Hong Kong and of course China followed similar routes and firmly focused on basic education, largely delivered by the state. In explaining the rapid economic progress of East Asia, its willingness to make good use of the global market economy is often and rightly emphasized. But that process was greatly helped by the achievements of these countries in public education. Widespread participation in a global economy would have been hard to accomplish if people could not read or write.

INDIA LEFT BEHIND

Oddly enough, despite the strong pro-education rhetoric in the Indian national movement, the expansion of school education has been remarkably slow in India – much slower than in East Asia. Indeed, India has been lagging behind East Asia by a long margin, as Table 5.1 illustrates. The deficit is particularly striking for Indian women, including young women, a large proportion of whom are illiterate even today, in sharp contrast with East Asia – including, for instance, Indonesia, which was earlier on (even in 1960) not performing much better in this respect than India, but where literacy is more or less universal in the younger age groups today.

To be sure, the different parts of India have disparate records in this field. The state of Kerala (which was formed after independence by putting together two 'native Indian states', Travancore and Cochin, allowed by the British Raj to have their own domestic policies) did have a history of pro-education policy – much more so than the rest of India. This pro-education outlook was continued and intensified after independence, under a left-wing political leadership, placing Kerala substantially ahead of the rest of India in school education. A small part of new Kerala, Malabar, which came from the old state of Madras in British India, and had a more backward educational history before India's independence, soon caught up with the rest of Kerala in educational development. But Kerala was the exception in the otherwise educationally backward

post-independent India, just as Sri Lanka was also an exception, with its own history of rapid expansion of schooling.[10] The bulk of India had astonishingly little schooling – for India as a whole, when the British left, the adult literacy rate was only around 18 per cent. And as we have discussed in Chapters 2 and 3, this neglect of school education continued solidly through the post-independence years, until quite recently.

About 20 per cent of Indian children between the ages of 6 and 14 years were not attending school even in 2005–6, and about 10 per cent of children of that age group had never been enrolled in any school at all.[11] The neglect is particularly strong for Indian girls, nearly half of whom were out of school in large parts of India (e.g. Bihar) in the same year. In this respect, South Asia (including India) has remained very much closer to sub-Saharan Africa than to the rest of Asia. And even within South Asia, India is not doing particularly well. Bangladesh, despite being much poorer than India, has caught up with – and in some ways overtaken – India in the education of girls, as was discussed in Chapter 3. Nepal is even poorer, and had less than half of India's literacy rates as recently as 1980, but has almost caught up with India too, in the younger age groups (see Table 5.1). And even the literacy gap between India and Pakistan looks much smaller today (though it is still to India's advantage) than it did thirty years ago. There is an alarming story here of sustained neglect of elementary education, and especially of girls' education, which is a central necessity in the process of economic and social development.

Table 5.1
Literacy Rates in Selected Asian Countries

Country	Adult literacy rate (% of literate persons in the age group of 15 years and above)			Youth female literacy rate (% of literate women in the age group of 15–24 years)	
	1960	1980[a]	2010[b]	1980[a]	2010[b]
South Asia					
India	28	41	63	40	74
Bangladesh	22	29	57	27	78
Nepal	9	21	60	15	78
Pakistan	15	26	55	24	61
Sri Lanka	75	87	91	90	99
East Asia					
China	n/a	65	94	82	99
Indonesia	39	67	93	82	99
Malaysia	53	70	93	87	98
Philippines	72	83	95	93	98
Thailand	68	88	94	96	98
Vietnam	n/a	84	93	94	96

[a] 1981 for Bangladesh, India, Nepal, Pakistan, Sri Lanka; 1979 for Vietnam; 1982 for China.

[b] 2006 for India; 2009 for Indonesia and Pakistan; 2008 for Philippines; 2005 for Thailand.

Sources: *World Development Report 1980*, Table 23, for 1960 data. *World Development Indicators* (online, 1 January 2013) for other years. Age-specific literacy rates from India's 2011 census are not available at the time of writing; for persons

aged 7 and above, the census estimate is 74 per cent.

CHALLENGES OF HIGHER EDUCATION

There are many problems to be addressed at different educational levels in India – starting from pre-school education to the highest levels of higher education. In this book, we concentrate mostly on the neglected state of schools – and schooling – in India, not only because these deficiencies are critically important in themselves, but also because they influence what can or cannot be achieved in post-school education. Since the intake into colleges and universities is severely compromised by the exclusion at the school stage of a significant part of the population, and an even larger exclusion from acceptably good school education, it is difficult for higher education to achieve anything near its potential. However, there are special problems of higher education that originate elsewhere, and it is useful to look briefly at the state and quality of higher education in India as a whole.

First, a few words on tradition. Europe and North America have been the dominant centres of organized higher education for nearly a thousand years. It is in Bologna in Italy that the oldest extant university in the world was created in 1088. Paris followed three years later, in 1091. Other citadels of higher learning soon emerged in different countries in Europe, including Oxford University in 1167 and Cambridge University in 1209. There is a tendency across the world – reflected in India as well – to assume that higher education is somehow a quintessentially Western contribution to the world. The history of the last millennium tends to confirm that understanding, and yet it is important in this context to remember – and be inspired by – the fact that India has, in some ways, an even longer heritage of higher education.

Consider Nalanda University, which served as a pan-Asian university (it drew students from all over Asia), run by a Buddhist foundation – to which others, including Hindu kings, contributed support. When the oldest European university, Bologna, was founded in 1088, Nalanda was already more than six hundred years old.* Nalanda was an ancient centre of advanced learning that attracted students from many countries in the world, for example China, Korea, Japan, Thailand, Indonesia, and the rest of Asia, but a few also from as far in the West as Turkey. At its peak, Nalanda, a residential university, had ten thousand students in its dormitories, in the seventh century.

The subjects that were taught in Nalanda are still being investigated, as the old university is being re-established under a joint initiative of the East Asia Summit; it is not an easy search, since the documents in Nalanda were indiscriminately burnt by Bakhtiyar Khilji and his conquering army at the end of the twelfth century. Contemporary accounts tell us that Nalanda's large and distinguished library – apparently housed in a nine-storeyed building – burnt for three days in the flames of destruction. While Nalanda lingered on for some time more after it had regrouped and reorganized itself following the devastation, it would never regain its former size, quality or reputation. But putting together all the accounts we have, especially the memoirs of former students of Nalanda (particularly from China), we do know that the

subjects taught and researched there included religion, history, law, linguistics, medicine, public health, architecture and sculpture, as well as astronomy (with a tall observatory that Xuangzang, a Chinese scholar who studied in Nalanda in the seventh century, described as towering majestically over the fog on misty mornings). There is circumstantial evidence that mathematics must have been taught too, closely linked as it is to astronomy, and this would have been natural given the proximity of Nalanda to the old haunt of Indian mathematicians in Kusumpur at Pataliputra – what is now Patna.

The interest in medicine and public health was particularly important, and Yi Jing, another student at Nalanda, from China, had the distinction of being the first author in the ancient world who wrote a comparative assessment of medical systems in two countries – China and India. Incidentally, in the history of ancient China, Nalanda is the only academic institution outside China where any Chinese scholar received higher education. It is hard to think of a better acknowledgement of the quality of higher education in Nalanda than that. It is also important to recognize that while Nalanda was the pioneer of higher education in India – and in the world – it was not unique, since other centres of higher education emerged in India in the first millennium, often inspired by Nalanda. Of these, Vikramshila, also in what is now Bihar, and which was also a Buddhist foundation, came to compete with Nalanda in terms of educational offerings and reputation for excellence.

But all this was a long time ago, and while all Indian universities today, including the newly re-establishing Nalanda University, can be inspired by the long history of higher education in India, the fact remains that the achievements of contemporary Indian universities are rather limited. The quality of higher education is hard to judge (and cannot but raise controversies), but if we go by the list of 200 top-ranking universities prepared by *The Times Higher Educational Supplement* in October 2011, an overwhelming proportion of the leading institutions of higher education in the world are based in the United States. Indeed, the top five are all in America: Harvard, Caltech, MIT, Stanford and Princeton, in that order. The British follow just behind, and in the top ten we also find Cambridge, Oxford and Imperial College, London.

What is, however, really arresting in the list is the preponderance of Western establishments in the entire list of 200 top universities.[12] There are none from Asia in the top 20, and while some elite universities in Asia do get in below that, including Hong Kong, Tokyo, Pohang, Singapore, Peking, Hong Kong University of Science and Technology, Kyoto, Tsinghua, and a few others, together they form only a small minority of the top universities on the globe. It is particularly striking that there is not a single university in India in this list of the top 200 in the world.

Since the whole world benefits from the availability of first-rate higher education in the West, non-Western nations have no reason to grudge the excellence of the West in this critically important field. This is so particularly because the doors of all Western universities are open to students from anywhere in the world – provided they can afford to pay the fees, which can, of course, be prohibitively high (unless the incoming students manage to receive a scholarship or other academic support from these universities or elsewhere). But given India's academic potential, and its long history in higher

education, it would be natural to expect a much better performance from the Indian university sector than we actually see today.

To make that judgement, we do not have to go only by the ranking presented by *The Times Higher Educational Supplement*, which could be, it has been alleged, culturally biased. There is plenty of other evidence pointing to the same conclusion. Even the assessment by students themselves, in particular which universities they try to get into, tend to confirm an important problem of quality deficiency. Indian students do spectacularly well once they enter any of the leading universities in the world, in a way that is hard for them to achieve within the confines of Indian universities. The situation can certainly be changed, and may, to some extent, already be changing. Many of the leading Indian universities have excellent areas of instruction and training in particular subjects, even when the overall achievement of the particular universities is pulled down by the low or indifferent quality of other departments. The quality of higher education offered in specialist institutions (such as the Indian Statistical Institute, or the Indian Institutes of Technology, or some Institutes of Management) has, by and large, been very high, and there is a maintenance of quality in them that the Indian universities in general do not have.

The problems of Indian universities, including academic arrangements and facilities, recruitments and emoluments, can be critically assessed – and should be. The limitation of intake is, however, a major drag on the reach and performance of Indian higher education, and to improve this it is crucially important to reform, indeed to remake, the entire system of school education in the country.

ACHIEVEMENTS AND DEFICIENCIES

It is encouraging that in recent years the neglect of school education in India has been partially addressed. But there is a long way to go to remedy this long-standing neglect. It is important to ask: what progress has there been, and what failures remain? India's official statistics show a steady increase in school enrolment – for both girls and boys – and in the facilities available in schools. Governmental decisions as well as orders of the Supreme Court have contributed to these developments, and the enactment of the Right to Education Act in 2010, uncertain as its impact may be, is certainly an attempt to move things forward. The all-India Sarva Shiksha Abhiyan ('campaign for universal education'), implemented by state governments with central government support, has also been of great help in expanding and improving school facilities across the country.

The progress that has come about is apparent not only in the government's own reports (there is considerable scepticism among the public about the reliability of some of these reports), but also in independent studies. These include, for instance, a recent re-survey of 200 randomly selected villages initially studied by the PROBE Team in 1996, located in seven large states of northern India (Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Rajasthan, Uttar Pradesh, Uttarakhand) where school participation and educational levels are comparatively low.[13] Even in these states, the school enrolment ratio for children between the ages of 6 and 12 years moved up from 80 to 95

per cent between 1996 and 2006.[14] Progress was particularly rapid for disadvantaged communities: by 2006, the school enrolment rates of Dalit, Muslim and (to a lesser extent) Adivasi children in the same age group had nearly caught up with the average of 95 per cent for the sample population as a whole. Though far from complete, the rapid movement towards universalization of primary-school enrolment across social groups is nevertheless impressive.

School amenities in the PROBE villages had also improved. By 2006, 73 per cent of the sample schools had at least two all-weather rooms, compared with 26 per cent in 1996. Also, by 2006, 60 per cent of the schools had their own toilets and nearly three-fourths of them had drinking water facilities. Free uniforms were given to the students in more than half of the schools (up from 10 per cent in 1996), and free textbooks were distributed in nearly all schools by 2006 (up from less than half in 1996). At least as significantly, provisioning of cooked midday meals (very important on nutritional grounds as well as for preventing the distraction of children from studies because of hunger), which were introduced between the two survey dates, were functioning in 86 per cent of the schools by the end of the period.[15]

And yet the functioning of the schools remains seriously – perhaps even disastrously – deficient. Only two-thirds of the pupils were present on the day of the survey, according to the school registers, and even fewer according to the field investigators' direct observations. There is considerable absenteeism among teachers as well, in addition to widespread late arrival and early departure. The proportion of schools with only one appointed teacher is still significant – about 12 per cent. There is a chronic shortage of regular teachers, largely due to the reluctance of public authorities to make appointments at what have now become, after the reports of successive Pay Commissions, fairly substantial salaries by Indian standards. The gap is sometimes met by 'contract teachers', hired at considerably lower salaries, but whose teaching performance is unclear – as is the sustainability of this dualist and discriminatory treatment of the teaching cadre.

In addition to the shortage of appointed teachers, however, absenteeism contributes to the one-teacher characteristic of many schools. Indeed, in the 2006 survey, 21 per cent of the sample schools were operating as single-teacher schools on the day of the survey, either because they had a single teacher appointed or due to teacher absenteeism. Additionally there is a shocking lack of teaching even by those teachers who do bother to show up. In fact, half of the schools had no teaching activity *at all* at the time of the investigators' unannounced visit – both in 1996 and in 2006.* This is certainly not a picture that inspires confidence about school education in areas where it is most needed. While much of the rest of the world, and even a significant part of the rest of the country, were humming with teaching activities, half of the schools in these states did next to nothing to impart education to children, neglecting their duties as well as ignoring the right of the young students to receive elementary education and to join the modern world.

Without even taking note of the low quality of teaching, the toll of this catastrophic breakdown of regularity and order in the schooling system can be appreciated by

considering the implications of these survey findings for the number of active teaching days a child enjoys over the school year. In the PROBE states, the official number of school days per year is around two hundred. But with a teacher absenteeism rate of around 20 per cent, and a pupil absenteeism rate of about 33 per cent, the combined probability of a child *and* his or her teacher being present on an average day is only just above 50 per cent. This brings down the number of teaching days effectively to one hundred days or so. But this is not the end of the story, because the survey also suggests that even during those hundred days, about half of the time is bereft of any teaching activity. So the actual teaching time is more like fifty days – about *one fourth* of what would happen in a well-functioning schooling system.

EDUCATIONAL STANDARDS

School education in India suffers from two principal deficiencies: firstly, limitation of coverage, and secondly, poor standards of the education that is offered and received. While there has been some progress in the former, the quality of education in Indian schools seems to be exceptionally low over a wide range of institutions. Teaching methods are quite often dominated by mindless rote learning, including repetition – typically without comprehension – of what has been read, and endless chanting of multiplication and other tables. Children often learn rather little in these schools, and in tests conducted in 2006 as part of the survey mentioned in the preceding section, it was found that nearly half of the pupils in Classes 4 and 5 could not do single-digit multiplication, or a simple division by 5. Their knowledge of important facts is also, in general, dismally poor. This was a relatively small survey, but the findings on pupil achievements are broadly consistent with those of a whole series of other studies, as Table 5.2 illustrates.

Lack of quality characterizes the education offered in most ordinary schools, but it appears that it is widely present even in what are considered to be 'top schools' in the larger Indian cities, such as Delhi, Mumbai, Chennai, Kolkata and Bangalore. In fact, in 83 such 'top schools' studied jointly by WIPRO, a leading informational enterprise, and Educational Initiatives (EI), the students' knowledge as well as skills seemed to be very limited. For example, only a third of these 'top school' students in Class 4 knew who was the alive person in a list of four: Mahatma Gandhi, Indira Gandhi, Rajiv Gandhi and Sonia Gandhi (a small number thought, interestingly enough, that it was Mahatma Gandhi who was still alive). About two-thirds of the students in Class 4 could not master the measurement of the length of a pencil with a ruler. There was also a noticeable lack of awareness of social issues among the sample students.[16]

Even though Indian authorities have resisted the country's inclusion in international comparisons of pupil achievements, some recent studies make it possible to compare Indian students with others, such as the 'PISA Plus' survey conducted in 2009. Indian performance comes out very much at the bottom of the 74 countries or economies included in this survey.[17] And this is the case even though the two Indian states that participated in PISA Plus happened to be two of the better-schooled states, Tamil Nadu

and Himachal Pradesh. In a comparison of overall reading ability of 15-year-old students in these 74 countries or economies, both Indian states figure among the bottom three (in the company of Kyrgyzstan). In other tests, including writing, science education and mathematics, Indian students are similarly disadvantaged compared with students from other countries included in the PISA survey.

Table 5.2: Pupil Achievements in Primary School: Recent Findings

Source	Basis	Sample findings
India Human Development Survey, 2004–5	Large, all-India random sample	• Only half of all children aged 8–11 years enrolled in a government school are able to read a simple paragraph with three sentences. • Less than half (43 per cent) of these children are able to subtract a two-digit number from another two-digit number. • More than one third (36 per cent) are unable to write a simple sentence such as 'My mother's name is Madhuben.'
ASER Survey, 2011	Large, all-India representative survey of schoolchildren in rural areas	• Only 58 per cent of children enrolled in Classes 3 to 5 can read a Class-1 text. • Less than half (47 per cent) are able to do a simple two-digit subtraction. • In Classes 5 to 8, only half of the children can use a calendar.
PROBE Revisited, 2006	Random sample of 284 rural government-school pupils in the Hindi-speaking states	• Only 37 per cent of children enrolled in Class 4 or 5 can 'read fluently'. • Less than half (45 per cent) are able to divide 20 by 5. • One third are unable to add with carry-over.
CORD-NEG Village Studies, 2010–11	Random sample of children in government schools of 9 villages in peripheral districts of Bihar, Jharkhand and Odisha	• Out of 110 children enrolled in Class 4 or 5, only half were able to recognize a two-digit number. • Less than one fourth of these 110 children were able to subtract a two-digit number from another two-digit number.
WIPRO-EI Quality Education Study 2011	Survey of more than 20,000 students in 83 'top schools' in five metro cities (Bangalore, Chennai, Delhi, Kolkata and Mumbai)	• Reading and maths skills of Class 4 pupils in India's 'top schools' are below the international average. • Only 16 per cent of Class 4 pupils could master the measurement of the length of a pencil with a ruler. • Only 22 per cent of Class 6 pupils could understand that crumpling a paper does not alter its weight.

Sources: Desai et al. (2010), p. 93; Pratham Educational Foundation (2012), p. 58; Pratham Educational Foundation (2012), p. 68; De et al. (2011),

The point is sometimes made that these tests – PISA and others – are culture-related, and reflect 'Western' biases. It is hard to understand why reading, writing and elementary mathematics should be seen as uniquely Western abilities, but perhaps it is worth noting that the world-beaters in these tests tend to be Asians, rather than only Europeans: the top three spots in the comparison of reading ability are in fact occupied by Shanghai (China) and South Korea, along with Finland. The top five also include Hong Kong and Singapore. What India seems to suffer from is not a problem of being excluded from the West, or one arising from a cultural problem of being in Asia rather than Europe or America: it is specifically an Indian – and South Asian – failure to

benefit from the insight about the role of quality education that has informed the development experiences of much of Asia, Europe and America.

In addition to the general adversity of low-quality education that Indian school students have to settle for, there is the further problem of wide variations in the educational accomplishments of Indian schoolchildren between different regions. As Table 5.3 shows, the two states included in the PISA study (Himachal Pradesh and Tamil Nadu) have some of the best pupil achievement levels among all major Indian states. While their educational standards are seriously deficient from an international perspective, the performance of students in other parts of India tends to be worse – in fact, much worse. It is horrifying, for instance, to learn that in seven large Indian states, accounting for *half* of India's population, the proportion of children aged 8–11 years enrolled in a government school who can pass a very simple reading test (going only a little beyond what passes for official 'literacy') varies between one fourth and one half.*

Table 5.3
Pupil Achievements in Major States, 2004–5

	Proportion of children aged 8–11 years enrolled in a government school who are able to:		
	Read[a]	Subtract[b]	Write[c]
Himachal Pradesh	81	64	77
Kerala	80	64	84
Tamil Nadu	78	67	82
Assam	73	45	97
Maharashtra, Goa	65	53	71
Haryana	63	58	61
Gujarat	60	36	64
Chhattisgarh	58	31	46
Odisha	58	48	73
Punjab	54	61	65
Uttarakhand	53	35	62
Jharkhand	51	54	56
West Bengal	51	56	72
Rajasthan	50	37	53
Karnataka	45	48	76
Andhra Pradesh	44	46	62
Bihar	40	43	65
Madhya Pradesh	39	25	38
Uttar Pradesh	29	22	51
Jammu & Kashmir	26	50	67
India[d]	50 (69)	43 (64)	64 (79)

[a] At least a simple paragraph with three sentences.

[b] Two-digit number from two-digit number, with borrowing.

[c] A simple sentence, with two or fewer mistakes.

[d] In parentheses, the corresponding percentages in private schools.

Source: Desai et al. (2010), p. 94, based on the India Human Development Survey (IHDS). Indian children generally join primary school at the age of 6 years, or (sometimes) 5 years. States are ranked in descending order of reading abilities.

Recent research points to other worrying aspects of pupil achievements (in terms of basic skills such as simple arithmetic or the ability to read and write) in India.[18] First, aside from being extremely low, they *improve very slowly* as children progress through the schooling system. One recent review of pupil achievements, for instance, suggests that among children who are unable to pass a very simple test (such as a single-digit vertical addition), the proportion who are *still unable* to pass the same test after another year of schooling is typically somewhere between 80 and 90 per cent.[19] This is consistent with the common observation that teachers often tend to focus mainly on children who are doing better, and to neglect those who actually need special attention. Second, low pupil achievements are not confined to government schools. In fact, differences in test scores between government and private schools are not particularly large, especially after taking into account differences in the socio-economic background of the pupils (see also Table 5.3, last row).[20] Even in expensive private schools, pupil achievements leave much to be desired, although they are certainly better than in an average school. Last but not least, there is little evidence of any general improvement in pupil achievements over time, at least in the recent past. In fact, the ASER surveys (initiated in 2005) suggest, if anything, a deterioration of average pupil achievements during the last few years.[21]

This is a very discouraging picture, which is yet to receive adequate recognition in education debates in India. The cognitive achievements of schoolchildren, and more broadly, the quality of education, matter a great deal. As was discussed earlier, education plays a very central role in a wide variety of fields – economic, social, political, cultural and others – and it can also play an enormously important part in reducing the force of inequalities of class, caste and gender. Recent research also brings out, more specifically, the importance of cognitive achievements for economic growth and participation. Indeed, learning achievements seem to have far more explanatory power than just 'years of schooling' as drivers of growth and development.* The enormous burst of economic activities in East and Southeast Asia, including an active role for women, owes a lot to the educational achievements of these countries, compared with India. If this connection is comparatively neglected in Indian discussions, this failure possibly reflects inadequate attention being paid to the nature of the economic expansion based on human capability development that Japan initiated and which has been followed with great success in East Asia, and to some extent even in Southeast Asia. More recent experience elsewhere, including Latin America, reinforces earlier evidence that standards of school education matter, both for economic growth and for the quality of life. As the boundaries of education research expand, the enormity of the price India is paying for its failure to put in place a well-functioning schooling system is becoming increasingly clearer.

PRIVILEGED EXCELLENCE AND SOCIAL DIVISIONS

There is, however, an interesting conundrum in the low quality of Indian education and the high praise that well-trained Indians often get across the world. Indian education,

despite its huge limitations, often receives spectacular acclaim from abroad. This raises an interesting question of epistemology (what gives the Indian education system its international plaudits?), but also has practical implications in terms of creating a false sense of satisfaction that things are, by and large, fine enough in Indian education.[22] We are told that well-trained Indian experts are taking away good jobs from previously unthreatened Westerners – this was an important part of the rhetoric of even the recent campaigns for the presidential election in the United States. Leading American newspapers have carried articles urging improvements of the education and training systems in the USA, in order to keep up with that learned lot from distant Asia, India included, who are said to be as accomplished as they are keen on snatching good employment opportunities away from simple Americans.

Is this the India that has such a terrible record of school education? What can the story be? Certainly, a large number of Indians – a minority but still quite numerous – receive excellent education in India. There are elite schools, advanced centres of higher learning, and a society that values educational excellence and honours it. Even in second-rate schools, the leading students often get very helpful attention and instruction. As we noticed earlier in this chapter, the institutes of higher education, such as the Indian Institutes of Technology (IITs) and Indian Institutes of Management (IIMs), can offer teaching and guidance of the highest quality in the world, and so do particular departments of a number of Indian universities. Well trained and confident, a lot of Indians are extremely successful abroad, and lead the businesses and professions in which they enter. In addition, Indian firms can handle outsourced business from America and Europe with competitive excellence and economy – not just low- to medium-skilled work (as in the so-called Call Centres), but sometimes jobs involving complex technical problems of programming and design.

The fact is that the Indian educational system is extraordinarily diverse, in a peculiar way, with a comparatively tiny group of children from the privileged classes enjoying high – often outstanding – educational opportunities, and the bulk of the population being confined to educational arrangements that are, in many different ways, poor or deficient. The facilities that students get vary enormously from their early school days to their specialized education, and place a small proportion of students – though a large group in absolute numbers – on the highest step of the ladder, whereas others are confined way down below. The Indian educational system – taking the social, economic and organizational elements together – does seem to make sure, in line with the general division between 'the privileged and the rest' in Indian society, that a few young people, out of a huge pool, manage to get an excellent education. The picking is done not through any organized attempt to keep anyone out (indeed far from it), but through differentiations that are driven by economic and social inequality related to class, caste, gender, location and social privilege.

The privileged by and large do very well – to their credit, they typically don't waste opportunities. Their success comes, first, in the educational establishments themselves, and then in the world at large, impressing Indians and foreigners alike. The country then celebrates with abandon the 'nation's triumphs'. Furthermore, not only do these

'first boys' (and, increasingly, 'first girls') do well in life, they can also relish – of course with becoming modesty – the homage that they receive for having 'done their country proud'. Meanwhile, the last boys, and particularly the last girls, can't even read or write, not having had the opportunity of any kind of decent education.

We should make clear that we have nothing against the first boys themselves. The country certainly needs them for many different purposes: for the academia to flourish, for the economy to prosper, for science and technology to move on, for medicine to progress, and indeed, for tackling with better effect the multitude of economic, social, administrative and environmental challenges that India faces. Our concerns do not arise from any sense that the first boys are letting us down. What goes wrong is the system in which the success of the educational enterprise is judged by the performance of a small (and largely self-contained) elite, ignoring the rest, and in which there is remarkable social insensitivity to the unfairness and injustice of such gross disparities, contributing to the persistence of a hugely stratified Indian society.

The recognition that we have to seek is that, despite the great successes of the first boys, India's education system is tremendously negligent both in coverage and quality. The steep educational hierarchy that has come to be tolerated in India is not only terribly unjust, but also extraordinarily inefficient in generating the basis of a dynamic economy and progressive society. It is in that structural perspective, combining considerations of efficiency with equity, that we can best understand how – and how much – the country loses through its extraordinary concentration on some, while neglecting the vast majority of Indians hampered by economic disadvantage, caste divisions, class barriers, gender inequalities and social gaps related to ethnicity and community.

SCHOOL MANAGEMENT AND THE TEACHING PROFESSION

The spread of literacy across the world has been achieved overwhelmingly through state education. This applies to all the major regions of the world where basic educational developments have led to literate and numerate societies. State action was the main basis of educational transformation in Europe and America in the nineteenth century, matched by the progress of Japan thereafter, followed by the rapid expansion of schooling under Communist rule in the Soviet Union (including Soviet Asia), China, Cuba, Vietnam and elsewhere, and strongly championed with great success by East Asia (despite the strong commitment there to develop a privatized market economy in general). It is difficult to see how India can achieve the same educational results without a similar level of commitment and effort by the state, and yet – as it happens – there is much championing of reliance on private schools among some development thinkers in India. We shall argue that while it is easy to see what is so attractive about reliance on the private sector for the growth of Indian school education, the real scope for that unusual path to educational transformation is rather limited. But before we discuss the problems of over-reliance on private schooling, we must look at the huge problems that state education has faced since independence and the difficulties that remain to be

overcome right now. If the *solution* offered by privatized education to the gigantic problems faced by public education in India is unreal (as we believe it largely is), the *problems* are real enough.

The classic problem of school education in India has been underfunding by the state. This was, of course, the case in British India right up to India's independence (when the British left India, more than four-fifths of Indians had not been touched by schooling), but it was followed by public policies of the newly independent India which continued gross underfunding despite rousing rhetoric claiming exactly the contrary, with such slogans as 'Education is our first priority.' That problem of underfunding remains today, but it is certainly much reduced by now – the limited progress discussed earlier in this chapter builds on a substantial heightening of financial support for school education. But even as the funding limitations are being, at least partially, remedied, other problems of public education in India have become increasingly more limiting and powerfully regressive.

Foremost among these problems is that of accountability in the delivery of school education. We mentioned earlier the incidence of absenteeism by teachers, which is very large indeed in some parts of the country, and on top of that, as was also discussed, in many regions the teachers who do show up seem reluctant to teach. There is something quite chilling in the thought that a large proportion (possibly as high as half) of the country's children are sitting idly in classrooms on an average school day – eager to learn, but deprived of any guidance, and condemned in many cases to leaving the schooling system without even being able to read or write. Most of the children are, of course, perfectly able not only to acquire basic literacy or mathematical skills, but also to study well beyond the constitutionally guaranteed minimum of eight years.[23] The schooling system's failure to respond to these aspirations and abilities is a manifest and colossal injustice, and yet it has remained unaddressed for many decades.

Could the laid-back attitude of many schoolteachers have something to do with their salaries being too low? The salaries used to be low (and one of us recollects joining protest marches on the streets of Calcutta, as a college student in the early 1950s, voicing demands for 'a decent salary for our teachers'). But that was a long time ago. It is difficult to defend that line of explanation today, given the steep rise in the salaries of schoolteachers, based on the recommendations of successive Pay Commissions, which have boosted the salaries of teachers (and other government employees) beyond levels that could have been reasonably imagined only a few decades ago. In fact, the salaries of government teachers in India are now well out of line with private-sector norms as well as with international patterns.

Just to use one possible benchmark, consider primary-school teacher salaries as a ratio of per capita GDP.[24] In 2001 this ratio of teacher salary to the GDP per head was estimated to be around one in China, somewhere between one and two in most OECD countries, and a little higher in developing countries, but not higher than three for any of the countries (except India) for which data were available. More recent data suggest similar ratios of teacher salaries to GDP in 2005 and 2009.[25] For instance, the OECD average hovered around 1.2 between 2000 and 2009. In India, however, it seems that

the corresponding ratio was already around three before the Sixth Pay Commission scales came into effect (in 2009, with retrospective effect from 2006), and shot up to around 5 or 6 after that (see Table 5.4).The state-specific ratios are even higher – much higher – in some of the poorer and more educationally deprived states (e.g. around 17 in Uttar Pradesh), if we use the state's per capita GDP as the denominator. Whatever may be the source of the problem of low teaching efficiency, the blame cannot be placed on any alleged lowness of salary of schoolteachers.

There is also, it appears, little evidence to suggest that high salaries are of particular help in raising teaching standards.[26] High salaries make it possible to select teachers from a larger pool of applicants, or to raise the minimum qualifications. On the other hand, they also transform teaching posts into plum jobs that attract anyone with the required qualifications – including those who have no interest whatsoever in teaching. But perhaps more importantly, high salaries also increase the social distance between teachers and parents. In many Indian states today, the salary of a primary schoolteacher is more than *ten times* what an agricultural labourer would earn, even if he or she were successful in finding employment every day at the statutory minimum wage. This social distance that has grown over the years, partly related to huge earning gaps, does not help to foster mutual cooperation between teachers and parents from most rural families, which could have been very important for the success of school education.

The relatively high salaries of schoolteachers have also had the effect of making the expansion of school education immensely more expensive in a country with a large pool of people qualified to teach and eager to do so. It is important to recognize that the problem of comparatively high salaries of teachers is part of the general problem of public sector salaries in India. The country has an odd system of pay fixation based on periodic reviews by appointed Pay Commissions that recommend salary scales for public sector employees without bearing any specific responsibility to offer enlightenment on how the financial burden of the wage structure would be financed, and more importantly, what the implications of the salary increases would be on the lives of those whose wages are *not* determined by Pay Commissions.* The members of the Pay Commission have little incentive to disappoint those whose salaries they are entrusted to determine (themselves included), without having any particular responsibility towards others, from rural labourers to the urban proletariat. Figure 5.1 compares recent trends in agricultural wages and public sector salaries (specifically, those of university professors), and the extent to which economic inequality has been enhanced over time by this bizarre system of fixing pay is truly astonishing.

Table 5.4
Estimates of Primary-School Teacher Salaries as a Ratio of Per Capita GDP

Country/state	Reference year	Estimated ratio of teacher salary to:	
		Per capita GDP	Per capita SDP
OECD average	2009	1.2	–
Asian countries			
China	2000	0.9	–
Indonesia	2009	0.5	–
Japan	2009	1.5	–
Bangladesh	2012	≈ 1	–
Pakistan	2012	≈ 1.9	–
India			
Nine major states[a]	2004–5	3.0	4.9
Uttar Pradesh[b]	2006	6.4	15.4
Bihar	2012	5.9	17.5
Chhattisgarh	2012	4.6	7.2

GDP = Gross Domestic Product.
SDP = State Domestic Product (for Indian states).

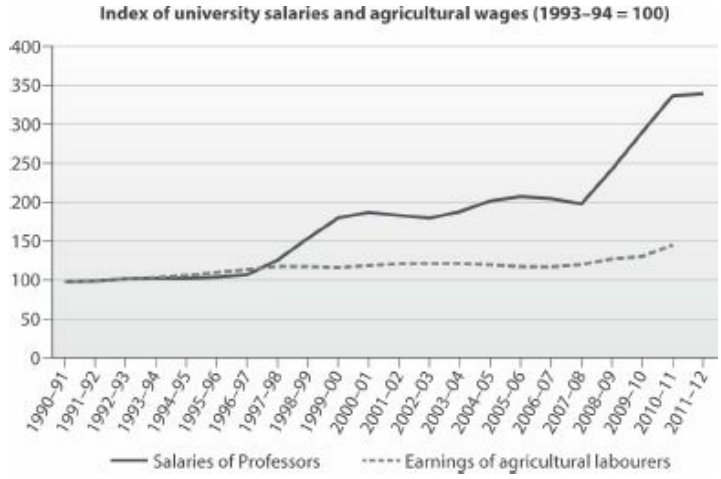
[a] Andhra Pradesh, Bihar, Gujarat, Jammu & Kashmir, Madhya Pradesh, Maharashtra, Rajasthan, Uttar Pradesh, West Bengal. Figures in this row refer to *all* primary-school teachers (including 'contract teachers', who earn much lower salaries than regular teachers), *before* the Sixth Pay Commission.

[b] Based on Sixth Pay Commission scales (fixed in 2009 with retrospective effect from 2006).

Note: The international figures apply to 'statutory salaries of teachers' after 15 years of service, at the primary level. Unless stated otherwise, Indian figures refer to regular teachers (as opposed to contract teachers). For more detailed information at the country level, see OECD (2011), Table D3.4.

Sources: OECD average, Indonesia and Japan: OECD (2011), Table D3.4, p. 419. China: Ciniscalco (2004), Figure 4 and data appendix, page 3. Bangladesh and Pakistan: Our informal estimates, based on data kindly provided by BRAC University (Dhaka) and the Collective for Social Science Research (Karachi), respectively. India: 'nine major states', calculated from Kingdon (2010), Table 1, based on population-weighted averages of her state-specific figures. Uttar Pradesh: Re-calculated from Kingdon (2010), using *Economic Survey* data on per capita GDP and SDP. Bihar and Chhattisgarh: Our estimates, based on enquiries about teacher salaries from the concerned Education Departments and Planning Commission data on per capita SDP.

Figure 5.1: Earnings of University Professors and Agricultural Labourers



Sources: Index of university salaries applies to the average consolidated salary of Delhi School of Economics professors, deflated by the Consumer Price Index for Industrial Workers. Index of agricultural wages is based on linking two real-wage series: a series based on *Agricultural Wages in India* presented in Drèze and Sen (2002), and a new series based on *Wage*

Rates in Rural India from Usami (2012), using 1999–2000 as the link year. For further details, see the Explanatory Note in the Statistical Appendix.

Faced with the cost escalation involved in these salary hikes, many states have stopped recruiting regular teachers and have increasingly come to rely on hiring 'contract teachers' to do the teaching.[27] The salaries of contract teachers are typically a fraction (as low as one fifth or so, in many cases) of what the regular teachers earn. They also typically have lower formal qualifications and less training than regular teachers. In fact, a large proportion of contract teachers are fairly untrained, or trained through dubious techniques such as *en masse* correspondence courses. On the other hand, they are expected to be more accountable, because they have renewable contracts, sometimes conditional on the approval of local communities or Gram Panchayats. Limited evidence suggests that, in terms of imparting basic skills such as reading and writing, contract teachers do no worse than regular teachers – at a much lower cost.[28] 'No worse', however, is not good enough, in view of what was discussed earlier about the remarkably low quality of school education in India, compared with the rest of the world. The contract approach has certainly facilitated a rapid expansion of the schooling system by lowering the unit costs, but it could easily become a major barrier against the improvement of teaching standards.

The result of all this is an oddly dualistic teaching cadre, where professional but often laid-back 'permanent teachers' work side by side with informal but more active 'contract teachers' hired at a fraction of the former's salary. It would have been nice to see some sort of middle path emerging from this dualism: new terms and conditions for the teaching profession, with decent salaries, good qualifications and some security of employment, but not unconditional, permanent plum jobs that undermine work incentives and ruin the integrity of the profession. Interesting proposals have also been made for integrating contract and permanent teachers in a common 'career ladder' that would help to spot and promote the best teachers.[29] However, there has been little space for exploring these and other alternatives in the polarized debate 'for or against' contract teachers, which tends to pose the question as an all-or-nothing choice between contract and permanent teachers.

The implementation of the recently enacted Right to Education Act may be an opportunity for constructive rethinking of the terms and conditions of employment of teachers in India. The Act prescribes not only a higher density of schools but also a pupil-teacher ratio no higher than 30:1 in every school. Further, all teachers are supposed to have minimum qualifications prescribed by the central government. Meeting these norms by expanding the cadre of permanent teachers on Sixth Pay Commission scales would be financially ruinous, especially in poor states with large shortfalls.[30] On the other hand, meeting them by hiring untrained contract teachers would become, strictly speaking, illegal. Many states, therefore, are constrained to seek a middle path between these unsatisfactory extremes. Failing that, accelerated privatization of schooling (as disgruntled parents pull their children out of government schools) is unfortunately a possible – even likely – scenario.

PRIVATE SCHOOLING AS AN ALTERNATIVE

It is not hard to see why the various problems faced by school education in the public sector would encourage commentators to think about going for privatization of school education. How viable is that as an allegedly superior alternative? Private schools do offer an alternative opportunity, but one which cannot, in any way, take over the role that state schools are meant to play and have played in the educational transformation of most countries in the world.

There is, first of all, a major problem of affordability, since substantial fees are inescapably linked with the profitability of private schools. This is not how children of poor families and disadvantaged communities are likely to get schooled and educated in India.

Second, even if the problem of affordability is somehow removed (based, say, on a system of private-aided schools or school vouchers), other problems remain. School education is a quintessential territory of informational limitation, particularly for parents of first-time school-goers, and there is also a huge presence of asymmetric information in so far as school authorities, or private-school entrepreneurs, know a lot more about what they are able (and intend) to offer than do the families of potential students. This is hardly the ideal territory for the working of a voucher system which tries to eliminate the problem of unaffordability by backing the supposedly informed choice of parents with the economic might of the vouchers.[31]

Third, in the absence of competition, as is very often the case in the Indian rural areas, private schools can be very extractive money-making machines with modest educational offerings. The role of competition in making markets function well cannot be overlooked when it comes to school education. There are, of course, many well-meaning efforts to expand non-government schools by collecting some fees for the sake of the viability of such efforts. But the recent experience of private schools in Indian education offers examples both of dedicated successes and of money-grabbing enterprises, with a reputation, often well deserved, for offerings not matched by performance. The fact that private schools in India do not seem to be doing much better than government schools, as mentioned earlier, in terms of average pupil achievements, indicates that there may not be an easy solution lying in wait to use here.

Fourth, school education, as has been widely noted across the world, has many features of what Paul Samuelson (1954) called ‘public goods’. There are externalities of school education, as well as indivisibilities of acquired knowledge. All this makes markets potentially very defective in terms of operation and delivery. This is not to indicate that these defects must necessarily outweigh the problems that the public sector has, but there is a clear need for hard-headed testing and checking of what the private schools are actually delivering (particularly in comparison with what they promise to deliver). That is, of course, the central problem in the monitoring of government schools as well. There is no automatic exemption from such continuous assessment when it comes to private schools.

Perhaps the most hidden penalty of greater reliance on private schools is that it

tends to take away from state schools the children of precisely those parents who are likely to contribute most to the critiques and demands that could make state schools more responsible and accountable. Reliance on private schools can make the problems of state schools much greater, by providing a way out for the more prosperous and more vocal families who suffer from low-quality school education in the state sector.[32] The private schools are likely to remain a part of the picture of Indian school education, but the need for carrying out major reforms of state schools as well as for relying on them is not going to disappear merely because of the existence of the private option for those who can afford it.

THE EVALUATION GAP

Among the organizational issues that have to be faced in reforming school education in India is the difficult one of pupil evaluation and school assessment. At the moment, the entire system of school tests is in a state of dangerous disarray. Under the Right to Education Act of 2010, 'automatic promotion' from one class to the next is guaranteed, irrespective of what a child has learnt, and Board Examinations are prohibited until Class 8. The Act does not prohibit school tests (as opposed to Board Examinations), but it does not encourage them either. Instead, it prescribes a system of 'comprehensive and continuous evaluation'. The details of this method, however, are far from clear, and some states have already complained that the new approach to evaluation effectively translates, on the ground, as 'no evaluation'.[33]

There is an urgent need to restore some clarity on this whole issue. No doubt, the traditional examination system in India had many flaws, and often ended up in large-scale cheating, excessive pressure on children, dumbing-down of teachers, and a reinforcement of crude teaching methods such as rote learning.[34] On the other hand, abolishing standardized tests of any kind in a system where pupil achievements are so low and teacher supervision is so scanty can hardly be a sound idea.

The main purpose of standardized tests is not so much to put pressure on children to learn – something many educationists understandably oppose – but to find out what kinds of help, attention or encouragement particular children or schools need. If a large proportion of children learn virtually nothing for years on end in a particular school, it is important to know it, well before they are sent for slaughter in the Board Examination (if indeed they reach the end of Class 8 without dropping out). This recognition is not a ground for the rejection of comprehensive and continuous evaluation, but for having adequate information about pupil achievements, which the alternative to standardized tests does not seem to provide.[35] An inadequately reasoned rejection of such tests without a viable and effective alternative is hardly what Indian schoolchildren need today.

The importance of information about pupil achievements is, of course, immediate for teachers, headmasters, inspectors, or administrators, but it applies also to the parents of the concerned children and the community around them. The disempowerment of parents is not the least reason for lack of accountability in the schooling system, and the

difficulty they have in assessing what their children are learning (and what is going on in the school) plays a very important part in that disempowerment. Generating useful information on pupil achievements and placing it in the public domain (if only in anonymous or statistical formats) could be of great help in enabling parents and others to hold the system accountable.

The nature and content of the tests, of course, need considerable thought. For instance, it is possible to design standard tests that evaluate the competencies of a child (say, the ability to comprehend – not just read – a simple text), rather than his or her ability to memorize. Similarly, 'open book' tests can help to shift the focus of tests from memorization to comprehension or competency. But the first step is to recognize the need for reform: the current evaluation gap is alarming.

UNIVERSALIZATION WITH QUALITY

School education in India is in a terrible state, and given the wide-ranging individual and social roles of education, this failure has played no small part in a whole gamut of social problems discussed in this book – from the lack of participatory growth and poor health achievements to problems of public accountability, social inequality and democratic practice. While the centrality of education to development is better recognized in India today than it used to be, and even though some progress has been made in extending the coverage and infrastructure of the schooling system, there is an urgent need to go beyond these elementary steps, and in particular, to give much greater attention to the *quality* of education.

The task of restoring accountability in the schooling system must certainly be an important part of the larger educational agenda. Since salaries of schoolteachers are fixed from outside (as was discussed earlier), the present system of teacher payment in government schools cannot be said to have any built-in system of financial incentives at all. However, incentives can come in some other forms, since the rewards of teachers include reputation and respect as well as general recognition as good teachers, and there is evidence that such non-financial incentives can indeed sway the work of schoolteachers in a substantial way.[36]

There are other concerns as well, since the quality of education also depends on many further factors (for instance, the school curriculum and pedagogy, the competence of teachers, and the good health of children). But accountability is clearly a central issue at this time – not just teacher accountability, but the accountability of the entire schooling system.

As discussed in Chapter 4, one of the principal obstacles against restoring accountability in the public sector, in general, is the fatalistic notion that nothing can be done about it. This applies to the schooling system as well. During the last ten years, even as so much was done to put in place schooling facilities, pupil incentives, and even a Right to Education Act, accountability issues were largely ignored or sidestepped.[37] And yet, much could be done if the sort of energy and resources that have been spent on expanding the reach of schooling facilities are now also aimed at improving the quality

of education.

It is not difficult to see, for instance, that a school without a head teacher is unlikely to function much better than a ship without a rudder. And yet, the survey of schooling facilities mentioned earlier in this chapter found that half of the schools were bereft of a head teacher at the time of the investigators' unannounced visits – due either to absenteeism, or, in one fifth of the sample schools, because no head teacher had been appointed at all. There is absolutely no reason to tolerate this gap, since it is easy enough to ensure that every school has a head teacher and to prevent absenteeism. Similarly, an active system of school inspection (not necessarily of a punitive kind) is clearly an essential component of any schooling system, and there is indeed some evidence that regular inspections make a difference to teaching standards.[38] And yet, the very term 'inspection' seems to be treated as a dirty word in Indian education policy. It is not mentioned in the National Policy on Education, except once, to say that it is expected to be gradually replaced with 'a developed system of school complexes', without much explanation of what this system would be (that was in 1992).[39] Nor is it mentioned in the Right to Education Act of 2010.

As discussed in the preceding section, a better system of pupil evaluation and school evaluation would also be of great help in enabling parents and others to hold the system accountable. Many other levers can be activated to create accountability – teacher selection, promotion rules, parent-teacher associations, grievance redressal facilities, among others. None of them is likely to suffice on its own, but taken together, they can make a big difference.

A related issue of some importance is the need to seek the cooperation of teachers' unions to assist in improving the work culture in the schooling system. More generally – not confined only to school education – there is a strong case for treating the unions as helpers rather than as sources of hindrance in enhancing accountability in the public sector. The attitude to unions and their own views have become too narrowly politicized in India. Free-market activists tend to treat the unions as just a nuisance, while the union-oriented Left seems most reluctant to criticize the narrowly self-centred priorities of some of the unions. All this has detrimental effects on the interests and well-being of pupils as well as, at least in the long run, of the teachers themselves. It is really important to try to get the unions to recognize their social responsibilities and, on the other side, to see them as collaborators rather than as obstacles that need to be eliminated – or comprehensively weakened. There are different ways of approaching the issue of social collaboration.* Treating the unions as pure adversaries is not one of them.

These are just some among a long list of issues that need much greater discussion and wider attention if questions of school accountability and of the quality of education are to receive the consideration they truly need. India does need a radical change in the force and cogency of public debates on school education, with much more focus on quality. This is one aspect of the case made in this book for a broadening of public discussion on development matters.

The distinct issues of increasing funding, restoring accountability, seeking the

cooperation of teachers and teachers' unions in improving the quality of education, and many other remedial measures all demand attention, since there is no magic solution that is going to resolve all the problems from which Indian education in general – and school education in particular – suffer. One overarching priority, however, is the need for more active pursuit of quality in India's schooling system. Even as the much recognized problem of having many children out of school is remedied (and there is need for more speed in addressing that as well), the improvement of the shockingly low quality of Indian schooling must be a central concern of educational planning in India today. We have identified certain specific problems, and possible ways of remedying them, but the conquering of so great an adversity requires much greater attention in public discussion and social reasoning than it currently gets. It is hard to think of a more urgent challenge that India faces today than the reshaping of school education to achieve universal coverage with good-quality education for the children of India.

* There was an earlier Buddhist establishment in Takshila, in what is now Pakistan, but while it offered religious instruction and some education related to Buddhism, it did not develop the kind of pedagogic reach and liberality that Nalanda managed to evolve. In this respect Takshila was more similar to Al Azhar, an early and very distinguished Muslim university in Egypt, which was initiated about a couple of hundred years after Nalanda, and which developed a regular system of pedagogic instruction, closely related to religion, and became justly renowned across the world.

* Another recent study, based on a random sample of more than three thousand schools across the country, came to similar conclusions: fewer than half of the teachers were engaged in teaching activity on an average day (Kremer et al., 2005). The PROBE findings, related to northern India, were actually worse (no teaching activity in a school means that *all* the teachers are doing something else). Teacher absenteeism rates in the national sample varied from 15 per cent in Maharashtra to 42 per cent in Jharkhand, with a national average of 25 per cent.

* These findings on pupil achievements need to be seen in light of the fact that a large proportion of the children going to elementary schools are first-generation learners. The parents of these students can offer little or no help to their children about education, and the lack of any educational tradition in those families makes the problem of generating interest and concentration much harder. Since the development of aspiration is a very important part of improving educational achievement (on which see Hart, 2012), the need for paying particular attention to the low aspiration levels of first-time school-goers is part of the task on which a rapidly expanding schooling system has to focus. None of this, of course, detracts from the shocking nature of recent findings on pupil achievements and the quality of education in Indian schools.

* As one review puts it: '… there is strong evidence that the cognitive skills of the population – rather than mere school attainment – are powerfully related to individual earnings, to the distribution of income, and to economic growth' (Hanushek and Woessmann, 2008, p. 607).

* The Central Pay Commission reports are, technically, advisory in nature, but the pay recommendations are typically endorsed wholesale by the central government, and emulated within a short period of time by state governments. The entire process goes largely unopposed, and tends to be treated with passive acceptance as an inevitable event by the mainstream media as well as by the academic profession, which is among the main beneficiaries of it.

* The Pratichi Trust has been working for some years now jointly with the All Bengal Primary Teachers Association and other unions of primary-school teachers in West Bengal on the work responsibility of the teachers, and the results have been very positive and encouraging. On this see Kumar Rana (2012). See also Sarkar and Rana (2010) and Majumdar and Rana (2012).

6

India's Health Care Crisis

Sometimes the most important things in life are least talked about. For instance, it is hard to think of anything more important than health for human well-being and the quality of life. And yet, health is virtually absent from public debates and democratic politics in India.

To illustrate, the coverage of essential aspects of health and health care in the mainstream media is extremely limited. This applies not only to what can be called, without intending any disrespect, India's relatively lightweight newspapers, but also to the most seriously engaged parts of the media. In our previous book, we found that even in India's best newspapers – with a creditable record of coverage of social issues in general – issues of health were rarely discussed. For example, among more than three hundred articles published on the editorial page of one of India's finest dailies between January and June 2000, not one was concerned with health.* We examined this issue again recently, by scrutinizing all the articles (there were more than five thousand) published on the editorial pages of India's leading English-medium dailies during the last six months of 2012. There were some signs of improvement compared with the situation 12 years earlier, but the overall coverage of health issues in editorial discussions remains minuscule – about 1 per cent of the total editorial space (even if we adopt a very broad definition of health-related matters). Most of the sample dailies did not publish more than one lead article on health on their editorial page over this period of six months. This is particularly striking considering that the second half of 2012 was a critical time for health policy, when there were real prospects of health becoming one of the main priorities of the Twelfth Five Year Plan, but also serious questions about the health policy framework outlined in the draft Plan (we shall return to this). While these questions were causing much concern among health activists and professionals, they did not become a matter of wide public discussion.

The low visibility of health issues in India's mainstream media and democratic politics applies also to child health, adding to the neglect of children in political discussions in general. For instance, a recent analysis of questions asked in the Indian Parliament found that only 3 per cent of these questions related to children (who constitute more than 40 per cent of the population). Further, of these children-related questions, less than 5 per cent were concerned with early childhood care and development. A similar analysis of recent media coverage of child-related issues shows that the interests of young children are virtually invisible in the mainstream media.[1]

A particularly telling illustration relates to child immunization. There is very little public awareness of the fact that India's immunization rates are among the lowest in the world. This is illustrated in Table 6.1, using comparable international data from

UNICEF's latest *State of the World's Children* report. Except for the BCG vaccine, India's immunization rates are uniformly lower than the corresponding averages for sub-Saharan Africa, or for the 'least developed countries'. They are also uniformly lower (even for the BCG vaccine) than the corresponding estimates for every other South Asian country, including Nepal and Pakistan. In fact, outside sub-Saharan Africa, one has to go to conflict-ravaged countries like Afghanistan, Haiti, Iraq or Papua New Guinea to find lower immunization rates than India's.[2] In contrast, Bangladesh has achieved immunization rates of around 95 per cent for each vaccine. This contrast reflects the fact that child immunization rates in India increased very slowly in the 1990s and early 2000s, while Bangladesh closed most of the immunization gap over the same period, as Figure 6.1 illustrates.[3]

Table 6.1: Immunization Rates, 2012

	Proportion (%) of 1-year-old children who are immunized				
	BCG	DPT	Polio	Measles	Hep B
India	87	72	70	74	37
South Asia	88	76	75	77	51
Sub-Saharan Africa	84	77	79	75	74
Middle East & North Africa	92	91	92	90	89
Latin America & Caribbean	96	93	93	93	90
East Asia & Pacific	97	94	96	95	94
CEE/CIS	96	95	96	96	94
Industrialized countries	–	95	95	93	66
World Average	90	85	86	85	75
'Least developed countries'	84	80	80	78	78
Bangladesh	94	95	95	94	95
Number of countries doing worse than India[a]	26	16	13	25	0
Countries doing worse than India, outside Africa[a]	Afghanistan, Azerbaijan, Colombia, Costa Rica, Haiti, Iraq, Laos, Papua New Guinea, Tajikistan, Yemen	Afghanistan, Haiti, Iraq, Papua New Guinea	Afghanistan, Haiti, Iraq, Papua New Guinea	Afghanistan, Azerbaijan, Haiti, Iraq, Laos, Lebanon, Papua New Guinea, Yemen	–

CEE/CIS = Central and Eastern Europe/Commonwealth of Independent States.

[a] Among all countries (with a population of at least 2 million) for which data are available; there are approximately 150 such countries (for each vaccine).

Source: *UNICEF* (2012), Table 3, pp. 96–9.

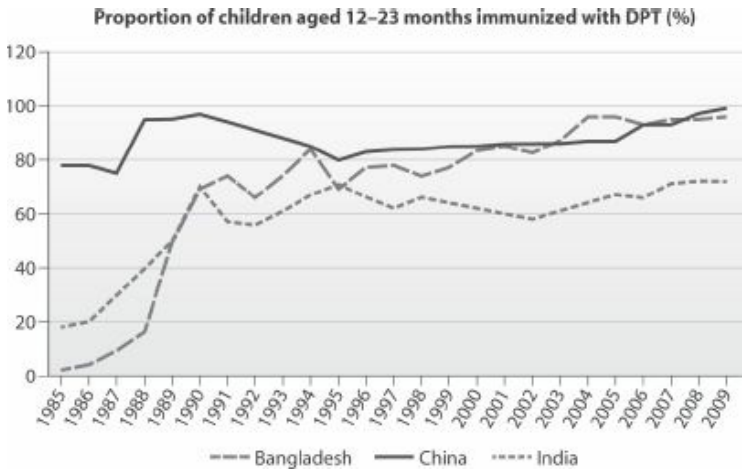


Figure 6.1: Immunization Coverage in India, China and Bangladesh (1985–2009)

Source: *World Development Indicators* (online, as on 1 January 2013). Very similar patterns apply to measles immunization data, available from the same source.

The issue is not only that India is doing very badly in child immunization, but also that this terrible record has remained unchallenged and virtually unaddressed. We found no evidence of any significant public debate having taken place on this issue in the last few years despite the enormity of the health problem involved.* The opposition to polio immunization in Pakistan by the Taliban does get attention (as it should), but India's lack of progress in critically important fields of immunization (despite some recent achievements, including the eradication of polio), even without a Taliban, gets little discussion in the Indian media.[4]

Since the practice of democracy depends greatly on which issues are publicly discussed, the comparative silence of the media on health care makes it that much more difficult to remedy the problems from which Indian health care suffers. There are, thus, two interrelated problems faced by health care in India: first, its massive inadequacy, and second, the near-absence of public discussion of this inadequacy.

A HEALTH CHECK-UP

This silence would perhaps be tolerable if the Indian population enjoyed good health and adequate health services, but nothing could be further from the truth. We already noted, in Chapter 3, that India's health and nutrition indicators are very poor, and compare quite unfavourably with those of many other countries – both rich and poor. For example, despite the fact that India's GDP per head is about twice as high as that of Bangladesh, the latter has a higher life expectancy than India and lower child mortality rates. The lack of effective public involvement with health matters in India has played no small part in the resilience of India's health predicament.

Public expenditure on health in India has hovered around 1 per cent of the country's GDP for most of the last twenty years – very few countries spend less than that on

health care, as a ratio of GDP. When the United Progressive Alliance (UPA) government came to office in 2004, one of the core commitments of the coalition government's National Common Minimum Programme was to raise public health expenditure to 'at least 2–3 per cent of the GDP over the next five years'. But the ratio actually declined, to 0.9 per cent of GDP in 2005, before rising very slowly again, partly due (in recent years) to salary increases in the public sector. At 1.2 per cent of GDP, public expenditure on health in India today is still exceptionally low in comparative perspective: only nine countries in the world have a lower ratio of public expenditure on health to GDP. India's 1.2 per cent compares with 2.7 per cent in China, 3.8 per cent in Latin America, and a world average of 6.5 per cent (including countries with a national health insurance, such as those in the European Union, where the average ratio of public health expenditure to GDP is around 8 per cent). In absolute terms, this translates (in terms of purchasing-power-parity 2005 international dollars) to $39 per person per year in India, compared with $66 in Sri Lanka, $203 in China and $483 in Brazil.

A related symptom of India's lack of governmental commitment to health care is that public expenditure on health accounts for less than one third of total health expenditure. Only a few countries (such as Afghanistan, Haiti and Sierra Leone) have a lower ratio of public health expenditure to total health expenditure. To put this in perspective, public expenditure accounts for 70 to 85 per cent of total health expenditure in most countries of the European Union and North America, with an average of 77 per cent in the European Union, and one notable outlier – the United States (just below 50 per cent), which remains a bit of a 'developing country' as far as public health care is concerned. Even the US ratio, however, is much higher than India's. The world average is 63 per cent, and even the averages for sub-Saharan Africa (45 per cent) and for the 'least developed countries' in the world (46 per cent) are also much higher than India's 29 per cent (see Table 6.2). These are some indications, among others, that India has one of the most commercialized health care systems in the world.

The unusual reliance on private health care in India results largely from the fact that the country's public health facilities are very limited, and quite often very badly run. Health facility surveys conducted by the International Institute for Population Sciences (Mumbai) in 2003 gave a chilling picture of the state of public health centres around the country. To illustrate, only 69 per cent of Primary Health Centres (PHCs) had at least one bed, only 20 per cent had a telephone, and just 12 per cent enjoyed 'regular maintenance'. These are national averages, and the corresponding figures for the poorer states are much worse. In Bihar, for instance, a large majority of PHCs had to make do without luxuries such as electricity, a weighing machine or even a toilet. It is worth remembering that a PHC is supposed to be a health facility of some importance, serving a population of about fifty thousand persons on average (often many more – about 158,000 in Bihar).

Table 6.2
Public Expenditure on Health, 2010

	As a share of GDP (%)	As a share of total health expenditure (%)	In absolute terms (2005 PPP international dollars)[a]
India	1.2	29	39
South Asia	1.2	30	36
Sub-Saharan Africa[b]	2.9	45	66
East Asia & Pacific[b]	2.5	53	167
Middle East & North Africa[b]	2.9	50	199
Latin America & Caribbean[b]	3.8	50	424
Europe & Central Asia[b]	3.8	65	585
World Average	6.5	63	641
European Union	8.1	77	2,499

[a] Calculated from per capita expenditure on health and share of public health expenditure in total health expenditure.

[b] 'Developing countries' only.

Source: *World Development Indicators* (online, 1 January 2013).

Even when health facilities are available, their utilization leaves much to be desired. According to one recent study, absenteeism rates among health workers ranged between 35 and 58 per cent in different Indian states in 2002–3.[5] A similar picture emerges from another study of health services in Udaipur district (Rajasthan): more than half of the health sub-centres were found to be closed during regular opening hours, and even in the PHCs and Community Health Centres, 36 per cent of the personnel were absent on average. Meanwhile, local residents suffered from horrendous levels of morbidity: one third of all adults had a cold during the 30 days preceding the survey, 42 per cent had body ache, 33 per cent had fever, 23 per cent suffered from fatigue, 11 per cent had chest pains, and more than half suffered from anaemia. Close to one-third found it difficult to draw water from a well and one in five had difficulty standing up from a sitting position.[6]

The problem is, naturally, most intense for the poorer Indians, but the bias towards private facilities affects even the relatively well-off, who too often have rather limited access to decent and affordable health care. The technology and expertise are usually available, but public facilities are highly inefficient and disorganized, and private services are virtually unregulated, leaving patients at the mercy, often enough, of unscrupulous practitioners. Fraud, over-medication, exploitative pricing and unnecessary surgery seem to be quite common in the private health sector. To illustrate, a recent study of health services in Chennai found that 47 per cent of deliveries performed in the private sector end up with a Caesarean, which is much higher than the WHO norms of up to 15 per cent (the corresponding ratio in the public sector in Chennai was 20 per cent).[7] Another recent study of health care in Delhi and Madhya Pradesh found that both public and private health facilities offered very defective services, with simple diseases being inaccurately diagnosed and inappropriately treated in a majority of cases.[8] The need for reform applies not just to public services, or to the services available to poor households, but to the health sector as a whole.

THE PRIVATE INSURANCE TRAP

The rapid growth of India's GDP and public revenue during the last twenty years, discussed in Chapter 1, was an opportunity to launch major initiatives in the field of health policy. This opportunity, however, has been largely missed, despite some signs of positive change in recent years. The rate of progress in public health care has been astonishingly slow over the last two decades, even as the growth of GDP in India has been exceptionally high. The 1990s were largely a 'lost decade' for India as far as health is concerned, and much of the 2000s did little better.

As mentioned earlier, the Common Minimum Programme of the first UPA government promised a radical increase in public expenditure on health, which did not materialize. It did lead to one major initiative: the National Rural Health Mission (NRHM), launched in 2005–6. However, NRHM expenditure was below Rs 10,000 crores per year during the first five years (less than 0.2 per cent of the GDP) – far too little to make a major difference in the country. This is quite possibly a good programme (about which more presently), but it can only achieve so much without greater economic resources and political commitment – from the government and from the public.

Along with these faltering moves towards consolidation of India's public health services, there are also other developments, of a very different kind – towards even greater reliance on private provision of health care and private insurance of health risks. The Rashtriya Swasthya Bhima Yojana (RSBY), or 'national health insurance scheme', is one step in that direction. Under this scheme, launched in 2008, 'below poverty line' (BPL) families are enrolled with private health insurance companies. The government pays the insurance premium, which entitles them to Rs 30,000 of health care in an institution of their choice, to be picked from a list of accredited hospitals and health centres.

Not surprisingly, this move has been welcomed by the corporate sector. As *The Wall Street Journal* put it a few years ago in an upbeat article, praising this 'business model', the Rashtriya Swasthya Bhima Yojana 'presents a way for insurance companies to market themselves and develop brand awareness'. Private hospitals also get their due, as 'the program can increase the number of patients and potentially widen the client base'. RSBY is a convenient springboard for the private health insurance industry – one of the fastest-growing sectors of the Indian economy.

Subsidized private health insurance under RSBY may, of course, bring some relief to selected households.[9] It is certainly an improvement over the current 'out of pocket system' (OOPS), whereby the bulk of health care is purchased for cash from private providers. But what sort of health system is it supposed to lead to, or be part of? One interpretation is that private insurance is expected to become the backbone of India's future health system. The government will pay the insurance premium for BPL families, and others will buy health insurance from private companies on their own. People will then seek health care from accredited institutions, public or private, and the costs will be reimbursed by private health insurance companies.* Despite its attractive sound, there are very serious reasons to be deeply concerned about this health care model.

Efficiency issues: The limitations of private (more precisely, commercial) health insurance begin with a series of standard 'market failures', associated in particular with adverse selection and moral hazard. Briefly, adverse selection refers to the fact that health insurance is likely to attract people who are particularly prone to illness, and this would drive up insurance premiums, restricting the pool of willing buyers to high-risk clients. Insurance companies can try to protect themselves from this by 'screening' their clients, but this runs against basic principles of equity in health care. And it can turn the problem on its head, by restricting insurance to low-risk groups and excluding those who are in greatest need of health care.

Turning to moral hazard, one of its manifestations is the fact that the insured patients – and health care providers – have little incentive to contain the costs. Every 'solution' to this raises its own problems. For instance, incentives to contain the costs of health care can be created by reimbursing costs on some sort of 'presumptive' basis (e.g. fixed amounts for specific procedures such as a delivery or treatment of tuberculosis). But then the health care providers (doctors, hospitals and so on) have strong incentives to use the cheapest possible method for each procedure, even if it goes against the interests of the patient. They may also be tempted to indulge in 'cream-skimming', that is, focusing on patients who can be treated at low cost and turn away the rest. These are just some examples of the complex efficiency problems associated with private health insurance – problems that can, at best, be alleviated with strict and sophisticated regulation, of a kind that would be very hard to implement in India as things stand.

Distortion issue: Commercial health insurance tends to be geared primarily to hospital care. A health system based on commercial health insurance is likely to be biased against preventive health services, and more generally, against non-hospitalized care. This would be a problem for any health system based on private insurance, but particularly so in India where a large part of the burden of ill health consists of communicable diseases.[10] It is also the case that health care for many types of non-communicable diseases such as diabetes, circulatory problems and cancer can be best dealt with by early – pre-hospitalization – treatment, against which a system focused primarily on hospitalization might be biased. This is an additional problem to the general undermining of public health and preventive services that can be expected to follow from increased reliance on schemes like RSBY. Quite likely, private health insurance would also end up promoting further privatization of health services and affect the resources, time, energy and commitment available to strengthen public health services, and this could undermine precisely the channel through which health transition has been brought about across the world – in Europe, Japan, East Asia, Latin America, Canada and even the USA. There are important lessons here from the global experience of successful health transitions from which India can learn, but which it seems to have ignored.[11]

Targeting issue: The idea that the government will pay the insurance premiums for poor households, to ensure that they are included in the system, raises all the problems associated with 'BPL targeting', including the unreliability and diviseness of the BPL identification process (for further discussion, see Chapter 7). In the context of health,

these problems are particularly serious, for two reasons. First, health contingencies can rapidly 'push' families into poverty. Thus, a family that was 'above the poverty line' yesterday may be below the poverty line today. BPL lists, for their part, are quite rigid (even renewing them every five years or so has proved extremely difficult in most states), and it is simply not possible to revise them as and when people fall into poverty due to health contingencies. So a BPL list can hardly serve the intended purpose well. The second reason is that taking into account people's health status creates problems for the entire logic of the BPL approach, based as it is on the per capita expenditure criterion and proxy indicators of it. For instance, a person with some disability but not severely low income may be severely deprived and in dire need of health insurance because of the costs and deprivations associated with that disability, and yet fail to qualify for the BPL list.* Thus, subsidizing the insurance premiums of BPL households is a very inadequate – and defective – way of ensuring universal health coverage.

Equity issue: A health system based on targeted insurance subsidies is very unlikely to meet basic norms of equity in health care, as four different sources of inequality reinforce each other: exclusion errors associated with the targeting process; screening of potential clients by insurance companies; the obstacles (powerlessness, low education, social discrimination, among others) poor people face in using the health insurance system; and the persistence of a large unsubsidized component in the health system, where access to health care is linked with the ability to pay insurance premiums.

Irreversibility issue: Last but not least, the private health insurance model can be, in effect, something of a one-way street – the health insurance industry can easily become a powerful lobby and establish a strong hold on health policy, making it very difficult to move away from that model if it proves ineffective. The current drift in India towards private health insurance, without developing a solid base of public health care, has that problematic feature – aside from others, just discussed.

The private health insurance model is essentially the American model, the lack of reach of which President Obama – and earlier the Clintons – tried hard to remedy (with some recent success).† Despite the excellent quality of top-level medical care in the USA, the country has paid a heavy price for taking this route, in terms of limited access to, and exclusions from, health care. The US health care system is one of the most costly and ineffective in the industrialized world: per capita health expenditure is more than twice as high as in Europe, but health outcomes are poorer (with, for instance, the US ranking 50th in the world in terms of life expectancy). This system is also highly inequitable, with nearly 20 per cent of the population excluded from health insurance, and terrible health conditions and risks among deprived groups. Further, attempts to reform the health care system in the US have proved extremely difficult, partly due to the power of the health insurance business, and partly due to deep-rooted political resistance to the idea of 'socialized' health care, which resistance has been much cultivated by private health insurance companies. The contrast with Canada, with so-called 'socialized medicine', which achieves more at far less cost than the USA for normal health care through state-provided health care, brings out some of the problems that the USA has to overcome before it can become a 'model' for the world – in

particular India – to follow. This is not to say that Canada itself is a flawless model: its exclusion of private health insurance, except for very limited purposes, may be seen as too extreme (it is not clear why the rich should not be allowed to pay for extra health insurance while remaining quite free to spend money on expensive holidays or yachts), and surely there is much to learn also from the European system of reliance on national health services and social insurance without ruling out private health insurance.

The fundamental need for active public involvement with health care (including a strong foundation of public provision) in India was recognized at least as early as the Bhore Committee Report of 1946, and reaffirmed recently – in a somewhat different form – by the Report of the High Level Expert Group on Universal Health Coverage for India.[12] The actual trajectory of the health sector, however, has been very different, at times even diametrically opposite – moving more and more towards privatized health care and insurance systems that do not preclude exclusion of 'unprofitable patients'. The proposed regulations seem deeply inadequate to tame a profit-seeking health care system to serve the purposes of universalism and equity. Health policy today is in a somewhat confused state, with some positive initiatives towards the consolidation of public services (including the National Rural Health Mission, and, more recently, a move towards public provision of generic drugs), but also a steady drift towards greater reliance on private insurance (actively encouraged by the health industry), and very little clarity about the principles on which India's future health system should be based. Meanwhile, many other developing countries – not just China, but also Brazil, Mexico, Thailand, Vietnam, among others – have made decisive progress towards universal health coverage, based on clear commitments to publicly funded universal health coverage and well-functioning public health services.* This is an aspect of public policy where very important choices remain to be made in India.[13]

THE NUTRITIONAL FAILURE

India's nutrition indicators have significantly improved during the last 65 years, starting from abysmal levels that existed at the time of Indian independence (see Chapter 1). For instance, clinical signs of severe undernutrition (such as marasmus and kwashiorkor) are much less common now than they used to be, and there has been a slow but steady improvement in children's heights and weights. And yet, even today, the nutrition situation in India (and in much of South Asia) remains appalling – worse than almost anywhere else in the world.[14]

To illustrate, none of the countries for which recent nutrition data are available have a higher proportion of underweight children than India.[15] The Indian figure, 43 per cent, is close to the South Asian average, but much higher than the estimated averages for sub-Saharan Africa (20 per cent) or the 'least developed countries' (25 per cent), not to speak of other major regions of the world (less than 12 per cent in each case – see Table 6.3). The latest estimate for China, 4 per cent, is about one tenth of the corresponding figure for India. The broad patterns are much the same for stunting (low height-for-age), although the contrasts in stunting rates are less sharp, and one or two

countries (e.g. Burundi) do have a higher estimated proportion of stunted children than India's 48 per cent.

The Indian population – not just children – also suffer from massive micronutrient deficiencies, including iron deficiency (which affects a majority of women and children), but also shortages of many other essential nutrients, as Table 6.4 illustrates.[16] According to the National Nutrition Monitoring Bureau data, the ratio of average intake to 'recommended daily allowance' among children in the age group of 4–6 years was only 16 per cent for Vitamin A, 35 per cent for iron and 45 per cent for calcium in the early 2000s. The situation remains much the same today in this respect, partly due to the inadequate reach of supplementation programmes, also illustrated in Table 6.4. For instance, only one third of Indian children below the age of five years are covered by the Vitamin A supplementation programme, compared with near-universal coverage in every other South Asian country and even in much of sub-Saharan Africa.

A view is sometimes aired claiming that child undernutrition in India is a 'myth', because Indian children are genetically shorter, so that international anthropometric standards are not applicable to them. However, this recent reincarnation of the so-called 'small but healthy' hypothesis (and that is what it is – a hypothesis) is yet to receive any sort of scientific support.[17] It is also difficult to reconcile with a recent re-examination of the validity of applying the same anthropometric standards of height and weight to children across the world: the Multicentre Growth Reference Study (completed under the auspices of the World Health Organization), which found no evidence of Indian children being genetically shorter than other children.* But even if this hypothesis is correct to some extent, it would not invalidate the basic fact that undernutrition levels in India are extremely high – certainly among the highest in the world.[18]

Table 6.3
Child Nutrition Indicators, 2006–10[a]

	Proportion (%) of children under 5 who are undernourished:		Proportion (%) of infants with low birthweight
	Weight for age	Height for age	
India[a]	43	48	28
South Asia	42	47	27
Sub-Saharan Africa	20	39	13
East Asia & Pacific	10	19	6
Middle East & North Africa	11	28	11
Latin America & Caribbean	4	15	8
'Least developed countries'	25	41	16

[a] Latest year for which data are available within that period.

Source: UNICEF (2012), Tables 2 and 3. The regional estimates are based on countries for which data are available, and pertain to 'developing countries' only.

The phenomenon of high levels of child undernutrition in South Asia (not only India), even compared with many sub-Saharan African countries that have poorer income and health indicators, is known as 'the South Asian enigma', following an influential article published in 1996 by a team led by Vulimiri Ramalingaswami, who was the Director of the All India Institute of Medical Sciences.[19] The original article drew attention to various aspects of the low status of women in South Asia as a possible explanation for this enigma, and this hypothesis is consistent with more recent work on this issue.[20] One of the connections between women's well-being and child nutrition works through low birthweights: women's poor nutritional status and other deprivations (especially during pregnancy) lead to poor foetal growth and low birthweights, affecting children's nutrition status right from birth and even conception. The original article, for instance, suggested that weight gain during pregnancy may be only about half in South Asia (about 5 kgs on average) as in Africa (much closer to 10 kgs).

Table 6.4: Micronutrient Deficiencies and Supplementation

	Deficiencies (%)				Supplementation (%)	
	Proportion of pre-school age children with anaemia	Proportion of pregnant women with anaemia	Proportion of pre-school age children with Vitamin A deficiency	Proportion of school-aged children with iodine deficiency	Vitamin A supplementation coverage rate (age 6–59 months), 2010	Proportion of households consuming adequately iodized salt, 2006–10
South Asia						
India	74	50	62	31	34	51
Bangladesh	47	47	22	43	100	84[a]
Nepal	78	75	32	27	91	63[b]
Pakistan	51	39	13	64	87	n/a
Sri Lanka	30	29	35	30	85	92[a]
China	20	29	9	16	–	97
Sub-Saharan Africa	68[c]	56[c]	44[c]	41[c]	86	53

[a] Data differ from standard definition or refer to only part of the country.

[b] 2002–7 figure, based on Micronutrient Initiative and UNICEF (2009), Annex A.

[c] Population-weighted average of country-specific figures.

Source: Micronutrient Initiative and UNICEF (2009), Annex A, for 'deficiencies'. UNICEF (2012), Table 2, for 'supplementation'.

In this connection, it is worth recalling that not only children but also adult women are more undernourished in India (and South Asia) than almost anywhere else in the world. According to the Demographic and Health Surveys, the proportion of adult women with a 'body mass index' below 18.5 (a standard cut-off conventionally associated with chronic energy deficiency) was as high as 36 per cent in India in 2005–6 – higher than in any other country for which DHS data are available, and nearly three times as high as the corresponding estimate for sub-Saharan Africa (14 per cent).[21]

This is just a sample of the distressing facts that characterize the nutrition situation

in India. As in the case of child immunization, discussed earlier, there is also a serious issue of lack of improvement over time. This was one of the main messages of the third National Family Health Survey ('NFHS-3'), conducted in 2005–6 – the most recent comprehensive household survey on health and nutrition in India at the time of writing. For instance, the proportion of underweight children was not much lower in 2005–6 than in 1992–3, the date of the first National Family Health Survey, and while child stunting rates seem to be improving a little faster, the overall picture is one of very limited progress over this period (see Table 6.5). Thirteen years may seem like a short time, but it is actually long enough to achieve major improvements in child nutrition based on bold interventions, as Thailand showed in the 1980s and China demonstrated in the 1960s and 1970s. The NFHS-3 data also point to very low rates of improvement in women's heights and body-mass index, and no improvement at all in the prevalence of anaemia. Like the stagnation of child immunization over the same period, these alarming trends have received astonishingly little attention outside specialized circles.*

Table 6.5
Trends in Child Nutrition

	Proportion (%) of children under the age of three years who are undernourished				
	Old NCHS Standards			*New WHO Standards*	
	1992–3	1998–9	2005–6	1998–9	2005–6
Weight-for-age					
Below 2 SD	52	47	46	43	40
Below 3 SD	20	18	n/a	18	16
Height-for-age					
Below 2 SD	n/a	46	38	51	45
Below 3 SD	n/a	23	n/a	28	22

SD = standard deviation (based on the reference population). Below 2/3 SD corresponds to moderate/severe undernourishment, respectively.

Source: International Institute for Population Sciences (2000), pp. 266–7, and International Institute for Population Sciences (2007a), p. 274, based on successive National Family Health Surveys (NFHS). The 2005–6 figures based on NCHS standards are from the 'National Fact Sheet' (International Institute for Population Sciences, 2007b). The National Centre for Health Statistics (NCHS) standards were used in NFHS surveys until the new WHO Child Growth Standards were released in 2006. For further details, see Deaton and Drèze (2009), Table 11.

CHILDCARE AS A SOCIAL RESPONSIBILITY[22]

Imagine how we would view a gardener who allows anyone to trample on the flowers he is growing, and then tries to rectify the neglect by giving the plants extra care and heavy doses of water and fertilizer. Something like this, however, is done by the state to Indian children on a regular basis, since very often public intervention does not begin until the children reach school-going age, when they are finally herded into school for

education and attention (which they get if lucky). Yet the first six years of life (and especially the first two) have a decisive and lasting influence on a child's health, well-being, aptitudes and opportunities.*

The long-standing neglect of childcare services in India arises partly from a common assumption that the care of young children is best left to the household. Parents are indeed best placed to look after their young children, and generally do take care of them. But parents often lack the resources, energy, power or time to take adequate care of their children, even when commitment and knowledge of what has to be done are not lacking. What they can do for their children depends on various forms of social support, including health services, crèche facilities and maternity entitlements. Further, many parents have limited knowledge of matters relating to childcare and nutrition. To illustrate, in a recent study in Uttar Pradesh, half of the sample children were found to be undernourished, yet 94 per cent of the mothers described their child's nutritional status as 'normal'. Folk wisdom on, say, breastfeeding can also be quite limited and even plain wrong, in spite of thousands of years of experience. For instance, the initiation of breastfeeding is often delayed based on the erroneous belief that a mother's first breast milk (colostrum) is harmful for the child, when exactly the opposite is true. In the same state of Uttar Pradesh, a majority of children are kept hungry for a full 24 hours after birth, and only 15 per cent are breastfed within an hour – the medically recommended practice.[23] What parents do for their children (for instance, whether they get them vaccinated, or how a pregnant woman is fed) also depends a great deal on social norms that lend themselves to positive influence through public action.

For all these reasons, the care of young children cannot be left to the household alone. Social involvement is required, both in the form of enabling parents to take better care of their children at home, and in the form of direct provision of health, nutrition, pre-school education and related services through public facilities.

In principle, there is much room for this under the Integrated Child Development Services – the only national programme aimed at children under six years of age. The aim of ICDS is to provide integrated health, nutrition and pre-school education services to children under six through local anganwadis (childcare centres). However, ICDS tends to be starved of resources, attention and political support. It is only in recent years that the programme has come to life, largely due to Supreme Court orders that have compelled the government to reframe it in a rights perspective: all ICDS services are now supposed to be available to all children under six as a matter of legal entitlement.[24]

The functioning of existing ICDS centres has been subjected to considerable criticism. Indeed some critics have even argued that to spend money on ICDS is to sink funds into a bottomless pit of a dysfunctional programme. There are surely many shortcomings of the ICDS programme as it now stands. And yet an impartial scrutiny of the available evidence does not support this defeatist assessment. The standards of implementation of ICDS have certainly been very low – so far – in many states, but this situation is neither universal nor immutable. The findings of the FOCUS Report, based on a survey of 200 anganwadis in six states (Chhattisgarh, Himachal Pradesh, Maharashtra, Rajasthan, Tamil Nadu and Uttar Pradesh) in 2004, shed some useful light on this matter.

These six states purposely included three (Himachal Pradesh, Maharashtra and Tamil Nadu) that have taken active interest in ICDS, and three (Chhattisgarh, Rajasthan and Uttar Pradesh) that have not – 'active states' and 'dormant states' respectively in Table 6.6, which presents a summary of the assessments of sample mothers. Aside from averages for the active and dormant states, the table also presents the corresponding figures for Tamil Nadu and Uttar Pradesh: the states with the best and worst ICDS programmes, respectively, among the six sample states.

The first point to note is that in every state an overwhelming majority (more than 90 per cent) of the anganwadis open regularly and have an active 'supplementary nutrition programme' (SNP). Bearing in mind that more than 90 per cent of villages in India today have an anganwadi, these findings point to a very important opportunity: India already has a functional, country-wide infrastructure that makes it possible, in principle, to reach out to children under six.[25]

Table 6.6
FOCUS Survey: Perceptions of ICDS Among Sample Mothers

	Tamil Nadu	'Active States'[a]	'Dormant States'[a]	Uttar Pradesh
General perceptions of the sample mothers (% of affirmative responses)				
The local anganwadi opens regularly	100	99	90	87
Their child attends regularly[b]	86	75	52	57
Supplementary nutrition is provided at the anganwadi	93	94	93	94
Their child is regularly weighed at the anganwadi	87	82	47	40
Immunization services are available at the anganwadi[c]	63	72	49	44
Pre-school activities are taking place at the anganwadi[b]	89	55	41	36
ICDS is 'important' for their child's welfare	95	88	57	59
Perceptions about the supplementary nutrition programme[d] (% of affirmative responses)				
Food distribution is regular	100	95	72	54
Children get a 'full meal'	100	87	48	32
Quantity is inadequate	2	13	54	69
Quality of food is poor	7	15	35	55

[a] Active states: Himachal Pradesh, Maharashtra, Tamil Nadu. Dormant states: Chhattisgarh, Rajasthan, Uttar Pradesh.

[b] Among mothers with at least one child in the age group of 3–6 years (the relevant age group for this question).

[c] These figures are likely to underestimate the extent of immunization activities under ICDS, because immunization sessions often take place at the local health centre, with the anganwadi worker playing a facilitation role (e.g. by bringing

the children).

[d] Among mothers who reported that supplementary nutrition was provided at the anganwadi.

Source: FOCUS Report (Citizens' Initiative for the Rights of Children Under Six, 2006), pp. 42 and 59. The figures are based on a random sample of women with at least one child under the age of six years, enrolled at the local anganwadi.

The standards of functionality, however, vary a great deal, as Table 6.6 illustrates. The picture is reasonably encouraging for the active states, and especially for Tamil Nadu, where ICDS has achieved exemplary standards (more on this presently). In the dormant states, however, many anganwadis have been reduced to feeding centres, and even the supplementary nutrition programme often works quite badly. An important message from the same report, however, is that in many cases the failures are not particularly difficult to diagnose or even cure.

Consider for instance the supplementary nutrition programme. There is much evidence that the best approach here is to combine nutritious, cooked food for children aged 3–6 years with well-designed 'take-home rations' (together with nutrition counselling) for younger children. Yet, at the time of the survey, many states were not even trying to take these simple steps to improve the nutrition component of ICDS. For instance, in Rajasthan and Uttar Pradesh, children aged 3–6 years were getting the same bland 'ready-to-eat' food (e.g. panjiri or murmura) day after day, and children under the age of three were getting nothing at all. It is no wonder that the mothers sampled in these states were often dissatisfied with the supplementary nutrition programme.

It is also worth noting that the resistance to replacing ready-to-eat food with locally cooked meals in some states is not unrelated to the powerful influence of food contractors, whose interests are directly involved. As will be discussed in Chapter 8, the last ten years have been a period of protracted battle against the invasion of commercial interests in child nutrition programmes.

The FOCUS report pointed to another very important role of cooked food for children aged 3–6 years: it is of enormous help in ensuring regular attendance. In this respect too, the provision of cooked food (as opposed to ready-to-eat mixtures) is a prime example of a simple but effective step to improve ICDS. Other interesting examples also emerged from the same study. For instance, it was found that the regularity of health workers' visits at the anganwadi was much greater when the health workers (e.g. the 'auxiliary nurse midwife', known as ANM) have a clear, fixed schedule of visits to different anganwadis than when they are allowed to 'drop by' at their convenience.

A recent analysis of National Family Health Survey data on ICDS corroborates the potential (and in some states, actual) effectiveness of the programme. The author, Monica Jain, found that daily nutrition supplements for children below the age of two years had a substantial positive effect on their height, particularly among girls. The effect was especially large (a gain of about two centimetres for girls) in states where daily feeding of young children under ICDS is a widespread practice, including the three 'active states' mentioned earlier. Jain also concluded, based on tentative cost-benefit calculations, that daily feeding of children under two was highly effective even in terms

of plain economic returns – taking into account the links between nutrition, productivity and wages.[26] This is a useful reminder of the fact that while taking care of young children is imperative from the point of view of their own rights and well-being, it is also sound economics.[27]

Given all this, it is rather unfortunate that only a small minority (about 6 per cent) of children under two in the country-wide NFHS sample seem to have benefited from daily feeding under ICDS, most of them concentrated in a few states that have used the programme extensively. This is one reflection of the programme's general bias towards older children (within the age group of 0–6 years). Some of the active states mentioned earlier have demonstrated the possibility of correcting that bias, not just in the feeding programme but also in other aspects of ICDS.[28] The need for much greater attention to younger children is especially urgent in the light of mounting scientific evidence that much of their nutritional and health future is sealed by the age of two or three years.* Aside from nutrition supplements, this would also call for other interventions, both within as well as outside ICDS, relating for instance to nutrition counselling, safe water, sanitation, immunization, maternity entitlements and crèche facilities, among other needs.

As far as ICDS is concerned, the main challenge is to break the vicious circle of low awareness, low expectations, weak demand and lethargic implementation. In a recent evaluation of ICDS by the Planning Commission, startling contrasts were found in women's awareness of children's food entitlements under the programme, ranging from 96 per cent in Kerala and 88 per cent in Tamil Nadu to less than 20 per cent in most of the poorer states, where the programme is desperately needed (e.g. 16 per cent in Bihar and 12 per cent in Uttar Pradesh).[29] Even then, interestingly, anganwadi workers report that one of their main difficulties is 'living up to the expectations of the communities who demand better quality services'. If anganwadi workers are responsive to the expectations of the community, and if awareness of entitlements is yet to rise from below 20 per cent to 80 per cent or more in the 'dormant states', perhaps there is hope for ICDS. A number of recent experiences across the country vindicate that hope – Tamil Nadu is one important example.[30]

INSIGHTS FROM PUBLIC SERVICES IN TAMIL NADU

Unlike most other Indian states, Tamil Nadu has a clear commitment to free and universal health care – not extending to every aspect of health care by any means, but covering a wide range of facilities and services. As discussed in our previous book, this commitment is evident in relatively good health services, and also translates into better health achievements than most other states.[31] Recent studies suggest not only that Tamil Nadu has made further rapid progress in this field during the last ten years or so, but also that these achievements fit into a larger pattern of comparatively active, creative and inclusive social policies.

In our earlier work, Tamil Nadu's lead in terms of health outcomes was brought out by comparing them with those of other states (e.g. the 'large north Indian states') that

had similar levels of per capita income or per capita expenditure at that time.[32] Tamil Nadu is now significantly better-off, economically, than most of those states, because of its relatively high rate of economic growth in recent years. In terms of per capita expenditure, it is now in the same league as states like Gujarat, though still significantly poorer than, say, Haryana. As Table 6.7 illustrates, however, Tamil Nadu's health-related indicators are enormously better than those of both Gujarat and Haryana (for instance, its infant mortality rate and maternal mortality ratio are about half as high as the corresponding figures for those states). In fact, Gujarat and Haryana's health indicators are not very different from the all-India averages in most cases, while Tamil Nadu is much closer to Kerala in this respect – and getting closer year after year.

The foundation of Tamil Nadu's health care system is an extensive network of primary health centres, routinely visited by patients from diverse social backgrounds. A series of recent field studies indicate that these health centres are reasonably well organized, well staffed, and well supplied with basic medicines.[33] A fairly typical account is the following by Dipa Sinha:

> The Primary Health Centres (PHCs) in Tamil Nadu were very lively and vibrant. Someone was present whenever I went there to visit. In the mornings the PHCs were bustling with activity and there was a well-rehearsed routine of people queuing up for their tokens, then going to the doctor and from there moving on to the pharmacy or the 'injection room'. While this drill is on it is impossible to catch the attention of any of the PHC staff. Everyone is busy, everyone takes their work seriously and curious visitors like me are requested to wait … I asked all the people in the queue whether they had to pay for the medicines or for consultation or any other fee and invariably the answer was in the negative.*

These impressions are corroborated not only by other independent accounts but also, in some respects at least, by secondary data. For instance, National Sample Survey data indicate that the private costs of obtaining health care in public institutions are much lower in Tamil Nadu (even zero, in the case of outpatient care in rural areas) than in other states.[34] The geographical density of health centres, ratio of doctors and nurses to population, and share of women in health staff (including doctors), are also much higher in Tamil Nadu than in most other states, among other indicators of public commitment to health care.[35]

Table 6.7: Health-related Indicators for Selected States

	Kerala	Tamil Nadu	Gujarat	Haryana	India
Per capita consumption expenditure, 2009–10 (Rs per month)					
Rural	1,835	1,160	1,110	1,510	1,054
Urban	2,413	1,948	1,909	2,321	1,984
Infant mortality rate, 2011 (per 1,000 live births)	12	22	41	44	44
Maternal mortality ratio, 2007–9 (per 100,000 live births)	81	97	148	153	212
Life expectancy at birth, 2006–10 (years)					
Female	76.9	70.9	69.0	69.5	67.7
Male	71.5	67.1	64.9	67.0	64.6
Proportion (%) of children below age 5 who are undernourished, 2005–6					
Weight-for-age	22.9	29.8	44.6	39.6	42.5
Height-for-age	24.5	30.9	51.7	45.7	48.0
Proportion (%) of births assisted by skilled health personnel, 2005–6	99	91	63	49	47
Proportion (%) of women who gave (live) birth with specific types of maternal care, 2005–6					
At least one ANC visit/antenatal care	94	99	87	88	76
Post-natal check-up	87	91	61	58	41
Proportion (%) of children aged 12–23 months, 2005–6, with					
Full immunization	75.3	80.9	45.2	65.3	43.5
No immunization	1.8	0.0	4.5	7.8	5.1
Proportion (%) of children aged 12–35 months who had at least one dose of Vitamin A in the last 6 months, 2005–6	46.5	44.8	20.6	15.9	24.8
Proportion (%) of children under three years, 2007–8, who started breastfeeding:					
Within one hour of birth	64.6	76.1	48.0	16.5	40.5
Later than 24 hours after birth	3.2	6.6	22.2	44.6	29.1

Source: Statistical Appendix, Table A.3.

Tamil Nadu has also been able to concentrate on many of the health 'basics' that have been so neglected in much of India, as discussed in Chapter 3 (and also in this chapter). For instance, there has been a sustained focus on 'public health', in the technical sense of public activities that are aimed at preventing illness rather than curing it.[36] Among other results of this focus on the basics are high child immunization rates – the highest among all major Indian states, with more than 80 per cent of children fully immunized in 2005–6.[37] Similarly, to ensure timely supply of free medicines in government-run health centres, the state has set up a pharmaceutical corporation and developed a sophisticated supply chain with computerized records. This, again, is in sharp contrast with the situation prevailing in many other states, where patients in government health centres are typically given a prescription and told to buy their own drugs in the market – often from a nearby chemist (the charge that these chemists share their profits with the prescribing doctors is unfortunately quite common). In Tamil Nadu's health centres, the provision of free medicines is compulsory and doctors are not allowed to send patients away with a paper prescription.

Further evidence on the performance of ICDS centres in Tamil Nadu is presented in Table 6.8, based on the FOCUS survey discussed earlier. Whether we look at the ICDS

infrastructure, child attendance rates, the quality of pre-school education, immunization rates, or mothers' perceptions, Tamil Nadu shines in comparison with other states, especially the northern states. Perhaps the best sign of real achievement is the fact that 96 per cent of the sample mothers in Tamil Nadu considered ICDS to be 'important' for their child's well-being, and half of them considered it to be 'very important'.[38]

A central feature of Tamil Nadu's experience with ICDS is initiative and innovation. Unlike many other states that have passively implemented the central guidelines, Tamil Nadu has 'owned' ICDS and invested major financial, human and political resources in it. For instance, anganwadis in Tamil Nadu are typically open for more than six hours a day, compared with an average of barely three hours a day in the northern states. Similarly, high child attendance rates in the age group of 0–3 years (see Table 6.8) show that many anganwadis in Tamil Nadu include crèche facilities for small children. Tamil Nadu has also developed sophisticated training programmes, involving the formation of active training teams at the Block level, joint trainings of ICDS and Health Department staff, regular refresher courses for anganwadi workers, inter-district exposure tours for ICDS functionaries, and more. Incidentally the entire ICDS programme in Tamil Nadu, from top to bottom, is run by women.[39]

Table 6.8
Anganwadis in Tamil Nadu

	Tamil Nadu	Northern States[a]
Proportion (%) of Anganwadis that have:		
Own building	88	18
Kitchen	85	30
Storage facilities	88	58
Medicine kit	81	22
Toilet	44	17
Average opening hours of the Anganwadi (according to the mothers)	6½ hours a day	3½ hours a day
Proportion (%) of children who attend 'regularly'[b]		
Age 0–3	59	20
Age 3–6	87	56
Proportion (%) of mothers who report that:		
Pre-school education activities are taking place at the Anganwadi	89	48
The motivation of the Anganwadi worker is 'high'	67	39
The Anganwadi worker ever visited them at home	58	22
Proportion (%) of women who had at least one pre-natal health check-up before their last pregnancy[c]	100	55
Proportion (%) of children who are 'fully immunized'[d]	71	41

Average number of months that have passed since an Anganwadi worker attended a training programme	6	30
Proportion (%) of Anganwadi workers who have not been paid during the last three months	0	22

[a] Chhattisgarh, Himachal Pradesh, Rajasthan, Uttar Pradesh.

[b] Among those enrolled at the local Anganwadi; responses from mothers.

[c] Among those who delivered a baby during the preceding 12 months.

[d] Based on assessment of trained investigators.

Source: FOCUS Survey, 2004; see Drèze (2006a), Table 6, and Citizens' Initiative for the Rights of Children Under Six (2006).

Interestingly, this creative activism is also found in many other social programmes in Tamil Nadu. For instance, Tamil Nadu was the first state to introduce free and universal midday meals in primary schools. This initiative, much derided at that time as a 'populist' programme, later became a model for India's national midday meal scheme. Today, school children in Tamil Nadu (more precisely, those enrolled in government schools) get not only free midday meals but also free uniforms, textbooks, stationery and health check-ups. Creativity and initiative have also been observed, more recently, in other major social programmes, such as the Public Distribution System (PDS) and the National Rural Employment Guarantee Act (both programmes are discussed in more detail in the next chapter).[40] Tamil Nadu's PDS, like its midday meal scheme and anganwadis, has become a model for the country, with regular distribution, relatively little corruption, and a major impact on rural poverty.[41] The standards of implementation of the National Rural Employment Guarantee Act in Tamil Nadu are also among the best in the country.[42]

Tamil Nadu's capacity for innovation and creative thinking in matters of public administration is an important example for the entire country. Some of the initiatives that have been taken there to improve the functioning of anganwadis, or to plug leakages in the Public Distribution System, or to ensure timely supply of drugs in health centres, are truly impressive. It is not an accident that Tamil Nadu has been ranked first among India's major states in terms of the overall quality of public services.[43]

Another noteworthy feature of Tamil Nadu's experience, already mentioned in Chapter 3, is the commitment to comprehensive and universalistic social policies. The most striking example is Tamil Nadu's PDS: every household is entitled to a minimum quota (currently 20 kgs) of subsidized rice every month, aside from other essential commodities. When an attempt was made to 'target' the PDS in 1997, in pursuance of national policy, targeting had to be rolled back within a week 'following a spate of protests'.[44] The principle of universalism in Tamil Nadu also applies to public health, midday meals (and other school incentives), childcare, employment guarantee, public transport, and also basic infrastructure such as water and electricity. As a result, the incidence of deprivation of some of the basic necessities of life is remarkably low in Tamil Nadu, as Table 6.9 elucidates.

The question arises as to how and when Tamil Nadu developed this commitment to universal and well-functioning public services. Various interpretations have been

proposed, focusing for instance on early social reforms (including the 'self-respect movement' founded by Periyar in the 1920s), the political empowerment of disadvantaged castes, the hold of populist politics, and the constructive agency of women in Tamil society. These and other aspects of the social history of Tamil Nadu, and their relevance to the state's contemporary achievements, remain a lively subject of research. What is interesting is that these different interpretations point, in one way or another, to the power of democratic action.

This includes the power of public reasoning and social action in elevating the visibility of health issues and opening new horizons. Visionary figures such as Dr K. S. Sanjivi, a pioneering proponent of social health insurance in Tamil Nadu, argued for public support for health care a long time before this became a more discussed issue in the country.* Tamil Nadu has had a major role, in general, in initiating public discussion of social issues. Health-related programmes, such as the provision of midday meals in schools, became subjects of lively public discussion quite early and were often implemented first in Tamil Nadu. These issues have continued to play an important role in election campaigns in the state, much in contrast with the rest of the country, particularly north India, where health (or other basic needs such as elementary education or child nutrition) does not seem to figure much on the political agenda.

Table 6.9
Access to Public Services in Tamil Nadu, 2005–6

	Tamil Nadu	India
Proportion (%) of households:		
With access to electricity	89	68
With improved water source	94	88
With a ration card[a]	94	83
Who find the PDS 'reliable' (2001)	73	23
Proportion (%) of adult women who:		
Get ante-natal care	99	76
Get tetanus vaccine during pregnancy	96	76
Give birth with help from skilled health personnel	91	47
Get a post-natal check-up	91	41
Proportion (%) of young children who:		
Are fully immunized	81	44
Are not immunized at all	0	5
Live in area covered by Anganwadi	97	81
Proportion (%) of government schools with:[b]		
Drinking water	100	92
Electricity	92	31
Midday meal	98	88

Health check-up	94	55
Proportion (%) of Primary Health Centres with:[c]		
Essential drugs	98	70
Medical officer	85	76
Pharmacist	94	69
Regular power supply	87	36
Functional operating theatre	90	61
Cold chain equipment	95	67

[a] 2004–5.

[b] 2009–10.

[c] 2007–8.

Sources: International Institute for Population Sciences (2007a), Table 8.22 (p. 220) for post-natal care, and Table 9.19 (p. 254) for anganwadi coverage; Desai et al. (2010), Table A.13.1.b (p. 206), for ration cards; Paul et al. (2006), p. 87, for reliability of PDS; for other indicators, see Statistical Appendix, Table A.3. Unless stated otherwise, the reference year is 2005–6.

The role of democratic action (at all levels, from small Dalit hamlets to state-wide social and political movements) in Tamil Nadu's health achievements emerges particularly clearly in Vivek Srinivasan's (2010) recent study of public services in Tamil Nadu. As the author notes, 'a culture of protest for public services in Tamil Nadu … developed over the last 30 years or so'.* Further, this development was closely linked with struggles for liberation from the oppressions of caste, class and gender. In the process, the provision of public services became highly politicized, much as had happened earlier in Kerala. This possibility of bringing democratic action to bear on the concerns of common people, and of linking collective demands for better public services with larger struggles for social equality, is perhaps the most important insight from Tamil Nadu's experience.

OVERCOMING THE HEALTH CRISIS

So what is the way out of the health crisis which is perhaps the biggest adversity facing India today? The problems are large, but rather than being overwhelmed by their enormity, we should identify the ways and means of overcoming this adversity, drawing both on the analyses, just presented, of the factors that have contributed to this crisis, and also – closely related to that investigation – on the lessons that have emerged from the experiences of other developing countries which have dealt with these problems much better than India has. There is also much to learn from the better performance of those Indian states (Kerala and Tamil Nadu in particular) which have taken care of the health of the people a lot better than the rest of India. As far as the rest of the world is concerned, the countries that offer immediate lessons for India include – most importantly – China, but also Brazil, Mexico and Thailand, among others.

Perhaps the first – and the most crucial – thing to appreciate is the importance of the commitment to universal coverage for all in a comprehensive vision of health care for the country as a whole. Thailand, Brazil and Mexico have got there in recent years, and

transformed the reach of health care for their people. China's experience is particularly interesting, since it attempted, first, to deny the necessity of this commitment when the economic reforms first occurred, in 1979, and by reversing the earlier universalism, China paid a heavy price for this denial in terms of the progress of longevity and general health (this was discussed in Chapter 1). China eventually realized the error in this denial and, from 2004, started moving rapidly back to universal commitment (China is already 95 per cent there), reaping as it is sowing. And contrary to what we often hear from alleged admirers of China who want India to follow China without being quite sure of what it is that the Chinese do, China does not leave the coverage of health in the hands of private health insurance – the state is the major player to ensure this.[45] These experiences are, as we have already discussed, entirely in line with what we would expect on grounds of economic reasoning, particularly because of (1) the 'public goods' character of the health of people, (2) the role of asymmetric information, and (3) the impact of inequality on the achievement of general health in a community and a nation.

The commitment to universal health coverage would require a major transformation in Indian health care in at least two respects. The first is to stop believing, against all empirical evidence, that India's transition from poor health to good health could be easily achieved through private health care and insurance. This recognition does not, of course, imply that there is no role at all for the private sector in health care. Most health care systems in the world do leave room for private provision in one way or another, and there is no compelling reason for India to dispense with it. Nor can health planning in India ignore the accountability issues and other challenges (discussed in Chapter 4) that affect the operation of the public sector – including the public provision of health care. Nevertheless, the overarching objective of ensuring access to health services and other requirements of good health 'to all members of the community irrespective of their ability to pay' (as the Bhore Committee aptly stated the core principle of universal health coverage many years ago) is intrinsically a public responsibility.[46] Further, given the limitations of market arrangements and of private insurance in the field of health care, public provision of health services has an important foundational role to play in the realization of universal health coverage.

Following on this, the second respect in which the proposed approach demands a change in India lies in the need to go 'back to basics' as far as public provision of health care services – both of a preventive and curative kind – is concerned, with a renewed focus on primary health centres, village level health workers, preventive health measures, and other means of ensuring timely health care on a regular basis. While RSBY (the newly established scheme of subsidized health insurance for poor households, discussed earlier) is a humane programme and much better than leaving the poor to die or suffer from neglected health care and unaffordable intervention, better results can be achieved at far less cost through early and regular health care for all (supplemented by providing expensive intervention if and when it is needed despite early and more systematic medical care for all).[47]

The need for public involvement is particularly strong in a range of activities aimed

at preventing rather than curing disease, such as immunization, sanitation, public hygiene, waste disposal, disease surveillance, vector control, health education, food safety regulation, and so on (what is technically known, as mentioned earlier, as 'public health'). In general, the prevention of illness as opposed to curing disease tends to be identified as particularly the responsibility of society and the state.* Expanded collective action in these areas is extremely urgent, especially given India's shockingly defective record in fields like immunization and sanitation, which we have also discussed.[48]

There have been limited but valuable attempts to revamp the public provision of health services in India (including some aspects of public health) in recent years, notably under the National Rural Health Mission (NRHM). And some of them, it seems, have already had positive results. For instance, the involvement of village-level 'accredited social health activists' (ASHAs) in vaccination programmes seems to have led to a significant increase in child immunization rates, ending a long period of virtual stagnation in this regard.[49] Similarly, the drive to promote institutional deliveries under the Janani Suraksha Yojana (maternal safety scheme) has led to a steep increase in the proportion of births attended by skilled health personnel.[50] There is even some tentative evidence of a more broad-based revival of public health facilities, and it may not be an accident that India's infant mortality rate declined by about 3 percentage points per year in the five years that followed the launch of the NRHM, compared with barely 1 percentage point per year during the preceding five years.[51]

The main message is not that the National Rural Health Mission is the solution to the crisis of India's health system. Indeed, the Mission is much too small for this (also, it was planned as a short-term programme, and was meant to end in 2012, though it has now been extended). Rather, the lesson here, as in the field of education and early childcare, is that well-planned efforts to improve public facilities – even some that have functioned rather poorly for a long time – can indeed lead to significant results. There is also an important confirmation in these achievements of the general possibility (also evident from a great deal of international experience) of promoting 'good health at low cost' – a very important lesson for poor countries in general and for India in particular.[52]

The challenge ahead is to consolidate these initiatives and build on comparative lessons from the world as well as from within India. There is a need not only for better health delivery, through institutional change, but also for devoting much more resources, as a proportion of the GDP, to public expenditure on health (as all the countries mentioned earlier in this section do).[53] This has to go hand in hand with the cultivation of greater efficiency and accountability in public services in general – a subject on which there are many lessons already in the experiences of some states in India (including Tamil Nadu, Kerala and Himachal Pradesh).

Last but not least, issues of health and health care must be brought much closer to the centre of attention in democratic politics. As we saw, while health has had little place in public reasoning in India as a whole, democratic engagement with health issues has played a very important role in the transformation of health policies in countries like Thailand, Brazil and Mexico, and within India, in Tamil Nadu and Kerala.* Even the gigantic lessons emerging from the commitment of the state in health care in the more

authoritarian polity of China can be replicated within India's multiparty democratic system only through making these lessons part of the democratic dialogue in India. Democracy gives India the freedom to learn from any country in the world, and there are excellent reasons for us to make much greater use of informed reasoning in the practice of democracy, rather than our being stuck in the hole in which we have placed ourselves, in the absence of systematic reasoning about the most important necessity of the people.

* See Drèze and Sen (2002), pp. 300–303. Out of interest, we repeated the exercise three years later, for the period January-June 2003. This time, we did find an article dealing with health issues – it was about the 'SARS crisis' in China as a 'potential threat to Asian economy'.

* There are sporadic references to the problem in specialized publications, such as some professional medical journals (see e.g. Vashishtha 2009), but it seems to have been largely ignored in the general media. Measles alone is estimated to be responsible for more than 100,000 child deaths in India every year (John and Choudhury 2009). While many poor countries have achieved dramatic reductions in measles mortality in the 2000s, India's progress has been so slow that its share of global measles mortality is estimated to have increased from 16 per cent in 2000 to 47 per cent in 2010 (Simons et al. 2012). In this period, apparently, '[a]ll countries have implemented a measles mortality reduction strategy, except India' (Duclos et al. 2009).

* This is not – at least not yet – an explicit policy, but as Gita Sen (2012) observes, 'there are many powerful forces that would like the health system to move (or continue to move) in the direction of an unregulated and lucrative private market, including for service provision, health insurance and medical education' (p. 52). There were further apprehensions of this sort among many observers during the process of preparation of the Twelfth Five Year Plan; see e.g. Gaitonde and Shukla (2012), Varshney (2012) and Varshney et al. (2012).

* On the inescapable relevance of disability in understanding the demands of the justice of health care, see the section on 'Disabilities, Resources and Capabilities' in *The Idea of Justice* (Sen 2009, pp. 258–60).

† In the health care systems of other OECD countries, insurance also plays a major role in many cases (one notable exception is the United Kingdom, where the National Health Service directly provides universal health care free 'at the point of delivery'), but insurance is normally arranged by the state, or by regulated non-profit institutions (as in Germany and Japan). Very few of them rely significantly on profit-driven health insurance, and to the extent that they do, it is subject to very tight regulation. For a useful review of health care systems in 13 OECD countries, see The Commonwealth Fund (2010).

* Mexico has moved rapidly towards universal health coverage through its System of Social Protection in Health (SSPH), introduced in 2003, with a crucial role for a national health insurance programme ('Seguro Popular'), run by the state, to provide 'effective health care as a universal right based on citizenship'. By 2012, Mexico seems to have achieved – or nearly achieved – universal health coverage. See 'A Crucial Juncture for Health in Mexico', *The Lancet*, 14 July 2012; and Richard Horton (2012). For an excellent discussion of the way SSPH and Seguro Popular work, see Felicia Marie Knaul et al. (2012).

* The Indian component of this study focused on a large sample of children from well-off families in South Delhi, with at least one well-educated member (17 years of education) and other favourable conditions including intensive maternal and childcare. These privileged children, brought up in a favourable environment, were found to grow along the same 'curve' (in terms of height and weight at different ages) as children in the other countries included in the WHO study – Brazil, Ghana, Norway, Oman and the United States. See WHO Multicentre Growth Reference Study Group (2006).

* One of the casualties of this lack of concern with nutrition trends is the nutrition monitoring system itself. NFHS-3 data are already eight years old, and very little information is available (at the time of writing) on subsequent developments in the nutrition situation. The findings of NFHS-4 (yet to be conducted) are not expected to be available until 2015 at the earliest. This ten-year gap in nutrition statistics does not help to take timely and effective steps to address India's nutrition problems.

* There is a pervasive need here for taking into account what Sudhir Anand and his colleagues have called, inspired by an approach pioneered by Albina du Boisrouvray, the 'cost of inaction' (see Anand et al. 2012). The costs – or losses – generated by inaction can be large, and often very much larger than the cost of undertaking actions that would have prevented the loss from neglect.

* The importance of prioritizing intervention at a very young age is one of the central messages of recent work by James Heckman and his colleagues on the early determinants of human capabilities, as well as of the growing literature on the economics of child development; see e.g. Heckman (2008), Conti and Heckman (2012), and earlier work cited there.

* The author attempted similar enquiries at PHCs in Uttar Pradesh. But the Centres were closed most of the time and 'in the sample villages the respondents did not know where the nearest PHC was' (Dipa Sinha, 2013).

* Dr. Sanjivi's initiative in building a remarkable institution in the form of Voluntary Health Services, established in 1958, demonstrated how much could be achieved through social cooperation in health care (including income-based health insurance with a built-in progressivity), rather than leaving matters in the hands of doctors serving only those clients who could afford to pay the – often unaffordable – fees. See 'The Great "Little" Man', *The Hindu*, 23 December 2003.

* Srinivasan (2010), p. 156. A case study of a Dalit hamlet, in the same study, vividly illustrates the emergence and influence of this culture of protest: 'A series of petitions, demonstrations, protests and bargaining marked how each hand pump, street light, road and other services were secured' (p. 177).

* The critical need for collective action in these fields arises partly from the fact that private incentives to promote public health tend to be very weak. Public health played an important role in the historical expansion of longevity in Europe, Japan, and the United States, as well as in more recent experiences of rapid increase in life expectancy in East Asia (including China), or, closer to home, in Sri Lanka. In India, however, public health is one of the most neglected aspects of health policy. In fact, during the last fifty years or so, public health services have been, as has been rightly observed, 'gradually eclipsed by the medical services, which attract far more political and public attention' (Das Gupta et al. 2010, p. 48). On the general neglect of public health in India, see also Das Gupta (2005).

* Among other inspiring experiences in this regard, there is a great deal to learn from the 'Health Assembly' in Thailand (established under the National Health Act of 2007), which holds regular meetings where complaints as well as wide-ranging reviews are aired by citizens on the working of public policy in health care. Thailand has made huge and rapid progress in universal coverage of health care for all through radical health initiatives, helped by interactive reviews of the problems encountered by citizens at the receiving end as well as by public servants on the delivery aspects of health care.