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Reforming elementary education in India: A menu of options

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Abstract

This paper reports on findings from a large sample survey in the states of India that account for two thirds of the children out of school. It then examines the feasibility of the central government's goals to ensure all children complete 5 years of school by 2007, and 8 years by 2010. These goals—more ambitious than the global EFA goals—are unlikely to be achieved without significant reforms by the central and state governments. It examines key reform options: in the public spending pattern; improving teacher accountability and work environment; incentives to improve demand for schooling; and the private sector. It argues that central to universalising elementary education will be improving the level, equity and efficiency of public spending. However, even with these reforms, improving teacher accountability will still remain key to the achievement of the goals.

Keywords: International education; Educational policy; India; Primary/junior secondary education

1. Introduction

India has over a third of the world's children (6–11 year olds) out of school—around 40 million (UNESCO, 2003). Six states of India account for three-fourths of its children out of school (Andhra Pradesh, Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh and West Bengal). This paper briefly summarises the results of a survey, based on a representative sample, in these states—focusing on elementary education (classes 1–8). It then goes on to present a menu of reforms that are necessary if elementary education is to be universalized by 2010, as is the goal of the central government.

Achieving this goal will be an enormously challenging task—given the fiscal crisis of the state, at both central/federal as well as provincial/state level. The challenge is heightened by the fact that the state governments, which account for 90 per cent total government spending on elementary education, have a fiscal deficit of at least 5 per cent of GDP. The central government's fiscal deficit, of an additional 5 per cent of GDP, compounds the challenge. Meanwhile, the condition of government schools in these six states—as revealed by the survey—is such that the ambitious goal of universal elementary education (UEE) will not be met (a) without a series of reforms; and (b) and most, though not all, of these reforms will require additional public resources, and also improvements in the equity and efficiency of public spending. The key reform without major fiscal implications is the one to improve teacher accountability.

The reform proposals we make in this paper stem from an extensive survey carried out in eight states—Bihar, Madhya Pradesh, Rajasthan, Uttar

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Pradesh, West Bengal, Andhra Pradesh and Assam (all States in the north and east of the country); Tamil Nadu, being a high-achiever state, in the south was also included in the survey. The structure of the remainder of the paper is as follows. Section 1 describes the methodology of the survey. Section 2 reports on the survey findings, and summarises the problems facing the elementary education system in the surveyed states. Section 3 discusses the reforms necessary to address these challenges. Section 4 concludes. The focus here is on what seem to be the most central problems; needless to say there are a number of subsidiary problems as well that this paper cannot address for reasons of space.

The survey reported in the study was carried out by a domestic educational consultancy organization during the second-half of 1999, based on a research design prepared for Unicef by the author and lead consultants. The units for the study were the villages in the rural areas and the urban enumeration area (or UEB, a term used by the Registrar General of India) in the cities and towns. The survey was carried out during the second-half of 1999 (over the academic year 1999–2000) and covered more than 120,000 households and a thousand schools spread over 91 districts in the eight states.[1] The rural sample was based on 34 districts, four per state for all states except Uttar Pradesh which had a sample of six districts. The urban sample of 80 towns and cities was spread over 64 districts. While most towns and cities fell in a different set of districts, a few districts coincided with those covered under the rural sample. The sample size is fairly large and comparable with major national level surveys.[2]

The survey consisted of the following components:

1. Census or enumeration questionnaire canvassed among all households in sample units regarding demographic and education characteristics, focusing on children between the ages 5–14 years.
2. Household questionnaire: Once the households had been enumerated, all households with children were classified into the following four strata: (1) households with currently enrolled children in formal schools; (2) households with dropouts; (3) households with never-enrolled children; (4) households with children in alternate schools. From each stratum, three households each were sampled, and the views/information of these households on schools, education, costs of education, incentives, and so on, were collected through the household questionnaires.
3. Schools: In the rural areas, all schools within the village were sampled. In the urban area, at least two schools within, or in proximity to, the UEB were selected and detailed school level information was canvassed through school records, the head teacher, and personal observation/inspection.
4. Teachers: In each school, at least two teachers, including the head teacher in all cases, were questioned. The teacher schedule collected information on the teachers and to gather views on the school, training process, dropouts etc.
5. Focus group discussions with villagers were duly recorded in field diaries and supplemented with field notes and observations of the investigators.

The survey yielded information regarding: (1) the state of government schools (access, retention, quality); (2) the state of private schools—enabling us to compare physical facilities and teaching resources in government schools with private ones; (3) extent of household costs of sending children to school. In addition, beyond the survey, each state study was intended to examine the public spending pattern in the state, linking the state of government schools with the level, equity and efficiency of spending.[3]

2. Findings

The survey found that there has been good progress in enrolment since the completion of the National Sample Survey Organisation education survey in 1995–1996. In this respect it

[1] There were 25 states in India in 1999, which were further divided into over 500 administrative districts. Each district has on average a population of about 2 million people. Uttar Pradesh has the largest number of districts—68. In fact, the eight states in the study are among the largest and most populous of the country. For Uttar Pradesh, Madhya Pradesh and Bihar the analysis refers to these states before they were divided.

[2] In fact, the sample is much larger. For example, the National Family Health Survey (NFHS) had a sample of 3000 interviews of eligible women for states having a population of 25 million or less in 1991 and 4000 interviews for states having a population of more than 25 million.

[3] The raw data was analysed for each state by a lead consultant, which resulted in one long paper by state, collected in Mehrotra (2006). In addition, for a cross-state analysis of the raw data, see Mehrotra et al. (2005).

confirms the findings of the National Family Health Survey II (1998) and Census 2001. This is partly a response to the introduction of a number of incentives to increase parental demand for education and partly the increase in public expenditures on elementary education by the center—largely funded out of external resources—but also a number of state-specific initiatives (as we discuss below).

2.1. Enrolment and quality

Progress is remarkable in the economically backward States of Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh which historically were characterized by low enrolment levels. This increase in enrolment has also narrowed the rural–urban divide that had been characteristic of Indian elementary education until the early 1990s. However, in rural areas, between one fifth and one third of all girls in five States (Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh) have never been enrolled in State schools. States like Bihar and Uttar Pradesh have a high incidence of *never-enrolled* children even in urban areas.

Unlike the progress in enrolment during the last two decades, the trends in retention and quality are not very encouraging. Drop out in both rural and urban areas is higher at the upper-primary (classes 6–8) than primary level (classes 1–5). That is, older children are not remaining in school. Analysis by States shows that the problem of dropouts is particularly high in the rural areas of four States: AP, Assam, Rajasthan, and even the educationally advanced State of Tamil Nadu.

Children who dropped out or never enrolled are the ones out of school. There is still a high incidence of *out-of-school children* for the 6–13 age group. Nearly a fifth of children from the younger age group (6–10 years old) in all States are out of school in rural areas, while this is the case for nearly a tenth in urban areas.

While comparing progress between the NSSO survey of 1995/1996 and the Unicef survey of 1999 what hits home repeatedly is that girls, and Scheduled Caste (i.e. the erstwhile untouchables) and Tribe children are the ones being left behind—especially in rural areas. Regardless of the progress in enrolment for all categories of children, there is often a triple burden borne by certain groups of children: if you are a girl, plus if you are a dalit (i.e. Scheduled Caste), plus if you live in rural areas, the likelihood of your being never-enrolled and of dropping out early is greater. And this more likely if you live in Bihar, Uttar Pradesh, Rajasthan or Madhya Pradesh.

The expansion of *schooling facilities within a reachable distance* and teacher supply are insufficient and incapable of meeting the growing demand for education. While 90 per cent of the population in rural areas might have gained access to schooling, nearly 10–15 per cent of the Scheduled Tribe (STs) and Scheduled Caste (SCs) groups in rural areas are still deprived of schools (given that in many states they continue to live in segregated hamlets). Moreover, the proportion of population from backward caste groups not served within the habitation exceeds 50 per cent in States such as Madhya Pradesh and Uttar Pradesh. The lack of upper-primary schools is even more dramatic, with one fourth to one half of the STs without a school within the habitation. Among the eight States the number of villages without schools ranges from 2000 in Tamil Nadu to more than 39,000 in Uttar Pradesh.

Similarly, slow growth in teacher supply has resulted in overcrowded classrooms. Overcrowding in schools is inevitable if primary pupil–teacher ratios are as high as 63 in Bihar and 52 in West Bengal. With the exception of Assam and Tamil Nadu, the ratio remains above the national norm of 1:40. The pupil–teacher ratio in rural schools remains far worse than those in urban areas (e.g. 67 in rural Uttar Pradesh compared to 30–35 in urban Uttar Pradesh). Regular posts for teachers remain unfilled, since the state is not in a fiscal position to hire additional teachers. When you combine this phenomena with the scale of teacher absenteeism (see below), the magnitude of the problems facing parents who wish their children to learn becomes clear.

The limited expansion is also evident in the large number of single-teacher schools. At the primary level, the highest proportion of single teacher schools existed in Madhya Pradesh (22 per cent of all schools), followed by Bihar (16 per cent), and Uttar Pradesh (12 per cent). Of all the states examined here, West Bengal had the highest proportion of three/more than three-teacher schools (79 per cent of all schools). The highest proportion of one or two-teacher schools were in Bihar (66 per cent), Uttar Pradesh (65 per cent), and Madhya Pradesh (60 per cent).

It may be easier to understand this situation in historical perspective—given what the country had inherited from the British Raj. Between 1950 and the mid-1980s there was a steady expansion of the school infrastructure. It was only by 1986, the year of the 5th All-India Educational Survey (of the National Council for Educational Research and Training, NCERT) that a school could be provided in most of the 587 000 villages of the country. But in 40 per cent of the cases, a school represented a teacher teaching classes 1–5 in one classroom. It is only with the adoption of the National Policy on Education in 1986 that the number of teachers began to grow in strength under the banner of Operation Blackboard (OB) (Seetharamu, 2002). The strategy was to provide an additional teacher, preferably a woman, to every single-teacher school, but the evidence suggests that rather limited headway has been made in eliminating single-teacher schools. This is the outcome, as we argue below, of a pattern of public expenditure in education that could not rise to the historical challenge.

In addition, historically, teacher absenteeism from school has been seen to be a major problem in India. In fact, Kremer et al. (2004), in a recent survey for the World Bank of 20 states in India using a representative sample, came to the conclusion that the teacher absence rate in India on average is 25 per cent—the highest rate in a sample of eight countries studied (except Uganda, where it was 27 per cent).[4] It is interesting that the states that have better elementary education indicators have a lower incidence of teacher absences—with Kerala, Tamil Nadu and Himachal Pradesh having the lowest absence rate, and Uttar Pradesh, Bihar, Chhatisgarh, Jharkhand, and Assam with higher than national average rates. Even for teachers who were present on the days of spot-check (during the survey), 41 per cent in the best performing state (Maharashtra) and 81 per cent of teachers in the worst one (Jharkhand) were engaged in non-teaching activity. States with higher absence rates also tended to have lower probabilities of teaching activity conditional on attendance. In other words, this most recent survey paints an equally dismal picture as our own survey results.

[4]The other rates were: Peru 11 per cent, Ecuador 15 per cent, Papua New Guinea 15 per cent, Bangladesh 16 per cent, Zambia 127 per cent and Indonesia 19 per cent.

2.2. The private sector in elementary education

There are essentially four types of schools in India:

- Government schools, including those run by local bodies.
- Private schools, aided by the government.
- Private unaided schools and
- Unrecognised private schools (the first three being recognised by the government).

The survey reveals that at elementary level, most of the schools in *rural areas* are government ones, over 90 per cent of them. Only in Uttar Pradesh and Tamil Nadu does that share drop to 73 and 74 per cent. However, in urban areas, the share of total enrolment at elementary level in government schools is much lower: Uttar Pradesh 49 per cent, Tamil Nadu 51 per cent, Bihar 53 per cent, Rajasthan 57 per cent, Madhya Pradesh 68 per cent, Assam 75 per cent, and West Bengal 95 per cent.

The share of private unaided schools in enrolment in urban areas, in descending order, is: Uttar Pradesh 33.5 per cent, Rajasthan 32.4 per cent, Bihar 28 per cent, Madhya Pradesh 19.33 per cent, Assam 17.6, AP 17 per cent, and West Bengal 3 per cent.

The pure private sector (i.e. the third and fourth category of schools) has expanded particularly in those States of India that have the most dysfunctional government school system—as the survey shows. Our analysis elsewhere of national level data (NSSO 52nd Round, 1995–1996) showed that the latter States also tend to be the States with the lowest per capita income in the country, showing the willingness of even poor parents to pay for schooling (even though the ability may be lacking); in other words, demand for schooling remains high (Panchamukhi and Mehrotra, 2005). However, private schooling has also expanded in States with some of the highest per capita income (Punjab and Haryana)—it is difficult to assess whether this is any more than a reflection of ability to pay of the relatively well-off in these States. Private schooling is also gender-biased (against girls, who are a larger share of the children out of school), and does not help to redress the bias against the lower castes. The lower castes, which have much lower enrolment rates than the upper castes generally, are less likely to be enrolled in fee-paying schools than the upper

castes (Tilak and Sudarshan, 2000). Nevertheless, demand for such schools appears to be high, one reason being they offer English as a subject (which is introduced in government schools after the primary level, i.e. grade 6) (PROBE, 1999).

The survey enabled us to compare facilities, both in terms of physical infrastructure and human resources, between government and private schools. In the States where the private-unaided schools account for a significant share of enrolled children—Uttar Pradesh, Bihar and Rajasthan—the proportion of urban unaided schools which are pucca (in brick buildings) is higher than the proportion of government schools that are pucca. The problem of one-classroom schools is also largely confined to the government schools. Private-aided schools do not have this problem. Similarly, most of the private-unaided schools do not seem to have a space constraint in terms of classrooms.

Most schools in the selected States have drinking water facility. Where they do not, the problem appears most serious in government schools, as they have the largest share of schools with no drinking water facility. The problem of no drinking water facility is non-existent in private-unaided schools in both rural and urban areas. In all selected States (except one) private-unaided schools tend to have a higher proportion of schools with toilets for staff than government or private-aided ones. Many more private-unaided schools (and private-aided ones) in urban areas have separate toilets for girls than do government schools.

The survey shows that the problem of single-teacher schools is confined to government schools—especially in the rural areas. Government school teachers are part of the civil service, wherein staff is transferable within the State from school to school; but teachers are able to avoid postings to remote rural areas, where the problem of single teacher schools is likely to be most concentrated. Government schools of most selected States have higher student–teacher ratios (well over 40 in most States) than private schools, particularly in rural areas.

Although government teachers are better paid and better trained, teacher absenteeism is high among them. While over 90 per cent of government schoolteachers are trained, the overwhelming majority of private un-aided schoolteachers in both rural and urban areas in all States are untrained, according to the survey. Untrained teachers also account for a higher share of teachers in private aided schools than of regular government schools. Also, private schools (especially unaided ones), more than government schools, generally hire teachers on a temporary basis. Most government schoolteachers are permanent employees of the State governments. The average salary of teachers in private schools is much less than in government schools.

The reported school working days are much lower in government schools and in many actually less than the 180 days that pedagogues regard as absolute minimum. Generally the number of working days in private-unaided schools is much higher than in government schools—which is one indication that despite having poorly paid, temporary, and untrained teachers, they actually function. The attendance rates in all States in government schools is usually lower than for private unaided schools—as per head count on the day of the survey—in both rural and urban areas.

When one combines these facts with the widespread known phenomena of teacher absenteeism in government schools, it speaks volumes for the inefficiency of the government school system. The well paid, permanently employed, trained government teachers, often do not turn up to teach; though, in some situations, one cannot blame them given that they are teaching a huge class, consisting of multiple grades, possibly in a single classroom school!

However, there is no firm evidence in India of better learning achievement of children of children in private schools. Second, we also know that the taking over of private schools by the State has had adverse equity effects (as discussed below). Third, we know that the unrecognised and recognised private-unaided schools are almost totally unregulated, despite their considerable importance in terms of enrolment in several States. In fact, the fact that the private schools have better infrastructural facilities (and also advertise themselves as offering English-medium' education)[5] does not mean that the quality of the teaching–learning experience is much better than in government schools; if anything, we noted that the teachers are poorly trained compared to government teachers. If UEE is to be achieved, the efficiency and equity of the entire educational system has to improve—not just of the public sector.

[5]This was noted both by the PROBE (1999) team, as well as by respondents in focus group discussions in our survey.

As we noted earlier, the private unaided sub-sector is very large in the States with the most children out of school (Uttar Pradesh, Bihar, Rajasthan, AP)—a clear indication that where the public system is dysfunctional private providers fill the gap. Having set up shop, private unaided schools lobby with State governments to secure government aid. The private-aided schools' share in enrolment tends to rise with the level of education: except in some States, it is relatively low at the primary level, rises sharply at the upper-primary level, and is the highest at the secondary level (Panchamukhi and Mehrotra, 2005).

The survey data show that even at elementary level, the share of private *aided* schools in total enrolment was low in rural areas, but quite significant in urban areas. Thus, in ascending order, the share of private aided schools at elementary level in urban areas was: 2 per cent in West Bengal, 8 per cent in Assam, 10.4 per cent in Rajasthan, 12.2 per cent in Madhya Pradesh, 17 per cent in Uttar Pradesh, 19 per cent in Bihar, 22 per cent in AP, and 43 per cent in Tamil Nadu.

The pure private sector (unrecognised and unaided schools) is in urgent need of greater regulation, in order to improve quality in such schools. The most important need for regulation arises from the urgency to contain the practice of converting private schools into government-aided ones, a decision which has serious efficiency and equity effects. Two consequences follow for the public system from this phenomenon of conversion of unaided to aided schools. First, contrary to the principle that a fiscally squeezed State should target its subsidies to the poor, the State now subsidises those who were able to pay. Once an unaided private school turns into an aided one, it becomes effectively part of the government bureaucracy. Teachers also stop being accountable to either parents or the private management, with worse outcomes for the children. Second, teachers begin to be paid salaries directly by the State government and their salaries rise dramatically, while their accountability declines (Kingdon and Muzammil, 2003). The impact on government spending on public elementary education is adverse. Thus, a significant proportion of government expenditure at the each level, but especially the secondary level, is now diverted to this kind of subsidisation of the non-poor.

To summarize the findings of the survey, the supply side problems remain serious. The most backward states continue to face: (1) shortages of regular teachers as well as infrastructure, so that access remains far from universal in the rural areas of these backward states. Teachers are not being hired any more on regular salaries on account of the fiscal crisis of the state governments. Thus pupil–teacher ratios remain extremely high, seriously compromising quality, especially in the rural areas. At the same time, the fiscal crisis of the central government has prevented a dramatic improvement in the state of physical infrastructure, despite the donor-funded programmes (including the District Primary Education Programme, DPEP) which began in the early 1990s. (2) Furthermore, teacher accountability remains a serious problem, and is perhaps the most important factor undermining the learning–teaching process, and in addition to the unsustainable pupil–teacher ratios, probably account for poor learning outcomes and high dropout rates. (3) Under the circumstances, it is hardly surprising that in the states with the worst educational indicators and weakest government school system, the private sector has grown, especially, though not only, in urban areas. However, this is not necessarily a vote of confidence in the private schools; only an act of desperation of parents for whom demand for elementary education remains high. The evidence that demand is high will be demonstrated later in the paper, where we present the survey data on household costs of sending a child to school—especially relative to total consumption expenditure of the household.

We therefore turn now to the reform options, starting with the public expenditure pattern, and its problems.

3. Addressing the challenges: a menu of reform options

3.1. Reforming the public spending pattern

For a country that still has 40 million children out of school, one of the most pressing problems facing the education system in India has been the chronic under-funding of the elementary sub-system. The total share of central and State spending on education in GDP had risen to 3.4 per cent by 1989/1990–1990/1991, but since then the share of education spending has remained below that level and was 3.1 per cent in 1997/1998 (while developed countries rarely allocate less than 4.5 per cent of GDP to education). How does this macro-economic

priority to education compare with other countries? The global Human Development Report (UNDP, 2004) classifies countries into high (HDI above 0.8), medium (HDI between 0.5 and 0.799) and Low (HDI below 0.5) Human Development levels. India's HDI in 2002 was 0.595 (medium HDI). Countries with a high HDI spend 5.3 per cent of GDP on education. Compared to other medium HDI countries like Thailand (which has a higher GDP per capita than India), India's education expenditure is much lower relative to its GDP: Thailand spent 5.5 per cent of GDP in 2000, compared to India's 4.1 per cent in 1999/2000 (UNESCO, 2004).

Further, the intra-sectoral allocation of public education spending has been inequitable ever since planned development began over half a century ago. As much as 25–30 per cent of combined central and State education expenditure over 40 years was allocated to higher education (till 1990). The adverse consequences of the heavy emphasis on higher education for 40 years are still being felt: India has the dubious distinction of having one third of the world's illiterates and more than a third of the world's children out of school.

What is notable is that in the First Five-Year Plan (1951/1952–1955/1956) the share of elementary education (i.e. classes 1–8, or primary plus what in other countries has been called junior secondary) was as high as 48 per cent. In fact, as Tilak (2000) notes, had that share of funding been maintained throughout the first two decades, it is likely that poor access to elementary education and the scale of India's illiteracy today might have been avoided. However, India's centrally planned development strategy, which in the First Five-Year Plan relied upon 'agriculture first', shifted from the Second Plan (1956/1957–1961/1962) onwards to 'heavy industry first', based on the Mahalanobis–Feldman model, and came to rely, like the Soviet model, on capital-intensive heavy industry. The latter strategy required a shift in manpower planning, and by implication, in education strategy. The education system was required to produce engineers, scientists and managers for the publicly owned industrial plants that grew rapidly. The universities, engineering colleges, institutes of technology, management institutes and medical schools that emerged to meet the manpower needs of these industries were all publicly funded. In a resource-constrained situation, the public elementary education system was bound to suffer in a low-income economy; at the same time per capita income was much too low to generate a demand for private providers of elementary schooling (total GDP only grew at 3.5 per cent per annum until 1980). We will return to this issue of the relative priority to elementary education below.

3.1.1. How to meet the capital cost requirements for improving access to schooling

Despite significant improvements in access to schooling in the eight States surveyed, in the 1990s lack of school facilities remained a serious problem for certain sections of the population. The survey revealed that between one fourth and one third of the population of the eight States in rural areas is deprived of schooling because there are no schools within easy walking distance; the problem is acute for children residing in small rural habitations. In addition, the proportion of villages without regular primary schools could be 12–15 per cent in the case of Andhra Pradesh and Tamil Nadu, and almost one half in Uttar Pradesh. This problem is compounded by the pockets of Scheduled Castes (SCs) and Scheduled Tribes (STs) (10–15 per cent) still deprived of primary schools; also, between 25 and 50 per cent of the STs (depending upon the State) are deprived of upper-primary, as per the respective State government norms. In fact, State norms based on population and distance criteria are often 'not child-friendly', as parents said in their responses to the survey enumerators.[6]

The lack of school facilities indicates that UEE is unachievable unless the capital cost requirements of such facilities are met. The capital cost requirements can be reduced by using an alternate model (e.g. Education Guarantee Scheme, the EGS) to expand the number of facilities, which would ensure that the community becomes directly involved in the provision of the facilities, wherever feasible. The EGS model in Madhya Pradesh, for example, has been very successful in expanding the number of facilities; from about a total number of 80, 000 schools in Madhya Pradesh at the end of 1996, the number expanded to over 110, 000 schools within three years of the launch of the scheme. Community demand for a school and community provision of facilities can lead to the mobilization of the

[6]Thus 'inconvenient location of school' was found to be a constraint by about 35–46 per cent of parents in urban Bihar and by about one fifth to one fourth of all parents in five other States, which they said compelled them to keep their children out of school.

community around the school. However, this model may not be feasible where spare existing infrastructure capacity does not exist; then the government will need to undertake capital expenditures.

Given the resource constraints of the States and the centre, the issue is how these capital expenditures will be met. It is interesting that although there is a cap of 40 per cent on capital expenditures in District Primary Education Programme (DPEP), these expenditures have usually been met, while those expenditures that might be more learning-related have not always been undertaken. DPEP has been largely externally funded; in fact, donors always prefer to fund fixed costs or capital requirements rather than recurrent costs. Hence, if additional external funding is to be sought, a major reason is to meet the capital cost requirements necessitated by the lack of school facilities identified above. Since the central and State governments' combined fiscal deficit to GDP ratio is definitely over 10 per cent, the capacity of either governments providing the resources needed without external support is limited.

However, external support for capital investment would need to be supplemented by domestic resources, and it is to the reform of the public spending pattern that the discussion now turns.

3.1.2. Reforming the recurrent public spending pattern

A main determinant of the efficiency of education spending is the distribution between various heads of recurrent spending, since recurrent spending accounts for, on average, 85–90 per cent of education spending at the elementary level in developing countries. In other words, the major determinant of the efficiency of recurrent spending is the allocation to teacher salaries compared with non-teacher inputs. The main determinant of equity in education spending is distribution by levels of education: elementary, secondary and higher.

The primary problems regarding the structure of public spending in India in general, including the selected states, are twofold: the extremely high share of teacher salaries in total recurrent spending at elementary level; and the fiscal priority accorded to elementary education by State governments. All these problems have serious equity and efficiency implications.

Teacher salaries at elementary level account for a higher share of recurrent expenditure in Indian States on average than in developing countries: 97 per cent[7] in India versus 90–95 per cent or so in Africa and elsewhere. The States establish the salaries of teachers separately but most follow central guidelines for both scales and increments, so that salaries are largely comparable across the country. In India, a teacher's salary as a multiple of State Domestic Product per capita is as high as 13.6 in Uttar Pradesh, compared with the highest (7–8 in Africa) in any developing region. The average per capita SDP in the six educationally backward States is comparable to that of Uttar Pradesh, while per capita SDP in the richest State is 2.2 times that of these six States. In other words, even in the richest Indian State the ratio of a teacher's salary to SDP per capita is comparable to African levels. The gross salary is much higher in India than in African low-income countries (Mehrotra and Buckland, 2001). Starting salaries of teachers are at least US$ 150 per month (at the official exchange rate). Despite relatively high salaries, however, teacher absenteeism is high. Worse still, teacher salaries completely squeeze out recurrent non-salary expenditure, thus explaining the poor working environment for the teacher.

There are a number of issues involved here. Increasing the number of teachers is a prerequisite for achieving UEE, partly to increase net enrolment rate to close to 100, and partly to reduce the number of single-teacher schools. That would require mobilization of additional resources. It would also require minimizing total teacher costs partly through hiring para-teachers (an issue discussed in a later section).

The second set of problems regarding the structure of public spending on education derives from its distribution by level. For all of the first four decades after independence (1950–1989), the share of higher education in total education expenditure (for all States, plan and non-plan) was around a quarter (Tilak, 2000). This share was higher than that obtaining in all industrialized countries 100 years ago.[8] By 1900, most of the North American and European countries, as well as Australia and New Zealand had full primary enrolment and had considerably expanded secondary education, just as

[7]Reduced to 93 per cent if non-education department expenditure on education taken into account in this estimate (World Bank, 1996).

[8]In India, the share of higher education in education expenditure has fallen in the 1990s from its high share over a period of four decades (1950–1989), just as it has in most developing countries.

literacy rates were approaching 90 per cent. However, despite the high levels of literacy and enrolment every country was still allocating 90 per cent of education spending to the elementary and secondary levels. Quite a different situation has prevailed in India and other developing countries. In fact, even more striking is the fact that in industrialized countries over three quarters of public education spending was going to the elementary level, which is higher than the allocation to the elementary level in India over the entire 50 years since independence (Lindert, 2004). In India the share of education spending allocated to higher education over the first 40 years since independence was much higher (between 25 and 30 per cent) and even in the last 10 years has continued to be higher than that in industrialized countries around 1900.

However, since the beginning of the 1990s the problem in the Indian case has not been with the share of higher but of secondary education. It should be borne in mind that secondary education in India is only for 4 years (grades 9–12), as 'elementary' is defined as grades 1–8. In other words, one would expect that the share of public education expenditure for secondary education in Indian States should be almost always less than that in other developing countries. In fact, however, in most Indian States the share of secondary education is higher than in Latin American middle-income countries (although they have secondary enrolments higher than that in most Indian States), and higher than in low-income African countries (which have lower secondary enrolment rates) (Mehrotra et al., 2005). In Indian states the share of secondary education in total education expenditure in the 1990s has been on average in the range of 30–33 per cent (Tilak, 2000). Clearly, State governments will need to address the issue of inter-sectoral priorities within the education sector, given the following: educationally advanced States had higher per capita spending (42 per cent higher) on education, as did the medium States (42 per cent higher), than the educationally poor States; for elementary education the per capita spending in educationally advanced States was 47 per cent higher and in medium States 13 per cent higher than in the educationally backward States (Srivastava, 2005).

The issue of intra-sectoral priority is, in India's federal constitution, largely a State-level issue, since education remains in practice a State subject. However, the central government could encourage the States to shift their priorities by using the principle of equalization of per capita spending on elementary education across the States through its own grants in assistance.[9]

Since the private returns to higher education are high, and most of those who are able to survive to the higher levels of education are the non-poor, there is a strong case on grounds of equity for there to be much greater cost recovery at the university level than is now taking place. If cost recovery is going to be acceptable to university students, it can only be on condition that the additional funds so raised are used not to replenish the government treasury but directly to improve facilities. Universities must link cost recovery to definite improvements, such as better library facilities (i.e., the fees would be used to buy library books) and loans and scholarships for poor students, especially ST, SC and other backward caste girls. Historically, high-achieving countries in education were characterised by equity between levels of education in their public education expenditure (Mehrotra, 1998; Mehrotra and Jolly, 1997).

3.2. Mobilizing resources

The Government of India has initiated a programme to achieve Universal Elementary Education, or Sarva Shiksha Abhiyan (SSA) as the programme is called. The SSA aims to provide quality elementary education to all children in the 6–14 age group by 2010. The objectives are:

- all children to be in school by 2003
- all children to complete 5 years of primary schooling by 2007
- all children to complete 8 years of schooling by 2010
- all gender and social category gaps to be bridged at the primary level by 2007 and at the elementary level by 2010
- universal retention by 2010

These goals are more ambitious than the Millennium Development Goals on education or the global Education for All goals, which are supposed to be achieved by 2015.

The SSA now provides a 'broad convergent framework', in the words of the Government of

[9] In Brazil the principle has been used very effectively in federal policy to equalize health and education expenditure across municipalities throughout the country.

India, for the implementation of the commitment to UEE. It is also a programme with budget provision for strengthening vital areas to achieve UEE. All investments for elementary education made by the governments (both federal or central and State) will merge into the SSA programme within the first few years of the decade. As a programme, it reflects additional resource provision for UEE.

There is precious little prospect of UPE being achieved by 2007 and UEE by 2010, as called for under the SSA, unless additional resources are mobilized by the government, and the equity and efficiency of public spending changes. The fiscal deficits of the poorest States are so serious that, while inter-sectoral reallocation in favour of education is desirable, it may not be feasible. In addition, the prospect of intra-sectoral reallocation within the education sector—from higher levels of education to the lower levels—will be limited unless the total envelope for education can be increased. The tax revenue–GDP ratio of the central and State governments is only about 17.2 per cent in 2000–2001; non-tax revenues are an additional 5.2 per cent, making the current revenue-GDP ratio about 22.4 per cent. The total envelope for education can be increased at the central or the State government level only if the revenue–GDP ratio rises and does so within a short span of time, so that within 10 years momentum can be built for UEE in the laggard States. An immediate start could be made, however, by creating one earmarked fund for elementary education at the centre, and another one in each State.

In fact, in the year 2004 budget the central government levied an education 'cess' or tax of 2 per cent on all central taxes, to finance the commitment to universalise access to basic education. This measure will yield a total revenue of Rs 50 billion per year (Rs 5 000 crore).[10] This constitutes 10–12 per cent of total government expenditure on elementary education for the central and state governments annually. A central government committee (in the late 1990s) had estimated that the additional cost of universalising elementary education over a 10-year period would amount to Rs 1370 billion (Rs 137 000 crore) annually (or about 0.7 per cent of GDP additional annually). Hence, the education 'cess' will make a significant contribution, but probably will still not be enough. Improving efficiency and effectiveness of resource use will be critical. In addition, we would suggest that the State government impose a similar levy on the taxes that it is entitled to collect. Given that state governments collect about a third of total tax revenues, this levy could raise additional resources at state level.

In the 1990s, external assistance for elementary education increased sharply. It grew from Rs 370 million in 1993–1994 to Rs 12.1 billion in 2001–2002 (in current prices). This was mainly plan expenditure (or broadly, capital expenditure). Of the central government plan expenditure on education aid grew from 5 per cent to 20 per cent over the same period. As a share of the central government's elementary education plan expenditure, external assistance grew from 10 per cent to 30 per cent. If the current time table of universalising elementary education by 2010 is to be met, both the size of external assistance and the government's (central and state) own expenditure may have to increase.

3.3. Improving teachers' accountability and work environment

The surveys found that the main issues concerning teachers were the serious shortage of teachers and their performance. Furthermore, there are three issues concerning improved teacher performance: the work environment, training, and accountability.

3.3.1. Teachers' work environment

There are many aspects of the teacher's work environment that need effective action by the government. These are: the pupil–teacher ratio, the large number of single-teacher schools, and teacher training. Most States have large fiscal deficits and are in no position to recruit additional teachers at regular salaries. A large number of States have had a ban on teacher recruitment on account of this fiscal squeeze for many years, so teachers now find themselves caught between the horns of a dilemma. Their strong political pressures have resulted in teacher salaries rising sharply, putting a tight squeeze on further expansion of teaching staff by the State. Meanwhile, enrolment has been growing, so that the pupil–teacher ratio has deteriorated in many States, worsening teachers' work environment. States have legitimately responded to the fiscal squeeze and the ban on recruitment of teachers at regular salaries by the appointment of

[10]This will exceed the loan agreement worth $1 billion (or roughly Rs 45 billion)—additional aid for elementary education, consisting of loans from the World Bank, DFID, European Commission for a 3-year period (2004–2007) (Tilak, 2004).

para-teachers. Hiring para-teachers offers a whole series of advantages: relieving the burden on single-teacher schools as a para-teacher could be appointed to existing regular primary schools; ensuring greater accountability since the teacher is locally recruited; permitting better links with the community; and relieving the fiscal constraint of the State in the short run.

However, there are a number of critical issues around the use of para-teachers. A very important reason why there is more commitment among para-teachers and lower absenteeism is that they do not have permanent contracts. If para-teachers were put on permanent contracts, their behaviour might become comparable to that of regular teacher. There will also be an issue of fairness and equity, since para-teachers are being paid a fraction of a regular teacher's salary for doing much the same work. In the medium-term, the way to resolve the issue is to raise salaries gradually over time (the fiscal implications of which will have to be squarely faced), while probably retaining the practice of periodic renewal of short-term contracts subject to good performance.

However, there are also short-terms issues in respect of para-teachers. Studies on para-teacher schemes suggest that on the learning achievement side there are as great worries about schools run by para-teachers as about regular primary schools (Government of India, 1999). In other words, there is need for a quantum leap in the training of para-teachers and their monitoring and supervision. The para-teacher programmes that have succeeded have a heavy component of both training and monitoring and support of the para-teachers (Mehrotra and Buckland, 2001). The infrastructure for providing training certainly exists to a much greater extent than ever before in the form of District Institutes of Education and Training (DIETs) and resource centres at local levels. This has allowed in-service training (INSET) opportunities to become a routine part of the professional life of a state-employed teacher.

However, change messages mediated through current training approaches are largely not having the expected impact on classroom processes. Dyer et al. (2004) illustrate the need to move away from the "assumption that *ability* should be the target of training, and instead to investigate the question of teachers' *willingness* to act on training messages in the contexts in which they work. The innovation of DIETs intended that national policy goals would be served by decentralised institutions able to recognise and respond to teachers' developmental needs. A decade after their inception, DIETs have found it difficult to fulfil these expectations. Although a heterogeneity of contexts led to their establishment, actual processes of formal teacher education through the DIET largely disregard that heterogeneity" (p. 45).

After extensive interviews with teachers and DIET staff, Dyer (2004) and Dyer et al. (2004) have interpreted teachers' accounts at a level that reveals some of the underlying rationales for what is so widely interpreted as teacher apathy and unwillingness. "Training is often imparted by persons who deliver the content of centrally designed modules as lectures. Such training may encourage teachers that they have learned 'something new', which they see positively, but does not provide them with guidance as to what to do in classrooms with, for example, varying student attendance, multi-grade teaching and dialect issues. In contrast to DIETs, Cluster Resource Centres, on the other hand, are already a promising avenue for teacher development. Conceptually based on problem solving by and among teachers themselves, they offer the potential of an approach that may over time challenge the top–-down skills- and knowledge-based model. For this to happen, however, those in management positions may have to accept that teachers' local knowledge also has policy significance" (Dyer et al., 2004, p. 46).

3.3.2. *Teacher accountability*

Improving teachers' work environment alone is not the only answer to improving teacher effectiveness and morale; in the Indian context, reforming the system of teacher accountability is equally important for improving the quality of schooling. It is fairly common knowledge that the appointment of teachers, their transfers and other administrative affairs are driven by political favours and financial transactions, which have an important bearing on teacher performance, especially their accountability to parents. Another issue in respect of teacher performance was raised repeatedly in the focus group discussions by parents during the survey: the widespread problem of teacher absence from school during school hours. In most States, the teachers are the single largest group within the civil service, so their unions possess considerable political power at State level. Teachers are the only government employees allowed to contest elections and become

members of State legislative assemblies (MLA), as well as Members of Parliament.

The Indian Constitution provides that 1/12th of the members of the Upper house (Legislative Council) in every State are to be teachers elected from teacher constituencies. The Upper house, however, has now been abolished in all States except four, where teachers still have reserved constituencies. Nevertheless, certain categories of teachers are still allowed to contest the elections for the State lower house as well as the national parliament. In other words, together with the size of the teachers' union in each State, there is the added political clout that comes from having legitimate access to political party membership, as well as individual funds (which are derived from the general tax revenues of the government, to which all MPs and MLAs have access) and the scope for disbursing patronage.[11] In fact, a teacher who is elected as an MLA or an MP continues to be a teacher, regardless of whether he or she teaches or not; in other words, such teachers continue to draw a full salary at government expense. This is clearly an unacceptable situation and needs to be addressed through a modification of government rules.

Teacher unions have acted to ensure that the salaries of all teachers in government-aided private schools are paid directly by the government. This has ensured that centralized management prevails not only in government schools but also in private-aided schools, and the legal situation in most States allows for centralized management of the school system. How does the enormous political power of teacher unions plus the centralized management of the school system (as ensured by teacher unions) coexist with plans for decentralization and for greater control by local village and town councils under the 73rd Amendment of the Indian Constitution? How does one ensure accountability under such a regime of centralized salary payment and management? There are three ways in which the issue could be addressed by the government centrally.

At the very least, government rules should be changed so that teachers, once elected for 5 years, have to take leave without pay from their teaching position. At the end of the 5-year term the teacher should have to decide whether to resume duties as a teacher or, if re-elected to office, to resign from the teaching position.

A second approach is legal action by the central government to introduce a constitutional amendment to eliminate this conflict of interest emanating from teachers being permitted to become MLAs, members of the Legislative Council (or Upper house at State level) and MPs, i.e. simultaneously part of the executive branch of government, as well as its legislative branch.

The third strategy is that the central government should require State departments of education to engage teacher unions in each State to adopt a Teachers' Code of Professional Ethics, administered by a General Teacher Council. The latter should be an independent body (with some teacher representation) with power to issue sanctions against teachers violating the code. Some 24 countries in the world have such Teacher Codes (including Scotland, England, Vietnam and Hong Kong). The overwhelming opinion expressed in the focus group discussions in the survey was that the teachers' own benefits and salaries are predominant in teacher-union concerns. However, while teachers have rights as professionals and employees, they also have a responsibility to their employers, their students and the parents or guardians, and to the community at large.

3.4. *Mobilizing the power of the people*

The overwhelming evidence from the focus group discussions carried out as part of the survey is that the representative village education committees (VECs)—that are part of the local councils or panchayat raj institutions—rarely function and, if they do meet, do not perform their functions. The VECs pre-dated the local councils (created by a Constitutional Amendment of 1993), and the local councils, which cover the entire range of services and government functions (not just education) should have energized the VECs. However, by and large, that has not happened, although in certain States (e.g. Madhya Pradesh, Kerala, Himachal Pradesh) the active involvement of the community in the affairs of the local school is a force for change. In many States basic education and basic health are not subjects that have yet been devolved by State governments to the local councils.

The case for the decentralization of basic education and basic health to the local councils rests essentially on efficiency. The experience of the last 50 years has

[11]Not surprisingly, Kingdon and Muzammil (2003) report that between 1965 and 1988 there were 10 major agitations by the teachers' union in Uttar Pradesh, having an average duration of 24 days.

been that hierarchically organized line ministries have proven to be extremely dysfunctional in the delivery of social services. The only prospect for improving the efficiency of primary schools and primary health centres is for all local-level State functionaries to become accountable to the locally elected council. That requires that, at a minimum, responsibility for these subjects should pass from the State government to the local councils, but in the majority of States that has not happened.

For there to be a collective voice, one able to prompt collective action by the community, State governments have to empower local councils, as the State government of Madhya Pradesh has done. Madhya Pradesh was the first State to put the system of democratic decentralization into effect This was followed by the introduction of an Education Guarantee Scheme (EGS)—mentioned earlier—to guarantee provision of primary schools to each hamlet, not just to each village (given that a village consists of a number of discrete hamlets). If 40 residents of a hamlet demand a school, the State is duly bound to provide a school within 90 days: that was the educational guarantee in the scheme. The results have been remarkable. While 80,000 schools had opened in the 50 years since independence in Madhya Pradesh as part of the regular government primary school system, 30 000 new schools were created within 3 years of the announcement of the scheme (after January 1997). What is particularly important is that it led to a huge increase in enrolment of tribal children, who had had some of the lowest enrolment rates among vulnerable groups. It also led to a larger than proportionate increase in girls' enrolment (Gopalakrishnan and Sharma, 1999).

What is distinctive about the EGS schools is that they are located in each hamlet. A village consists of a number of hamlets. A VEC—covering many hamlets—is unlikely to be as interested in the schools in every hamlet as the parents whose children attend a particular school may or may not all belong to the same caste. For collective voice, what is needed is a school-level association, which is effectively a Parent–Teacher Association (PTA).[12]

In other words, for community pressure to work, the evidence suggests that two institutional arrangements need to be in place: the leave-granting and salary-releasing authority for all teachers in all States should belong to the panchayat (village level council); and there must exist in every school a PTA which is in regular touch with the panchayat and the school.[13] Government schools, whether rural or urban, do not have any board of governors. The head teacher or headmaster usually reports only to a district inspector of schools, who is part of the State government department of education and is rarely able to physically visit the school. In other words, the teacher's accountability to the government hierarchy is tenuous at best. Further financial assistance by central government to State government should be made conditional upon these new institutional arrangements being put in place.

In fact, it is remarkable that one of the educationally backward states, Madhya Pradesh, has among the lowest teacher absence rates (17.6 per cent), compared to the national average of 25 per cent) (Kremer et al., 2004). This is also one of the states that has gone furthest in promoting depth in its democratic decentralization, by activating the voice of the people. By contrast, Bihar, which did not even deign to hold the first elections to its panchayati raj institutions until 2001—the last state to do so—has among the worst absence rates (37.8 per cent, with 73.6 of teachers present found engaged in non-teaching activities). The same applies to Jharkhand, which was part of Bihar till earlier in this decade.

3.5. *Offsetting household costs and improving the cost-effectiveness of non-teacher inputs*

According to the survey, annual household costs (in 1999–2000) of putting a child through the elementary stage as a whole ranged from Rs 626 (US$ 14) to Rs. 1188 (US$ 26) in rural areas and between Rs. 1245 (US$ 28) and Rs. 2292 (US$ 51) in urban areas (varying by State). These are total costs, including both direct and indirect costs: fees, books and stationery, uniform, footwear, and transportation. Households tend to spend relatively larger amounts on their first-born children, so that there is a risk of older children being induced to drop out (Panchamukhi, 2005). The opportunity costs are found to be even larger than the household expenditures in money terms.

[12]Kremer et al. (2004) point out that an active PTA (even when measured by the weak indicator of having met in the past 3 months) is correlated with 1.5 per cent lower teacher absence.

[13]The PROBE (1999) survey found that less than one fifth of the schools surveyed had a PTA. The PTAs that did exist rarely went beyond formalities. Some parents went to school only on 15 August (Independence Day) and 26 January (Republic Day) for snacks or a brief celebration, following an earlier tradition of inviting parents to the local school on those days.

When one compares the household expenditure per child with average per capita consumption expenditure (in 1999–2000), the magnitude of the burden borne by parents of sending children to school becomes clear. Sending *one* child to a primary school in rural areas can cost the family anywhere between 11 per cent and 15 per cent of its monthly per capita consumption expenditure in the seven states under discussion here.[14] In urban areas the monthly household expenditure on primary education per child as a proportion of per capita consumption expenditure per month is even higher: ranging between 11 per cent in West Bengal to 21 per cent in Assam.[15] Even allowing for the fact that incomes are higher than consumption, these proportions are still forbiddingly high.

At middle level, the cost per child relative to per capita consumption expenditure rises even further. In rural areas, it ranges from 18 per cent in Assam to 30 per cent in Tamil Nadu,[16] and in urban areas it is between 15 per cent in Tamil Nadu to 27 in Rajasthan.[17] Given that the total fertility rate in all these states is between 3 and nearly 5 (except in Tamil Nadu where it is 2), the costs of sending more than one child to school would be a challenge to most poor households. And under these circumstances, it is girl-children who suffer—as respondents repeatedly said in the focus group discussions.

The survey showed that the incentives offered by the central and State governments are not robust enough to constitute a noticeable share in income; in fact, in poor States like Madhya Pradesh, Rajasthan, Bihar and Uttar Pradesh the incentives offered are too low to be effective.

There are essentially four kinds of incentives currently in place: free rations (or in some States a cooked midday meal), free uniforms, free textbooks, and attendance scholarships for girls, the first being financed by the centre, and the last three by the States. While the first has been nationally available since 1995–1996, for the rest both the availability and the target groups tend to vary by State.

With regard to incentives, the survey and the focus group discussions seem to show that incentives are at least encouraging parents to enrol children into school, although serious problems remain. There were spatial inequities in the delivery of incentives. More urban than rural children seem to benefit from the free textbooks and attendance scholarships. Most children (50–90 per cent) do not receive any incentives. Of those parents who do, 70–90 per cent, depending upon the State surveyed, are dissatisfied with their quality.

The fact that incentives account for 5 per cent of total recurrent expenditure of the government on elementary education—more than all other non-salary inputs—is a problem: there is a trade-off with other inputs in terms of resource use. What is absolutely critical is that incentives should be such as to ensure the actual attendance in class by the child, and not mere enrolment in order to take advantage of the incentives.

The National Programme for Nutritional Support for Primary Education or the Midday Meal Scheme began in 1995 and is by far the largest programme in terms of central schemes of assistance to States. Expenditure for the mid-day meal was in 1998–1999 more than 2.5 times the combined expenditure on three other central schemes: Operation Blackboard, Non-Formal Education and Teachers Education (Bashir, 2000a, b).

There are two types of provisions given to students under the programme: cooked meals or food grains (a 3 kg ration per child per month). Till 2001, only the States of Gujarat and Orissa provided cooked meals, all the other States providing food grains (wheat, rice or both). Dreze and Goyal (2003) found a visible effectiveness of cooked meals in coverage and impact, so clearly there is a strong case for cooked meals.

Given the positive impact of cooked meals, it is critical that the efficiency and effectiveness of the mid-day meal scheme improves. Since cooked meals will ensure attendance, while rations merely encourage enrolment, the way forward must be the provision of cooked meals.[18]

All the other incentive schemes need thorough evaluation to determine which should be retained

[14]These figures are an average based on costs of all kinds of schools, government, private aided, and private unaided. Naturally the costs of private unaided schools are greater to the household than government schools. The shares in rural primary schools, where the majority of schools are government ones, are (in per cent): Assam 11, WB 11, MP 12, Rajasthan 14, TN 15, UP 15, Bihar 16.

[15]The shares in urban primary schools are (in per cent): WB 11, TN 12, MP 15, Bihar 17, UP 19, Rajasthan 19, Assam 21.

[16]The shares in rural middle schools are (in per cent): Assam 18, MP 22, Rajasthan 24, UP 28, Bihar 29, TN 30, WB 32.

[17]The shares in urban middle schools are (in per cent): TN 15, WB 21, MP 23, UP 24, Bihar 25, Assam 27 and Rajasthan 27.

[18]The Right to Food campaign has ensured that cooked meals are now provided in most states in India.

and which dropped.[19] The following three criteria for choosing could be adopted:

- Is the incentive learning-related (cooked food and textbooks are)?
- Does it involve a minimum risk of leakage of funds to intermediaries and a maximum transfer to the beneficiary?
- Is it simple to deliver in administrative terms?

The most important criteria should be which mechanism involves least leakage and which incentive is learning-related.

We suggest that uniforms should cease to be mandatory for all children in all government and government-aided schools. The international experience is that abolishing uniforms is a huge incentive; the abolition of mandatory uniforms in Malawi in 1994, together with the elimination of school fees, had the effect of enormously increasing enrolment (UNICEF, 1998) The survey of Indian States also shows that uniforms are one of the largest household costs.[20]

With regard to all other incentives (e.g., textbooks, uniforms, scholarships) there should be cash payment into a post office savings account for each enrolled child. In other words, incentives need to be monetized and, to be meaningful, increased; they should be paid into a joint account held in the name of the mother and child. There is some evidence from Latin America that subsidies reach children more effectively if provided in kind or paid to mothers rather than adult males in the household (Schiefelbein, 1997). The proposal to pay cash directly to beneficiaries deserves support because it reduces bureaucratic inefficiencies in the delivery mechanisms, quite apart from minimizing leakages to intermediaries. Some States in India already use cash payment for various incentives.[21] Cash payments have been used widely in Latin America to help school attendance (e.g. the Borsa Familia Programme in the Brasilia Federal District). Costa Rica, Venezuela, and Mexico have similar programmes (Schiefelbein, 1997).

What is important is to ensure actual attendance of the children, rather than mere enrolment. In other words, while a part of the incentive payment can be withdrawn by the mother from the savings account at regular intervals during the school year, the remaining part would be contingent upon the child passing the grade-5 board exam, a transparent mechanism without any scope for cheating by either parents or teachers. This latter requirement would automatically create pressure for the child to attend school.

3.6. Regulating, not subsidizing, the private sector

It has already been noted that if UEE is to be achieved, the efficiency and equity of the entire educational system has to improve, not just that of the public sector.

There has been, since independence, a nexus between government grants-in-aid, politics and private schools. Since independence private individuals and groups have continued to found educational institutions which receive accreditation and grants-in-aid from the department of education when they fulfil certain criteria, though with political contacts, such impediments can usually be by-passed. Further, several studies (e.g. Agarwala, 2000) have shown that the unrecognized and recognized private-unaided schools are almost totally unregulated, despite their considerable importance in terms of enrolment in several States. At the same time, there is no firm evidence in India of better learning achievement of children in private schools. Furthermore, Kingdon and Muzammil (2003), Tilak and Sudarshan (2001) and Mehrotra et al. (2005) have shown that the taking over of private schools by the State has had adverse equity effects.

There are policy implications arising from each of these issues. First, there should emerge a national policy on private schooling articulated by the central government, after a process of consultation, given that usually governments have very little information about unrecognised schools, and rarely monitor the performance of un-aided private schools.

Second, one element in the national policy could be that the 'nationalization' of private schools, i.e., the conversion of private unaided schools into aided schools, should be reconsidered henceforth. We are not speaking of schools run by NGOs here, whose share in the total private unaided sub-sector of elementary education is not particularly large (though there might be a concentration of denominational schools, e.g. Madrasas or schools run by hindu charities like Ramakrishna Mission in some urban areas). Private schools created by entrepreneurs are at issue here. Given the fiscal constraints of State governments, the

[19] A detailed examination for the NCERT (Saxena et al., 2000) identified the problems in the delivery of the remaining three incentives.

[20] This finding is inconsistent with another study in three Asian and two African countries about uniforms (Mehrotra and Delamonica, 1998).

[21] Thus, students are given cash to purchase their uniform in Haryana. For textbooks, Manipur and Tripura make payment in cash to students.

indiscriminate conversion of private schools into government-subsidized ones adversely affects equity, as it increases the government subsidy for the non-poor; at the same time it reduces the resource availability for the publicly funded elementary system, the social rate of return of which is higher. It also has perverse efficiency effects since the subsidy to private schools is provided without any effective performance guarantee. All existing private-aided schools should in future only be provided aid under very strict performance criteria. Those performance criteria need to be clearly spelt out in the national policy and legislation, after a thorough evaluation of the international experience in respect of giving grants-in-aid by the State to private schools.

4. A summary of policy recommendations

4.1. Additional resources and reforming the public spending pattern

- The capital costs of additional school for habitations without schools may require additional resources. Such capital costs could be met through official development assistance (i.e., bilateral or multilateral loans). Recurrent costs, especially for hiring additional teachers, would have to be met from additional domestic mobilization of resources. The earmarked tax introduced in the 2004 budget is a good beginning, but it will have to be followed up with incentives by the central government to state governments, so that the latter will come up with similar earmarked taxes. If the central government was to offer an incentive of a matching grant to resources mobilized by the state government, the realization of SSA goals may not remain unrealistic.
- State governments have to address the pattern of public spending on education as a whole. Within the education sector, the fiscal priority to elementary education in many States needs to increase compared with secondary education. This reform is particularly important in the States with low elementary enrolment rates.
- Since the private returns to higher education are high, and most of those who are able to survive to the higher levels of education are the non-poor, there is a strong case on grounds of equity for there to be much greater cost recovery at the university or tertiary level. Wherever cost recovery is to be increased at the higher levels of education, it must lead to improved facilities at that level.

4.2. Improving teacher accountability and effectiveness

- There is dire need for PTAs in each village for each school, partly to mobilize the community and partly to counter teacher power. In order to give democratic decentralization real teeth, the leave-granting and salary-releasing authority for all teachers (both in EGS and regular schools) in all States should belong to the panchayat. In addition, a Teacher Code of Conduct should be agreed upon, to be implemented and administered by a General Teacher Council that can discipline teachers for absenteeism and non-performance.
- The work environment of teachers could be improved by the appointment of para-teachers to the new type of schools (EGS-type) and the regular schools (all one- and two-teacher schools). It can address the problems of high pupil-teacher ratios and single-teacher schools by adding to the number of teachers, and also that of the shortage of female teachers. While teachers would retain their temporary contracts and the renewal of their contracts would be based on performance, gradual increases in salary for para-teachers would be necessary to sustain commitment. However, there is need for a quantum leap in the number of days and quality of training of para-teachers, and their monitoring and supervision. Cluster Resource Centres—one level below the DIETs—offer an unutilised opportunity here.

4.3. Improving cost-effectiveness of non-salary inputs

- The household costs of sending a child to school remain prohibitive, and the efforts to offset those costs have to be greater than hitherto. The central government's contribution to incentives comes from the food grain distributed to attending children. This is the central government's way of reducing its excessive national food grain stocks without any financial cost to the central ministry of education. It is a poorly administered scheme and is being substituted by a scheme of cooked meals, rather than mere distribution of rations. The State governments should pay for the additional costs of cooked meals, which could be cooked with community involvement.
- Inefficient allocations to the three other kinds of incentives offered are taking place at the State

level. Uniforms should be abolished altogether for all children in all government and government-aided schools. And all other incentives should be paid in cash into a savings account in the name of each child and his or her mother, a part to be withdrawn over a period of time, the remainder only upon successful completion of the grade-5 exam.

4.4. Regulating, not subsidizing the private sector

- There should emerge a national policy on private schooling articulated by the central government.
- The conversion of private-unaided schools into aided schools should be banned henceforth. All existing private-aided schools should only be provided aid under very strict performance criteria.

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