

Schooling and 'Skilling' of the Country's Youth

Secondary Education in Four Indian States

Focusing on variations in secondary schooling across the states of Andhra Pradesh, Kerala, Maharashtra and Tamil Nadu, this paper makes the claims that we need to deal with the challenges of universal elementary education and the expansion of secondary schooling simultaneously, rather than in a gradual sequence. Except in a few educationally forward regions of the country, secondary participation remains highly restrictive because, a majority of young people – in particular from deprived communities – do not have access to secondary education. Decisions regarding virtually all school related activities are concentrated at the state level, to the relative neglect of sub-state level and school level actors. Vocational secondary education and 'skilling' of adolescents have always received step-motherly policy attention. Interestingly, however, in the majority of the sample states, aided schools seem to have become reasonably accessible to disadvantaged groups, in sharp contrast to unaided schools. Hence there is a case for strengthening aided schools, as a potentially effective means of narrowing the gaps between the privileged youth and their disadvantaged peers.

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Encourage the development of different forms of secondary education, including general and vocational education, [and] make them available and accessible to every child...

– Article 28 (para 1b) of the Convention on the Rights of the Child, 1989

I Introduction

As we step into the 21st century, we find ourselves confronting two momentous educational challenges, namely, to make a successful transition from universal elementary education to expanded secondary schooling, and correlatively, to strike at the roots of persistent class, gender and caste biases which impede such progression. Simply put, as we still struggle and strive to achieve universal elementary education, almost in tandem, substantial improvements in mass access to secondary education has to be achieved, for the latter to grow out of its present elitist character. Indeed, in most parts of India secondary and senior secondary schooling remains highly selective; it prepares only a small proportion of the youth for university education or for technical occupations. This means that a majority of young people do not have access to secondary education. In contrast, in developed and some developing countries, secondary schooling has become mass education.

Interestingly, however, in India elementary education appears to be assuming a mass participatory character in recent times; this transition at the elementary level has important implications for secondary schooling. To be sure, in some parts of the country, we are still grappling with obstacles to the implementation of compulsory elementary education. So, how pertinent is it to talk about selective participation at the secondary level? As we elaborate below, there is no reason why we should be forced to choose

between the two, especially at a time when the transition from universal elementary education to expanded secondary participation is emerging as a global imperative. Indeed in a majority of developed countries today the duration of compulsory education extends into secondary schooling [World Education Report, 2000]. Hence, while there is obviously a limit to which education can be made compulsory, secondary education has to be made generally available and accessible to all. In concrete terms, the following specific issues motivate this work.

First, since universal elementary education (UEE) appears to be a proximate reality in the country (of course not in every state), the current pattern of growing elementary schooling is thought to have a cascading effect on demand for secondary education [Aggarwal, undated]. As a recently held workshop on secondary education, under the aegis of NIEPA (2001), conclude, "In our assessment, secondary education will, during the next two decades or earlier, face simultaneously strong pull for quantitative expansion and qualitative improvement" (p 1). Due to the effect of improved access and retention at the elementary level, increasing cohorts of students "will now knock at the doors of secondary education for more and more places" [op cit:1]. There are a number of reasons to be concerned about whether the education sector is up to the challenges it faces. Therefore, a systematic analysis of demand and supply for the expansion of secondary education in the coming years stands in need of close scrutiny. So far this is a relatively understudied area.

Second, expanded secondary participation also becomes a priority in light of the changing demands of the labour market in which there is an increasing share of information-based service sector jobs [Majumdar 2001]. The development process, in general, is becoming increasingly skill-driven, generating in turn a growing demand for secondary school educated manpower. It

is, therefore, important to raise the educational endowment of the future generation of workers through the expansion of secondary schooling, at least to augment the number of trainable, if not fully trained, people. But as it stands now, a large number of young adults in the country leave school altogether before proceeding to high school and, as a corollary, the labour force remains starkly undereducated. In contrast, the countries we need to contend with during this era of global competitiveness have highly qualified manpower. Of course, the goal of widening secondary participation has to be pursued without diluting the paramount task of UEE. But we should not be forced to choose between the two. On the contrary, in India, as in many other developing countries, developmental imperatives compel us to deal with these challenges simultaneously rather than in a gradual sequence.

The third question is whether we need to establish a strong linkage between education and the world of work; that is to say, do we need to rethink the role of vocational education in the secondary education cycle? The secondary education system plays a dual role: it prepares students for higher education and provides training for those who will end their schooling at this level [Castro et al 2000]. So the issue is whether to put students together within a comprehensive high school system or track them in different institutions, having a separate vocational track at this level. This is a controversial subject even after much has been written about it and no uncontested verdict has emerged thus far. Also, in almost every country academic education has had the higher status than vocational/technical education. So the lingering debate is how best to prepare students for university and for work and at which level to offer job training [Castro et al 2000].

II

India and its States in Comparative Perspective

To set the stage for the present enquiry, we present as briefly as possible some data on secondary schooling from other parts of the globe. In most parts of the developed world, the secondary/upper secondary level has now become the main transition stage to employment; in other words, in these regions a majority of young people defer entry into the world of work, until they enter secondary grades and successfully complete them. In many such countries compulsory schooling extends into secondary grades [WER 2000]. Secondary enrolment ratios are also very high in developed regions, as a cursory look at the net secondary enrolment ratios in a handful of randomly selected countries in North and South America, Europe, Africa and Asia indicate (Table 1). The corresponding figure for India at the same time reveals the narrow confines of high school participation in the country.

With the foregoing sketchy and necessarily inexhaustive outline of the international scenario of secondary education, we turn to focus on interstate variations in secondary schooling within our national borders.

Interstate Variations

While in general participation in secondary schools remains very restricted in the country, there exist wide interstate variations in the spread, organisation, clientele and performance of the secondary education sector, which largely motivate this study.

The overall developmental performance itself has a strongly regional character; for example, population growth rates are falling faster in the south than in the north; gender, caste and income-based differences may also be somewhat similarly polarised. In terms of economic growth and poverty alleviation too the country stands divided into two broad parts: the relatively backward league of northern and eastern states on the one hand and the more advanced group of southern and western states on the other [Deaton and Dreze 2002].

Our discussion here concentrates on the three southern states of Andhra Pradesh (AP), Kerala and Tamil Nadu (TN) and the state of Maharashtra in the west. Importantly, the expansion of opportunities for secondary level education has picked up speed during the decade of the 1990s in the study states (though from different starting points). Kerala, Tamil Nadu and Maharashtra are also the states that have recorded significant progress in universalising elementary education. The record of AP on the other hand is much more modest with respect to both elementary and secondary school participation. One may ask whether the high achievers in elementary schooling are also in the lead in spreading secondary education. For example, has the state of Kerala adequately utilised its advantage of mass elementary schooling to augment secondary participation? More elaborately, have the secondary education potentials been adequately developed here in line with the opportunities offered by a wide base of basic education as well as a wide network of school education?

Again, Maharashtra is a state with higher average income levels as well as a larger industrial sector as compared to those obtaining in the southern states. The needs and dynamics of economic and industrial growth in the state, one may expect, would create special demands for widening of secondary education. One may argue, for example, that at least a secondary educated workforce would be a precondition for the progress of Maharashtra. But does the state, with a relatively developed industrial base, in fact have high secondary enrolment ratios? These are the issues that lie at the heart of our enquiry.

More concretely, the study aims to provide a factual picture of the trend in secondary enrolment in the 1990s, female participation in secondary studies, and under-representation of socially disadvantaged youth as compared with their more privileged peers. It further summarises major controversies surrounding the vocational education debate and looks at school-based vocational programmes. A broader set of financing issues has not received adequate attention in this paper. Furthermore, issues such as pedagogic practices, curriculum and examination reforms, quality improvement of teachers, demographic changes and consequent enrolment projections are not dealt with in this essay. The

Table 1: Secondary Enrolment in Selected Countries

	Net Secondary Enrolment Ratio (Per Cent) 1998
US	90
UK	94
Cuba	75
Malaysia	93
Thailand	55
Chile	70
China	50
Botswana	57
India	39

Source: *Human Development Report, 2002.*

present exercise is more of an investigation rather than a rigorous analysis of how things are vis-à-vis secondary schooling in the selected states.

It is apt to mention at this point the major limitation of the study and thereby indicate the future direction of research. The picture the paper offers is mostly institutional in nature; the larger perspective of the hapless condition of many adolescent children in the country, the stifling education process they are forced to go through, the mismatch between their qualifications and semi-menial jobs they often end up doing remains neglected here and stands in need of urgent investigation.¹

Organisation and Administration of Secondary Education: An Institutional Perspective

In the country as a whole as in the four study states, the plurality of management in secondary schooling is constitutionally recognised. In other words, both government and private agencies are involved in providing education. Usually a 'public' education institution is one managed (and funded) by government agencies – including local bodies (LBs) – and those described as 'private' by a large variety of non-governmental agencies. However, 'aided' private institutions are public in the sense that a large portion of their funding comes from the government; hence they are private largely in a managerial sense.

In some cases, however, what is known as a 'public' school is typically one managed by an unaided private agency. Among the private unaided schools also there exist wide variations in terms of management, quality and orientation. Some schools are run by religious or linguistic minority communities on a non-profit basis; others have overt commercial orientation – the so-called 'self-financing' commercial enterprises which capitalise on the differentiated and unmet educational needs of a widening clientele and use this as an opportunity to make profit. Historically religious and linguistic minority groups received encouragement from the government to establish academic institutions of their choice and often received financial aid. In particular, minority communities have had a vital role to play in the educational development of Kerala and Tamil Nadu. Many attribute the early educational advance of these two states to such instances of public-private collaboration.

A brief review of the institutional location and responsibility for secondary education in the four states, the grants-in-aid policy, allocation of educational functions across the state, district and sub-district levels and so on will help us understand both the commonalities and contextual specificities that characterise high school education in India. The interstate variations in the structure of school administration and organisational styles are palpable even from the small sample of cases we have included in this study. These divergences are a product, at least in part, of different historical trajectories of educational growth evident in different regions of the country.

For instance, Christian missionaries have played a critical role in the educational growth of both Kerala and Tamil Nadu. Now a variety of agencies – government and non-government – are engaged in imparting school education in these states. In the state of Kerala in particular, voluntary agencies, minority groups and the private sector in general have historically had a prominent place in the education system. The agencies that run educational institutions now constitute an ideologically motley group of, say,

the Nair Service Society, SNDP Yogam, etc, on the one hand and Christian churches and Islamic organisations on the other. At all stages of school education, the private aided sector dominates. State support to these educational initiatives also goes as far back as the late 19th century, when the grant-in-aid system was introduced in the state for the first time in 1869. The general idea was to encourage private agencies by extending liberal grants. The system later underwent a series of modifications. Recently some rethinking has started here, as in almost all other states in the country, vis-à-vis the grants-in-aid policy. There is indeed much scope for research, as the Kerala experience shows, on the complementary effect of private provisioning on government provisioning and vice versa.

Continuing with the brief history of the spread of education in the study areas, the Maharashtra region, for example, pioneered one of the most significant anti-caste movements in the country, under the leadership of the great visionary thinker and activist Jotiba Phule. He was among the first to emphasise the potential role of education as an instrument of social awakening among dalits [Velaskar 2000]. Education came to be perceived by the 'lowly' castes as the best available means to change their socio-economic fortunes. To quote Velaskar [2000:479, emphasis added], "The Mahars in particular, right from the British days when they gained access to military service and opportunities in the urban economy and then under the powerful impact of Ambedkar's clarion call to 'Educate, Organise, Agitate', have been at the forefront of educational pursuit." The mahars, now largely 'nava-baudhs', thus had a headstart in education, as compared to other sub-categories within the scheduled castes (SCs).

Coming to the specifics of the secondary school cycle, in Tamil Nadu the secondary stage consists of grades 9 and 10, and upper secondary grades 11 and 12, whereas in Andhra Pradesh, Kerala and Maharashtra the secondary stage includes grades 8 to 10. Senior secondary education is located in a multiple institutional setting in the study states. Many secondary schools have been upgraded to include the 'plus two stage'; also in the states of Andhra Pradesh, Kerala and Maharashtra there are a number of junior/intermediate colleges imparting higher secondary education that are either run independently or affiliated to degree colleges.

In Kerala, until recently, the 'plus two' stage was under the university system. During 1990-91, plus two courses were added to a selected number of high schools in the state, to gradually bring them within the fold of the school system. They are now being transferred to school education in a phased manner and are brought under a separate Directorate of Higher Secondary Education. In recent times unaided schools are being actively encouraged to introduce plus two courses. In one view, this drive for expansion of senior secondary classes (labelled as government-sponsored privatisation in some parlance) is more in the nature of firefighting than proper planning vis-à-vis the question of redeployment of lecturers/teachers.² The viability of government and aided higher secondary classes is indeed a major area of concern in the state.

Grants-in-Aid: Roll Out or Roll Back?

In all the states under scrutiny, a major responsibility for secondary education (especially in the managerial sense) rests with the non-governmental or private agencies through the grants-in-aid rules. In Maharashtra even some of the local body schools

are considered to be non-governmental organisations receiving aid from the government. This of course blurs the distinction between public and private educational initiatives. Interestingly, in practice, many aided schools, especially in Andhra Pradesh, also have classes and sections which are unaided and directly funded from fees. There appears to be some implicit cross-subsidy between these two types of sections [Reddy and Reddy 2001]. For example, teachers paid through government aid may be asked to also teach in non-aided sections. Sometimes these schools also collect, quite improperly, fees from all students irrespective of whether they are part of aided or unaided sections. "This is coming in handy", observe Reddy and Reddy (2001: 46), "for the management to raise money through fees."

Recent developments in high school education in the study states demonstrate that although the aided sector still has a sizeable presence, the expansion has been taking place mostly in the non-aided sector, with the government/aided sector either stagnating or shrinking.³ In AP the aided sector has always remained depressed, especially in rural areas. Correspondingly, there exists a limited grants-in-aid scheme in the state, now being subjected to further revision under the current pressures of cost-cutting measures.⁴ Also, here private schools operate mainly in urban areas. It appears as though government schools are co-terminous with rural schools, whereas private schools are a synonym for urban schools. Though the urban bias of private schools is also visible in the other states, it is significantly more pronounced in AP. Interestingly, in Maharashtra private aided schools are the most numerous of all. What is more, this already oversized sector has continued to grow during the 1990s. Thus the expansion of secondary education in this state has been driven by the growth of the aided sector. However, a new shift is visible – from Kerala to Maharashtra – in the parental demand for education – away from state-board schools in favour of schools under the CBSE/ICSE board.

In recent times, the government of AP has been very cautious in admitting new schools or sections (even in LB schools) into the aid scheme, trying to reduce the burden of grant under the pressures of financial austerity, creating in the process some new distortionary forces both within the education department as well as the school management. Reddy and Reddy (2001) comment on various corrupt practices which surround the grants-in-aid system and teacher recruitment in aided schools, especially at the time of admitting new schools into the scheme. As they put it, "To recruit in place of an aided post of a retired teacher the management demands lot of money which sometimes exceeds even Rs 2 lakh. Therefore, one can observe an economically better off teaching community in aided schools when compared to government schools" (p 45).

In Tamil Nadu also, some rethinking has begun in recent years vis-à-vis the existing grants-in-aid policy. The growth of aided institutions had almost stagnated during the decade of the 1990s. As per the recent official position, schools opened and recognised after 1990-91 (including minority schools) will not be eligible for any official grant and therefore will have to function as self-financing institutions. While we do not go into the details of this issue in this paper, a general comment is apposite here about the public-private sharing of financial burden. There is a viewpoint that sees private schools as ways of relieving the government financial burden. But there is an alternative argument suggesting that many non-governmental educational institutions

eventually seek government support such that the government relieves the burden shouldered initially by the concerned communities. Indeed, a major incentive for communities to establish schools is the promise of future government takeover [Bray 1996].

In Maharashtra, the current official aid policy vis-à-vis private schools follows two tacks: (a) at the time of granting permission and recognition, some schools are accorded the status of 'permanently unaided'; (b) another set of schools start with no governmental support at the initial stage. But once the latter are able to financially sustain themselves for five years, they become eligible for receiving governmental grants in a phased manner, following a pre-specified official formula. Recently, a new proposal for substantial revision of the present grants-in-aid policy is under consideration in the state, whereby the government will gradually reduce and subsequently discontinue aid altogether. When implemented, this policy would mean that all new schools are granted only the permanently unaided status. The wider ramifications of such major policy shifts require deeper probing. In particular, how we reconcile the newly emerging challenges of secondary education with the current climate of cost-consciousness and austerity is a confounding issue.

State-level Centralisation of Educational Activities

The organisational structure of school education in most states of the Indian union is a complex web of administrative structures on the one hand and rules, regulations, norms and functions on the other. All these ostensibly aim to ensure that educational institutions satisfy minimum conditions of physical provision, teacher competence and financial probity [Lewin 1997]. They cover a wide range of activities starting from personnel and financial management, to educational policies and programmes, to supervision, academic support and inspection and a multiplicity of institutional arrangements around these activities. To get an idea of this multidimensional organisational edifice, the activities and functions of the education department have to be studied at the secretariat, directorate and inspectorate levels. Furthermore, it is essential to proceed progressively downward from the state, district, block to finally the school level to make sense of how schools are established, how teachers are trained, certified, appointed, transferred and fired, who sets school curriculum and selects text books, how school timing, class sizes and fee structures are determined and above all who finances school education.

Some local variations notwithstanding, in all the four sample states, the secretariat is the main policy and planning organ of school education. Under this apex body there exist the various directorates that are the main implementation agencies. The structure at the directorate level however differs widely across states. At the field level (i e, district and sub-district levels), secondary education is mostly supervised by district education officers (DEOs), assisted in turn by block level officers and inspectors. Some of the major states, like Maharashtra and Andhra Pradesh, have established an additional regional-level set up between the directorate and district-level apparatus, to act as a conduit between the two.

Table 2 draws a schematic sketch of various educational activities and functions and their distribution across a number of agencies. It appears that decisions regarding virtually all school related

activities of secondary and higher secondary schools – pedagogic, administrative as well as financial – are concentrated at the state level. Opening of new schools, grant of recognition to private schools, sanction of new teaching posts are all largely state-level activities. Teachers are recruited by the department usually to a district cadre and are therefore transferable within the district. In this respect too, sub-state level actors exercise only limited powers. School construction and maintenance is one among a handful of functions that is vested with the sub-district level actors, in particular with the local bodies (LBs) that were traditionally responsible for such duties.⁵

The primary responsibility for school management remains largely centralised at the state level, with district and sub-district level officials and actors performing a relatively minor role in decision-making – as implementers for plans conceived at the state or even central level. Similarly, until recently the role of local bodies in education administration has been insignificant. Simply put, local participation in educational decision-making, by school-level actors, local representatives or parents/communities, and local bureaucracy is still a thing to come, especially at this stage of education. Interestingly, with the recent strengthening of panchayat raj institutions (PRIs), education up to the high school level has been brought under the ambit of these bodies. It is important to watch how long it will take to translate this paper commitment into actual practice.

But of the four states under scrutiny, in the state of Kerala, the new organisational principles, conceived under the aegis of the recently revived decentralised planning campaign, envisage much greater involvement and responsibility of local bodies, and people in general, in the preparation and implementation of

district education plans, as well as in specific problem areas such as teacher absenteeism and student attendance. Over and above the decentralisation reforms, the people’s planning campaign in the state has made great strides in fostering people’s participation in education planning and management, right from the district to the ward of a village panchayat, or even to the neighbourhood group level.

The preceding brief analysis of interstate variations in institutional features of school administration as well as in grants-in-aid policies was meant to capture a glimpse of ‘state’ or ‘policy’ effects on high school participation. For example, what forces enable the youth – especially the poor youth – to participate in high school education in Kerala but disable them from doing so in A.P? This requires a thorough examination of the crucial state-specific effects (differences in organisational styles, expenditures, progressive pro-poor civic activities, etc) that facilitate, in some cases, secondary school participation of poorer children despite their economic disadvantage, but fail to do so elsewhere. Although no rigorous attempt is made here to establish causality, in the next section we try to link up the institutional narrative with the question of access.

III Secondary Schooling: Some People Have More Access Than Others

It is still the situation in most of India – though comparatively better in the study states – that a majority of young people do not have access to secondary and upper secondary education. The position of the poor (and among them of women) is one

Table 2: Assignment of Educational Responsibilities within the Administrative Apparatus in Sample States

	State	District	Sub-district
Granting permission to open a new high or higher secondary school	Education department in consultation with the directorate and the finance dept	Inputs also from the district education officer (DEO) – application through the DEO	
Setting curriculum, selecting text-books, determining class size and school timing, and setting equivalencies	Department, directorate, SCERT/ Board of secondary education		
Sanctioning of teaching posts, hiring and placement of teachers	At the secretariat level in consultation with the directorate and departments of planning and finance	Placement and transfer at the revenue/education district level by deputy director/DEO for teachers in government schools	For other schools, appointment by school management with the approval of the DEO or local education bureaucracy
Training teachers	Directorate and SCERT	DIET	BRCs
Disciplining and firing teachers	Termination decision only at the state level, with DEO’s recommendation; scope for appeal to higher authorities or even to the court of law against disciplinary action	Inputs from DEO or zilla parishad in case of ZP schools	Management in case of private schools; if teachers have grievance against a decision, the government can intervene and exercise control over the concerned management; the case can also be taken to the court also
Hiring and firing of administrative personnel	Department and directorate	Limited disciplinary powers with the deputy director/CEO/DEO	
Fixation, financing and release of budgets to government schools and release of grant to aided schools	Department, with inputs from the directorate, based upon proposals from field level officials, and in consultation with the finance and planning departments; fund flows from the state level to the region, if any, and from there to the district level	Requisition for funds from schools scrutinised and approved by the CEO/DEO and then sent across to the regional deputy director, if any, for further approval; the DEO is also the disbursing authority	School management prepares and submits budgetary requirements and disburses salary in case of aid-receiving private schools
Maintenance of Schools		DEO and district panchayats	School management, PWD and sub-district level local bodies

Source: Based upon unpublished write-ups and discussions with several officials at the department of education in the respective states.

among the worst. Perhaps most urgently therefore, we need to address the issue of social and economic barriers to secondary school participation in the country.

Let us take a quick look at the educational endowment of the population (7 years and above) in the selected states, focusing in particular on the proportion of secondary educated people. The most recent figures (1999-2000) are available from the NSSO (2001). The average performance often conceals the fact that educational fortunes of different socio-economic groups vary widely. To lay bare such multiple dimensions of educational prosperity or impoverishment, it is possible to map out the widely diverging secondary completion rates among various population sub-groups, using statistics disaggregated by caste, class and gender. The data seem to carry the predictable message of gender and locational (rural-urban) disparities; as opposed to summary statistics, they reveal much more about how income-poor and status-poor (due to caste disadvantage) people suffer from special educational deficiencies. But interstate variations in these respects are evident from even the small sample of four states.

To pick out some stark records, while the average level of high school completion is itself low in the state of Andhra Pradesh, some people suffer much more than others in this respect, on account of belonging to the 'wrong' caste, class, gender or location. Only 1 per cent of ST rural women have finished high school in the state. Indeed, disparities in secondary participation between the haves and the have nots and between villagers and city dwellers appear so wide that they suggest the existence of two practically incomparable worlds of education in the same state.

In Maharashtra too, the usual effects of class, caste and gender on schooling are all evident, though in varying degrees. For example, while rural background demonstrably depresses educational participation, it has a far more damaging consequence for women than for men. Also, the commonly disabling effects of membership of 'lowly' castes appear somewhat muted. One may recall here that like Kerala and Tamil Nadu, Maharashtra has inherited a tradition of reformist social movements against upper caste domination and a relatively radical political culture. Such an element of reformism has contributed in some ways to the educational progress (albeit limited) of dalits in the state. Somewhat unexpectedly (as women in the state are known to have risen against patriarchal forces), women in Maharashtra, especially in villages, have a large education deficit. Above all, the situation looks particularly, ominous when we look at class differences. Indeed, in this state of relative economic prosperity income-poverty appears to be the worst form of handicap for both men and women, for urbanites as well as for villagers.

Income poverty seems to be a major barrier to secondary schooling in Tamil Nadu also, as only a small proportion of individuals belonging to the lowest expenditure class successfully complete secondary education in the state. The overlapping nature of social and economic barriers to schooling is also manifest, though somewhat less perniciously. For example, if one carries the triple disadvantage of being a woman, residing in a village and belonging to a very poor household, chances are that less than 2 out of 100 such women will get a high school degree.

On an absolute scale, the secondary completion rate is significantly higher among Kerala's population than what obtains among people in the rest of the country. As compared to the

situation in the other selected states, as well as by the national standard, even the so-called disadvantaged groups (not to speak of their privileged counterparts) have a noticeably higher proportion of high school graduates among themselves. Of course, this overall lead in secondary participation notwithstanding, relative disparities in this respect exist between the rich and the poor, and the forward castes and dalit groups in Kerala. In urban areas, however, these gaps are less pronounced. Clearly, Kerala society is yet to reach a stage in which secondary education is made generally accessible to all, irrespective of locational, caste-related, income-based disadvantages. However, it is important to bear in mind that many of these otherwise entrenched forms of deprivation are far less intractable in Kerala than in most other parts of the country. This society has almost closed the gender gap in secondary education.

Secondary Schooling of the Country's Youth

To ascertain the current trends as well as future prospects of high school education, it is more meaningful, however, to focus on the stock and flow of education among younger age groups. Because it is their progress or otherwise, and not so much that of adults (whose educational fortunes are unlikely to change dramatically), which will eventually make a difference to society's overall educational growth. In Table 3 we get some idea of the secondary completion rates of youth (15-19 year olds) in the sample states, based upon the latest NFHS (II, 1998) survey data.

Encouragingly, youth are doing better educationally in all these states, as compared to the population as a whole. Rural or caste-related disadvantages appear to be somewhat losing their grip on the educational opportunities of the younger generation. More importantly, in Kerala and in parts of Tamil Nadu, young girls no longer seem to suffer from any special barrier to secondary schooling just on account of being female. In Kerala, young girls in urban areas consistently outperform their male peers when we consider their respective school graduation records. Indeed, the goal of achieving gender parity in secondary participation is near complete in Kerala society. Similar strides have been made in reducing disparities among the rural and urban youth.

But this apparent progress in secondary schooling of the younger generation has to be placed against an analysis of who benefits from such overall growth. Using the detailed information on asset ownership available through the NFHS I (1992-93) survey, Filmer and Pritchett (1999) have developed an asset-based index of income poverty. They have then vividly demonstrated the poverty gap (to some lesser degree the gender and location gap as well) that yawns wide between the secondary school participation of the rich and poor youth (Table 4).⁶ In Andhra Pradesh, for example, school completion still appears to be the preserve of

Table 3: Education Attainment Profile of the Youth (15-19 Year Olds) in Selected States, 1998

	Completed at Least Grade 10			
	Andhra Pradesh	Kerala	Maharashtra	Tamil Nadu
Rural male	25.3	58.3	23.4	31.0
Rural female	13.6	60.8	21.2	22.2
Urban male	43.7	65.9	34.5	41.8
Urban female	39.7	65.2	36.7	42.4

Source: National Family Health Survey, II, 1998.

the privileged, although some roots of disadvantage look less pernicious and stubborn than others. For example, female and rural disadvantages are somewhat less pronounced, as compared to those emanating from asset-based poverty. Young girls lag behind their male peers by 18 percentage points; the rural youth trail behind their urban counterpart by 36 percentage points; the poorest falter behind the richest by 68 percentage points. But above all, consequent to a pernicious combination of being female and being poor, poor young girls stagger behind rich young boys by 80 percentage points when their school graduation records are compared. All this points to the entrenched nature of class disparities in the state.

In Maharashtra also, economic inequalities continue to impede the education progress of the younger generation, though perhaps in a less pernicious manner. Importantly, being female by itself appears to be less of a handicap in comparison to locational (i.e., being rural) and class-related (i.e., being poor) disadvantages. Asset-based poverty seems to be the correlate of the worst form of educational poverty, as indicated by a 50 percentage-point gap between school completion rates of the richest and the poorest youth and a 65 percentage-point gap in this respect between the richest boys and the poorest girls. In this connection, it is important to note that the respective grade completion rates of rich males and rich females are roughly similar. Otherwise stated, the preserve of privilege is enjoyed by elite boys as well as girls. In sharp contrast, it is the fortune of the poor that varies. The poor young girls are the worst-off section; in educational achievement they are far behind the rich boys as also behind their privileged female peers (and with a lesser margin behind boys of similar economic background). Simply put, class divisions appear overwhelming and tend to reinforce other entrenched inequalities.

Turning to Kerala, there exist marked educational disparities between the asset-rich and the asset-poor groups of adolescents. Although the absolute level of high school participation of the latter (nearly 42 per cent) is much higher than that of its counterparts (i.e., poorer groups) in the other chosen states, it is less than half of what their richer peers achieve (nearly 85 per cent grade 9 completion rate) in their own state. Herein lies a major trouble spot in the otherwise successful school education system of Kerala. Any policy measures toward expanding secondary schooling need to address this lacuna. On the more promising side of the register, the results reiterate the same positive features of gender and rural-urban equity in educational participation of the youth. That is to say, the place of residence or the gender one belongs to no longer determines secondary education opportunities of young boys and girls.

Simply put, for the rich, completing high school education is not a problem in the areas under study. What varies significantly however is the grade completion pattern of the poor across the states. It is indeed striking that there is so much variation within such a small set of cases.

Social Composition of Public and Private Schools

What are the main trends in secondary enrolment in schools under different managements? Is the expansion of secondary schooling, if any, driven mainly by the growing number of students in unaided schools? What are the respective shares of government, aided and fee-charging schools in total secondary enrolment? Do SC/ST students depend more on government

schools for their high school training as compared to children from the so-called forward communities? Here we wish to address, albeit in a limited manner, some of these aspects of secondary education. In general the growth of government and aided high schools and higher secondary schools has been tardy in the sample states. Clearly the expansion of secondary educational institutions is driven mainly by the phenomenal growth of unaided institutions.⁷

In Kerala private initiatives of many hues have spearheaded the movement for 'education for all'. But in their efforts they have been amply supported and encouraged by the government, mainly through the latter's liberal grants-in-aid policies. A product of this public-private collaboration in education is that private aided schools have a sizeable presence in the state's school education system. But even in Kerala, in more recent times – in particular in the latter half of the 1990s – the unaided sector has recorded an impressive growth.

Moving beyond numbers and relative enrolment shares, let us focus on the social background of students in schools under different management (Table 5). The aim here is to see how accessible high schools are to students of one traditionally disadvantaged community, namely, SC/STs. This may help us gauge the social distance that might have crept into the school system, due to the widening of student participation from all

Table 4: Secondary Schooling of Young (15-19 Year Olds) People in 1992-93 in the Sample States

	Grade 9 Completed (Per Cent)			
	Andhra Pradesh	Kerala	Maharashtra	Tamil Nadu
Location				
Urban	65.2	63.4	60.6	52.4
Rural	29.1	63.6	38.5	33.6
Asset				
Richest	81.8	84.8	74.9	74.3
Poorest	13.7	41.6	20.9	19.0
Gender				
Male	48.8	61.4	54.7	46.3
Female	30.7	65.5	42.0	35.3
Asset and gender				
Rich male	86.6	84.4	75.2	75.8
Rich female	77.9	85.2	74.7	73.1
Poor male	22.0	34.0	31.8	27.1
Poor female	5.9	48.1	10.2	12.3

Source: Filmer and Pritchett (1999).

Table 5: Segmentation in Schools under Different Managements in Sample States, 1992-93

	Percentage of SC/ST in Total Enrolment in Classes					
	Government and LB	IX-X		Government and LB	XI-XII	
		PA	PUA		PA	PUA
Andhra Pradesh						
Rural	20.4	21.3	9.4	23.8	20.2	17.3
Urban	19.1	15.7	7.9	19.2	6.4	10.8
Kerala						
Rural	13.4	11.5	2.4	7.1	6.7	0.0
Urban	10.2	7.0	2.5	4.1	8.6	0.0
Maharashtra						
Rural	32.6	20.6	21.4	29.8	20.2	20.3
Urban	22.4	17.2	12.8	16.5	16.1	12.4
Tamil Nadu						
Rural	26.2	20.0	12.8	22.6	14.6	7.7
Urban	25.3	17.5	7.8	20.5	14.7	5.7

Source: Calculated from *Sixth All India Educational Survey*, Vol II, NCERT, New Delhi, 1998.

social classes on the one hand, but rationing of places in elite educational institutions on the other. Put differently, are the schools under different managements themselves socio-economically stratified? Put more crudely, are government schools those where mostly dalit children study? Is there a corollary for unaided schools?

Some interstate variations notwithstanding, the data seem to suggest that government and local body schools accommodate a majority of the SC/ST students (in particular those from rural backgrounds) who are fortunate enough to make it to high and higher secondary schools. Aided schools absorb a relatively lesser proportion of them, with unaided schools hardly offering any places for this group within their set up. It is a truism worth repeating that schools themselves are socio-economically stratified, with students of deprived communities heavily relying on public institutions for whatever little progress they make. Simply put, government schools become 'dalit' schools, while unaided schools remain largely elitist.

Interestingly, in the state of Maharashtra in both government and aided schools SC/ST students are represented in numbers, which closely correspond to their share in the total population. In comparison, unaided schools remain relatively inaccessible to students of SC/ST communities. But on the whole, taking a comparative perspective, high and higher secondary schools in Maharashtra appear to be much more open to potential students from SC/ST communities than what we observe in the other study states. Another important point is that the social composition of pupils in private aided schools is fairly similar – with degrees of difference in the regions under scrutiny – to that of pupils in government schools, suggesting in turn that aided schools are relatively more accessible to disadvantaged groups as compared to unaided fee-charging schools.⁸ Indeed, the big contrast here is between government and aided schools on the one hand and unaided schools on the other. This also strengthens the case for aided schools.

Given the stark reality of school segmentation, it is apt to ask how different educational institutions fare with respect to grade progression and performance of their pupils.

Transition and Progression within Education Cycles

If our aim is to examine whether elementary school graduates enter the secondary stage in large numbers and complete the same, we need to look at both the transition from the upper primary to the secondary stage, as well as student progression within the secondary cycle. To that end, the ideal situation would be to collate student flow data for a number of years so that we can calculate for example grade 9 enrolment, as a per cent of grade 1 enrolment eight years ago; or grade 9 enrolment as a per cent of grade 8 enrolment one year ago and so on. This will allow us to examine whether it is the rationing of secondary places that accounts for the termination of schooling after the elementary level (if it is indeed the case that dropout is high between the last year of elementary education and the first year of secondary education). Or does the problem lie within the secondary school system itself (if there are high failure rates at the end of grade 10)? In short, it would be helpful to find out whether our analytical and policy attention has to be directed towards issues and problems before or after the transition.⁹

Based upon crude data from the education departments of respective states on student flow, we try to trace the movement of students from the upper primary level to the secondary stage and then study the pattern of progression within the secondary cycle itself.¹⁰ In Kerala, almost all elementary level students, from both SC/ST and non-SC/ST backgrounds, proceed to the next level of schooling. More than 90 per cent of boy and girl students do so; indeed girls fare slightly better than their male peers in this regard. It appears that transition from the elementary to the secondary stage poses no serious problems to Kerala's children, irrespective of their gender or caste.

However, there are indications of a large-scale withdrawal of students between grades 9 and 10, caused by dropouts, push-outs or strict evaluation and detention in school or a combination of all of these. The Kerala education report puts it succinctly [KSSP 1999:40]:

Enrolment figures at the secondary level show some interesting trends. Students seem to make a smooth transition from the primary level to the secondary level with hardly any dropouts. Dropouts appear at the secondary level, and after standard IX there is a clear slump, with the schools applying the promotion rules. Only 70 per cent of the initially enrolled students finally make it to standard X.

It is certainly possible that school authorities follow an unwritten practice of rigorous screening before students proceed to the final grade of the secondary stage.

In Tamil Nadu too, a sizeable proportion of boys and girls studying in grade 8 proceed to grade 9. But for girls belonging to SC/ST communities, transition from the upper primary to the secondary stage appears to be a much bigger hurdle. SC/ST boys, however, do not appear to be suffering from any special disadvantage in this respect. There is, however, a noticeable decline in the proportion of students who proceed beyond grade 10. Stated differently, a large proportion of students from all communities fall through the net of schooling in the passage to the higher secondary stage. Only about 30 per cent of those who enroll in grade 8 reach grade 12. For SC/ST girls, the corresponding figure turns out to be as low as 20 per cent. Why does this point of transition appear to be so porous? Is it an effect of failure to graduate from secondary classes or is it due to the inadequacy of places at the next stage for secondary school graduates, or both? Indeed, transition from secondary to upper secondary level seems to be the greatest hurdle; more concretely the greatest fault-line appears between grades 10 and 11.

It is surprising to note that in AP the rates of progression from the upper primary to the secondary level, as well as those within the secondary cycle are quite high. Our uneasiness with official data is quite acute here. This is counter-intuitive too, as the other relevant statistics bring out several problems that beset the school system in AP. We do not have adequate information that reasonably explains this anomaly.

Finally, like in the educationally forward states of Tamil Nadu and Kerala, in Maharashtra too the so-called 'massification' of secondary schooling is under way. Put differently, a majority of school age children indeed go to school and complete the elementary stage and in turn make a successful transition to the secondary level. This is largely true for SC/ST communities also – a significant marker of the assertion of 'low' caste social ambitions. Progression through grades within the secondary cycle is also more or less steady; only in standard 10 some effects of

dropouts and behind-schedule progress of students begin to show up. Jarring breaks in the flow of students occur between grade 10 and grade 11, caused clearly by high failure rates in public examination at the end of the secondary cycle. This is one of the most serious problems that plague secondary schooling in the states under study. While the quality of education at the secondary stage leaves much to be improved, the origin of the poor performance at the school leaving examination can be traced back, at least partly, to deficiencies at the basic education level. The cumulative effects of a long-drawn 'education deficit' are indeed severe.

Performance of Students and Schools

What is the appropriate measure of performance – pass/completion rates or subsequent earnings? Admittedly, pass rates are a crude proxy to measure student achievement or internal efficiency of schools. Indeed, in the view of several educationists, evaluating student performance is a complex task, involving different norm-based and other competency indicators of pupils' absolute and relative progress. In the absence of such comprehensive evaluation results, we are forced to rely on what is available with us. It may also be mentioned that standards and assessment practices vary from state to state. Therefore, statistics on pass percentages of students under different examination systems in different states may not be strictly comparable. Again, attainment depends upon parental inputs and peer group effects, in addition to schooling inputs. Also, pass rates can be allowed to increase independently of whether performance is improving [Lewin 1997]. These limitations acknowledged, pass rates, in practice,

are the best proxy data available at the macro level as academic performance indicator.

In Tamil Nadu, about 30 to 35 per cent of the students who appear for school leaving examinations at the end of class 10 fail on the first attempt. Many repeat the examination about which we do not have readily available data. The incidence of failure is on the whole somewhat lower at the next stage. Management-wise percentages vary widely, from roughly 70 to 95 per cent between public and private schools. The performance of students from aided and unaided schools in the secondary school leaving examination is better on average, although there are wide variations across privately managed schools also. Of course, here we do not control for the influence of social class and for factors such as the contribution of private tuition. Indeed, given the limited data, there is no scope for adjusting for the socio-economic background of pupils appearing for school leaving examinations, unless we conduct primary surveys. In aided and unaided schools, many come from higher socio-economic background; hence 'good' schools are often schools made up of 'good' students, with greater parental support and academic ability, which may account for their better performance.

The official data from Tamil Nadu show that there are no significant differences between boys and girls in their respective pass percentages. In fact, girls seem to outperform boys by a small margin. But differences do exist between SC/ST students and others in this respect (Table 6). They have much lower pass rates, when compared with those of students from more privileged social backgrounds. Variations in pass percentages appear to be uncomfortably consistent with caste-based hierarchies in the state.

In Kerala over a 10-year period SSLC results show a more or less unvarying pattern. On the average only a little over 50 per cent of the high school students have successfully graduated. Put another way, only one-third of the students enrolled at the primary stage, manage to pass the SSLC [KSSP 1999]. While the ratio has improved somewhat in recent years, it has remained more or less unchanged for nearly a decade. This is particularly intriguing in a state that has expanded the base of schooling for quite some time now. Table 7 presents a somewhat detailed analysis of SSLC results in 2002 in the state. Figures clearly show how pupil performance at the school leaving examination varies from government, to aided, to unaided schools, offering a commentary on the performance of schools themselves, let alone the students. It is as if schools themselves are qualitywise stratified. While only 49 per cent of students from government schools successfully graduated from high school in 2002, nearly 98 per cent of their peers from unaided schools have done so. For students of aided schools, the corresponding figures lie in between – at 65.5 per cent. The performance of SC/ST students is much more wanting, with less than 40 per cent of them

Table 6: Pass Percentages of Students from Different Communities in Secondary and Higher Secondary Examinations in Tamil Nadu

	1999		2000		2001	
	B	G	B	G	B	G
SSLC Examination						
OC	74.4	83.4	70.6	82.1	75.8	84.1
OBC	72.0	79.9	74.9	81.2	76.1	81.9
MBC	58.3	67.0	62.7	68.3	63.8	68.3
SC	49.2	57.2	53.1	57.4	55.4	57.6
ST	54.7	51.3	58.1	61.6	57.0	61.0
All Communities	63.7	72.5	66.9	73.0	68.3	73.3
Higher Secondary Examination						
OC	79.4	91.7	87.9	93.6	88.8	91.9
OBC	89.1	88.0	84.1	91.3	84.4	89.3
MBC	84.3	80.4	73.6	84.3	76.5	83.3
SC	83.2	70.6	64.7	76.3	69.8	76.4
ST	64.1	75.7	72.2	78.8	72.7	76.9
All Communities	74.9	84.4	78.3	87.6	80.4	82.2

Notes: OC = other castes; OBC = other backward castes; MBC = most backward castes; SC = scheduled castes; ST = scheduled tribes.

Source: Unpublished data from the Department of Government Examinations, Directorate of School Education, Tamil Nadu.

Table 7: SSLC Results in Public and Private School in Kerala, 2002

	Total Appeared	Appeared from			Passed from			Pass Percentages			
		Government	Aided	Unaided	Government	Aided	Unaided	G	A	UA	Total
All communities	454308	166808	267107	20393	82279	174877	19906	49.3	65.5	97.6	61.0
SC/ST communities	46004	20919	24582	503	6978	10791	430	33.3	43.9	85.5	39.5
		(36.7)	(58.8)	(4.5)							
		(45.4)	(53.4)	(1.2)							

Note: Figures in parentheses denote share in total number of candidates appeared.

Source: Calculated from GOK, Government Examinations, 2002.

successfully clearing the SSLC examination in 2002. What is indeed disturbing is that SC/ST candidates appearing from government schools fare even worse, with only 33 per cent of them qualifying in the final examination. Their pass percentages are somewhat better in aided schools and considerably so in fee-charging private schools.

The point to be seized is that the so-called 'good' unaided schools are often schools comprising 'good' students, with constant parental guidance, home support in the form of private tuition, 'selected in' through carefully designed elimination tests, euphemistically called admission tests. Given that places in 'good' schools are strictly rationed – unaided schools have a nominal share of the total number of candidates appearing for the SSLC examination in the state (4.5 per cent overall and only 1.2 per cent of students from SC/ST communities) and that students of disadvantaged backgrounds therefore rely more on public and aided schools, which cater to the 'masses', the average performance in SSLC examinations is driven more by what teaching-learning goes on inside government and aided schools than in private schools.

This further implies that to improve the average performance (and not just that of a privileged few), a good deal of policy efforts have to be directed towards improving the quality of government and aided schools. It is to be noted, however, that there is considerable inter-district variation in the performance of government schools themselves – ranging from a low of 33 per cent to a high of 65 per cent. Similar discrepancies in student performance appear among aided schools of different districts also (varying between 43 per cent in Palakkad to 80 per cent in Ernakulam).

In Maharashtra the average failure rates in school leaving examinations in the decade of 1990s hover around 50-55 per cent. High failure rates in public examinations at the end of the secondary and senior secondary cycles indeed show substantial wastage of resources. Based upon elaborate statistics of the intermediate examination results of 1998 in the state of Andhra Pradesh (i.e., unpublished data at the Board of Intermediate Education) which cover dimensions of gender, caste, school management and humanities/science streams, we have calculated and presented in Table 8 a disaggregated analysis of student performance at the end of the intermediate (i.e., 'the plus two' stage) cycle. Several interesting points attract our attention here. Some pertain to problems that are common to the entire system of intermediate education; others relate to lacunae specific to particular student groups, or educational institutions. Generally speaking, girl students consistently perform better than boys, irrespective of the type of schools they are attending or the kind of courses they are taking. Similarly, results of students enrolled in science streams are considerably better than those of students enrolled in the humanities branch. Above all, students of SC/ST background suffer from some special difficulties that get reflected in their less-than-average performance at the board examination. In comparison, students of non-SC/ST communities (labelled here as 'others') have a clear advantage ensuing presumably from their home environment, access to better quality of instruction as well as a conventionally more supportive social culture.

When we further disaggregate pass percentages by the management of junior colleges, the data clearly indicate the particularly poor performance of government colleges. Students of both

SC/ST and other communities appearing as candidates from government run colleges have a far less chance of clearing the final examination, as compared to those studying in aided and unaided colleges. Students of unaided colleges have a far better record of successful completion at the end of the intermediate cycle. Even students of SC/ST background, let alone from 'other' groups, outperform their peers studying in government and aided colleges. Barring one or two exceptions, the pass percentages in unaided institutions are always higher than the corresponding figures in the other two categories of colleges.

Clearly, failure at the end of the school cycle – especially in government educational institutions – pushes a considerable number of youth out of the school system. But adolescence or young adulthood is also the age at which household or social pressures prompt school goes to discontinue studies and join work. Indeed, adolescent labour is socially more acceptable than child labour. Adolescent labour, therefore, is potentially one important determinant, among others, of the premature termination of secondary schooling. This issue, of course, requires a thorough investigation that lies beyond the scope of the present study. To say the least, the relation between education and employment is complex. Surely, training or education is not an absolute guarantee against unemployment; also there is no guarantee that increasing the number of trained people will reduce aggregate unemployment. The latter depends on the economic health of the country as a whole.

Also, several contradictory forces coexist. At one level there is an excess demand in the market for skilled and semi-skilled workers, from technicians and skilled artisans to professional software engineers [KSSP 1999]. In the country, there is indeed a dearth of people competent to handle tasks requiring medium-level skills. At another level, in the absence of avenues for suitable occupations, upon completing successfully one stage of education, students move on to the next stage as a matter of course and postpone entry into the workplace not due to the urge to pursue higher education per se but because of the lack of employment opportunities. Without pretending to make sense of these confounding issues, we turn next to a fleeting discussion on vocational secondary education.

IV Vocationalising Secondary Education?

Vocationalising secondary education has remained a contentious issue throughout the world, so also the inter-relationship between general/academic and vocational education. Also relevant is the issue of the stage at which vocational instruction

Table 8: Pass Percentages of Students at Intermediate Level in AP, 1998

	Government			Aided			Unaided		
	Science	Arts	Total	Science	Arts	Total	Science	Arts	Total
Female									
SC/ST	28.8	21.4	25.4	22.7	25.0	23.9	42.4	31.4	38.4
Others	33.1	32.7	32.9	46.2	46.7	46.5	61.3	53.5	58.6
All	32.1	30.9	31.4	42.4	43.7	43.1	59.8	51.6	56.9
Male									
SC/ST	27.3	16.2	21.1	20.5	18.4	19.3	38.1	17.2	28.7
Others	31.6	23.1	29.8	39.5	30.2	34.9	57.8	38.2	52.9
All	30.5	21.4	25.3	36.6	27.9	32.2	56.2	34.5	50.4

Source: Calculated from unpublished data from the Board of Intermediate Education, Hyderabad.

is to be introduced – at the secondary, higher secondary or the post-secondary stage. Besides, what is the appropriate institutional location for technical and vocational education? Should we aim for the complete separation of academic and vocational preparation? There are wide divergences in western countries too in these respects.

Certainly, one of the purposes of secondary/senior secondary education is to prepare young people for work, improve their performance and productivity, in other words, to align secondary/higher secondary education more closely with labour market needs as well as to assess the labour market outcomes of general/academic versus vocational education (e.g., the rate of return analysis). But there are differences of views regarding the relevance and appropriateness of school-based vocational training.

Several approaches compete for attention vis-a-vis three related issues, namely, the type of training, the mode of delivery and the source of funding. One view argues that demand-driven training systems by private sector institutions perform better than supply-driven systems by public training institutions [see the discussion in Bennell and Segerstrom 1998]. Government training is expensive, the argument continues, and leaves workers with few marketable skills. Should vocational training, then, be left to the private sector, with government involvement kept to a minimum? Are occupation-oriented programmes best imparted in the workplace, outside the school system? Should employers and employees be responsible for the bulk of funding of vocational education provision? Fully resolving these questions requires research that is beyond the scope of this study. We only raise some of these issues in our state-specific contexts, without fully answering them.¹¹

In the chosen states, vocational training, as a distinct stream at the plus-two stage, was introduced as a centrally sponsored scheme in the 1980s. In addition, in Kerala at the lower secondary level itself there are a few junior technical schools. However, information on vocational streams, student intake and their performance is very sporadic in all these states. Comparatively speaking, the enrolment share of vocational courses is higher in Tamil Nadu and the other study states than in the northern part of the country. If at all, this centrally sponsored scheme can claim some degree of presence only in the southern states. The data no doubt are very imperfect. There are discrepancies between the NCERT survey data and official figures regarding the estimated share of vocational enrolment as a percentage of total secondary enrolment. In Tamil Nadu, at the senior secondary stage, less than 20 per cent of total enrolment was in vocational education in 1990-91. This share has dwindled further to constitute only about 13 per cent of total higher secondary enrolments in 2001.

Sixty six vocational courses under six major areas of agriculture, home science, commerce, engineering, health and miscellaneous courses are being taught at the higher secondary level in the state, which, many feel, are one too many. As per government of India norms, one full-time and one part-time vocational teacher is necessary for each course, but in practice there are only 3,366 vocational instructors working in higher secondary schools in the state in the late 1990s [*Tamil Nadu Human Development Report*, 2002]. Nearly 50 per cent of teachers are part-time employees; many work on a contractual basis for years together, having no specialised training throughout their entire service career and with little hope of getting regularised.

In Kerala, there has been a tradition of craft-oriented training to create skilled technicians, artisans and so on. In Cochin efforts were made to vocationalise education by starting industrial schools as early as 1890. Junior technical schools, where students can join after completing grade 7, were established in the state mostly in the 1960s. However, despite this felt presence of school-based technical education programmes, unemployment among vocational school graduates is widespread; many students in vocational streams indeed want to come back to the educational mainstream and are allowed to do so under the existing rules.

The separate Directorate of Vocational Higher Secondary Education came into being in Kerala in the year 1983-84 and vocational education at the higher secondary level (i.e., the plus two stage of school education) was formally introduced. Most of these schools in the state, however, are only about 10 years old, as vocational courses were introduced in 157 schools during the year 1989-90. The major motivation behind their creation was to avail of the central assistance; hence not much planning had taken place before they were started. In recent years, these schools admit a little over 20,000 students in all the vocational streams.¹²

But the programme suffers from a number of weaknesses on all fronts – institution, instruction and administration. One major trouble spot in the programme lies with the absence of trained and competent full-time teachers. Most of such schools lack sufficient number of staff, let alone permanent staff. A further element of ad hocism ensues from the fact that the programme basically runs on a system of guest lecturership. Therefore, although on paper many good courses are on offer, very few are taught well. Surely, some courses are obsolete, often keeping no track of changes in the occupational characteristics of the labour force. There is indeed much scope for improvement in the school-based vocational education programme. The quality of available vocational training is of crucial importance here.

The Kerala education report clearly brings out the sad state of affairs in graphic details [KSSP 1999:45]. “All members of the 4,206 strong teaching staff in government VHS schools are temporary; they are appointed every year from employment exchange on a provisional basis. They are mostly inexperienced and hence incapable of imparting any meaningful education or training.” There are hardly any facilities in the state to train teachers for vocational education. “There are no proper textbooks”, the report continues, “or instructional materials to teach vocational subjects. The VHS schools do not have the necessary infrastructure, such as well-equipped laboratories and workshops, to impart practical training, and there are hardly any linkages with industry.” In the state of Maharashtra too, some moderate success has been achieved in the spread of school-based vocational education; but in Andhra Pradesh vocational education absorbs a minuscule proportion of total high school enrolment.

It may be argued that the vocational education programme at the higher secondary level has failed not because it is inherently problematic, but because the programme was ignored and overlooked since the time of its inception. Analysing the pattern of central budgetary allocations (i.e., the centrally sponsored schemes on education), Shariff and Ghosh (2000) comment,

The main thrust of the secondary education budget is on the Navodaya Vidyalayas (34 per cent of the total) which are residential schools spread all over the country and Kendriya Vidyalayas

(46 per cent of the total). It should be noted that the budget for vocational education is only 3.2 per cent of the total.

The purpose of the 10+2 system is to allow children to pursue options other than higher education. But resource allocation is at odds with this stated intention. If alternatives are to be taken seriously, they need to be attractive, and lead to certification in a range of other activities, and hold out the promise of high returns. The current allocations do not suggest that this is being done with any *seriousness* (emphasis added).

The current allocation to Navodaya Vidyalayas is around Rs 105 lakh per school, Kendriya Vidyalayas Rs 68 lakh per school, and for vocational education Rs 65,000 per school.

V Concluding Remarks

Here we do not make any attempt to summarise the foregoing discussions. We only raise a few issues that are germane to the new imperative of widening quality secondary education. As the knowledge-intensive service sector more and more dominates the labour market and in turn requires an extended period of schooling – especially the expansion of secondary and senior secondary participation – the following issues attract our attention. These include the relative under-enrolment of deprived communities at this stage; commercialisation of secondary education; decentralisation reforms in education; segmentation in schooling; demographic changes and secondary enrolment; and parental views on secondary education and so on.

One major area of concern is the burden of the government for financing education. Resource requirements for achieving wider secondary schooling would perhaps be the biggest challenge, given the nagging constraints on public spending. This, of course, is a big issue, not easy to settle. Would secondary education be primarily tax-financed or supported through private contributions? On the one hand, as the poverty gap in secondary education discussed above vividly demonstrates, it is unlikely that substantial improvements in mass access can be financed wholly from private resources. Hence, a generic market prescription in the face of the highly restricted nature of secondary participation is not likely to be sustainable. On the other hand, in recent times the idea of public financing of education opportunities beyond the period of compulsory schooling is increasingly giving way to the idea of shared responsibility or partnership between government, employers and learners themselves. In case of the four study states, one discerns a growing role of the private sector in both provisioning and financing of post-elementary education.

Indeed, as we try to suggest above, in Kerala, Tamil Nadu and to a lesser extent in Maharashtra the private sector used to contribute significantly to financing education in the past as well. Indeed a multiplicity of educational institutions came up in response to felt educational needs at different historical periods. Many of these agencies drew sustenance from both public support and private contributions. But the point to be seized is that though originating in the private sector, the effect of activities of many of these actors and agencies was indeed 'public'; they led to the emergence of not an exclusionist claim of 'education of a few' but of a democratic and inclusivist norm of 'education for all'. Admittedly, at present such public-spirited private initiatives are not easily forthcoming. Consequently, policy-makers in almost all states of the country have recently turned to encouraging the

private sector to take up some educational responsibility. What would be the nature of such public-private collaboration is precisely the question to address and research.

In forging such complementarity, it is important to bear in mind the need to target subsidies to poorer students for better access to secondary education and thus to ensure that the pattern of public spending on education is consistent with equity objectives. Usually it is expected that children from downtrodden sections will benefit from spending on government schools, as they rely heavily on the latter.¹³ But in this context it is also important to pay a closer look at the aided schools. It is evident from the foregoing discussion that they are better than government-run schools. Also, in three out of the four sample states (Andhra Pradesh is the outlier here) aided schools seem to have become reasonably accessible to disadvantaged groups, in sharp contrast to unaided schools. Hence there is a case for strengthening and expanding aided schools, as a potentially effective means of narrowing the gaps between the privileged youth and their disfavoured peers. But at a time when the social composition of aided schools is beginning to assume a mass participatory character in the states under review, we also notice almost in tandem a process under way in the same states (themselves reeling under increased pressures to get the deficit down) to revise their grants-in-aid policies much to the disquiet of aided schools.

Admittedly, the incidence of aid to private schools used to benefit the higher income groups to a greater extent, because they were the primary clientele. But, since these schools have become relatively more representative of the masses in recent times, at least in the study states, there is room for serious discussion on the nature of aid policies to private schools. As we learn from the Kerala experience [Nair and Salim 2002], time and again the grants-in-aid schemes in the state were rationalised by excluding some sections and including others. The purpose of such reform measures was to democratise access to schooling. The challenge therefore is to institute a dynamic – as opposed to a static or 'sacrosanct' – system of incentives and subsidies, keeping in mind the centrality of the educational needs of the depressed classes. ■■■

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Notes

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1 I am indebted to Jean Dreze for insightful comments on this issue. Also, we do not take into account in this paper the phenomenon of demographic transition in some states (especially in Kerala and Tamil Nadu) and its effect on the number of school age population and correlatively on investment decisions (e.g. closure of 'uneconomical' schools, etc). The pattern of demographic changes differs considerably by state. Some of the states that are both poor and most educationally deprived also face the challenge of a school-age population that will go on growing at least

for the next 25 years [Cassen 2002]. On the other hand, in Kerala both the primary and secondary school population have already started to decline; enrolment rates at these stages have also been relatively high in the state. This implies that Kerala will enjoy a 'demographic bonus' in the shape of released funds that need to be redeployed. Andhra Pradesh, Maharashtra and Tamil Nadu will see declines in both their 6-10 and 11-14 age groups between now and 2026. The meaning of all these is considerable.

- 2 I am indebted to D Narayana for useful discussions on this point. A slightly more alarmist view will also suggest that in the absence of a strong public accreditation body to ensure quality, anybody can now start plus two courses; this will further lead to an unhealthy competition among teaching shops for greater enrolment of students.
- 3 One cannot be fully confident about the reliability of available data on secondary schools or secondary enrolment. Therefore, one is not completely sure whether observed differences are indicative of ground reality or are simply an artifact of data limitation.
- 4 One such variant of state-assisted privatisation under consideration is to provide a one-time grant to new and existing private institutions and allow them to evolve into self-financing bodies.
- 5 In the past, local bodies such as panchayat unions in Tamil Nadu, mandal parishads in Andhra Pradesh and Zilla Parishads in Maharashtra used to look after school education. However, the powers vested in them were eventually transferred to the education department. Perhaps school maintenance is the only function that still remains within the jurisdiction of LBs who have otherwise been stripped of virtually all control over erstwhile LB schools, including recruitment, monitoring and transfer of teachers; consequently they evince little interest in school functioning.
- 6 Their focus is on grade 9 completion rates among young boys and girls.
- 7 Importantly, wide discrepancies are found between different sets of data regarding the relative share of the public and private sectors (aided or unaided) in high/higher secondary schools or secondary enrolment. For example, wide divergences exist, in these respects, between official/departmental figures and results of independent surveys (such as the NCERT Sixth Education Survey or the NSSO 52nd round education survey). No doubt there are problems of comparability. However, here we do not proceed beyond flagging these anomalies toward fully resolving the issue.
- 8 I owe this point to incisive comments by Jean Dreze on an earlier version of the paper.
- 9 For a very helpful discussion on this issue, see Filmer and Pritchett (1999). However, we may add here that sometimes it is difficult to neatly compartmentalise and apportion educational shortcomings across different cycles. Rather, the malaise of one stage tends to spillover to the next, creating a cumulative deficiency. For example, studies show [World Bank 2002] that failure in public examination at the end of the secondary cycle may be traced, at least partly, back to educational flaws and inadequacies at the elementary level itself.
- 10 The data are available on request.
- 11 In some scholarly and policy analyses on vocational education and training (VET), a shift has taken place from 'the manpower requirement approach' to 'the rate of return' approach. Consequently a focus on labour market outcomes of vocational training investments has gained prominence. For a very helpful review of several of these issues, see Bennell and Segerstrom (1998). Evaluation of VET programmes in several Latin American countries has shown that academic school education has better outcomes than vocational school education; also costs of vocational secondary education is higher than general academic schooling. These have further implications for the type and content of secondary schooling. The international picture of VET is however mixed and unclear. In the OECD countries vocation education constitutes a sizeable segment of the secondary school sector. Several of the rapidly growing economies of south-east Asia also put emphasis on vocational education at an early stage in their industrialisation processes. China too adopted from the very start of industrialisation a very proactive and aggressive manpower development strategy and great efforts were made to vocationalise its secondary education since the late 1970s [Yang 1998]. But as mentioned above, there is no clear evidence, at least in the Latin American countries under review, that academic secondary school leavers (who do not go to universities) are worse-off in the labour market than vocational school graduates [Castro et al 2000]. But these Latin American

countries are also those with low economic growth rates; hence the authors remark that the comparison between two streams is complicated by a number of issues, including the rate of growth of the economy as a whole and, in particular, the growth rate of the industrial sector, service sector, formal sector employment, etc. We cannot ignore the degree to which unemployment rates might suppress rate of return on education.

- 12 However, vocational enrolment records a steady increase. In 2000-2001 about 16 per cent of total 'plus two' enrolment is absorbed by vocational schools. This proportion is indeed high (same as in Tamil Nadu) as compared to most other States in the country.
- 13 However, at times public spending itself has the effect of hidden subsidies from which the affluent benefit disproportionately; recall that those who continue education enjoy more subsidies and thus the system favours higher level students.

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