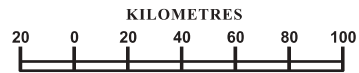


Literacy and Education

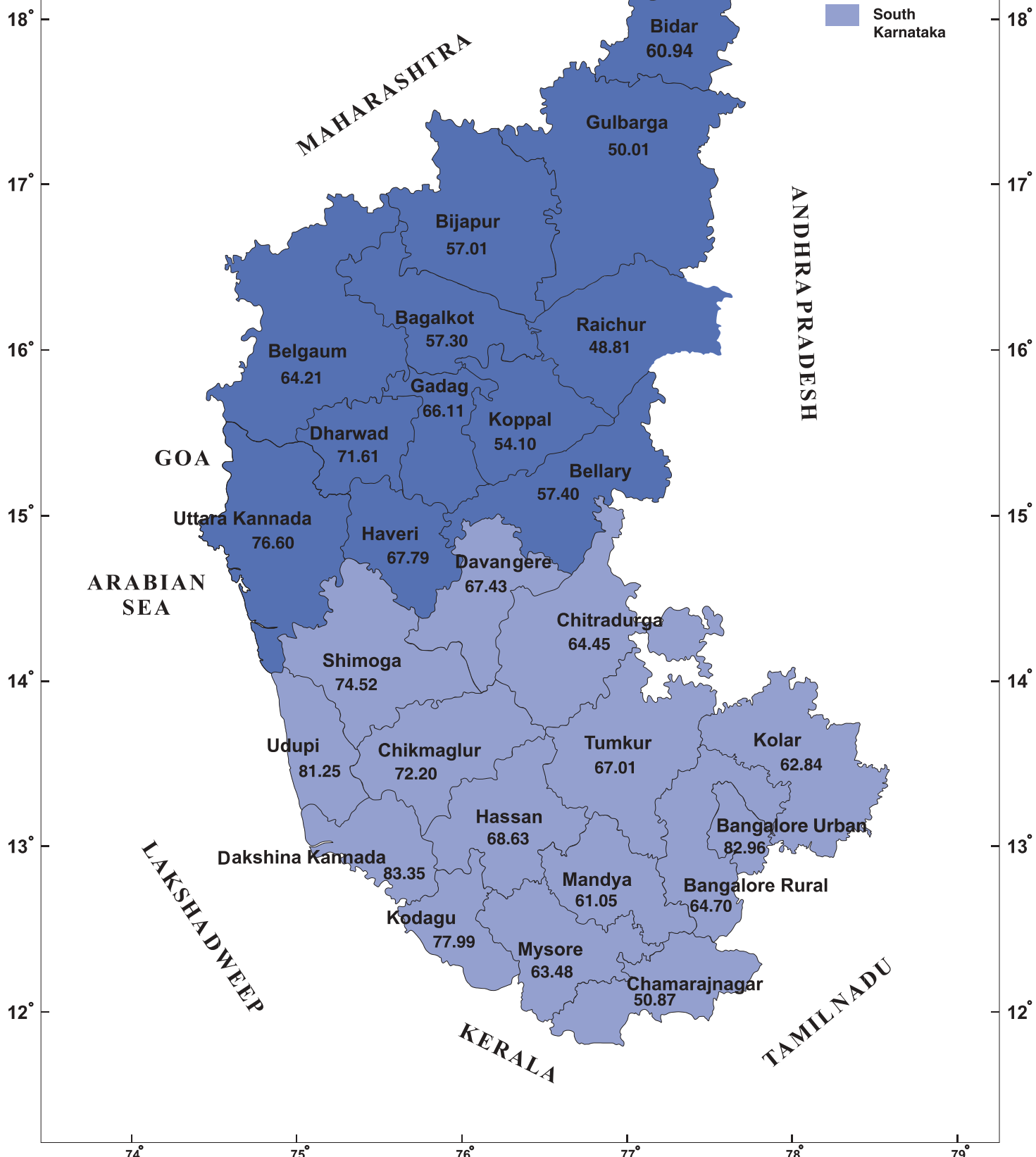


KARNATAKA

Total Literacy Rate 2001



- North Karnataka
- South Karnataka



Literacy and Education

Introduction

Education is recognised as a fundamental human right, along with other necessities, such as food, shelter and water in *The Universal Declaration on Human Rights* (1948). The advantages it confers on individuals and nations are multi-dimensional and multi-faceted. It sustains economic growth by providing basic as well as specialised skills that ensure increased productivity and higher per capita incomes. Human development is predicated upon universal access to education, with its implications for equity and social justice. Education empowers people to make informed choices about their lives and about their rights as citizens in a democracy. Gender justice gets a boost when women have access to education, which, by enhancing women's knowledge and employment capacity, increases their sense of autonomy and self worth. People's health status improves as their education levels rise. Above all, education is valued, quite simply, for itself and the avenues of knowledge and awareness that it opens for us.

Achievements in education in Karnataka have been quite remarkable, and the state is moving towards universal literacy at a steady pace. The literacy rate increased from 56.04 per cent in 1991 to 66.64 per cent in 2001, with the female literacy rate increasing more swiftly than the male literacy rate. Overall, the gender disparity in literacy is declining rather perceptibly and the decline is much more evident in the less economically developed districts of the state. Karnataka has 51,904 primary schools (2003-04) and the number of habitations with primary schools within a distance of one kilometre increased from 84 per cent in 1993 to 88 per cent in 2002. Enrolment in primary education grew at the rate of one per cent for boys and two per cent for girls per annum from 1990-91 to 2003-04. The dropout rate for Classes I to IV came down from a high 31 per cent in 1993-94 to six per cent in 2001-02, but increased thereafter, to 11 per cent in 2003-04. For classes I to VIII, the dropout rate declined

from 54-59 per cent between 1992 and 2000 to 45.4 per cent in 2003-04. Karnataka has taken steps to recruit women teachers, whose numbers went up to 54 per cent in 2003-04. At present there exists an extensive high school network in the state and the midday meal scheme covers nearly 66 lakh children in classes I to VII, in both government and aided schools. As many as 1,088 high schools have computer-aided learning centres, thereby bringing information technology within the reach of rural students.

The constraints and challenges will have to be confronted head-on. Overall, the mean years of schooling have improved only marginally over a four-year period, from 1999-2000 to 2003-04. The high levels of regional, caste and gender disparities imply that not all the children in the state have equal access to education. The dropout rate in south Karnataka districts in 2003-04 was lower than the state average as well as north Karnataka's average for boys and girls. In terms of infrastructure in primary schools, Hyderabad Karnataka performs poorly while south Karnataka has better infrastructure than other regions. More than 3 per cent schools

Education is recognised as a fundamental human right, along with other necessities, such as food, shelter and water in *The Universal Declaration on Human Rights* (1948).

BOX 5.1

UN Millennium Development Goals

Goals	Target	Indicators
1. Achieve universal primary education.	Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.	1. Net enrolment ratio in primary education. 2. Proportion of pupils starting grade I who reach grade V. 3. Primary completion rate. 4. Literacy rate of 15–24 year-olds.
2. Promote gender equality and empower women.	Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education not later than 2015.	1. Ratio of girls to boys in primary, secondary and tertiary education. 2. Ratio of literate females to males among 15–24 year-olds.

do not have teachers and 19 per cent function with single teachers (Seventh All-India School Education Survey, Provisional Statistics, 2002). The percentage of girls' and boys' enrolment in secondary education in the state still shows marked differentials (boys: 6,86,893 and

girls: 5,97,244 in 2003-04) despite a steady improvement over the years. The quality of instruction and instructional material will have to improve considerably to ensure better retention of students.

As noted in chapter 3, from 1990-91 to 2002-03, the largest allocation of public education expenditure went to general education, and primary and secondary education within general education, a pattern which reflects the government's priorities. Despite this, the share of primary and secondary education in the state income and in the education budget has been more or less static. The combined public expenditure ratio (PER) and the social allocation ratio (SAR) for primary and secondary education has straggled along at around 2.4 per cent and 13.3 per cent for over 12 years. While the state government has, quite rightly, prioritised primary

BOX 5.2

Monitorable targets in the Tenth Five Year Plan of India

1. All children in school by 2003.
2. All children to complete 5 years of schooling by 2007.
3. Reduction in gender gap in literacy by at least 50 per cent by 2007.
4. Increase in literacy rate to 75 per cent within 2002-03 to 2006-07.

Source: Planning Commission, Government of India.

BOX 5.3

Selected social indicators with reference to the Tenth Plan targets and Millennium Development Goals – Karnataka

Indicator	Year	Rural			Urban		
		Male	Female	All	Male	Female	All
Literacy	1991	60.3	34.8	47.7	82.0	65.7	74.2
	2001	70.5	48.0	59.3	86.7	74.1	80.6
School attendance	1993-94	73	62.3	67.8	86.1	84	85
	1999-2000	77.7	72.6	75.1	87.4	88.4	88.2
Gender gap in literacy	1991	-25.5			-16.3		
	2001	-22.5			-12.6		
Head count ratio of poverty	1993-94	22			36		
	1999-2000	19.1			27.1		
Infant mortality rate	1991	87			47 (77)		
	2004	64			24 (52)		

Sources:

1. Head count ratio based on calculation of poverty estimates by Sen and Himanshu (2004).
2. *Sarvekshana* (1997) for school attendance rates for 1993-94.
3. School attendance rates for 1999-2000 were calculated by Himanshu (2004) using unit level NSSO data.
4. Himanshu (2004), School attendance rates for different states of India: Estimates based on unit level data from the 55th Round of Employment-Unemployment Survey, CESP, Jawaharlal Nehru University, New Delhi.
5. Literacy Rate: Census 1991 and 2001.
6. Infant Mortality Rate: SRS 2004 (figures in brackets indicate state average).



and secondary education in terms of resources, the overwhelmingly large share of revenue expenditure in total expenditure indicates that, in Karnataka, as in other southern states, not enough investment is being directed towards capital expenditure. The non-salary component is low and the expenditure on school infrastructure, curriculum development, instructional material, in-service teachers' training – in short, all the elements that contribute to improving the quality of education – is inadequate.

Literacy

Literacy's positive association with improved socio-economic development indicators, as well as some demographic indicators, underlines its crucial role in the process of human development. Attainment of literacy improves people's productivity by strengthening their knowledge and skill base, and this, in turn, increases their income. The coefficient of correlation between the population below the poverty line and the female literacy rate in rural areas is -0.62 , indicating clearly that poverty and female illiteracy are very closely linked (Table 5.1). There is also likely to be greater improvement in women's status when their literacy levels rise: for instance, there is a positive correlation (0.28) between female literacy and the sex ratio (Table 5.1). This is apparent from the situation prevailing in Dakshina Kannada and Udupi districts, which have the highest sex ratio in the state, as well as a very high female literacy rate.

Karnataka's literacy rate (66.64) has increased by 10 percentage points between 1991 and 2001. Its literacy rate has been consistently higher than all-India in all census years and is even higher than the literacy rate in some neighbouring countries such as Pakistan (44.0), Bangladesh (40.10) and Nepal (39.20), but lower than Sri Lanka (91.10). Karnataka, however, still has to catch up with its neighbours, Kerala (90.9), Tamil Nadu (73.5) and Maharashtra (76.9). The scenario in Karnataka is somewhat mixed. About one-third of the state's population is still illiterate; the illiteracy rate is more than 63 per cent and 58 per cent respectively among Scheduled Tribe and Scheduled Caste females. As many as 15

TABLE 5.1

District-wise rural female literacy rate and percentage of rural families below poverty line: 2001

Sl. No.	Districts	Female literacy rate 2001	Rural female literacy rate 2001	Sex ratio	No. of rural families below poverty line (%)
1	Bagalkot	43.56	36.33	980	23.50
2	Bangalore Rural	54.99	50.95	955	35.75
3	Bangalore Urban	77.48	60.78	908	15.67
4	Belgaum	52.32	45.80	960	23.70
5	Bellary	45.28	36.82	969	44.57
6	Bidar	48.81	43.64	949	39.60
7	Bijapur	43.47	37.32	950	42.00
8	Chamarajnagar	42.48	38.59	971	36.00
9	Chikmagalur	64.01	60.70	984	27.00
10	Chitradurga	53.78	49.12	955	41.50
11	Dakshina Kannada	77.21	72.69	1022	15.40
12	Davangere	58.04	52.02	962	20.00
13	Dharwad	61.92	47.70	949	39.00
14	Gadag	52.52	46.28	969	46.40
15	Gulbarga	37.90	29.43	966	33.70
16	Hassan	59.00	54.72	1004	27.13
17	Haveri	57.37	54.52	944	32.00
18	Kodagu	72.26	70.10	996	19.00
19	Kolar	52.23	44.99	972	40.27
20	Koppal	39.61	35.81	983	42.50
21	Mandya	51.53	47.65	986	29.86
22	Mysore	55.81	42.31	964	28.14
23	Raichur	35.93	28.86	983	43.20
24	Shimoga	66.88	60.66	978	36.00
25	Tumkur	56.94	52.29	967	31.40
26	Udupi	75.19	72.97	1130	24.67
27	Uttara Kannada	68.47	63.52	971	30.45
South Karnataka		63.02	53.68	966	28.71
North Karnataka		48.30	41.15	964	37.29
Karnataka		56.90	48.01	965	33.00
Correlation-coefficient			-0.62	0.28	

Sources:

1. Registrar General of India, Primary Census Abstract 2001.
2. Report of High Power Committee for Redressal of Regional Imbalances, 2002.

TABLE 5.2
Literacy rate of Karnataka and all-India

Year	Karnataka				All-India			
	Persons	Male	Female	IGD ¹	Persons	Male	Female	IGD
1961	29.80	42.29	16.70	0.47	28.30	40.40	15.35	0.48
1971	36.83	48.51	24.55	0.36	34.45	45.96	21.97	0.38
1981	46.21	58.73	33.17	0.32	43.56	56.37	29.75	0.35
1991	56.04	67.26	44.34	0.25	52.20	64.13	39.29	0.29
2001	66.64	76.10	56.90	0.19	64.80	75.80	54.20	0.22

Note: IGD=Index of Gender Disparity.

Source: Registrar General of India, Census of India, various volumes.

TABLE 5.3
Region-wise literacy-gender disparity index in Karnataka:
1991 and 2001

Region	Rural		Urban		Total	
	1991	2001	1991	2001	1991	2001
South Karnataka	0.27	0.20	0.12	0.09	0.21	0.15
Bombay Karnataka	0.34	0.27	0.20	0.15	0.29	0.23
Hyderabad Karnataka	0.47	0.33	0.24	0.18	0.38	0.28
State	0.31	0.24	0.15	0.11	0.25	0.19

Note: Estimated using data from the source.

Source: Registrar General of India, Census of India, 1991 and 2001.

The coastal districts of Dakshina Kannada (83.35) and Udupi (81.25) along with Bangalore Urban district (82.96) continued to maintain their lead status as high performers, well on the way to catching up with Kerala.

districts (9 in north Karnataka and 6 in south Karnataka) have a literacy rate that is below the state average and 11 districts are even below the national average, ranging from Raichur with 48.8 per cent to Mysore with 63.48 per cent. One encouraging feature is that the female literacy rate increased more rapidly (around 28 per cent) from 1991 to 2001 than the male literacy rate (around 14 per cent). The gender disparity in literacy has declined steadily over the years, from 0.47 in 1961 to 0.19 in 2001, indicating significant progress in the reduction of female illiteracy. Another trend, which is reflective of the success of policy interventions, is the sharp decline in gender disparity in the rural areas of even the relatively less developed region of Hyderabad Karnataka. While the literacy-gender disparity is higher in rural areas

than in urban areas, the good news is that the disparity has reduced more rapidly in the rural areas (Table 5.3).

Literacy rates in the various districts of the state have improved significantly in 2001. The coastal districts of Dakshina Kannada (83.35) and Udupi (81.25) along with Bangalore Urban district (82.96) continued to maintain their lead status as high performers, well on the way to catching up with Kerala, while four districts of the Hyderabad Karnataka region were below the all-India literacy rate in respect of total, male and female literacy levels in both census years (1991 and 2001). The *malnad* districts of Kodagu (77.99), Shimoga (74.52) and Chikmagalur (72.20) maintained a steady growth in the literacy rate. Within Hyderabad Karnataka, Bidar, despite being below the state average, emerged as the best performing district (60.94), while Raichur occupied the lowest position in both census years. Bijapur's literacy rate was higher than the all-India literacy rate in 1991, but regressed below the all-India male, female and total literacy levels in 2001. Other districts, which showed similar deterioration and fell below the national literacy rate, are Chitradurga (male and total literacy), Bagalkot (male), Gadag (female) and Belgaum (total literacy). It is possible that this somewhat grim scenario is the outcome of the bifurcation of certain districts (viz. Chitradurga, Bijapur and Dharwad) in 1997, whereby pre-existing intra-district differentials in literacy became sharply outlined. The less developed Hyderabad Karnataka districts gave cause to rejoice, having registered the most marked improvements in literacy in the state with the highest increases in decennial growth: Raichur (3.58), Koppal (3.53) and Bidar (3.05), while the lowest was Bijapur with 0.13. Even Chamarajnagar, one of the most underdeveloped districts in south Karnataka, managed to improve its performance from 38.19 per cent in 1991 to 50.87 per cent in 2001.

The low female literacy rate in Karnataka, as in India, is a visible manifestation of gender bias, which refuses to acknowledge women's inherent right to education. Caste, class and geographical factors are other sources of inequity that shape

¹ Disparity Index = $\text{Log}(X_2/X_1) + \text{Log}[(Q-X_1)/(Q-X_2)]$, Where $X_2 \geq X_1$ and $Q \geq 200$, Sopher, D.K (1974) 'Measurement of Disparity', *The Professional Geographer*, 26/2, (Nov), 380-92.

female literacy levels. This becomes evident when the inter-district performance in female literacy is analysed. The highest female literacy rates are to be found in Bangalore Urban (77.48), Dakshina Kannada (77.21), and Udupi (75.19) districts, and the lowest in Raichur (35.93), Gulbarga (37.90) and Koppal (39.61). Geographically, Gulbarga, Raichur and Koppal are contiguous and share the same socio-economic characteristics of underdevelopment, while Dakshina Kannada and Udupi (which were originally one district) have traditionally maintained good human development indicators. The female literacy rate in Bangalore Rural was a low 54.99 per cent – lower than the state average, and lower than some southern districts such as Davangere (58.04) or Tumkur (56.94), which do not have the advantage of lying in the immediate periphery of India's fastest growing city. Figure 5.1 shows the rural female literacy rate between different districts of the state and reveals wide variations between north and south Karnataka. The mean literacy rate of the districts of north Karnataka² (60.99 per cent) is less than that of south Karnataka³ (69.52 per cent). There has been a sharp decline

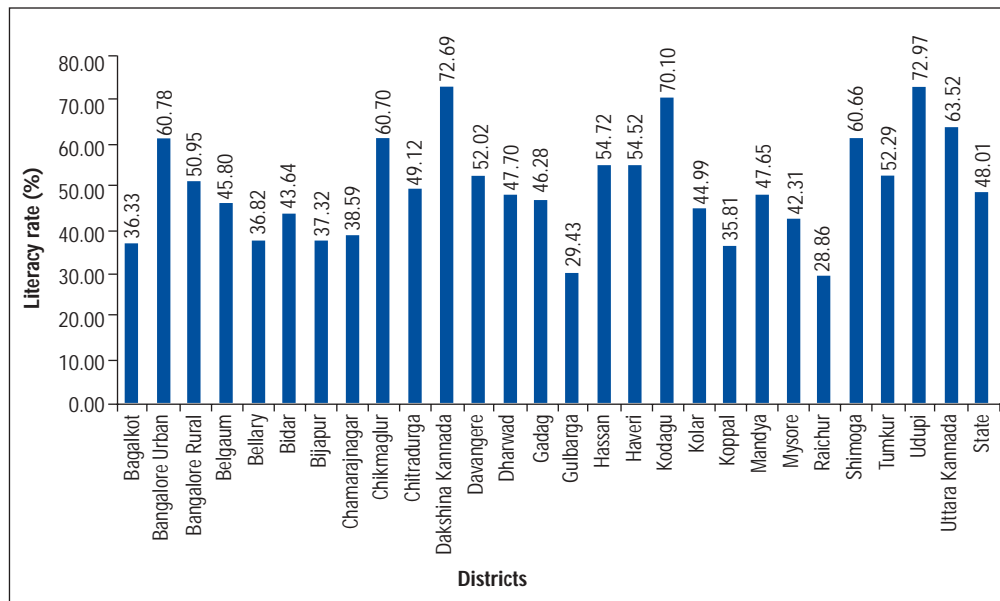
in the variation (as reflected through coefficient of variation) during the decade among districts, both in the south (17.17 per cent in 1991 and 13.18 per cent in 2001) and the north (20.94 per cent in 1991 and 13.97 per cent in 2001). The variation in literacy over the decade has been narrowing for all caste groups. In Hyderabad Karnataka, female literacy rates in rural areas reveal significant improvements (the maximum in the state) in all the districts during this period, showing that the initiatives taken in the state have started bearing fruit in recent years.

The literacy rate of rural females in Karnataka is lower than that of urban females, as the urban female literacy rate grew at a faster rate than the rural female literacy rate. Raichur and Koppal have the lowest urban female literacy rates in Karnataka. As many as 10 districts in north Karnataka and four districts of south Karnataka have a rural female literacy rate that is below the state average. The poor performing districts in Bombay Karnataka are Bijapur and Bagalkot while Raichur and Gulbarga are the low performers in Hyderabad Karnataka and



In Hyderabad Karnataka, female literacy rates in rural areas reveal significant improvements.

FIGURE 5.1
Inter-district disparities in the rural female literacy rate



²North Karnataka includes: Belgaum, Bijapur, Bagalkot, Dharwad, Gadag, Haveri, Uttara Kannada, Bellary, Bidar, Gulbarga, Raichur and Koppal.

³South Karnataka includes: Bangalore Urban, Bangalore Rural, Chitradurga, Davangere, Kolar, Shimoga, Tumkur, Chikmagalur, Dakshina Kannada, Udupi, Hassan, Kodagu, Mandya, Mysore and Chamaraajnagar.



The lowest gender disparity in literacy is in Bangalore Urban and the highest in Raichur.

Chamaraj Nagar in south Karnataka (Appendix Tables: Series 4).

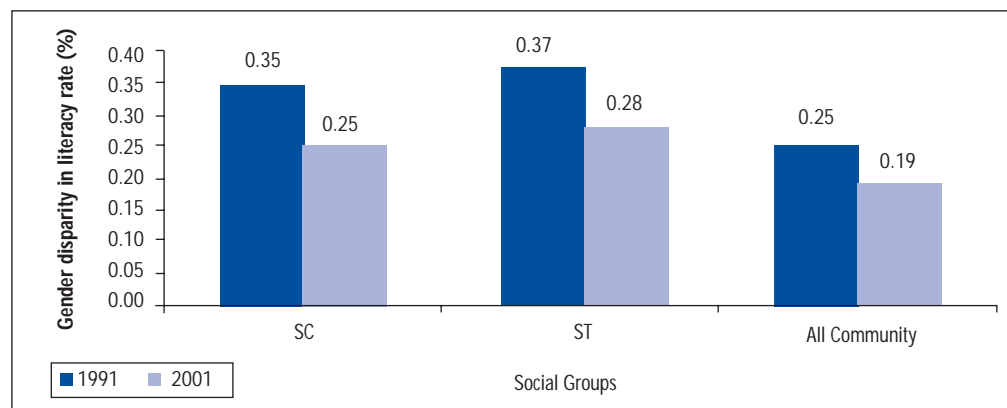
The gender disparity index has been calculated by using Sophers' disparity index where a high index means high gender disparity. A noticeable and welcome element is the fact that the gender disparity in literacy has declined sharply over the decade. The lowest gender disparity is in Bangalore Urban and the highest disparity is in Raichur. While gender disparity in literacy is higher in north Karnataka than in south Karnataka, it would be simplistic to say gender disparities are insignificant in the southern districts. The female literacy rate in Bangalore Rural district may have improved over the decade, but it is still too low for a district that has the advantage of being adjacent to an urban centre. The intensity of difference may be less in the southern districts, but the disparity does exist and has serious effects on female health and poverty. While it is reassuring to note that, overall, the gender disparity in literacy is declining and that the decline is faster in the more underdeveloped regions, more policy interventions are required if Karnataka is to meet the MDG (Figure 5.2).

Since the Scheduled Caste and Scheduled Tribe populations are characterised by low literacy rates, districts with high SC and ST populations tend to have lower literacy rates than others (see chapters 9 and 10).

State interventions

One reason for the existence of such high levels of illiteracy in India, even today, when it is poised to become a super power in this millennium, is the low priority accorded to both adult literacy and primary education in the post-Independence years. The institutions of higher learning established in those years have contributed immeasurably to the country's emergence as a leader in the current knowledge-based global economy, but the lack of policy seriousness in tackling illiteracy as a grassroots movement meant that increases in literacy levels took place incrementally. The National Adult Education Programme (NAEP), launched in 1978, was a national programme to remove illiteracy, under which funds were made available to states to set up departments of adult education. The next initiative, the National Literacy Mission 1988, was launched in the then popular mission mode. The Literacy Mission used a community based approach to address adult illiteracy, drawing upon volunteers and NGOs and using catchy tactics such as *jathas* and street theatre to mobilise people. In some states, the Literacy Mission met with unexpected success in mobilising women around social issues, as in the anti-arrack agitation in Nellore, Andhra Pradesh. This kind of social activism on this scale can be described as true education (through empowerment) in the broadest sense of the term. However, the outcomes of the efforts of the NLM, when viewed

FIGURE 5.2
Gender disparity index of the literacy rate



through the lens of census data on literacy, are somewhat mixed.

In Karnataka, Bijapur and Dakshina Kannada were the first two districts to be selected for implementation of the NLM. Their relative performances are given in Table 5.5. It is now recognised that the NLM could neither eradicate illiteracy, as promised, nor make a spectacular impact in Bijapur.

Having completed the Total Literacy Campaign and Post Literacy Campaign in all districts, continuing education programmes are now being run in 18 districts. At the village level, there are Continuing Education Centres (CEC) and Nodal Continuing Education Centres (NCEC) at the taluk level. Currently there are 1,513 NCECs and 14,145 CECs in the state. This lull in financing adult literacy programmes by the Centre needs serious rethinking when 33 per cent of the population is still illiterate.

Looking ahead, it may be noted that in 2001, the literacy rate in urban and rural Karnataka was 80.58 and 59.33 per cent respectively, hence the Tenth Plan goal of 75 per cent literacy rate has already been met, in the urban areas at least, although it will take some time for the rural areas to catch up. The rate of increase in the literacy rate in the rural areas between 1991 and 2001 was about 12 percentage points and at this rate, *ceteris paribus*, Karnataka is unlikely to meet the Tenth Plan goal of literacy in the rural areas. Furthermore, the goal of reducing the gender gap in literacy by 50 per cent by 2007 can be achieved only through strong policy initiatives. Between 1991 and 2001, the gender gap in literacy reduced by only 3.1 and 3.76 percentage points in the rural and urban areas of Karnataka respectively. Hence, adult education needs another boost if the MDG and Tenth Plan goals are to be fulfilled. A change in strategy, which addresses the issue bottom-up, i.e. from the gram panchayat up, is critical to the success of adult literacy programmes.

Education

This section will focus on school education from primary, up to and inclusive of plus-two education.

TABLE 5.4
Coefficient of variation (percentage) in literacy rates by social groups

Region/Gender	All		SC		ST	
	1991	2001	1991	2001	1991	2001
South Karnataka						
Male	12.7	10.4	16.2	9.1	22.6	15.1
Female	24.3	17.2	32.3	16.7	36.9	22.5
Total	17.2	13.2	21.5	12.0	27.1	17.9
North Karnataka						
Male	15.2	9.9	22.8	13.5	27.8	17.2
Female	31.5	20.4	41.2	27.1	47.5	31.8
Total	20.9	14.0	28.5	18.4	33.4	22.2
All Districts						
Male	14.0	10.6	19.0	11.8	24.7	16.5
Female	29.6	21.3	37.5	25.0	44.6	30.4
Total	19.8	14.8	24.8	16.7	30.5	21.5

Source: Registrar General of India, Census of India, 2001, Primary Census Abstract, (estimated).

TABLE 5.5
Decennial growth in literacy: Bijapur and Dakshina
Kannada districts - 1991 and 2001

(Per cent)

District	Total		Male		Female		Compound growth rate		
	1991	2001	1991	2001	1991	2001	T	M	F
Bijapur	56.55	57.01	70.50	69.94	41.81	43.47	0.08	-0.03	0.45
Dakshina Kannada	76.74	83.35	84.88	89.70	68.84	77.21	0.88	0.65	1.15

Note: In 1991 Dakshina Kannada included Udupi and Bijapur included Bagalkot.

Source: Registrar General of India, Census 1991 and 2001.

Tertiary education is a vast sphere, encompassing as it does, diverse fields such as professional courses as well as general education. A plethora of issues has emerged in higher education such as financing, autonomy, governance, and quality – all in the context of equity and social justice. It would be difficult to address all these complex issues within the confines of this chapter. The Task Force on Higher Education (2004) has dealt with these aspects of higher education very comprehensively.

Primary education

The Supreme Court ruling in 1994 that a child has a fundamental right to free education up to age 14 clearly directs the state government to take responsibility for universal elementary education (UEE). The state of Karnataka has made major

With an urban literacy rate of 80.58 per cent, Karnataka has achieved the Tenth Plan goal of 75 per cent literacy rate in the urban areas at least.

Objectives and goals of the Department of Primary and Secondary Education

Objectives/Goals	Performance targets from 2002-03 (actual level) to 2006-07 (targeted level)
1. Enhance literacy rates.	1. Increase in literacy rate from 66.64 per cent in 2001 to 80 per cent by 2004-05.
2. Ensure that all children complete 8 years of primary schooling and enable 80 per cent of those who complete 8 years to pursue secondary schooling and acquire the knowledge, skills and qualifications for further education or for employment.	2.1 Reduction in percentage of children aged 6–14 who are out of school from 7.38 per cent to 0 per cent; 2.2 Increase in survival rate of class I children reaching class V from 88.82 per cent to 100 per cent; 2.3 Increase in survival rate of class I children reaching class VIII from 48 per cent to 85 per cent; 2.4 Increase in survival rate of class I children reaching class X from 41.35 per cent to 80 per cent; 2.5 Increase in gross enrolment ratio in classes I to X from 84.5 per cent to 100 per cent.
3. Increase achievement levels.	3.1 Increase in pass percentage in class VII from 94.96 per cent to 100 per cent; 3.2 Increase in pass percentage in class X from 55.57 per cent to 65 per cent.
4. Reduce income, gender, caste, religious, rural and regional gaps in enrolment, retention, completion, achievement and ensure a progression to higher education.	4.1 Reduction in gap in percentage of out-of-school children between boys and girls from 0.4 per cent to 0 per cent; 4.2 Reduction in gap in percentage of out-of-school children between total and SC from 2 per cent to 0 per cent; 4.3 Reduction in gap in percentage of out-of-school children between total and ST from 5 per cent to 0 per cent; 4.4 Reduction in gap in percentage of out-of-school children between state and northeast region from 6.19 per cent to 0 per cent; 4.5 Reduction in gap in percentage in class X between boys and girls from 4.75 per cent to 0 per cent; 4.6 Reduction in gap in percentage in class X between all students and SC/ST students from 14.2 per cent to 2 per cent; 4.7 Reduction in gap in percentage in class X between the state and the northeast region from 10.98 per cent to 0 per cent.
5. Increase in non-salary expenditure.	5.1 Increase in percentage of non-salary expenditure in total expenditure on primary education from 6.86 per cent to 20 per cent; 5.2 Increase in percentage of non-salary expenditure in total expenditure on secondary education from 7.91 per cent to 10 per cent.

Source: Education Department, Karnataka.

strides towards achieving the goal of UEE, which requires the fulfilment of the following objectives: (i) universal access to primary schools for all children; (ii) universal enrolment; (iii) universal retention; and (iv) universal achievement of minimum essential levels of learning by all children.

Access and enrolment

Karnataka has 51,904 primary schools (classes I to VIII) in 2003-04, of which 43,447 are government schools. Districts with the largest number of primary schools are Kolar (3,940), Tumkur (3,878), Belgaum (3,465) and Bangalore Urban (3,242). However, the number of primary schools by habitation is a better indicator of access than mere numbers of schools. The number of habitations with primary schools within a distance of one kilometre increased from 84 per cent in 1993 to 88 per cent in 2002 (Seventh All-India Education Survey: 2002). South Karnataka schools generally serve smaller populations per habitation (509) than north Karnataka schools (1,024), with the exception of Uttara Kannada, according to the Sixth All-India Education Survey. In certain districts viz. Shimoga, Chikmagalur, Hassan and Uttara Kannada, less than 75 per cent of the habitations have a primary school within a distance of one kilometre. These districts are situated in the Western Ghats, where habitations are small and widely dispersed. In most of the north Karnataka districts, however, 90 to 99 per cent of the habitations have a primary school within a distance of one kilometre, due in part to the fact that habitations are large and concentrated, but also as an outcome of policies and projects in this region (Table 5.6).

The government is the dominant provider of primary education in Karnataka. The role of the private sector is minimal, but it has registered some growth in recent times. In 1990-91, about 89 per cent of all primary schools were government schools, five per cent were private schools, which received grants from the government, and six per cent were unaided schools. By 2003-04, aided schools and unaided schools constituted 4.83 per cent and 11.46 per cent respectively and government schools constituted 83.71 per cent of

the total number of schools, indicating a modest increase in the number of unaided schools and a relative decline in the proportion of government schools over a period of 13 years. The number of private unaided schools in the state increased at a compound growth rate of eight per cent per annum during the period 1990-91 to 2003-04 while aided schools and government schools increased at 1.8 and 1.5 per cent respectively during the same period. This suggests that there is now a slight increase in the demand for unsubsidised, primary schools but overall, the government's role as provider of education to the poor and the vulnerable has not diminished significantly. The absolute number of government schools has increased, hence the government's proactive role continues. Districts with the highest percentage of government primary schools (classes I to VIII) are Udupi (95.05), Chikmagalur (91.63), Haveri (91.59) and Bangalore Rural (91.00) (Appendix Tables : Series 4) Table 5.7 reinforces this position: the demand for private schooling is urban-driven with a high concentration (34.1 per cent) of private, unaided schools in urban areas where the distribution of government schools is low at 47.4 per cent. Predictably, Bangalore Urban district has the highest percentage (38.74) of private unaided schools. Providers of private schooling do not find it profitable to establish institutions in rural areas where the population is predominantly low-income and where habitations can be both small and dispersed. The responsibility of educating the poor is shouldered by the state and any fallback here would have adverse consequences for the attainment of UEE.

Enrolment in primary education (classes I to VII) grew at the rate of 1.4 per cent, encompassing growth of one per cent for boys and two per cent for girls per annum, from 1990-91 to 2003-04, indicating that girls' education has received an impetus. Girls' enrolment grew from 36 per cent of the total enrolment in 1980-81 to 48 per cent in 2003-04. Bijapur, which had the lowest rank among all the districts in girls' enrolment in 1997-98 (KHDR 1999), continues to be the lowest ranked district in 2003-04, although enrolment increased from 42.2 per cent in 1997-98 to 46.8 per cent in

BOX 5.5

Learning via satellite

The Edusat Primary Education Project is a pilot project in distance education in primary education and the first of its kind in the country. It is being implemented in collaboration with ISRO.

The infrastructure consists of a central hub at Bangalore and Receive only Terminals (ROT)s with 29 sets in 885 schools in the educationally backward district of Chamarajnagar. Education programmes uplinked from the hub are received via the Edusat satellite in all schools simultaneously.

Edusat's objectives are:

- To bring in quality improvement in classroom transactions at the primary level;
- To make learning child centred, interesting and motivating;
- To supplement classroom teaching with audio-visual support;
- To take children through real life situations;
- To give students access to the best teachers in every field;
- To ensure that 'difficult' topics in every subject are easily understood by children;
- To provide inputs in non-curricular areas for the overall development of children;
- To encourage teachers to develop teaching learning materials (TLM) and use them effectively in classrooms.

Source: Education Department.

TABLE 5.6

Ratio of schools to students in primary education: A profile - 2003-04

Districts	No. of schools	Children per school
Kolar	3940	114
Tumkur	3878	100
Belgaum	3465	221
Bangalore Urban	3242	282
North Karnataka		
Bijapur	1901	210
Gulbarga	2594	273
Koppal	982	243
Uttara Kannada	2264	98
South Karnataka		
Chikmagalur	1696	103
Chitradurga	1907	147
Mandya	2104	120
Mysore	2339	176

Note: The first four districts have the highest number of primary schools in the state. The remaining eight districts are selected randomly (Appendix Tables, Series 4).

Source: Commissioner for Public Instruction, Karnataka.

BOX 5.6

Involving parents and the community

In 2001, School Development and Monitoring Committees (SDMCs) replaced the Village Education Committees (VECs) in Karnataka. An SDMC has a 3-year term. SDMCs comprise nine elected parent members, four ex-officio members and six nominated members (including students) to ensure parental and community involvement and participation in the day to day activities of schools. A committee meets once a month to review the functioning of the school.

A study found:

- 85 per cent of the parents rated the functioning of SDMCs as good;
- 83 per cent of the parents attend meetings every month;
- 30 per cent of the teachers said that SDMCs have been effective in carrying out improvements to schools through collective participation;
- According to 28 per cent of the parents, the SDMC has a positive impact on retention, attendance and enrolment;
- Around 30 per cent of the parents said that SDMCs have improved the functioning of the midday meal scheme;
- 79 per cent of the students reported that SDMC members visit schools regularly;
- 87 per cent of the students reported that SDMC members visit classes, verify whether teachers conduct classes and randomly test some of the learning competencies; and
- More than 70 per cent of the presidents of committees said that they have attempted to bring out-of-school children back to school.

Contributed by SDMCs (2002-03):

- 38 per cent have contributed towards land and buildings;
- 26 per cent have provided teaching learning materials (TLMs); and
- 19 per cent have contributed cash.

Every day one family supplies the vegetables and coconuts required for the midday meal served at the Government Lower Primary School, Jumbabeta, 40 km from Honnavara. The community has constructed a separate dining room. In fact, the community itself started the school, which the government later took over. The school is situated amid the thick forests of Uttara Kannada district. Despite the distance factor and geographical location the community has ensured that the school has furniture like benches, chairs, cupboards, etc. It cleans the playground through *shramadana*.

Then and now...what a change!

Old timers say this higher primary school at Sivarampet in Mysore looked like a cowshed. However, today it has been transformed by the local committee. This SDMC has formed sub-committees to look after the various developmental activities of the school. It has provided a range of facilities like drinking water, toilets, classrooms, power, a garden, teaching and learning material, sports equipment, gymnasium, a computer and books.

Source: An evaluation study conducted by the Policy Planning Unit, DSERT, in collaboration with Centre for Child and the National Law School of India University.

2003-04. There is not much variation between districts in girls' enrolment. Mandya has the highest enrolment of ST girls and Gulbarga the lowest enrolment for SC girls. Enrolment was the highest in Bangalore Urban and the lowest in Bellary, though it may be noted that there is not much difference between the highest and lowest enrolment numbers.

Gross and net enrolment ratios capture the multiple dimensions of schooling. It is useful to distinguish between the concept of gross enrolment and net enrolment rate. Generally, the gross and net enrolment ratios are used to capture child schooling. The enrolment rate is defined as the number of children enrolled in school divided by the child population in the relevant age group. The gross enrolment rate (GER) includes children at a given educational level who may be over or under-aged relative to the age group used as a divisor. The net enrolment rate (NER) is obtained by dividing the number of children in the relevant age group enrolled in a particular stage by the total child population in that specified age group. The GER may, therefore, exceed 100 per cent.

The GER of the state increased from 92 in 1996-97 to 99 in 2000-01 and fell to 94.14 in 2003-04. In 1998-99, Raichur had the lowest GER and Udupi the highest. In 2000-01, there was no change in the status of Raichur where the GER (74.54) was still the lowest, while Bangalore Urban (128.21) was the highest. During 2003-04, Dakshina Kannada had the highest GER and Raichur still had the lowest GER. Bidar's GER has improved markedly particularly the GER of girls,

TABLE 5.7
Distribution of primary schools by management and area: 2002-03

(Percentage)

Type of school	Rural	Urban	Total
Government	91.1	47.4	84.2
Private aided	2.6	18.5	5.1
Private unaided	6.3	34.1	10.7
All schools	84.0	16.0	100.0

Source: Saikshanic Anki Anshagala Pakshinota, 2002-03, Karnataka.

which is now on a par with their male counterparts. Across castes, the GER of the Scheduled Tribes (STs) is lower than that of the general population and the Scheduled Castes (SCs). In fact, there has been a great improvement in the GER of the SCs, which has overtaken the general population in 2000-01, and which is a direct outcome of the government's special incentive schemes. Some introspection and remedial action is called for with regard to the STs, who have a different set of problems altogether.

Table 5.8 reveals that all north Karnataka districts have very high net enrolment ratios. In 2004-05, Bidar for example, has an NER of 130 for classes I to V and 131 for classes VI to VII, the highest in the state.

The high GER and NER figures indicate that the first two objectives – universal access and enrolment – have largely been achieved, and increased attention is now required in the areas of retention/attendance and quality of learning.

Retention

The mean years of schooling are used as an indicator of levels of educational attainment. Overall, the mean years of schooling have improved only marginally over a four year period, from 3.97 in 1999-2000 to 4.25 in 2003-04, and there is little difference between boys and girls. Across social groups the mean years of schooling of Scheduled Tribe students is slightly lower than the Scheduled Castes as well as the non-SC and non-ST students.

Boys out-perform girls among the Scheduled Castes and Tribes, but overall, there is no significant difference in the mean years of schooling for girls and boys in the non-SC and non-ST group. Ten districts (all 5 districts of Hyderabad Karnataka; Chamarajnagar, Davangere, Bijapur, Bagalkot, and Belgaum) are below the state average for mean years of schooling for girls in 2003-04. If free education up to the age of 14, as mandated in the Constitution, is taken as the norm, then all children must have eight mean years of schooling, and current achievement levels, therefore, fall well short of this objective.

The dropout rate is an indicator of the efficiency of the primary school system since it presents an overview of the wastage of human resources. Non-attendance and/or dropping-out are the outcomes of a combination of factors at the individual, institutional and structural levels. Structurally, poverty means that parents cannot afford the opportunity costs, preferring to put their children to work, either at home or for other people. For girls, gender disparity combines with poverty to keep them out of school for a variety of reasons, ranging from early marriage to using girls for housework and sibling care. Lack of parental support, caused largely by the parents' own low education levels and lack of motivation, is another strong inhibiting factor. If schools are far from the habitation or have inadequate infrastructure with reference to classrooms, toilets for girls and drinking water, then parents feel discouraged. Within schools, multi-grade teaching, poor instructional quality, teacher absenteeism, repetition and the lack of



The high GER and NER figures indicate that the objectives of universal access and enrolment have largely been achieved.

TABLE 5.8
Net enrolment ratio

Sl. No	Region	Age 6–11 (classes I-V)			Age 12–13 (classes VI-VII)		
		Boys	Girls	Total	Boys	Girls	Total
1	Karnataka	95.97	95.95	95.96	99.53	101.42	100.48
2	North Karnataka	96.58	96.47	96.52	102.46	104.15	103.30
3	South Karnataka	90.01	90.06	90.03	91.32	93.25	92.29

Source: EMIS 2004-05, Children's Census 2005, Karnataka.

BOX 5.7

Mahiti Sindhu: IT at the grassroots

This year, the Government High School in the Indian Institute of Science Campus, Bangalore was adjudged the best secondary school providing computer education in the state and was honoured by the President of India.

This success story has been replicated in 1,000 government secondary schools across the state where computer learning has become a way of life for nearly 4,00,000 children over the past 4 years.

Quarterly evaluations of the programme are being regularly conducted by the Computer Science departments of local engineering colleges under the guidance of the Indian Institute of Science, Bangalore. Teachers in these schools are trained in computer application, thereby enhancing their teaching skills.

FIGURE 5.3
Percentage of girls' enrolment to total enrolment

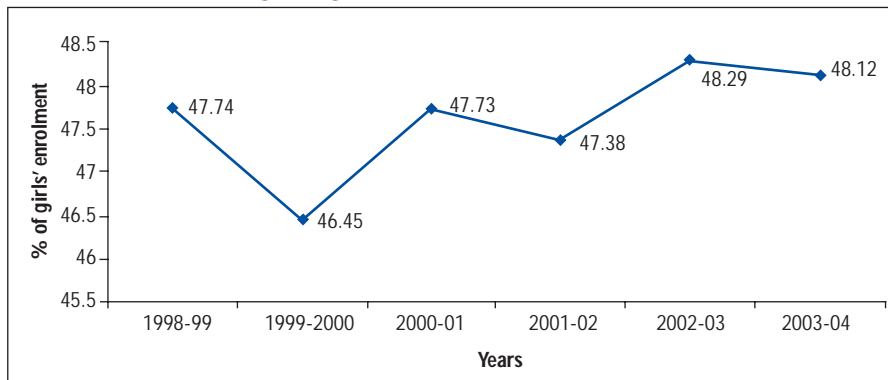


FIGURE 5.4
Gross enrolment ratio for classes I to VIII

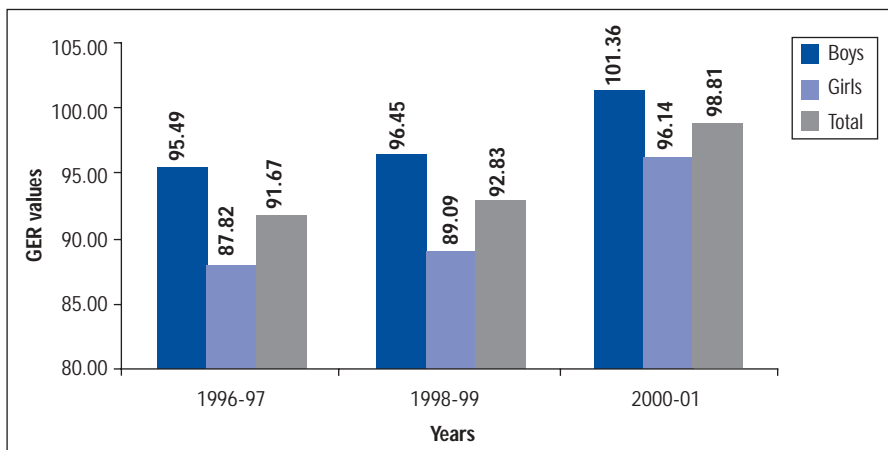
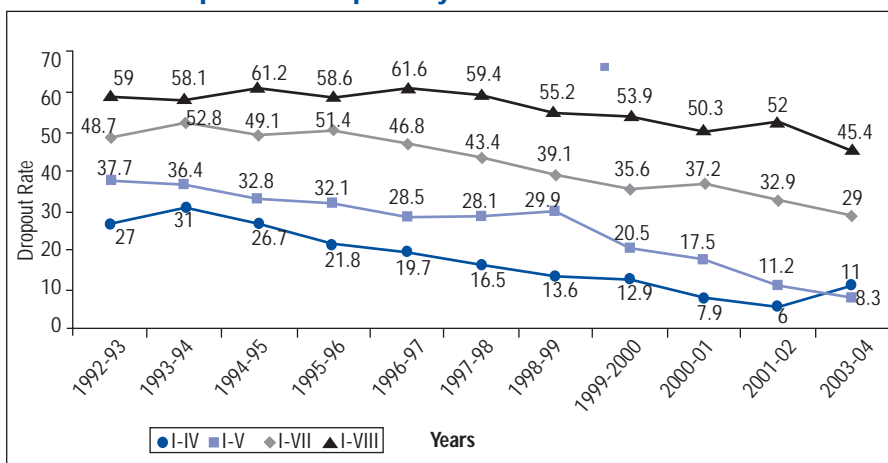


FIGURE 5.5
Dropout rate in primary education in Karnataka



correlation between education and market-based job skills are some factors that encourage dropouts. This combination of factors means that 45 out of 100 children enrolled in class I are likely to drop out by class VIII.

The dropout rate increases as students move up from class I: 2003-04 figures show that out of 100 children who enrolled in class I, 11 per cent dropped out by the end of class IV, 29 per cent dropped out by the end of class VII and 45 per cent by the end of class VIII. The survival rate of children in the higher classes declines even more sharply. The dropout rate for classes I to IV ranged from a high 31 per cent in 1993-94 to 6 per cent in 2001-02; for classes I to VII, it fluctuated between 52.8 per cent (1993-94) to 29 per cent (2003-04); for classes I to VIII, the dropout rate has been fairly high from 1992-93 to 1999-2000 (59 to 54 per cent), before it dropped to 45.4 per cent in 2003-04 (Figure 5.5).

Poverty has been identified as one of the main reasons for high dropout rates since the poor cannot afford the opportunity costs of education. However, there are other facets of this issue. The dropout rate for girls is invariably higher than that of boys in all classes. While there has been a decline in the dropout rate over the years, for both boys and girls, the decline is more perceptible for boys, who are regarded as socio-economic assets by the family and investing in their education is perceived as producing favourable outcomes by way of enhanced vocational skills and higher wages. Investing in girls' education is not high priority, partly because it does not benefit the birth family directly, but mainly because women are treated as marginal beings who can be pulled out of school to manage the home and assist in sibling care. Figure 5.6 indicates the dropout rate for both boys and girls. The dropout rate for the state is further shaped by regional disparities. The dropout rate in the districts of south Karnataka in 2003-04 is lower than both the state average and the average for north Karnataka, for boys, girls and all children. Even in north Karnataka itself, there are gaps between the Hyderabad Karnataka and Bombay Karnataka regions. The dropout rate in the districts

of Hyderabad Karnataka, which was 56.5 per cent (1999-2000) and 46.7 per cent (2003-04), was markedly higher than 36.8 per cent (1999-2000) and 29.7 per cent (2003-04) in the districts of the Bombay Karnataka region. The gender gap in the dropout rate is very high in the northern districts whereas it has been steadily dwindling in the southern districts. The sharp decline in the dropout rate can be attributed to the concerted efforts of the state to enroll all eligible children, retain them in school and to bring back out-of-school children into either the formal or a non-formal system. Many of these schemes target the educationally backward districts of the state.

According to the Children's Census conducted by the Department of Public Instruction in 2005, the highest percentage of out-of-school children in the age group 7-14 is among STs and SCs. These two social classes also have the highest percentage of out-of-school girls.

The state has a gamut of schemes directed at ensuring universal enrolment and retention. Under the *Vidya Vikasa* programme, school children in classes I to VII get free text books and uniforms. *Akshara Dasoha*, the midday meals scheme, was initially introduced in seven northern districts and was subsequently extended to cover all children in classes I to VII in both government-and private-aided schools. This helps over 60 lakh children and the expenditure is of the order of Rs.280 crore. For girls, there are attendance scholarships.

Karnataka has pioneered various schemes for bringing out-of-school children back to school. The schemes directly address all the major constraints faced by out-of-school children and their families. They are *Chinnara Angala* (bringing out-of-school children back to school), *Coolienda Shalege* (for child labour), flexi schools (night schools for working children), mobile schools (for slum children), *Beediyinda Shalege* (for street children), *Baa Baale Shalege* (for the girl child), *Kishori Kendra* (residential bridge courses for girls in Bellary and Koppal), and *Samudayadatta Shale* (community rallies). These schemes have enabled the state to mainstream a number of out-of-school children into primary education. *Chinnara*

BOX 5.8

Initiatives for north Karnataka

On the basis of the recommendations of the Report for the Redressal of Regional Imbalances (2002), certain actions have been initiated to improve education indicators in the northern districts of the state:

- Separate Additional Commissionerates of Public Instruction were established at Belgaum and Gulbarga in 2003-04;
- Separate Regional Secondary Examination Boards were established at Belgaum and Gulbarga.
- The cooked midday meals programme was initially launched in 9,724 government primary schools in the northern districts of Karnataka during 2001-02;
- 50 per cent of the non-salary grants of the state education budget under primary and secondary heads have been earmarked for north Karnataka from 2001-02 onwards;
- 2,587 posts of primary school teachers were moved from other parts of the state during 2001-02 and 2002-03 to this region to improve the pupil-teacher ratio.
- The pupil-teacher ratio in north Karnataka districts came down from 42.04 in the year 2001-02 to 40.97 in the year 2003-04;
- Large education districts were bifurcated to improve efficiency.

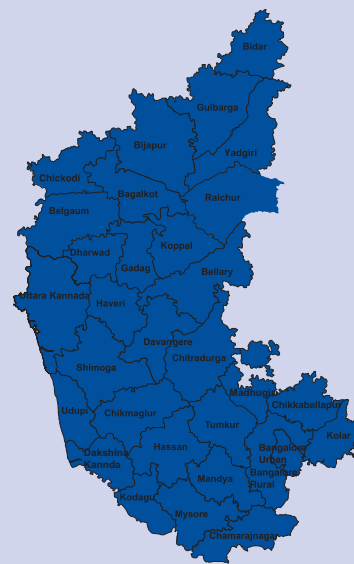


TABLE 5.9

Region-wise dropout rate at the primary level (I-VII)

Region/State	1999-2000			2003-04		
	Boys	Girls	Total	Boys	Girls	Total
South Karnataka	27.6	25.8	26.7	20.1	20.8	20.4
Bombay Karnataka	31.4	43.1	36.8	28.1	31.5	29.7
Hyderabad Karnataka	54.5	58.9	56.5	42.8	51.1	46.7
North Karnataka	42.3	50.4	46.0	34.9	40.5	37.5
State total	34.6	36.7	35.6	27.6	30.4	29.0

Source: Commissioner for Public Instruction, Karnataka.

TABLE 5.10

Percentage of children who are out of school in the age group 7-14

Sl. No.	Category	Percentage of out-of-school children		
		Male	Female	Total
1	All	1.47	1.62	1.54
2	SCs	1.99	2.47	2.22
3	STs	2.11	2.67	2.42
4	Muslims	1.3	1.24	1.27

Source: Children's Census, Department of Public Instruction, 2005.

BOX 5.9

How to guarantee learning

The Learning Guarantee Programme is co-managed by the Government of Karnataka and the Azim Premji Foundation with the goal of creating willingness among schools and communities to come forward and be evaluated on the criteria of enrolment, attendance and learning achievements of children. Schools that satisfy the criteria are eligible for awards. The programme aims to inspire and motivate teachers and schools to develop classroom practices and processes that enable every child to learn.

The programme was launched in 8 education districts of north Karnataka – Bellary, Bijapur, Bagalkot, Raichur, Bidar, Gulbarga, Yadgir and Koppal. Participation in the programme was voluntary and open to all primary and upper primary schools that chose to participate. As many as 6,484 schools sent in applications expressing an interest to participate in the programme and 896 schools volunteered for assessment in 2003 with the number increasing to 1,443 in 2004.

Criteria for a 'Learning Guarantee School'

Criteria	Category A	Category B	Category C
Enrolment	100 per cent of children in the 6–14 age group.		
Attendance	90 per cent of the students enrolled should have attended at least 75 per cent of the total number of working days in school.		
Learning	80 per cent of all children enrolled should have attained the prescribed competencies.	70 per cent of all children enrolled should have attained the prescribed competencies	60 per cent of all children enrolled should have the prescribed competencies.

Results of school evaluation 2004

- 1,888 schools (20 per cent of the government schools) are participating in the programme;
- Over 2,00,000 children were tested;
- 82 schools won the Learning Guarantee Programme Award for 2004;
- The average pupil–teacher ratio (PTR) in the winning schools is 28.5 against the north Karnataka average of 43;
- 11 per cent of the lower primary schools (LPS) evaluated were winners vs. 3 per cent higher primary schools;
- While 24 schools that won in 2003 did not win again in 2004, 16 schools repeated their success and 48 schools that did not win in 2003 came out winners in 2004, showing that schools can improve but must also guard their excellence zealously.

The Lower Primary School at Hanakanahalli, a small village in Bellary district, stands out as a good example of what dedicated teachers, a supportive SDMC and enlightened parents can achieve if they work together as a team. The school, which was graded 'B' last year, upped its ante this year and emerged as an 'A' grade school. **It is also the only school where all its students demonstrated 100 per cent achievement in Kannada and Mathematics.** Yet, this multi-grade school has just two teachers who manage 33 students studying in five classes in two rooms, one of which also serves as the office.

Angala has succeeded in mainstreaming more than half of the total beneficiary children. The highest proportion of children mainstreamed for all schemes is in the Hyderabad Karnataka region. However, even programmes with a small number of beneficiaries are no less critical since the real effort lies in enrolling the 'last mile' children. These children are from the most disadvantaged sections of society – urban street children and child labourers – whose income is critical to their families, and getting them into school is a difficult task (Table 5.11).

Infrastructure

Lack of infrastructure or inadequate infrastructure is among the factors cited for high dropout rates. Causes range from lack of classrooms, latrines, and separate latrines for girls, to not provisioning safe drinking water. An infrastructure index has been constructed based on the percentage of schools run in their own buildings, availability of electricity, water, common toilets, separate toilets for girls, *pucca* buildings/*kutchha* buildings/no building. The infrastructure index has been constructed by using the formula: average of [(Actual - Min)/(Max - Min)]. Based on this index, Bangalore Urban district (0.81) tops in terms of facilities provided to students and Uttar Kannada (0.20) is last. The extent of the gulf between

TABLE 5.11
Percentage of children benefited through various programmes: Karnataka

Name of programmes	Percentage of beneficiaries
Chinnara Angala	51.50
Baa Marali Shalege	10.52
Cooliinda Shalege	1.57
Beediyinda Shalege	0.54
Baa Baale Shalege	5.12
Special Enrolment Drive	27.70
Through EGS	2.62
Flexi School	0.21
Mobile School	0.22
Grand Total	100.00

Source: Sarva Shiksha Abhiyana Samithi, Karnataka.

Bangalore Urban and the second ranking district, Kodagu, is represented by 0.16 points. Across regions, Hyderabad Karnataka has the lowest and south Karnataka the highest infrastructure index. Within south Karnataka, Chitradurga, Tumkur and Hassan have lower infrastructure indices than certain districts of north Karnataka such as Dharwad and Gadag (Figure 5.7). A study found that poor school infrastructure not only repelled students, it also kept teachers away as well (World Bank 2004). Better infrastructure for teachers meant availability of teachers' toilets, electricity, covered classrooms, non-mud floors and libraries. In fact, it has been found that schools that are near paved roads have less teacher absence.

Teachers

Ensuring that there is an adequate number of trained teachers obviously improves the quality of instruction in schools. In Karnataka, only trained teachers are recruited, and the department is conducting in-service training regularly. There has been a perceptible improvement in the pupil-teacher ratio (PTR) at the primary level, which declined from 38 in 1998-99 to 35 in 2003-04, indicating that Karnataka has now attained the national norm of 35 students per teacher at the primary level. Across districts, however, no district in north Karnataka, except Uttara Kannada, and all the districts of south Karnataka except Bangalore Urban and Dakshina Kannada have fulfilled this norm (Appendix Tables: Series 4). This is probably because habitations in most of south Karnataka, as in Uttara Kannada district, are small and widely dispersed. Within Hyderabad Karnataka, Bidar has the lowest PTR. Urban schools have a higher PTR than rural schools, due, in part, to the lower student strength in rural schools. Management-wise, the PTR for 2003-04 indicates that the PTR is higher in private aided schools than in government and unaided schools. The trend shows that a high PTR is correlated with low enrolment and a high dropout rate. The Learning Guarantee Scheme found that the high-performing schools in north Karnataka had a PTR (28.5) which was markedly lower than the local average of 43.

More than 3 per cent of schools are still without teachers and 19 per cent schools function

TABLE 5.12

Basic infrastructure in primary schools: India and selected states

State	Percentage of schools with:				
	Drinking water	Urinal	Separate urinal for girls	Lavatory	Separate lavatory for girls
Andhra Pradesh	31.42	7.34	4.94	6.01	4.27
Karnataka	23.94	4.57	2.28	3.31	1.77
Kerala	76.16	81.38	50.97	40.29	12.05
Tamil Nadu	62.34	19.97	12.10	12.57	8.23
India	44.23	18.93	8.66	10.86	5.12

Source: Sixth All-India School Education Survey, 1993.

FIGURE 5.6

Dropout rate (percentage) in various classes

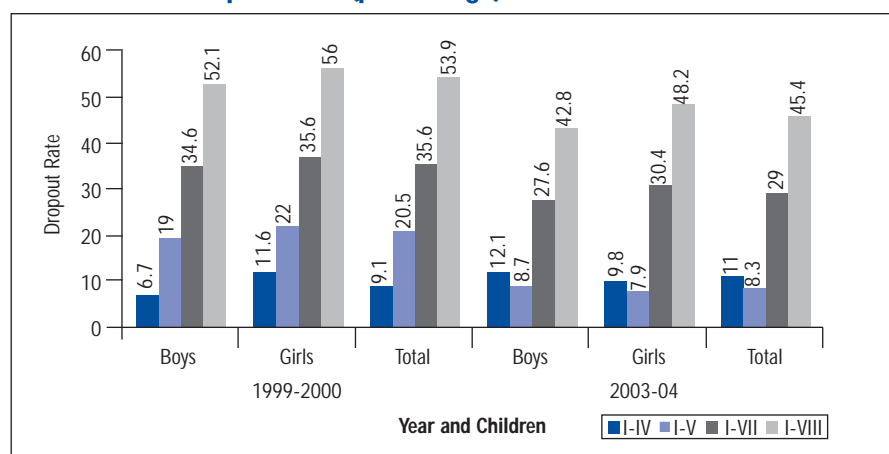
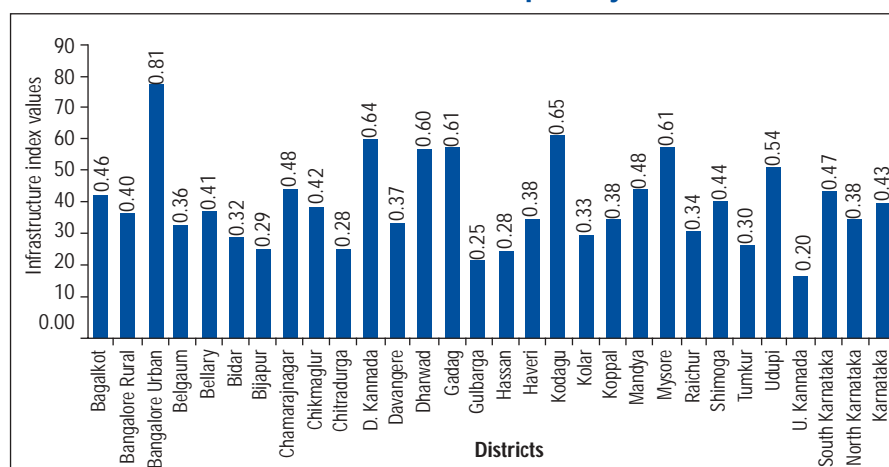


FIGURE 5.7

District-wise infrastructure index for primary schools: 2003-04



Note: Infrastructure index calculated for all type of management schools.

TABLE 5.13
**Teacher absence and teaching activity
 in schools: Karnataka and selected
 states**

State	Teacher absence percentage	Non-teaching activity - percentage of observations
Karnataka	21.70	44.00
Maharashtra	14.60	40.70
Gujarat	17.00	43.10
Madhya Pradesh	17.60	48.90
Kerala	21.20	43.50
Tamil Nadu	21.30	50.40
Orissa	23.40	56.20
Rajasthan	23.70	63.40
West Bengal	24.70	53.90
Andhra Pradesh	25.30	57.00

Source: World Bank Survey, 2004.

Girls' education gets a strong impetus with the presence of female teachers in a school. Government policy directs that women shall constitute not less than 50 per cent of teachers recruited to the state school system. The proportion of female teachers has, accordingly, increased from 46 per cent in 1998-99 to 54 per cent in 2003-04.

with single teachers (Seventh All-India School Education Survey, Provisional Statistics, 2002). This problem is more pronounced in rural areas, while urban areas often have a glut of teachers. This affects the quality of instruction and widens the rural-urban and inter-district disparity in teaching and learning.

Teacher absenteeism, whether for authorised or unauthorised reasons, has an adverse effect on the quality of education. A World Bank survey (2004) found that nearly 22 per cent of teachers are absent from government primary schools on a typical day in Karnataka.

Teachers who are more powerful, defined in this context, as male, older and better educated, and head teachers, are more likely to be absent. In this respect, the survey found that there was not much difference between government and private (aided and unaided) school teachers or regular and contract employees. Multi-grade schools report a higher incidence of teacher absence. Only 45 per cent of the teachers surveyed were actually found teaching during the survey. Low teacher attendance translates into low student attendance and poor examination scores.

Girls' education gets a strong impetus with the presence of female teachers in a school. Government policy directs that women shall constitute not less than 50 per cent of teachers recruited to the state school system. The proportion of female teachers has, accordingly, increased from 46 per cent in 1998-99 to 54 per cent in 2003-04. Kodagu has the highest proportion of female teachers (79.2 per cent) and Bijapur the lowest (38 per cent) in 2003-04. Dakshina Kannada has seen a significant improvement in this regard, from 39.26 per cent in 1998-99 to 73.91 per cent in 2003-04, but the percentage of female teachers has declined in Bangalore Urban, Koppal and Udupi districts. The proportion of women teachers in rural schools is about half of that in urban schools with a few exceptions. While this says something about the lack of facilities for women teachers in rural areas, it also has adverse gender outcomes in terms of low girls' enrolment and retention in rural Karnataka.

Minimum levels of learning

Achievement of certain minimum levels of learning is the fourth objective of UEE and the most difficult to attain. Given the huge spread of the public school system, maintaining uniformity in instructional quality is a challenging task. Certain programmes have been introduced by the government to improve the quality of teaching and learning. *Keli-Kali* is an innovative radio programme for primary school children. The radio programmes are broadcast across the state to cover nearly 6.1 million students in classes III to VI. Its objectives are to provide the benefit of expert teaching to all students, promote student teacher interaction and to inculcate in children an awareness of joyful learning. Songs, local dialects, folklore and sound effects contribute to the attractiveness and topicality of the lessons.

With so many multi-grade schools still in existence, managing uniform levels of learning in all grades becomes a complex task for the teacher. *Bahumukhi*, a training module on multi-grade and multi-level learning, enables teachers to implement strategies such as effective implementation of instructional plan, activity-based teaching methodology, effective

use of teaching and learning material (TLM) and community resources, co-curricular activities, classroom management, time management, *Keli-Kali* radio lessons and continuous and comprehensive evaluation, to ensure that students in multi-grade schools do not lose out on quality.

More recently, the trimester system has been introduced: (i) to ensure there is continuous and activity-based learning during the academic year, through project work; (ii) to render learning more meaningful and interesting to children, by including non-cognitive areas such as drawing, music, yoga, drama and value education in the curriculum; (iii) to build systems for internal assessment and evaluation by introducing grades for evaluation. All these are recent initiatives directed at improving the quality of instruction and learning and the real test is whether the system can be successfully replicated across regions and schools with varying levels of infrastructure.

Examination scores may not be the best way of testing a child's learning skills since the system itself prioritises rote learning over comprehension and analysis. At present, however, it is the only formal system of evaluation of student and teacher performance and one way of assessing the quality of instruction is to look at the number of children who appear for, and pass the examinations after completing seven years of schooling. The government has a policy of 'no detention till class V', thereby ensuring that all children who attend school for a minimum number of days are promoted to the next higher class, irrespective of learning achievements. While this policy helps to keep children in school, thus increasing the years of schooling and reducing dropouts, its effect on levels of learning is not satisfactory. The examination results indicate an improvement in the pass percentage from 84 per cent in 1997 to 91 per cent in 2002. Despite their high dropout rate, girls have a better pass percentage than boys. This trend is manifested across all caste groups, leading to the inevitable conclusion that the socio-economic factors that work against retaining girls in school cause a tremendous waste of human potential for the individual and the country. Across districts, Gulbarga had the lowest and Mandya

the highest pass percentage in 2002. There is little significant difference in the pass percentages of different caste groups. It is self-evident that districts with high literacy rates, a low dropout rate, low PTR and good infrastructure in schools will perform well in the class VII examination. Table 5.14 presents a summary of examination results.

Secondary education

The demand for secondary education is bound to increase as Karnataka moves steadily towards universal elementary education. The demand is likely to peak within a few years of the inception of the Eleventh Plan period. The educational sector will have to address the challenges of universal secondary education by ensuring budgetary support for putting in place the infrastructure required to meet the needs of the most underdeveloped districts of the state, so that quality does not become a casualty as the system expands its outreach. Universal access is emerging as a critical concern since denial of quality education to children because of gender, economic class, caste and geographic location raises serious equity issues. Retention of students who enter secondary education calls for imaginative approaches to ensuring that instructional material and curricula are relevant and develop vocational skills in students. Karnataka Education Department's *EduVision* document stated that 65 per cent of children in the relevant age group would enter the

The educational sector will have to address the challenges of universal secondary education by ensuring budgetary support for putting in place the infrastructure required to meet the needs of the most underdeveloped districts of the state, so that quality does not become a casualty as the system expands its outreach.

TABLE 5.14
7th standard examination pass percentages: Karnataka

Year	Pass percentages		
	Boys	Girls	Total
1997	81.90	86.05	83.77
1998	84.77	88.59	86.49
1999	88.29	91.34	89.68
2000	91.32	93.68	92.40
2001	90.99	93.52	92.16
2002	89.88	92.54	91.12

Source: Karnataka Secondary Education Examination Board, Bangalore.

secondary education stream, and 80 per cent of those who joined should complete the course, and that secondary school leavers should be equipped with the technical and communication skills necessary to join the world of work.

Access

In the year 2003-04, Karnataka had 9,012 high schools, representing a 10 per cent growth since the last HDR (1999). Of these, 3,029 were government, 2,621 were private aided and 3,362 were unaided institutions. Bangalore Urban district (1,179) had the largest number of high schools followed by Belgaum (636) and Tumkur (593) (Appendix Tables: Series 4).

Private, unaided schools grew very rapidly from 845 in 1990-91 to 3,362 in 2003-04. From 1998-99 to 2002-03, however, the rate of growth of unaided schools was 20 per cent while government and aided schools grew at 46 and seven per cent respectively. About two-third of high schools are located in south Karnataka whereas only 57.3 per cent of the state's population resides in this region. This pattern is replicated for all types of management. Gulbarga had the highest number of government schools (251), Belgaum the largest number of aided schools (271) and Bangalore Urban had 841 unaided schools. In fact, Bangalore Urban depends heavily on the private sector to provide school education. It also had a large number of private, aided schools (235). Districts adjacent to Bangalore Urban such as Tumkur, Kolar and Bangalore Rural, and Belgaum and Bidar in north Karnataka also had a significant number of unaided high schools. In addition to Bangalore Urban district, Belgaum, Bijapur, Bangalore Rural, Chitradurga, Dakshina Kannada, Davangere, Tumkur and Uttara Kannada had a heavy concentration of aided schools.

The distribution pattern of high schools does not seem to be correlated with the socio-economic needs of the student population. Given the dominance of the private sector in secondary education, government schools fortunately have a strong presence in rural areas where they can achieve optimal impact in terms of universal access, while unaided schools are concentrated in urban areas where incomes are higher and parents are ready to pay for what is perceived as 'quality education'. 'Quality' is that highly marketable commodity which is associated with private schools, aided and unaided, though unaided schools which do not have to conform to certain government regulations are seen as vastly superior by parents. The social awareness of urban parents about the importance of education in enhancing their wards' life skills and enlarging their choices leads them to demand quality in education, and they are both willing and able to pay for 'quality' education, which often means education in English-medium schools.

The scenario is quite different among the poor, who have to be persuaded into accepting the value of education and be motivated to send their children to school. The elite do not send their wards to government schools because they lack quality. Private schools typically provide better infrastructure such as classrooms, laboratories, libraries, and other resources such as sports and extra-curricular activities, but at a price. In terms of quality, government has highly qualified teachers, but in terms of motivation and outcomes, private schools often do better. This does result in a scenario where the poor and marginal groups have access to an education quite different from that which the elite enjoy. The answer would be to improve the quality of education in government schools and hope that private schools will provide scholarships to the academically gifted poor, as in the West.

Enrolment

Enrolment in high schools increased from 5,57,735 in 1997-98 to 19,49,404 in 1999-2000 and was 19,51,313 in 2002-03. In the year 1997-98, the percentage of girls was 43, which increased to 46.5 in 2003-04 (Table 5.16).

Given the dominance of the private sector in secondary education, government schools fortunately have a strong presence in rural areas where they can achieve optimal impact in terms of universal access.

TABLE 5.15

Secondary schools in Karnataka: 2003-04

Region	Government	Aided	Unaided	Total
South Karnataka	1769	1567	2349	5685
North Karnataka	1260	1054	1013	3327
Total	3029	2621	3362	9012

Source: Commissioner of Public Instruction, Karnataka.

South Karnataka may have the highest percentage of enrolled girls, but enrolment has grown more rapidly in the Bombay and Hyderabad Karnataka regions. There has been a truly impressive growth in ST girls' enrolment in Hyderabad Karnataka. Overall, the proportion of enrolment among girls from the Scheduled Tribes is higher than that of Scheduled Castes and over the years, the enrolment of ST girls has increased at a faster rate than that of others. Hassan had the highest percentage of enrolled girls and Koppal the lowest in 2003-04. However, the enrolment among the SC and ST girls in some districts is still a matter of concern; for example, it is below 25 per cent and 29 per cent in Koppal and Gulbarga districts respectively. Significant gender differentials in enrolment exist between rural and urban areas in some of the less developed districts of north Karnataka, viz. Bijapur, Bagalkot, Gulbarga, Bellary and Raichur (Seventh All-India Education Survey, 2002, Provisional Statistics). Government schools have the highest number of enrolled girls, indicating that they either fulfill the demands of equity or that parents are less willing to incur the costs of private schooling for daughters. However, the retention rate of girls declines in the higher classes as they are pulled out of school to get married or to stay at home.

The gross enrolment ratio in secondary education in classes I to X has improved from 84 in 1998-99 to 90 in 2000-01. There is a marked difference between the GER of girls (87) and boys (93). Across social groups, the GER of ST students is lower than that of SCs and all communities. A completely different picture emerges if one examines the GER for classes XI and XII only. In 1998-99, the GER for the secondary stage was 47.9 and it increased to 52.1 in 2003-04. There is not much difference between boys and girls. The GER for these two classes is almost half of the GER for classes I to X (Table 5.17). In 2000-01 and 2003-04, the GER of Raichur was the lowest in respect of all children, girls and boys. Gulbarga has the lowest GER for ST children in 2000-01.

Retention

There has been a decline in the dropout rate in secondary education (classes I to X) over the years. In 1992-93, the dropout rate in secondary

FIGURE 5.8
High schools by management

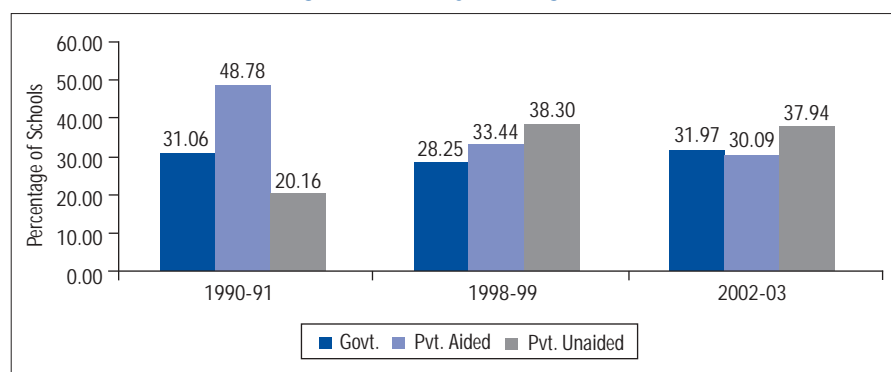


TABLE 5.16
Percentage of girls enrolled in secondary schools

Region/State	1998-99			2003-04		
	All	SC	ST	All	SC	ST
Bombay Karnataka	39.9	36.7	39.0	44.0	33.7	42.3
Hyderabad Karnataka	39.5	34.0	31.8	44.2	36.1	37.1
South Karnataka	46.8	45.8	43.7	48.2	44.1	46.3
North Karnataka	39.7	35.7	35.5	44.1	34.8	39.7
State	44.2	42.9	40.9	46.5	41.3	43.9

Source: Commissioner of Public Instruction, Karnataka.

TABLE 5.17
GER for secondary education for classes I-X and XI-XII

Year	GER: Class I-X			GER: Class XI-XII		
	Boys	Girls	Total	Boys	Girls	Total
1998-99 (All)	87.03	80.37	83.77	48.03	47.82	47.93
2000-01 (All)	92.86	86.89	89.95	55.53	44.98	50.47
2000-01 (SCs)	97.63	90.77	94.31	46.85	44.32	45.66
2000-01 (STs)	85.59	76.51	81.17	42.20	35.20	38.91
2003-04 (All)	86.99	84.31	85.69	53.91	50.13	52.08

Source: Commissioner of Public Instruction, Karnataka.

education was 71 per cent and it declined to 59.61 per cent in 2003-04. Kodagu had the lowest dropout rate and Bellary the highest in 1999-2000. In 2003-04, Kodagu and Tumkur had the lowest dropout rates, i.e. below 23 per cent and 30 per cent respectively. Gulbarga (76.55 per cent) and Bellary (75.77 per cent) had the highest percentage of dropouts that year. About 61 per cent girls drop out when they reach class X. The dropout rate of girls varied from 16

The enrolment of girls is lower than that of boys and their dropout rate is higher, but the inescapable reality is that if girls continue with their education, then they perform exceedingly well.

per cent (Kodagu) to a high 79 per cent in Gulbarga in 2003-04. The overall dropout rate is high in north Karnataka as only three districts of this region are below the state average as compared to eight districts of south Karnataka, which are below the state average. Figure 5.9 depicts that even though the dropout ratio has been declining since 1992-93 to 2003-04, it is still quite high at around 60 per cent.

Appointment of teachers

Recruitment of teachers has kept pace with enrolment, as the pupil-teacher ratio has remained almost constant: merely changing from 23 in 1997-98 to 25 in 2002-03. Bidar has the highest PTR and Kodagu the lowest, but the variation between regions is not significant. The presence of women teachers, especially in rural areas, actively enhances the enrolment and retention of girls at the secondary level. Parents hesitate to send teenagers to schools that are staffed almost exclusively by men. The percentage of female teachers in the state was 33.37 per cent in 1998-99, but fell to 32.33 per cent in 2002-03. Bijapur had the lowest percentage of female teachers (13.2) and Bangalore Urban the highest (64.5) in 1998-99. By 2003-04 Gulbarga had the lowest percentage (10.16) while Bangalore Urban still topped the list with 58.68 per cent female teachers. This highlights an unfortunate trend which is confirmed by the Seventh All-India Education Survey provisional figures: the percentage of women teachers in rural areas is almost half the number in urban areas in almost all districts. Districts in the

Hyderabad Karnataka and Bombay Karnataka region, with low retention numbers for girls, are also below the state average in terms of women teachers (Table 5.18). This scenario does little to whittle away at socio-cultural biases that work for the attrition of girls in secondary education. The gender biases that women teachers experience in the work place also encourage them to opt for the relative security of urban areas. This is one Catch 22 situation to which innovative solutions, such as residential quarters for women teachers and residential schools for girls, will have to be found.

School infrastructure

This is another variable that influences both enrolment and retention, especially of girl students. Drinking water and separate toilets for girls are not always available in high school buildings. Only 32 per cent of the high schools in the state have separate toilets for girls and only 46 per cent have common toilets for boys and girls. Gadag has the highest percentage of high schools with toilets for girls and Chamarajnagar the lowest. The absence of toilets for adolescent girls is rather high in the state. Uttara Kannada, Gulbarga and Chamarajnagar have the lowest infrastructure index while Dakshina Kannada, Udupi and Chikmagalur have the highest (Figure 5.10).

Educational attainments

Performance in board examinations shows that students in privately managed schools and urban schools perform better than students from government and rural schools. The performance

FIGURE 5.9
Dropout rate in classes I-X

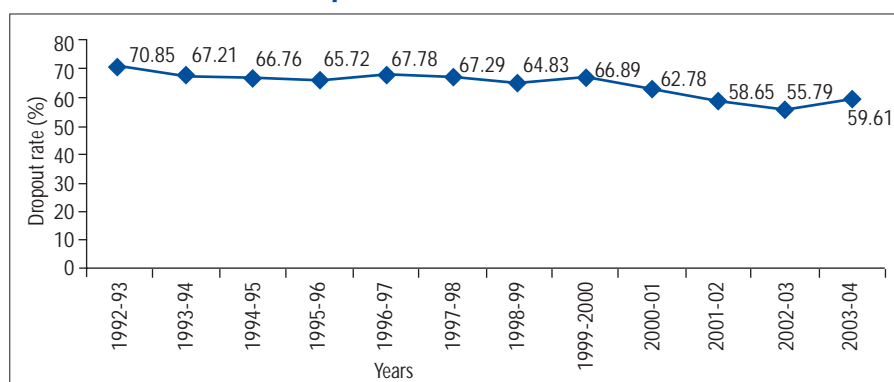


TABLE 5.18
Percentage of female teachers in secondary schools by rural and urban areas in Karnataka: 2002

Region	Rural	Urban
Bombay Karnataka	19.24	40.52
Hyderabad Karnataka	17.36	49.24
South Karnataka	24.93	63.75
North Karnataka	18.59	44.10
State	22.46	58.13

Source: Seventh All-India Education Survey, Provisional Statistics, 2002.

of SC/ST students is also unsatisfactory, but overall, girls in every social group usually out-perform boys. As we saw, the enrolment of girls is lower than that of boys and their dropout rate is higher, but the inescapable reality is that if girls continue with their education, then they perform exceedingly well. Their high attrition rate from class I to X signals wastage of human resources on an unimaginable scale. This is a loss, both for women as gender-class and for a nation where vulnerable sub-groups such as women, SCs and STs dropout of a system that can bring great rewards to those who perform well.

The highest pass percentage in the secondary school board examination in 2004 was in Udupi and the lowest was in Gulbarga district. Over the years, the pass percentage has not shown any consistent trend. There was a marginal increase in the pass percentage from 54 per cent in 1990 to 56 per cent in 2004 in the state (Appendix Tables: Series 4)

Plus-two education

Since the focus of this chapter is school education, we propose to dwell only briefly on the next levels of education. 'Plus-two', or 'pre-university' (PU) education, in Karnataka is conducted in both high schools and pre-university colleges. Conceptually, it is a bridge leading from high school to professional courses in medicine, engineering, agriculture et. al. or to general education. A student who passes high school should ideally decide at this point whether he or she wants to pursue vocational education in polytechnics, industrial training institutes or at the plus-two stage itself in pre-university courses, or move on to tertiary education.

The ratio of PU colleges increased from 3.9 per one lakh population in 1998 to 4.4 in 2003-04. Overall, PU colleges are unevenly distributed across the state, with southern Karnataka having the highest number of PU colleges and Hyderabad Karnataka the least. In 2003-04, eight districts in north Karnataka and four districts in south Karnataka were below the state average. The enrolment in PU colleges has increased at a faster rate than for all other institutions.

FIGURE 5.10
District-wise infrastructure index for secondary schools

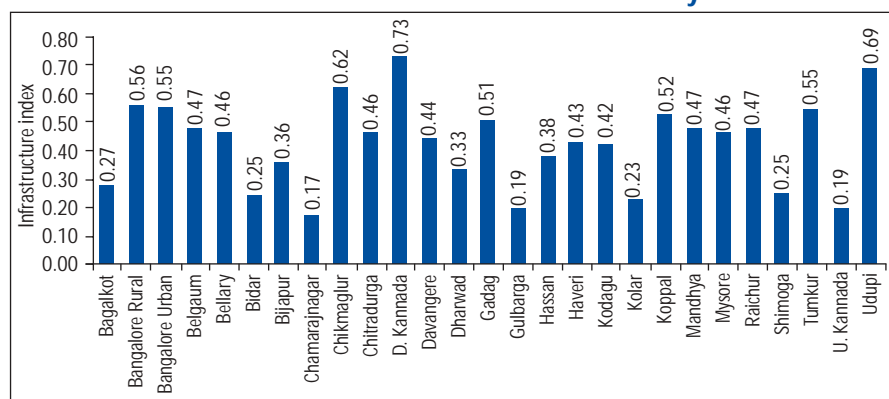


TABLE 5.19
SSLC results: Percentage of students who passed the class X examination

Results by	1990	1993	1995	1997	1999	2001	2003	2004	2005
Type of School									
Government	45.4	39.8	30.6	32.5	47.3	42.5	51.2	62.2	NA
Private	60.0	56.7	51.5	57.2	61.7	56.3	58.6	68.8	NA
Gender									
Boys	52.3	48.7	42.5	43.2	55.0	49.7	52.2	61.7	59.3
Girls	58.4	55.9	48.8	48.3	58.9	52.4	58.5	64.5	66.1
Region									
Rural	52.4	46.4	40.5	40.3	54.1	47.9	53.7	57.1	NA
Urban	56.4	56.4	48.8	57.2	59.9	55.9	56.4	55.6	NA
Social groups									
SC/ST	41.3	40.8	32.5	32.1	43.8	36.7	51.3	52.7	49.40
General	57.1	53.6	47.8	48.5	59.6	48.1	54.6	57.0	66.02
State Total	54.3	51.4	44.9	45.3	56.7	50.9	55.1	63.01	62.47

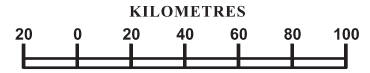
Source: Karnataka Secondary Education Examination Board, Bangalore.

Note: NA - Not Available.

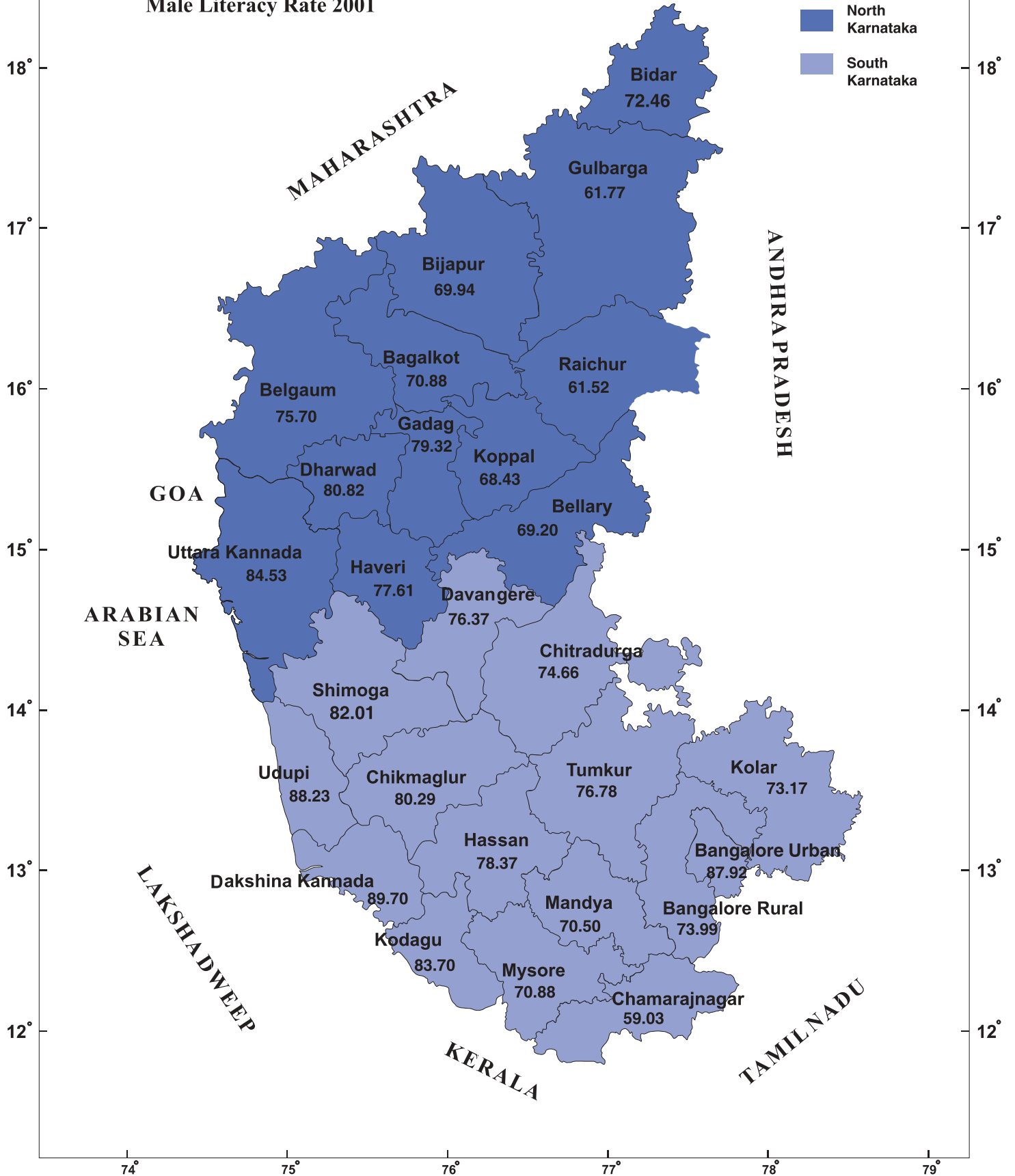
The performance of students in PU examinations shows that there has been significant improvement in pass percentages in the state, from 48 per cent in 1997-98 to 58 per cent in 2003-04. Girls have done better than boys in all districts. While this is heartening, it also leads to some uncomfortable questions about attrition at the next level, i.e. enrolment in tertiary education where girls are under-represented. Across districts, Dakshina Kannada tops the list while

KARNATAKA

Male Literacy Rate 2001



- North Karnataka
- South Karnataka



Bidar and Gulbarga have a pass percentage that is less than 30 per cent (1998–99). In 2003–04, Gulbarga's performance had improved (36.70) (Appendix Tables: Series 4). There is not much difference between the pass percentage of SCs and STs, but the pass percentage of non-SC/STs is better than that of SCs, STs and 'all categories' (Figure 5.12).

Vocational education

A student can pick vocational courses from a variety of institutions: polytechnics, industrial training institutes (ITIs) and vocational courses at the PU level itself. The objective here is to reduce the pressure on higher education, but more important, to impart vocational skills to prepare students for self-employment. About 182 polytechnics (38 government, 36 aided and 108 private institutions) offer diploma courses in various engineering disciplines, fashion technology, commercial practice, cinematography, etc. About 70,000 students are enrolled in these courses. The department of Vocational Education runs 890 courses as diverse and disparate as dairying, accountancy, garment design, civil construction and computer technology to name a few. There were 68 government and 328 private ITIs in the state in 1998–99, which increased to 104 and 466 by 2003–04, showing a growth rate of 8.9 per cent and 7.3 per cent per annum for government and private ITIs respectively.

The spread of government polytechnics varies from a low 11 per cent in Bombay Karnataka to a high 28 per cent each in southern Karnataka and Hyderabad Karnataka. The southern districts have the highest proportion of private unaided institutions (61.67) in 2002–03. The dominance of private institutions, particularly in the backward areas of the state, is likely to create inequalities, as only the higher income groups can afford them. The predominance of the private sector is again apparent when we look at the ITI stream of vocational training. In 2003–04, Belgaum district had the highest number of government institutions and Koppal had the lowest number of private ITIs, while south Karnataka has a better distribution of institutions than north Karnataka. The enrolment in ITIs increased at a compound

FIGURE 5.11
Growth of PU colleges and enrolment

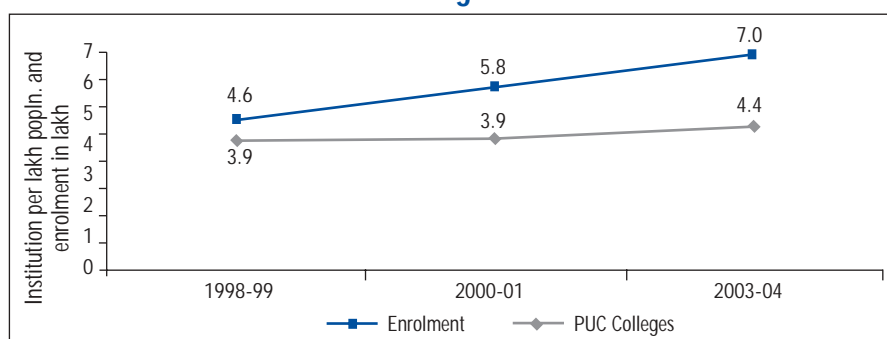
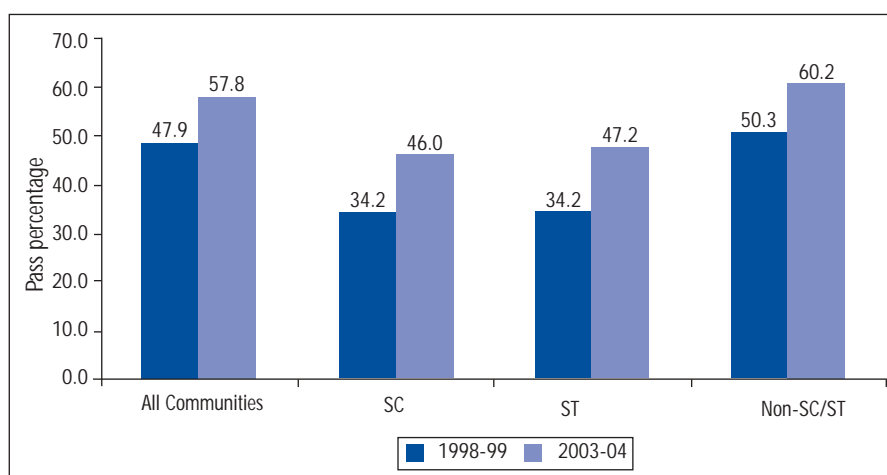


FIGURE 5.12
Pass percentages of PUC results by social groups



growth rate of 8.5 per cent per annum during the period 1998–99 to 2003–04.

The enrolment in government institutions increased at 10.8 per cent while in private institutions it grew at 7.2 per cent per annum during the same period. Girls constitute only 16.6 per cent of all students and the enrolment of girls was about 2.5 times higher in south Karnataka than in north Karnataka (2003–04). The lowest proportion of girls' enrolment was in Koppal district (0.95) while Chitradurga (50.2) had the highest. Disturbingly, girls' enrolment in ITIs is very low in the less developed districts.

Vocational education institutions, both government and private, show a sharp decline over the period 1998–99 to 2003–04. The decline in private institutions (3.63 per cent) is more marked than in government institutions (0.68) but there has been

TABLE 5.20
District-wise education index: 1991 and 2001

Sl.No.	Districts	Education Index (I-X)		Education Index (I-X): 2001		
		1991	2001	All Communities	SCs	STs
1	Bangalore Urban	0.757	0.93	0.89	0.83	1.29
2	Bangalore Rural	0.582	0.69	0.66	0.62	0.66
3	Kolar	0.576	0.75	0.71	0.64	0.65
4	Tumkur	0.612	0.75	0.71	0.62	0.67
5	Shimoga	0.662	0.80	0.77	0.83	0.78
6	Chitradurga	0.590	0.73	0.70	0.63	0.59
7	Davangere	0.623	0.74	0.71	0.57	0.56
8	Mysore	0.550	0.70	0.67	0.64	0.60
9	Chamarajnaragar	0.446	0.60	0.57	0.60	0.50
10	Mandya	0.622	0.72	0.68	0.63	0.71
11	Hassan	0.599	0.76	0.73	0.61	0.65
12	Chikmagalur	0.639	0.78	0.74	0.60	0.65
13	Kodagu	0.739	0.86	0.83	0.72	0.45
14	Dakshina Kannada	0.799	0.88	0.82	0.69	0.80
15	Udupi	0.830	0.88	0.84	1.19	0.77
16	Belgaum	0.586	0.73	0.70	0.65	0.49
17	Bijapur	0.561	0.66	0.64	0.60	1.03
18	Bagalkot	0.567	0.66	0.64	0.55	0.55
19	Dharwad	0.637	0.79	0.76	0.71	0.65
20	Gadag	0.601	0.77	0.75	0.62	0.78
21	Haveri	0.582	0.73	0.70	0.61	0.63
22	Uttara Kannada	0.692	0.82	0.78	0.72	0.58
23	Gulbarga	0.432	0.60	0.57	0.51	0.32
24	Bellary	0.506	0.64	0.62	0.51	0.48
25	Raichur	0.372	0.55	0.52	0.46	0.34
26	Koppal	0.403	0.60	0.58	0.49	0.49
27	Bidar	0.547	0.72	0.69	0.67	0.45
	State	0.604	0.74	0.71	0.63	0.56

Sources:

1. KHDR 1999, Planning Department, Karnataka.
2. Registrar General of India, 2001: Primary Census Abstract.
3. Commissioner of Public Instruction, Karnataka.

no such reduction in the Hyderabad Karnataka districts. Closure of courses probably indicates their unpopularity with students, especially if they had no linkages to market needs.

How relevant and useful are these courses and to what extent do they succeed in providing viable alternatives to tertiary education courses? The Task Force on Higher Education (2004) reports that annually, only 59 per cent of the intake in polytechnics is utilised, showing severe wastage. Ultimately, these courses will find takers only if they lead to employment and enhanced incomes.

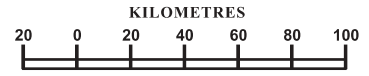
There is a need to evaluate these courses and ascertain how many students actually get the jobs/vocations for which they study. Vocational education is a complex area, since changes in the job market/business scenario can impact the courses that are being offered. Institutions have to be dynamic and have the flexibility to add new options/courses, e.g. repair of mobile phones, computers and eliminate courses that are no longer relevant to the market. Government institutions too need to operate under a framework that allows for such flexibility. Private institutions may be slightly better placed in this respect, but both government and private institutions have the same boards, which dictate course content and which are slow to respond to new market demands.

Education index

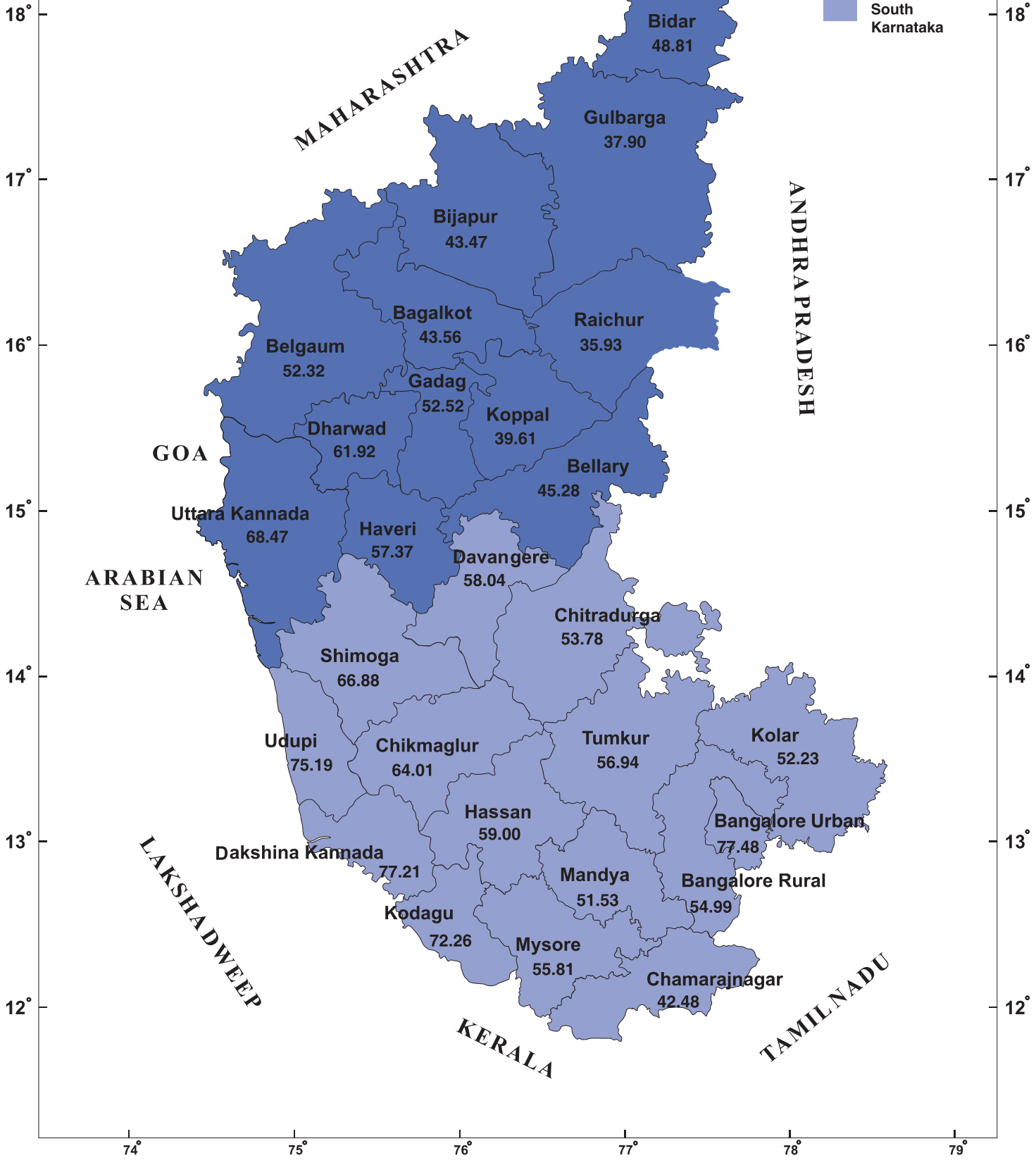
An education index of districts (EI) has been computed based on the literacy rate and the GER. Despite significant improvement in the EI of Raichur in 1991-2001, the relative status of this district has not changed. In 1991, Raichur district occupied the lowest position and Dakshina Kannada ranked first among districts. In 2001, Raichur occupied the lowest place for all communities and Scheduled Castes, while Gulbarga district is last in the EI for Scheduled Tribes. Bangalore Urban, Kodagu, Dakshina Kannada and Udupi are well above the state average while Raichur, Gulbarga, Koppal, Bellary and Chamarajnaragar are below the state average (Table 5.20).

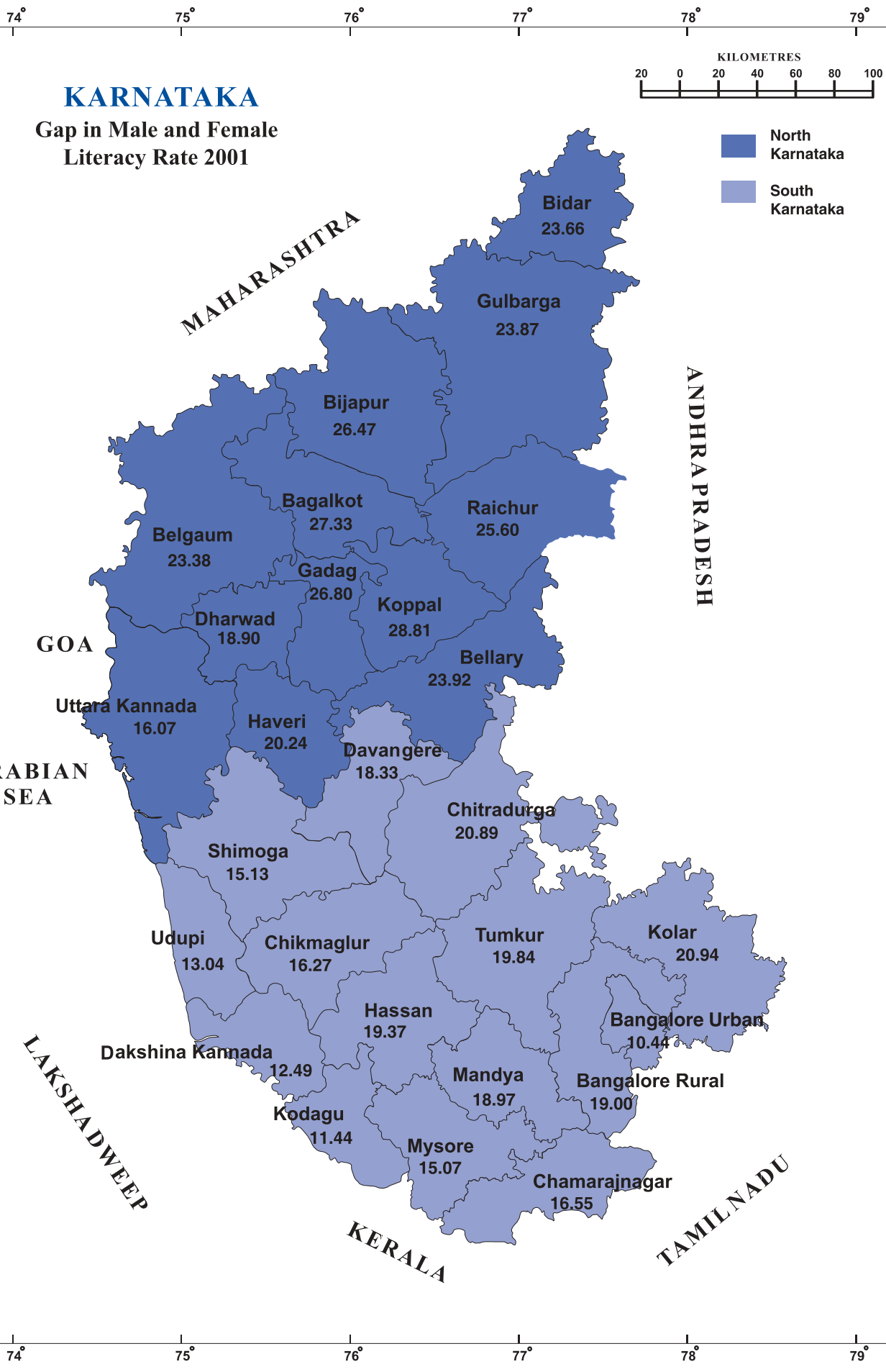
KARNATAKA

Female Literacy Rate 2001



- North Karnataka
- South Karnataka





Concerns

- In 2001, Karnataka's urban literacy rate was 80.58 per cent, hence the Tenth Plan goal of 75 per cent literacy has already been met in the urban areas at least, but the rural areas with 59.33 per cent literacy are some distance from the goal.
- The goal of reducing the gender gap in literacy by 50 per cent by 2007 seems over-ambitious since, between 1991 and 2001, the gender gap in literacy dwindled by only 3.1 and 3.76 percentage points in the rural and urban areas respectively. The illiteracy rate is more than 63 per cent among Scheduled Tribes and about 58 per cent among Scheduled Caste females.
- The literacy level of SCs in Karnataka was higher than the all-India SC literacy level with reference to both female and total literacy in 1991. In 2001, the SC literacy rate was lower than the all-India SC male, female and all, which is a matter of great concern.
- As many as 15 districts (9 in north and 6 in south Karnataka) have a literacy rate that is below the state average, while five districts of the Hyderabad Karnataka region are below the all-India literacy rate in respect of total, male and female literacy levels.
- North Karnataka, especially Hyderabad Karnataka, performs poorly in several indicators. Enrolment rates have risen in primary education in the state particularly in Raichur district, but unfortunately the GER of this district has been the lowest in the state from 1996-97 to 2000-01 meaning that all districts are working towards improving enrolment and retention and Raichur will need special attention to match them. The highest dropout rate for girls is in Gulbarga (58 per cent) and Bellary (55.40 per cent) in 2003-04 in classes I to VII. Retention is thus a crucial challenge.
- The mean years of schooling have increased only slightly from 3.97 in 1999-2000 to 4.25 in 2003-04.
- Significant work remains to be done to enhance the quality of teaching-learning. The 'no detention' policy, while encouraging retention of children upto class V, could also lead to an inadequate assessment of learning and teaching in the first four years (which are, admittedly, the most significant years as far as learning is concerned). Further, measures to assess learning are still largely dominated by test-of-memory examinations.
- About three per cent primary schools in rural, and four per cent schools in urban areas, do not have any teachers at all while slightly more than 20 per cent in rural and seven per cent schools in urban areas have only one teacher.
- Nine districts in north Karnataka and five districts in south Karnataka have less than 50 per cent female teachers in primary schools in 2003-04.
- Primary school infrastructure is a critical variable for retention. However, as many as nine out of 12 districts of north Karnataka are below the state infrastructure index average. DPEP districts should have basic infrastructure as it was one of the objectives of DPEP, but it seems this has been only partially fulfilled with 6 out of 11 (DPEP) districts still below the state average. As many as seven districts in southern Karnataka are below the infrastructure index average.
- The dropout rate at the secondary level is about 60 per cent by the time students reach class X. The low percentage of female teachers and lack of infrastructure are contributory factors to the high dropout rate of girls.
- The infrastructure of high schools is relatively poor, particularly in north Karnataka, as the average index (0.37) of these districts is below the average index of the state (0.42). In 2002-03, 54 per cent of schools did not have any toilets and 68 per cent of schools did not have separate toilets for girls.
- Examination results indicate that government and rural high schools do not perform as well as privately managed schools and urban schools. With government schools catering to low socio-economic groups, girls, SCs and STs and rural areas, this is a matter of concern.
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join should complete secondary education' is yet to be achieved as only 40 per cent of those who joined completed secondary education in the state in 2003-04.

- The increasing popularity of private schools can be a cause for concern from an equity perspective. This preference for private (unaided) schools is most visible in urban areas, where parents seem to prefer them to government schools, wherever they can afford them.
- Currently, vocational education lacks the mechanisms for responding quickly to changing market demands. Certain courses are under-subscribed in polytechnics and many courses have shut down in the department of Vocational Education.
- Vocational courses have become stopovers for tertiary education instead of being terminal points.

Recommendations

While literacy rates in urban Karnataka are very good, the literacy levels of the rural population, women, SCs and STs, and more particularly SC and ST women indicate that the state is far from reaching the Tenth Plan goals. Literacy levels in the northeastern districts are considerably below the state and national averages. The hiatus in national spending and targeting of low-performing areas and groups must give way to a renewed focus on adult education.

The goals of access, enrolment, retention, are in a way sequential, in the sense that each goal needs to be significantly achieved before the next can be meaningfully addressed. Karnataka has dealt satisfactorily with the access and enrolment goals. Retention and quality of learning are more complex and challenging goals, since they need varied and qualitative strategies while the first two — access and enrolment — largely need physical/quantitative remedies. Physical/quantitative goals are easier to achieve than qualitative/soft goals. Most vulnerable to dropping out of school are girls from all social classes, the poor and the Scheduled Castes and Tribes. Geographically, the northern districts and especially the Hyderabad Karnataka region have poor education indicators. Focused

targeting of these marginal sub-populations thus becomes necessary.

Infrastructure facilities, particularly classrooms, separate toilets for girls and drinking water should be provided to all schools on a priority basis. Lack of these facilities could negatively impact retention, especially of girls. Though toilets have been constructed in many schools, they have become unworkable without water supply. Hence, construction of toilets must go hand in hand with providing water facilities. In addition, upgradation of laboratories and libraries in high schools should be taken up.

The proportion of female teachers in rural schools is about half of that in urban schools with a few exceptions in some south Karnataka districts. Thus, while the state has achieved its target of 50 per cent women teachers, their over-concentration in urban areas will have to be corrected to ensure that rural primary schools do not suffer from a shortage of women teachers.

From a governance perspective, there will have to be concerted efforts to ensure that teachers do not absent themselves from school, even for authorised purposes. In a single teacher or multi-grade school, this means that the school effectively closes down. Good governance is the critical factor here in curbing indiscipline, whether it is in ensuring that schools in remote, underserved areas get teachers and these teachers actually report for work or in curbing absenteeism and encouraging committed teachers to perform well.

The quality of decision-making in the administration would be significantly enhanced if an EMIS (Education Management Information System) was available to administration at the state, district, taluk and village levels. For instance, information on the current status of teacher vacancies and absenteeism, training and training needs would help administrators significantly.

Panchayat Raj institutions (PRI) and community support to schools for fully achieving the goals of education can be split into two categories

– ‘hard’ factors such as infrastructure, enrolment, attendance and ‘soft’ factors such as quality of teaching-learning. Gram panchayats and School Development and Monitoring Committees (SDMCs) will have to play an important role in infrastructure creation and supporting enrolment and attendance of both teachers and students, while department officers provide academic/pedagogic input.

Village level tracking systems must be put in place to monitor dropouts and out-of-school children. It would mean that panchayat institutions, community based organisations like the SDMC and departments, viz. Education, Labour and Rural Development, must organise a platform of interventions to ensure that children enroll and stay on in school.

School adoption is a programme that should be more fully explored. The department should make the ‘School Adoption Programme’ easily accessible to individuals and institutions all over the country, and to NRIs in particular. The Internet can be a relevant medium to promote this programme world wide. School adoption could focus on the infrastructure needs of the school.

In secondary education, government must take steps now itself to accommodate the large stream of students who will seek admission to high schools in the wake of its successful implementation of the *Sarva Shikshan Abhiyan* programme.

The tremendous attrition in secondary education is due in part to lack of proper evaluation at the primary level that lets most students pass through the system, sometimes without having attained minimum levels of learning. Bridge courses for such children would ensure that they do not drop out. The dropout rate at the secondary level is about 60 per cent by the time students reach class X. The low percentage of female teachers, lack of infrastructure, especially separate toilets for girls, and above all, social restrictions on girls once they attain puberty, are contributory factors. This is a difficult challenge that needs to be effectively tackled to ensure that the benefits of education reach girls. The education of girls is known to have immense emancipatory and empowerment potential, hence this must be accorded high priority

by recruiting more women high school teachers as in primary levels, providing schools with basic infrastructure (68 per cent of high schools do not have separate toilets for girls) and by building awareness in the community. Otherwise, girls who constitute a high percentage of dropouts are likely to lose out even more when the influx to secondary education begins.

The infrastructure of high schools is poor, especially in the northern districts. A high 54 per cent of the schools do not have any toilet whatsoever. Laboratories are so ill-equipped that Science practicals are not conducted in the S.S.L.C. examinations to ensure against urban bias. Many high schools do not even have furniture for class rooms. Hence these facilities will have to be provided.

The tenth class has been conceptualised as a terminal point for those who wish to discontinue studies to enter the world of work. However, the vocation/job opportunities for those who complete secondary education is limited. This is another complex area that needs attention. Students who leave the education stream after completing class X do not have sufficient skills, vocational and communicative, to take up meaningful jobs. All too often, they become alienated from their traditional occupations such as agriculture. Incorporating a vocational base to secondary education has been tried several times and failed for various reasons such as lack of relevance to market needs, inflexibility of curricula and lack of trained teachers. However, this is one area, which needs to be re-addressed from a fresh perspective.

Vocational education has had its successes when it has responded to the market, as in the case of IT-based diplomas or Commercial Practice, which is popular with girls as they get jobs almost immediately. The older vocations such as civil and mechanical engineering have seen a decline in demand: these courses should be revamped, and retraining teachers should go hand-in-hand with this strategy. Developing vocational courses for dropouts from the school system also needs to be prioritised.

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