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Research Article

Literacy and Education System in Karnataka State

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Abstract

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 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. Literacy positive association with improved socio-economic development indicators, as well as some demographic indicators, underlines its crucial role in the process of human development. 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. 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. 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.

Keywords: Education, Enrollment, Infrastructure, Literacy

1. 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

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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 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.

2. 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. 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. 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 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 1 District-wise rural female literacy rate and percentage of rural families below poverty line: 2011

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	Chikmaglur	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**

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

Table 2 Literacy rate of Karnataka and all-India

Year	Karnataka				All-India			
	Persons	**Male**	**Female**	**IGD1**	**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.

2.1 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 mobilize 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 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.

2.2 Education

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

2.3 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 strides towards achieving the goal of UEE, which requires the fulfillment of the following objectives:

1) Universal access to primary schools for all children
2) Universal enrolment
3) Universal retention
4) Universal achievement of minimum

2.4 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, Chikmaglur, 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. 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), Chikmaglur (91.63), Haveri (91.59) and Bangalore Rural (91.00). 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 universal Elementary Education (UEE).

Table 3 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		
Chikmaglur	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.

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 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, 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 4 Distribution of primary schools by management and area: 2002-03

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.

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-ofschool children into primary education. Chinnara 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.

Table5 Percentage of children benefited through various programmes: Karnataka

Name of programmes	**Percentage of beneficiaries**
Chinnara Angala	51.50
Baa Marali Shalege	10.52
Coolienda 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.

2.5 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/kutcha 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 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.

2.6 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 Edu Vision document stated that 65 per cent of children in the relevant age group would enter the 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.

Table 6 Secondary schools in Karnataka: 2003-04

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: Commissioner of Public Instruction, Karnataka.

2.7 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 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.

2.8 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 Chikmaglur have the highest.

Table 7 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.

2.9 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 of SC/ST students is also unsatisfactory, but overall, girls in every social group usually outperform 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 drop-out 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 percent in 1990 to 56 per cent in 2004 in the state.

2.10 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.

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 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'

1.11 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 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 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.

2.12 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 fi rst 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 Chamarajnagar are below the state average.

3. Concerns

In 2001, Karnataka's urban literacy rate was 80.58 per cent, hence the Tenth Plan goal of 75 percent 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 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 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.

4. Recommendations and Conclusion

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 accesses 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, up gradation 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.

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