4

Literacy and Education

Introduction

The 86th Constitutional Amendment introduced in 2002 makes access to free and compulsory education for all children in the age group of 6-14 years a Fundamental Right. The Right to Education (RTE) Act, 2009, legislated under the aforementioned Article further strengthened India's commitment towards educating her children. The Act distributed the responsibility of ensuring this right between the Centre and the States. The amendment and subsequent legislation under Article 21-A were affirmative steps towards realisation of one of the UN Millennium Development Goals (MDGs).

Education, along with food, water and hygiene, is considered a basic human right under the Universal Declaration of Human Rights. It is one of the three components used in the computation of the HDI (Human Development Index) of a country. Education among the people of a region indicates not just those who can read or write, but forms the basis for larger social, political and economic progress of the region. By the Tamil Nadu Compulsory Education Act, 1994, and the Tamil Nadu Right of Children to Free and Compulsory Education Rules, 2011, the State has laid the formal framework to attain universal primary education. Further, the State also envisages achieving universal secondary education, increasing enrolment in colleges (including vocational education) to over 50 per cent and making the State an innovation hub and a knowledge capital of India, on the strength of world class institutions in various fields and the best of human talent.

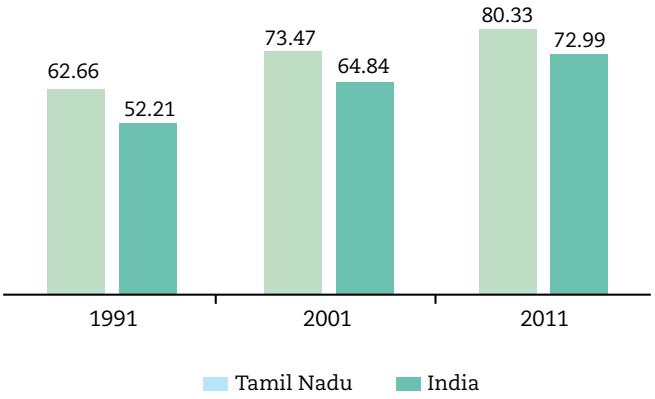
This chapter provides an overview of the progress of education in Tamil Nadu, focusing on efforts made by the State to expand literacy and provide equitable access to quality education at all levels. It maps the progress of education over the decade 2001-2011—literacy, primary and secondary education, higher education and skill development—at the State level and across districts.[1] In doing so, we also highlight the challenges that are likely to emerge.

Trends in Literacy

Although literacy is just one aspect of education, it is undeniably the most important and commonly used indicator of basic education or more simply, the ability of a population to read and write. It is computed for population aged 7 and above. According to the 2011 population census, 80.09 per cent of Tamil Nadu's population is literate, an improvement from 73.45 per cent in 2001. This is much higher than the all-India average of 74.04 per cent, positioning the State as eighth among all other States. This is remarkable, given its large size, as the only State of comparable size that ranked higher than Tamil Nadu is Maharashtra. Total literacy rate in India and Tamil Nadu has shown an increasing trend over the years. While the literacy rate of Tamil Nadu has increased from 62.66 in 1991 to 80.33 in 2011, that of India has also increased from 52.21 in 1991 to 72.99 in 2011. The difference between the national average and the State average has also decreased from slightly over 10 per cent in 1991 to over 7 per cent in 2011.

Figure 4.1

Literacy Rates in Tamil Nadu and All-India



Source: Census 2001, Census 2011.

According to Census 2011, of the total rural and urban population, 24,098,521 (80.33%), 19,980,569 (73.8%) respectively are literates. Over the decade 2001-2011, the urban and rural literacy rates have increased from 82.53 to 87.24 per cent and 66.21 to 73.8 per cent respectively, with the latter exhibiting higher growth over the decade than the former. In terms of female literacy, it may be noted that while the total literacy rate for women in 2011 was 73.86 per cent, rural female literacy rate was 65.52 per cent (an increase of 10.24% from that in 2001), and urban female literacy rate was 82.67 per cent.

In order to get a sense of inter-district variations in spread of literacy, the total, rural and urban literacy rate in 2001 and 2011 are examined at the district level as shown in Table 4.1.

1. The present report is a follow-up of the Tamil Nadu Human Development Report (TNHDR) (2003), which had traced the progress of literacy and education in the state until 2001.

Table 4.1

District-wise Literacy Rates in 2001 and 2011

State/ District	Literacy Rate (2001)			Literacy Rate (2011)		
	Total	Rural	Urban	Total	Rural	Urban
Tamil Nadu	73.45	66.21	82.53	80.33	73.8	87.24
Thiruvallur	76.94	67.18	84.98	83.82	74.38	88.82
Chennai	85.33	Nil	85.33	90.33	Nil	90.33
Kancheepuram	76.85	67.28	85.12	85.29	76.6	90.25
Vellore	72.36	67.43	80.46	79.65	75.39	85.25
Dharmapuri	60.31	57.57	75.67	64.71	62.69	74.23
Krishnagiri	62.29	58.61	80.47	72.41	68.41	86.07
Tiruvannamalai	67.39	64.65	79.52	74.72	72.54	83.3
Viluppuram	63.8	60.98	80.28	72.08	69.79	85.25
Salem	65.09	57.27	74.16	73.23	66.16	79.97
Nammakkal	67.41	63.15	74.83	74.92	71.73	79.66
Erode	65.44	57.57	73.64	72.96	66	79.63
The Nilgiris	80.01	74.26	83.9	85.65	81.67	88.4
Coimbatore	78.5	65.77	83.77	84.31	72.43	88.15
Tiruppur	71.08	62.55	79.6	79.1	70.31	84.73
Dindigul	69.35	64.25	78.77	76.85	72.28	84.49
Karur	68.08	62.33	79.59	75.86	69.59	85.11
Tiruchirappalli	77.9	69.87	86.76	83.56	77.24	90
Perambalur	66.07	63.59	78.93	74.68	72.46	85.4
Ariyalur	64.08	62.32	77.74	71.99	70.79	81.49
Cuddalore	71.01	65.37	82.32	79.04	74.97	86.85
Nagapattinam	76.34	74.16	83.89	84.09	82.54	89.41
Thiruvarur	76.58	74.28	85.53	83.26	81.53	89.99
Thanjavur	75.45	70.73	84.59	82.72	79.06	89.36
Pudukkottai	71.12	68.1	85.72	77.76	74.97	89.29
Sivaganga	72.18	67.03	85.26	80.46	76.33	89.62
Madurai	77.82	67.6	85.74	81.66	70.28	88.98
Theni	71.58	66.13	76.19	77.62	72.81	81.83
Virudhunagar	73.7	68.7	79.7	80.75	76.53	84.87
Ramanathapuram	72.96	69.04	84.43	81.48	77.62	89.77
Thoothukkudi	81.34	77.54	86.65	86.52	82.57	90.46
Tirunelveli	76.15	71.76	80.79	82.92	79.49	86.4
Kanyakumari	87.55	86.17	88.29	92.14	90.95	92.4

Source: Registrar General of Census 2001, 2011.

Table 4.2

Literacy Rates by Districts, Gender and Residence, 2011

State/District	Literacy Rate: Male (2011)			Literacy Rate: Female (2011)		
	Total	Rural	Urban	Total	Rural	Urban
Tamil Nadu	86.81	82.08	91.82	73.86	65.52	82.67
Thiruvallur	89.18	82.45	92.7	78.39	66.33	84.85
Chennai	93.47	Nil	93.47	87.16	Nil	87.16
Kancheepuram	90.34	84.18	93.85	80.17	68.96	86.6
Vellore	86.96	84.08	90.77	72.43	66.75	79.83
Dharmapuri	69.16	67.3	78.17	60.03	57.8	70.25
Krishnagiri	79.65	76.49	90.5	64.86	59.96	81.5
Tiruvannamalai	83.73	82.29	89.46	65.71	62.77	77.23
Viluppuram	80.58	78.76	91.13	63.51	60.72	79.39
Salem	80.7	75.02	86.23	65.43	56.71	73.57
Nammakkal	83.09	80.84	86.46	66.68	62.5	72.86
Erode	80.81	74.94	86.53	65.07	56.88	72.79
The Nilgiris	92.15	89.87	93.71	79.44	73.94	83.28
Coimbatore	89.49	80.25	92.47	79.16	64.67	83.84
Tiruppur	86.07	79.36	90.33	72.07	61.29	79.05
Dindigul	84.91	81.74	90.26	68.82	62.81	78.79
Karur	84.86	80.15	91.81	67.05	59.25	78.55
Tiruchirappalli	90	86	94.08	77.24	68.64	86
Perambalur	83.39	81.88	90.73	66.11	63.19	80.18
Ariyalur	82.06	81.31	88.03	62.22	60.58	75.19
Cuddalore	86.84	84.04	92.25	71.2	65.79	81.48
Nagapattinam	90.38	89.31	94.08	78	75.96	84.94
Thiruvarur	89.65	88.53	94.1	77.02	74.69	86.05
Thanjavur	89.06	86.5	93.74	76.61	71.87	85.18
Pudukkottai	86.19	84.24	94.17	69.51	65.9	84.46
Sivaganga	88.61	86.11	94.17	72.33	66.59	85.09
Madurai	86.55	76.79	92.87	76.74	63.7	85.09
Theni	85.48	81.94	88.54	69.72	63.52	74.95
Virudhunagar	88.46	85.81	91.05	73.14	67.34	78.79
Ramanathapuram	87.89	85.23	93.52	74.93	69.89	85.87
Thoothukkudi	91.42	88.85	93.96	81.77	76.51	87.04
Tirunelveli	89.66	87.18	92.16	76.38	72.06	80.79
Kanyakumari	93.86	92.49	94.15	90.45	89.42	90.67

Source: Census 2011.

Table 4.3

Comparing Lowest/Highest Literacy Rates across Gender (2001-2011)

Sub-category		*2001*		*2011*	
		Minimum	*Maximum*	*Minimum*	*Maximum*
Total	Male	70.79	90.37	69.16	93.86
	Female	49.28	84.79	60.03	90.45
Urban	Male	81.96	92.54	78.17	94.17
	Female	64.96	85.51	70.25	90.67
Rural	Male	67.99	88.95	67.3	92.49
	Female	45.64	83.44	56.71	89.42

Source: Census 2011.

Overall, only about 50 per cent of the districts show rural and urban literacy rates above the State average in 2001 and 2011. Krishnagiri district has the highest rural literacy rate growth over the decade at 9.8 per cent and Madurai has the lowest at 2.68 per cent. In 2001, Kanyakumari had the highest rural literacy rate at 86.17, whereas Salem had the lowest at 57.27. Similarly, Kanyakumari has the highest rural literacy rate in 2011 too at 90.95 per cent (the national average is 72.99%) and Dharmapuri has the lowest at 62.69. Moving on to urban literacy rates, in 2001, Kanyakumari had the highest literacy rate at 88.29 and Erode had the lowest at 73.64. Over the decade, Kanyakumari continued to have the highest urban literacy rate at 92.4 per cent, and Dharmapuri had the lowest literacy rate at 74.23. Perambalur had the highest growth in literacy rate at a rise of 6.47 per cent over the decade 2001-2011. Dharmapuri`s literacy rate decreased by 1.44 from 74.67 in 2001[2]. Next, we present literacy rates by gender and residence across districts in Tamil Nadu for 2011 (Tables 4.2 and 4.3).

Kanyakumari district has maintained its record of attaining the highest total male and female literacy rates at 93.86 and 90.45 per cent respectively in 2011. The district with the lowest total male and female literacy rates in 2011 was again Dhamapuri with 69.16 and 60.03 per cent respectively. Kanyakumari has the highest rural male literacy rate at 92.49 per cent, whereas Pudukkottai and Sivaganga have the highest urban male literacy rate at 94.17 per cent, despite Pudukottai ranking slightly lower than the State average in overall literacy levels. Considering female literacy rates by residence, Kanyakumari has the highest rural and urban female literacy rates at 89.42 and 90.67 per cent, respectively. Dharmapuri has the lowest rural male literacy rate at 67.3 per cent, while Salem shows the lowest rural female literacy rate of 56.71 per cent. Dharmapuri also has the lowest urban male and female literacy rates at 78.17 and 70.25 per cent, respectively.

Table 4.3 presents the spread of literacy rates in 2001 and 2011 by gender and location of the residence. For males, the dispersion in total and urban literacy rates across districts is higher in 2011 than in 2001, while for females the inter-district variation has narrowed in 2011 compared to 2001.

Expansion of literacy also needs to be considered in terms of differences in the literacy rates by social groups—general population *versus* the SCs (scheduled castes) and STs (scheduled tribes) population.

According to the 2001 Census, the literacy rate in Tamil Nadu amongst the SCs was at 63.19 per cent, while that amongst the STs was at a significantly lower 41.53 per cent. Even amongst these sections, literacy rate in rural areas was lower than in the urban areas. SCs in rural areas had a literacy rate of only 59.61 per cent compared to 71.45 per cent for their urban counterparts. Similarly, STs in rural areas in 2001 had a 38.41 per cent literacy rate as opposed to 58.6 per cent in the urban areas. Men were also seen to be significantly more literate than women of the same communities in the context of both SCs and STs. The difference between men and women was approximately the same for both SCs and STs, although the former had an overall higher literacy

2. It must however be mentioned that strict inter-temporal comparisons cannot be done for all districts as new districts have been carved from old districts during this decade such as Krishnagiri from Dharmapuri, and Ariyalur from Perambalur.

Box 4.1

Library Movement in Tamil Nadu

The Tamil Nadu government has been taking various steps in promoting public libraries with an intention to nurture the reading habit among children, youth and the public at large. In pursuit of realising the goals outlined in "Vision Tamil Nadu-2023", the Department of Public Libraries has taken steps to open libraries in villages. At present, there are 4,532 libraries functioning under the directorate of Public Libraries, which was originally established in 1972.

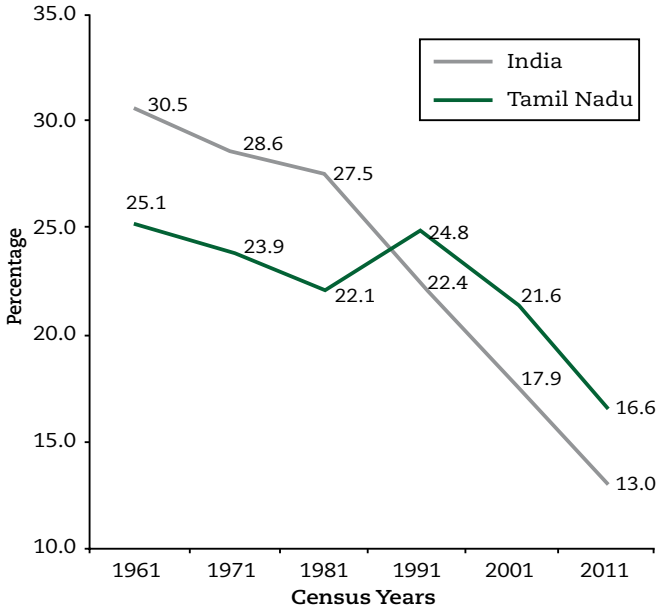
There are 32 District Central Libraries, 1,925 branch libraries, 1,821 village libraries, 10 mobile libraries and 742 part-time libraries. There is one State Central Connemara Library and the recently opened Anna Centenary Library. In addition to this, there are few aided libraries in Tamil Nadu, like Saraswathi Mahal Library, Thanjavur, U.V Swaminatha Iyer Library, Chennai and Maraimalai Adigal Library, Chennai.

In accordance with the recommendation of the National Knowledge and Information Commission, Tamil Nadu intends to convert all libraries into Knowledge and Information Centers (KICs). All the public libraries of Tamil Nadu are being computerised. Also, a digital library is being established in Erode district. Efforts have been made by the government to create and sustain the interest of young learners in reading books.

rate. However, by 2009-10, literacy rate among the SCs in rural areas increased to 66.6 per cent, where male literacy was substantially higher than female literacy. It is also notable that in case of the ST population in rural areas, the literacy rate increased to 48.8 per cent, with males having 55.8 per cent, and females 39.2 per cent literacy (NIRD Rural Development Statistics, 2011-2012).

Figure 4.2

Gender Gap in Literacy, 1961-2011



Note: For 1981-2011, literacy rate computed for population aged 7 and above; For 1961 and 1971, it is with reference to the 5+ age population.

Source: Census Tamil Nadu, Primary Census Abstract Data Highlights, p.45.

An outcome indicator that captures the spread of literacy is the reduction in gender gap in literacy. Tamil Nadu had a gender gap greater than that at the all-India level until 1981. However, since 1981, the gender gap in literacy in Tamil Nadu has recorded significant improvements. On this count, Tamil Nadu has performed better compared to improvements made at the all-India level. According to the 2011 Census, the gender gap at national level stood at 16.6, while Tamil Nadu had a gender gap of 13. This points to both the overall pace at which literacy levels have increased and also the more equitable spread of literacy in the State in terms of gender.

Having examined the levels and changes in literacy rates, we move on to other indicators of educational progress, namely the number of institutions, enrolment therein, teachers and infrastructure at various levels of education.

Primary Education

The Government of Tamil Nadu has taken the lead in launching several initiatives to improve access to and enrolment and retention in early schooling (primary and up to elementary) so as to attain the goal of UEE (universal elementary education).

One important indicator of access is number of schools, and increase over time in this indicator implies improvement in access. An analysis of the distribution of schools by management presents an idea of the providers of educational facilities in the State. The following table shows the number of government schools, private-aided schools, private-

unaided schools and other management schools as a percentage of the total primary schools in the years 2002-03 and 2011-12. Interesting findings emerge from the percentage share of schools by management in the State. The State government or local bodies and government aided schools still continue to be the major providers of primary education, but the percentage of government schools offering primary education in the State has declined over last 10 years. On the other hand, the percentage of private-unaided schools has shown a large increase from 4.16 per cent in 2002-03 to 18.96 per cent in 2011-12. The ways in which this trend affects the access to primary education of children from the disadvantaged sections of society is a matter of concern. The provisions of the RTE and their effective implementation can point to possible solutions.

In Tamil Nadu, the RTE came into effect from 1 April 2010 and the Tamil Nadu Right of Children to Free and Compulsory Education Rules, 2011, were released on 8 November 2011. For implementation of the Act, 12 government orders have also been released. In a government order released in 2011, the definition for the State of Tamil Nadu was expanded to include orphans, HIV-affected children, transgender, as well as children of scavengers. This document also defined a 'child belonging to weaker section' as one whose parents or guardians earned less than Rs. 2 lakh a year. The Directorate of Teacher Education, Research and Training (DTERT) was made the nodal agency to organise and impart RTE-related training and information to the various stakeholders. An RTE cell was also set-up within the DTERT to attend to relevant queries.

Table 4.4

Distribution of Primary Schools by Management

Type of School	*Distribution by Management*		
	2002-03	*2011-12*	*2013-14*
Department of education	13.47	8.94	10.15
Tribal welfare department	3.61	3.11	3.02
Local body	63.48	52.95	51.90
Private aided	15.21	15.19	14.79
Private unaided	4.16	18.96	19.97
Other management	0.08	0.08	0.09

Source: *Elementary education in India: Analytical Report*, various issues.

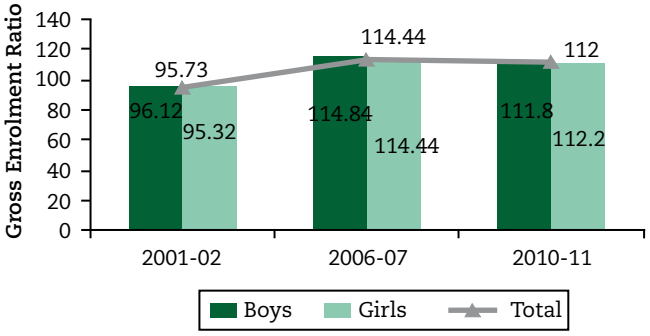
Enrolment and Completion

The GER (Gross Enrolment Ratio) is the number of children enrolled in an educational level (primary or secondary), regardless of age, divided by population of the age group that officially corresponds to the same level. The decade from 2001 to 2011 shows a mixed trend in GER in Tamil Nadu. The GER rose in first half of the decade, peaked in 2006-07 and then showed a slight fall until 2010-11. Figure 4.3 presents year-wise GER, disaggregated by gender, for children in class I to VIII.

GER has seen an overall increase from 95.73 per cent in 2001-02 to 114.44 per cent in 2006-07 and finally, 112 per cent in 2010-11.

Figure 4.3

Gross Enrolment Ratio



Source: *Elementary education in India: Analytical Report*, various issues.

A gender disaggregated analysis reveals that GER for girls has not only caught up, but has also exceeded that for boys by end of the decade. The initial years show a higher GER for boys and by 2006-07, the girls were on par with them. Data from 2010-11 shows that the GER for girls is 112.2 per cent as opposed to 111.8 per cent for boys.

The NER (Net Enrolment Ratio) shows the number of children belonging to a given age group enrolled in a particular stage of education system. The following table shows the gender-wise NER across different social categories of students, specifically SCs and STs.

This analysis of NER shows an increasing trend over the past nine years. The NER of students has substantially increased from 93 per cent in 2002-03 to 99.60 per cent in 2010-11. In 2002-03, NER of boys was 93 per cent and that of girls was 92 Per cent. This situation reversed in 2010-11; the ratio among boys (99.57%) had become lower than that among girls (99.63%), thereby showing an improvement in the gender gap. Across the different

Table 4.5

Net Enrolment Ratio

Year	All			SC			ST		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
2002-2003	93.00	92.00	93.00	89.00	88.00	89.00	83.00	82.00	83.00
2003-2004	96.00	96.00	96.00	93.00	92.00	93.00	88.00	87.00	88.00
2004-2005	98.00	98.00	98.00	97.00	96.00	96.00	92.00	92.00	92.00
2005-2006	99.00	98.00	98.00	98.00	98.00	98.00	98.00	96.00	97.00
2006-2007	99.29	99.29	99.29	99.31	99.31	99.31	97.76	97.61	97.69
2007-2008	99.42	99.35	99.39	99.17	99.24	99.20	96.41	96.74	96.57
2008-2009	99.41	99.46	99.43	99.27	99.30	99.28	97.47	97.69	97.69
2009-2010	99.48	99.53	99.50	99.32	99.40	99.36	97.57	97.85	97.70
2010-2011	99.57	99.63	99.60	99.30	99.39	99.36	97.73	97.91	97.82

Source: *Elementary Education in India: Analytical Report*, various issues.

Figure 4.4

Dropout Rates in Primary Education

Source: *Elementary Education in India: Analytical Report*, various issues.

social strata, the NER of ST students is comparatively lower than that of SC and General Students during the given years. The greatest improvement can be observed from the year 2005-06 to 2006-07, where the NER of SC students had overtaken that of the General category students. A boost is, however, still required with regard to ST students.

One of the persistent problems in school education is early dropping out of students from schools. This leads to enormous wastage of resources. The problem is very crucial in the primary stage because this could contribute to illiteracy and even hold back achievement of the universalisation goal. Hence, it is essential to examine trends in the dropout rate in primary education.

The dropout rates in primary education among social groups have seen a downward trend over the given years, as seen in Figure 4.4. In 2011-12, the dropout rate of SC students (0.88%) is in fact lower than that of ST (1.28%) and General category (0.95%) students. These figures show a significant decrease from the levels in 2002-03 for all three categories (Figure 4.4). This steep fall in dropout rate implies higher retention rates at the primary level. This significant achievement can be attributed to the various State welfare programmes, especially in the case of SC students.

In 2002-03, completion rates of all categories of students, along with SC and ST students were 64.61 and 58 per cent respectively. By 2010-2011, these rates had seen a significant increase to 97.36, 96.84 and 92.08 per cent for the same categories respectively.

Table 4.6

Completion Rates

Year	*All*	*SC*	*ST*
2002-03	64	61	58
2003-04	69	66	61
2004-05	75	73	72
2005-06	78	74	68
2006-07	86.55	84.4	83.4
2007-08	92.46	89.88	87.1
2008-09	93.94	91.18	88.16
2009-10	97.03	96.59	91.95
2010-11	97.36	96.84	92.08

Source: Department of Education.

Yet another related problem is grade repetition. Stagnating in a class could delay completion and eventually even lead to a child dropping out of the school system. Over the last 10 years, repetition rate has shown a declining trend in Tamil Nadu. From 2002-03, the repetition rate among all categories has fallen from 24 per cent to 1.65 per cent. During the same period of time, the rate for SC students has fallen from 25 per cent to 2.25 per cent; and for ST students from 23 per cent to 6.59 per cent. From the sharp decline in dropout and repetition rates, we may infer that the State has effectively tackled the problem regarding wastage of resources allocated to primary education, thereby ensuring system efficiency.

Table 4.7

Repetition Rates

Year	*All*	*SC*	*ST*
2002-03	24	25	23
2003-04	23	24	23
2004-05	19	21	16
2005-06	19	22	21
2006-07	11.54	13.64	13.1
2007-08	6.14	8.9	11.06
2008-09	4.84	7.69	10.43
2009-10	1.95	2.47	6.69
2010-11	1.65	2.25	6.59

Source: Same as Table 4.6.

Education for All (EFA) will remain a distant goal if a sizable number of school-aged children stay out of school, and the real challenge is to enrol these out-of-school children. The district-wise analysis of out-of-school children in the school-going age for the year 2004-05 and 2010-11 have been shown in Table 4.8.

Table 4.8

Number of Students Out of School

District	*2004-05*	*2011-12*
Chennai	5502	3164
Coimbatore	5573	3403
Cuddalore	2039	895
Dharmapuri	5505	1745
Dindigul	4778	2773
Erode	2833	1087
Kancheepuram	4352	2196
Kanyakumari	1133	575
Karur	1097	545
Krishnagiri	8667	4101
Madurai	6294	1988
Nagapattinam	1691	914
Nammakkal	7405	2680
Perambalur	1989	1151
Pudukkottai	1097	593
Ramanathapuram	2324	1077
Salem	7548	2628
Sivaganga	2582	909
Thanjavur	3921	2345
Nilgiris	1095	414
Theni	2670	505
Thiruvallur	3616	1761
Thiruvarur	2053	1232
Thoothukkudi	2739	1149
Tiruchirappalli	4098	1922
Tirunelveli	4113	1730
Tiruvannamalai	4456	1981
Vellore	3489	2318
Villupuram	3868	2627
Virudhunagar	3762	2150

Source: *Elementary Education in India: Analytical Report*, various issues.

Box 4.2

Pedagogical Innovation

Activity-based Learning (ABL), grounded on the pedagogical method of learning through activity, was launched in Chennai Corporation schools in 2003 and was gradually scaled up to cover all government primary schools across Tamil Nadu by 2005. Based on pedagogical practices and materials developed at the Rishi Valley school near Madanapalle in Andhra Pradesh, the ABL initiative aimed to improve the quality of primary education in schools of Tamil Nadu: raising the achievement of students in different subjects at primary level, changing classroom practices by making them more child centred, and transforming the role of the teacher to that of a facilitator. This provides children with more freedom to express themselves, raise questions and learn through activity and peer interaction. Learning ladders allow children to track their own progress and independently 'manage' the learning process, turning to the teacher for help when required. Classrooms are child-friendly with low *chowkies* for the children to sit in groups and blackboards along the walls at child-appropriate height.

Active Learning Methodology (ALM) is a student-friendly methodology that is being implemented at the middle school level in all government schools in Tamil Nadu. An eleven day workshop by teachers from The School KFI in Chennai was organised in May 2007. The workshop explored active learning methodologies that are put to practice in the school and were adopted in the government schools of Tamil Nadu. Building upon the child-centred pedagogy of ABL at the primary level, ALM seeks to transform the middle school child into a self-directed life-long learner.

Among 30 districts in Tamil Nadu, the number of students out of their respective schools has been lowest in Nilgiris (414), Theni (505), Karur (545) and Kanyakumari (575) compared to other districts in 2011-12. The districts with the highest number of students out of school were Krishnagiri (4,101), Coimbatore (3,403) and Chennai (3,164). Salem, Krishnagiri and Madurai have recorded the most improvement, while Pudukkotai, Karur and Kanyakumari have recorded the least progress in this regard.

It is evident that the enrolment and completion rates have increased overtime even as dropout, repetition and children remaining outside the system have been largely contained. Such improvements have been made possible due to concerted efforts of the State through various interventions and incentives. The ABL methodology, a unique and major initiative of the Government of Tamil Nadu for classes I-IV, is an intervention that is worthy of mention (Box 4.2 for more details on this innovative programme). These achievements have also come about due to the increase in number of teachers as well as provision of physical infrastructure. We now turn to an examination of these.

The PTR (Pupil-Teacher Ratio) is an indicator of quality of education, and in this respect Tamil Nadu has shown a substantial improvement from 2005-06 to 2011-12. While some districts have reflected significant

Table 4.9

Pupil-Teacher Ratio

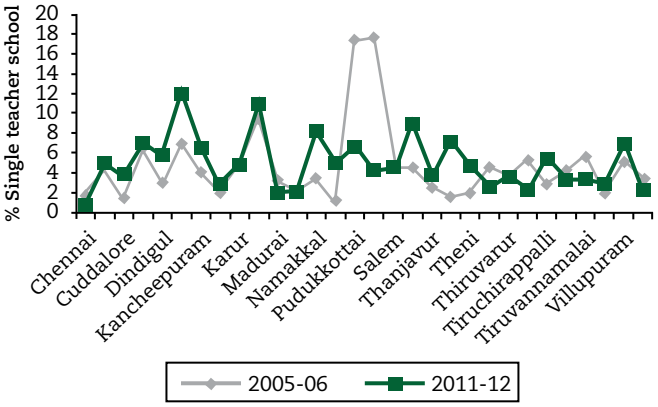
District	*2005-06*	*2011-12*
Chennai	27	25
Coimbatore	28	21
Cuddalore	33	24
Dharmapuri	31	23
Dindigul	30	25
Erode	29	21
Kancheepuram	32	21
Kanyakumari	32	23
Karur	28	21
Krishanagiri	33	26
Madurai	25	23
Nagapattinam	29	23
Nammakkal	29	22
Perambalur	34	26
Pudukkottai	36	22
Ramanathapuram	31	23
Salem	32	24
Sivaganga	27	20
Thanjavur	30	24
Nilgiris	26	17
Theni	32	27
Thiruvallur	31	19
Thiruvarur	29	21
Thoothukkudi	27	23
Tiruchirappalli	29	23
Tirunelveli	32	26
Tiruvannamalai	31	23
Vellore	29	25
Villupuram	32	27
Virudhunagar	32	27

Source: *Elementary Education in India: Analytical Report*, various issues.

improvement, betterment of the PTR has been only marginal in few other districts. The districts with the most improvement have been Pudukkottai (increase of 14%) and Thiruvallur (increase by 12%). On the other hand, districts like Madurai (2%) and Chennai (2%) have registered the least change in terms of PTR.

Figure 4.5

District-wise Distribution of Single Teacher Schools



Source: Same as Table 4.9.

The percentage of primary schools with only one teacher has overall seen a decrease from 2005-06 to 2011-12. The districts that have shown the most improvement are Ramanathapuram and Pudukottai, where the rates have fallen from 17.6 per cent to 4.3 per cent and 17.3 per cent to 6.6 per cent in the given time frame respectively. This confirms the increased recruitment of teachers in these two districts. On the other hand, in the Nilgiris and Nammakkal, the percentage of schools with single teacher has shown an increase of 5.5 per cent and 4.6 per cent respectively. It is worth mentioning however, that adoption of the ABL methodology—designed for multi-grade multi-level learning—has helped mitigate problems that single teacher primary schools could face.

It is clearly evident from the Table 4.10 that the percentage of female teachers in primary schools has increased across all districts of Tamil Nadu. In 2005-2006, the participation of female teachers was highest in Chennai, followed by Madurai and Tiruchirappalli and lowest in Villupuram, Perambalur, Kancheepuram and Pudukkottai. These districts have been successful in attracting more female teachers in primary schools between 2005-06 and 2011-12 with an increase of 12.4 per cent, 11.5 per cent and 11.4 per cent, respectively.

The educational qualification of teachers is yet another indicator of the quality of teacher input. Most of the primary school teachers in 2002-03 were graduates

Table 4.10

Percentage of Female Teachers

District	*2005-06*	*2011-12*
Chennai	95.7	96.1
Coimbatore	81.6	86.8
Cuddalore	69.1	79.8
Dharmapuri	64.6	70.9
Dindigul	75	80.5
Erode	72.2	82.3
Kancheepuram	77.5	89
Kanyakumari	85.2	91.4
Karur	73.6	81.7
Krishanagiri	66.4	71.2
Madurai	86.5	88.6
Nagapattinam	68.8	74.9
Nammakkal	70.8	79.1
Perambalur	64.9	77.3
Pudukkottai	67	78.4
Ramanathapuram	71.9	77.4
Salem	75.8	83
Sivagangai	74.2	83.4
Thanjavur	77.6	85.6
Nilgiris	74.1	82.8
Theni	76.2	81.4
Thiruvallur	76.9	86.1
Thiruvarur	71.1	80.7
Thoothukkudi	84.6	89.3
Tiruchirappalli	78.8	86.6
Tirunelveli	78.7	84.5
Tiruvannamalai	62.7	70.4
Vellore	74.3	80.4
Viluppuram	62.2	69.2
Virudhunagar	76.8	82

Source: *Elementary Education in India: Analytical Report*, various issues.

(65.18%), followed by teachers being recruited with secondary education (15.57%) and higher secondary education (11.89%) qualifications respectively. The data available for 2011-12 shows an overall improvement in this situation with a fall in the number of teachers with 'below secondary' and 'secondary' educational qualifications, and a rise in the number of those with 'higher secondary', 'graduate' and 'postgraduate' qualifications. This is shown in Table 4.11.

Table 4.11

Educational Qualification of Teachers in Primary Education Institutions

Educational Qualification	*2002-03*	*2011-12*
Below secondary	1.26	1.22
Secondary	15.57	13.17
Higher Secondary	11.89	12.01
Graduates	65.18	67.22
Postgraduate and above	5.04	6.38

Note: Values are percentages.

Source: *Elementary Education in India: Analytical Report*, various issues.

Caste-wise and gender-wise analysis of primary teachers in 2011-12 indicates that the percentage of teachers involved in primary education is the highest among the OBC (other backward classes) category females (77.45%), followed by OBC category males (75.11%). Involvement in primary education is seen to be the lowest amongst ST category females (0.92%) and ST category males (1.33%). The corresponding figures for SC females and males are 17.75 per cent and 15.03 per cent respectively; and those for the General community are 6.61 per cent amongst females and 5.81 per cent amongst males.

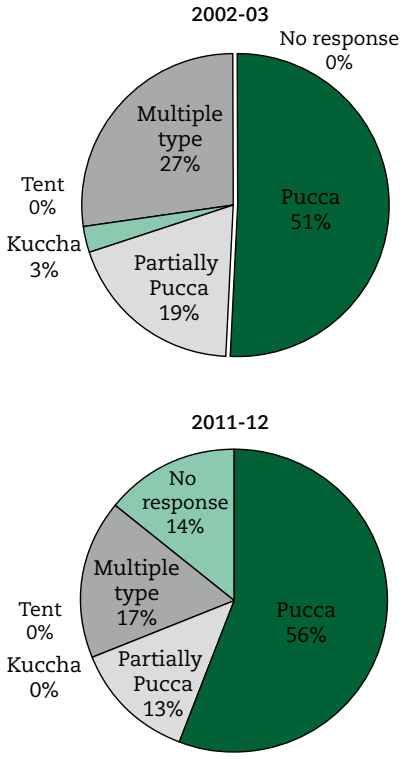
Infrastructure

Basic infrastructure is a crucial input in schooling as it complements the quality of education received. The factors used to measure basic infrastructure in schools are drinking water, availability of urinals for boys, separate sanitation facilities for girls and provision of electricity.

In 2002-03, the percentage of schools in Tamil Nadu with drinking water facilities, urinals for boys, separate toilets for girls and access to electricity were 80.6 per cent, 30.14 per cent, 19.02 per cent and 46.15 per cent, respectively (Table 4.12). In 2011-12, these percentage values saw a significant improvement to 100 per cent, 84.07 per cent, 65.83 per cent and 95.59 per cent respectively.

Figure 4.6

Basic Infrastructure in Primary Schools



Source: DISE 2011-12, Flash Statistics.

Table 4.12

Basic Infrastructure in Primary Schools

	(2011-12)				(2002-03)			
	Percentage of schools with:				*Percentage of schools with:*			
States	*Drinking water*	*Urinal for boys*	*Separate toilet for girls*	*Electricity*	*Drinking water*	*Common Urinal*	*Separate toilet for girls*	*Electricity*
Andhra Pradesh	85.88	70.83	51.39	76.48	42.5	15.5	7.9	11.15
Karnataka	99.29	97.86	96.56	93.07	56.4	17.2	9.85	19.49
Kerala	96.89	87.83	72.14	85.66	86.8	73.26	26.49	55.21
Tamil Nadu	100	84.07	65.83	95.59	80.6	30.14	19.02	46.15
India	93.15	78.1	65.4	36.34	71.9	29.06	15.64	12.35

Source: *Elementary Education in India: Analytical Report*, various issues.

As far as physical structure of the primary school building is concerned, 50.11 per cent of the buildings were *pucca* in 2002-03. This figure increased to 55.91 per cent in 2011-12, while multiple type buildings have reduced from 26.41 to 16.6 per cent in this time period. Comparing the southern States, infrastructural development index in 2011-12 is highest in Tamil Nadu (0.748), followed by Karnataka (0.713), Kerala (0.663) and Andhra Pradesh (0.507) for primary education.

Upper Primary and Secondary Education

At the upper primary level, from 2001-02 to 2011-2012, the share of private-aided and private-unaided schools have fallen from 25.03 per cent to 16 per cent and 7.3 per cent to 0.4 per cent respectively, while the percentage of schools managed by local bodies has increased from 24.12 per cent to 79.15 per cent during this period.

Table 4.14

Gross Enrolment Ratio (Age-wise)

	Age group	
Year	*14-16*	*16-18*
2004-05	80.66	43.87
2005-06	82.62	45.4
2006-07	86.72	48.59
2007-08	90.79	53.74
2010-11	82.3	50.4

Source: *Elementary Education in India: Analytical Report*, various issues.

Gross enrolment ratio of students in the age group of 14-16 was 80.66 per cent in 2004-05 and increased to 90.79 per cent in 2007-08. This figure has shown a great fall in 2010-11. Same pattern can be observed among students in the age group of 16-18, where the GER of

Table 4.13

Distribution of Upper Primary and Secondary Schools by Management

Management	*Distribution of schools (2002-03)*				*Distribution of schools (2010-11)*		
	Primary with upper primary	*Primary with upper primary and secondary*	*Upper primary only*	*Upper primary with sec*	*Senior secondary school*	*Upper Primary*	*High secondary school*
Department of Education	11.43	7.27	29.41	61.61	-	-	-
Tribal welfare department	3.75	1.67	2.35	2.8	61.7	4	68
Local body	52.15	4.22	24.12	5.13	3.3	79.5	3.8
Private Aided	25.03	11.61	35.29	25.99	29.4	16	20.2
Private Un aided	7.3	73.22	7.65	4.09	5.5	0.4	8
Other Management	0.34	2.01	1.18	0.2	-	-	-

Source: *Elementary Education in India: Analytical Report*, various issues.

Table 4.15

Net Enrolment Ratio (Caste-wise)

	General category			*SC*			*ST*		
Year	*Boys*	*Girls*	*Total*	*Boys*	*Girls*	*Total*	*Boys*	*Girls*	*Total*
2007-08	98.64	98.6	98.62	98.78	98.82	98.8	96.27	95.78	96.04
2008-09	98.67	98.67	98.67	98.96	98.88	98.92	96.93	97.05	96.99
2009-10	98.75	98.77	98.76	99.04	98.95	99	96.9	97.16	97.03
2010-11	98.79	98.89	98.84	99.1	98.97	99.03	96.98	97.25	97.12

Source: Same as Table 4.13.

students increased from 43.87 per cent to 53.74 per cent in 2004-05 to 2007-08, followed by a fall in 2010-11.

The caste wise analysis of NER shows that the percentage of students enrolled from SC community is comparatively higher than those belonging to the General and ST categories from 2007-08 to 2010-11. This is clearly evident in Table 4.15. Gender differences in enrolment too has lessened over the years as per Table 4.16.

Table 4.16

Girls' Enrolment to Total Enrolment

Year	*Upper Primary*
1991-92	38.2
2001-02	43.9
2011-12	48.38

Source: Same as Table 4.13.

Table 4.17 presents the percentage of students who dropped out between 2001-02 and 2010-11.

Table 4.17

Dropout Rates

Year	*(I-X)*
2001-02	57.66
2005-06	42.45
2010-11	25.9

Source: Same as Table 4.13.

The time series data on dropout rates shows a mixed trend from the year 2001-02 to 2010-11. The dropout rate had significantly fallen from 57.66 per cent to 46.8 per cent from 2001-02 to 2002-03. However, this fall could not be maintained in 2003-04, where the dropout rate has steeply increased by 12.02 per cent. From the year 2003-04 to 2010-11, the dropout rates have shown a diminishing trend. In 2003-04, the dropout rate was 58.82 per cent, coming down in 2010-11 to 25.9 per cent.

A summary of the number of repeaters in Tamil Nadu for 2011-12 reveals high variation between the districts. Districts with the highest number of repeaters are (3,893 students), Cuddalore (3,304 students) and Chennai (3,057 students). Those with the lowest number of repeaters are Tiruvannamalai (27 students), Salem (74 students) and Tiruppur (143 students). When analysed along gender lines, it is seen that all districts have a larger number of boys repeating an academic year than the girls. While some districts have successfully bridged the gap to a large extent, there exists a gulf in most others. The districts with the highest gap are Nagapattinam (883 more boys), Chennai (739 more boys) and Tirunelveli (585 boys).

The PTR of all districts of Tamil Nadu is presented in Table 4.18.

Table 4.18

Pupil-Teacher Ratio

	Primary + Secondary	
District	*2005-06*	*2011-12*
Chennai	22	40
Coimbatore	28	31
Cuddalore	35	41
Dharmapuri	31	35
Dindigul	26	31
Erode	26	28
Kancheepuram	33	40
Kanyakumari	20	35
Karur	23	26
Krishnagiri	44	40
Madurai	21	23
Nagapattinam	28	34
Nammakkal	22	28
Perambalur	48	32
Pudukkottai	37	52
Ramanathapuram	39	36
Salem	26	30
Sivagangai	31	38
Thanjavur	25	33
Nilgiris	19	28
Theni	21	35
Thiruvallur	29	27
Thiruvarur	30	34
Thoothukkudi	47.3	30
Tiruchirappalli	26	30
Tirunelveli	25	36
Tiruvannamalai	31	30
Vellore	26	35
Viluppuram	29	39
Virudhunagar	24	24

Source: Same as Table 4.13.

Table 4.19

Percentage of Female Teachers

District	*Primary + Secondary*	
	2005-06	*2011-12*
Chennai	86.5	91.3
Coimbatore	81.6	90.4
Cuddalore	56.8	83.9
Dharmapuri	49.7	78.2
Dindigul	69.5	85.6
Erode	66.2	83.1
Kancheepuram	68.2	88.7
Kanyakumari	77.77	92.3
Karur	68.1	84.6
Krishnagiri	64.1	75.3
Madurai	80.5	88.3
Nagapattinam	59.7	56.8
Nammakkal	65.9	82.1
Perambalur	53.5	83.8
Pudukkottai	51.3	80.1
Ramanathapuram	61.2	80
Salem	64.8	70.9
Sivaganga	63	70.9
Thanjavur	65	71.3
Nilgiris	63.1	75.3
Theni	63.7	71.1
Thiruvallur	72.2	86.8
Thiruvarur	58.8	86.6
Thoothukkudi	75.7	91.9
Tiruchirappalli	72.8	85.1
Tirunelveli	65.6	77
Tiruvannamalai	52.4	78.9
Vellore	60	80.9
Villupuram	52.1	77.6
Virudhunagar	70.7	87.3

Source: *Elementary Education in India: Analytical Report*, various issues.

The districts with highest and lowest PTR in 2005-06 were Perambalur (48) and Nilgiris (19) respectively. In 2011-12, the highest PTR was found in Pudukottai (52) and lowest was found in Madurai (21).

In 2005-06, the percentage of female teachers in Chennai was highest at 86.5 per cent, followed by Coimbatore and Madurai at 81.6 per cent and 80.5 per cent, respectively. Percentage of female teachers was found to be lowest in Dharmapuri at 49.7 per cent. In 2011-12, Kanyakumari and Thoothukudi topped the list with highest female teacher ratio of 92.3 per cent and 91.9 per cent respectively. Percentage, in the context of Dharmapuri, has significantly increased from 49.7 per cent to 78.2 per cent during the period 2005-06 to 2011-12.

Table 4.20 shows a comparison of the educational qualifications of upper primary and secondary school teachers for the years 2002-03 and 2011-12.

In 2002-03, 43.4 per cent of the upper primary and secondary school teachers were graduates and postgraduates, while around 7 per cent of the teachers had qualifications lower than graduation. In contrast, figures for the year 2011-12 imply that the percentage of graduate and postgraduate teachers in upper primary and secondary schools has almost doubled to 80.8 per cent, while the number of teachers with qualifications lower than graduation also shows a rise of about 19.1 per cent. The data capture appears to be comprehensive for the year 2011-12, indicating a quantum improvement in information gathering and management within the school education system in Tamil Nadu.

An examination of caste-wise distribution of male and female teachers in both upper primary schools and upper primary with secondary schools for the year 2011-12 reveals that in upper primary with secondary schools, OBC males constituted 75.2 per cent of the male teachers, while OBC females make up 70.06 per cent of the female teachers. While SC and General category teachers comprise between 12 and 15 percent of the total number of teachers at this level, recruitment done among the ST population of the State is significantly low with only 1.8 per cent of female teachers. The general trend at the upper primary level is similar, with about 75 per cent of all teachers belonging to the OBC category. While there is a marginal involvement from the ST communities—1.05 per cent males and 0.97 per cent females—the recruitment from General category is significantly lower at the upper primary level. The SC males and females constitute 19.07 per

Table 4.20

Educational Qualification of Teachers

Educational Qualification	2002-03		2011-12	
	Upper Primary + Secondary	*Upper Primary*	*Upper Primary + Secondary*	*Upper Primary*
Below secondary	4	7	163	3
Secondary	26	166	3564	22
Higher secondary	36	99	5110	40
Graduate	615	537	19618	117
Post Graduate	443	244	15122	65
M.Phil	20	8	2619	13
Others	3	1	9	0
No response	1713	377	0	0

Source: *Elementary Education in India: Analytical Report*, various issues.

cent and 14.66 per cent, respectively, of the upper primary teaching staff in the State.

Infrastructure

Infrastructure in educational institutions is judged by access to drinking water and electricity as well as availability of toilets, especially for girls. In Tamil Nadu, the State average for access to drinking water and electricity is at a very high level of 94.67 per cent and 97.96 per cent respectively in 2010-11. Kanyakumari district has achieved 100 per cent access to drinking water, while Kancheepuram, Sivaganga and Kanyakumari districts have achieved 100 per cent access to electricity. Availability of separate toilets for girls is at a lower level then the State average of 68.05 per cent. The districts with the highest degree of access are Kanyakumari (93.78%), Tirunelveli (88.17%) and Coimbatore (86.59%). On the other hand, those with the least access are Tiruvannamalai (31.22%), Thanjavur (50.25%) and Thivurarur (53.33%).

Comparing the district-wise drinking water facility in the schools at secondary level, it can be seen that Perambalur has comparatively poor facility in 2010-2011. On the other hand, all the secondary schools in Kanyakumari are equipped with drinking water facility. It should be noted that as per the most recent data for 2013-14, all districts in Tamil Nadu have 100 per cent drinking water availability in secondary schools. Kanyakumari, Kanchipuram and Sivangangai are the three districts where all secondary schools have electricity facility. The rest of the districts have more than 75 per cent of the secondary schools with electricity facility. Kanyakumari has the maximum percentage of secondary schools with a separate toilet for girls, whereas districts like Tiruvannamalai and Thiruvarur needs more attention in this area.

A comparison of the infrastructure development index across the southern States reveals that Karnataka holds the first rank as far as infrastructural development index at the upper primary level is concerned, followed by Tamil Nadu, where the infrastructure development index is 0.802. Kerala and Andhra Pradesh are the States with the lowest infrastructural development index among the four southern States.

The increase observed in the number of qualified teachers and the expansion of infrastructure appear to have led to a rise in the pass percentage at both class X and class XII levels. In 2009-10, the pass percentage for class X was 82.5, which increased to 85.3 in 2010-2011. For class XII, the pass percentage in 2009-10 was 85.2, which registered a marginal increase to 85.5 in 2010-11.

Concluding the discussion on school education, it is pertinent to note that according to the EDI (Education Development Index) 2012-13 (which comprises four parameters: access, infrastructure, teachers and outcomes rankings prepared by the National University

Table 4.21

Secondary Schools- Basic Infrastructural Facility

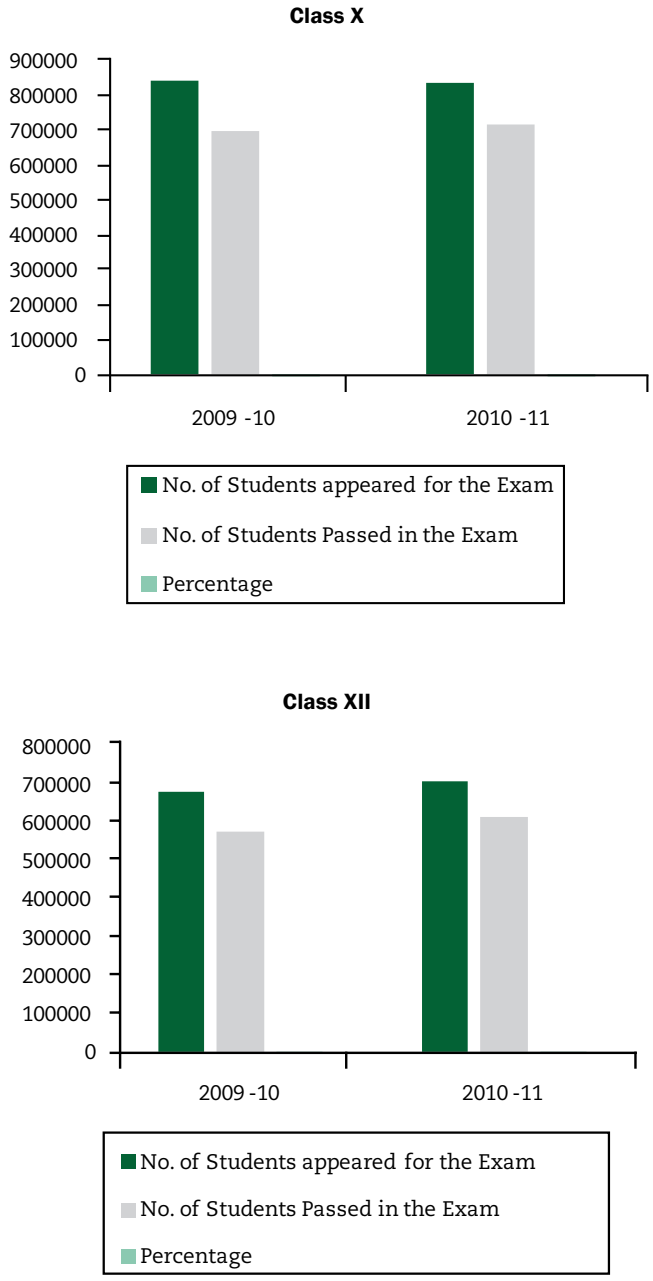
		Drinking Water	*Electricity*	*Separate Toilet for Girls*
1	Ariyalur	91.25	93.75	53.75
2	Chennai	95.65	99.52	71.01
3	Coimbatore	92.74	97.21	86.59
4	Cuddalore	81.17	96.10	64.29
5	Dharmapuri	68.97	80.17	61.21
6	Dindigul	86.47	90.23	78.95
7	Erode	91.74	91.74	80.17
8	Kancheepuram	91.83	100.00	83.27
9	Kanyakumari	100.00	100.00	93.78
10	Karur	83.12	96.10	72.73
11	Krishanagiri	81.46	92.70	66.29
12	Madurai	86.75	95.18	63.25
13	Nagapattinam	77.61	88.81	61.94
14	Nammakkal	89.11	97.03	71.29
15	Perambalur	68.00	76.00	56
16	Pudukkottai	81.56	92.91	69.5
17	Ramanathapuram	71.11	91.11	81.11
18	Salem	81.61	93.72	69.06
19	Sivaganga	96.15	100.00	79.81
20	Thanjavur	88.94	94.97	50.25
21	The Nilgiris	94.44	95.37	76.85
22	Theni	79.49	94.87	64.1
23	Thiruvallur	79.66	94.24	61.02
24	Thiruvarur	85.56	96.67	53.33
25	Thoothukkudi	88.79	92.52	73.83
26	Tiruchirappalli	90.34	96.59	59.66
27	Tirunelveli	92.31	97.63	88.17
28	Tiruppur	79.37	78.57	70.63
29	Tiruvannamalai	69.23	85.52	31.22
30	Vellore	84.77	88.89	68.31
31	Viluppuram	88.84	95.98	56.7
32	Virudhunagar	71.94	86.33	66.91
	All Districts	85.26	93.44	68.05

Note: Data pertains to 2010-11.

Source: *Elementary Education in India: Analytical Report*, various issues.

Figure 4.7

Students Completing Class X and Class XII



Source: Department of School Education, Govt of Tamil Nadu.

of Educational Planning and Administration [NEUPA] taking into account both the performances in primary and upper primary levels), Tamil Nadu is one of the top five States with an EDI score of 0.683, marginally behind Lakshadweep (0.712) and Puducherry (0.696).

Higher education plays a key role in giving impetus to economic development and growth. Having traced the development of school education, we now turn to the progress of higher education in Tamil Nadu.

Higher Education

One of the major challenges of the State is to tap the existing human capital potential by providing quality education to the youth. In terms of demography, Tamil Nadu is favourably placed with a population of around 77.7 lakh in the age group of 18 to 23 in 2011, where 38.8 lakh are males and 38.9 lakh are females. In terms of share in total population of the State, this age group accounts for an overall 10.8 per cent, with 10.7 per cent males and 10.8 per cent females. However, the share of graduates and above in State population is 8 per cent, with 9.7 per cent in male population and just 6.5 per cent in female population.

As per the data available for the year 2011, Tamil Nadu ranks first among all Indian States in context of the number of universities, with 59 universities, followed by Uttar Pradesh (56) and Andhra Pradesh (46). The State also ranks second in the number of State public universities (23), following Andhra Pradesh (30). Tamil Nadu has 9.5 per cent of all the universities in the country. The State also ranks first in the number of Technical Universities (14), followed by AP and Madhya Pradesh with 6 technical universities each. It can be seen from table 4.22 that the total number of universities in the State has almost doubled over the decade 2001-2011. The state has two universities set up exclusively for women and 22 dual mode universities. Notably, there is a nine-fold increase in the number of private deemed universities.

Table 4.22

Number of Universities in Tamil Nadu and India, 2001-2011

Type of University	*Tamil Nadu*	
	2001	*2011*
Central university	2	2
Institution of national importance	1	4
State public university	20	23
State open university	1	1
Government deemed university	0	1
Private deemed university	3	28
Grand total	31	59

Source: Annual Status of Higher Education in States and Union Territories of India, Various issues.

Table 4.23

Number of Universities in Tamil Nadu and India Based on Specialisation, 2001-2011

Specialisation	*Tamil Nadu*	
	2001	*2011*
General	18	29
Agriculture	1	1
Medical	1	1
Law	1	1
Technical	10	14
Veterinary	1	1
Others	0	10
Total	32	59

Source: Annual Status of Higher Education in States and Union Territories of India, Various issues.

As per AISHE 2011-12, Tamil Nadu had a total of 2302 colleges, implying a ratio of 30 colleges for a lakh population. This is higher than the all-India average (25). Further the state also a higher enrolment per college (772) compared to the all-India average of 703. Total enrolment of students in regular mode in higher education institutes in the State is around 18 lakh. Out of the total colleges in the State, 93 per cent are affiliated to universities, and the remaining is constituent/university colleges, PG/off campus or recognised direct centres of the Universities. In terms of management, Tamil Nadu colleges are dominated by the private unaided colleges, forming 88.5 per cent of all colleges in the State, followed by 5.8 per cent owned by the government and 5.6 per cent that are private aided.

Table 4.24

Enrolment in Colleges in Tamil Nadu and India, 2001-2011

Type of Management	*Tamil Nadu*	
	2001	*2011*
Private Unaided	98956	465980
Private Aided	231018	67877
Total Private	329974	533857
Government	90200	57245
Total	750148	591102

Source: Annual Status of Higher Education in States and Union Territories of India, Various issues.

Table 4.25

Degree-wise Distribution of Enrolment in Colleges in Tamil Nadu and India, 2001-2011

Programmes		*Tamil Nadu*	
		2001	*2011*
PhD	Male	156	4925
	Female	105	3070
	Total	261	7995
MPhil	Male	893	1847
	Female	875	2765
	Total	1768	4612
Postgraduate	Male	23614	201662
	Female	22602	187009
	Total	46216	388671
Undergraduate	Male	178758	810432
	Female	188972	764762
	Total	367730	1575194
PG Diploma	Male	715	10079
	Female	774	4842
	Total	1489	14921

Source: Department of Higher Education, Govt of Tamil Nadu.

The State-wise enrolment through regular mode at various levels was 18 lakh in 2011. The highest share of enrolment (65.4%) is at undergraduate level, followed by Diploma (16.3%) and postgraduate (16.1%), with all other levels forming only 2.1 per cent. Maximum enrolment share (78.8%) is in private unaided colleges in the State. In terms of gender, enrolment is skewed as 56.9 per cent comprising males. In terms of GER, according to the All India Higher Education Survey (AISHE) 2013-14 published by the Ministry of Human Resource Development, Government of India, the state ranks the highest among major states at 43 per cent. This is almost twice that of the all India average (23%). While the GER for SCs and STs are much lower at 31 per cent and 28.4 per cent respectively, the enrolment rates for these social groups are again much higher than the all-India average. In terms of gender, the GER is skewed towards males, with a GER of 45.6 per cent for males and 40.4 per cent for females. An examination on the basis of gender and social representation show that the share of student enrolment across backward groups is lesser than their proportionate share in population, except for Muslims. The PTR of colleges in Tamil Nadu at 7 students per teacher is considerably better than the all-India average of 15.1. Tamil Nadu has the healthiest PTR compared to other States in the country. Tamil Nadu also has nearly double number of teachers per college (82.5) compared to the all-India figure (46.4). Non-teaching staff per college (58.7) is also much higher than the corresponding all-India levels (37.3).

The expansion of technical education is another notable achievement of the State with regard to higher education. The total number of polytechnics increased from 154 in 1996-97 to 203 in 2002-2003. The numbers increased the most in self-financing colleges, which had escalated from 98 in 1996-97 to 146 in 2002-03. The total number of engineering colleges increased from 81 in 1996-97 to 222 in 2001-02. Only the self-financing colleges increased in number during this period, from 71 in 1996-97 to 212 in 2001-02. Self-financing colleges were the largest in number in all districts. We notice a massive expansion with regard to technical education over the decade 2001-2011 on examining the number of institutions and students admitted. The number of engineering colleges increased to 525 in 2011, of which 95 per cent are self-financing colleges. The number of students enrolled in these colleges has crossed 1.5 lakh in 2011. Equally impressive has been the growth of polytechnics, predominantly driven by the growth of self-financing polytechnics.

Table 4.26

Number of Engineering Colleges and Enrolled Students in Tamil Nadu (2011)

Type of Institution	*Number of Colleges*	*Number of Students Admitted*
Engineering Colleges		
Self-Financing colleges	498	149045
Anna University colleges	18	7019
Government colleges	6	2434
Government aided colleges	3	2656
Polytechnics		
Self-Financing colleges	380	98658
Government colleges	30	11035
Government aided colleges	37	11992

Source: Reports of Dept. of Technical Education, Govt. of Tamil Nadu, Various Issues.

The growth of private engineering education has been spectacular in southern States, such as Andhra Pradesh, Tamil Nadu and Karnataka along with Maharashtra, reflecting a global trend. The fast growth in the private

sector is on account of the fact that during the Sixth Five Year Plan (1980-1985), when the Central and State governments were struggling to expand technical education in the country, a few State governments, especially that of Karnataka, Maharashtra, Tamil Nadu and Andhra Pradesh, took a decision to permit private registered societies and trusts to establish and run technical institutions on a self-financing basis. All these institutions were established with the permission of the respective State governments and were affiliated to universities of the region with the approval from both the State Board of Technical Education and Training (SBTET) and the All India Council for Technical Education (AICTE). Eventually, private sector acquired a dominant presence in engineering education in Tamil Nadu, occupying more than 95 per cent of the total engineering colleges. The self-financing colleges grew at an annual rate of 18.14 per cent during the period from 1993-94 to 2008-09.

A notable development in higher education in the last three years is the government's initiative to establish new State universities and colleges. Commencing in 2011-12, 12 government arts and science colleges, 24 university constituent arts and science colleges, 11 government polytechnic colleges, 4 government engineering colleges, a National Law University, 2 new government medical colleges, a Tamil Nadu Teachers' Education University (TNTEU) and 1 Indian Institute for Information Technology (IIIT) have been opened. This is indeed a historic development considering the crowding out of government institutions by private players in the State in recent past.

The inclusiveness in higher education is shown in Table 4.27. As per the table, 35 per cent of enrolments in the various engineering courses comprise girls. SCs account for nearly 15 percent of the total enrolment.

Parallel to the case of engineering education, we can identify a rapid expansion of medical education as well. A total of more than 350 medical and para-medical institutions, including Siddha, homeopathy, Unani, Ayurveda, dental, pharmacy, nursing, physiotherapy and others, function in Tamil Nadu. Both government and private unaided institutions are affiliated to the Tamil Nadu MGR Medical University. Government medical and para-medical colleges in the State occupy

Table 4.27

Admission to First Year B.E./B.Tech./Bach. Degree Course: 2013–14
Santioned Intake and Admitted Particulars

Sl. No.	Category	No. of Institutes	Sanctioned Intake	Total Admitted	OC		BC (Others)		BC (Muslim)	
					Boys	Girls	Boys	Girls	Boys	Girls
1	Government	10	3760	3156	91	65	854	650	99	41
2	Government Aided	3	2820	2685	242	128	848	554	66	23
3	Self–Financing	541	272872	170013	13122	5701	48637	29396	5308	1739
4	Anna University (Constituent Colleges)	18	7845	6401	224	184	1392	1344	162	119
	Total	572	287297	182255	13679	6078	51731	31944	5635	1922
					19757		83675		7557	

Sl. No.	Category	MBC		SC		SCA		ST		Total	
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
1	Government	469	319	245	204	44	46	16	13	1818	1338
2	Government Aided	282	187	162	114	39	20	11	9	1650	1035
3	Self–Financing	26248	11727	16000	8524	1873	1020	540	178	111728	58285
4	Anna University (Constituent Colleges)	941	774	510	499	115	78	42	17	3386	3015
	Total	27940	13007	16917	9341	2071	1164	609	217	118582	63673
		40947		26258		3235		826		182255	

Source: Dept. of Technical Education Govt. of Tamil Nadu Policy Note, various issues.

Table 4.28

Medical Colleges by Management

Courses	*2006-07 in %*		*2013-14 in %*	
	Share of government institutions	*Share of private institutions*	*Share of government institutions*	*Share of private institutions*
Medical	67	33	55	45
Sidha	40	60	29	71
Homepathy	10	90	11	89
Unani	100	0	100	0
Ayurveda	0	100	16	84
Nursing	6	94	2.5	97.5

Source: Based on *www.tnmgr.univ.org.*

10 percent, while the share of medical colleges owned and run by private unaided managements is 90 per cent. Out of these institutions, more than 100 of them offer postgraduate/diploma courses. Of these postgraduate institutions, the majority (82%) are in the private sector. Almost all the para-medical courses, such as dental, pharmacy, nursing, physiotherapy, and occupational therapy, are provided by the private sector.

Expansion of higher education is also marked by attempts to improve quality. As the higher education scenario is dominated by private players, often questions on ensuring quality assume importance. National Assessment and Accreditation Council (NAAC) has been playing the role of benchmarking quality since its inception in 1994. By 2005, Tamil Nadu had the maximum number of colleges and universities accredited compared to any other States, i.e., 89 institutions consisting of 82 colleges and 7 universities. Nearly 20 per cent of the higher education institutions were accredited in Tamil Nadu, which constitutes one-third of the total accredited institutions in the country. As of 2011, NAAC has accredited 24 universities and 288 colleges in Tamil Nadu. However, compared to Karnataka, the process of accreditation in Tamil Nadu has been slow in recent years.

However, as of 2014, there are 27 universities and 529 colleges accredited in Tamil Nadu.

Tamil Nadu State Government Educational and Related Welfare Schemes

The State government, with the objective to spread education, has initiated a number of schemes so as to help the students of economically backward sections

Further, a number of performance-related incentive schemes have also been introduced such as district-level prizes for $10^{th}/12^{th}$ examination ranging between ₹500 and ₹3000 (AdiDravida and Tribal Welfare Department) and State-level prizes for $10^{th}/12^{th}$ examination of ₹10,000 and ₹25,000, respectively. Tamil-medium students are exempted from the payment of examination fees and special and/or examination fee is waived for selected economically backward students who enrol in BA (Bachelor of Arts), BSc (Bachelor of Science), BCom (Bachelor of Commerce) courses, and for girl students in postgraduate degree courses. The government also provides slates, notebooks, stationery, textbooks (1^{st} to 12^{th} standard) to students from BC (backward castes), MBC (most backward castes) and DNTs (denotified tribes). Other incentives include the Chief Minister's award for merit, sports, National Service Scheme and Special Prize Money Award—a one-time award to Graduates/Postgraduates and those in professional courses.

With an overarching objective of ensuring inclusion in education, the State has also launched the Integrated Education for Disabled Children (IEDC) in order to retain children with special abilities in school and integrate them with the general community. The scheme provides for books, stationery, uniforms, transport as well as cost of equipment and has been implemented across all districts with the help of NGOs (non-governmental organisations). Further, there is the Puratchi Thalaivar MGR Nutritious Meal Programme, which has been acclaimed as a pioneering effort in ensuring hunger-free school education. This

Box 4.3

Technology in Education

The centrally sponsored ICT in Schools' Scheme was launched in December 2004, and revised in 2010, to promote computer-enabled learning and usage of ICT in teaching activities of government and government aided and higher secondary schools with emphasis on educationally backward blocks and areas with concentration of SC/ST/minority/weaker sections. The scheme is implemented on a sharing basis of 75:25 ratio between Government of India and State government. In Tamil Nadu, the scheme is being implemented through BOOT Model (Build, Organise, Operate and Transfer).

There are several ICT initiatives taken by the Tamil Nadu School Education Department to promote ICT intervention in schoo ls. The department has recently launched a web portal which contains the complete database of schools, teachers, students and department officials. The portal also has information about various welfare schemes for teachers and students, events, calendar, quality initiatives of the government, recent announcements, policy notes and statistical information, etc. The link is *http://www.tnschools.gov.in*. The other ICT initiatives include SMS-based attendance, Smart Card and Education Content Server that is integrated through EMIS (Education Management Information System).

The School Education Department has also signed a memorandum of understanding (MoU) with Microsoft for the implementation of "Project Shiksha" Programme so as to provide comprehensive computer training to government school teachers. Intel® Teach Programme in association with Sarva Shiksha Abhiyan (SSA) has been launched to promote ICT integration in schools of Tamil Nadu through various programmes. As per the policy note 2012-13 of School Education Department, it has been stated that the existing computer labs would be converted into Computer Aided Language Labs by providing software and hardware materials to schools. The Government of Tamil Nadu has also recently taken efforts to provide laptop-based education for students.

is further supplemented by food grants for students of BC, MBC and minority communities who stay in government-recognised hostels. In addition, free supply of kit and sports equipment is provided by the Joint Sports Development Centre, along with supply of uniforms, mats and bed sheets (for hostels) and free bus passes for students of 1st to 8th standard. The State also introduced the distribution of free bicycles for students of BC, MBC and minority communities pursuing 11th standard in government/government-aided/partly-aided schools.

Skill Development

On recognising the major role that quality skilled manpower has played in economic development of the State and in the export of goods and services, the State has initiated a number of steps to focus attention on the production of highly skilled craftsmen. In this context, on recognising the need for upgrading Industrial Training Institutes (ITIs) in a PPP (public-private partnership) mode to achieve the goal of producing technicians of world standard, the

Box 4.4

Mid-Day-Meal Scheme

Tamil Nadu has been a pioneer of the Mid-Day-Meal (MDM) scheme, officially known as the Nutritious Meal Programme (NMP). Actually, it was started even earlier under Kamaraj in the 1960s and to a limited extent in the colonial period. Since 1984, children in the age group of 2-5 and students in classes I to X receive a hot, freshly cooked meal through the scheme, which covers more than 42,000 government, government aided and special schools. Apart from protecting children of families that live in poverty from classroom hunger, this programme also appears to have increased enrolment and attendance in schools by providing such families with an incentive to turn children away from labour and towards a school education. Going by most surveys, including official figures, we do see an increase in enrolment and a corresponding decline in school dropout rates, and it is plausible that a relatively well-implemented NMP has played a significant role in this.

Recently, Tamil Nadu government has introduced a new menu including vegetable *biriyani*, tomato rice, lemon rice, *Bisibelebhath*, egg masala, chilli fried potato, etc., to replace the routine menu of *sambar* rice and boiled egg.

government has launched a programme to upgrade ITIs over five years back A key ingredient of the government's reform agenda in this regard is to move the private sector into a lead role at all levels of decision-making—from policymaking at the central and State levels to managing individual training institutions. Other important ingredients in the government agenda of systemic reform include modernisation/ development of curricula to meet international standards, development of a qualifications framework, levelling the playing field for public and private sector providers, and designing and implementing a training fund.

As of the year 2011, there are 62 government ITIs, 627 ITCs (industrial training centres), and 987 industrial schools in Tamil Nadu. On an average, these institutions turn out 0.83 lakh students, along with 1.16 lakh diploma holders. The State Skill Development Mission (TNSDM) acts as a single agency to conduct training programmes for qualifications upto 12th standard. TNSDM also accredits training institutions.

A recent initiative has been undertaken to set up a world-class vocational training institute so as to train youth in high technology areas, like aviation, shipping, etc., with a willing industry partner under PPP mode. Further, a faculty development institute in order to provide adequate exposure of industry and technology trends to the trainers in ITIs/ITCs has also been established. It is planned that successful students of National Trade Certificate (NTC) will be issued Smart Cards that will contain information about the individual, which is expected to benefit around 25,000 successful NTC holders and 50,000 persons under the Modular Employable Skills (MES) programme.

The Skill Development Mission conducts skill training for college students with a target of around 25,000 government arts and science college students. There is also a collaboration with the British Council for imparting English languages skills. The State has implemented a project on vocational training improvement with the assistance of World Bank. The objective of the project is to achieve the government's goal of improving the employment outcomes for graduates from the vocational training system by making the design and delivery of training more demand responsive. The project aims to produce high quality craftsmen from publicly-funded ITIs, to enhance knowledge and skills of ITI instructors and trainers, to promote innovations and to bring about systemic reforms. The idea is to establish Centres of Excellence (CoEs) and upgrade the training of conventional trades in ITI.

ICT Academy of Tamil Nadu (ICTACT) has been implementing various skill development initiatives for up-skilling the teachers in the ICT domain, thereby benefitting the students to become employable in the State of Tamil Nadu. ICTACT has launched SKILLEDGE, a skill development initiative dedicated to create and enhance employability skills among the graduating students in both engineering as well as arts and science colleges. SKILLEDGE trains teachers on the Industry-relevant content and assists in delivering classes to students in colleges. Students who have cleared all the courses of SKILLEDGE will get an opportunity to participate in placement drives organised by ICTACT.

Community colleges have emerged as an important institution in recent years in terms of imparting skill enhancement. Community college refers to an alternative system of education, which aims to empower disadvantaged and underprivileged groups through appropriate skills development, leading to gainful employment, in collaboration with local industry and local community. The community colleges promote job-oriented, work-related, skill-based and life-coping education. They provide education for earning a livelihood, responding to the challenges of exclusion and elimination from the formal system, mismatch between education and employment capability, poverty and problems of unemployment, under-employment, unemployability and school dropouts.

Tamil Nadu Open University has recognised 185 community colleges in Tamil Nadu as per Government Order No. 163. More than 22 academic programmes are being conducted by community colleges from 2005, including life coping skills and communication skills. Profile of Tamil Nadu Open University community college students is provided in Table 4.29.

Table 4.29

Profile of Tamil Nadu Open University Community College Students (upto 2010-11)

Particulars	*Students*
Type	
Male	11417
Female	30832
Total	42249
Marital Status	
Unmarried	36369
Married	5475
Widows	294

Divorced	111
Total	42249
Age-wise	
18 – 22	31676
23 – 26	6342
26 – 30	2371
31 - Above	1860
Total	42249
Education	
Below 10th	7722
10th Passed	11596
12th Passed	20883
Degree	2048
Total	42249
Caste-wise	
SC	14868
ST	626
MBC	9145
BC	15949
OC	1661
Total	42249
Religion-wise	
Hindus	26926
Christians	12678
Muslims	2613
Others	32
Total	42249
Monthly Income-wise	
Below-1,000	13353
1,001-2,000	15278
2,001-3,000	8667
3,001-above	4951
Total	42249
Category-wise	
Physically Challenged	469
Others	41780
Total	42249
Employment Status	
Employed	40763
Higher Education	1486
Total	42249

Source (for entire grid): Tamil Nadu Open University, Report 2012.

Using innovative technology, both print media and multimedia approach, job-oriented vocational education programmes, such as that of House-Electrician, Refrigeration and Air-Conditioning Technician, Four Wheeler Mechanic, Health Assistant, Early Childhood Care and Education, Garment Making, Apparel and Fashion Design, Beautician, DTP-Operator, Plumbing Technician, Multimedia, Animation, Hardware Serving, Catering Assistant, etc., are offered to learners for immediate employment.

Box 4.5

Success Story of a Community College Student

I am Sumathi. I have completed my secondary and high secondary studies and was married soon after. After the sudden death of my husband, I thought that everything had come to an end. But when Madam Selvin came to my house and talked to me, I began to forget my sorrows. Madam asked me to join Udhayam Rural Community College. I never thought that I would pursue my studies after twelfth standard. But I joined Diploma in Early Childhood Care Education (DECE) trade in the community college approved by Tamil Nadu Open University, Chennai and did well. Now I am working and taking care of myself with sufficient income. Life skills taught in the community college have changed my perception and outlook towards life. I have gained enough confidence to withstand any amount of hardships in my life. I am grateful to my community college.

Financing of Education

The social sector comprising sub-sectors of education, health and medical care, housing and water supply, is very essential for the economic development of any State. Social development paves the way for sustained and sustainable economic development. Most of the social sector subjects fall within the purview of the States, for which funding is provided through CSS (centrally sponsored schemes). Here too, Tamil Nadu sets a model for other States in India, with the State government playing a very significant role in development of the social sector.

The share of revenue expenditure in the social sector expenditure of Tamil Nadu was 83.48 per cent in the year 1990-91 and it was 77.79 per cent in the year 2009-2010. This points to a reduction in revenue expenditure of the social sector in recent years. At the same time, the share of capital expenditure was 16.52 per cent in the year 1990-91 and 22.21 per cent in 2009-10. These

figures imply that in the recent past, importance has been given to physical infrastructure development in the social sector.

Table 4.30

Composition of Social Sector Expenditure in Tamil Nadu

Year	Percentage to total social sector expenditure				
	Education	Health	Water supply	Housing	Others
2000-01	45.85	10.38	7.01	0.66	35.44
2001-02	46.79	10.9	7.41	0.75	33.4
2002-03	43.04	10.51	6.75	1.04	37.62
2003-04	36.72	9.19	6	1.32	45.46
2004-05	34.49	8.51	11.25	3.02	39.71
2005-06	36.88	9.46	3.16	1.19	48.11
2006-07	36.88	8.34	3.29	3.23	45.04
2007-08	35.35	7.58	3.29	2.42	48.94
2008-09	34.52	7.83	2.88	5.04	44.68
2009-10	38.98	10.22	4.32	3.16	40.16

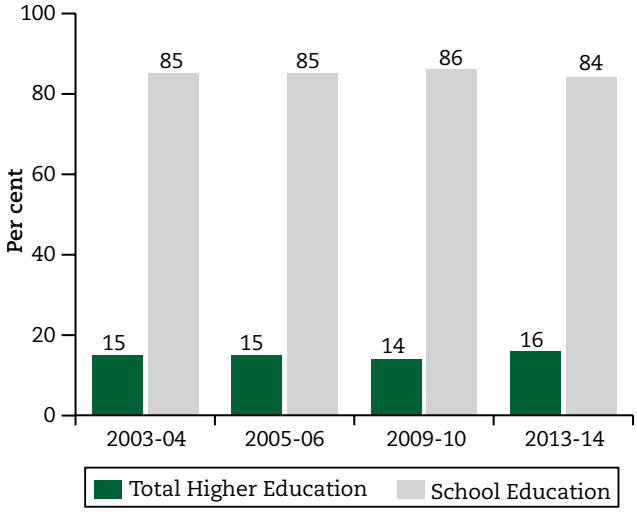
Source: RBI, *Handbook of Statistics on State Government Finances*, various issues.

Table 4.30 shows the composition of social sector expenditure in Tamil Nadu for the period 2001-01 to 2009-10. It can be inferred that even though the education sector has accounted for a larger share in the social sector expenditure, its share is declining since the year 2000. This assumes importance as Tamil Nadu, having achieved high levels of enrolment at the school level now is faced with the challenge of enhancing the quality of education at the school level and expansion of higher education. The share of health sector is less compared to that of education. The "Others" category includes urban development and other social welfare measures, which have increased their share over the years. It can be concluded that the decade since 2000 was a decisive period for the State, in terms of altering the compositional share of the sub-sectors of social sector.

Viewed from a different angle, the period since 2011 shows an increasing share for education in total social services expenditure. Currently, education accounts for 45 percent of the social service expenditure, which is the same share it had in 2000. Equally important is the fact that education has been accorded top priority in the State's expenditure, with nearly 17 per cent of the total expenditure devoted to it. Nearly one-third of the total development expenditure is allocated to education since 2011, which points to a return of the emphasis on education and human capital formation as a priority of the State's development plan.

Figure 4.8

Allocation of Education Expenditure



Source: Govt. of Tamil Nadu, *Budget Document*, various years.

An examination of allocation within education reveals that school education accounts for more than 80 per cent of the total expenditure on education.

Table 4.31

Social Sector Expenditure: Recent Trends

	2011-12	2012-13	2013-14
Share of Education, Sports, Art and Culture in Social services expenditure	45.90	43.46	45.97
Share of Education, Sports, Art and Culture in Development expenditure	32.20	29.92	29.74
Share of Education, Sports, Art and Culture in Total expenditure	18.21	17.26	16.94

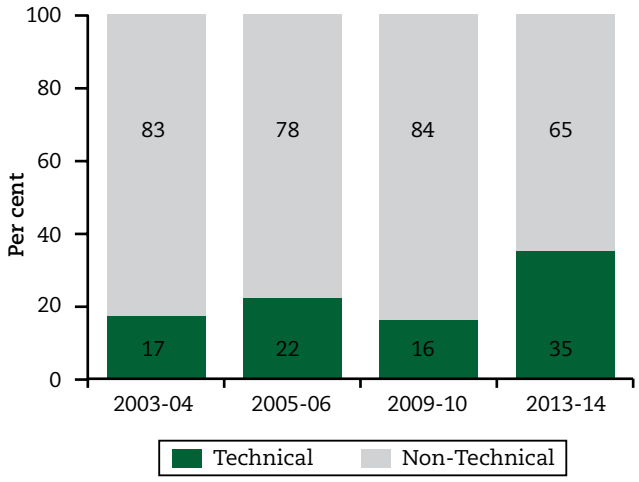
Note: All values are percentages.

Source: RBI, *Handbook of Statistics on State Government Finances*, various issues.

Regardless of a marginal increase in the share of higher education, the expenditure pattern seems to be highly skewed. This pattern needs to be re-examined with the demographic changes that are taking place in the State.

Figure 4.9

Break-up of Expenditure



Source: Same as Figure 4.8.

There seems to be a quantum jump in the share of technical education within higher education. The share has more than doubled since 2009-10. This is an indication of emphasis of the State on nurturing human capital. Apart from additional teaching faculty being recruited, the thrust on technical education quality improvement programme (TEQIP), phase II, has resulted in the purchase of equipment, machinery, books and journals to modernise laboratories and libraries.

Future Challenges for Tamil Nadu

The school education sector in Tamil Nadu is overwhelmingly public, and much of the future expenditure both in terms of enrolment and in improving quality has to be incurred by the State government. However, there are several areas where the private sector can contribute in a significant way by means of innovative institutional mechanisms within the ambit of Sarva Shiksha Abhiyaan (SSA) and beyond. For example, residential schools for never-enrolled and dropout girl students from poor communities can be set up. This scheme can be scaled up to reach out-of-school girl students, and extended to the secondary level so as to reduce chances of dropout after the elementary stage.

Community participation is a cornerstone of the SSA design and implementation. Given sufficient training and capacity improvement, the community can help in mobilising out-of-school children, supervision of maintenance works, enforcing accountability of teachers and contributing extra resources. While SSA's commitment is to provide opportunities for elementary education until the age of 14, there also has to be a long-term strategy to absorb the extra students into higher education. The ratio of enrolment in secondary to elementary education needs to be improved.

The share of education in total budgetary expenditure should at least be stabilised, if not increased, to focus on improving quality of education. There is also a wide variation in the number of dropout children and incompletion rates in elementary education across districts. Some degree of decentralisation in the school education scene should be considered, with local bodies being more involved in the process to ensure accountability. There exists huge potential for enhancing involvement of the private sector, especially in upgrading the quality of education in government institutions. The government can play the role of a co-financier and a facilitator in the process.

Regarding higher education, in a system dominated by private players, university/college administration may have to play a greater role to ensure the effectiveness of other actors and institutions in this sector. Recent experiences reveal that the enabling environment has been created by autonomous—both government and private—institutions of higher education. Academic freedom and compliance with duties and responsibilities require autonomy of institutions. Autonomy is that degree of self-governance necessary for effective decision-making by institutions regarding curriculum development and related activities consistent with systems of public accountability. Financial constraints pose barriers in recruiting staff required for proper functioning. It is important to establish such terms and conditions of employment that will be most conducive for effective teaching, research, scholarship and extension work. To achieve this, the State government has to facilitate greater interaction with the department of education, universities, University Grants Commission (UGC) and the central Ministry of Human Resource Development (MHRD). Preparing a perspective plan of development for a span of time and making the financial allocations and adjustments for prioritised activities will enable institutions to move in the desired direction.

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Appendix A-4.1

A. Elementary Education in India: Where do we Stand?
State Elementary Education Report Card 2013-14

Total Districts	30	Districts Covered	30	State Code	33			TAMIL NADU	
Primary Cycle	1-5	Upper Primary Cycle	6-8	Ratio of P. to U.P. School/Section			2.26		
Data Reported	Blocks/Taluks	413	Clusters	4,088	Villages	19,295	Schools	56,785	
Basic Data: 2011	Total Population in ('000's)	72139.0	%Urban Population			38.1	% 0-6 Population	9.6	
Decadal Growth Rate	15.6	Sex Ratio	995	% SC Population		20.0	% ST Population	1.1	
Overall Literacy Rate	80.3	Female Literacy Rate	73.9				Male Literacy Rate	86.8	

Key Data	*Primary only*	*Pry. with U. Pry*	*Pry with UP & Sec+H Sec*	*U. Pry. only*	*UP with Sec+H Sec*	*Pry. with UP & Sec*	*UP with Sec*	*No Res & Other Cat.*	*Total*
Total Schools (2013-14)	35,177	9,22	4,035	128	7,823	0	0	0	56,785
Total Schools (2012-13)	35,185	9,656	3,832	144	7,718	0	0	0	56,535
Government Schools	23,928	7,250	91	13	5,718	0	0	0	37,000
Private Schools	11,234	2,343	3,942	114	2,102	0	0	0	19,735
Madrasas & Unreco. sch.	15	29	2	1	3	0	0	0	50
Government Schools: Rural	21,401	6,182	47	12	4,623	0	0	0	32,265
Private SChools: Rural	6,674,	1,372	1,757	97	985	0	0	0	10,885
Total Enrolment (2013-14)	2,960,356	1,997,695	2,554,072	10,887	1,873,431	0	0	0	9,396,441
Total Enrolment (2012-13)	3,146,144	2,043,342	2,610,589	14,487	1,863,914	0	0	0	9,678,476
Enrdment in Govt. Schools	1,487,031	1,249,624	45,606	1,137	1,074,774	0	0	0	3,858,172
Enrdment in Pvt. Schools	1,472,549	741,668	2,507,715	9,740	798,491	0	0	0	5,530,163
Enr. in Madrasas & Unreco.	776	6,403	751	10	166	0	0	0	8,106
Enr. in Govt. Schools: Rural	1,258,356	1,020,397	21,676	1,071	801,485	0	0	0	3,102,958
Enr. in Pvt. Schools: Rural	715,602	347,829	1,001,254	7,520	290,295	0	0	0	2,362,500
Total Teachers (2012-13)	137,811	77,413	115,523	951	142,513	0	0	0	474,211
Government Teachers	64,864	50,479	2,406	71	100,485	0	0	0	218,305
Private Teachers	78,229	27,034	134,185	706	49,706	0	0	0	289,860
Tch. in Madrasas & Unreco.	95	450	45	3	30	0	0	0	623

Perfomance indicators (in percentage)	*Primary only*		*P + UP*		*P + UP + Sec + HS*		*UP only*		*UP + Sec + HS*		*P + UP + Sec*		*U.P. + Sec*		*All Schools*	
	12-13	13-14	12-13	13-14	12-13	13-14	12-13	13-14	12-13	13-14	12-13	13-14	12-13	13-14	12-13	13-14
Single–Classroom Schools	1.2		0.0	0.0	0.1	0.0	0.7	0.0	2.1	0.0					1.0	0.0
Single–Teacher Schools	6.9	3.7	0.4	0.3	0.0	0.0	2.1	0.0	0.2	0.2					4.4	2.3
Sch Aproachable by All Road	97.2	97.7	97.3	97.8	99.2	99.1	97.2	98.4	98.1	98.4					97.5	98.0
Schools with Playground	73.0	73.9	73.2	74.1	97.3	98.0	86.1	88.3	76.0	76.2					75.1	76.0
Schools with Boundary Wall	73.3	74.4	80.2	81.6	97.3	97.2	80.6	83.6	80.5	83.0					77.1	78.4
Schools with Girls Toilet	94.0	86.3	99.1	97.4	100.0	100.0	97.1	94.3	97.0	96.5					95.6	90.5
Schools with Boys Toilet	52.7	99.6	75.7	99.9	95.6	100.0	79.8	97.0	76.4	99.1					62.6	99.6
Schools with Drinking Water	99.4	100.0	99.6	100.0	99.7	100.0	97.2	100.0	97.8	100.0					99.2	100.0
School Provided MDM#	98.8	99.1	99.2	99.5	49.1	50.0	68.0	98.0	98.5	98.6					98.5	98.8
Schools with Electricity	96.0	96.5	98.4	98.7	99.5	99.7	95.8	96.1	95.0	95.9					96.5	97.0
Schools with Computer	34.9	35.5	81.6	82.6	98.1	99.0	75.0	78.1	77.9	79.2					53.1	54.1
Sch. with Ramp, if required		83.6		89.1		82.1		77.1		86.3						85.2
Sch. Established since 2001	13.0	13.3	6.7	7.3	21.4	25.3	50.0	54.7	20.6	20.1					13.6	14.2
Schools with Kitchen–shed	89.8	95.3	94.1	96.7	46.8	94.4	59.2	97.9	80.1	89.3					88.8	94.7
Sch. with Enrdment<=50	49.9	51.6	3.3	3.7	1.1	1.4	38.9	35.9	4.4	5.0					32.4	33.5
Schools with SMC#	95.7	95.0	94.9	94.3	52.5	52.8	47.2	79.6	93.6	92.7					94.8	94.3
Pupil–Teacher Ratio	23	21	26	26	23	19	15	14	13	12					20	18
Studen–Classroom Ratio	20	19	27	26	37	34	23	20	44	43					28	27
average Tch. per School	3.9	4.1	8.0	8.0	30.1	33.9	6.6	6.1	18.5	19.2					8.4	9.0
Female Teachers	82.6	82.8	71.0	82.6	82.6	83.0	82.4	57.1	57.9						73.1	73.7
Enr. in Single–Tch Schools	2.7	1.5	0.2	0.2	0.0	0.0	0.1	0.0	0.1	0.0					0.9	0.5
Enr. in Govt. Schools	48.0	50.2	62.3	62.6	1.7	1.8	43.0	10.4	58.0	57.4					40.4	41.1
Girls Enrolment	49.6	49.7	49.6	49.6	45.9	45.7	65.3	65.4	50.3	50.1					48.8	48.7

% Sch. with Pre–pry.	*pry. level*	21.1	*Total Grossness*	*Primary*	*Upper Primary*	*Transition Rate (Pry. to Upper Pry.)*	95.4
% Enr. in Pre–pry.		20.2		15.5	22.0	*ratio of Grade V to Grade I*	

Incentives (previous year)	Text books			Uniform			*% Sch with SCR >*		*% SCR with PTR >*	
Number of Beneficiaries	*All*	*SC*	*ST*	*All*	*SC*	*ST*	*30 at Pr. Level*	*35 at U.P. Level*	*30 at Pr. Level*	*35 at U.P. Level*
Primary Level	2,881,097	937,990	81,625	1,722,257	602,459	44,397				
Upper Primary Level	2,351,033	701,951	43,371	1,188,174	396,807	23,571	18.3	37.0	13.0	16.5

# = Govt + Aided	NR=Not Required	Some totals may not match due to no response in classificatory data items

B. Secondary Educatio: State Report Cards
State Secondary Education Report Card: 2013–14

Number of Districts Covered			30	State Code	33	TAMIL NADU		
Ratio of U.P. to Sec.Schools/Sections			1.82	Ratio of Sec. to Hr Sec. schools/Sections			1.00	
Date reported from	Blocks	413	Clusters	3746	Villaes	6685	Schools	11901
Basic data: 2011	Total population in (000's)		72139	% Urban population		48.45	Sex ratio	995
Decadal growth rate	15.60	% SC population		20.00		% ST population		1.10
Overall literacy rate	80.33	Male literacy rate		86.81		Female literacy rate	73.86	130058

Key Data	*Prim. with U.P. & Sec. & HSec.*	*U.P. Sec. & HSec*	*Prim. with U.P. & Sec.*	*U.P. with Sec.*	*Sec. only*	*Sec. with H.Sec.*	*H. Sec. only*	*Other Categories*	*Total*
Total Schools	4035	7823	0	0	8	24	11	-	11901
Schools: Rural	1805	5610	0	0	7	11	3	-	7436
Schools: Urban	2230	2213	0	0	1	13	8	-	4465
Total Enrolment	894643	3060403	0	0	692	8607	4354	0	3968699
Enr. in Rural Areas	314734	1643983	0	0	604	3779	1027	0	1964127
Enr. in Urban Areas	579909	1416420	0	0	88	4828	3327	0	2004572
Total Teachers	49689	105406	0	0	43	337	215	0	155689
Tch. in Rural Areas	20249	62564	0	0	36	158	50	0	83057
Tch. in urban areas	29440	42841	0	0	7	179	165	0	72632

Performance Indicators	*Prim. with U.p. & Sec. & HSec.*	*U.P. with Sec. & HSec.*	*prim with U.p. & Sec.*	*U.p. with Sec.*	*Sec. Only*	*Sec. with H. Sec.*	*H.Sec. Only*	*All Schools*
% Single–Classroom schools	2.65	1.07			0.00	0.00	0.00	1.60
% Single–Teacher schools	0.02	0.15			0.00	4.17	0.00	0.12
% Schools with Building	99.53	99.22			100.00	100.00	99.33	
% Schools with Girls' Toilet	99.95	98.41			100.00	100.00	100.00	98.96
% Schools with boys' Toilet	99.67	93.75			85.71	100.00	100.00	96.89
% Schools with Toilet for CWSN	19.55	11.75			12.50	16.67	18.18	14.41
% Sch. with Drinking Water	100.00	100.00			100.00	100.00	100.00	100.00
% Schools with Electricity	99.73	97.03			100.00	100.00	100.00	97.96
% Schools with Ramp. if needed	82.09	86.29			100.00	100.00	50.00	85.69
% Schools with Library	99.85	97.09			100.00	95.83	90.91	98.02
% Schools with Full time Librarian	55.44	8.45			0.00	25.00	63.64	24.46
% Schools with Boundary Wall	97.25	82.97			87.50	87.50	100.00	87.84
% Schools Exclusively for CWSN	1.76	0.37			0.00	0.00	0.00	0.84
% Schools with Lab. Assistant	42.50	24.04			0.00	25.00	81.82	30.34
% Schools with Head Master Room	97.84	66.09			62.50	75.00	90.91	76.89
% Schools with Hostel for Boys	10.14	8.39			0.00	8.33	9.09	8.97
% Schools with Hostel for Girls	9.84	6.31			0.00	29.17	9.09	7.55
% Schools with Computer & Internet	92.81	69.93			25.00	79.17	81.82	77.69
% Schools with ICT Laboratory	38.49	10.19			12.50	20.83	27.27	19.82
% Schools with Playground	98.02	76.25			75.00	83.33	72.73	83.64
% Sch. Conducted medical Check–up	82.03	95.49			100.00	79.17	81.82	90.88
% Schools having SMDC	5.77	76.89			25.00	37.50	9.09	52.60
% Sch. with School Bld. Committee	8.72	44.24			12.50	8.33	9.09	32.07
% Schools having PTA	37.47	89.39			50.00	62.50	36.36	71.66
% Schools Established Since 2006	12.96	14.47			12.50	4.17	9.09	13.93
Pupil–Teacher Ratio	18	29			16	26	20	25
Student–Classroom Ratio	31	42			28	32	34	39
Avg. no. of Teachers per School	12	13			5	14	20	13
% Female Teachers	73.59	55.34			72.09	51.04	70.70	61.18
% Girls eneolment	47.31	51.47			46.24	42.23	41.20	50.50
PTA Parent Teacher Association	SMDC–School management & Development Committee				CWS–Children with Special Need			

C. Elementary Education: State Report Cards

Ratio of Girls to Boys Enr: Grades I to V				0.95	Retention Rates (Pry.)			96.29				
Enrolment 2013–14					Total Re-peat-ers	Rep-etition rate	Drop out rate	SC/ST/OBC Enrolment			Enrolment ratio	
Grade	Total	Girls en-rolment	CWSN						Pri-mary	U.Pry.	GER Pri-mary	102.6
			Boys	Girls				% SC enr.	24.2	24.3	GER U. Pry.	98.3
I	1,169,855	569,502	7,031	5,072	1,244	0.10	5.94	% SC enr.	48.9	49.0	NER Pri-mary	86.7
II	1,131,279	550,861	8,896	6,157	1,104	0.09	3.43	% ST enr.	1.9	1.4	NER U. Pry	76.7
III	1,133,013	51,291	9,003	6,820	1,031	0.09	3.48	% ST girls	47.8	48.4	Non–Tec Assignment	
IV	1,160,886	564,714	8,507	6,812	993	0.08	2.90	% OBC enr.	70.0	70.0	% Teachers involved	1.9
V	1,174,652	570,626	8,374	6,683	1,034	0.08	4.53	% OBC girls	48.6	48.6		
VI	1,177,180	574,670	11,475	8,699	885	0.07					Number of days involved	10
VII	1,205,708	586,966	11,915	9,301	952	0.08		% Muslim enr.	6.2	5.9	Average Instructional Days	
VIII	1,243,868	604,365	11,310	9,678	874	0.07						
Pry (I–V)	5,769,685	2,806,994	41,811	31,544	5,406	0.09	4.06	% Muslim girls	48.8	49.3	Pr. level	U. Pr. level
U. Pry.	3,626,756	1,766,001	34,700	27,678	2,711	0.07	1.24				216	213

Classooms/Others Rooms									*Enrolment by nature of Disability*								
School category	*Average Cls.*	*Total Classrooms*	*% Good cond.*	*% Minor repair*	*% Major repair*	*Other rooms*			*Nature of Disability*	*I*	*II*	*III*	*IV*	*V*	*VI*	*VII*	*VIII*
Pry. only	4.4	155,782	88.71	8.27	3.02	30,791			Blind	523	344	345	287	243	516	314	331
Pry. + U. pry.	8.1	77,639	87.24	9.35	3.41	14,257			Low-sion	769	1108	1297	1471	1378	3045	4142	4241
P + UP + Sec +HS	18.7	75,621	99.70	0.29	0.01	28,664			Hearing	1136	1469	1993	1379	1550	2019	2112	2512
U. pry. only	4.3	553	98.01	1.81	0.18	257			Speech	685	923	917	1032	892	890	840	1013
U.P. + Sec. + HS	5.6	43,554	90.11	7.37	2.52	32,689			Loco–motor	1385	1803	2020	2028	1953	2560	2637	2653
P + U.P. +Sec									Mentally	5348	6551	6466	6539	6788	862	7736	7441
U.P. + Sec									ratarded								
Teachers by Edu. Qualification (Other than contract teacher)									Learning	74	117	155	149	129	156	224	164
School category	Below Sec.	Sec.	Hr. Sec.	Grad.	Post Grad.	M Phil/ PhD	Post Doc.	No Res.	Carebral palsy	645	1101	806	941	798	1005	1384	664
Pry. nly	1,758	14,651	45,421	52,224	23,897	2,135	31	61	Autism	226	287	356	215	194	268	347	378
Pry + U. Pry	522	4,621	16,387	29,911	22,994	2,842	14	7	Multiple	1312	1350	1468	1278	1132	1653	1480	1591
P + UP + Sec + HS	1,923	3,975	9,816	59,675	49,911	7,263	76	108	% Professionally Trained Teachers								
U. Pry. only	12	44	64	381	193	20	0	0	Gender	Government							
U.P. + Sec + HS	514	5,091	7,612	40,921	70,031	25,094	97	17		Regular			Contract			Private	
P + U.P. + Sec									Male	99.4			97.1			97.5	
U.P. + Sec									Female	99.6			94.1			94.6	
Contract	121	447	1,359	4,279	1,986	270	9	3	All Teachers	99.5			95.4			95.2	

Teachers by Gender & Caste		Regular Teachers			Contractual teachers			SC Teachers		ST Teachers	
School category	Total	Male	Female	No res	Male	Females	No res	Male	Female	Male	Female
Primary only	143,188	24,438	115,740	0	141	2,869	0	4,415	18,468	390	1,238
Primary + U. pry	77,963	21,727	55,571	0	144	521	0	4,387	7,942	305	522
P + UP + Sec + HS	136,636	23,229	109,518	0	611	3,278	0	4,050	11,472	208	808
Upper Pry. only	780	130	584	0	7	59	0	11	140	1	27
U.P. + Sec + HS	150,21	62,991	86,386	0	325	519	0	11,750	11,749	478	535
P + U.P. + Sec											
U.P.+ Sec											

Enrolment by Medium of Instructions						% Sch	
School category	Tamil	English	Others		Urdu	TLM	SD Grant
Primary only	2090223	821380	775		15954	18.7	81.9
Primary with Upper Primary	1728836	231103	48		9173	21.6	90.6
Primary with UP. Pri & Sec & HS	66987	241776	237		64	0.9	2.8
Upper primary only	10459	318	438		0	5.5	35.9
Upper Primary with Sec & HS	1530237	244657	41671		4946	18.3	91.1
Primary with up & Sec							
Upper Primary with Sec							

% Teachers Received In–Service Training (Previous year)								% Teachers by Age (In year)@			% Grants Utilized	
	P. only	P+ UP	P+ UP+ Sec+ HS	UP only	UP+ Sec+ HS	P+ UP+ SEC	UP+Sec	55–56	57–58	59–60	TLM	SD Grant
Male	81.2	81.2	1.2	48.9	20.8			3.43	2.79	0.44	99.7	99.8
Female	51.9	71.6	1.3	48.4	25.8			1.86	1.52	0.35		
All Tch.	56.9	74.3	1.3	48.5	23.7			2.27	1.85	0.37		

Source: National University of Educational Planning and Administration.