# 7 India

Meera Samson and Anuradha De

The teaching profession in India cannot be said to have been feminised, in the sense of women statistically dominating the teaching profession. Rather the overall picture indicates a shortage of female teachers, and the need to expand recruitment of female teachers, so as to facilitate the attainment of EFA and MDG goals. It is hoped that increasing the number of female teachers will "create a stimulating, participatory learning environment" (meeting at Nagarkot, Nepal in August 1997 cited in UNESCO, 2000).

The paper has five sections. Section 1 provides a statistical overview of the situation in India. Within the Indian sub-continent, there are considerable differences in the extent to which women are represented in the teaching profession. The paper explores these variations, and in particular, focuses on the states of Kerala and Rajasthan, which are at opposite ends of the spectrum on this parameter. Section 2 looks at the policy framework which impacts female teacher recruitment. Section 3 focuses on Kerala where the teaching profession is feminised. It highlights the socio-cultural factors which have facilitated this process, in particular the gendered expectations of women. It discusses how women's choices are further constrained within the teaching profession. Gender relations in present-day Kerala are touched upon. We then come to how high levels of education have affected growth in Kerala, before concluding with some concerns about the quality of education in the state.

Section 4 focuses on Rajasthan, where women are poorly represented in the teaching profession. Schooling in Rajasthan is a relatively recent phenomenon. There are enormous challenges concerning both access and quality of schooling. Rajasthan is still in a situation where it is necessary to recruit female teachers to contribute to greater gender parity and social equity in school enrolment. The situation is very different between urban and rural areas of Rajasthan. Urban areas have much higher proportions of female teachers, although gender roles for women are very strongly defined here too. In rural areas, it is much more difficult to recruit female teachers, with only small proportions of women with the requisite schooling able to go in for higher education and subsequent employment in schools. Teacher training is however a popular choice for girls who are able to enrol in higher education. Gendering within the teaching profession is very strong. We conclude this section with looking at the social background of female teachers in Rajasthan, and suggest why it could be difficult for female teachers in Rajasthan to be change-agents. In the final section, the paper discusses a few research studies which indicate that recruiting female teachers is useful in certain contexts but that it is not sufficient to improve school quality, or to definitively enhance gender and social equity in schools in the Indian context. Kerala with its high proportion of female teachers still struggles with the need to improve the quality of public schooling, and to bring about more gender equity in its society.

## Section 1 Overview – women in the teaching profession in India

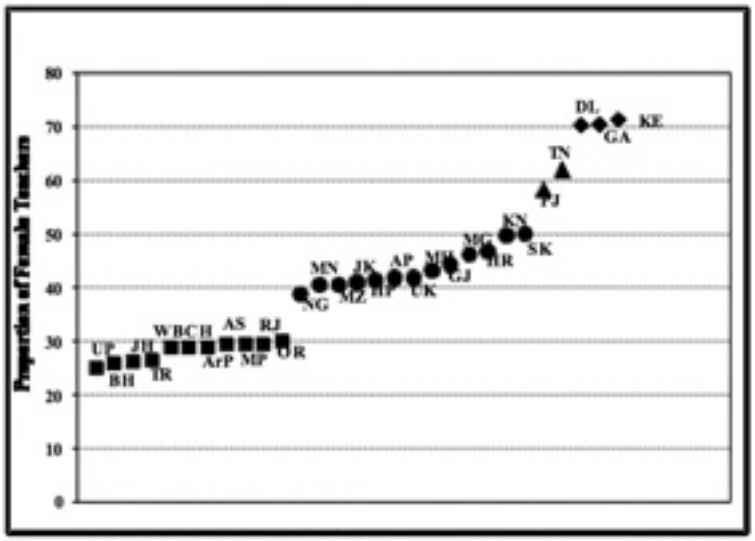
The proportion of female teachers in India among those teaching grades 1–12 was found to be 39.1 per cent in 2006–07. In India, being able to recruit higher proportions of female teachers is still an aspiration for education authorities in most states.

### *1.1 Variations in proportions of female teachers in different states*

Proportions of female teachers vary enormously in different states (see Figure 7.1). They can be separated into 3 groups:

(1) Kerala has the highest proportion of female teachers. There are four other states where the proportion of female teachers is moderately high to high. In these states, the teaching profession could be said to be feminised, if one uses the term to imply that female teachers predominate.
(2) There are 11 states including Rajasthan where proportion of female teachers is considerably lower than the all India average. These include Bihar, Jharkhand, Madhya Pradesh, Chhatisgarh, UP, and some of the eastern states (West Bengal, Assam, Arunachal Pradesh, Tripura and Orissa).
(3) In a number of states (13), the proportions of female teachers are above the all India average but hover around 50 per cent.

**Figure 7.1 Statewise proportion of female teachers in schools (grades 1–12), 2006–07**




Source: Selected Education Statistics, Ministry of Human Resource Development, Govt. of India.

| | | |
|---|---|---|
| UP: Uttar Pradesh | BH: Bihar | JH: Jharkhand |
| TR: Tripura | WB: West Bengal | CH: Chhattisgarh |
| ArP: Arunachal Pradesh | AS: Assam | MP: Madhya Pradesh |
| RJ: Rajasthan | OR: Orissa | NG: Nagaland |
| MN: Manipur | MZ: Mizoram | JK: Jammu & Kashmir |
| HP: Himachal Pradesh | AP: Andhra Pradesh | UK: Uttarakhand |
| MH: Maharashtra | GJ: Gujarat | MG: Meghalaya |
| HR: Haryana | KN: Karnataka | SK: Sikkim |
| PJ: Punjab | TN: Tamil Nadu | DL: Delhi |
| GA: Goa | KE: Kerala | |

### *1.2 Focus of the study: two states – Kerala and Rajasthan*

The focus of the study is the situation in two states with great variations in the proportions of females in the teaching profession: the coastal state of Kerala (71 per cent of teachers were female in 2006–07) and the desert state of Rajasthan (30 per cent of teachers were female in the same period). The all India figure for proportion of female teachers (39 per cent) is much closer to Rajasthan than to Kerala; Kerala is very much an outlier.

Kerala is a state which is small in size in terms of area (39 thousand sq. km.), but has a high population density (819 per sq. km.) (see Table 7.1a). It is located on the east coast of the southernmost part of peninsular India. It has fertile land with abundant water and

other resources. The level of urbanisation is relatively low (26 per cent), below the average for India as a whole. At the same time it has 78 towns and cities (with a population of 100,000 or more) (Gopalan, 2004). The relatively low level of urbanisation is because Kerala's villages are well connected and highly developed[22] and there is no large-scale migration to urban areas. However, due to limited employment opportunities in the state, a significant proportion of its population does migrate outside the state – within India and abroad. Kerala has a high per capita NSDP (Rs 43,000) compared to India as a whole (Rs 32,000). While it has a strong agrarian base for its economy, industrial development has lagged behind. The contribution of the services sector to GDP is high (63 per cent). In terms of social composition, Kerala has a mix of Hindus, Muslims and Christians. Its historically disadvantaged groups comprise 11 per cent of the population – Scheduled Castes or dalits (10 per cent) and Scheduled Tribes (1 per cent).

**Table 7.1a Basic statistics for India, Kerala and Rajasthan**

| | India | Kerala | Rajasthan |
|---|---|---|---|
| Area (sq. km.) | 32,87,240 | 38,863 | 3,42,239 |
| Population density (per sq. km.) | 325 | 819 | 165 |
| Level of urbanisation (%) | 28 | 26 | 23 |
| Road length, 2008 (length in kms per 100 sq. kms area) | 97 | 527 | 50 |
| Net State Domestic Product per capita (Rs), 2008–9 (2004–5 prices) | 31,801 | 42,646 | 23,125 |
| Contribution to GDP, 2008–9 (%) | | | |
| Primary | 19 | 12 | 28 |
| Secondary | 24 | 26 | 26 |
| Tertiary | 57 | 62 | 46 |
| Religious groups (%) | | | |
| Hindus | 80.5 | 56.2 | 88.8 |
| Muslims | 13.4 | 24.7 | 8.5 |
| Christians | 2.3 | 19 | Negligible |
| Others | 3.8 | 0.1 | 2.7 |
| Scheduled Castes (%) | 16.2 | 9.8 | 17.2 |
| Scheduled Tribes (%) | 8.2 | 1.1 | 12.6 |

Sources: 1. Census, 2001 for all figures for which dates have not been specified. 2. NSDP and road length figures are from Ministry of Statistics and Programme Implementation (www.mospi.nic.in).

Rajasthan is one of India's largest states (at 342 thousand sq. km. it is close to 9 times the size of Kerala); 60 per cent of it is desert and drought-prone (see GOI, 2006). Situated in the north-west of India, it is reported to be the most water-deficient state in the country (Sen et al., 2009). Less than one-quarter of its population (23 per cent in 2001) lives in urban areas, although its urban population is reported to be growing rapidly largely on account of migrants from rural areas coming in search of employment, education, and so on (see GOI, 2006). It has relatively poor connectivity – 50 kms of road length per 100 sq. kms compared to the all India average of 97 kms of road length per 100 sq. km (see Table 7.1a). Its per capita NSDP is far below the all India average, and only a fraction of that in Kerala. The contribution of the primary sector (subsistence rain-fed agriculture; animal husbandry, marble/stone/tiles) to GDP is 28 per cent, indicating that it plays a larger role than in Kerala and in India as a whole; the proportionate contribution of the secondary sector is similar to that in Kerala; while the services sector's contribution to GDP at 46 per cent (though far less significant than in Kerala), is still the largest in Rajasthan. Close to 90 per cent of the population is Hindu, with Muslims forming a sizeable minority. The state has a high proportion of historically disadvantaged groups – 17 per cent of its population belong to the dalit community and 13 per cent of its population are classified as belonging to Scheduled Tribes.

*22 This has led to the coinage of the term "rurban" to describe much of the countryside in Kerala (Sreekumar, 1990 cited in Kanaan, 2000).*

**Table 7.1b Development indicators for India, Kerala and Rajasthan**

| | India | Kerala | Rajasthan |
|---|---|---|---|
| IMR Infant mortality rate (per 1000), 2008 | 53 | 12 | 63 |
| MMR Maternal mortality rate, 2007 | 254 | 95 | 388 |
| TFR Total fertility rate, 2008 | 2.6 | 1.7 | 3.3 |
| FMR Female Male Ratio | 933 | 1058 | 921 |
| Literacy rate (%) | | | |
| All | 65.4 | 90.9 | 60.4 |
| Females | 53.7 | 87.9 | 43.9 |
| Literacy rates among SCs (%) | | | |
| All | 54.7 | 82.7 | 52.2 |
| Females | 41.9 | 65.0 | 33.9 |
| Literacy rates among STs (%) | | | |
| All | 47.1 | 64.4 | 44.7 |
| Females | 34.7 | 43.5 | 26.2 |
| Per capita budgeted expenditure (Rs) on education, 2007–08* | 6208 | 8400 | 4963 |
| Per capita expenditure on education as a % of domestic product, 2007–08** | 4.0 | 3.6 | 3.4 |

Notes: *Based on Plan/non-Plan expenditure.
**Based on expenditure from revenue account.
Sources: 1. Census, 2001 for all figures for which dates have not been specified. 2. Infant mortality rate from Economic Survey of India, 2010–11. 3. Total fertility rate and Maternal mortality rate from indiastat.com. 4. Expenditure figures, 2007–08 calculated from data accessed through Ministry of Statistics and Programme Implementation (www.mospi.nic.in) and www.indiastat.com

Kerala is justifiably highly acclaimed for its high indicators of overall development. It has a low Infant Mortality Rate (IMR) (14/1000 live births); and a comparatively low Maternal Mortality Rate (MMR) (95 women dying in childbirth/100,000 live births) (see Table 7.1b). Its low Total Fertility Rate (TFR) (1.7) indicates that it is in an advanced stage of demographic transition. Its high Female Male Ratio (FMR) (1058) reflects that females are not disadvantaged here, as they are in much of India, in the sense that even their survival is threatened. Kerala is educationally well-developed as is indicated by a high female literacy rate (88 per cent). Literacy among its dalit population is high at 83 per cent; though female literacy in these communities is much lower at 65 per cent. Far worse is the situation for the tribals in Kerala who form only 1 per cent of the population (overall literacy is 64 per cent with female literacy at 44 per cent). The per capita budgeted expenditure on education is as high as Rs 8335, benefiting from Kerala's high net state domestic product.

Rajasthan, on the other hand, has very poor development indicators, particularly reflecting the acute lack of gender equity in the state. It has a high IMR of 80/1000 live births; and a high MMR of 388 deaths due to childbirth per 100,000 live births. It has a high TFR of 3.3, indicating that it is in a much earlier state of demographic transition than Kerala. It also has a low FMR of 921/1000 males. Its relative backwardness in the field of education is revealed in its low female literacy rate (44 per cent in 2001). Female literacy among the SC groups is still lower at 34 per cent, and lower than that among STs at 26 per cent.

The relative differences between India, Kerala and Rajasthan are also visible when looking at school attendance figures collected in household surveys by NSSO (National Sample Survey Organisation). We focus on rural areas. Within Kerala, 84 per cent of the children from the least advantaged group – the STs – are enrolled in school (see Table 7.2a). Higher proportions of children are enrolled among all other social groups. Looking at figures for India as a whole, girls are less likely to be enrolled than boys, and similarly children from SC families are less likely to be enrolled than those from OBC families, and children from ST families are less likely to be enrolled than children from SC families. Deprivation is most acutely visible for girls in rural Rajasthan – 68 per cent of them are enrolled compared to 85 per cent of the boys.

**Table 7.2a School attendance rates for the 5–14 age group (rural), 2004–05**

| Proportion (%) who reported attending school | India | Kerala | Rajasthan |
|---|---|---|---|
| Boys | 83.5 | 96.2 | 85.3 |
| Girls | 76.7 | 98.3 | 68.1 |
| OBC | 84.3 | 97.4 | 86.0 |
| SC | 80.9 | 93.6 | 84.9 |
| ST | 76.7 | 84.2 | 78.6 |

Source: GOI, 2004–05, NSSO, 61st Round.

Enrolment of girls in grades 10 and 12 and in higher education are based on school and college data collected by the Ministry of Human Development of the Government of India. These figures also reflect the very different situations in the two states (see Table 7.2b). The Kerala figures do not indicate that girls are at a disadvantage. On the other hand, in grade 12 and in higher education, they are a higher proportion of total enrolment (54.6 per cent and 54.4 per cent, respectively). In Rajasthan, enrolment figures indicate girls being greatly disadvantaged – they are approximately one-third of total enrolment (in class 10, class 12 and in higher education). The situation for India as a whole, shows girls at a disadvantage, but to a lesser extent than in Rajasthan. In India, they are 43 per cent of total enrolment in grades 10 and 12. Proportions decline further to 39 per cent in higher education.

**Table 7.2b Comparing girls' enrolment in India, Kerala and Rajasthan (for grades 10/12 in school and in higher education)**

| | India | Kerala | Rajasthan |
|---|---|---|---|
| No. of girls who are enrolled in class 10, 2007–8 | 57,95,659 | 2,44,264 | 2,67,369 |
| Proportion (%) of enrolled who are female | 43.4 | 50.3 | 34.4 |
| No. of girls who are enrolled in class 12, 2007–8 | 32,93,321 | 1,44,618 | 1,20,897 |
| Proportion (%) of enrolled who are female | 43.0 | 54.6 | 32.1 |
| | | | |
| No. of girls enrolled in higher education, 2006–7 | 59,59,236 | 2,45,506 | 1,77,347 |
| Proportion (%) of enrolled who are female | 38.8 | 54.4 | 33.8 |

Source: Statistics of School Education (2007–8) for girls enrolled in classes 10 and 12; Annual Report, 2008–09, MHRD for girls enrolled in higher education.

Finally, we compare proportions of women who have completed class 10 in urban and rural areas, data for which are available through household surveys conducted by the NFHS (National Family Health Survey). Even Kerala, who has a history of women's education being encouraged had only 30 per cent of rural women and 36 per cent of urban women who had completed grade 10 (see Table 7.2c). Figures for India as a whole were much lower – 8 per cent of women in rural India and 29 per cent of women in urban areas had completed grade 10, and figures for Rajasthan were really dismal (22 per cent in urban areas and 2 per cent in rural areas).

**Table 7.2c Completion of secondary schooling among adult women, 2005–06**

| Proportion (%) of adult women (15–49 years) who have completed class 10: | India | Kerala | Rajasthan |
|---|---|---|---|
| Urban | 28.5 | 35.8 | 21.9 |
| Rural | 8.0 | 29.9 | 2.0 |

Source: NFHS-3, 2005–06.

The wide range of statistics are extremely useful as they provide a comparative overview of the situation in the two states of Kerala and Rajasthan and where they stand relative to the country as a whole.

### *1.3 Changes in proportions of female teachers in India, Kerala and Rajasthan from 2002 onwards*

There appears to have been little change in the proportion of female teachers for India as a whole in the four year period prior to 2006–07, although the number of female teachers has increased from 2.2 million to 2.5 million in this period (see Table 7.3).

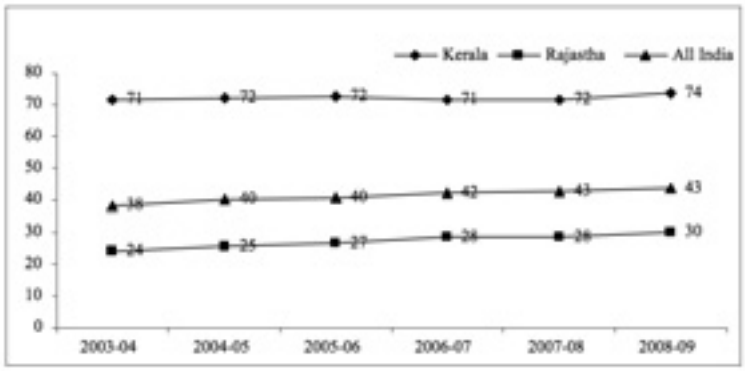
**Table 7.3 Changes in numbers and proportion of female teachers, 2002–03 to 2006–07**

| | No. of female teachers (thousands) | Proportion (%) of female teachers |
|---|---|---|
| 2002–03 | 2203 | 39.9 |
| 2004–05 | 2240 | 38.4 |
| 2006–07 | 2458 | 39.1 |

Source: Selected Education Statistics, various years.

This data based on Selection Education Statistics is collected annually by MHRD, GOI, but is available only till 2006–07. More recent data was available through DISE, which is collected annually by NUEPA, but excludes schools which do not have primary or upper primary grades. We use DISE data to look at changes in proportions of female teachers in India, Kerala and Rajasthan between 2003–4 and 2008–9 (see Figure 7.2). The DISE data indicate that in Kerala, proportions of female teachers are high and increasing only marginally, while in Rajasthan, the proportions are low but increasing at a slightly higher rate. Proportions of female teachers for India as a whole follow a similar pattern of increasing at a steady rate from 38 per cent in 2003–04 to 43 per cent in 2008–09.

**Figure 7.2 Proportion of female teachers**




Source: DISE, State Report Cards, various years.

### *1.4 Disaggregating the picture for India: extent of female representation among teachers*

*Primary / middle / secondary and senior secondary schools*

Data suggests lower proportions of female teachers at higher levels of schooling. Proportions of female teachers are highest in primary and middle schools (see Table 7.4), slightly lower in secondary schools, and slightly lower than that in senior secondary schools. The picture presented by SES data is slightly blurred because data is not collected separately for different stages of schooling. Data is disaggregated only by school. A further disadvantage of SES data is that it is not disaggregated for urban and rural areas.

**Table 7.4 Proportion (%) of female teachers: all India (2006–07)**

| | |
|---|---|
| Primary schools (1–5) | 39.6 |
| Middle schools (1–8, 6–8) | 39.5 |
| Secondary schools (1–10, 6–10, 9–10) | 38.5 |
| Senior secondary schools (1–12, 6–12, 9–12) | 37.9 |
| All schools | 39.1 |

Note: In several states, the primary stage includes grades 1–4, the middle or upper primary stage includes grades 5–7, with the next stage beginning with grade 8. Source: SES 2006–07.

*Urban and rural areas*

The DISE data indicate high proportions of female teachers in urban (65 per cent) compared to rural areas (37 per cent) in 2008–09. The rural urban gap in proportions of female teachers was found to be high in all states with the exception of Kerala (see section 3).

**Table 7.5 Rural urban gaps in proportions (%) of female teachers in 2007–08**

| % of female teachers: | Rural | Urban | All |
|---|---|---|---|
| In primary schools (grades 1–4,5) | 37.7 | 69.6 | 42.3 |
| In primary plus upper primary schools (1–7,8) | 38.3 | 66.6 | 45.1 |
| In primary plus secondary / senior secondary (1–10; 1–12) | 43.9 | 68.6 | 55.8 |
| In middle schools (grades 5–7, 6–8) | 29.8 | 62.5 | 35.4 |
| In upper primary plus secondary / senior secondary (5–10; 5–12; 6–10; 6–12) | 31.0 | 53.6 | 37.9 |
| **In all schools** | **36.5** | **65.2** | 42.7 |

Source: DISE, 2007–08.

DISE data is available only from 2002 onwards. To get a picture of changes over time in rural and urban areas, we can use data collected by NCERT in the Sixth (1993) and Seventh (2002) All India Educational Surveys. The coverage of schools by NCERT and DISE differs so the two sets of data are not comparable. We need to note also that NCERT data are disaggregated by school rather than by stage. The NCERT figures show a considerable rise over the nine year period which overlaps with the 3 phases of the DPEP (District Primary Education Programme) initiative. The number of female teachers in rural areas rose from 954 thousand to 1458 thousand, proportionately increasing from 24 per cent to 29 per cent. The dominance of female teachers vis-à-vis male teachers in urban areas, already visible in 1993, was more pronounced by 2002, with proportions of female teachers rising from 55 per cent to 59 per cent. The rural-urban gap in proportions of female teachers decreased slightly over this period.

**Table 7.6 Changes in numbers and proportions (%) of female teachers in rural and urban areas, 1993–2002**

| | Rural | Urban | All-India |
|---|---|---|---|
| No. of female teachers, 1993 | 9,54,117 | 3,02,191 | 12,56,308 |
| Proportion (%) who are female | 23.5 | 55.0 | 33.6 |
| | | | |
| No. of female teachers, 2002 | 14,58,102 | 5,34,229 | 19,92,331 |
| Proportion (%) who are female | 29.1 | 59.2 | 39.4 |

Sources: 1993 data: Sixth All India Education Survey, 1998. 2002 data: Seventh All India School Education Survey, 2007.

*Government and private schools*

The proportions of female teachers is higher in private schools: The all-India proportion of female teachers in government schools (39 per cent) in 2007–08 is substantially lower than in aided and unaided schools (53 per cent), according to DISE 2008–09 (excludes schools with only grades 9–10, 9–12, and 11–12).

### *1.5 Limited data on female teachers at tertiary level*

The proportion of female teachers in tertiary education for India as a whole was only 18 per cent in 1993–94 (see Chanana, 2004). The author rues the lack of reliable disaggregated data on faculty and students in public and private institutions providing higher education. She found that the proportions of female teachers are much lower than proportions of women who are students and researchers in higher education, which is close to 39 per cent (op.cit.).

The limited figures for proportion of female teachers in tertiary education indicate that they are much lower than at school level. In 1950–51, at the time of independence the gap between the proportion of female teachers at school and college level was 7 per cent. The proportion of female teachers has increased in tertiary education between the 1950s and the 1980s, but at a slightly lower rate than in school education.

**Table 7.7 Proportion (%) of female teachers in higher education, India**

| Year | % female teachers in higher education |
|---|---|
| 1950–51 | 8.3 |
| 1960–61 | 12.3 |
| 1970–71 | 15.3 |
| 1980–81 | 19.4 |

Source: Based on statistics released by Department of Secondary and Higher Education, MHRD.

Women's choice of courses in school and college are often not made with a career in mind. This may be because of their socialisation or because of explicit constraints on the choices open to them. General education has always been a preferred option. Professional education often requires additional investment in coaching for entrance tests. Since the nineties, more women are taking up professional education, but they continue to be employed in certain sectors many of which offer them short-term, contractual low-paid jobs.

## Section 2 The policy framework which impacts female teacher recruitment

### *2.1 Policy initiatives to increase recruitment of female teachers*

*Pre-independence and post-independence*

Educational policy in post-independence India has been concerned about increasing the recruitment of female teachers, particularly to draw girls into school. The presence of a female teacher is useful to assure parents of the well-being and safety of their daughters, particularly important, as Chudgar and Sankar suggest, in gender-segregated societies (see Chudgar and Sankar, 2008).

Policy documents on education (post-independence in 1947) (see Agrawal and Aggarwal, 1992) all include recommendations to incentivise female teachers. Suggestions include: giving females preference when giving admission to recruits in teacher training institutions; giving females from rural areas greater preference at the time of admission to teacher training institutions; giving female teachers posted to rural areas living quarters and a special allowance.

To encourage women's education, the committees made a number of additional recommendations, many of which involve recruiting female teachers:

- Setting up exclusively girls' schools and colleges where most teachers will be female but there will also be male teachers.
- Appointing some female teachers to all co-educational institutions.
- At least half of all teachers appointed (in some specified situations) to be female.

In the last twenty years, recruitment of female teachers has been an important policy at primary level (under Operation Blackboard and DPEP (District Primary

Education Programme), and at primary and upper primary level (under SSA (Sarva Shiksha Abhiyan). Operation Blackboard, 1990 explicitly recommended that all schools should have at least two teachers, one of whom should be a woman. This reflected the concern of NPE (National Policy for Education), 1986 on the need to increase the number of female teachers. The current SSA programme (2002–present) also states in its aims that 50 per cent of all teachers are to be female (see SSA, n.d.).

An important recent initiative under SSA has been the setting up of residential schools for girls in grades 6–8 primarily for girls from SC, ST and minority communities in certain areas which are officially classified as educationally backward blocks[23] (EBB) where the rural female literacy is below the national average and the gender gap in literacy is more than the national average. The scheme[24] (Kasturba Gandhi Balika Vidyalaya KGBV) provides for a minimum reservation of 75 per cent of the seats for girls belonging to SC, ST, OBC or minority communities, and priority for the remaining 25 per cent is accorded to girls from families below the poverty line (officially classified as BPL). It is being implemented in 27 states, including Rajasthan. These schools cater to 50–100 girls and provide for up to 5 full time female teachers, and 3 part time female teachers. The scheme has been in operation since 2004. It has been revised in 2008, and more blocks have been included (in the list of those eligible for the setting up of residential schools), and in addition, towns where there are a concentration of minorities. Currently, there are 2,573 KGBVs (residential girls' schools under this scheme (see Table 7.8), with an average enrolment of 79 girls. More than four-fifths of the KGBVs are in 8 states: six of these states are in the Hindi-speaking heartland (Rajasthan, Chhatisgarh, Madhya Pradesh, Bihar, Jharkhand, Uttar Pradesh), the remaining two are Orissa in the east and Andhra Pradesh in the south. All these states (with the exception of Andhra) have proportions of female teachers far below the national average, and the KGBV scheme is playing an important role in boosting girls' education, as well as contributing to higher proportions of female teachers being employed. Rajasthan appears to have opened up at least 1 KGBV in every EBB, unlike several other states where the number of KGBVs is less than the number of EBBs.[25]

**Table 7.8 Educationally backward blocks (EBBs) and Kasturba Gandhi Balika Vidyalayas (KGBVs) in India, Kerala and Rajasthan**

| | India | Kerala | Rajasthan |
|---|---|---|---|
| No. of Educationally Backward Blocks, 2008 | 3,479 | 1 | 186 |
| Proportion (%) of blocks which are EBB | 49.2 | 1 | 74.7 |
| No. of residential girls' schools (KGBVs), 2009–10 | 2,573 | – | 200 |

Source. GOI, 2010b, www.education.nic.in

### *2.2 How proportions of female teachers have increased over time*

Looking at the five decades after India attained independence in 1947,[26] we see that there is a steady increase in the number and proportion of female teachers. Figure 7.3 shows how the number of female teachers shot up from 0.1 million in 1950–51 to 0.6 million in 1970–71 to 1.3 million in 1990–91 to 1.8 million in 2000–01. The rate of growth of proportions of female teachers in the system at school-level can be seen in Figure 7.4 showing that it increased steadily, though at a modest rate.

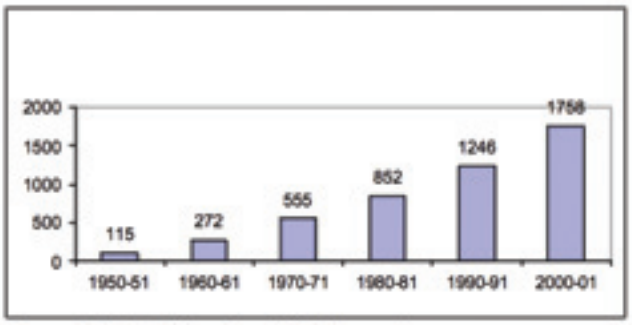
*22 Three states contain 56 per cent of the EBBs – Bihar, Uttar Pradesh and Andhra Pradesh. See GOI, 2010b.*

*23 Details obtained from the SSA website (see GOI, 2009).*

*24 Bihar, Uttar Pradesh and Andhra Pradesh who have the largest number of EBBs, also have the largest number of EBBs without a KGBV (139, 248 and 342, respectively in the 3 States) (see GOI, 2010b).*

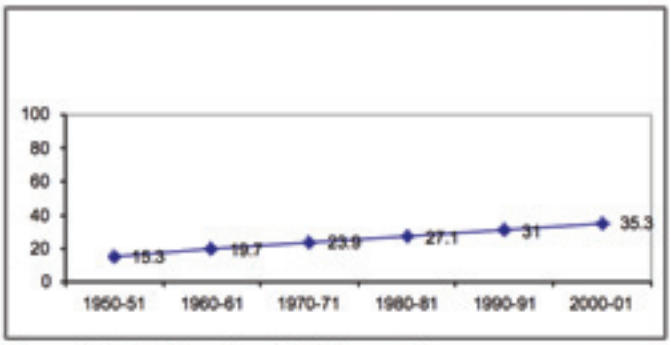
*25 In the pre-independence period, the proportions of female teachers were much lower. In 1926-27 it was only 9 per cent for the country as a whole. Over the next 20 years, it rose to 14 per cent (see Agrawal and Aggarwal, 1992).*

**Figure 7.3 Number of female teachers, 1950–51 to 2000–01 (thousands)**




Source: Selected Educational Statistics, various years.

**Figure 7.4 Proportion of female teachers, 1950–51 to 2000–01**




Source: Selected Educational Statistics, various years.

### *2.3 Varying state policies and progress with regard to female teacher recruitment*

Since recruitment and deployment of teachers is a state subject (and not under the Central Government), these suggestions set out in policy documents on education have been implemented differently in different states. A large number of teachers were recruited in the 1990s at primary level in all states, many of whom were female (see Jha and Bhardwaj, 2001). There were enormous differences between states.

Below are some examples of the recruitment policy in different states that has determined the extent to which women were able to access teaching jobs. Some states (Karnataka,[27] Tamil Nadu) actually reserved 50 per cent of their primary-stage teaching posts for women (op. cit.). Orissa reserved 33 per cent for female teachers at the primary-stage. Rajasthan has reserved 30 per cent places for female teachers at the primary-stage (see SSA Rajasthan, n.d.), and this policy has been in the government's policy documents for many years (see the 1970 Rajasthan service rules, GOR, n.d.). Many states chose to make no explicit quota for female teachers, and proportions of female teachers have remained low in these states.

The proportion of female teachers in any particular state is also influenced by the way in which teachers are recruited.

In some states they are recruited through a centralised examination as was done by Bihar where the examination was conducted by the Bihar Public Services Board in 1994. In such examinations, it is suggested that women lose out because of greater levels of

*27 Karnataka implemented this policy in 1993-94, which led to a significant increase in the proportion of female teachers in the state.*

competition from persons of varied educational background in such state-level examinations – Jha and Bhardwaj cite the example of the Bihar recruitment where less than 5 per cent of the successful candidates were women[28] (Jha and Bhardwaj, 2001).

Those states where teachers were being recruited district-wise based on merit lists of candidates, prepared from their grades in Class 12 Boards and in pre-service training courses, were found to be more favourable to women as it allowed recruitment to be made among those who had actively chosen to train to be teachers. These were found to include a higher proportion of women.

Raising the minimum qualifications required for teacher recruits was a policy that was implemented by the UP government. Instead of a minimum of senior secondary schooling and pre-service training, it asked for graduation (Jha and Bhardwaj, 2001) and pre-service training. This worked against women, as women have lower levels of education compared to men. In addition, it worked against women of disadvantaged groups such as SCs, STs, and minorities since educational levels among women in these groups is still lower.

Policies of deployment also greatly reduce the attractiveness of teaching jobs for female teachers. In Bihar, it was decided that no teacher should be posted within 15 kms of their village (Jha and Bhardwaj, 2001). This is particularly difficult for female teachers, since in a patriarchal society, it is the female teacher's husband's location that will determine where the family will live. Many other states no longer have the policy of not posting the teacher in their own block/village.

In the last twenty years, there has been a growing trend to recruit contract teachers, or para-teachers as they are also known. This will be discussed in greater detail in the next section.

### *2.4 Impact of the use of para-teachers*

Over the last two decades, as the educational system has had to expand to bring children into school, states have increasingly chosen to recruit contract teachers. In some states, contract teachers are locally recruited and appointed by the Panchayat or Village Education Committee / School Management Committees to a particular school. In others, they are now recruited at district level. In all cases they are paid less than regular teachers and they get fixed term contracts of a year. No pre-service training is required.

Several advantages and benefits are attributed to the introduction of contract teachers. Most importantly, it allows the state to reduce teacher shortages within a short period (availability of qualified trained teachers in rural areas is otherwise a constraint), and within limited resources. Recruitment and payment through village bodies potentially makes for better accountability to the community. If locally recruited, they do not have to commute, which potentially contributes to lowering the rates of absenteeism. Local contract teachers are more likely to understand the language and culture of the students, being from the same milieu, and can thereby contribute to greater learning in school.

However, the recruitment of contract teachers through local village bodies has increased the likelihood of making the teacher cadre even more politicised. Candidates who are recommended / recruited by local politicians are unlikely to act accountably to education authorities. This applies to both male and female contract teachers. As far as sharing language and culture of disadvantaged children, even selected candidates who are local, may belong to the more privileged social groups in the district (e.g.

*28 Even this small proportion of women among the new teacher recruits could have come in because there was a 3 per cent quota reserved for women teachers.*

OBCs), and not necessarily at an advantage in terms of effective communication with, for example, tribal children enrolled in the school.

States have been found to differ considerably with regard to whether they use para-teachers. Evidence that is available for Kerala suggest that the state has used para-teachers only supposedly as a temporary and stopgap measure. In 2006–07, the number of para-teachers employed was 2438, and 74.5 per cent of them were women (DISE, 2007 cited in Ramachandran et al., 2008). The majority of these teachers were in standalone primary schools and in schools with grades 1–8. The qualifications required for para-teachers were the same as for regular teachers (Ramachandran et al., 2008).

*Para-teacher policy in educationally disadvantaged states*

The Shiksha Karmi Programme in 1987 in Rajasthan was the inspiration for recruiting local teachers even if they were poorly qualified to deal with problems of chronic absenteeism among the well-qualified permanent teacher cadre. Within the scheme, there were efforts to recruit females. While the minimum qualification for men was completion of grade 8, for women it was reduced to grade 5. While the age group for male recruits was specified to be 18–33 years, the upper limit was extended to 38 years for females. Special efforts were also made to train women by opening Mahila Prashikshan Kendras or Women's Training Institutes where crèche facilities were provided. There was great resistance to the scheme from families who were concerned that the female teacher recruits might become too 'independent' or 'go out of control' (Rajagopal, 1999). Within this scheme, women (called Mahila Sahayogis) were also appointed to escort girls from their house to the school, as it was discovered that this was an important need. Nevertheless, an evaluation of the scheme (Sandhan, 1995 cited in Rajagopal, 1999) showed that retention of girls continued to be low.

Para-teachers in Rajasthan were later recruited for remote schools under the Rajiv Gandhi Shiksha Mission in Rajasthan which had only grades 1 and 2. Later the recruitment was extended to other schools. There were a huge number of para-teachers in 2006–07 in Rajasthan (more than 32,000 according to DISE, 2007 cited in Ramachandran et al., 2008 and 25 per cent of them were women).

More recently, Rajasthan has stopped recruiting para-teachers and absorbed them into their regular teaching cadre.[29] The para-teachers recruited earlier are now termed Prabodhaks and put on the same level as 'third grade' teachers,[30] all to teach classes 1–5. The Prabodhaks are given a special six-month teacher training course to make up for their lack of training. As Prabodhaks, they get the same[31] basic pay (Rs. 4500), but a gross salary of Rs. 8950 for a probation period of two years. The probation period begins from the year when they were appointed as para-teachers. Once past the probation period, they are made permanent, and paid a salary of about Rs. 15,000.

The better terms and conditions for all teachers in Rajasthan are likely to make teacher positions more attractive to males in Rajasthan. The recruitment of all teachers through state level examinations is also likely to lead to a higher proportion of males being selected, with the wide gender gap in educational attainments. However, Rajasthan continues officially to reserve 30 per cent of all teacher positions for women.

It is useful to note the widely differing policies in two other states which can also be considered educationally disadvantaged. Uttar Pradesh has deployed para-teachers extensively – in 2006–07, it had employed close to 96,000 para-teachers, of whom 48% were female (DISE, 2007 cited in Ramachandran et al., 2008). However, there were

*29 As a result the reported percentage of para-teachers in 2007-08 had dropped to 8% (see Sen et al., 2009).*

*30 These are directly recruited at State level.*

*31 The para-teachers were earlier paid about Rs. 4500.*

certain stipulations in place which seemed to protect school quality: not more than 2 para-teachers could be appointed in a school; a para-teacher could only be appointed to a school which already had a regular teacher; a second para-teacher could be appointed only when the school had a second regular teacher, Jha and Bhardwaj 2001).

Madhya Pradesh began by deploying para-teachers only in remote schools under the Education Guarantee Scheme in MP which had only grades 1 and 2. Later, they were recruited in formal schools to replace regular teachers, and in 2006–07, there were over 119,000 contract teachers employed of whom 31 per cent were female (DISE, 2007 cited in Ramachandran et al., 2008).

Evidence that the para-teacher scheme has led to an increase in proportion of female teachers comes from the PROBE Revisited study which compares changes in the social background of teachers between 1996 and 2006 in all schools with primary education facilities in a randomly selected sample of villages in the states of Rajasthan and undivided Bihar, MP and UP (see Box 7.1).

**Box 7.1 Changes in social background of teachers, 1996–2006**
(Excerpted from PROBE Revisited)

The PROBE Survey was a study of primary education in rural areas in the states of Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh in 1996. Himachal Pradesh was also surveyed as a contrast. In 2006, the Survey was repeated in roughly the same villages (see PROBE Revisited, 2011). Some relevant findings are discussed below.

The recruitment of contract teachers has contributed to very visible changes in the gender and caste background of teachers. The proportion of female primary school teachers was found to have increased from 21% to 37% in 2006. There was a decline in the proportion of general caste teachers, and an increase in the proportion of OBC teachers (see Table 1). The proportion of disadvantaged groups among teachers in both years remains unchanged.

**Table 1. Changes in social background of teachers in rural schools (PROBE States*)**

| Proportion (%) of primary school teachers who are: | 1996 | 2006 |
|---|---|---|
| Female | 21 | 37 |
| "General castes" / high castes | 53 | 37 |
| OBC (Other Backward Classes) / middle castes | 19 | 37 |
| SC / ST (Scheduled Castes / Scheduled Tribes) | 20 | 19 |
| Minorities | 8 | 7 |

Source. PROBE, 1996; PROBE Revisited. 2006.

Studying the intersection between gender and caste is particularly useful. Among male 'permanent teachers', 41% are "general castes" whereas this figure is only 24% among male 'contract teachers". Contract teacher jobs are clearly not a preferred option for "general caste" males. Male 'contract teachers' are mostly OBCs (42%), a powerful group in rural north India. A substantial proportion is from the disadvantaged SC/ST groups (33%). This is in strong contrast to female teachers – permanent and contract. For both groups, close to half are "general castes", reflecting a higher level of education among women in the upper caste groups, their inclination to take up teaching, as well as their ability to access government jobs. Just over one third are OBCs, and negligible proportions are SC or ST or non-Hindu.

**Table 2. Intersection between gender and caste among permanent and contract teachers in rural schools, 2006 (PROBE states*)**

| Proportion of primary school teachers who are: | Permanent teachers | | | Contract teachers | | |
|---|---|---|---|---|---|---|
| | Male | Female | All | Male | Female | All |
| "General castes" | 41 | 48 | 43 | 24 | 48 | 35 |
| OBC | 38 | 36 | 38 | 42 | 34 | 39 |
| SC/ST | 20 | 16 | 18 | 32 | 15 | 24 |
| Minorities | 1 | 0 | 1 | 2 | 3 | 2 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |

Source. PROBE Revisited, 2006.
*PROBE states include Rajasthan and undivided Bihar, MP and UP.

## Section 3 Case study of Kerala – teaching profession feminised

### *3.1 Kerala has high achievements in education*

While introducing Kerala in the earlier section, we noted how the state has not just achieved universal literacy, it is also close to achieving universal secondary education, for both boys and girls (Mukhopadhyay 2007, Eapen and Kodoth, 2003).[32] Achieving gender parity in enrolment till secondary school level is a remarkable achievement. Access to secondary school facilities in Kerala is very high – in 2002, the proportion of rural population who had access to secondary schools within 6–8 kms was 97.8 per cent (Economic Review, 2002 cited in GOK, 2006).

The provision of teachers and the availability of physical infrastructure in Kerala's educational system are far superior to India as a whole. Kerala's primary schools are larger (higher student enrolment and more teachers[33]) with a much lower Pupil Teacher Ratio (24) compared to the average for India (PTR of 35). The declining PTR has to be understood (see GOK, 2006) in the context of falling student enrolment[34] since the early 1990s. The number of teachers has also declined but not as fast as enrolment. Kerala also has a negligible proportion of single teacher schools (less than 1 per cent), compared to the India average of 13 per cent of primary schools. Nearly all schools (with primary and /or upper primary grades) have at least one female teacher compared to only 74 per cent of schools for India as a whole. In terms of physical infrastructure, Kerala has a higher than average number of classrooms (6 compared to 3.1) in its primary schools, with a much smaller than average proportion (5.4 per cent compared to 9.5 per cent ) requiring major repair. Most of its schools have at least one toilet (83 per cent ), and most also have a separate girls' toilet (78 per cent ).

**Table 7.9 Provision of teachers and availability of infrastructure in Kerala, 2008–09**

| | Kerala | India |
|---|---|---|
| **Teacher provision** | | |
| Average no. of children in a primary school | 146.7 | 106.1 |
| Average no. of teachers in a primary school | 6 | 3 |
| PTR in primary schools | 24 | 35 |
| Proportion (%) of single-teacher primary schools | 0.7 | 13.3 |
| Proportion (%) of schools with female teachers* | 99.4 | 73.7 |
| **Infrastructure** | | |
| Average no. of classrooms in a primary school | 6.0 | 3.1 |
| Proportion (%) of classrooms which require major repair* | 5.4 | 9.5 |
| Proportion (%) of all schools without any toilet* | 17.1 | 23.2 |
| Proportion (%) of all schools without a girls' toilet* | 22.1 | 46.4 |

Note: *Refers to all schools with primary and / or upper primary sections.
Source: DISE, 2008–09.

*32 School dropout rates among girls are actually lower than among boys since the seventies (Ambili, 1996 cited in Kodoth and Eapen, 2003).*

*33 Kerala has a negligible proportion of para-teachers as mentioned in the previous section.*

*34 Kerala is in an advanced stage of demographic transition, with the TFR below replacement level.*

The education system in Kerala has greatly benefited from both the government and private aided[35] institutions in school education and in higher and technical education. Both are important education providers at school level. Aided schools constitute the majority of schools in Kerala (55 per cent) (see Table 7.10), while government schools are a substantial 41% of all schools. The bulk of teachers (58 per cent) teach in aided schools; while 37 per cent of all teachers work in government schools. The unaided sector is very small, although growing at a rapid pace.

**Table 7.10 Share of government, aided and unaided sectors: schools and teachers in Kerala**

| | Government sector | Private Aided | Private Unaided | All |
|---|---|---|---|---|
| % Distribution of Schools | 40.8 | 55.4 | 3.7 | 100.0 |
| % Distribution of Teachers | 36.6 | 58.3 | 5.1 | 100.0 |

Source: DISE, 2008–09.

### *3.2 Role of historical and socio-cultural factors in Kerala's educational development*

There has been a lot of interest in understanding how Kerala is close to universalising secondary education, particularly in the context of many states in India still struggling to universalise elementary education. Scholars suggest that both historical and socio-cultural factors have played a role. Kerala has a long history of being visited by traders (helped by its location and its rich natural resources), but Kannan (Kannan, 2000) suggests that it was the advent of 'colonial capital' in the nineteenth century which disturbed its 'social equilibrium dominated by a rigid caste structure'. Intermediate castes in particular benefited from the opening up of the interiors. The roles played by missionaries, and governments of the erstwhile princely states of Travancore and Cochin in the late nineteenth century are considered important (Ramachandran, 1996; Shailaja, 2006). Community organisations are also reported to have pushed for social reform in the early twentieth century. This included a widespread demand for education for all groups, including the disadvantaged (Kanaan, 2000; Kodoth and Eapen, 2005; Devika 2007).

Kerala also has a history of being very different from other states in India in terms of gender relations. Even till the early twentieth century, Kerala is said to have had a mix of diverse forms of matrilineal and patrilineal family systems which protected women from the worst types of discrimination (Eapen and Kodoth, 2003). In matrilineal families, the birth of girls was greeted with joy. Girls were able to access education even in the mid nineteenth century, to a greater degree than elsewhere (Jeffery, 1992 cited in Eapen and Kodoth, 2003). In spite of this, female literacy rates were only 3 per cent in 1901, and rose to 11 per cent in 1931 (see Table 7.11). Between 1931 and 1951, female literacy jumped to 36 per cent. By 1971, it had risen to 63 per cent, and by 1991 it was 86 per cent. Gender differentials in literacy rate were narrowing over this period (1951–2001) but they were quite pronounced in the period prior to 1991 (see Figure 7.5).

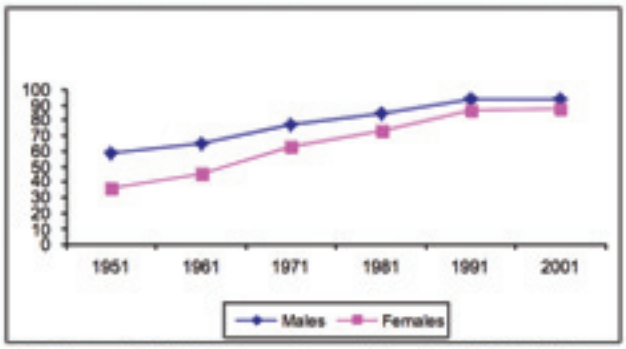
**Table 7.11 Literacy rates in Kerala, 1901–41**

| | 1901 | 1911 | 1921 | 1931 | 1941 |
|---|---|---|---|---|---|
| Males | 19.2 | 22.3 | 27.9 | 30.9 | – |
| Females | 3.2 | 4.4 | 10.3 | 11.0 | – |

Source: http://www.srckerala.org/publication/facts_figures.pdf
Census documents cited in Table 6.

*35 'Aided' institutions are privately managed institutions that receive aid from the government. Aided schools and colleges in Kerala are generally run by the major religious/caste groups in Kerala.*

**Figure 7.5 Literacy rates in Kerala, 1951–2001**




Note: Figures for 1951–71 are for population 5+; 1981–2001 for population 7+.
Source: http://www.srckerala.org/publication/facts_figures.pdf
Census documents cited in Table 3.

The base for Kerala's social development, post Independence, was greatly strengthened by the high government spending on related infrastructure (see Government of Kerala, 2006). This includes facilities such as road transport – which as we have noted in section 1 is extensive in Kerala (Table 7.1a). However, post the mid-1980s Kerala also experienced a financial crunch, like the other states in India.

### *3.3 Important feature of Kerala's education system – high proportion of female teachers*

Kerala differs from much of India in that it has a high proportion of women in the teaching profession. The proportion of female schoolteachers was 41 per cent as early as 1956–57 (Chakraborty, 2005). It was as high as 74 per cent in 2008–09 – based on DISE data which takes only those schools into account which have primary and/or upper primary grades (see Table 7.12).

Rural areas in Kerala are well connected and highly developed, as mentioned in section 1. This is reflected in the limited differences in the proportions of female teachers in urban and rural areas: the proportion of teachers who are female is 73 per cent in rural areas compared to 80 per cent in urban areas (see Table 7.12, from DISE, 2008–09). A similar picture emerges if we look at data which covers all teachers teaching grades 1–12 (SAISES, 2007), which gives us data for 2002. The proportion of female teachers in Kerala is lower in rural areas (67 per cent) compared to urban areas (75 per cent), but the gap is not large.

**Table 7.12 Kerala and other states where the teaching profession is feminised: rural-urban differences in percentage of female teachers, 2008–09**

| % female teachers | All | Rural | Urban | Urban-Rural Difference |
|---|---|---|---|---|
| Kerala | 73.7 | 72.5 | 80.2 | 7.7 |
| Tamilnadu | 75.0 | 70.6 | 84.8 | 14.2 |
| Punjab | 64.5 | 59.3 | 82.5 | 13.2 |

Source: DISE, 2008–09.

Kerala is quite different in this context even from other Indian states which have high overall proportions of female teachers. Tamilnadu and Punjab, both states where the teaching profession is feminised, have a rural urban difference of 14 and 13 percentage points, respectively in the proportions of teachers who are female (see Table 7.12). These two states also have a much higher level of urbanisation than Kerala (34 per cent in Tamilnadu and 30 per cent in Punjab).

While Kerala does not have great urban rural differences in female representation among teachers, it does have some spatial differences, and these are visible from district level data on rural female literacy in 2001 based on the Census, and on proportions of female teachers in 2002 from SAISES. Out of 14 districts, 8 districts have a higher percentage of female teachers than that for the state as a whole. The top 3 districts with high proportions of female teachers are: Thrissur (84.3 per cent), Ernakulam (82.4 per cent), and Alappuzha (79.9 per cent). The 3 districts with the lowest proportion of female teachers are: Malappuram (57 per cent), Kozhikode (53 per cent), and Kasaragod (50.7 per cent). The proportion of female teachers ranges from 51 to 84 per cent. Urban rural differences in proportions of female teachers are highest in Kasaragod, Kozhikode and Palakkad.

### *3.4 Gendered perceptions of female education and employment in earlier times*

While education has been seen as important for women in Kerala, it is suggested that this was within a gendered framework. Teaching (and nursing) was seen as suitable for women where women's maternal gifts will be useful. These gendered perceptions of female education and employment have been responsible for high proportions of women in teaching. Evidence of this comes from two studies of pre-independence Kerala.

These studies indicate that well before Independence in 1947, policy and social norms were instrumental in promoting women in the teaching profession. A useful study (see Swaminthan, 1999) focuses on issues around feminisation of the teaching profession in Madras Presidency[36] in 1900–30. The main document analysed is a report entitled 'Development of Women's Education' (1929), which the author points out reflects the patriarchal attitudes of educational policy in Britain. In terms of access to school education, there were many more educational institutions available for boys. In terms of the curriculum in schools, the focus for girls was femininity and motherhood. Girls were also to be given moral education. They were to be prepared for their future lives as wives, mothers and homemakers. They also had limited access to higher education. The choice of courses was generally restricted to teaching and nursing. In terms of employment opportunities, there was an active policy to recruit female teachers at primary level, based on the argument that 'women had a natural skill in caring for young children'. Differential attitudes to women were also reflected in the fact that female teachers and educational administrators were placed on lower salary scales vis-à-vis their male counterparts.

Another study, which provides a historical overview of women in pre-independence Kerala, suggests that female education was pushed in colonial times as part of a vision to 'build the modern moral home, imagining the educated woman to be its fulcrum' (see Devika and Mukherjee, 2007). Women was seen as the homemakers – the 'domestic ideal' was praised (op. cit.). Women were to acquire not just literacy, but also 'gendered attitudes and skills (op. cit.). The potential contribution of women's housewifely and motherly skills to society came to be highlighted particularly in the early twentieth century. They were seen as very useful in professions such as teaching (where women could play 'a disciplining role with love' in schools) and nursing (where women could play a caring role).

### *3.5 Gender-differentiated decisions in educational paths taken by men and women*

There is sufficient evidence to indicate that present day Kerala continues to be a strongly gendered society as reflected in the educational paths chosen by men and

*36 One district of Madras Presidency (i.e. Malabar) later became part of Kerala when the State came into existence in 1956.*

women. Even today, women dominate teacher-training courses; men are encouraged to go into professional courses such as engineering and management.

Eapen and Kodoth use sex-wise data on educational attainments at different educational levels (based on Census, 1991 data) to highlight the gendered nature of Kerala society (see Table 7.13). They find that at school level and in courses leading to graduate and postgraduate degrees, there is considerable parity between men and women, and for this achievement Kerala is justly acclaimed. However, women outnumber men in courses leading to a non-technical diploma (includes stenography, dress-making, cutting and tailoring, data preparation and so on) and in training to be teachers. Gender disparities are highest in engineering and technology. Eapen and Kodoth indicate that these choices reflect family decisions to invest differentially in their sons and daughters in accordance with how they see their future roles. Parents send boys to coaching for professional education (including engineering and technology). Girls are sent for general education. These courses are not job oriented. Girls are sometimes educated to improve their marriage prospects; sometimes to kill time while waiting to find a suitable groom.

**Table 7.13 Gender disparities at different educational levels, 1991**

| | Proportion of males to females |
|---|---|
| **Schooling** | |
| Primary | 0.96 |
| Middle | 1.05 |
| Matric | 1.01 |
| Higher Secondary | 0.87 |
| **Higher education** | |
| Graduation other than technical degree | 1.23 |
| Post graduation degree | 1.17 |
| Technical diploma | 1.49 |
| Engineering and technology | 6.63 |
| Non technical diploma | 0.50 |
| Teacher training | 0.45 |

Source: Eapen and Kodoth (2003), taken from Table 2 based on Census, Social and Cultural Tables: Kerala.

More recent data on the marked gender differences in courses being pursued by men and women has been presented by Irudaya Rajan and Sreerupa. They point out that in these courses of higher education, the proportion of women is very high in the areas of social work and education, traditionally associated with women, and much lower in other fields (computer applications and business administration) (see Table 7.14). They also report a preponderance of women in the general arts and science courses at graduate and post-graduate levels.

**Table 7.14 Female enrolments in specified courses in Kerala, 2003**

| Courses | % of enrolled who are female |
|---|---|
| Masters in Social Work | 78.6 |
| Masters in Education | 61.8 |
| Masters in Computer Applications | 49.7 |
| Masters in Business Administration | 42.8 |

Source: Irudaya Rajan and Sreerupa, 2007, part of Table 2.4 taken from Government of Kerala (2004), Women in Kerala-CD, Trivandrum: Department of Economics and Statistics.

The picture is similar when we look at figures provided by Selected Educational Statistics for female enrolment in higher education in 2005–06 (see Table 7.15). Proportions of girls enrolled peak in teacher training courses at 81 per cent. They are also high (63 per cent) in the medical group of courses which includes nursing. Women dominate graduate and post-graduate courses, with higher proportions in science, then arts, and least in commerce. The only exception to the predominance of female enrolment is in engineering and architecture.

**Table 7.15 Female enrolment in higher education in Kerala, 2005–06**

| Courses in Higher Education | % females |
|---|---|
| B.Ed./B.T. | 80.9 |
| Medicine, Dentistry, Nursing, Pharmacy, Ayurvedic & Unani, Homeopathy etc. | 62.5 |
| M.Sc. | 77.4 |
| M.A. | 74.8 |
| M.Com | 66.5 |
| B.Sc./B.Sc.(Hons) | 69.2 |
| B.A./B.A.(Hons) | 66.9 |
| B.Com./B.Com.)Hons) | 53.4 |
| B.E./B.Sc.(Engg)/B.Arch | 37.9 |
| Total Higher Education | 54.1 |

Source: Selected Educational Statistics, 2005–06.

We have seen in this section how women in Kerala are less likely to be enrolled in specific professional courses compared to men, and that high proportions are in the teaching profession. Within the teaching profession, a further level of gendering takes place.

### *3.6 Gendering of opportunities within the teaching profession in Kerala*

There is a further gendering of opportunities within the teaching profession. We discuss how (a) those looking after the pre-primary age group were most likely to be women; (b) at primary, middle and secondary levels of schooling, the proportions of female teachers at primary level are slightly higher than at middle and secondary levels in both rural and urban areas; (c) women were less represented in head teacher positions compared to their representation in the teaching profession; and (d) women were more likely to be in the private sector than in the government sector.

*Pre-primary age group*

For the pre-primary age group (3–5 years), the government-run ICDS or Integrated Child Development Scheme is in operation under which nearly all staff at village level (known as anganwadi workers and helpers) are women. In other institutions which include independent pre-primary schools and those attached to larger schools, the proportions of female teachers were over 90 per cent in 1993 (see Jha and Bhardwaj, 2001).

*Primary, middle and secondary schooling*

Rural areas: Figures indicate that in rural Kerala, standalone primary schools are numerically the largest in number among all schools with primary level grades. Close to three-quarters of all teachers (74.9%) in these schools are female. Among the schools with upper primary grades, the largest numbers are those with grades 1–7, and these have 69.8 per cent of all teachers who are female. Among schools with secondary and/or senior secondary grades, those without a primary section outnumber the integrated schools, and here 72.6 per cent of teachers are female.

**Table 7.16 Rural Kerala: percentage of female teachers by level of schooling, 2008–09**

| Schools in rural areas | % of institutions | % female teachers |
|---|---|---|
| Primary schools (grades 1–4) | 55.1 | 74.9 |
| Primary plus upper primary schools (1–7) | 19.5 | 69.8 |
| Primary plus secondary / senior secondary schools (1–10; 1–12) | 8.4 | 74.1 |
| Middle schools (grades 5–7) | 6.1 | 69.9 |
| Upper primary plus secondary / senior secondary schools (5–10; 5–12) | 10.9 | 72.6 |
| All schools | 100 | 72.5 |

Source: DISE, 2008–09.

Urban areas: Similarly, in urban areas, standalone primary schools are numerically the largest group among those giving primary schooling. The proportion of female teachers is highest in these schools (82.7 per cent). For children in middle schooling, schools with grades 1–7 are the most common. Here 76.6 per cent of the teachers are female. Schools with secondary and senior secondary grades most commonly do not have a primary section. Close to four fifths of teachers (79.9 per cent) are female at this level of schooling.

**Table 7.17 Urban Kerala: percentage of female teachers by level of schooling, 2008–09**

| Schools in urban areas | % of institutions | % female teachers |
|---|---|---|
| Primary schools (grades 1–4) | 47.0 | 82.7 |
| Primary plus upper primary schools (1–7) | 20.7 | 76.6 |
| Primary plus secondary / senior secondary (1–10; 1–12) | 10.0 | 83.6 |
| Middle schools (grades 5–7) | 4.2 | 75.0 |
| Upper primary plus secondary / senior secondary (5–10; 5–12) | 18.1 | 79.9 |
| All schools | 100 | 80.2 |

Source: DISE, 2008–09.

*Women in head teacher positions*

Proportion of female head teachers is high (63 per cent in rural areas and 72 per cent in urban areas) in Kerala, though below the proportion of female teachers overall (which is 73 per cent in rural areas and 80 per cent in urban areas) (DISE, 2008–09). In terms of management type, the proportion of female head teachers was 50 per cent in government and aided schools, it was a bit higher at 53 per cent in private unaided schools.

In Kerala, the position of the headteacher is attractive in terms of salary and career development opportunities. A study (see Shailaja, 2002) found that the state government scales match central government scales both at primary level and upper primary level, unlike in many other states including Karnataka, Madhya Pradesh and Uttar Pradesh. However, at secondary level, state government scales in Kerala were lower than central government scales. The study found that Kerala allows for elementary school head-teachers to be promoted to DEOs (District Education Officer), and headteachers of high schools to move up to ADPI (Additional Director of Public Instruction). This makes the headteacher jobs very attractive.

The same study found that the proportion of female head teachers was much greater than the proportion of male head-teachers at primary level (56 per cent female), lower than the proportion of male head-teachers at upper primary level (43 per cent female), and approximately equal to the proportion of male head-teachers at secondary level/training school (49 per cent).

Women may not take up leadership positions because they are socialised to believe that men are better leaders. They may also be caught up in a struggle with balancing responsibilities of work and home (see the next section for a longer discussion of gender relations in Kerala). Men on the other hand also face highly gendered expectations of earning as much as possible, and with this pressure to pursue positions of leadership such as head-teacher roles.

An interesting ICT study reveals the constraints on female teachers in Kerala when faced with demands on their time outside immediate working hours (see Raji and Arun, 2010). Firstly, their families resented that they could be called on the phone at any time, including by male teachers. Then, they resented that they had to work after school hours, in the evenings and on weekends. Finally, they did not like that they had to travel to the district head quarters for support and training.

*Women teachers in private / government schools*

The proportion of female teachers in Kerala in government schools (71 per cent ) in 2008–09 was found to be slightly lower than in aided and unaided schools taken together (75 per cent ) (see Table 7.18). Salaries in private unaided schools are usually lower than they are in government schools, with the latter being regulated by the government.

**Table 7.18 Female teachers in schools disaggregated by management type**

| | Government | Private Aided | Private Unaided | All |
|---|---|---|---|---|
| % female teachers | 71 | 75 | | 74 |

Source: DISE, 2008–09.

## *3.7 Gender relations in present-day Kerala*

As can be seen from the figures given in section 1, women in Kerala do enjoy a different level of access to education and healthcare, including gender parity in schooling and high proportions enrolled in higher education. Women in Kerala benefit from having smaller families (TFR Total Fertility Rate is as low as 1.7), and potentially less household chores compared to women in states such as Rajasthan which has a TFR of 3.3. The commute to the worksite (including schools) may also be easier in Kerala as the state is densely populated and connectivity is high. These conditions may be reflected in the larger numbers of women who look for and are able to get paid employment.[37] The poverty alleviation programme, Kudumbashree, has had considerable success in providing women with opportunities for employment. It has been helped by education among the poorest women and a lowering of barriers provided by caste. It is suggested that, as a result of the programme, the physical quality of women's lives have improved, although it has not been able to challenge a modern form of patriarchy (Devika and Mukherjee, 2007).

According to these scholars, gendering roles exist for both sexes[38] but are more oppressive for women than for men (op. cit.). Women in Kerala are constrained by their situation but are not passive either. 'Individuation is encouraged, but within the bounds of femininity.' Women still take the major role in childcare and all other household chores. The pressures of childcare on women includes children performing extremely well in school and college so they get a well-paying job. There is also an increase in pressure on unmarried women to earn to enable them to marry as dowries are going up. More recently, the authors point out, the domestic ideal is being replaced by the ideal of the income-earning mother, and is associated with the success of programmes such as Kudumbashree.

Other scholars have also countered the notion of Kerala as a society with a high level of gender equity. Eapen and Kodoth use the term 'patrifocal'[39] to describe Kerala society (see Eapen and Kodoth, 2003). They assert that what girls study and how far they study has always been decided such that it did not jeopardise the interests of the

*37 Labourforce participation among women is important because it not only gives women income, but also exposes them to the outside world and to authority structures and networks other than kin based ones (Dixon-Mueller, 1993 cited in Irudaya Rajan and Sreerupa, 2007).*

*38 Men are pressured to take up professional education and professional employment. Boys also take up vocational jobs. Teaching jobs being given less social status is a consequence.*

*39 The term is reported to have first been used by Mukhopadhyay and Seymour (see Mukhopadhyay and Seymour, 1994 cited in Eapen and Kodoth, 2003). Patrifocal families are those who give precedence to the interests of the men in the family in all-important matters. Structural features of a patrifocal society are patrifocal residence, patrilineal descent, and patrilineal inheritance and succession.*

patrifocal family.[40] They speak of the 'persistence of gender differentiated family roles, with the primary responsibility of domestic chores falling on women and perpetuating a sexual division of labour through an asymmetry of opportunities offered for acquiring untraditional skills' (op. cit.).

Female labourforce participation has been found to be low and declining (Kodoth and Eapen 2005). Unemployment is high among educated women in Kerala (34.2 per cent in urban areas compared to 36.7 per cent in rural areas in 1999–2000 (based on Usual Principal and Subsidiary Status, NSSO, 55th Round cited in Irudaya Rajan and Sreerupa, 2007). The same source reported that women outnumbered men among job seekers registered with employment exchanges in Kerala in 2003. Possible explanations for the high levels of female unemployment were related to women already carrying the burdens of housework and childcare and being unwilling to take up jobs which did not offer them social status and proximity to home (reported by a study of women in central Kerala, see Lakshmi Devi, 2002 cited in Irudaya Rajan and Sreerupa, 2007). Similar findings came from a study based on the CDS Employment Unemployment Survey, 2003 (see Sebastian and Navaneetham, 2008). It found 74 per cent of educated women in the sample unemployed; 94 per cent of these unemployed women reported that they were unemployed because they could not get a job at a convenient location, with convenience related to their need to be able to fulfil their household responsibilities. The authors cite Chasin and Frank, 1996 who ascribed lack of mobility among Kerala women for the high level of unemployment they experience. Higher unemployment may also be because women's expectations of getting particular kinds of jobs have risen with increased education levels. Enrolment in higher education is often disguised unemployment.

Women's organised sector employment was found to be 60% in the private sector and 40 per cent in the public sector, while for men it was the reverse (Government of Kerala, 1989 cited in Eapen and Kodoth, 2003). Looking at the employment in the private sector, it appears that regular employment for women in urban areas has been declining over time while casual employment has been increasing, indicating a further decline in women's access to 'self-acquired income', and an overall weakening of their position. Scholars are concerned that women in Kerala are not necessarily better off than they were earlier – there has been erosion of traditional rights, and at the same time increased access to relatively low-paid jobs.

Kerala's women are reported to suffer on account of domestic violence and issues of mental health (see Gopalan, 2004; Mukhopadhyay et al., 2007). There are still women who accept domestic violence as sometimes justified, as was revealed through the NFHS-2 (cited in Gopalan, 2004). In fact, higher proportions of women felt this way in Kerala compared to India as a whole (Kodoth and Eapen, 2005). Kerala also has one of the highest suicide rates in the country (Gopalan, 2004). In 2001, 29 per cent of the registered suicide cases were women. All these suggest that gender relations in Kerala are far from equitable.

### *3.8 How have high levels of education affected growth in Kerala?*

There has been concern that in spite of education, the Kerala economy has grown at a very slow rate till the nineties. The relatively slow growth has been ascribed to a variety of reasons including the politics in the state which has been unfriendly to private investment. Kerala has had the CPI-ML, a left-wing party, in power for much of its post-

*40 In their analysis the authors highlight the role of the family because it regulates the extent to which men and women are able to access education, healthcare, access to property, and so on.*

independence history, but it has also had the Congress party in power. Both parties are committed to socialist traditions, although it is asserted that Kerala's strong religious and caste-based community organisations are politically very influential and play a key role (Mathew, 2005). It is also suggested that the climate is not friendly to private investment in the sense that any potentially negative impact the investment might have on civil rights and the environment is widely discussed by its politically conscious and educated citizenry, which tends to slow down or stifle the process altogether (Jeromi, 2005).

The Kerala economy has been reported to have grown faster in the nineties (Kannan, 2005; Subramaniam and Azeez, 2000 cited in Suresh Babu, 2005). Growth has been primarily in the tertiary sector. It is argued that the growth in the tertiary sector is a combination of skill-intensive high-value-added activities (such as software, communications and financial services) and low-skilled service activities (such as hotels, restaurants and other services) (see Suresh Babu, 2005). The same author suggests that growth which has taken place has clearly built on earlier investment in health and education.

Stimulus to growth was provided by the large numbers of men with school level education and basic skills who were able to migrate, particularly to the Gulf. A high level of remittances meant that per capita income was much higher than per capita net state domestic product. It is also suggested that the high level of migration and subsequent remittances led to a rapid development of infrastructural facilities such as banking and telecommunication (GOK, 2006).

Only a very small proportion of migrants (16 per cent) were women (Zachariah and Rajan, 2004 cited in Mukhopadhyay, 2007), and it is interesting in the context of this paper that women were reported to dominate certain occupational segments of migration such as nursing and teaching (Kodoth and Eapen, 2005). Migration of women was allowed in the context of family needs and dowry demands (Gallo, 2004; Joseph, 1999 cited in Kodoth and Eapen, 2005).

Rising education levels have also led to unemployment among the educated (including among women as discussed in section 3.7). This is a serious problem causing great concern, and has raised queries about the type and quality of education being offered by government institutions, and led to a spurt of private institutions offering market-driven courses of all kinds.

### *3.9 Serious concerns about quality of education in Kerala*

*School education*

Low levels of learning: While Kerala's achievements in the social sector have been laudable, there has also been concern about deficiencies in the quality of education – as revealed through low levels of learning in certain national level studies. Learning achievements at primary level have been disappointing (according to the 2009 ASER (Annual Status of Education Report – Rural) survey). More than one-fourth of class 3 students (26 per cent) could not read a class 1 level text. More than half the children in class 5 could not do division (55 per cent). In both cases, girls did a bit better than the boys (see Table 7.19).

**Table 7.19 Kerala rural: learning achievements of children, 2009**

| | Girls | Boys | All |
|---|---|---|---|
| % children in class 3 who can read at least class 1 level text | 72.5 | 71.8 | 73.6 |
| % children in class 5 who can do division | 46.8 | 43.7 | 45.4 |

Source: ASER (2009).

Retention and dropping out among all communities, SCs and STs: Deteriorating quality of government schools hits disadvantaged groups the most because higher proportions of SCs and STs are in government schools than in unaided schools. A useful study (see Chakraborty, 2005) looks at dropping out and retention patterns among students from all communities, from Scheduled Castes, and from Scheduled Tribes, indicating that among the latter two (with Scheduled Tribes being among the most impoverished) retention rates are decreasing in Kerala.

The study does not put forward any arguments to explain the higher dropout rates among boys in all communities, and in particular among disadvantaged communities. A possible explanation could be that boys from disadvantaged groups were under greater pressure on several fronts – on the home front there may be pressure on them to earn. On the school front they may be unhappy because they cannot comprehend what is being taught, and/or the dislike the discipline in school life and the pressure to study. Girls on the other hand may prefer to continue with their schooling since schooling provides them a break from household chores, and their own socialisation to adjust may lead them to have more patience with their schooling experience.

Highly contrasting school experiences (and reasons for dropping out) were reported by male and female adolescents in Delhi (see Samson et al., 2007). The study found that roughly equal proportions of boys and girls from Delhi's resettlement colonies and JJ (jhuggi jhopdi) colonies had dropped out of school by class 8. While the boys reported that they dropped out of their own accord because of a negligent and violent school environment, and looked for casual opportunities to earn, the girls reported that they dropped out because of demands from the family, although they themselves would have preferred to continue with schooling.

Growing size of the private unaided sector: It is suggested that the growing size of the private unaided sector in Kerala is a result of people's unhappiness with the aided sector and the state sector (GOK, 2006). Between 1990–91 and 2002–03, enrolment in Government schools fell by 25.6 per cent, whereas it increased by 79 per cent in private unaided schools (op. cit.). Out-migration and fall in fertility rates have led to more income being available and more money being spent on private education. Most of the private unaided schools are English medium schools. Families are also turning to private tuition on a large scale (see George and Sunaina, 2005). Higher proportions of rural households in Kerala are spending on private tuition than in the rest of rural India (NSSO 61st Round, 2004–05 cited in Ajith Kumar and George, 2009). Private costs of education have been estimated for primary, upper primary and secondary sections (Namboothiri, 2004 quoted in Ajith Kumar and George, 2009). It was found that at upper primary and secondary levels, household expenses (which included costs of reading and writing materials, clothes, travel, tuition, donation to PTA, and so on) were more than government spending towards recurring expenses on these students.

Possible reasons for decline in quality of school education:

1. No expansion has taken place in the government or aided primary sector after the eighties. (George and Sunaina, 2005). Most of the government budget goes on teachers' salaries with little available for other expenses including improvement of infrastructure such as science laboratories, libraries and so on (Economic Survey of Kerala, 2002 cited in Gopalan, 2004; also GOK, 2006).
2. Schools declared as 'uneconomic' (with less than 25 children in a class) have teachers whose posts are 'protected'. These schools have come about due to school enrolment declining significantly since the late seventies owing to a decline in the rate of growth of population, and constitute a great drain on the exchequer (Gopalan, 2004). While some of those 'protected teachers' in the government sector have been re-deployed, those in the aided sector have resisted this (GOK, 2006).

More recently, the problem of 'protected teachers' has occurred with the transfer of the pre-university course to the higher secondary section under school education, and added to the burden on the exchequer (op.cit).

3. No control over management of aided schools in spite of efforts by the government to rein it in (GOK, 2006) It is alleged that teachers' recruitment is not based on competence but on nepotism and corruption (George and Sunaina, 2005). 'Social capital' has played a big role in teaching jobs accessed in private aided schools (and colleges) (see Mathew, 2005). In the context of large-scale unemployment among the educated, it is alleged that teachers' jobs are auctioned for large sums of unaccounted money (George and Sunaina, 2005).
4. Policy of automatic promotion leads to dropping out peaking at class 10.
5. Schools use out-dated curricula and teaching is lacklustre (GOK, 2006).

*Higher education*

Fees in government and aided institutions at the level of higher education and technical education are low. However, private costs of education at this level can be high as, for example, for students in government engineering colleges who have to spend on hostels. There are considerable complaints primarily about the quality of higher education provided in government and aided institutions. This has implications for pushing up costs of higher and technical education and potential exclusion of the less privileged, as only some students are able to turn to private tuition and/or to private unaided institutions.

Proportions spent by the state on higher education are relatively low compared with India as a whole. Here too most of the budget is absorbed by teachers' salaries. There is little available for other types of inputs into higher education (George, 1999; Tilak, 2001); there are constraints on starting new courses or providing IT connections, as suggested in a Government of Kerala document (Economic Review, 2002 cited in Gopalan, 2004). The education system has been criticised for evolving into providing skills for 'white collar jobs' in Kerala and outside – in the sense that it is very examination and rote-learning oriented (George and Sunaina, 2005). Families have turned to private tuition on a large scale through college (op. cit.). There has also been a huge growth in self-financing institutions imparting technical, medical and para-medical courses as well as teacher training (op. cit.), leading to increasing stratification of opportunities. For example, it is reported that students from Malayali medium schools find it difficult to get through entrance exams in colleges. With this discussion on the challenges faced by education in Kerala, we now move to our second focus state – Rajasthan.

## Section 4 Case study of Rajasthan – low levels of female teachers

The state of Rajasthan lies at the opposite end of the spectrum from Kerala on many counts, as we have already highlighted in section 1. The issues related to female teachers are entirely different, and it provides a useful example of an area where policy-makers are struggling to increase the proportion of female teachers.

### *4.1 Schooling in Rajasthan is a relatively recent phenomenon*

In Rajasthan, schooling for all communities has become a norm relatively recently. Looking at literacy rates over the fifth years after Independence, we see that male literacy rates in 1951 were only 13 per cent, and female literacy far lower at just 3 per cent (see Table 7.20). The large gender gaps are a characteristic feature of this state, although they are narrowing.

**Table 7.20 Literacy rates in Rajasthan, 1951–2001**

| | 1951 | 1961 | 1971 | 1981 | 1991 | 2001 |
|---|---|---|---|---|---|---|
| Males | 13.1 | 23.7 | 28.7 | 36.3 | 55.1 | 75.7 |
| Females | 2.5 | 5.8 | 8.5 | 11.4 | 20.8 | 43.9 |

Note: Figures for 1951–71 are for population 5+; 1981–2001 for population 7+.
Source: Women and Men in Rajasthan, Directorate of Economics and Statistics, 2007.

Many factors are likely to have contributed to the relatively limited advance of formal schooling. Firstly, the arid and semi-arid land means rural families are able to engage largely in subsistence agriculture, and have also to depend on rearing livestock as a survival strategy (Kavoori, 1999). Women and children play a vital role in both these activities (Gold and Gujar, 2002; Samson et al., 2008) and even more so when men migrate to towns and cities for wage labour opportunities. Women and children also bear the burden of other household chores, particularly the need to bring water from great distances (Rajagopal, 1999). For many families, the opportunity cost of sending children to school is very high. Secondly, the difficult terrain and dispersed settlement pattern in the desert areas in the west, and the forested areas in the south, makes providing access to schooling more difficult, in terms of making schools available as per national norms (within 1 km of habitations in the case of primary, 3 kms in the case of upper primary, and 5 kms in the case of secondary level schooling). In addition, the terrain and the extreme heat particularly in the desert areas makes distances even more of a hurdle than if they had to be traversed in less hostile conditions. Limited connectivity also makes it difficult for teachers, who may be living in towns or other villages, to reach schools in remote areas. Thirdly, the state's inland location enables communities to persist with traditional values without challenge. These include holding on to a highly patriarchal and caste-based system, which is based on unequal treatment of women (vis-à-vis men) and lower castes (vis-à-vis higher castes). Tribal communities have also suffered from exclusion on account of living in remote, forested areas in southern Rajasthan. Any schooling facilities will thus first be extended to boys from the dominant caste groups. Girls are rarely given the opportunity to complete the schooling cycle and are instead absorbed into household chores and often subjected to early marriage (see Palriwala, 1999, Samson et al., 2008, Rajagopal, 2010). This is part and parcel of the restrictions they will face on their mobility and autonomy in their adult lives, which we discuss in greater detail in section 4.3.

There have been huge improvements in terms of access and quality of education in Rajasthan in the 1990s, when the target was taking primary schooling to all through a number of initiatives including the Shiksha Karmi programme, Lok Jumbish and DPEP or District Primary Education Programme. In 2002, close to four-fifths (79.8 per cent) of habitations in rural areas had primary schools available within 1 km of the habitation (see SAISES, 2007), a situation vastly better than in 1993 (SAIES, 1998). Data on female enrolment of 6–14 year olds in Rajasthan indicate a considerable increase from 40.6 per cent (NFHS 1, 1992–3) to 63.2 per cent (NFHS 2, 1998–9). Social norms with regard to educating girls had changed to some extent and girls had begun to be sent to school till class 8, or at least till class 5.

More recent figures indicate that, in 2007–08, at primary level, the GER[41] and NER[42] are 118 and 90 respectively (see DISE, 2007–08). What has contributed to the surge in primary-level enrolment, and girls' enrolment in particular, include the opening of more

*41 Gross Enrolment Rate (GER) at primary level is the number of children in primary schooling divided by the total number of children in the 6-10 year age group. GER includes underage and overage enrolment.*

*42 Net Enrolment Rate (NER) at primary level is the number of children enrolled in primary schooling belonging to the 6-10 year age group divided by the total number of children in the 6-10 year age group*

schools in remote rural habitations, improving infrastructure and facilities in schools, providing incentives such as free textbooks and cooked midday meals, and appointing more teachers including female teachers (based on the findings of the PROBE Revisited survey which compared the status of primary education in 2006 with that in 1996, in villages across seven states including Rajasthan – see De et al., 2011).

In 2002, the proportion of habitations for which upper primary schools were available within 3 kms of the habitation was 78.3 per cent (see SAISES, 2007), also vastly better than in 1993. With SSA in 2002, the focus of education reforms was extended from primary to both primary and upper primary schools. Large numbers of primary schools have been upgraded to upper primary schools. However, the infrastructure and facilities at both standalone primary schools and those extended to upper primary schools were found to be comparatively poor in 2006 (De et al., 2011). It appeared that the governments in the surveyed states (including Rajasthan) were not necessarily allocating sufficient resources for their primary or upper primary schools (op. cit.). This is confirmed by the picture we get in the next section when we discuss access and quality issues in greater detail.

The Rajasthan Human Development Report highlights the fact that retention of children in the schooling system till class 8 remains a major problem. In 2005, only 60 per cent of children enrolled in class 1 were reported to have completed class 8 (GOR, 2008a). The Aide-Memoire of the Eleventh Joint Review Mission of SSA (see GOI, 2010a) indicates that while the state has made some progress in enhancing participation and retention of SCs and STs, the proportions of Muslim children in school at primary and upper primary level is far below their proportions in the population. Problems with access and retention at secondary schooling level and beyond are even more grim (World Bank, 2003). We look next at school attendance rates among the 6–17 age group, disaggregated by gender and location.

The 6–17 age group encompasses the entire schooling cycle, based on the premise that a child is enrolled in grade 1 at the age of 6 years, and continues to go to the next grade each year, finally getting enrolled in grade 12 at the age of 17. School attendance rates among boys and girls in the 6–17 age group in 2005–06 show that gender differences are most stark in rural areas. Even in urban areas, girls' enrolment (71 per cent) lags behind boys' enrolment (80 per cent), but this differential is small compared to rural areas where only 53 per cent of girls are enrolled compared to 77 per cent of boys (see Table 7.21). In Rajasthan, there are still critical issues of gender parity in enrolment which need to be addressed. This will also address issues of social equity, since the girls out of school are primarily those from historically disadvantaged groups. It is important to plug this, including through the policy of appointing more female teachers. Large gaps in access and quality of school provision remain which we discuss in the next section.

**Table 7.21 Proportion of children aged 6–17 in school, 2005–06**

| | Rajasthan | | | India |
|---|---|---|---|---|
| | Boys | Girls | All | |
| Urban | 79.6 | 70.6 | 75.4 | 76.6 |
| Rural | 76.5 | 53.2 | 65.2 | 68.8 |
| Total | 77.2 | 57.2 | 67.6 | 71.0 |

Source: NFHS-3, 2005–06.

### *4.2 On-going concerns about access and quality of education in Rajasthan*

It is important to realise that schooling has come a long way in Rajasthan in the last 50 years as we discussed in the last section. However, major challenges still remain including difficulties even in being able to access secondary schooling in some rural

areas in Rajasthan. Close to half of households could access a secondary school within 2 kms of their habitation; but 30 per cent had a secondary school between 2–5 kms away, and 23 per cent of the households were only able to access a secondary school more than 5 kms away. We have already mentioned how the difficult terrain and the climate could make traversing such distances very difficult. In addition, we do not have figures on what proportion of households could only access a secondary school between 5 and 10 kms away for instance, or what proportion had to travel more than 10 kms away, or even further. A 2001 study of schooling and labour among 11–18 year olds in Rajasthan, found that among the 16 villages in the study (selected randomly from the four agro-climatically varied districts of Bikaner, Barmer, Udaipur and Alwar), the average distance to the nearest secondary school was more than 7 kms, and to the nearest senior secondary school, as much as 28 kms (see Samson et al., 2008). The Government of Rajasthan is making efforts to incentivise girls' education at secondary level by providing cycles to girls enrolled in class 9 and beyond, and free bus passes for Rajasthan State Transport Corporation buses. While this is laudable, it is also essential to open more schools for this level of schooling, and particularly exclusively girls' schools.

**Table 7.22 Access to secondary schools, 2007–08**

| Proportions of households with a secondary school | Less than 2 kms away | Between 2–5 kms away | More than 5 kms away |
|---|---|---|---|
| Urban | 96.7 | 2.9 | 0.5 |
| Rural | 47.7 | 29.6 | 22.6 |

Source: NSSO, 64th Round, 2007–08.

Parents in a traditional society such as in rural areas in Rajasthan where gender segregation is a norm would naturally prefer to send their adolescent girls to exclusively girls' schools. In this context, it is surprising that there are only a small number of schools of this category in the government sector – 301 secondary schools and 504 senior secondary schools exclusively for girls, out of a total of 8288 secondary schools and 5319 senior secondary schools (Annual Report of the Department of Secondary Education, 2007–08 cited in Rajagopal, 2009). Much needs to be done to improve girls' physical access to schooling at this stage. In addition, there is a problem of costs of schooling. While girls pay no tuition fees in government secondary and senior secondary schools, they are required to contribute to the school's development fund and pay other miscellaneous fees which works towards excluding girls from vulnerable groups from schooling.

Infrastructure and facilities in secondary and senior secondary schools are not being discussed here in detail although the PROBE Revisited study referred to above indicates that these were better than what was available in the primary and upper primary schools. Below are some figures about teacher provision and physical infrastructure in the primary and upper primary schools in 2008–09 (see Table 7.23). The data indicates a huge shortage of teachers. While the PTR is not high, there are only 2 teachers on average assigned to 5 grades. The proportion of single teacher primary schools is extremely high (31 per cent). More than 36 per cent of schools do not have a single female teacher. Infrastructural gaps are also enormous, although we mention only two parameters here. The first is classrooms which require major repair. The proportion is 10 per cent. The situation is particularly dismal when one looks at proportions of schools without a toilet (58 per cent in 2008–09 in primary schools). The figure for schools without a separate girls' toilet was as high as 65 per cent in 2005–06 (DISE, 2005–06 cited in Sen et al., 2009).

**Table 7.23 Provision of teachers and availability of infrastructure in Rajasthan, 2008–09**

| | Rajasthan | India |
|---|---|---|
| **Teacher provision** | | |
| Average no. of children in a primary school | 64.0 | 106.1 |
| Average no. of teachers in a primary school | 2 | 3 |
| PTR in primary schools | 32 | 35 |
| Proportion (%) of single-teacher primary schools | 31.4 | 13.3 |
| Proportion (%) of schools with female teachers* | 63.8 | 73.7 |
| **Infrastructure** | | |
| Average no. of classrooms in a primary school | 2.7 | 3.1 |
| Proportion (%) of classrooms which require major repair* | 9.4 | 9.5 |
| Proportion (%) of schools without a toilet | | |
| Primary schools | 58.4 | 38.6 |
| All schools with grades 1–8* | 44.0 | 23.2 |

Note: *Refers to all schools with primary and / or upper primary sections.
Source: DISE, 2008–09.

Poor quality of primary schooling in Rajasthan is also indicated by some research on what children have learned. A recent household survey of learning achievements in Rajasthan (ASER, 2009) found that just over one-third of class 3 children could read a class 1 text (see Table 7.24). A little less than one-third of class 5 children could do division. These figures are extremely low. Both girls and boys fared poorly, with girls faring considerably worse than the boys.

**Table 7.24 Rajasthan rural: learning achievements of children, 2009**

| | Girls | Boys | All |
|---|---|---|---|
| % children in class 3 who can read at least class 1 level text | 32.1 | 36.5 | 34.4 |
| % children in class 5 who can do division | 28.1 | 34.0 | 31.6 |

Source: ASER (2009).

The data on access and quality of schooling at primary and upper primary level indicate that there is a long way to go for the Government of Rajasthan to provide schooling of quality to all its children. Unfortunately, the per capita budgeted expenditure on education in Rajasthan in 2007–08 was less than Rs 5000 – lower than the average for India as a whole which was Rs 6200, and far lower than that in Kerala which was Rs 8400 (see Table 1b). Although the state is spending a proportion of its budget on education comparable to Kerala (3.4%, see Table 7.1b), it has a much lower State Domestic Product than Kerala (23 thousand rupees compared to 44 thousand rupees, see Table 7.1b). In this context, it is useful to understand how the economy has been growing in Rajasthan. Between 1993–94 and 1999–2000, the average annual growth in Rajasthan was a little more than 10 per cent per annum, but in the subsequent period – 1999–2000 to 2006–07, this dropped to only 5.3 per cent (Sen et al., 2009). Disaggregating the rate of growth, in the more recent period, by sectors, the state was found to have experienced only limited growth in all its sectors – primary, secondary and tertiary. The authors suggest that a higher rate of growth in the secondary and / or tertiary sectors could have propelled the economy forward (op. cit.). The low rate of growth makes it difficult for the state to finance the substantial allocations it requires to improve both access and quality of schooling.

### *4.3 Low proportions of female teachers in rural areas compared to urban areas in Rajasthan*

Rajasthan is characterised by huge differences in proportions of female teachers in urban and rural areas. For schools with grades 1–8,[43] the proportion of female teachers

*43 This includes schools with lowest grade 1 and highest grade 5/8/10/12, and schools with lowest class 6 and highest grade 8/10/12.*

in rural schools was as low as 24 per cent in 2008–09, while it was more than twice that (53 per cent) in urban schools (DISE, 2008–09). We get a similar picture from SAISES, which provides 2002 data on all schools (including those without a primary or upper primary section). The proportions of female teachers in Rajasthan were significantly lower in rural areas (21 per cent) compared to urban areas (47 per cent).

Out of 32 districts, 11 districts were above the state average for female teachers and 21 were below average. The proportion of female teachers was highest in Ajmer (50.2 per cent), followed by Udaipur (44.5 per cent), Kota (43.0 per cent), Ganganagar (40.9 per cent) and Bikaner (40.3 per cent) (SAISES, 2002). The 5 districts with the lowest proportions of female teachers were: Karauli (13.1 per cent per cent, Dausa (14.3 per cent), Jalor (15.2 per cent), Nagaur (15.3 per cent) and Sawai Madhopur (20.2 per cent). Jalor and Nagaur are in the arid desert region of Rajasthan, described as 'sparsely populated and vast' in the Rajasthan HDR. They have rural female literacy rates of 26 per cent and 37 per cent, respectively. Sawai Madhopur, Dausa and Karauli are contiguous districts in the east, with rural female literacy rates of 30 per cent, 40 per cent and 43 per cent, respectively.

Ajmer and Udaipur, which are the two districts in Rajasthan which have the highest proportions of female teachers overall, also have the highest proportions of female teachers in urban areas (64–65 per cent), and the highest proportions of female teachers in rural areas (35 per cent); they also have among the largest gaps between proportions of female teachers in rural and urban areas. Jodhpur, Jaipur and Alwar are three other districts which have relatively high proportions of female teachers in their urban areas (57, 55 and 51 per cent, respectively). However, they differ from Ajmer and Udaipur in that they have only low proportions of female teachers in rural areas. The three districts have large differences between the proportions of female teachers in urban and rural areas. The pattern appears to be that districts with high proportions of female teachers in urban areas will have a large gap on this parameter between rural and urban areas, whatever the proportions of female teachers in rural areas.

One reason why it is difficult to recruit female teachers in Rajasthan particularly in rural areas is that educational levels of women are generally low, and only a small proportion may have enough schooling to qualify for getting into higher education. In urban areas, in 2005–06, only 22 per cent of adult women had completed class 10 or more, and 15 per cent had completed class 12 or more. In rural areas, the figures were nearly negligible (see Table 7.25). Only 2 per cent of adult women had completed class 10 and less than 1 per cent had completed class 12. Lack of availability of women with adequate levels of education are the reason why minimum qualifications were reduced when efforts were being made to recruit female contract teachers under the Shiksha Karmi programme to teach in remote rural schools (Rajagopal, 2000).

**Table 7.25 Education levels of adult women (15–49 years) in Rajasthan, 2005–06**

| Proportion of adult women who have: | All | Urban | Rural |
|---|---|---|---|
| Not been to school | 56.2 | 33.1 | 64.3 |
| Studied up to less than class 5 | 17.1 | 15.5 | 17.7 |
| Passed Class 5 but not passed class 10 | 19.4 | 29.5 | 15.9 |
| Passed Class 10 but not passed class 12 | 2.7 | 7 | 1.2 |
| Completed Class 12 and above | 4.5 | 14.9 | 0.8 |

Source: NFHS-3, 2005–06.

Restrictions on adult women's mobility and autonomy are an important reason why it is difficult to recruit female teachers in Rajasthan. Young girls in India are deeply socialised to think of themselves in a certain context – to see their natal homes as a temporary abode,

and their future husband's home as a more permanent place where they will live out their adult lives as daughters-in-law, wives and mothers. Here they will be in a position of subjugation and dependence (Krishna Kumar, 2010). Their primary role as homemakers is clearly spelt out. Certain communities including the dominant castes in Rajasthan place considerable restrictions on adult women's mobility and autonomy. Gender segregation is a norm, and women are generally veiled in the presence of men. Women don't work outside the house. It is a relatively new development for women to take up paid employment.

In Rajasthan, the powerlessness for a married young woman is reinforced by the system that allows marriages to be arranged only when the bride belongs to a village some distance away from the groom's village (Palriwala, 1999), where she is likely to live after marriage. The wishes of the husband's family largely determine whether the daughter-in-law will take up paid employment, and particularly what type of employment.[44]

There are also specific problems faced by female teachers in Rajasthan, which makes it difficult to 'rationalise their deployment', that is, assign them to schools where they are needed rather than to schools at convenient locations. The female teachers often belong to urban areas in a few highly developed districts such as Jaipur and Alwar. They may be posted to other districts to which they do not belong, which may mean that they have to move there without their families. These postings may also be to remote areas within these districts. Even if they are assigned to the district to which they belong, they can face problems because of being transferred to villages far from their residence. Connectivity between villages with towns and cities is often poor, which makes for a difficult commute from home to school. These difficulties may also make it difficult for them to keep a balance between their responsibilities at school and at home, and they may not be at school the entire school day every day.

Female teachers are also vulnerable to harassment in a highly gender-segregated and male-dominated society. They are often unable to attend training programmes, because of family constraints on their mobility and because they are needed at home. Lok Jumbish did some innovative work with setting up of a Women Teachers' Forum (WTF) in Pisangan block in Rajasthan in 1994 (Jha and Bhardwaj, 2001). More such forums were later set up in other areas. The idea was to encourage women teachers' participation in training programmes and facilitate their becoming master trainers. In the Pisangan forum, women brought up a number of problems including lack of childcare facilities at the teacher training programmes. They also reported that at training sessions they feel unsafe about the relatively few women trainees in the course. The trainers were generally male, and women reported that men dominate trainings as they do schools (op. cit.). Actions were taken on women's suggestions and the WTF scheme led to greater female participation in training programmes, and an increase in the number of female master trainers (based on Annual Reports of Lok Jumbish cited in Jha and Bhardwaj, 2001).

Education authorities are well aware of the heavy demands of domestic duties on female teachers. For this reason, they often give them a posting to a school in the town or in a village which is conveniently located as, for example, a 'road-point' village on a bus route.

### *4.4 Teacher training is a popular choice for girls who enrol in higher education*

Female enrolment in higher education in Rajasthan is relatively low as only low proportions of women complete class 10 and class 12. From Table 7.26, we see that only one-third of those enrolled in higher education in 2005–06 were women. Enrolment in particular courses indicates what is popular and acceptable for boys and

*44 Teaching is encouraged among those families where females are permitted to take up employment because it can be taken up without badly affecting a woman's home-making responsibilities.*

girls. Female enrolment is comparatively high in post-graduation courses in arts and science, indicating that these courses are not popular with males (see Table 7.26).

In professional courses, the share of female enrolment is comparatively high only in teacher training courses[45] (45 per cent), which very much reflects a gendering of opportunities available to women. Female enrolment is much lower (29 per cent) in medicine related fields (which include nursing), and very low in engineering and architecture (17 per cent), indicating that this is a strongly male domain in Rajasthan.

**Table 7.26 Female enrolment (%) in higher education in Rajasthan, 2005–06**

| | % enrolled who are female |
|---|---|
| M.Sc. | 54.4 |
| M.A. | 48.7 |
| M.Com | 41.8 |
| B.A./B.A.(Hons) | 39.4 |
| B.Sc./B.Sc.(Hons) | 37.6 |
| B.Com./B.Com.(Hons) | 34.2 |
| B.Ed./B.T. | 44.8 |
| Medicine, Dentistry, Nursing, Pharmacy, Ayurvedic & Unani, Homeopathy etc. | 29.2 |
| B.E./B.Sc.(Engg)/B.Arch | 16.7 |
| | |
| **All Courses in Higher Education** | **33.0** |

Source: Selected Educational Statistics.

Teaching is one of the most attractive options for educated women in this context of highly unequal gender relations. In a study of teacher motivation in India (see Ramachandran et al., 2005), female teachers in Rajasthan reported that they had chosen the profession because of its respectability, the security it provided, and because it allowed them to manage their home.[46] They also talked about how the teaching profession was the preferred choice of their husband / husband's parents, a matter of considerable importance as we mentioned in section 7.4.3.

Male teachers in Rajasthan in the teacher motivation study referred to above (op. cit.) reported that they opted to teach when they could not get another more preferred option. Most of them simultaneously pursued other work. Some male teachers saw teaching as a stopgap arrangement while preparing for a range of civil service examinations. In Rajasthan in general, but particularly in rural areas, there is a general shortage of paid employment opportunities, so teaching jobs are considered valuable by men.

### *4.5 Gendering within the teaching profession is very strong*

*Limited figures available for the pre-primary stage give a mixed picture*

As in Kerala, very high proportions of anganwadi workers were reported to be female (see NCERT, 1993 cited in Jha and Bhardwaj, 2001). However, figures for the proportion of female teachers in 1993 in standalone pre-primary schools and in larger schools with pre-primary sections were found to be low – 35.4 per cent and 33.1 per cent, respectively (op. cit.). These schools were relatively few in number – only 122 and 121 were reported in all of Rajasthan in 1993.

*Higher proportions of women teachers in primary schooling*

In rural Rajasthan, standalone primary schools are the largest number of schools among those with primary level grades. These have the highest proportions of female teachers,

*45 For India as a whole, girls dominate teacher training courses – they form 53 per cent of enrolment.*

*46 There is a lot of pressure on the young daughter-in-law to cook and clean and take care of her husband's parents, her husband, her children, and other unmarried male relatives who might be living in the house.*

although it is low at 26.4 per cent. For children enrolled in upper primary grades, the 1–8 schools are the most common, and here the proportion of female teachers is slightly lower at 25 per cent. Among schools with secondary/senior secondary grades, there are a few more integrated schools than those without a primary section. In the integrated schools, the proportion of female teachers is 18.4 per cent; in the schools without a primary section, the proportion of female teachers is still lower at 14.9 per cent. It is clear that in rural areas in Rajasthan, not only are proportions of female teachers very low, but also that higher proportions of women in Rajasthan are clustered at lower levels of schooling.

**Table 7.27 Rural Rajasthan: percentage of female teachers by level of schooling, 2008–09**

| Schools in rural areas | % of institutions | % female teachers |
|---|---|---|
| Primary schools (grades 1–5) | 51.8 | 26.4 |
| Primary plus upper primary schools (1–8) | 35.6 | 25.0 |
| Primary plus secondary / senior secondary (1–10; 1–12) | 6.7 | 18.4 |
| Middle schools (grades 6–8) | 0.3 | 57.5 |
| Upper primary plus secondary / senior secondary (6–10; 6–12) | 5.7 | 14.9 |
| All schools | 100 | 23.8 |

Source: DISE, 2008–09.

In urban Rajasthan, the largest number of institutions providing primary schooling is the group with lowest grade 1 and highest grade 8. This is also the largest group among those providing middle schooling. In this group of schools, the proportion of female teachers is as high as 54.1 per cent. Among schools providing secondary / senior secondary schooling, integrated schools are most common, and here too the proportion of female teachers is quite high at 48.3 per cent. Overall in urban areas of Rajasthan, female teachers outnumber the males, although here too, higher proportions are clustered at lower levels of schooling.

**Table 7.28 Urban Rajasthan: percentage of female teachers by level of schooling, 2008–09**

| Schools in urban areas | % of institutions | % female teachers |
|---|---|---|
| Primary schools (grades 1–5) | 27.0 | 58.9 |
| Primary plus upper primary schools (1–8) | 44.4 | 54.1 |
| Primary plus secondary / senior secondary (1–10; 1–12) | 21.9 | 48.3 |
| Middle schools (grades 6–8) | 0.5 | 58.1 |
| Upper primary plus secondary / senior secondary (6–10; 6–12) | 6.2 | 51.0 |
| All schools | 100 | 52.8 |

Source: DISE, 2008–09.

*Fewer women in positions of leadership*

The proportion of female head-teachers is low in rural areas as a whole (14 per cent) but considerably higher in urban areas (36 per cent). It is substantially lower than the proportion of female teachers in both rural (24 per cent) and urban (53 per cent) areas. Pressures of housework and / or difficult travel to school can make female teachers less willing to take on additional work in school, or even to carry out their teaching duties.[47]

*47 Ramachandran, 2005 discusses how new recruits soon understand what must be done and what can be left undone.*

The DEO in a study of urban government-sector senior-secondary schools in Rajasthan (see Rajagopal, 2010) admitted that there is a gender bias in promotional avenues. Women teachers who had joined in 1976 had been promoted to grade II only recently but male teachers who had joined in 1988 as grade III had already been promoted. A female principal also spoke of being assigned a less important post than what she was entitled to.

*Fewer female teachers in government schools*

The proportion of female teachers in Rajasthan in government schools (29 per cent) is slightly lower than in private schools (32 per cent). In Rajasthan, the largest proportion of schools are under government management (77 per cent) (see Table 7.29) and this is where the bulk of teachers are employed (62 per cent). In the private sector it is the unaided sector which is comparatively large (22 per cent) and a larger proportion (37 per cent) of teachers are employed here.

**Table 7.29 Government, aided and unaided sectors in Rajasthan**

| | Government | Private Aided | Private Unaided | All |
|---|---|---|---|---|
| % Distribution of Schools | 77.1 | 0.7 | 22.2 | 100.0 |
| % Distribution of Teachers | 62.1 | 1.2 | 36.7 | 100.0 |
| % Female Teachers | 29 | 32 | | 30 |

Source: DISE, 2008–09.

## *4.6 Female teachers in Rajasthan need to be empowered to be change agents as envisaged by NCF 2005*

The objective of pushing recruitment of female teachers is to encourage girls' enrolment and retention in states such as Rajasthan where girls out of school. However, recruiting more female teachers need not be sufficient to counter social pressures for girls to drop out of school. The type of gender issues girl students face in Rajasthan are also faced by female teachers themselves (very limited autonomy in terms of any decision-making; individual choices subservient to family needs). A female teacher may not counter such forces – she may not think it is practical because of her own understanding and acculturation. She is likely to have internalised the power of patriarchal family forces; she may have exerted only limited agency, at most, to resist such forces which will make it difficult for her to encourage others to do so.

Female teachers may not have the energy to deal with gender issues faced by girls in their charge. Girls may come to school hungry and exhausted. They may also be irregular because of the demands on their time. Female teachers may themselves be exhausted by their household chores (see Ramachandran et al., 2005) and by their commute to school, and may be unwilling to think beyond the minimum that is required from them by the education system – to be physically present in school, and to finish what paperwork is required.

Female teachers may also expect that girls should be socialised to be quiet and accepting. Although the current National Curriculum Framework envisages education to be child-centric and allow the child freedom to express himself or herself, Krishna Kumar discusses how this is completely at odds with how little girls (and female teachers) are socialised themselves (see Krishna Kumar, 2010).

Girls who are in danger of dropping out may belong to disadvantaged castes or minorities. Recruitment of female teachers can even be regressive in terms of challenging discrimination on account of caste or religion, and promoting social equity. Female teachers are more likely to belong to the upper castes than male teachers since education among women in the disadvantaged caste groups is still at a

low level in Rajasthan. This is apparent from DISE data on the social background of teachers (see Table 7.30), which indicate that female teachers in both urban and rural areas are primarily from 'general castes' – 69 per cent and 47 per cent, respectively. Substantial proportions of female teachers are also from the OBC communities, particularly in rural areas in Rajasthan. Very small proportions are from disadvantaged groups – 6 per cent from SC groups and 2 per cent from ST groups in urban areas, and 11 per cent from SC groups and 9 per cent from ST groups in rural areas. Even smaller proportions are from other groups which include minorities.

**Table 7.30 Teachers in Rajasthan: disaggregated by caste and gender**

| | Rural | | | Urban | | |
|---|---|---|---|---|---|---|
| | Male | Female | All | Male | Female | All |
| 'General castes' | 28.1 | 47.3 | 32.7 | 46.8 | 68.6 | 58.3 |
| OBCs | 41.6 | 33 | 39.6 | 35.7 | 22.4 | 28.6 |
| SCs | 17.8 | 10.8 | 16.1 | 12.1 | 5.6 | 8.7 |
| STs | 11.5 | 7.8 | 10.6 | 3.9 | 2.0 | 2.9 |
| Others | 1.0 | 1.1 | 1.0 | 1.5 | 1.4 | 1.5 |
| | | | | | | |
| No. of teachers* | 2,70,853 | 84,972 | 3,55,825 | 45,573 | 51,042 | 96,615 |

*Excludes a small no. of teachers who did not give a response
Source: DISE 2008–09.

Upper caste women face greater restrictions on mobility than lower caste women. Patriarchal controls on women's sexuality are maximum in the case of upper castes, who place the greatest premium on family honour (Batliwala, 1998 cited in Ramachandran, 2000). Women from these groups are likely to be more rigid than male teachers (the majority of whom are from the OBC group) about issues related to ritual pollution and religious taboos, since maintaining the family honour is a vital part of their identity. Women may also have only limited exposure to the outside world (physical constraints on their mobility – travel only with permission even to visit a doctor or their own families; have limited or no access to books), in spite of their teaching careers. Changing their world views is likely to be a very uphill task. Female teachers in Rajasthan need to be empowered, as for example through programmes such as Mahila Samakhya, for them to be agents of gender and social equity.

We come now to the last section where we discuss a few research studies which throw light on the value of recruiting female teachers to improve school quality and to enhance gender and social equity in schools in the Indian context.

## Section 5 Female teachers and their impacts on school quality and on gender and social equity

### *5.1 Research studies*

In this section, we look at a number of research studies in the India context which look at the impact of female teachers on school quality, and on gender and social equity. Certain important qualifications need to be made:

a. Female teachers are a very heterogeneous group. Female teachers in different states differ by qualification; by terms of service; by pre-service training; within states, there are considerable differences in teacher qualifications between urban and rural areas. Heterogeneity should make one conscious of the dangers of generalising.
b. Research studies have very different contexts. The issue of female teachers may be discussed in the context of situations where female teachers are quite scarce and/or school quality (in terms of teacher absenteeism, low teaching activity, lack of teacher accountability) is very low. Or the situations may be such that there is no

particular shortage of female teachers, or there may be national level coverage which includes all types of situations.

c. The research studies vary in terms of methodology (qualitative, quantitative and in some cases a combination of quantitative qualitative methodologies).

We begin with discussing research in areas where there is a relative shortage of female teachers. There are a few qualitative studies which indicate that female teachers have a much more positive impact on school quality than male teachers. However, weaknesses of female teachers also come up. The first of these is a study in Hardoi district in UP[48] (see Jha and Bhardwaj, 2001) which included a large number of interviews with all stakeholders in primary education in rural areas. Education authorities and teacher trainers felt the role of female teachers to be critical for students in classes 1 and 2. They also reported that they found women teachers to be more sincere and less involved in politics. The perceptions of children were also positive. The reasons included: "Female teachers make us understand well; they do not snub us if we ask questions; they are more sympathetic; they are more affectionate". On the flip side, it was felt that female teachers come late to school; and that female teachers want preferential treatment – to be posted to urban areas or to roadside villages.

A second study explored teacher motivation in 10 urban and rural government primary and upper primary schools in Tonk district in Rajasthan in 2004–05 (see Ramachandran et al., 2005). The study reported on perceptions of male and female teachers based on interviews and focus group discussions.

- Female teachers said that male teachers were more interested in local politics and other issues and took less interest in their work.
- Male teachers also felt that female teachers were more motivated about their work, interacted well with children, and were less aggressive with children. At the same time, they said that female teachers tended to take more leave because of their home-making responsibilities. Some female teachers were reported to come hungry to school,[49] which was alleged to reduce their productivity.

The study also found that both male and female teachers were just not engaged with issues of increasing rapport with children and improving children's learning levels. Even the more motivated teachers were primarily concerned with their presence in school each day, compiling and sending the necessary data, and maintaining discipline.

Positive feedback on female teachers came from a study done in the city of Jaipur in Rajasthan in 4 senior secondary schools (see Rajagopal, 2009). Two were co-educational, the third was a girls' school, and the last was a boys' school. The study found female teachers contributing to better school quality: a few female teachers were observed to be teaching better; most boys felt that female teachers were better than male teachers (generally friendly teachers were more liked).

Bringing to the forefront the possible impact that the social background of the female teachers might play is a study done in 2006 in rural primary schools across the erstwhile BIMARU[50] states using both quantitative and qualitative research methodologies (see Box 7.1 from PROBE Revisited, 2011 in section 7.2). With increasing recruitment of para-teachers in the government system, there are higher proportions of female teachers. More female teachers were found to be upper caste than male

*48 The study was also conducted in Karnataka.*

*49 This was either because they are fasting (a weekly religious practice among Hindu women) or because they have no time to eat.*

*50 These include Bihar and Jharkhand, Madhya Pradesh and Chhatisgarh, Rajasthan, and Uttar Pradesh and Uttarakhand.*

teachers, so this has led to greater social distance between teachers and students, the latter being more likely to be from socially disadvantaged caste groups.

The concept of social distance also came through in an ethnographic study[51] of schooling in a large village on the outskirts of Delhi (see Sarangapani, 2003). The author found that in her sample the female teachers came from the city and the male teachers were local, and that the children were freer with the two male teachers from their village and less comfortable with the female teachers.

The context was very different in a study of upper primary and secondary schools[52] in Delhi (see De et al., 2005, Samson et al., 2007) also using a mix of qualitative and quantitative research methodologies. The study found girls' secondary schools with all female staff functioning better than boys' secondary schools with primarily male staff. The female head-teachers were keenly involved in supervising the functioning of the schools, although they reported limited power to control teachers in their school. The female teachers themselves also expressed considerable motivation about teaching.[53] On the other hand, little effort was being made by the male head-teachers to check the performance of their primarily male staff. Many of the boys' schools visited were barely functional in terms of classes taking place. Violence by male teachers and in the playground were reported much more commonly by boys. Male teachers were unhappy with being teachers. They felt it gave them little social status. They had taken up teaching because they were unable to get other permanent employment. Although they were not unhappy with their salaries, they were also engaged in other occupations.

A quantitative study of teacher absence in India based on a nationally representative sample of primary schools in 20 states also had positive findings about female teachers (see Kremer et al., 2005). The study found that male teachers were significantly more absent than female teachers. It is suggested that this may be on account of power differentials. Older, more educated, more experienced teachers all had higher absence rates.

There appears to be very limited India-based research on the impact of female teachers on learning achievements of students. An extensive review of existing learning achievement research in India (Reddy, 2004 cited in Chudgar and Sankar, 2008) does not have any studies which look at the impact of the gender of the teacher on the attainments of the students.

A quantitative study of data[54] from schools selected from the five most populous towns in each of five Indian states[55] (Chudgar and Sankar 2008) suggests that male and female teachers differ considerably with respect to class management as well as their belief in a student's learning ability. It also shows that students benefit from a female teacher in the study of languages, but teacher gender has no effects on mathematics learning. These data do not show any evidence of specific beneficial effect of the presence of a female teacher on language or mathematics achievement for girl children. Equally importantly, the findings seem to indicate that the benefits of female-

*51 The fieldwork was focused on a government school in the village, and was conducted in 1992-93.*

*52 Findings were based on a school survey of 40 randomly selected government schools (with a post primary section) in Delhi in 2000.*

*53 Mostly second earners in the family, they were happy to have jobs that enabled them to look after their domestic duties, although they were frustrated that their students did not understand what they were being taught because of poor teaching in primary schools.*

*54 The data was collected for 300 private and government schools and for teachers and students in grades 2, 4 and 6. The authors have based their findings on data for government schools and for teachers and students in grades 4 and 6.*

*55 The states are Andhra Pradesh and Chhatisgarh (two states with low proportions of female teachers), and Gujarat, Rajasthan and Uttarakhand (three states with average proportions of female teachers).*

headed classrooms over male-headed classrooms may be limited to specific sub-groups of teachers such as the early-career teachers with fewer years of experience. The results presented here offer only a partial support for hiring more female teachers in India if the goal is to improve girl students' learning achievement.

Do high levels of female teachers have a negative impact on boys' achievements in school? This does not appear much in the research and policy discourse in India, possibly because high levels of female teachers are still limited to pockets e.g. to certain states such as Kerala. There are also comparatively higher proportions of female teachers in urban areas (rather than rural areas where the bulk of India's children live), and in private schools (rather than government schools where the bulk of India's children are enrolled).

Discourse on Kerala education is often concerned about the declining quality of education in government and aided schools and the rise of the unaided sector. Impact of feminisation of the teaching profession is written about mainly in two contexts: female teachers have made a very positive contribution to Kerala's development (Chakraborty, 2005); and high proportions of female teachers reflect a lack of gender equity in society (Devika, 2007 and Devika and Mukherjee, 2007; Eapen and Kodoth, 2003; Irudaya Rajan and Sreerupa, 2007). There are many other bits of evidence to confirm this lack of gender equity such as the fact that the majority of women in Kerala are out of the labour market, and that female unemployment is very high among the educated unemployed in the state. Incidence of domestic violence has also been widely reported in research studies.

### *5.2 Other factors which can improve educational access and equity more significantly than the gender of the teacher*

The quality of education in the school depends on the teachers. There is a pressing need to improve recruitment, training, social status, and work conditions of teachers. Yet many states are still recruiting teachers at low pay, on contract, without ensuring that they have pre-service training, and without ensuring that they have access to good quality training once recruited. Instead the emphasis in teacher training continues to be on quantitative targets. Investment needs to be made in building up a cadre of teacher educators with sufficient teaching experience to improve the quality of training they are able to impart. There is little effort to sustain teacher motivation through a clear promotional path. As mentioned earlier, the teaching cadre is getting increasingly politicised in many states, and this contributes greatly to reducing levels of accountability that teachers feel towards their job.

### *5.3 Appropriate recommendations on how female teacher recruitment can be addressed to promote the goals of gender and social equity in education*

Gender issues need to be addressed in different ways:

Gender issues are often addressed mechanically. Men, women and children need to understand the constraints on women on account of existing social norms, and how it would benefit all of society if they were eased.

There has been a special recruitment drive for women teachers in Rajasthan: The number of women teachers has increased in the last few years due to this special recruitment drive, but the percentage share is still low. It is important to reflect at all levels the rationale behind such a recruitment drive; the success and failure of such drives in different regions of Rajasthan, and the reasons thereof; the implications for the teaching community, including teacher unions; and the implications for enrolment and retention of students.

Women teachers must also be empowered by enabling them to take up leadership responsibilities. Women were rarely found in positions of authority and leadership in

schools in Rajasthan. The qualitative study of senior secondary schools in Jaipur city in Rajasthan (Rajagopal, 2010) found that female teachers reported a very patriarchal educational system. They were aware of gender bias towards female teachers within the system – for example, they reported female teachers being given a heavier workload in terms of classes to be taught compared to male teachers.

It is important that there is more discussion on this during in-service training programmes. There is need for greater awareness of systemic constraints for women wishing to develop their career within the education sector, such as negative attitudes towards women's ability to manage and lead schools, lack of female role models, long hours, and commitments that are difficult to reconcile with family and child care responsibilities. There is also a need to spread awareness of constraints for female teachers within families and communities.

Teacher training programmes should pay attention to the different experiences, perspectives, and priorities of women, rather than assume the gender neutrality of being a teacher. They should work closely with Mahila Samakhya, whose objectives are not simply about the inclusion of girls and women in formal education but about the transformation of their lives. The MS process draws from non-negotiable principles, rooted in respect for village women's priorities, centring on collective decision-making and actions controlled and directed by women (Unterhalter and Dutt 2010).

Women teachers need support from the mainstream education system itself. There is an urgent need to improve their status, conditions and career development opportunities. The creation of forums for female teachers is essential so that they can collectively bargain and negotiate better working conditions in schools.