

Working Paper 600

**Disparities in Educational
Attainment Across
Socio-Economic Groups in
India and Karnataka: An
Exploration of NSSO Findings
(2007-08 to 2022-23)**

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**DISPARITIES IN EDUCATIONAL ATTAINMENT ACROSS SOCIO-ECONOMIC
GROUPS IN INDIA AND KARNATAKA:
AN EXPLORATION OF NSSO FINDINGS (2007-08 TO 2022-23)**

P Manivannan*

Abstract

This study analyses disparities in educational attainment by socio-religious groups in India and Karnataka, using data from different NSS rounds (2007-08, 2017-18, and 2022-23). In general, although overall literacy and educational attainment have improved, disparities persist, particularly among Scheduled Castes (SCs), Scheduled Tribes (STs), and Muslims. At the national level, illiteracy has declined, and secondary and graduate-level education has expanded, but SCs and STs remain disadvantaged. Karnataka follows a similar trend, with Hindu, General and OBC groups recording higher educational attainment, especially in higher education. Muslim educational progress is concentrated in urban areas, while STs and SCs remain the most disadvantaged in rural and urban Karnataka. Female educational attainment has increased, particularly at the primary and secondary levels, although SC, ST, and Muslim females lag in higher education. Attainment across expenditure quintiles shows that higher quintiles perform better, especially in higher education. Across Karnataka's administrative divisions, Bengaluru Division leads in attainment, while Gulbarga lags, especially with respect to educational attainment by SCs and STs. Logit model estimation results show that STs and SCs have the lowest probability of attaining primary-and-above education, while urban residence and household income positively influence attainment. The study shows that Karnataka has made progress in education but at a slower pace than India as a whole, particularly in reducing illiteracy and improving higher education among marginalised communities like STs, SCs, and Muslims. While India's overall illiteracy declined faster during 2007-08 to 2022-23, Karnataka's ST population remains significantly behind national trends. Though Muslims in Karnataka showed better primary education growth, STs, SCs, and Muslims underperformed at the higher education levels. Rural SC males, urban SC males, Muslim males, and ST females face substantial educational disadvantages. Economic disparities persist, with lower literacy and retention across all income levels, particularly in secondary and higher education. Policy recommendations to address the disparities include the launch of additional targeted programmes for disadvantaged groups, especially SCs, STs and Muslims in rural areas, enhancement of financial aid/scholarships to these communities, and integrating education-lined incentives in poverty alleviation/self-employment programmes.

Key words: *Disparities, Educational Attainment, Minorities, Inequalities, Programmatic Initiatives*

JEL Classification Codes: *I24*

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Introduction

Education is a key determinant of the growth and development of individuals, households and communities, and widely recognised as a catalyst of progress. Despite years of efforts by governments and non-governments across the world, wide disparities in educational attainment persist across gender, religion, geography, race, disability, language and endowment. Studies such as Morrisson and Murtin, 2013 claim that global inequality in education has been declining in terms of years of education, and those of others (Permanyer and Boertien, 2021) show that intra-country inequalities are on the rise. The Global Education Monitoring Report 2020 (UNESCO, 2020) observes that millions continue to be excluded from education access with a disproportionately large proportion of such individuals being women; people living in poverty; and those belonging to ethnic, religious and linguistic minorities. Further, this Report notes the role of policy interventions in reducing disparities in educational attainment, especially the improvement of socio-economic status which has a higher impact than gender on academic disparity.

In the Indian context, Varughese and Bairaghya (2020) explored data from four rounds of the National Sample Survey (NSS) to confirm the strong influence of socio-economic factors on inequalities in educational attainment and call for additional policy interventions to reduce the group-based educational attainment gap, and to support the educational attainment of SC, ST and Muslims. Chatterjee and Robitaille (2018) have shown that illiteracy levels are moderately higher particularly in rural India and among female children, which may be associated with unabated dropout rates. Asadullah and Yalonetzky (2012) utilise the 1983-2004 NSS data to examine the role of caste, gender, and religion in determining the level of and changes in educational opportunity in India, and conclude that these factors have a significant influence with inequalities varying across Indian states. Borooah (2012) shows that educational attainments vary considerably between India's caste and religious groups with Muslims, Dalits (the Scheduled Castes), Adivasis (the Scheduled Tribes), and the 'Other Backward Classes' (the OBC) being the most backward, and that Muslim, Dalit, and Adivasi children had the greatest disadvantage in some or all the three competencies of reading, arithmetic, and writing. An earlier work, Borooah and Iyer (2005), examined the influence of community norms of religion (Hindu or Muslim) or caste (Scheduled or non-Scheduled) on enrolment of children at school in India, and showed that the size of the community effect was higher under less favourable circumstances when the parents were illiterate, with Muslim and Dalit children facing circumstances which were not the most favourable for ensuring their education.

The Sachar report (2006) showed that in 2001 the literacy rate among Muslims was below the national average (64.8%), with the gap being greatest in urban areas and the gap between Muslims and other Socio Religious Categories (SRCs) increasing with the level of education. The report noted that the educational deprivation of Muslims was high due to the low levels and poor quality of education. This deprivation has continued, as shown in the 2011 Census findings on the educational level of religious communities (RGCC, 2016), which reveals that Muslims continued to occupy the last position among India's religious minorities with the literacy rate among Muslims recorded at 68.54% which was lower than that of Christians (84.53%), Sikhs (75.39%), Buddhists (81.29%) and Jains (94.88%) as well as the overall national literacy rate of 72.98%.

Along with the differences in education between socio-religious groups, the role of income inequality in educational attainment has been examined. Tilak and Choudhury (2019) show that higher income groups have a higher probability of attending higher education institutions and that the difference in the probability of participation between men and women narrows down as one move from poorest to richest quintiles. Tilak and Choudhury (2021) have shown that inequality in access to higher education had increased by the households' economic status during the period of 2007-08 to 2013-14.

In the context of Karnataka state, Deepa, Razack and Indumathi (2013) offer evidence for the presence of educational inequalities across Karnataka's regions. Ahamed and Honakeri (2014) note the low literacy rate of Karnataka's Scheduled Castes and Scheduled Tribes, and a low literacy rate among women of these communities, and the higher dropout rates of SCs and STs at the elementary school level. Das (2023) utilises census data to show that Karnataka had high indexes of urban-rural differential in literacy in the period between 1981 and 2011.

A clear research gap exists with the crucial issue of trends in disparities in educational attainment between Karnataka's socio-religious groups over time and the determinants of attainment being unexplored. Therefore, this paper aims to fill this gap and offers insights and examines policy implications on the nature and extent of educational attainment inequalities across socio-religious groups in India and Karnataka. The paper also adopts a comparative approach to assess Karnataka's progress in addressing the inequalities with respect to achievements at the national level. This analysis contributes to the identification of the determinants of educational attainment, and draws a few policy prescriptions that integrate the inequalities with existing governmental programmes and developmental strategies.

Data and Methodology

This study utilises the unit level data from the three NSSO rounds of 2007-08 (64th round), 2017-18 (75th round) and 2022-23 (consumer expenditure round) to measure, describe and analyse the socio-economic attainment. *Socio-religious groups include ST: Scheduled Tribes; SC: Scheduled Castes; H_OBC: Hindu Other Backward Classes; H_GEN: Hindu General category; Muslims: Muslim community, and Other Minorities: Includes other religious and social minorities. Educational attainment (calculated for population of age 25+) is distinguished by: Not Literate: Percentage of people who are not literate ; Primary: Percentage with primary education (basic schooling) ; Secondary: Percentage with secondary-level education ; Higher Secondary: Percentage with education up to higher secondary (grade 11-12) Graduate: Percentage who completed an undergraduate degree, and Post Graduate & above: Percentage with postgraduate education or higher (e.g., master's, doctorate).*

Using the above data, trends over 15 years (2007-08 to 2022-23), and the inequalities across socio-religious groups, rural-urban, male-female and expenditure quantiles are studied. Determinants of educational attainment are estimated by using the standard Logit Model. Based on the results, policy recommendations are suggested to address the inequalities in educational attainment.

Analyses of Results

Educational Attainment

Educational attainment in India across social groups and education levels

A comparative assessment of the educational attainment of the population of age 25+ (**Table 1**) indicates that during 2007-08 to 2022-23, the overall educational attainment has improved at the national level, especially in reducing illiteracy and increasing participation in secondary and graduate education. For instance, illiteracy rates have consistently declined for all groups, with ST showing the most improvement (from 70.5% in 2007-08 to 39.2% in 2022-23). Muslims show a decline in illiteracy from 60.1% in 2007-08 to 42.1% in 2022-23. Across educational levels, the percentage of population with primary education has been relatively constant with the Muslim religious group recording a steady rate of about 15% while the disadvantaged ST and SC groups have relatively steady primary education attainment over the years. This trend is seen at secondary education level with the proportion of individuals with secondary education increased across all groups with the attainment of STs nearly doubling from 13.6% in 2007-08 to 26.1% in 2022-23, and that of Muslims from 18.4% to 26.0%. However, the Other Minorities group recorded the highest secondary education attainment at 31.3% in 2022-23. The higher secondary education level also shows an increase, especially in the ST group (from 2.1% in 2007-08 to 10.5% in 2022-23), and attainment of Muslims increased from 3.0% to 7.8% over the years.

The attainment of graduate education has significantly risen in all groups, especially in ST (from 1.8% in 2007-08 to 9.4% in 2022-23) although the Hindu General population remains the leader in graduate education with 20.6% of the population having a graduate degree in 2022-23. At the Postgraduate & Above level, the Hindu General group has the highest post-graduate attainment at 7.70% in 2022-23 with ST, SC, and Muslims experiencing notable increases over the years and the percentage of post-graduate Muslims growing three-fold during the period.

Educational attainment in Karnataka across social groups and education levels

Table 2 provides details of the disparities in educational attainment in Karnataka across socio-religious groups over the period 2007-08 to 2022-23. As in the national case, Illiteracy rates have declined for all groups over time, but STs and SCs continue to have the highest proportion of illiterates although the proportion of illiterate Muslims and other Minorities has remained nearly constant since 2017-18. The proportion of Muslims with primary education rose to 20.6% in 2022-23 (from 15.8% in 2007-08). With respect to graduate and post-graduate Education, a significant improvement in attainment is evident for all groups with the proportion of graduate SCs rising from 2.4% to 7.1%. Muslims continue to lag in higher education although the proportion of graduate Muslims grew from 3.9% (2007-08) to 6.3% (2022-23). Across all groups, higher education levels (graduate and post-graduate) are increasing faster among the Hindu General and Hindu OBC groups than among SC/ST. Illiteracy has declined, but gaps in secondary and higher education attainment persist.

A comparison of Karnataka's achievements in educational attainment across socio-religious groups during 2007-08 to 2022-23 to that achieved in the Indian context shows that illiteracy in India has reduced slightly faster (from 51.8% to 34.1%) than that recorded by Karnataka (50.9% to 36.7%).

A stark difference in attainment is seen in the case of STs where Karnataka's ST illiteracy was markedly higher at 54.5% in 2022-23 (75.9% in 2007-08) as compared to 39.2% in India (70.5% in 2007-08). However, the Hindu General group in Karnataka had a lower illiteracy rate (35.1% in 2007-08, reducing to 25.6% in 2022-23) as compared to India (29.5% to 19.3%). Across the other education levels, Karnataka's Muslims recorded a faster growth than India in the case of primary education, while in secondary education attainment, Karnataka's SCs recorded a slower growth from 15.6% to 22.4% (16.0% to 25.2% in India). In higher education too, Karnataka's STs, SCs and Muslims have lagged behind the communities' educational attainment at the national level. Therefore, overall, it can be said that although Karnataka has been able to match the country's progress in education attainment during 2007-08 to 2022-23, the State has grown at a slower pace in reducing illiteracy and promoting higher education amongst marginalised groups.

Table 1: Educational Attainment across Socio-Religious Groups (% of population): All India, 2007-08 to 2022-23

Level of Education	ST	SC	H_OBC	H_GEN	Muslims	Ot_Minorities	Total
	2007-08						
Not Literate	70.50%	65.40%	54.10%	29.50%	60.10%	30.20%	51.80%
Primary	11.70%	12.80%	14.00%	13.20%	14.80%	13.80%	13.50%
Secondary	13.60%	16.00%	22.90%	30.70%	18.40%	33.70%	22.50%
Higher Secondary	2.10%	2.70%	3.90%	8.50%	3.00%	7.70%	4.60%
Graduate	1.80%	2.50%	4.10%	13.90%	3.10%	11.50%	6.00%
Post Graduate & Above	0.40%	0.60%	1.00%	4.10%	0.70%	3.20%	1.60%
	2017-18						
Not Literate	56.40%	50.60%	42.30%	23.10%	49.40%	23.90%	41.30%
Primary	13.50%	14.70%	13.70%	11.40%	15.20%	10.70%	13.40%
Secondary	20.50%	23.20%	27.40%	30.40%	24.50%	32.40%	26.40%
Higher Secondary	4.90%	6.10%	8.20%	12.90%	5.50%	14.90%	8.40%
Graduate	3.70%	4.20%	6.60%	17.00%	4.40%	13.90%	8.00%
Post Graduate & Above	1.00%	1.20%	1.80%	5.30%	1.00%	4.20%	2.30%
	2022-23						
Not Literate	39.20%	44.80%	35.50%	19.30%	42.10%	20.80%	34.10%
Primary	12.60%	13.20%	12.20%	10.10%	15.10%	10.50%	12.20%
Secondary	26.10%	25.20%	27.10%	28.70%	26.00%	31.30%	27.00%
Higher Secondary	10.50%	8.00%	10.50%	13.70%	7.80%	14.90%	10.70%
Graduate	9.40%	6.70%	11.40%	20.60%	6.70%	16.60%	12.10%
Post Graduate & Above	2.20%	2.00%	3.40%	7.70%	2.20%	6.00%	3.90%

Source: Author's calculations

Table 2: Educational Attainment across Socio-Religious Groups (% of population): Karnataka, 2007-08 to 2022-23

Level of education	ST	SC	H_OBC	H_GEN	Muslims	Ot_Minorities	Total
2007-08							
Not Literate	75.90%	66.00%	52.90%	35.10%	49.60%	29.90%	50.90%
Primary	9.30%	13.60%	13.90%	13.80%	15.80%	13.20%	13.70%
Secondary	9.70%	15.60%	23.80%	27.00%	24.60%	34.90%	22.70%
Higher Secondary	1.90%	2.40%	3.50%	6.70%	5.40%	5.70%	4.30%
Graduate	3.00%	2.40%	5.30%	15.80%	3.90%	12.10%	7.50%
Post Graduate & Above	0.20%	0.10%	0.60%	1.60%	0.80%	4.20%	0.90%
2017-18							
Not Literate	60.30%	50.90%	40.40%	29.10%	37.90%	16.90%	40.70%
Primary	11.60%	12.80%	12.20%	11.00%	16.10%	13.40%	12.40%
Secondary	21.00%	23.80%	28.90%	27.60%	32.80%	37.10%	27.60%
Higher Secondary	3.70%	7.30%	8.90%	11.10%	5.90%	14.80%	8.50%
Graduate	2.20%	3.80%	8.20%	15.70%	6.10%	11.50%	8.40%
Post Graduate & Above	1.20%	1.40%	1.40%	5.50%	1.20%	6.30%	2.30%
2022-23							
Not Literate	54.50%	47.30%	34.70%	25.60%	37.40%	16.90%	36.70%
Primary	12.30%	13.30%	12.90%	11.90%	20.60%	9.10%	13.40%
Secondary	21.50%	22.40%	25.80%	26.90%	27.10%	27.80%	25.30%
Higher Secondary	6.80%	8.50%	10.90%	10.80%	7.40%	14.20%	9.90%
Graduate	3.90%	7.10%	12.40%	18.90%	6.30%	26.70%	11.60%
Post Graduate & Above	1.00%	1.50%	3.30%	5.90%	1.20%	5.40%	3.10%

Source: Author's calculations

Educational attainment in India across Place of Residence and Gender

Table 3 presents a comparison of the educational attainment of social groups by males and females and rural and urban residence, and over the period 2007-08 to 2022-23.

In rural India, the percentage of illiterate males declined significantly across all socio-religious groups with the percentage of ST males reducing from 62.5% to 46.7%. Also, at the secondary, higher secondary and graduate levels, a gradual improvement is seen e.g. the percentage of ST males with graduate-level education rose from 1.5% in 2007-08 to 4.6% in 2022-23 while that of Hindu General males rose from 8.6% to 13.7%. Among rural females, despite an overall improvement in literacy levels, illiteracy remains high especially among ST and SC categories (67.5% and 64.4% respectively in 2022-23). A notable development has been that the percentage of Hindu General rural females with graduate-level education rose from 2.8% in 2007-08 to 6.9% in 2022-23. The attainment of secondary education overall by rural females improved from 12.6% in 2007-08 to 19.6% in 2022-23. On the whole, rural female Illiteracy was highest among STs and lowest for the Hindu General group during all the three years.

In urban India, the educational attainment of urban males and females during the same period showed consistent growth with illiteracy levels also declining, especially in the percentage of illiterate SC males declining from 33.7% in 2007-08 to 21.6% in 2022-23. Urban males, especially those belonging to

the Hindu General and Hindu Other Backward Classes groups, increased their attainment in graduate and post-graduate education. SC graduate-level attainment increased from 9.0% in 2007-08 to 14.9% in 2022-23. Illiteracy among urban females decreased significantly, particularly among SC females (from 60.4% in 2007-08 to 40.4% in 2022-23). The graduate level attainment of Hindu OBCs rose from 5.9% to 15.7% while the higher secondary level attainment of urban Muslim females saw a growth from 3.7% to 8.7% during 2007-08 to 2022-23. Urban females have higher illiteracy rates as compared to urban males across socio-religious groups, with higher education attainment (graduate/post-graduate) also being lower for urban females as compared to urban males.

Thus, Rural females lag behind urban counterparts in literacy and education; Urban Hindu General and Hindu OBC males and females show the highest attainment in higher education; and secondary education attainment is increasing for both male-female and rural-urban. Across all groups and by gender, illiteracy consistently declined over the three time periods, but rural females experienced slower progress as compared to males and their urban counterparts. The gender gap persists with rural females at a disadvantage at graduation/post-graduation attainment level.

Rural females continued to face significant barriers in achieving higher education when compared to rural males, urban males, and urban females, particularly among disadvantaged groups like STs and SCs. Urban males and females consistently have better educational outcomes, with Hindu General and Hindu OBC groups performing the best, while STs lagged across all demographics. Notwithstanding the progress in literacy and secondary education, the disparity in higher education attainment between rural females and others remains a challenge in the country.

Table 3: Educational Attainment (% of population) by Socio-Religious Groups, Place of Residence and Gender: India, 2007-08 to 2022-23

Residence		ST	SC	H_OBC	H_GEN	Muslims	Ot_Minorities	Total	ST	SC	H_OBC	H_GEN	Muslims	Ot_Minorities	Total
	2007-08														
	Level of education	MALE							FEMALE						
RURAL	Not Literate	62.5	58.7	46.1	27.5	56.7	34.2	47.7	84.1	82.0	74.1	54.1	76.8	44.6	72.6
	Primary	15.5	15.2	16.7	15.9	17.5	14.5	16.2	8.2	9.3	11.2	16.8	11.6	16.0	11.7
	Secondary	17.5	19.6	28.3	36.9	19.6	37.3	26.4	6.6	7.2	12.2	22.4	10.0	27.9	12.6
	Higher Secondary	2.6	3.3	4.5	8.7	3.0	5.2	4.7	0.6	0.8	1.3	3.2	0.8	4.9	1.5
	Graduate	1.5	2.6	3.6	8.6	2.7	7.0	4.1	0.4	0.5	1.0	2.8	0.8	5.5	1.3
	Post Graduate	0.4	0.6	0.7	2.3	0.5	1.8	0.9	0.1	0.1	0.2	0.7	0.1	1.1	0.3
URBAN	Not Literate	28.4	33.7	22.0	8.7	37.8	11.4	20.7	54.1	60.4	44.7	21.9	58.4	20.2	39.6
	Primary	11.3	16.3	14.3	7.3	16.6	11.2	12.2	8.3	13.1	14.4	11.3	13.6	11.8	12.7
	Secondary	33.6	32.4	36.6	31.8	29.8	36.8	33.3	25.4	18.3	27.7	32.0	19.9	34.2	27.1
	Higher Secondary	9.1	6.4	9.4	13.2	6.2	13.1	10.1	4.2	4.0	5.0	10.4	3.7	10.4	6.9
	Graduate	14.7	9.0	14.0	30.2	7.6	20.9	18.5	5.9	3.2	5.9	18.4	3.5	18.4	10.3
	Post Graduate	2.9	2.0	3.7	8.8	1.9	6.7	5.2	2.2	1.1	2.3	6.1	0.9	5.0	3.4
2017-18															
RURAL	Not Literate	49.4	43.7	36.5	21.8	47.4	25.7	38.0	71.5	67.2	61.7	44.1	66.3	37.4	61.0
	Primary	16.7	16.4	15.7	13.1	16.3	13.1	15.5	11.3	12.9	13.2	15.7	14.1	11.8	13.4
	Secondary	24.9	27.8	32.6	36.9	27.0	36.0	30.9	13.4	15.2	18.7	27.6	16.1	31.5	18.9
	Higher Secondary	5.1	6.8	8.8	13.8	5.2	15.5	8.6	2.7	2.9	3.9	6.7	2.5	12.0	4.1
	Graduate	3.4	4.3	5.3	12.0	3.5	8.1	5.8	0.9	1.3	1.8	4.4	0.9	5.7	2.0
	Post Graduate	0.6	1.0	1.1	2.4	0.6	1.6	1.2	0.1	0.4	0.6	1.5	0.1	1.6	0.6
URBAN	Not Literate	18.8	23.7	15.8	7.0	29.6	8.8	15.9	37.8	43.6	33.8	17.5	46.7	17.9	31.1
	Primary	9.8	15.2	11.6	6.5	15.1	7.6	10.7	10.0	14.1	11.7	9.5	15.1	8.9	11.6
	Secondary	32.1	32.4	33.5	27.7	33.4	30.4	31.3	27.6	25.2	29.8	28.9	24.2	30.8	28.1
	Higher Secondary	14.4	13.5	15.7	16.7	9.3	18.1	14.8	10.1	7.6	10.5	14.8	7.0	14.8	11.2
	Graduate	18.5	12.0	18.3	31.9	9.9	28.4	21.0	10.4	6.4	10.7	21.6	5.4	19.0	13.2
	Post Graduate	6.5	3.3	5.0	10.2	2.6	6.8	6.2	4.0	3.0	3.5	7.7	1.6	8.6	4.8

		2022-23													
RURAL	Not Literate	46.7	42.3	32.7	19.9	43.7	23.9	35.0	67.5	64.4	57.0	40.1	61.0	35.5	56.7
	Primary	15.2	14.6	13.8	12.5	17.9	13.4	14.3	10.7	11.3	12.3	14.9	13.9	13.4	12.6
	Secondary	25.0	27.8	31.4	35.3	25.8	36.5	30.1	15.3	16.2	19.1	27.3	18.1	28.4	19.6
	Higher Secondary	7.5	8.4	11.0	14.9	6.8	15.4	10.4	3.7	4.4	6.0	8.6	4.2	11.6	5.8
	Graduate	4.6	5.6	9.0	13.7	4.3	8.2	8.1	2.1	2.9	4.4	6.9	2.1	7.8	4.1
	Post Graduate	1.0	1.3	2.1	3.6	1.4	2.7	2.0	0.6	0.9	1.2	2.2	0.6	3.3	1.2
URBAN	Not Literate	22.3	21.6	13.7	7.3	27.9	9.2	14.9	40.2	40.4	28.4	16.9	39.6	14.7	27.7
	Primary	12.1	12.4	10.0	6.4	16.0	7.2	10.0	11.2	12.1	11.3	8.6	14.8	9.4	11.0
	Secondary	28.2	33.2	31.3	26.1	31.8	31.4	29.9	23.1	25.2	26.6	26.6	26.8	28.6	26.4
	Higher Secondary	14.4	12.9	14.7	15.5	10.6	16.2	14.2	10.5	8.9	11.9	13.2	8.7	14.0	11.5
	Graduate	18.3	14.9	22.8	32.5	10.6	25.7	23.0	11.4	9.9	15.7	23.7	7.6	22.9	16.5
	Post Graduate	4.8	5.1	7.4	12.2	3.1	10.4	8.0	3.7	3.5	6.2	11.0	2.4	10.4	6.9

Source: Authors calculations

Educational attainment in Karnataka across Place of Residence and Gender

As shown in **Table 4**, rural Karnataka has witnessed a notable decline in the proportion of illiterate males (49.9% in 2007-08 to 36.0% in 2022-23) and females (71.9% to 55.8%) while the percentage of both rural males and females with primary education in 2022-23 was about 15%. Across socio-religious groups in rural Karnataka, the percentage of illiterate Muslim females has seen a significant decline from 77.7% in 2007-08 to 55.2% in 2022-23. Rural females in Karnataka have seen a higher growth than males in secondary and higher secondary education attainment. The lowest attainment of graduate and postgraduate education between all socio-religious groups in rural Karnataka is seen amongst Muslim females (graduate – 1.6% and postgraduate - 0.2% in 2022-23), although all other groups, including STs, SCs and Hindu OBCs, have recorded a gradual increase during the period.

In urban Karnataka, the attainment of graduate education by females has recorded a notable rise between 2017-18 (11.8%) and 2022-23 (18.9%) with the attainment by Hindu OBCs nearly doubling during the period, and the achievement by Other Minorities recording a rapid rise (from 4.5% to 30.3%) during the same period. However, urban Muslim females have the lowest percentage of graduate education attainment (6.1%). In 2022-23, as with rural Muslim females, urban Muslim males and females have the lowest educational attainment as compared to the other groups. Of the rural males, the lowest attainment of higher education in 2022-23 was recorded for the STs. Urban Hindu general males have the highest level of graduate attainment at 36.8% in 2022-23 while the lowest graduate (and postgraduate) attainment was by urban Muslim females. About half (48.9%) of the urban Hindu general male population had attained higher education as compared to a mere 7.4% of urban Muslim females, indicating the wide disparity in educational attainment across these groups.

To summarise the disparities across socio-religious groups across rural-urban and male-female in Karnataka, rural females face the greatest challenges, with lower levels of literacy and educational attainment, although steady progress is visible. Rural males showed steady progress, but literacy levels remain lower than their urban counterparts while rural females saw the greatest improvement in reducing illiteracy but remain the most disadvantaged group. Across socio-religious groups, The Hindu General and Other Minorities groups consistently show higher levels of education, particularly in urban areas. Muslim and SC populations tend to have lower education levels, though significant improvements are visible during 2007-08 to 2022-23. Urban females have shown the fastest growth in higher education (graduates and postgraduates) between 2017-23, although gender disparity persists, albeit a narrowing gap, particularly in urban areas.

A comparative analysis of educational attainment in Karnataka and India across place of residence and gender shows that illiteracy among India's rural males declined from 47.7% in 2007-08 to 35.0% in 2022-23 while Karnataka recorded a comparable decline from 49.9% to 36.0% in the same period. In 2022-23, Karnataka's rural SC males continued to have higher illiteracy (45.1%) than India's rural SC males (42.3%) while Karnataka performed better in the case of rural Muslim males (India – 43.7%; Karnataka 39.1%). At the graduate education level, Karnataka's rural males recorded a lower attainment growth from 4.3% in 2007-08 to 7.4% in 2022-23 as compared to India's rural males (4.1% to 8.1%). Also, 3.4% of Karnataka rural ST males and 9.5% of rural Hindu general males had attained the graduate level of education as compared to 4.6% of India's rural ST males and 13.7% among rural

Hindu general males, thereby showing Karnataka's overall lower achievements at this level irrespective of socio-religious groups. Also, at the post-graduate level, Karnataka's rural males' achievement of 1.2% is lower than of India's rural males (2.0%) with notable differences amongst Hindu General (Karnataka – 1.7%; India – 3.6%) and Hindu OBC (1.4% and 2.1%). Among urban males, Karnataka's SCs recorded a graduate level attainment of 12.2% as compared to 18.3% among India's SCs, while 1.9% of Karnataka's urban Muslim males achieved post-graduation as compared to 3.1% at the national level. In literacy gains, Karnataka's urban SC (38.5%) and Muslim females (33.6%) outperform national levels (40.2% and 39.9% respectively) although Karnataka's urban ST females lag significantly at this level (48.0% vs. 40.2%). Thereby, although, vis-à-vis India, Karnataka has made gains in reducing illiteracy, the low levels of literacy among rural SC males and, low levels of graduate education among urban SC males, Muslim males and ST females remain a challenge.

Table 4: Educational Attainment (% of population) by Socio-Religious Groups, Place of Residence and Gender: Karnataka, 2007-08 to 2022-23

Residence	Level of Education	ST	SC	H_OBC	H_GEN	Muslims	Other Minorities	Total	ST	SC	H_OBC	H_GEN	Muslims	Other Minorities	Total	
		MALE							FEMALE							
		2007-08														
RURAL	Not Literate	71.7	60.9	49.5	34.9	55.9	38.5	49.9	88.3	80.5	71.8	59.7	77.7	46.7	71.9	
	Primary	10.7	15.9	17.6	16.8	18.7	22.0	16.6	7.6	11.6	11.9	16.2	11.9	16.5	12.6	
	Secondary	12.3	18.7	26.6	30.6	21.2	30.2	24.7	3.4	7.2	13.9	18.1	8.6	31.1	12.7	
	Higher Secondary	3.5	2.5	3.3	8.0	2.1	-	4.2	0.2	0.6	1.1	0.8	1.2	-	0.8	
	Graduate	1.9	2.1	2.9	9.2	1.8	9.4	4.3	0.5	-	1.2	5.1	0.6	5.7	1.9	
	Post Graduate	-	-	0.2	0.5	0.2	-	0.2	-	-	0.1	-	-	-	0.0	
URBAN	Not Literate	25.6	38.6	19.2	5.7	29.6	17.4	19.7	68.7	61.6	38.7	21.1	49.3	32.1	38.6	
	Primary	13.7	16.2	11.9	7.2	15.8	12.3	11.9	8.2	10.6	11.1	10.9	16.4	9.7	11.7	
	Secondary	33.1	27.0	37.1	28.3	35.8	44.7	33.3	13.4	21.8	32.8	35.6	24.6	29.2	30.0	
	Higher Secondary	3.1	8.6	8.9	13.0	8.9	6.4	9.8	1.4	2.0	6.2	8.5	6.5	9.0	6.5	
	Graduate	20.8	9.1	19.8	41.1	8.3	14.2	22.3	8.4	4.0	10.1	20.4	2.4	13.5	11.2	
	Post Graduate	3.7	0.5	2.9	4.7	1.5	4.9	3.0	-	-	1.1	3.5	0.9	6.5	2.0	
2017-18																
RURAL	Not Literate	54.2	49.4	43.0	36.8	36.5	36.3	43.9	74.4	65.2	57.5	54.0	52.1	29.8	59.6	
	Primary	15.0	14.7	12.4	15.6	21.2	33.5	14.5	10.7	11.8	14.1	15.9	12.5	19.6	13.5	
	Secondary	25.0	26.1	31.4	33.4	32.3	21.5	29.9	12.7	18.7	22.1	22.2	34.0	44.2	21.5	
	Higher Secondary	4.0	7.4	9.1	8.9	4.3	7.6	7.8	2.2	3.4	3.7	5.5	1.0	3.3	3.6	
	Graduate	0.7	1.5	4.0	4.7	5.7	0.6	3.3	-	0.5	1.7	1.9	0.4	3.2	1.2	
	Post Graduate	1.2	1.0	0.1	0.7	0.0	0.4	0.5	-	0.4	0.8	0.5	-	-	0.5	
URBAN	Not Literate	17.3	18.5	11.8	9.5	28.2	4.0	14.4	57.3	42.7	26.7	17.6	37.2	13.2	28.2	
	Primary	7.2	11.5	10.4	3.2	14.9	2.6	8.7	5.3	11.2	8.9	10.0	15.8	10.8	10.5	
	Secondary	44.8	29.7	29.5	25.8	35.0	44.6	30.0	22.6	26.7	38.0	29.3	30.1	34.2	32.1	
	Higher Secondary	3.8	17.2	15.8	14.3	9.2	17.5	14.2	10.4	9.9	13.3	15.5	8.0	21.0	12.8	
	Graduate	19.9	18.6	28.5	34.1	12.2	30.2	26.3	3.4	6.7	10.6	20.6	5.1	4.5	11.8	
	Post Graduate	7.1	4.6	4.0	13.1	0.6	1.1	6.4	1.1	2.9	2.5	7.1	3.9	16.3	4.5	

		2022-23													
RURAL	Not Literate	47.3	45.1	33.0	27.7	39.1	23.3	36.0	68.3	64.9	53.0	48.1	55.2	33.2	55.8
	Primary	13.8	15.7	14.5	14.4	24.1	9.1	15.1	10.6	12.9	15.5	15.8	21.6	17.2	15.0
	Secondary	26.1	25.3	29.9	33.9	24.6	31.5	29.0	16.0	15.0	21.0	24.2	17.9	30.4	19.8
	Higher Secondary	8.7	7.8	12.7	12.8	6.7	23.5	11.3	2.9	4.6	6.0	6.1	3.5	8.6	5.4
	Graduate	3.4	5.5	8.5	9.5	4.6	9.9	7.4	1.8	2.3	3.9	4.9	1.6	9.5	3.5
	Post Graduate	0.6	0.7	1.4	1.7	0.9	2.7	1.2	0.4	0.4	0.6	0.9	0.2	1.2	0.6
URBAN	Not Literate	27.3	21.1	9.7	6.1	29.4	8.4	14.4	48.0	38.5	22.7	14.6	33.6	14.3	25.7
	Primary	12.8	11.5	7.1	6.6	18.9	4.7	9.7	13.1	10.8	9.6	9.4	19.6	9.2	11.5
	Secondary	27.5	30.5	27.1	25.6	30.4	24.8	27.7	19.8	25.1	26.7	23.2	30.8	27.7	26.3
	Higher Secondary	14.7	16.0	14.9	12.8	9.0	14.3	13.6	8.9	11.2	14.1	12.2	8.7	12.7	12.2
	Graduate	12.2	16.0	30.6	36.8	10.3	39.5	26.1	8.5	12.4	21.0	29.7	6.1	30.3	18.9
	Post Graduate	5.5	4.9	10.7	12.1	1.9	8.3	8.5	1.7	2.0	5.9	10.9	1.3	5.8	5.4

Educational Attainment in India across Expenditure Quintiles of Socio-Religious Groups

In this section, disparities in educational attainment across socio-religious groups are analysed by five expenditure quintiles. Results at national level are presented in Table 5.

The percentage of population in the "Not Literate" category has declined across all social groups and quintiles over time. The steepest decline in illiteracy is seen in higher quintiles (Q4 & Q5) and among Hindu General (H_GEN) and Other Minorities, where illiteracy is less than 20% in Q5 (2022-23). Among the poorest (Q1 & Q2), STs, SCs and Muslims have high illiteracy rates (above 40%), though they have improved significantly e.g. in Quintile 1 (the lowest income group), the "Not Literate" percentage for STs decreased from 81.60% in 2007-08 to 60.60% in 2022-23. Higher income quintiles (Q4 and Q5) show better educational attainment as compared to lower income quintiles (Q1 and Q2). While literacy rates have improved amongst Muslims and Other Minorities with varying rates across quintiles, the gap with H_GEN and H_OBC persists e.g. in Quintile 3, the "Not Literate" percentage for Muslims decreased from 59.20% in 2007-08 to 41.50% in 2022-23, but it remains double that of H_GEN (20.70%).

Across all groups, there is a shift from primary education to secondary and higher secondary levels. Hindu OBCs, Hindu General, and Other Minorities saw the largest increase in secondary education across all quintiles. SCs and STs are catching up but still lag in Q1 and Q2, though secondary school attainment has increased. In terms of higher education attainment, the proportion of graduates and postgraduates has increased in Q4 and Q5. Hindu General (increase in graduates from 22.60% in 2007-08 to 28.60% in 2022-23) and Other Minorities dominate higher education (graduate/postgraduate), with the highest increase in Q5. ST, SC, and Muslims have a low postgraduate representation, especially in Q1-Q3, but there is a gradual increase over time.

Across socio-religious groups, Hindu General consistently shows the highest educational attainment, followed by Other Minorities and Hindu OBCs. STs and Muslims have the lowest educational progression, especially in lower quintiles (Q1-Q3). Muslims have lower participation in higher education despite improving literacy rates, while SCs have improved significantly in secondary and higher secondary education, although they still lag in higher education as compared to Hindu OBCs and General groups e.g. in Quintile 1, the "Not Literate" percentage for ST was 60.60% in 2022-23, as compared to 30.90% for H_GEN.

To summarise the trends across the three NSS rounds, during 2007-08 to 2017-18, significant improvements in literacy and higher education attainments were witnessed across all groups, with the most notable gains in higher income quintiles. During 2017-18 to 2022-23, while the growth in educational attainment has continued across all socio-religious groups, the pace of improvement has slowed while inequalities continued to persist across the groups and across all quintiles. By 2022-23, literacy rates have improved for all groups, especially in lower quintiles, but disparities remain. Also, secondary and higher secondary education are expanding across all groups, particularly in middle and upper quintiles, although graduation and post-graduation attainment is concentrated in H_GEN and Other Minorities, while STs, SCs, and Muslims lag significantly. STs and Muslims remain the most

disadvantaged, and inter-quintile data confirms that economic status plays a significant role in educational attainment regardless of social group.

Educational Attainment in Karnataka across Expenditure Quintiles of Socio-Religious Groups

Table 6 shows that Karnataka has witnessed changes in the educational attainment of individuals belonging to the five expenditure quintiles of various socio-religious groups during the period of 2007-08 to 2022-23. Across all quintiles and socio-religious groups, the percentage of "Not Literate" individuals in Karnataka has decreased over the years, with significant reductions recorded in lower quintiles (Q1 & Q2) (Table 6). e.g. in Quintile 1, the "Not Literate" percentage for ST decreased from 84.20% in 2007-08 to 66.40% in 2022-23. Illiteracy amongst Muslims shows a consistent decline across the quintiles although they still have a higher illiteracy rate when compared to H_GEN. However, indicating the persistent disparities across socio-religious groups, Karnataka's ST, SC, and Muslims continue to have higher percentages of "Not Literate" individuals as compared to H_GEN and H_OBC e.g. in Q1, the "Not Literate" percentage for STs was 66.40% in 2022-23, as compared to 40.50% for H_GEN. The socio-religious groups of SCs, STs, and Muslims, who had lower literacy rates in 2007-08, have shown significant improvement, though gaps remain with Hindu OBCs and Hindu General groups. In Quintile 1, illiteracy among Hindu OBC (71.8% to 44.6%) and Hindu General (63.5% to 40.5%) has declined rapidly during 2007-08 to 2022-23.

Primary education attainment has increased across quintiles, with Muslims showing higher attainment rates in Q3 and above as compared to STs and SCs. In secondary education attainment, Muslims have attained higher achievements especially in Q4 and Q5, although they continue to trail H_GEN and Other Minorities. Muslims, especially Q5, have achieved higher progress in graduate and post-graduate education but post-graduate participation remains low across all quintiles.

Across quintiles, higher quintiles (Q4 and Q5) show better educational attainment as compared to lower quintiles (Q1 and Q2). In 2007-08, illiteracy of Q1 was high, with STs (84.2%) and SCs (79.4%) having the lowest literacy levels. Q1's Muslims reported better educational attainment than STs and SCs in terms of secondary education and graduate education but still lagged behind most groups including Other Minorities. In contrast to Q1, Karnataka's Q5 population's graduate and post-graduate attainment increased significantly with more than a third of the Hindu General group of this quintile attaining higher education. Q5 also saw lower illiteracy rates by 2022-23 although STs and SCs still lagged behind the other groups in higher education.

Further, the literacy rates of Muslims and other Minorities have improved, and the gap with H_GEN and H_OBC persists e.g. in Q3, the "Not Literate" percentage for Muslims decreased from 47.50% in 2007-08 to 39.50% in 2022-23, but it remains higher than H_GEN (32.50%). Muslims in Karnataka show steady progress in educational attainment across all quintiles, but face challenges when compared to H_GEN and Other Minorities, especially in higher education. Their participation in secondary and graduate education improves from the lowest to the highest quintile indicating the key influence of income in educational attainment.

Table 5: Educational Attainment (% of population) of Socio-Religious Groups by Expenditure Quintiles: India, 2007-08 to 2022-23

Exp quintiles	Level of Education	2007-08							2017-18							2022-23						
		ST	SC	H_OBC	H_GEN	Muslims	Other Minorities	Total	ST	SC	H_OBC	H_GEN	Muslims	Other Minorities	Total	ST	SC	H_OBC	H_GEN	Muslims	Other Minorities	Total
Quintile 1	Not Literate	81.6	75.4	67.1	48.6	72.2	48.8	69.7	65.2	59.5	49.9	33.5	58.0	33.5	53.5	60.6	54.9	44.7	30.9	50.9	37.0	49.0
	Primary	9.9	10.9	13.0	16.2	13.4	16.4	12.5	13.8	13.8	14.6	14.2	14.8	13.2	14.3	13.4	13.1	13.1	13.9	16.5	12.5	13.8
	Secondary	7.6	11.3	16.4	25.8	12.4	25.8	14.4	16.9	19.9	25.6	32.3	21.0	28.3	23.1	18.0	21.4	26.3	31.3	22.9	31.5	23.9
	Higher Secondary	0.5	1.5	2.2	5.2	1.4	5.6	2.0	2.6	4.1	5.8	10.3	3.9	9.6	5.2	5.1	5.9	8.4	10.9	5.3	9.6	7.1
	Graduate	0.4	0.8	1.1	3.2	0.6	2.9	1.1	1.2	2.2	3.5	8.2	1.8	11.6	3.2	2.6	3.9	6.4	10.8	3.6	8.0	5.3
	Post Graduate	0.1	0.1	0.3	1.0	0.1	0.6	0.3	0.3	0.6	0.5	1.5	0.5	3.8	0.6	0.5	0.8	1.1	2.3	0.8	1.4	1.0
Quintile 2	Not Literate	73.7	71.6	60.7	41.4	68.1	41.2	62.2	59.9	51.9	43.6	26.2	53.8	31.8	45.5	44.9	48.8	40.1	24.6	45.4	29.6	40.1
	Primary	12.1	12.3	14.4	17.0	13.6	18.5	14.0	13.5	14.6	14.7	13.8	15.4	13.4	14.5	14.3	13.8	13.0	12.3	15.9	12.4	13.6
	Secondary	11.8	12.9	20.2	29.0	14.6	28.3	18.5	19.5	23.7	28.2	32.3	23.5	33.9	26.5	25.2	24.2	26.7	31.9	25.1	30.1	26.8
	Higher Secondary	1.5	1.8	2.8	5.8	1.9	4.5	2.8	4.2	5.6	7.9	12.0	4.4	10.9	7.3	8.2	7.0	9.7	13.3	6.9	12.9	9.3
	Graduate	0.7	1.0	1.5	5.3	1.5	5.7	2.0	2.5	3.3	4.5	12.5	2.4	8.6	5.1	6.2	5.1	8.6	14.1	5.4	12.4	8.2
	Post Graduate	0.2	0.3	0.3	1.4	0.2	1.7	0.5	0.4	0.8	1.1	3.3	0.5	1.4	1.2	1.2	1.2	1.9	3.9	1.3	2.6	2.0
Quintile 3	Not Literate	68.4	62.7	55.0	33.4	59.2	31.8	52.9	56.0	51.7	44.3	26.6	50.1	28.4	43.9	36.7	43.2	36.5	20.7	41.5	24.1	34.4
	Primary	12.8	14.1	14.5	15.2	16.6	16.7	14.7	13.6	16.2	13.7	13.6	15.4	12.8	14.4	13.3	13.8	12.3	11.1	15.0	11.2	12.7
	Secondary	14.9	17.5	23.2	32.8	18.7	35.7	23.3	21.8	22.2	27.6	32.5	24.2	35.0	26.7	28.1	26.3	28.2	31.7	26.8	32.8	28.6
	Higher Secondary	2.5	2.5	3.4	8.1	2.9	8.7	4.2	4.8	5.6	8.1	12.1	5.5	13.7	7.8	10.9	8.4	10.0	14.0	8.3	14.5	10.6
	Graduate	1.1	2.6	3.2	8.6	2.2	6.4	4.0	3.2	3.6	5.2	12.1	3.8	7.0	5.8	9.2	6.4	10.3	17.0	6.6	13.7	10.6
	Post Graduate	0.3	0.6	0.7	2.0	0.4	0.6	0.9	0.6	0.7	1.1	3.1	1.1	3.2	1.4	1.9	1.9	2.8	5.5	1.8	3.6	3.0
Quintile 4	Not Literate	65.6	59.6	50.7	27.9	54.8	33.2	47.0	49.6	47.4	41.7	23.2	43.4	24.8	38.3	30.6	39.6	33.2	18.1	37.8	21.3	30.0
	Primary	11.8	13.7	14.5	13.8	15.7	14.8	14.1	14.7	15.0	12.8	10.8	16.7	9.9	13.2	11.8	13.5	11.9	9.9	14.5	11.1	11.9
	Secondary	16.6	18.8	24.7	33.4	21.3	34.5	25.4	23.0	24.4	27.7	33.1	26.0	32.6	28.1	29.1	27.4	27.4	29.8	27.8	31.8	28.5
	Higher Secondary	2.9	3.7	4.6	9.2	3.7	7.0	5.5	6.7	7.1	8.4	13.2	6.6	12.9	9.2	13.0	9.0	11.3	14.5	9.1	15.4	11.9
	Graduate	2.6	3.4	4.5	12.6	3.9	8.6	6.4	4.7	4.5	7.5	16.0	6.2	14.3	9.0	12.6	8.0	12.5	20.5	8.0	15.3	13.5
	Post Graduate	0.5	0.8	1.0	3.1	0.7	1.9	1.5	1.2	1.6	1.9	3.6	1.1	5.5	2.3	2.8	2.6	3.7	7.2	2.9	5.0	4.2

Quintile 5	Not Literate	48.1	48.6	39.5	20.4	38.8	24.5	32.6	39.5	39.6	32.8	17.4	37.5	20.3	28.5	23.3	34.8	26.8	13.5	29.9	15.5	22.7
	Primary	13.3	13.8	13.7	10.0	15.2	11.5	12.2	10.7	13.9	12.7	9.1	12.9	9.8	11.4	10.5	11.7	11.2	7.5	12.8	9.3	10.0
	Secondary	25.2	23.5	28.7	29.6	28.5	34.9	28.8	25.6	26.6	27.6	26.1	29.4	31.9	27.4	30.5	27.7	26.6	24.0	28.9	30.7	26.9
	Higher Secondary	4.9	5.3	6.1	10.0	6.0	8.6	7.6	9.5	8.9	10.7	14.0	8.2	17.1	11.7	15.1	10.2	12.2	13.9	10.9	15.7	13.0
	Graduate	6.7	7.0	9.5	22.6	9.0	15.7	14.4	10.8	8.4	11.9	24.1	9.5	16.5	15.5	16.1	11.3	16.8	28.6	12.2	20.2	19.5
	Post Graduate	1.8	1.8	2.7	7.4	2.4	4.7	4.4	3.9	2.6	4.2	9.3	2.5	4.4	5.5	4.5	4.2	6.3	12.5	5.3	8.7	7.8

To summarise, across all socio-religious groups and quintiles, Karnataka has recorded significant growth in educational attainments although disparities exist across the groups and quintiles. Over time, illiteracy has declined significantly across all economic levels and social groups with an increase in those completing secondary education, especially in the middle and higher quintiles. Higher education (graduate/post-graduate) has been expanding, particularly among Higher General & Other Minorities. On the flip side, STs and SCs continue to lag across all quintiles with a low representation in higher education, and Muslims show slower progress beyond secondary education.

A comparison of Karnataka's performance *vis-à-vis* India across expenditure quintiles reveals that in quintile 1 (the economically disadvantaged section), Karnataka has a marginally higher level of illiteracy (50.0% vs. 49.0%) with Karnataka's Q1 STs and SCs having a significantly higher illiteracy of 66.4% and 67.4% as compared to 60.6% and 54.9% respectively at the national level. While Karnataka's Muslims perform better than Indian Muslims upto the primary level, their attainment is lower for secondary and above levels, indicating possible issues in the retention of economically poorer students in the formal education system. In Q2, across all socio-religious groups, illiteracy in Karnataka is higher than that at the national level, while, at the graduate level, Karnataka STs have a significantly lower level of attainment (1.7%) as compared to India's STs (6.2%). With respect to Q5, 47.5% of STs and 40.6% of SCs are illiterate as compared to 23.3% and 34.8% respectively in India, thereby reflecting Karnataka's dismal achievement therein. In quintile 5, the educational attainment of most socio-religious groups across levels is lower than in the national context although Karnataka's 'Other Minorities' have performed well. Thus across all expenditure quintiles (Q1 to Q5), Karnataka's performance has been lower than that of India with respect to literacy with the State's STs, SCs and Muslims lagging behind the national achievements, especially in secondary education-and-above levels.

Table 6: Educational Attainment (% of population) of Socio-Religious groups by Expenditure Quintiles: Karnataka, 2007-08 to 2022-23

Exp quintile	Level of Education	2007-08							2017-18							2022-23						
		ST	SC	H_OBC	H_GEN	Muslims	Other Minorities	Total	ST	SC	H_OBC	H_GEN	Muslims	Other Minorities	Total	ST	SC	H_OBC	H_GEN	Muslims	Other Minorities	Total
Quintile 1	Not Literate	84.2	79.4	71.8	63.5	69.2	53.0	72.2	57.4	56.0	52.3	48.0	51.1	14.9	52.6	66.4	67.4	44.6	40.5	50.0	87.5	50.9
	Primary	9.5	8.4	15.3	11.7	11.8	12.3	12.1	14.8	13.1	9.4	10.7	13.6	85.1	11.7	10.1	9.3	13.5	9.2	20.5	-	13.7
	Secondary	3.9	9.3	10.2	17.5	16.6	27.0	12.1	23.7	24.2	27.8	28.5	27.9	-	26.7	16.3	13.1	24.9	33.8	21.6	12.5	22.3
	Higher Secondary	1.8	1.1	1.9	4.0	0.6	5.0	2.0	4.0	3.6	7.6	5.1	6.2	-	5.7	4.7	6.7	10.2	8.3	5.0	-	7.9
	Graduate	0.7	1.5	0.8	3.1	1.6	2.7	1.5	0.1	2.1	2.9	6.6	0.6	-	2.8	2.6	2.5	6.1	7.9	2.5	-	4.6
	Post Graduate	-	0.3	0.1	0.2	0.2	-	0.1	-	1.1	-	1.0	0.6	-	0.5	-	1.0	0.7	0.3	0.4	-	0.6
Quintile 2	Not Literate	78.7	72.9	67.2	44.7	60.8	42.4	62.8	65.5	55.0	46.8	37.6	57.1	11.8	49.0	66.0	52.3	41.5	34.0	38.1	37.9	44.2
	Primary	7.6	13.3	11.5	19.3	15.2	14.3	14.0	10.7	12.6	13.1	15.2	15.0	18.8	13.5	7.8	9.3	14.8	16.5	22.6	19.0	14.7
	Secondary	8.1	11.9	19.1	26.9	19.2	33.1	18.7	20.9	16.9	28.0	27.3	23.9	62.8	24.9	16.3	22.8	23.4	29.9	26.2	30.0	23.8
	Higher Secondary	3.7	1.4	1.1	3.7	3.0	6.0	2.3	1.5	10.2	7.6	8.9	2.5	2.0	7.3	8.1	9.3	9.7	8.0	6.0	6.3	8.7
	Graduate	1.9	0.4	0.9	5.1	1.8	4.2	2.1	1.4	4.0	3.2	8.6	1.2	4.6	4.0	1.7	5.8	9.2	9.8	6.3	4.5	7.5
	Post Graduate	-	-	0.2	0.3	-	-	0.1	-	1.3	1.2	2.3	0.3	-	1.2	0.1	0.4	1.5	1.8	0.9	2.3	1.1
Quintile 3	Not Literate	78.9	57.7	56.7	43.1	47.5	27.7	54.0	67.5	53.8	45.0	37.2	30.0	25.2	45.3	57.4	48.2	40.4	32.5	39.5	21.3	42.1
	Primary	12.6	17.7	15.9	14.1	23.1	8.3	16.0	8.0	15.0	11.8	16.9	19.2	7.5	13.8	12.1	15.2	13.8	13.1	18.7	11.8	14.3
	Secondary	7.8	20.4	21.9	27.9	21.5	45.4	22.3	19.5	21.6	27.5	28.0	33.6	41.1	26.6	19.5	23.6	25.7	26.6	29.0	29.6	25.3
	Higher Secondary	0.5	2.3	2.3	4.7	3.9	12.9	3.2	3.3	5.4	8.6	9.1	6.6	23.7	7.5	6.9	7.5	9.5	13.3	7.8	14.1	9.2
	Graduate	0.2	2.0	3.1	9.5	3.0	5.7	4.2	1.8	3.7	6.3	4.6	6.1	2.1	5.1	3.9	4.5	9.0	12.2	4.3	18.1	7.7
	Post Graduate	-	-	0.0	0.7	1.0	-	0.3	0.0	0.6	0.7	4.3	4.5	0.4	1.6	0.2	1.0	1.6	2.3	0.7	5.1	1.4
Quintile 4	Not Literate	69.3	61.9	46.7	34.2	39.3	34.3	45.9	52.7	52.3	38.2	29.1	29.1	17.5	38.6	50.6	45.6	35.3	28.8	33.3	24.2	36.8
	Primary	4.2	12.8	14.4	17.0	15.1	16.4	14.5	12.9	11.8	13.9	10.2	18.2	11.1	13.1	14.4	15.7	13.5	12.7	20.5	6.1	14.3
	Secondary	19.0	17.4	29.1	33.1	39.3	41.0	29.1	22.3	23.7	31.0	28.7	41.0	58.6	30.0	23.3	22.9	25.6	30.3	30.8	29.9	26.3
	Higher Secondary	1.1	3.9	4.0	7.9	3.9	5.5	4.9	5.3	9.7	9.1	14.2	5.0	7.1	9.6	5.9	7.9	11.2	10.1	8.1	17.1	9.9
	Graduate	6.3	4.0	5.5	7.8	2.3	2.0	5.5	4.0	2.4	6.8	15.4	6.7	5.5	7.5	4.6	6.7	11.3	14.2	6.4	17.5	10.1
	Post Graduate	-	-	0.3	-	-	0.9	0.1	2.7	0.2	1.1	2.4	0.0	0.2	1.2	1.2	1.2	3.1	3.9	0.9	5.2	2.6

Quintile 5	Not Literate	54.8	36.0	33.2	14.4	20.6	11.9	25.1	55.2	40.0	31.3	19.3	29.4	17.0	29.6	47.5	40.6	27.4	19.0	29.7	8.9	28.1
	Primary	10.1	20.5	12.4	9.1	13.7	14.1	11.7	13.2	12.0	11.0	8.0	12.4	11.5	10.4	13.1	12.3	11.4	10.4	21.4	9.0	11.9
	Secondary	17.9	28.7	32.3	26.6	31.4	27.4	29.1	19.9	32.4	28.6	26.8	33.7	14.1	28.2	25.1	23.3	27.0	24.1	24.7	26.2	25.7
	Higher Secondary	2.2	6.3	6.8	10.0	18.5	1.2	8.5	5.0	5.7	10.3	12.0	9.2	22.4	10.1	7.3	9.8	12.0	11.2	9.3	13.6	11.2
	Graduate	12.8	8.5	13.2	35.4	12.4	32.1	22.1	3.5	6.1	16.2	24.0	15.2	20.9	16.5	4.8	11.2	16.9	26.1	11.7	36.2	17.6
	Post Graduate	2.2	-	2.1	4.5	3.3	13.3	3.4	3.2	3.8	2.6	9.9	0.1	14.2	5.2	2.3	2.7	5.3	9.2	3.2	5.9	5.5

Educational attainment by socio-religious groups in Karnataka across administrative divisions

Mirroring the state-level improvements, educational attainment across social groups in Karnataka's administrative divisions of Belagavi, Bengaluru, Gulbarga, and Mysore have shown significant progress during the period 2007-08 to 2022-23. Nevertheless, disparities remain between social groups and the divisions (**Table 7**). On the whole, the proportion of "Not Literate" individuals has declined, albeit at varying rates, across all divisions and social groups.

Across divisions, illiteracy rates in Belagavi division among STs and SCs declined from 80.6% (STs) and 72.9% (SCs) in 2007-08 to 63.2% and 54.2% in 2022-23. Within Belagavi division, Muslims with illiteracy dropped from 64.5% to 44.0% during the same period. Literacy in the division's Other Minorities group with illiteracy declined by about two-thirds (37.5% to 12.3%). Bengaluru division recorded progress on this front with the proportion of illiterates declining from 42.30% in 2007-08 to 29.40% in 2022-23 but about half (50.4%) of the division's STs continued to be illiterate in 2022-23. Gulbarga division reported low levels of literacy with 91.80% in 2007-08 but this proportion reduced to 56.1% in 2022-23. 98% of Gulbarga division's Other Minorities were illiterate in 2017-18 with this proportion showing a rapid decline to 15.8% by 2022-23. In Mysore division, illiteracy among SCs dropped from 59.7% in 2007-08 to 44.7% in 2022-23, with Muslims (34.6% to 26.6%) too experiencing rapid improvements in literacy. In summary, although illiteracy rates have declined across all groups by 2022-23, STs in Belagavi (63.2%) and Gulbarga (56.1%), SCs in Belagavi (54.2%) and Gulbarga (59.9%), Hindu OBCs in Belagavi (40.4%) and Gulbarga (43.0%), and Muslims in Belagavi (44.0%) and Gulbarga (43.3%) continue to linger at low levels of literacy.

In terms of educational levels, the attainment of primary education has remained stable in all the divisions, secondary education has expanded significantly. In Mysore and Belagavi, secondary education rates have steadily increased for SCs and OBCs, with 24.9% of Mysore's SCs and 23.5% of Belagavi division's OBCs attaining this level in 2022-23. In Bengaluru division, the attainment of secondary education grew across all groups, with STs, SCs, and Muslims recording significant improvements. Higher secondary (10+2) and graduate education levels have improved significantly although STs and SCs still lag in higher education. By 2022-23, Bengaluru and Belagavi divisions achieved the strongest growth in graduate-level education, with Hindu General and Other Minorities reaching 23.7% and 34.5% respectively in Bengaluru. Bengaluru division performs the best in terms of attainment of secondary, graduate and post-graduate education.

To summarise the inequalities in educational attainment by socio-religious groups across Karnataka's administrative divisions, Bengaluru division shows the highest improvements although half of the division's STs continue to be illiterate. Belagavi and Mysore divisions show moderate levels of improvement in educational attainment with declines in illiteracy accompanied by high levels of persistent illiteracy amongst STs, SCs and Muslims. Gulbarga division fares poorly across most levels of educational attainment although a gradual improvement is seen over time. About 0.8% and 0.5% of Gulbarga's STs and SCs, and a mere 0.9% of Belagavi division's Muslims have attained post graduate education. Thus, disparities in educational attainment continue to exist across socio-religious groups in Karnataka's administrative divisions although the gaps between the groups have reduced over time.

Table 7: Educational Attainment across Socio-Religious groups (% of population) across Administrative Divisions of Karnataka: 2007-08 to 2022-23

Division	Level of Education	2007-08							2017-18							2022-23						
		ST	SC	H_OBC	H_GEN	Muslims	Other Minorities	Total	ST	SC	H_OBC	H_GEN	Muslims	Other Minorities	Total	ST	SC	H_OBC	H_GEN	Muslims	Other Minorities	Total
Belagavi	Not Literate	80.6	72.9	62.8	46.1	64.5	37.5	58.3	64.8	55.2	45.6	33.8	51.6	38.7	46.3	63.2	54.2	40.4	34.5	44.0	12.3	42.4
	Primary	3.9	9.3	16.7	15.4	13.3	11.3	13.7	8.1	11.7	13.5	15.1	12.0	2.5	13.0	9.3	13.6	15.2	14.2	22.9	6.4	15.3
	Secondary	9.6	13.7	15.1	25.9	16.1	37.8	19.6	24.8	16.3	23.0	26.1	20.9	46.5	22.6	15.0	17.4	23.5	26.4	22.2	35.7	22.8
	Higher Secondary	1.8	2.5	1.5	5.9	3.5	4.9	3.7	0.9	13.1	10.5	9.6	7.4	6.8	9.9	6.6	7.1	10.1	10.4	5.1	19.1	9.1
	Graduate	4.0	1.5	3.5	6.3	2.5	8.4	4.3	1.3	3.2	6.4	11.7	5.0	5.2	6.6	5.1	5.5	9.0	10.7	5.0	19.9	8.3
	Post Graduate	-	-	0.5	0.5	0.2	-	0.3	-	0.5	1.0	3.8	3.0	0.4	1.7	0.9	2.2	1.8	3.8	0.9	6.7	2.1
Bengaluru	Not Literate	73.0	60.3	46.5	19.9	38.7	27.9	42.3	60.9	45.5	31.8	18.0	28.5	5.3	32.2	50.4	41.9	26.2	20.6	29.5	15.1	29.4
	Primary	10.4	16.1	12.4	11.9	17.2	11.4	13.2	10.7	10.2	9.5	5.8	13.8	11.6	9.2	9.0	11.4	9.5	10.7	16.8	7.1	10.4
	Secondary	12.4	18.3	26.7	29.3	28.4	34.7	25.3	20.3	29.7	31.2	29.0	40.2	24.5	30.4	24.4	24.9	27.6	26.2	34.8	24.3	27.1
	Higher Secondary	1.4	2.3	4.5	8.2	8.3	4.1	5.2	3.1	7.6	10.0	13.3	5.8	18.0	9.6	8.8	10.7	12.5	10.8	9.1	13.4	11.4
	Graduate	2.9	3.0	8.8	27.1	5.4	15.3	12.2	3.2	4.8	15.5	24.6	11.1	20.9	14.6	6.1	9.6	17.9	23.7	8.2	34.5	16.5
	Post Graduate	-	-	1.1	3.5	2.0	6.6	1.8	1.8	2.1	1.9	9.3	0.7	19.7	4.0	1.3	1.6	6.3	8.0	1.7	5.6	5.2
Gulbarga	Not Literate	91.8	80.1	74.0	54.4	64.4	47.0	69.0	56.0	54.6	47.8	42.6	42.3	98.0	48.3	56.1	59.9	43.0	29.5	43.3	15.8	45.6
	Primary	4.2	7.1	7.6	8.9	9.6	7.8	-	10.3	16.4	15.3	18.1	21.4	-	16.4	14.8	16.0	16.1	15.6	19.5	10.2	16.3
	Secondary	2.6	7.5	13.9	19.2	18.7	35.5	14.2	19.7	21.4	27.3	21.2	30.2	-	24.8	20.5	17.4	23.1	27.7	22.3	20.2	22.4
	Higher Secondary	0.8	2.8	1.9	4.6	4.3	6.6	3.2	7.3	2.7	4.7	10.5	4.6	-	5.5	6.0	3.0	8.9	10.1	8.7	18.5	8.0
	Graduate	0.5	2.2	2.2	12.5	3.0	6.6	5.5	3.8	4.5	3.6	6.0	1.4	1.0	4.0	1.7	3.3	7.9	13.2	5.2	28.5	6.6
	Post Graduate	-	0.4	0.3	0.3	-	4.3	0.3	2.9	0.3	1.2	1.7	0.1	1.0	1.1	0.8	0.5	1.0	3.9	1.1	6.7	1.2
Mysore	Not Literate	52.0	59.7	50.6	27.6	34.6	17.0	47.0	58.8	52.7	42.0	42.9	31.8	11.2	43.8	49.5	44.7	34.9	23.9	26.6	24.7	35.3
	Primary	21.6	17.7	15.3	23.2	23.0	24.2	17.8	16.3	15.3	12.1	13.3	21.9	19.5	14.2	17.5	15.1	13.4	9.5	24.3	14.7	14.4
	Secondary	16.6	18.1	26.8	33.9	34.1	31.7	26.7	20.4	22.9	31.8	31.7	38.9	44.2	30.1	24.8	24.9	27.9	29.7	32.5	26.6	27.7
	Higher Secondary	4.3	2.3	3.5	7.3	4.1	11.1	4.0	4.2	4.8	9.2	7.4	4.8	16.5	7.6	4.4	8.5	11.1	12.1	7.7	9.7	10.0
	Graduate	3.5	2.2	3.6	7.4	3.9	12.2	4.1	0.3	2.1	3.7	4.1	2.0	8.4	3.2	2.6	5.7	10.9	21.1	7.7	20.8	10.7
	Post Graduate	1.9	-	0.3	0.7	0.3	3.7	0.4	0.0	2.1	1.1	0.6	0.6	0.1	1.1	1.1	1.0	1.9	3.8	1.3	3.6	1.9

Determinants of Educational attainment by Socio-Religious Groups in India and Karnataka

To estimate the determinants of educational attainment and the disparities across socio-religious groups, we analyse the disaggregated individual specific unit level data available in two education rounds: the National Sample Survey Organization (NSSO) 75th round conducted during July 2017 to June 2018, and the 64th round conducted during July 2007 – June 2008. The 64th round (Participation and Expenditure in Education) covers a sample of 1,00,581 households (63,318 rural households and 37,263 urban households) while the 75th round (Household Social Consumption: Education) covered a sample of 1,13,757 households (64,519 rural households and 49,238 urban households) from all over India.

The sample of individuals who had completed different level of education are grouped into below-primary level and above-primary level for subsequent analysis. Logit Model is used to estimate the determinants. Results are given in **Table 8** for all-India and Karnataka. Key results of the estimations are summarized below.

Individuals belonging to Scheduled Castes are 0.86% more likely to have attended primary and above level of education as compared to Scheduled Tribes. Similarly, Other Backward Classes are 3.14% more likely to have attended primary and above level of education. Households falling under the 'others' category are 8.26% more likely in comparison to Scheduled Tribes to have attended primary and above level of education. In Karnataka too, a similar pattern was observed with individuals belonging to SC, OBC and general categories having a higher chance of completing primary-and-above level of education as compared to ST. This finding reveals the prevalence of disparities in primary-and-above educational attainment across socio-religious groups in India and Karnataka.

At the all-India level, Muslim households are 7.7% less likely to have attended primary-and-above level of education as compared to Hindu households. Christians and Sikh/Jain/Buddhism/Others are 8.08% and 2.17% more likely to have attended primary-and-above level of education than Hindu households. For the state of Karnataka, Muslims are 4.63% less likely to have attended primary-and-above level of education than Hindu households. On the dimension of gender disparity, females are 11.1% less likely to have attended primary-and-above level of education than their male counterparts overall. Muslim females in India are 11.4% less likely to have attended primary-and-above level of education than their male counterparts while for Muslims residing in Karnataka, it is 7.9% less likely. While we find that Muslims, overall, were less likely to complete primary-and-above level of education in both India and Karnataka, it is lower among Muslim women, thereby indicating the crucial issue of gender inequality within the community.

Further, the Logit estimation results show that there exists a greater probability of urban individuals having attended primary-and-above level of education as compared to their rural counterparts. Urban residents in India are 6.85% more likely to have attended primary-and-above level of education, while, in Karnataka, the corresponding value rises to 9.19%. In India, urban Muslims are 3.94% more likely than rural Muslims to have completed primary-and-above level of education while, for Karnataka, this value is higher at 5.00%.

The logit analysis also reveals that household size has a negative association with the probability of attending primary-and-above level of education. For instance, a unit increase in household size decreases the likelihood of having attended primary-and-above level of education by 0.29% at the all-India level. For Karnataka and Karnataka's Muslims, a similar association is seen with a magnitude of 0.46% and 0.25% respectively.

In addition, the logit analysis showed that the probability of having attended primary and above education level increases with an increase in per capita consumption expenditure. In our model, it is seen that households falling under 3rd and 4th quantiles are 4.08% and 13% (respectively) more likely to have attended primary-and-above level of education as compared to the 1st quantile for all-India. Muslim households of the 4th quantile were 61.2% more likely to have attained primary-and-above education level.

Overall, we find that socioeconomic factors significantly determine educational attainment and access to higher education among Muslims in India and also in Karnataka.

Conclusion and Policy Implications

This study has analysed the presence and extent of disparities in educational attainment by socio-religious groups in India and Karnataka, and the determinants of educational attainment. NSS data from three rounds (2007-08, 2017-18 and 2022-23) have been analysed to examine the changes in disparities and the trends across socio-religious groups. These analyses are disaggregated by levels of education, place of residence, gender, expenditure quintiles, and administrative regions. A major conclusion of these analyses is that disparities continue to exist between socio-religious groups although various policy interventions, as reflected by the programmes and schemes, have been in place to support the socially and economically disadvantaged communities, women and rural population to achieve higher levels of educational attainment.

Karnataka has made progress in education but at a slower pace than India, particularly in reducing illiteracy and improving higher education among marginalised communities like STs, SCs, and Muslims. While India's overall illiteracy declined faster during 2007-08 to 2022-23, Karnataka's ST population remains significantly behind national trends. Though Muslims in Karnataka showed better primary education growth, STs, SCs, and Muslims underperformed at the higher education levels. Rural SC males, urban SC males, Muslim males, and ST females face substantial educational disadvantages. While Karnataka's rural Muslim males performed better in literacy than their national counterparts, rural SC males lagged. Graduate and post-graduate attainment is lower in Karnataka across most socio-religious groups, particularly among rural and urban marginalised communities. Economic disparities in educational attainment also persist, with Karnataka underperforming across all expenditure quintiles. Illiteracy is higher among Karnataka's poorest STs and SCs as compared to the national level. Though Muslims perform better at the primary education level, their secondary and higher education retention is weaker. Even in the wealthiest quintile (Q5), STs and SCs in Karnataka lag behind national averages. The study, considering the attainment of below-primary and above-primary levels, has shown that determinants such as place of residence, sex, household size and consumption expenditure contribute to disparities in educational attainment across groups. However, research opportunities exist to examine

their influence across other attainment levels and also to assess the influence of parents' educational attainment on children's educational attainment across socio-religious groups.

Table 8: Determinants of Predicated Probabilities of Educational Attainment: Logit Estimations

Variables	Total Students				Muslim Students			
	All India		Karnataka		All India		Karnataka	
	Coeff.	Marginal effects	Coeff.	Marginal effects	Coeff.	Marginal effects	Coeff.	Marginal effects
General	Reference							
SC	-0.0482*** (0.0129)	-0.0086*** (0.0023)	0.172* (0.0736)	0.0320* (0.0139)				
OBC	0.184*** (0.0117)	0.0314*** (0.0020)	0.470*** (0.0681)	0.0822*** (0.0128)				
Others	0.527*** (0.0129)	0.0826*** (0.0021)	0.662*** (0.0748)	0.111*** (0.0135)				
Hindu	Reference							
Muslim	-0.440*** (0.0099)	-0.0773*** (0.0018)	-0.276*** (0.0545)	-0.0463*** (0.0095)				
Christian	0.596*** (0.0177)	0.0808*** (0.0021)	0.878*** (0.243)	0.109*** (0.0228)				
Other Minorities	0.141*** (0.0183)	0.0217*** (0.0027)	0.417 (0.29)	0.059 (0.0365)				
Female	-0.685*** (0.0071)	-0.111*** (0.00113)	-0.697*** (0.0355)	-0.112*** (0.00567)	-0.591*** (0.0171)	-0.114*** (0.00326)	-0.476*** (0.0948)	-0.0792*** (0.0158)
Urban	0.436*** (0.00836)	0.0685*** (0.00127)	0.584*** (0.0435)	0.0919*** (0.00667)	0.207*** (0.0183)	0.0394*** (0.00347)	0.296** (0.104)	0.0500** (0.0181)
Household size	-0.0183*** (0.00139)	-0.00293*** (0.00022)	-0.028*** (0.007)	-0.0046*** (0.0011)	-0.016*** (0.00323)	-0.003*** (0.00061)	-0.0149 (0.0204)	-0.00245 (0.00335)
Q1	Reference							
Q2	-0.0136 (0.0225)	-0.00265 (0.00438)	-0.244 (0.179)	-0.0468 (0.0328)	-0.260*** (0.0752)	-0.057*** (0.0157)	-0.182 (0.372)	-0.0387 (0.0768)
Q3	0.219*** (0.0221)	0.0408*** (0.0043)	0.0585 (0.177)	0.0106 (0.0323)	0.0362 (0.0744)	0.0075 (0.0155)	0.17 (0.359)	0.0337 (0.0736)
Q4	0.799*** (0.0228)	0.130*** (0.0043)	0.616*** (0.179)	0.0970** (0.0325)	0.612*** (0.0754)	0.112*** (0.0155)	0.818* (0.381)	0.138 (0.0763)
Constant	1.010*** (0.0248)		0.908*** (0.196)		1.114*** (0.0779)		0.981* (0.43)	
Observations	509530	509530	20287	20287	72472	72472	2719	2719

Notes: (i) *** significant at 1% level, ** significant at 5% level and * significant at 10% (ii) Figures in the parentheses are standard error

Source: Authors calculations

Overall, while Karnataka has seen improvements, targeted interventions are needed to bridge gaps in literacy and higher education, especially for marginalised and economically weaker groups. In this context, the following policy interventions may be considered: Launch additional targeted programmes for disadvantaged groups, especially SCs, STs and Muslims, and enhance the financial aid/scholarships to these communities to pursue their education. Considering the low levels of attainment by STs at all education levels, additional efforts may be taken through IEC interventions,

mission-mode mobilisation and community-led programmes (e.g. by involving religious leaders) to encourage students to pursue higher levels of education. Programmes that provide a more satisfying and rounded learning experience may also be implemented in rural areas by improving school infrastructure, teacher availability, and digital resources in rural schools (such as in KREIS managed schools) and by providing model schools (e.g. Eklavya schools), transportation and hostel facilities to improve access to secondary and higher education. It may be useful to strengthen the existing bridge programmes to help underprivileged students' transition to college. Additional stipends and safety measures may be taken up to encourage education of females, especially for SC, ST, and Muslim girls, and to expand vocational training and career counselling for young women. Public-private partnerships may be intensified to launch quality initiatives in educational institutions located in rural, hilly and remote areas and lagging regions such as the Gulbarga administrative division. Also, where feasible, education-linked incentives may be integrated into poverty alleviation / self-employment schemes with additional incentives for higher educational attainment.

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