REGIONAL, GENDER AND SOCIAL DISPARITIES IN SECONDARY SCHOOL ATTAINMENT IN KARNATAKA, SOUTH INDIA

















© KHPT, September 2016

Authors Ravi Prakash, Parinita Bhattacharjee, Raghavendra Thalinja & Shajy Isac

Author contact ravi.prakash@khpt.org

Suggested citation Prakash R, Bhattacharjee P, Thalinja R, Isac S. 2016. Regional, social and

gender disparities in secondary school attainment in Karnataka, South

India. Bengaluru: Karnataka Health Promotion Trust.

Editor Meghna Girish

Concept and design 129 Degrees Design Studio and Twist Open Innovations

Acknowledgements We thank the Department of Education, Government of Karnataka, for

providing necessary data to accomplish this work. We are grateful to Dr. Chandan Kumar, Assistant Professor, Kalaburagi Central University for providing technical support in compiling the NSSO data. Thanks are also due to Dr. Nabanita Majumder for putting up the findings into a report form. We acknowledge the assistance of Mr. Prakash Javalkar and Mr. Vidyacharan from KHPT in making maps for this report. We thank the administrative staff of KHPT for providing the logistical support for

the study.

Disclaimer The study was funded by the UK Department for International

Development (DFID) as part of STRIVE, a 6-year programme of research and action devoted to tackling the structural drivers of HIV (http://STRIVE.lshtm.ac.uk/), ViiV Health Care, and University of Manitoba. The views expressed herein are those of the authors and do not necessarily reflect the official policy or position of the UK Department of International Development, ViiV Health Care, or the University

of Manitoba.

Publisher Karnataka Health Promotion Trust

IT Park, 5th Floor, 1-4, Rajajinagar Industrial Area

Behind KSSIDC Administrative Office Rajajinagar, Bengaluru - 560 044

T: 91-80-40400200 **F**: 91-80-40400300 **W**: www.khpt.org





Regional, gender and social

disparities in secondary school attainment in Karnataka, South India

Ravi Prakash Parinita Bhattacharjee Raghavendra Thalinja Shajy Isac



CONTENTS

List of Tables	ii
List of Figures	iii
Acronyms	iv
Executive Summary	V
Introduction	1
1.1 Background	1
1.2 Objectives	3
1.3 Methodology	3
1.4 About Karnataka	5
1.5 Socio-demographic profile of Karnataka state	6
1.6 Classification of region and socio-demographic differentials	7
1.7 Socio-demographic differentials across the region	8
1.8 Structure of the report	9
School Enrolment and Continuation	10
2.1 Background	10
2.2 Enrolment of children in secondary schools	11
2.3 Gross Enrolment Ratio	13
2.4 Net Enrolment Ratio	15

2.5	Secondary school attendance among children aged 14-15 years	16
2.6	Ranking of the districts according to the level of secondary school attainment among girls	18
2.7	Current level of secondary school attainment: National Sample Survey	21
Tra	nsition and Drop Out Rates	25
3.1	Background	25
3.2	Transition rates between standards 7-8 and 8-9	26
3.3	Drop-outs across classes	28
3.4	Extent of non-enrolment in secondary education	30
3.5	Ranking of the districts according to the dropout and transition rates among girls	32
3.6	Characteristics of children discontinued the educational attainment: an exploration from NSSO data	35
3.7	Discontinuation from schools and the reasons	36
3.8	Characteristics of secondary schools in Karnataka	38
3.9	School to student ratio (SSR), school classroom ratio (SCR) and pupil-teacher ratio (PTR) in registered schools of Karnataka	40
Sur	nmary and Conclusion	43
Арр	endix-l	49
App	endix-II	59

Contents

LIST OF TABLES

Table No.	Particulars	Page No.
1.1	Socio-demographic profile of Karnataka state, 2001-2011	6
1.2	Classification of districts in three major regions	7
1.3	Differential in socio-demographic indicators across three regions, 2011	8
2.1	Caste and religion-wise differential in enrolment in secondary education across three regions in Karnataka state, 2014-15	12
2.2	Gross enrolment ratio in secondary education, gender parity index and gender gap across three regions in Karnataka state, 2014-15	14
2.3	Net enrolment ratio secondary education, gender parity index and gender gap across three regions in Karnataka state, 2014-15	15
2.4	Current school attendance, gender parity index and gender gap among children aged 14-15 years across three regions in Karnataka state, 2014-15	17
2.5	Ranking of districts (within the region and within the state) by female GER NER and literacy rate across three regions in Karnataka	, 19
2.6	Percentage of children aged 14-15 years by current school attainment, 2014-15	21
2.7	Percentage of children aged 14-15 years currently attending school by selected school level characteristics, 2014-15	22
2.8	Percentage of children aged 14-15 years currently attending school by selected socio-economic and demographic characteristics, 2014-15	23
3.1	Transition rate from class 7 to 8 and class 8 to 9, gender parity index and gender gap across three regions in Karnataka state, 2014-15	26
3.2	Transition rate from class 7 to 8 and class 8 to 9, gender parity index and gender gap among SC/ST population across three regions in Karnataka state, 2014-15	27
3.3	Dropout rates, gender parity index and gender gap across three regions in Karnataka state. 2014-15	28

3.4	Dropout rates, gender parity index and gender gap among SC/ST population across three regions in Karnataka state, 2014-15	29
3.5	Illiteracy, gender parity index and gender gap among children aged 14-15 years across three regions in Karnataka state, 2014-15	31
3.6	Ranking of districts (within the region and within the state) by dropout and transition rates among girls across three regions in Karnataka	33
3.7	Percentage of respondent currently not attending school* by selected characteristics, 2014-15	36
3.8	Selected secondary school related characteristics across three regions of Karnataka	38
3.9	SSR, SCR, and PTR in registered schools across three regions of Karnataka	41



LIST OF FIGURES

Fig. No.	Particulars	Page No.
2.1	Children enrolled in secondary school across the region in Karnataka state, 2014-15	11
3.1	Percentage of respondents by educational attainment status	35
3.2	Quality of secondary schools across different regions of Karnataka	40

/ ACRONYMS

CBSE	Central Board of Secondary Education
DISE	District Information System for Education
GER	Gross Enrolment Ratio
ICSC	Indian Certificate of Secondary Education
MPCE	Monthly Per Capita Expenditure
NER	NET Enrolment Ratio
NIOS	National Institute of Open Schooling
NSSO	National Sample Survey Organization
RMSA	Rashtriya Madhyamic Shiksha Abhiyan
RTE	Right to Education Act
SSA	Sarva Shiksha Abhiyan
SSLC	Secondary School Leaving Certificate



EXECUTIVE SUMMARY

profound educational policy forms the bedrock for national development.

Development of education levels of individuals has certainly a bearing on productivity, incomes and employment, which in turn, enhances the quality of life. Karnataka has been a pioneer in implementing several well thought out initiatives in the field of education and has several notable achievements to its credit. The state currently has one of the most widespread networks of elementary, as well as secondary schools in the country. Yet, the state continues to remain somewhere in the middle in education and other development indicators in comparison to other states in the country.

The educational achievements of the state can be characterised in terms of increasing female literacy, increased enrolment in primary education and declining gender gap, reduction in school drop-out, recruitment of female teachers, and the establishment of more schools. Despite these achievements, Karnataka's ranking in overall literacy rate remains weak as compared to other states in southern India. Although, the Right to Education Act (RTE) brought remedial measures to improve elementary education, the level of enrolment in secondary school remains far from satisfactory. Schooling for girls' and boys' in secondary classes in the state continues to be characterised by gender differentials, although a steady improvement is seen over the years. The state has not only witnessed gender disparities in educational attainment but also has been subjected to a striking regional imbalance in other developmental indicators, including the work participation, health infrastructure, and service facilities across its' different geographic regions.

In the recent past, the issue of regional imbalances in India is being prioritised for an intra-state analysis rather than exploring the interstate variations. Considerable work on regional imbalances has been carried out at the state level. Studies at the district or even at the local level are comparatively less in number. Further, the regional imbalances within a state are more important than those between different states due to for effective programme planning and implication at the lowest level, and none of the states in India are free from the problem of intra-state disparities in terms of human development.

¹ Education for All-Towards Quality with Equity, National University of Educational Planning and Administration, 2014. http://mhrd.gov.in/sites/upload files/mhrd/files/upload document/EFA-Review-Report-final.pdf

The present study has been carried out to explore the differential in secondary school attainment from the perspectives of geography (region), gender and social classes. For the purpose of this study, the state is divided into three broad regions, namely, Hyderabad-Karnataka region, Mumbai-Karnataka and Mysuru-Karnataka regions. The regional categorization was based on the history of Karnataka state administrative divisions since 1872. During this period, Karnataka was divided into five provinces. These provinces were Bombay Presidency, Madras Presidency, Hyderabad Princely state, Mysuru Princely state, and British territories and consisted of altogether nine princely states, 17 Princely districts, and 8 British districts. The state of Karnataka underwent repeated changes in administrative divisions till Indian independence in 1947. Post-independence, though Karnataka had five administrative divisions, it was confined to 21 districts with only one district in Coorg division and three districts each in Hyderabad and Madras states. For this study, the districts of Coorg division and Madras state were merged into Mysuru division.

Using the data from different sources such as Census 2011, District Information System for Education (DISE) 2013-14 and 2014-15, and the National Sample Survey Organization (NSSO) 2014-15, the present study aims to triangulate various indicators of secondary education and demonstrate the current level of secondary school attainment among boys and girls in the state, and the extent to which regional, social and gender differential persist at the secondary school level.

GER, NER, and current school attendance

Findings show that during the year 2014-15, about 18 lakh children aged 14 to 15 years were enrolled in the classes 9th and 10th and the level of enrolment in secondary schools was higher for boys (52 percent) compared to girls (48 percent). The gender gap in secondary school enrolment was observed to be highest in the Hyderabad-Karnataka region followed by Mumbai-Karnataka and Mysuru-Karnataka regions. A higher number of boys and girls belong to OBC category were enrolled for secondary education compared to those belonged to SC/ST community. The secondary school enrolment was lowest among Muslim children, especially among the girls.

The Gross Enrolment Ration (GER) in Karnataka state in 2014-15 was 77.3 percent. At the overall level, GER was higher among boys (about 79 percent) than girls (76 percent). Across the regions, GER was highest in Mysuru-Karnataka region followed by Mumbai-Karnataka region and Hyderabad-Karnataka region. Gender gap shows that gross enrolment ratio was higher for boys in all the three regions. However, the largest gender disparity in GER was observed in the Hyderabad-Karnataka region. The gender difference in GER also persisted among scheduled caste and scheduled tribe (SC/ST) boys and girls. At the overall level, compared to 80 percent boys of SC/ST group, 74 percent girls of the same social group were enrolled in secondary classes. Again the gender disparity in secondary school enrolment within the SC/ST community was more profound in the Hyderabad-Karnataka region followed by Mumbai-Karnataka and Mysuru-Karnataka regions.

The age-appropriate level of schooling, measured in terms of Net Enrolment Ratio (NER), revealed the fact that just over half of the children in Karnataka (56 percent) receive age-appropriate secondary schooling. The NER was 57 percent among boys compared to 55 percent among girls. Further, enrolment to secondary education and continuation is determined by regional, gender and social disparities. Of the three regions, NER was highest (62 percent) in Mysuru-Karnataka region followed by Mumbai-Karnataka region (55 percent) and Hyderabad-Karnataka region (38 percent). A high level of secondary school enrolment and continuation of schooling was found among both boys and girls belonging to the Mysuru-Karnataka region followed by Mumbai-Karnataka and Hyderabad-Karnataka regions. However, the gender differential in NER was more visible in Hyderabad-Karnataka region as compared to the other two regions.

Although the GER and NER revealed the current level of enrolment in secondary schools for boys and girls in Karnataka, it is important to understand to what extent, children enrolled at the secondary level, are currently attending the schools. Data from Census 2011 revealed that of the children aged 14-15 years enumerated, 81 percent were attending the school of which 82 percent were boys and 80 percent girls. Again the level of current school attendance was relatively weak in Hyderabad-Karnataka region compared to other two regions.

Characteristics of children currently attending school

Although the DISE and Census data provided the current level of school attainment, they do not however provide information on the characteristics of children currently attending secondary school. Data from the 71st round of National Sample Survey conducted in 2014 was analysed to understand the characteristics of children aged 14-15 years who were attending school at the time of the survey. Results show that, of the 557 children aged 14-15 years who participated in the survey, more than 90 percent are currently attending school, seven percent had dropped out, and about two percent never attended school. The current school attainment among the sampled children aged 14-15 years was highest in Mysuru-Karnataka region (95 percent), followed by Mumbai-Karnataka region (86 percent) and Hyderabad-Karnataka region (81 percent).

Findings suggest that while 55 percent children aged 14-15 years who participated in the survey were attending government schools, and the corresponding figure was highest in the Hyderabad-Karnataka region (76 percent).

The study also found that around 70 percent children are currently getting free education in Hyderabad-Karnataka region. Children from Hyderabad-Karnataka region had to travel less than 2 Km from their residence to reach school.

The better learning environment and better quality of education in the private schools were cited as the two major driving forces for girls to get enrolled in private institutions. Unavailability of a nearby government school in Mumbai-Karnataka and Hyderabad-Karnataka regions were also the important factors due to which relatively larger proportion of children got enrolled in a private institution. Children reported that English medium of instruction worked as a pull factor due to which they preferred private schools over the government schools.

Transition and dropout rates

Overall, 98 percent children transitioned from class 7th to 8th while 95 percent did so from class 8th to 9th in the state of Karnataka. Hyderabad-Karnataka region recorded the lowest level of transition rates (92 percent between classes 7th to 8th and 88 percent between classes 8th to 9th) compared to other two regions where almost 98-99 percent boys and girls transitioned to class 8th and 9th. No striking gender differential was observed in the transition rate.

Findings suggest that a large proportion of children dropped out of school when they moved from class 8th to 9th. The dropout rates among girls in general and those belong to SC/ST community, in particular, remained higher between class 8th to 9th (6 percent girls in general and 7 percent among SC/ST girls) when compared with girls who dropped out between class 7th to 8th (dropout rate of around 3-4 percent). The school dropout rate was highest among the SC/ST girls belonging to Hyderabad-Karnataka region while transitioning from class 8th to 9th (15 percent) compared to children of all other groups and regions. The extent of school dropout was much greater in the Hyderabad-Karnataka region than in the other two regions.

Using the data from Census 2011, the study also described the distribution of children aged 14-15 years by sex, social category, and region, who never attended school. Findings suggest that, at the overall level, five percent children aged 14-15 years from general community versus eight percent from the SC/ST communities never attended school. Moreover, girls from the SC/ST communities were more likely to remain out of school (10 percent) than the non-SC/ST girls (6 percent) and also boys belonging to general and SC/ST communities. Results also show that highest proportion of boys and girls from Hyderabad-Karnataka region aged 14-15 years never attended the school. For instance, about 3-5 percent non-SC/ST boys and girls in the Mysuru-Karnataka and Mumbai-Karnataka regions, 13 percent children aged 14-15 years (10 percent boys and 16 percent girls) from Hyderabad-Karnataka regions never attended school.

Profile of the children dropped out of school and reasons for dropout

Analysis of NSSO data suggests that a significantly higher proportion of children (33 percent) from Hyderabad-Karnataka region followed by Mumbai-Karnataka region (38 percent) mentioned that they dropped out of school after completing primary class (i.e. class 5th) or upper primary class (class 8th). In other words, as compared to 44 percent child respondents of Mysuru-Karnataka region who participated in the survey, about 66 percent from Mumbai-Karnataka and 60 percent from Hyderabad-Karnataka region reported dropping out from school by the time they completed elementary school (class 1-8).

The mean age at discontinuation from school was around 15-16 years which also corroborates with the findings that the maximum dropout has happened while the children transitioned from upper primary to secondary schools, i.e., class 8th to 9th. A comparatively lower mean age at discontinuation in Hyderabad-Karnataka and Mumbai-Karnataka regions (around 14 years) clearly indicates that the school dropout in these two regions was relatively earlier than the Mysuru-Karnataka region where mean age at discontinuation is about 16 years.

Engagements in economic and domestic activities were the two primary reasons cited for the school dropout. A group of respondents (children) also dropped out of school as they were either not interested in studies or they faced financial constraints. Marriage was found to be another important reason for the dropout from schools, especially among the respondents of Mumbai-Karnataka region.

Characteristics of secondary schools across the regions

In Karnataka, 15 thousand schools are secondary schools. Only one-third of all secondary schools are registered with the government department. The remaining are either private schools or social welfare schools. Findings show that almost 89 percent of sanctioned positions of the secondary schools are filled; however, there is striking gender differential in the proportion of working teachers as a significant proportion of currently working teachers in the secondary schools are male. Availability of female teachers was found to be a major factor promoting the continuation of girls schooling.

According to previous evidence, girl child believes that the presence of female teachers makes them comfortable in school. Results show that majority of the currently working teachers in the secondary schools are male teachers². The overall gender ratio of secondary school teachers was found to be around 558 female teachers per 1000 male teachers, ranging from as low as 397 in Mumbai-Karnataka region to a maximum of 644 female teachers per 1000 male teachers in the Mysuru-Karnataka region. Moreover, each female teacher in Mumbai-Karnataka and Hyderabad-Karnataka region takes care of as many as 38-39 girl students when compared with 23 girls per female teacher in the Mysuru-Karnataka region.

The analysis suggests that almost all the registered secondary schools in Karnataka have the necessary infrastructure like drinking water, electricity, library facilities and separate toilets for boys and girls. However, at the overall level, about 20 percent schools do not have a playground while one-fourth registered secondary schools do not have the compound wall which is one of the most important measures for child safety, particularly for girls.

The quality of secondary schools in Karnataka is being measured through indicators like Student Classroom Ration (SCR) and Pupil Teacher Ratio (PTR). Findings show that although the secondary schools in Karnataka are not very crowded as the overall SCR is below 30 students per classroom, some of the schools in north Karnataka districts and those in Ballari and Chamrajnagar districts are relatively more crowded than schools in other districts of the state.

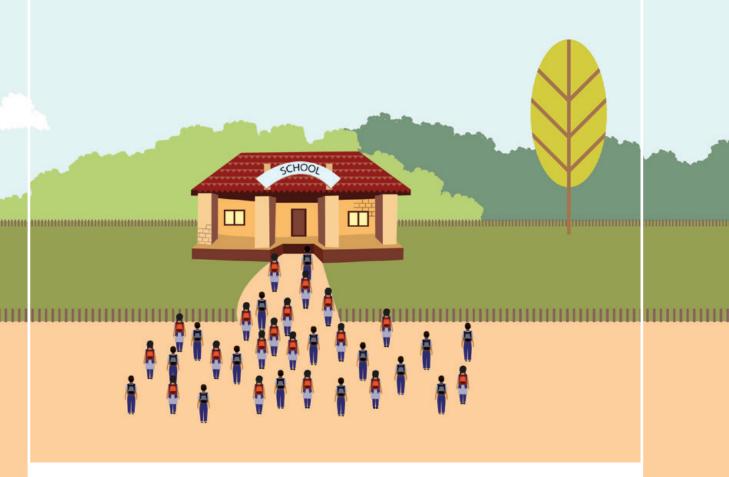
ix

² Bhagavatheeswarana L et al. 2016. The barriers and enablers to education among scheduled caste and scheduled tribe adolescent girls in northern Karnataka, South India: A qualitative study, International Journal of Educational Development; 49:262-270. doi: 10.1016/j.ijedudev.2016.04.004

Summary

- Hyderabad-Karnataka is the worst performing region across the state of Karnataka, followed by Mumbai-Karnataka and Mysuru-Karnataka on all indicators of educational attainment.
- Rates of enrolment and school attendance are higher among boys across all the regions in Karnataka.
- In general, girls are more likely to drop out at the secondary school level compared to boys, especially when they transition from class 8th to 9th, across all the regions in Karnataka.
- Girls from SC/ST communities are most vulnerable in terms of not entering or completing secondary schooling as compared to non-SC/ST girls and boys in general.
- Yadgir and Raichur districts in Hyderabad-Karnataka region and Vijayapura and Bagalkote districts in Mumbai-Karnataka region are poor performing districts on most indicators of educational attainment.

INTRODUCTION



1.1

Background

Education is an essential component to improve the quality of life of an individual as well as the quality of growth of an economy. Since independence, the focus of educational programmes in India was concentrated on elementary education, as the constitutional commitment is free and compulsory schooling to all children up to the age fourteen. Hence, all efforts were focused on achieving the goal of universal elementary education. Secondary schooling had never been in focus. However, the level of teaching beyond the elementary stage matters, especially in the context of an emerging knowledge-based society.

Secondary and higher secondary education not only furthers the knowledge base and necessary skills but also strengthens the foundation for specialised vocational training courses and acquiring specific skills which are required in the professional sector.

The Government of India has constituted a task force on secondary education to recognize the growing importance of secondary education. As a consequence, like Sarva Shiksha Abhiyan (SSA), the Department of School Education and Literacy of the Ministry of Human Resource Development (MHRD), Government of India launched *Rashtriya Madhyamic Shiksha Abhiyan* (RMSA) in 2009 with an aim to achieve Universal Access and Quality Secondary Education. Unlike the Universalisation of Elementary Education, which is by a Constitutional mandate, the Universalisation of Secondary and Higher Secondary Education is not mandated by the Constitution, but by moral principles and by need.

Situated in the southern part of the country, the state of Karnataka is well known for the presence of globally reputed educational institutions for higher education³. Achievements in education in Karnataka have been quite remarkable, and the state is moving towards universal literacy at a steady pace. The literacy rate increased from 56.0 percent to 75.4 percent during 1991-2011. The educational achievements of the state can be characterised in terms of increasing female literacy, increased enrolment in primary education and declining gender gap, reduction in drop out, recruitment of female teachers, and the establishment of more schools. Despite these achievements, the state ranking in overall literacy rate remains weak as compared to other states of southern India.

As per the 2011 Indian census, Karnataka stood at the 23rd rank in overall literacy rate; just above the eight EAG states⁴ and three north-eastern states. Although, the Right to Education Act (RTE) brought remedial measures to improve the elementary education, the enrolment levels in secondary schools remain far from satisfactory. Despite a steady improvement over the years, schooling for girls' and boys' in secondary classes in the state continue to be characterised by gender differentials⁵. The state has not only witnessed gender disparities in educational attainment but has also been subjected to a striking regional imbalance in other developmental indicators including work participation, health infrastructure, and service facilities across its' different geographic regions (locations)⁶.

History of Karnataka shows that North Karnataka was more developed politically, economically and culturally. After being defeated by Britishers, the Mysuru territory was divided into three parts, namely, Hyderabad Karnataka, Mumbai Karnataka and Mysuru Karnataka⁷.

Introduction 2

³ Referred to the educational institutions such as Indian Institute of Science, Indian Institute of Management, the National Institute of Technology Karnataka, Indian Institute of Information Technology, Dharwad, Visvesvaraya Institute of Advanced Technology (VIAT), and the National Law School of India University.

⁴ The Empowered Action Group (EAG) set up to facilitate preparation of area-specific programmes in eight States, namely, Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Orissa, Rajasthan, Uttar Pradesh and Uttarakhand, which have lagged behind in containing population growth to manageable levels. (http://pib.nic.in/archieve/lreleng/lyr2001/rjun2001/20062001/r200620011.html)

⁵ Vyasalu Vinod. 1995. "Management of Poverty Alleviation Programmes in Karnataka", *Economic and Political Weekly*, October 14-21.

⁶ Vidwas, SM. 1996. "Regional disparity: A New Approach", Indian School of Political Economy (IPSE) Occasional Paper 1, Pune: Indian School of Political Economy.

⁷ Nanjunhdappa, DM. 1999. "Karnataka's Economy: Retrospect and Prospects" in S Gowda and N Gowda (ed.). *Economic Development of Karnataka: Leading Issues*. Bangalore: Local Advisory Committee, 81 Annual Conference of the Indian Economic Association.

During the British rule (colonialism), Mysuru province was one of the better developed regions in India, as a result of planning and implementation of various social welfare programmes and policies for development. On the other hand, *Hyderabad Nawab* did not follow the example. Hence, Hyderabad Karnataka region did not develop that well. The same was the case with Mumbai Karnataka region, but it is comparatively better than Hyderabad Karnataka in terms of development. In addition, most parts of northern Karnataka have frequently been affected by famines and other scarcity circumstances. Before 1947, there was neither visible economic development of the region, nor investment in human capital. During 1970-71, the region experienced severe drought, which continued to affect people in the area until the 1980s. The region was again affected by severe drought during 2002-03. The region remains underserved, with limited infrastructures and other social developments. It has been a challenge to focus on establishing equity in health infrastructure in northern Karnataka districts. Additionally, the low level of literacy and insufficient workforce participation created a big gap in the development of this region in comparison with other parts of the state.

Disparities in these three regions are reflected in several development indicators, among which education is an important one. Gender and caste differentials, as well as disparities in literacy rates within these three regions affects enrolment of students at all levels of education viz, lower primary, higher primary, secondary, higher secondary, graduate and post graduate level of education. This study is an attempt to understand the different layers of disparities in secondary school attainment in the state of Karnataka by using the available secondary data sources.

In the recent past, the issue of regional imbalances in India is mostly a subject for the intra-state analysis rather than the inter-state 5.6. Considerable work on regional imbalances has been carried out at the state level, but studies at district level variations within the state are comparatively less explored. None of the Indian states is an exception, so far as the problem of intra-state disparity is concerned. It is likely that some states face more regional imbalances compared to others. However, the problem is present in all the states. Many Committees have been set up to examine regional imbalances within some states and Karnataka is considered as one of the states where the issue of regional imbalance is very acute8.

1.2

Objectives

Education is an essential component to improve the quality of life of an individual as well as the quality of growth of an economy. Since independence, the focus of educational programmes in India was concentrated on elementary education, as the constitutional commitment is free and compulsory schooling to all children up to the age fourteen. Hence, all efforts were focused on achieving the goal of universal elementary education. Secondary schooling had never been in focus. However, the level of teaching beyond the elementary stage matters, especially in the context of an emerging knowledge-based society.

3

⁵ Vyasalu Vinod. 1995. "Management of Poverty Alleviation Programmes in Karnataka", Economic and Political Weekly, October 14-21.

⁶ Vidwas, SM. 1996. "Regional disparity: A New Approach", Indian School of Political Economy (IPSE) Occasional Paper 1, Pune: Indian School of Political Economy.

⁸ Shiddalingaswami H and Raghavendra V K. 2010. "Regional Disparities in Karnataka: a District Level Analysis of Growth and Development", Centre for Multi-Disciplinary Development Research

What is the current level of enrolment in secondary education? Who are getting enrolled in greater numbers? What types of institutions are children attending?

Who are currently being deprived of schooling or dropping out?

What is the condition of current educational facilities in terms of infrastructure and staffing? Is the school environment enabling students, especially girls, to pursue their studies?

What can be the effective strategies to improve the performance of secondary education in the state?

1.3

Methodology

To fulfil the above-mentioned objectives, recent data from the Census of India 2011, National Sample Survey (NSSO) 71st round conducted in 2014, and District Information on School Education (DISE) 2013-14 and 2014-15 were used. These data sources provide information on the sociodemographic profile of the state, enrolment status of the students, drop-out status, the profile of schools, and profile of teachers, infrastructure, and quality of schools. While data from Census was used to estimate the number of children in different age groups by sex and social status groups, information obtained from NSSO was utilized to profile the children currently attending school and those out of school, types of school they are attending, reasons for not attending school, and other characteristics essential for designing the programme to improve the extent of secondary education.

Some of the indicators like children enrolled in secondary schools, gross enrolment ratio (GER), net enrolment ratio (NER), current school attendance, transition rates, dropout rates, proportion illiterate were considered as key outcome variables. Gender, caste, religion, and region were considered as independent variables while analysing the profile of children who were attending school at the time of data collection. Apart from that, a number of indicators related to quality and characteristics of schools were also considered. Most of the results in this report are presented in percentage form. However, the results also show gender parity index and the gender gap in selected indicators. The gender parity index is calculated by the ratio of female to male population (of that particular indicator) the gender gap is calculated as the difference between male to the female population to the total population.

Introduction 4

⁸ Shiddalingaswami H and Raghavendra V K. 2010. "Regional Disparities in Karnataka: a District Level Analysis of Growth and Development", Centre for Multi-Disciplinary Development Research

1.4

About Karnataka

Blessed with a diverse terrain conforming to all the romance of quintessential India, Karnataka delivers with its winning blend of palaces, tiger reserves, megacities, ancient ruins, beaches and legendary hang-outs. Karnataka is located in the southern part of the country, surrounded by other states like Maharashtra and Goa in the north, Tamil Nadu and Kerala in the south, Andhra Pradesh in the east and the Arabian Sea in the west.

The state of Karnataka is situated approximately between the latitudes 11.5° and 18.5° North and the longitudes 74° and 78.5° East. The state has a total land area of 1,91,791 sq.km, accounting for 5.83 percent of the total area of the country (32.88 lakh sq. km) and ranks eighth among major states in terms of size. Kannada is the most widely spoken and official language of the state.

The state has three major physical zones: The coastal strip, called Karavalli, between the Western Ghats and the Arabian Sea, which is lowland, with moderate to high rainfall levels. This strip is around 320 km in length and 48–64 km wide. The Western Ghats, called *Malenadu*, a mountain range inland from the Arabian Sea, rising to about 900 m average height, and with moderate to high rainfall levels. The Deccan Plateau, called *Bayalu Seeme*, comprising the main inland region of the state, which is drier and verging on the semi-arid. The humidity in these plains (or *maidans*) never exceeds 50 percent. The highest point in Karnataka is the Mullayanagiri hills in Chickmagalur district which have an altitude of 1,929 metres (6,329 ft). Some of the important rivers in Karnataka are Kaveri, Tungabhadra, Krishna, Malaprabha and the Sharavathi.

Karnataka State has been divided into four revenue divisions, 49 sub-divisions, 30 districts and 177 taluks for administrative purposes. The districts of Karnataka are as follows: Bagalkote (Bagalkot), Bengaluru Rural, Bengaluru Urban, Belagavi (Belgaum), Ballari (Bellary), Bidar, Vijayapura (Bijapur), Chamarajanagar, Chikkaballapura, Chikkamagaluru, Chitradurga, Dakshina Kannada, Davanagere, Dharwad, Gadag, Kalaburagi (Gulbarga), Hassan, Haveri, Kodagu, Kolar, Koppal, Mandya, Mysuru (Mysore), Raichur, Ramanagara, Shivamogga (Shimoga), Tumkur, Udupi, Uttara Kannada and Yadgir.

Each district is governed by a district commissioner or district magistrate. The districts are further divided into sub-divisions, which are regulated by sub-divisional magistrates; sub-divisions comprise blocks containing *Panchayats* (village councils) and town municipalities.

Socio-demographic profile of Karnataka state

As per the 2011 Census, the total population of the state is 6,10,95,297 with about 3,09,66,657 males and 3,01,28,640 females. The population growth rate for Karnataka in the last decade was 15.60 percent (2001 to 2011). Population density is 319 per km sq and the sex ratio is 973 females to 1000 males in 2011 which has increased from 965 in 2001.

Around 39 percent population (2011 Census) of Karnataka live in urban areas, a sizeable proportion of the total population of the state is literate (75 percent) consisting of 82 percent male literacy and 68 percent female literacy (Table 1.1).

Table 1.1 Socio-demographic profile of Karnataka state, 2001-2011

INDICATORS	2011	2001
Total Population	6,10,95,297	5,28,50,562
Male	3,09,66,657	2,68,98,918
Female	3,01,28,640	2,59,51,644
Total Population (0-6 Age)	71,61,033	71,82,100
Male Population (0-6 Age)	36,75,291	36,90,958
Female Population (0-6 Age)	34,85,742	34,91,142
Percentage of Total Population	5.05	5.14
Population Growth	15.60	17.25
Percentage Urban Population	38.70	33.99
Percentage of SC/ST Population	24.10	22.75
Percentage of Muslim Population	12.92	12.30
Sex Ratio	973	965
Child Sex Ratio	948	946
Literacy	75.36	66.64
Male Literacy (%)	82.47	76.10
Female Literacy	68.08	56.87
Density (persons per km²)	319	276
Area (km²)	1,91,791	1,91,791
Number of Towns	347	264
Number of Villages	29,340	27,481
_		

Source: Census 2011

Classification of region & socio-demographic differentials



To compare the different school level outcomes of interest across the regions, and to assess the gender and social disparities within as well as across the regions, the state is classified into three regions: Hyderabad-Karnataka region, Mumbai-Karnataka region and Mysuru-Karnataka region.

Of the 30 districts, five districts namely Bidar, Kalaburagi, Yadgir, Raichur, and Koppal comprised the Hyderabad-Karnataka region and seven districts, namely, Vijayapura, Bagalkote, Belagavi, Dharwad, Gadag, Haveri, and Uttar Kannada were clubbed into the Mumbai-Karnataka region. Rest of the 18 districts were grouped into the Mysuru-Karnataka region.

Table 1.2 shows the name of districts within each of the three regions.

Table 1.2 Classification of districts in three major regions

Hyderabad- Karnataka		
Mumbai- Karnataka	Vijayapura, Bagalkote, Belagavi, Dharwad, Gadag, Haveri, Uttar Kannada	Total Districts 7
Mysuru- Karnataka	Bengaluru, Bengaluru Rural, Ballari, Chamarajanagar, Chikkaballapura, Chikmagalur, Chitradurga, Udupi,Dakshina Kannada, Davanagere, Hassan, Kodagu, Kolar,Tumkur, Mandya, Mysuru, Ramanagara, Shivamogga	Total Districts 18

Socio-demographic differentials across the region

Table 1.3 shows that, according to 2011 census population, Mysuru-Karnataka region was the most populous region (37 million) comprising of 66 percent of total population of Karnataka followed by Mumbai-Karnataka region (24 percent) and Hyderabad-Karnataka region (14 percent). This is mainly because relatively more number of districts were included in the Mysuru-Karnataka region than in the remaining two regions.

It has also found that Mysuru-Karnataka region was more urbanized (45 percent) compared to the Mumbai-Karnataka and Hyderabad-Karnataka regions. However, the concentration of socioeconomically backward population (SC/ST and Muslim Population) was higher in Hyderabad-Karnataka region (33 and 16 percent respectively) in comparison to Mumbai-Karnataka region and Mysuru-Karnataka region. Interestingly, the overall sex ratio seems to be relatively better balanced (979 females per 1000 males) in Hyderabad-Karnataka region than the Mumbai-Karnataka region (971 females per 1000 males) and Mysuru-Karnataka region (972 females per 1000 males). However, the child-sex ratio was comparatively better in Mysuru-Karnataka region than the remaining two regions.

Literacy rate indicates that around 78 percent of total population is literate in Mysuru-Karnataka region which comprises 84 percent male literacy and 72 percent female literacy. Among the three regions, the literacy rate is comparatively less in Hyderabad-Karnataka region. Overall results indicate that among the three regions, Mysuru-Karnataka region is socio-demographically more developed compared to Mumbai-Karnataka region and Hyderabad-Karnataka region (Table 1.3).

Table 1.3 Differential in socio-demographic indicators across three regions, 2011

Indicators	Hyderabad Karnataka	Mumbai Karnataka	Mysuru Karnataka
Total Population	8762629	14793174	37539494
Male	4427186	7503933	19035538
Female	4335443	7289241	18503956
Percentage to Total Population	14.34	24.21	61.44
Percentage Urban Population	25.18	30.52	45.03
Percentage of SC/ST Population	33.79	18.07	17.29
Percentage of Muslim Population	16.40	14.40	11.50
Sex Ratio	979	971	972
Child Sex Ratio	948	939	953
Literacy	63.61	74.41	78.36
Male Literacy (%)	73.55	82.75	84.35
Female Literacy (%)	53.52	65.87	72.20
Literacy ratio (Female to Male literacy ratio)	0.73	0.80	0.86
Number of towns	39	95	213
Number of villages	3564	5299	20477

Source: Census 2011

1.8

Structure of the report

This report is divided into three chapters, including this introductory chapter. Chapter 2 describes the findings of the report on children's enrolment in secondary school and the school continuation in terms of the proportion of children currently enrolled, the GER and NER, extent of children currently attending school, their profile and type of school they are currently attending. Chapter 3 describes the transition and dropout rates, the extent to which children were never enrolled in school and reasons for dropout. This section also describes the school level characteristics that may influence child schooling. Chapter 4 briefly summarizes the main conclusions and highlights the findings that have significant implication for programme planning and implementation.

SCHOOL ENROLMENT & CONTINUATION



Background

At the outset, it is to be noted that unlike many other states in India, Karnataka and few other states have a different structure of school education. The elementary system in these states covers class I to class VII and the secondary education department of the government of Karnataka has the responsibility for classes eight, nine and ten so far. The higher secondary stage at the moment in the state is mostly a part of colleges with only a few schools having provision for class eleven and twelve.

However, at present, this system has not been followed uniformly across the state, and some of the schools (by different management type) continue to support the old system where class VIII was covered under the elementary school. The DISE considers class VIII under the elementary school. Therefore, to maintain uniformity across the districts within the state, we have considered class 1-8 under the elementary school and classes 9th and 10th under the secondary school. The findings of this chapter discuss the results on selected indicators related to the secondary school enrolment, continuation, and profile of the children currently attending secondary school by triangulating the data from different sources.

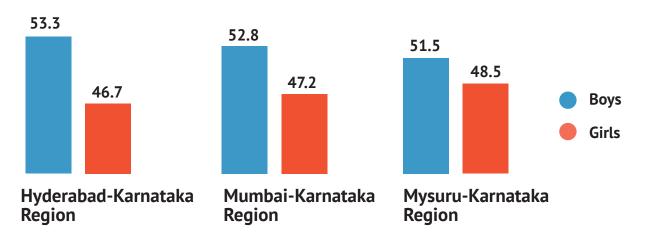
2.2

Enrolment of children in secondary schools

The District Information System for Education (DISE) provides information on the number of children enrolled in the school by different characteristics like the age of the children, class in which they are currently enrolled, type of school, and by some of the social categories. Findings show that, as per the DISE 2014-15, little more than 17.6 lakh children were enrolled in the classes 9th and 10th. Figure 2.1 represents an overall situation of enrolment of children by gender in secondary schools across the regions and suggests that more than half of the boys (52 percent) are enrolled in secondary education whereas the corresponding figure for girls is around 48 percent in Karnataka state.

Despite regional differences in the extent of secondary school enrolment, across all the three regions (Hyderabad-Karnataka, Mumbai-Karnataka, and Mysuru-Karnataka), more than 50 percent boys were enrolled in the secondary education, whereas, less than half of the girls were in the secondary school. Findings also indicate the persisting gender differential in the secondary school enrolment within each region. Although there was not a very striking gender difference in the secondary school enrolment, relatively larger gender gap was observed in the Hyderabad-Karnataka region followed by Mumbai-Karnataka and Mysuru-Karnataka regions.

Figure 2.1 Percentage of children enrolled in secondary schools (class 9 and 10) across the three regions in Karnataka state, 2014-15



Caste and religion-wise differential in secondary school enrolment are presented in Table 2.1. The results show disparity persisted at the secondary level enrolment across the social groups in the state. Secondary school enrolment was highest among children belonging to OBC category (55 percent) compared to children belonging to General (20 percent), SC (18 percent) and ST (7 percent) categories respectively. Boys and girls enrolment in secondary education by caste also gave similar results, i.e., a higher percentage of boys and girls belonging to OBC category were enrolled in secondary schools compared to their other social counterparts. It has also found that the rate of enrolment in class 9th and 10th standard was lowest among Muslim children (12 percent), of which, 11 percent were boys, and 13 percent were girls.

Table 2.1 Caste and religion-wise differential in enrolment in secondary education across three regions in Karnataka state, 2014-15

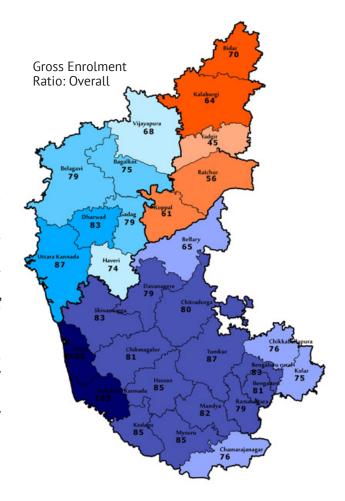
	Region	Childr SC	en enre ST	olled in OBC		-10 (%) MUSLIM	No. of children
	Hyderabad- Karnataka	21.1	10.3	55.2	13.5	16.0	2,40,834
	Mumbai- Karnataka	13.1	5.3	54.2	27.4	13.0	4,54,441
IAL	Mysuru- Karnataka	18.8	7.2	55.2	18.7	10.7	10,71,655
TOTAL	Karnataka	17.6	7.2	54.9	20.2	12.0	17,66,930
	Hyderabad- Karnataka	22.5	10.8	53.1	13.6	14.4	1,28,263
	Mumbai- Karnataka	13.6	5.4	53.2	27.8	12.2	2,39,807
(S	Mysuru- Karnataka	18.8	7.3	54.9	19.0	10.3	5,52,436
BOYS	Karnataka	18.0	7.3	54.2	20.5	11.3	9,20,506
	Hyderabad- Karnataka	19.5	9.7	57.6	13.3	17.9	1,12,571
	Mumbai- Karnataka	12.6	5.3	55.2	26.9	13.9	2,14,634
T	Mysuru- Karnataka	18.8	7.2	55.6	18.4	11.2	5,19,219
GIRLS	Karnataka	17.3	7.1	55.7	19.9	12.8	8,46,424

Source: District Information System for Education (DISE), 2014-15

Inter-regional comparison in secondary school enrolment shows that more than 50 percent OBC children were enrolled in secondary education whereas SC, ST, General and even Muslim enrolment in secondary school was far low in all the three regions. Nevertheless, among the social categories other than OBC, more children belonging to SC and ST in Hyderabad-Karnataka region (21 percent and 10.3 percent respectively), and more children belonging to General category (27 percent) in Mumbai-Karnataka region were enrolled for secondary education.

Cross Enrolment Ratio

The Gross Enrolment Ratio (GER) defined as children at a given education level who may be over or underaged relative to the age group used as a divisor, was used as another indicator to represent the extent of enrolment in secondary school among boys and girls in the state. The GER extended to 100 percent represents the case where all the children at a given education level are enrolled relative to a particular age group. Table 2.2 shows that, at the overall level, GER in the secondary school during 2014-15 was 77 percent which constitutes around 79 percent boys and 76 percent girls. The GER at secondary school level was much lower than GER at the elementary school which hovered around 97-98 percent across the state (see Appendix). These two results clearly give an indication that enrolment of boys and girls in the secondary school are much lower than the primary and upper primary levels.



Findings also depicted a remarkable regional differential in GER across the state. Across all the three regions, GER was highest in Mysuru-Karnataka region (82 percent) followed by Mumbai-Karnataka region (78 percent) and Hyderabad-Karnataka region (60 percent). The GER was more for boys across the three regions and was highest in Mysuru-Karnataka region (83 percent) followed by Mumbai-Karnataka (80 percent) and (Hyderabad-Karnataka) region (63 percent). Gender parity index and gender gap show the level of disparity in GER, and the gender issue has persisted across the three regions in Karnataka till date, with Hyderabad-Karnataka region being the most gendered region across the state in terms of GER in secondary schooling (Table 2.2).

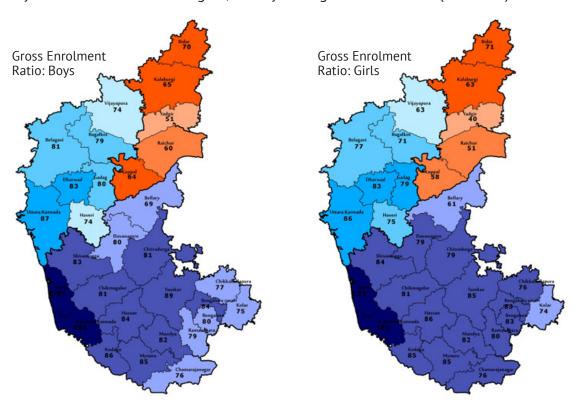
Differences in GER were also observed among socially backward boys and girls across the regions. As compared to SC/ST girls, a relatively higher proportion of boys belonging to the same category were enrolled in secondary classes across the regions. Similar to the boys and girls of non-SC/ST categories, the proportion of boys attending the secondary school was highest in Mysuru-Karnataka region (88 percent) followed by Mumbai-Karnataka and Hyderabad-Karnataka regions.

Table 2.2 Gross enrolment ratio in secondary education, gender parity index and gender gap across three regions in Karnataka state, 2014-15

	Region	Gross of Boys	enrolme Girls	nt ratio Total	Gender Parity Index	Gender Gap
	Hyderabad- Karnataka	62.8	57.9	60.4	0.78	0.25
	Mumbai- Karnataka	79.5	75.4	77.5	0.95	0.05
OVERALL	Mysuru- Karnataka	83.0	81.9	82.4	0.99	0.01
8	Karnataka	78.5	76.0	77.3	0.97	0.03
	Hyderabad- Karnataka	61.9	49.8	56.0	0.81	0.22
	Mumbai- Karnataka	80.0	70.2	75.2	0.88	0.13
SC / ST	Mysuru- Karnataka	88.4	85.2	86.8	0.96	0.04
SC,	Karnataka	80.4	73.9	77.2	0.92	0.08

Source: District Information System for Education (DISE), 2014-15

The disparity in enrolment among backward groups (GPI=0.92 and GG=0.08) persists in all the three regions, with Hyderabad-Karnataka region being a highly gendered region in terms of secondary school enrolment among SC/ST boys and girls in the state (Table 2.2).



Net Enrolment Ratio

The Net Enrolment Ratio (NER) is defined as the number of children enrolled in a given level of education which belong to the age group that officially corresponds to that particular level of education, divided by the total population of the same age group. The NER also represents the age appropriate schooling. Net enrolment ratio in Karnataka is 56 percent suggesting the fact that

just half of the children in the state are accessing age-appropriate education. Moreover, the distribution of NER is not uniform across the three regions of Karnataka. The highest NER is found in Mysuru-Karnataka region (62 percent) followed by Mumbai-Karnataka region (55 percent) and the lowest in Hyderabad-Karnataka region (38 percent). There is also a gender gap in NER as boys outnumbered girls across the regions. However, inter-region comparison indicates, NER was highest among boys in Mysuru-Karnataka region (63 percent) and lowest in Hyderabad-Karnataka region (40 percent) (Table 2.3). The corresponding estimates for girls were 61 percent in Mysuru-Karnataka region, 53 percent in Mumbai-Karnataka and 37 percent in Hyderabad-Karnataka regions, Gender Parity Index in NER suggests highest gender disparity in NER in Hyderabad-Karnataka region

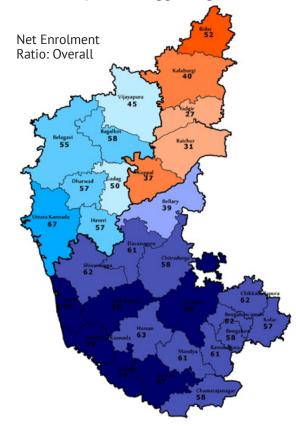


Table 2.3 Net enrolment ratio secondary education, gender parity index and gender gap across three regions in Karnataka state, 2014-15

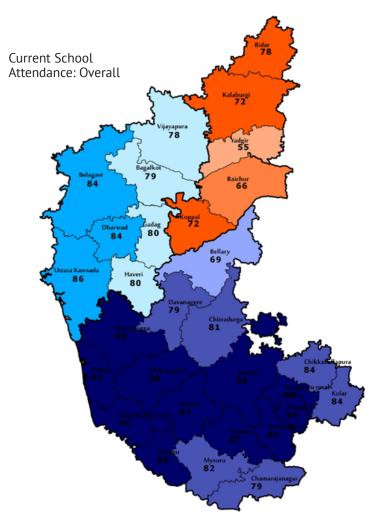
Region	Region Net enrolment ratio		Gender Parity	Gender Gap	
	Boys	Girls	Total	Index	
Hyderabad- Karnataka	39.9	36.6	38.3	0.77	0.02
Mumbai- Karnataka	56.5	53.1	54.9	0.88	0.00
Mysuru- Karnataka	62.5	61.2	61.9	0.89	0.01
Karnataka	57.0	54.9	56.0	0.86	0.01

Source: District Information System for Education (DISE), 2014-15

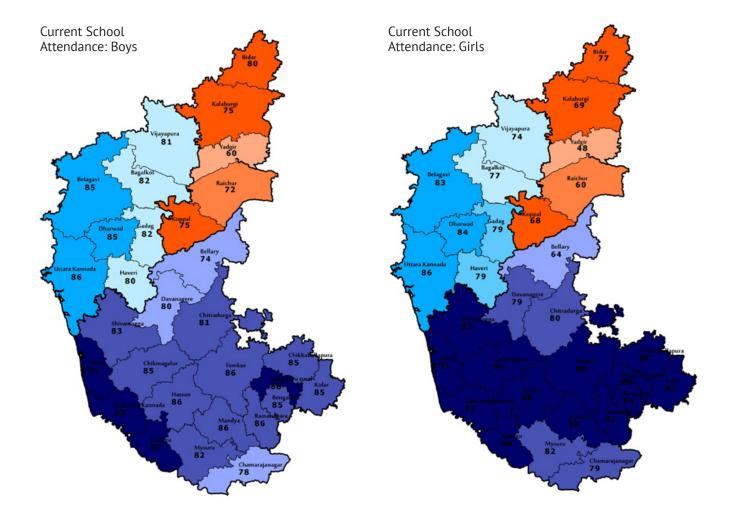
Secondary school attendance among children aged 14-15 years

As seen above, just over 50 percent of the boys and girls in the state are enrolled in secondary education appropriate to their age. However, the level of enrolment, measured through GER or NER as indicators, may not be sufficient to understand the secondary school attainment among children, until we analyse to what extent the children aged 14-15 years are currently attending the school. The recently conducted Census in India, 2011, collected information on the age-wise distribution of a number of children currently attending school. This information was used to analyse the current school attainment of children aged 14-15 years in the state.

Findings suggest that, at the state level, about 81 percent children (82 percent boys and 80 percent girls) aged 14-15 years were attending secondary school by the year 2011. Unlike the previous findings, the level of current school attendance was poor in Hyderabad-Karnataka region as compared to other two regions. Overall, about 70 percent children aged 14-15 years from this region were found to be attending school, as against 82-84 percent children of similar age group who were attending secondary school in the Mumbai-Karnataka and Mysuru-Karnataka regions. The sex-wise differential was evident in the level of current school attainment.



Similar to the GER and NER, at the overall level, boys outnumbered girls in terms of current school attainment (82 percent against 80 percent) in Karnataka. However, the gender differential in current school attainment was more visible in Hyderabad-Karnataka region as compared to other two regions. While more than 80 percent boys and girls aged 14-15 years were attending secondary education in Mysuru- Karnataka and Mumbai-Karnataka regions, about 66 percent girls compared to 73 percent boys within the Hyderabad-Karnataka region were in school at the time when the 2011 Census was conducted.



Current school attendance among socially backward groups was 74 percent according to 2011 census. Current school attendance among boys was more (77 percent) compared to girls (71 percent). Amongst the three regions, current school attendance among boys and girls was comparatively higher in Mysuru-Karnataka region (79 percent and 77 percent respectively) and low in Hyderabad-Karnataka region (68 percent and 56 percent respectively). Inequality in current school attendance among boys and girls was comparatively higher in this region (GPI=0.83 and GP=0.18) than the other two (Table 2.4).

Table 2.4 Current school attendance, gender parity index and gender gap among children aged 14-15 years across three regions in Karnataka state, 2014-15

	Region		ently in 9-10 (%)		Gender Parity Index	Gender Gap	
		Boys	Girls	Total			
	Hyderabad- Karnataka	73.1	65.9	69.7	0.90	0.10	
OVERALL	Mumbai- Karnataka	83.2	80.3	81.8	0.97	0.04	
	Mysuru- Karnataka	84.0	83.8	83.9	1.00	0.00	
6	Karnataka	81.9	79.8	80.9	0.93	0.03	

Region			ently in 9-10 (%		Gender Parity Index	Gender Gap	
		Boys	Girls	Total			
	Hyderabad- Karnataka	68.0	56.4	62.6	0.83	0.18	
=	Mumbai- Karnataka	78.5	71.5	75.2	0.91	0.09	
OVERALL	Mysuru- Karnataka	79.4	77.2	78.3	0.97	0.03	
0	Karnataka	76.6	71.4	74.1	0.93	0.07	

^{*}Aged 14-15 years. Source: Census, 2011

2.6

Ranking of the districts according to the level of secondary school attainment among girls

Ranking of the districts of Karnataka state within the three regions and the state by girls' enrolment in secondary education is presented in Table 2.6. The GER in the Hyderabad-Karnataka region was lowest in Yadgir District (40 percent), which also stood at the bottom position (ranked 1) in the state in terms of lowest GER. The SC/ST girl children were particularly left out of secondary education in this district with GER of just 30 percent. Due to lower participation of girl children in secondary schools, Yadgir district ranked first in terms of NER (23 percent) and current school attendance (49 percent) indicator as well. Raichur district which falls under Hyderabad-Karnataka region ranked second within the region and also in the state across all the indicators because of its low enrolment of girls in secondary school. The GER among girl children of Mysuru-Karnataka region was found to be highest in Dakshina Kannada and Udupi districts (almost 100 percent) while NER in these two districts was 66 percent and 75 percent, respectively.

In terms of overall girl child enrolment (GER, NER, and current school attendance) in Mumbai-Karnataka region, Vijayapura district retained the bottom position (ranked 1) within the region in terms of poor gross enrolment ratio. Bagalkote district was the next poor performing district within the region as far as female GER is concerned. At the state level, Vijayapura and Bagalkote districts stood at 5th and 7th position respectively, in terms of poor female GER. The current school attendance among non-SC/ST population was again lowest in these two districts. However, among SC/ST girls school attendance was lowest in Gadag and Vijayapura districts at 65 percent.

Table 2.5 Ranking of Districts (within the region and the state) by female GER, NER and current school attendance across three regions in Karnataka

Region	District	GER (Overall)		king n the: State	GER (SC/ST)	Ranl within Region	-
	Bidar	70.7	5	8	67.8	5	8
Hyderabad-	Kalaburagi	63.0	4	6	54.5	4	5
Karnataka	Koppal	58.3	3	3	52.9	3	4
region	Raichur	50.9	2	2	40.2	2	2
	Yadgir	39.6	1	1	30.2	1	1
	Bagalkote	70.7	2	7	64.0	2	7
	Belagavi	77.1	4	13	75.4	5	11
Mumbai-	Vijayapura	62.9	1	5	55.6	1	6
Karnataka	Dharwad	83.4	6	22	85.7	7	20
region	Gadag	78.9	5	15	70.8	3	9
	Haveri	75.2	3	10	71.0	4	10
	Uttara Kannada	86.1	7	28	81.5	6	15
	Bengaluru	82.8	10	20	92.5	14	26
Mysuru-	Bengaluru Rural	83.2	11	21	101.0	16	28
Karnataka	Ballari	60.6	1	4	52.3	1	3
region	Chamarajanagar	75.8	3	11	84.4	6	17
	Chikkaballapura	76.0	4	12	80.2	4	14
	Chikmagalur	81.1	8	18	90.3	9	21
	Chitradurga	78.8	5	14	85.1	7	18
	Dakshina Kannada	102.4	18	30	111.0	17	29
	Davanagere	79.3	6	16	80.0	3	13
	Hassan	85.8	16	27	95.2	15	27
	Kodagu	84.7	13	24	84.2	5	16
	Kolar	74.2	2	9	77.3	2	12
	Mandya	81.8	9	19	85.4	8	19
	Mysuru	85.2	14	25	90.7	11	23
	Ramanagara	79.7	7	17	90.9	12	24
	Shivamogga	84.4	12	23	92.4	13	25
	Tumkur	85.3	15	26	90.5	10	22
	Udupi	99.0	17	29	122.6	18	30

NER (Overall)	Rank within Region	_	Current Attendance* (Overall)	Rank withir Region	the:	Current Attendance* (SC/ST)	Rank within Region	_
52.1	5	8	76.8	5	8	72.0	5	12
39.2	4	5	69.2	4	6	59.3	3	5
35.5	3	3	68.4	3	5	60.1	4	6
28.5	2	2	60.5	2	2	49.1	2	2
23.5	1	1	47.9	1	1	36.3	1	1
55.0	4	10	77.0	2	9	66.5	3	9
52.2	3	9	82.7	5	17	75.6	5	14
41.6	1	6	73.6	1	7	65.3	2	8
56.7	5	13	84.0	6	20	77.8	6	16
50.0	2	7	78.8	3	11	64.6	1	7
58.0	6	15	79.1	4	12	72.5	4	13
66.4	7	26	85.8	7	21	81.0	7	22
58.6	5	16	86.2	8	22	83.1	12	26
61.9	10	21	87.8	13	27	85.0	16	30
36.6	1	4	64.3	1	3	53.2	1	3
57.5	4	14	79.4	3	13	81.9	9	23
60.2	6	17	83.8	7	19	80.5	8	21
66.3	14	25	86.3	9	23	79.8	7	20
56.0	3	12	80.3	4	15	75.7	3	15
78.1	18	30	91.6	18	32	86.2	18	32
60.3	7	18	78.7	2	10	71.1	2	10
62.7	12	23	88.3	16	30	82.3	10	24
71.3	16	28	88.1	14	28	78.1	4	17
55.3	2	11	83.5	6	18	82.8	11	25
61.7	8	19	88.2	15	29	85.3	17	31
66.7	15	27	82.0	5	16	79.3	5	18
61.8	9	20	87.0	12	26	83.7	15	29
62.0	11	22	86.6	11	25	79.5	6	19
66.0	13	24	86.5	10	24	83.5	13	27
75.3	17	29	90.8	17	31	83.6	14	28

^{*}among children aged 14-15 years

Ballari district gets the first rank in terms of lowest female enrolment in secondary school and across all the outcome indicators within the Mysuru-Karnataka region. Kolar is the second lowest ranked district within the region in terms of non-SC/ST female GER, SC/ST GER, and non-SC/ST NER. However, in the case of overall current school attendance rate and among SC/ST group, Davanagere district ranks second within the region (Table 2.5).

2.7

Current level of secondary school attainment: National Sample Survey

Although the DISE and Census 2011 data provide the current level of educational attainment, they do not provide information on the characteristics of children currently attending secondary school. Also, they also do not give information on school-level characteristics such as the type of school, distance from home, medium of instruction, etc. Data from the recently conducted National Sample Survey (71st round, 2014) provides an opportunity to extract this information. Because the survey carried out by NSSO is representative at the national and sub-national level, we have obtained relevant information on the above-mentioned aspects from the NSSO data and presented it in the following section.

Overall, information on the educational attainment and drop out was collected from 6167 children aged 5-29 years, of which less than 10 percent boys and girls (n=557) were aged 14 to 15 years. Results show that, of the 557 children aged 14-15 years who participated in the survey, more than 90 percent are currently attending school, seven percent had dropped out and about two percent never attended school. The current school attainment among the sampled children aged 14-15 years was highest in Mysuru-Karnataka region (95 percent), followed by Mumbai-Karnataka region (86 percent) and Hyderabad-Karnataka region (81 percent). On the other hand about 13 percent children aged 14-15 years from Mumbai-Karnataka and Hyderabad-Karnataka regions had dropped out of school (Table 2.6).

Table 2.6 Percentage of children aged 14-15 years by current school attainment, 2014-15

INDICATORS	Hyderabad- Karnataka region	Mumbai- Karnataka region	Mysuru- Karnataka region	Karnataka
Never attended school	5.4	0.0	2.1	2.3
Ever attended but not currently	13.3	13.6	3.0	7.3
Currently attending school	81.3	86.4	94.9	90.4
No. of children*	114	126	317	557

Source: NSSO 71st round, 2014; *unweighted cases

Table 2.7 presents the selected school level characteristics as reported by children currently attending secondary school across different regions. Results show that about three-fourth of the children aged 14-15 years from Hyderabad-Karnataka region were attending government schools

and about 70 percent were currently getting free education as compared to 57 percent children in Mumbai-Karnataka and 48 percent children in Mysuru-Karnataka regions, attending government schools. Close to 80 percent children from Hyderabad-Karnataka and Mumbai-Karnataka regions also mentioned that they received a free meal or nutritious food from their school. Other than 16 percent of the children from Hyderabad-Karnataka regions all others (84 percent) attend a nearby school (within a periphery of 2 km from their place of residence). In contrast, 63 percent secondary school going children in Mumbai-Karnataka region and 60 percent in Mysuru-Karnataka region were enrolled in a school which was less than 2 km from their place of residence at the time of the survey.

Table 2.7 Percentage of children aged 14-15 years currently attending school by selected school level characteristics, 2014-15

INDICATORS	Hyderabad- Karnataka region	Mumbai- Karnataka region	Mysuru- Karnataka region	Karnataka
Currently studying in government school	75.6	57.3	48.3	54.8
Current education is free	69.5	48.6	31.2	41.3
Receive meal/tiffin/ nutrition food	78.3	88.1	62.1	70.4
Distance <2 km of educational institution from residence	84.0	62.6	59.6	64.3
Changed educational institution in last one year	0.8	11.6	9.2	8.3
Continuing in the same class as that of previous year	0.1	4.9	0.7	1.5
Reason for preferring private inst	itution* ———			
Better learning environment	36.8	47.5	59.2	54.9
Quality of education in govt. institution not satisfactory	31.3	10.7	19.2	18.6
English medium of instruction	16.2	15.6	17.1	16.7
No government institution nearby	12.5	26.2	4.3	9.5
Could not get admission in government institution	3.2	0.0	0.1	0.4
No. of children**	96	110	305	511

^{*}Among those who are studying in private schools (aided/unaided); Source: NSSO 71st round, 2014

School Enrolment and Continuation

^{**}unweighted cases

The survey also captured information from the respondents about the reasons for attending a particular type of secondary school at the time of the survey. Table 2.7 depicts several reasons due to which children currently attending secondary school preferred to attend private schools over the government schools. Importantly these reasons differed for the students belonging to different regions. While children of all the three regions mentioned better learning environment as the most important reason for attending private schools, 31 percent children from Hyderabad-Karnataka region and 19 percent from Mysuru-Karnataka region reported that quality of education in government schools is not satisfactory. On the other hand, among most of the children (26 percent) from Mumbai-Karnataka region, unavailability of government institution was another reason for preferring private institution.

An attempt was also made to analyse the socio-economic and demographic characteristics of children aged 14-15 across the three regions with their current school attendance. Results presented in Table 2.8 suggest that majority of the children aged 14 years were attending school across all the three regions. A relatively larger proportion of girls in Mumbai-Karnataka region (90 percent) and Hyderabad-Karnataka region (88 percent) were found to be in school, whereas larger proportion of boys(96 percent) in Mysuru-Karnataka region were in school. Also, children who were residents of urban areas and following Hindu religion were more likely to be in school. Compared to children belonging to rich and richest MPCE (monthly per capita expenditure) quintile, those belonging to poorest MPCE quintile were less likely to be in the school.

Table 2.8 Percentage of children aged 14-15 years currently attending school by selected socio-economic and demographic characteristics, 2014-15

CHARACTERISTICS	Hyderabad- Karnataka region		Mumbai- Karnataka region		Mysuru- Karnataka region		Karnataka		
	%	N	%	N	%	N	%	N	
Current age									
14	91.9	57	89.0	66	95.6	178	93.5	301	
15	73.6	57	83.5	60	94.0	139	87.2	256	
Significance (p-value)	0.00	0	0.00	00	0.00	00	0.0	0.000	
Sex									
Male	75.4	57	83.6	70	96.1	162	89.3	289	
Female	87.6	57	89.6	56	93.7	155	91.7	268	
Significance (p-value)	0.00	0	0.00	00	0.00	00	0.0	00	
Place of residence									
Rural	79.2	74	83.7	67	94.1	148	88.3	289	
Urban	89.0	40	91.2	59	96.0	169	94.2	268	
Significance (p-value)	0.00	0	0.000		0.00	0.000		0.000	
Religion									
Hindu	82.9	90	87.9	94	94.2	262	90.7	446	
Non-Hindu	(75.0)	24	81.3	32	98.2	55	89.2	111	
Significance (p-value)	0.00	0	0.00	00	0.00	00	0.0	00	

CHARACTERISTICS	Hydera Karnat region		Mumba Karnat region	aka	Mysuri Karnat region	aka	Karnat	aka
	%	N	%	N	%	N	%	N
Caste								
SC/ST	(81.1)	21	66.7	32	94.1	71	85.4	124
OBC	87.8	49	87.4	58	93.0	154	91.0	261
Others	73.8	44	100.0	36	99.1	92	93.3	172
Significance (p-value)	0.000)	0.00	0	0.00	0	0.00	00
Household Size								
<=5	82.5	58	96.0	73	95.6	227	93.8	358
6-9	89.2	45	72.5	41	97.4	75	87.7	161
>=10	(41.4)	11	(79.0)	12	(66.1)	15	61.5	38
Significance (p-value)	0.000)	0.00	0	0.00	0	0.00	00
MPCE Quintile								
Poorest	83.6	12	68.9	34	89.3	63	83.0	109
Poor	82.2	36	(96.3)	29	87.1	40	88.2	105
Middle	68.4	35	(95.5)	28	98.4	63	88.7	126
Rich	(100.0)	24	(89.3)	21	98.8	64	97.2	109
Richest	(100.0)	7	(87.3)	14	100.0	87	98.5	108
Significance (p-value)	0.000)	0.00	0	0.00	0	0.00	00
Total	81.3	114	86.4	126	94.9	317	90.4	557

MPCE: Monthly Per Capita Expenditure; percentages in parenthesis are based on less than 30 cases.

Source: NSSO 71st round, 2014

TRANSITION AND DROP OUT RATES



3.1 Background

The Sarva Shiksha Abhiyan (SSA) has initiated a number of programmes for better access, effective participation and successful completion of elementary education by all children 6 to 14 years. This is also expected to result in better transition of children from elementary to secondary education. However, evidence suggests that the transition rate is still a matter of concern for the state. Thus, the focus of this chapter is to explore the transition rates and dropout rates among school going children between classes 7th to 8th and 8th to 9th.

Also, the proportion of school going children who never attended school; dropout rates and percentage of girls who never attended school; and ranking of the districts by the level of transition to secondary education are also presented in this chapter. Some of the school level characteristics which may have potential influence on the high dropout rate are also discussed here.

3.2

Transition rates between classes 7-8 and 8-9

Information obtained from two consecutive years of DISE (2013-14 and 2014-15) was used to analyse the transition rates among boys and girls by sex, social category, and region. Results show that at the overall level, around 98 percent children transitioned from class 7 to 8 (99 percent boys and 98 percent girls) while 95 percent boys and girls transitioned from class 8 to 9 in Karnataka state. Observing regional variation, the transition rates between class 7th to 8th and class 8th to 9th remained highest in Mysuru-Karnataka region (100 percent and 98 percent) as compared to Mumbai-Karnataka (98 percent and 95 percent) and Hyderabad-Karnataka regions (92 percent and 88 percent), respectively.

Table 3.1 Transition rate from class 7 to 8 and class 8 to 9, gender parity index and gender gap across three regions in Karnataka state, 2014-15

	Region		nsition I	Rate	Gender Parity	Gender Gap
		Boys	Girls	Total	Index	
	Hyderabad- Karnataka	92.9	91.7	92.3	0.99	0.01
CLASS 7 - 8	Mumbai- Karnataka	98.4	97.9	98.2	1.00	0.00
	Mysuru- Karnataka	100.0	99.1	99.8	0.99	0.01
귕	Karnataka	98.7	97.5	98.1	0.99	0.01
	Hyderabad- Karnataka	88.5	87.0	87.8	0.98	0.02
6-	Mumbai- Karnataka	95.1	94.0	94.5	0.99	0.01
CLASS 8	Mysuru- Karnataka	97.5	97.5	97.5	1.00	0.00
3	Karnataka	95.5	95.0	95.3	0.92	0.01

Source: District Information System for Education (DISE), 2013-14 & 2014-15

Results did not show any significant gender disparity in transition rates within each region (Table 3.1). The transition rate for both boys and girls was highest in Mysuru-Karnataka region (100 percent for boys and 99 percent for girls) followed by Mumbai-Karnataka region (98 percent for both boys and girls) and Hyderabad-Karnataka region (93 percent for boys and 92 percent for girls). A similar pattern ensued in case of transition from class 8 to 9. The highest transition from class 8 to 9 was found in Mysuru-Karnataka region.

Table 3.2 shows that transition rates among children from SC/ST population across the regions. Findings suggest that the transition rates were around 95 percent or above between the two classes, i.e., from 7 to 8 and 8 to 9, among both boys and girls belong to SC/ST category across all the three regions. However, this was not the case for Hyderabad-Karnataka region where the transition rate from class 8 to 9 among SC/ST population was found to be around 87 percent. Similar to the case of general population, no significant gender variation was observed in the transition rates of boys and girls within each region. However, at the overall level as well as across the regions, the transition rates were marginally smaller in SC/ST population compared to the population in general.

Table 3.2 Transition rate from class 7 to 8 and class 8 to 9, gender parity index and gender gap among SC/ST population across three regions in Karnataka state, 2014-15

Region		Tra	nsition	Rate	Gender Parity	Gender Gap	
		Boys	Girls	Total	Index		
_	Hyderabad- Karnataka	93.8	90.4	92.2	0.96	0.04	
	Mumbai- Karnataka	98.4	97.3	97.9	0.99	0.01	
OVERALL	Mysuru- Karnataka	100.0	98.8	99.4	0.99	0.01	
8	Karnataka	98.3	96.7	97.5	0.98	0.02	
	Hyderabad- Karnataka	88.6	85.5	87.3	0.96	0.04	
	Mumbai- Karnataka	94.9	94.9 93.1 94.1		0.98	0.02	
SC / ST	Mysuru- Karnataka	97.0	97.3	97.1	1.00	0.00	
SC	Karnataka	94.9	94.3	94.6	0.99	0.01	

Source: District Information System for Education (DISE), 2013-14 & 2014-15

3.3

Drop-outs across classes

As with the transition rates, the dropout rates were also analysed between classes 7th to 8th and 8th to 9th. Table 3.3 shows that, at the overall level, dropout rates were higher when children transitioned from elementary to secondary school, i.e., between class 8 to 9 (6 percent) compared to class 7 to 8 (3 percent) in Karnataka state. Gender disparity was evident in the school dropout rates. Girls, in comparison to boys, were more likely to drop out of school in some regions and during particular classes. For example, when compared to a tiny proportion of boys (0.4 percent), about two percent girls in Mysuru-Karnataka region dropped out of school while transitioning from class 7th to 8th. Also, the dropout rate of girls between classes 8th to 9th was relatively higher than boys in Hyderabad-Karnataka region and Mumbai-Karnataka region.

In general, across all the regions, dropout rates were much higher among boys and girls in Hyderabad-Karnataka region compared to the other two regions. Across all the social, gender and regional groups, the dropout rates were highest among the girls between class 8th to 9th (14 percent) belonging to the Hyderabad-Karnataka region, followed by girls of the same region while transitioning from class 7th to 8th (9 percent). The school dropout rates among boys of the same region transitioning from class 8th to 9th and class 7th to 8th were 13 percent and eight percent, respectively.

Table 3.3 Dropout rates, gender parity index and gender gap across three regions in Karnataka state, 2014-15

Region		Dr	op Out R	Rate	Gender Parity	Gender Gap
		Boys	Girls	Total	Index	
CLASS 7 - 8	Hyderabad- Karnataka	8.0	9.1	8.5	1.14	-0.13
	Mumbai- Karnataka	2.4	2.7	2.5	1.12	-0.11
	Mysuru- Karnataka	0.4	1.7	1.0	4.45	-1.29
급	Karnataka	2.2	3.2	2.7	1.44	-0.37
	Hyderabad- Karnataka	12.7	14.1	13.4	1.12	-0.11
6-	Mumbai- Karnataka	5.9	6.8	6.3	1.15	-0.14
CLASS 8	Mysuru- Karnataka	3.7	3.4	3.6	0.91	0.10
3	Karnataka	5.7	5.9	5.8	1.04	-0.04

Source: District Information System for Education (DISE), 2013-14 & 2014-15

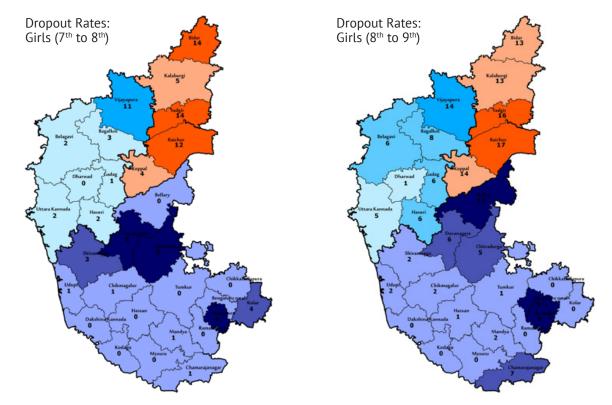


Table 3.4 shows the dropout rates, gender parity index, and gender gap among SC/SCT boys and girls between the standards 7th and 8th as well as 8th and 9th across three regions of Karnataka. Findings suggest that, compared to girls in the general community, the dropout rates were higher among SC/ST population, especially among girls and those belonging to the Hyderabad-Karnataka region. At the overall level, the dropout rates were three and six percent among SC/ST boys and girls between class 7th to 8th and class 8th to 9th, respectively. However, unlike the other indicators, the dropout rates were highest in Hyderabad-Karnataka region (about 9 percent between class 7th to 8th and 14 percent from class 8th to 9th) compared with the other two regions, where the dropout rates between the same classes were almost half or even less.

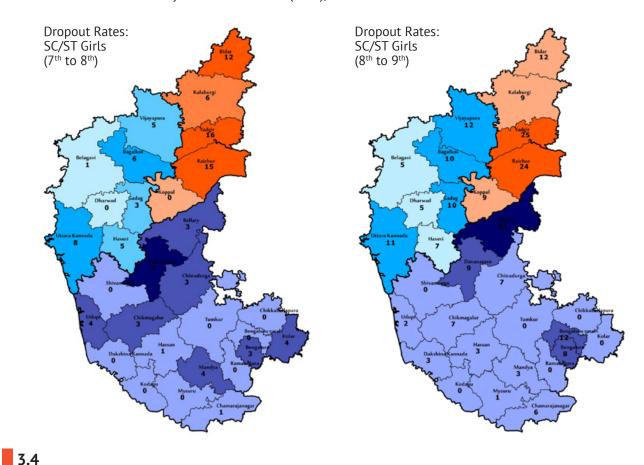
Gender parity index and gender gap confirmed the findings and suggested a significantly higher dropout among SC/ST girls compared to the boys. Also, the dropout rate was highest among the SC/ST girls belonging to Hyderabad-Karnataka region while transitioning from class 8th to 9th (15 percent), compared to children of all other groups and regions.

Table 3.4 Dropout rates, gender parity index and gender gap among SC/ST population across three regions in Karnataka state, 2014-15

	Region	Dr Boys	op Out F Girls	Rate Total	Gender Parity Index	Gender Gap
	Hyderabad- Karnataka	7.2	10.0	8.5	1.40	-0.34
∞	Mumbai- Karnataka	2.3	3.1	2.7	1.36	-0.31
- Z SS	Mysuru- Karnataka	0.9	1.9	1.4	2.04	-0.69
CLASS	Karnataka	2.6	3.8	3.2	1.48	-0.39

	Region	Dr Boys	op Out I Girls	Rate Total	Gender Parity Index	Gender Gap
	Hyderabad- Karnataka	12.4	15.0	13.6	1.21	-0.19
6	Mumbai- Karnataka	5.8	7.6	6.7	1.31	-0.27
SS 8 -	Mysuru- Karnataka	4.5	3.7	4.1	0.83	0.18
CLASS	Karnataka	6.4	6.6	6.4	1.03	-0.03

Source: District Information System for Education (DISE), 2013-14 & 2014-15



Extent of non-enrolment in secondary education

Though studies have discussed the level of current enrolment in secondary school, GER, NER, school continuation and dropout, the extent to which the children of age 14-15 years who are eligible to attend secondary school but have never been to school, was not assessed. The last population level Census conducted in the year 2011 captured detailed information about the number of children who had never been to school by their age, sex and place of residence (i.e., rural or urban areas). Using this data, the distribution of children aged 14-15 years who never attended school by sex, social category, and region are presented as part of this report.

Table 3.5 shows that, at the overall level, five percent children aged 14-15 years from general community versus eight percent from the SC/ST communities never attended school. Moreover, girls from the SC/ST communities were more likely to remain out of school (10 percent) than the non-SC/ST girls (6 percent), as well as boys belonging to general and SC/ST communities. Looking at the regional variation, the highest proportion of boys and girls from Hyderabad-Karnataka region aged 14-15 years never attended school. For instance, compared to about 3-5 percent non-SC/ST boys and girls in the Mysuru-Karnataka and Mumbai-Karnataka regions, 13 percent children aged 14-15 years (10 percent boys and 16 percent girls) from Hyderabad-Karnataka regions never attended school.

Findings presented in Table 3.5 also show that girls belonging to SC/ST group and residing in the Hyderabad-Karnataka region were most vulnerable (22 percent) to remain out of school compared to girls of Mumbai-Karnataka (9 percent) and Mysuru-Karnataka (6 percent) regions. Similarly, the highest proportion of SC/ST boys from Hyderabad-Karnataka region (14 percent) reported never being to school compared to SC/ST or non-SC/ST boys of any other region.

Table 3.5 Percentage of children aged 14-15 years never attended school, gender parity index, and gender gap across three regions in Karnataka state, 2014-15

	Region	Never at	tended	school (%)	Gender Parity	Gender Gap
		Boys	Girls	Total	Index	·
	Hyderabad- Karnataka	10.4	15.7	12.9	1.51	-0.41
	Mumbai- Karnataka	3.8	5.3	4.5	1.42	-0.35
OVERALL	Mysuru- Karnataka	2.9	3.8	3.3	1.33	-0.29
	Karnataka	4.4	6.3	5.3	1.42	-0.35
	Hyderabad- Karnataka	13.5	22.2	17.6	1.65	-0.50
	Mumbai- Karnataka	5.3	9.2	7.1	1.74	-0.55
ST	Mysuru- Karnataka	4.1	6.2	5.1	1.51	-0.41
SC / ST	Karnataka	6.5	10.4	8.3	1.60	-0.47

^{*}Children aged 14-15 years; Source: Census, 2011

Ranking of the districts according to dropout and transition rates among girls

Table 3.6 presents the classification of districts (within regions and the state) by dropout and transition rates among girls between classes 7th to 8th and 8th to 9th across the three regions of Karnataka state. Bidar is the district in Hyderabad-Karnataka region which ranks first within the region as well as the state according to overall dropout rates among girls between classes 7 to 8 (13.7 percent). However, Raichur district from the same region stands first within the region as well as the state for dropout rates among girls from class 8 to 9 (16.5 percent). Also, overall transition rate among girls from class 8 to 9 was found to be lowest in Raichur district (84.6 percent) which retains the district at the first rank within the region and the state. So far as the transition rate among girls from SC/ST group between classes 8th to 9th is concerned, the same district (Raichur) ranked second (49.1 percent), immediately after Yadgir district which ranked lowest with transition rate of 36 percent for the same group. The drop-out rate among girls from SC/ST group between both the classes (7th to 8th and 8th to 9th) was again highest (15.8 percent and 25.4 percent respectively) in Yadgir district of Hyderabad-Karnataka region and transition rate from class 8 to 9 was lowest (36 percent) in the same district and therefore, Yadgir district ranked first in terms of high dropout rates and low transition rate among girls from SC/ST population within the region as well as the state.

Vijayapura district from Mumbai-Karnataka region recorded highest dropout rates among non-SC/ST girls between class 7 to 8 (10.5 percent) and 8 to 9 (13.5 percent) and highest dropout rate among SC/ST girls between class 8 to 9 (11.5 percent), and hence, on this indicator, ranked first within the region. Again, the district stands first within the region and second within the state in terms of lowest transition rate from class 8 to 9 among overall girl population (86.5 percent). The district also has second lowest transition rate among SC/ST girls from class 8 to 9 (65.3 percent), followed by Gadag district with lowest transition rates of about 65 percent for the same group. Bagalkote district which ranked second in terms of high dropout rates and low transition rate among non-SC/ST girls was followed by Vijayapura. Also, Bagalkote has second highest dropout rate between class 7th to 8th among SC/ST population (5.6 percent) with Uttar Kannada (7.9 percent) having the highest dropout rate within the Mumbai-Karnataka region.

The Mysuru-Karnataka region comprising maximum number of districts showed variation in the ranking of districts on different indicators for drop-out and transition rates among girls. The districts of Bengaluru (5.7 percent) and Davanagere (5.1 percent) ranked first and second respectively, within the region, in terms of high dropouts among non-SC/ST girls between classes 7th to 8th. However, the ranking of the districts changed on considering the dropout rate from class 8th to 9th. The dropout rate among non-SC/ST girls was highest in Ballari district (11 percent) followed by Bengaluru district with a dropout rate of about nine percent. Davanagere district ranked first within the region in terms of high dropout among SC/ST girls from class 7th to 8th (7 percent), while Ballari district ranked first for SC/ST girls dropping out between classes 8th to 9th (20.9 percent). Ballari district also recorded lowest transition rate between the classes 8th to 9th among girls from both non-SC/ST and SC/ST communities (89.8 percent) and (53.2 percent) within Mysuru-Karnataka region (Table 3.6). The transition rates among non-SC/ST and SC/ST girls were highest in Kolar and Mandya districts respectively.

Table 3.6 Ranking of districts (within the region and the state) dropout* and transition** rates among girls across three regions in Karnataka

	Region	District	Prop Out rate 7-8 (Overall)	Rank within Region	the:	Drop Out rate 8-9 (Overall)	Rank within Region	the:	Drop Out rate 7-8 (SC/ST)	
		Bidar	13.7	1	1	13.4	4	5	11.9	
	Hyderabad-	K <mark>alabu</mark> ragi	4.9	4	7	12.8	5	6	5.5	
	Karnataka	K <mark>oppal</mark>	3.8	5	9	14.0	3	3	0.0	
	region	Raichur	11.8	3	3	16.5	1	1	15.4	
4		Yadgir	13.5	2	2	15.5	2	2	15.8	
		Bagalkote	2.8	2	12	8.4	2	10	5.6	
		Belagavi	2.1	3	13	6.0	5	14	1.1	
	Mumbai-	Vijayapura	10.5	1	4	13.5	1	4	4.9	
	Karnataka	Dharwad	0.0	7	22	1.0	7	23	0.0	
	region	Gadag	1.0	6	20	6.1	4	13	3.4	
		Haveri	1.8	5	15	6.3	3	12	4.7	
		Uttara Kannada	2.1	4	14	5.2	6	16	7.9	
		Bengaluru	5.7	1	5	8.8	2	8	3.1	
	Mysuru-	Bengaluru Rural	1.1	8	18	8.6	3	9	0.0	
	Karnataka	Ballari	0.0	11	22	11.0	1	7	3.1	
	region	Chamarajanagar	1.3	6	16	7.0	4	11	0.9	
		Chikkaballapura	0.0	11	22	0.0	16	28	0.0	
		Chikmagalur	0.9	10	21	2.2	7	18	2.6	
		Chitradurga	4.6	3	8	5.1	6	17	3.1	
		Dakshina Kannada	0.0	11	22	0.4	13	25	0.0	
		Davanagere	5.1	2	6	5.9	5	15	7.0	
		Hassan	0.0	11	22	0.5	12	24	0.5	
		Kodagu	0.0	11	22	0.0	16	28	0.0	
		Kolar	3.7	4	10	0.0	16	28	4.4	
		Mandya	1.1	7	17	2.0	9	20	3.5	
		Mysuru	0.0	11	22	0.4	14	26	0.1	
		Ramanagara	0.0	11	22	0.1	15	27	0.0	
		Shivamogga	3.3	5	11	2.1	8	19	0.0	
		Tumkur	0.0	11	22	1.4	11	22	0.0	
		Udupi	1.1	9	19	1.6	10	21	4.2	

^{*} in descending order; ** in ascending order

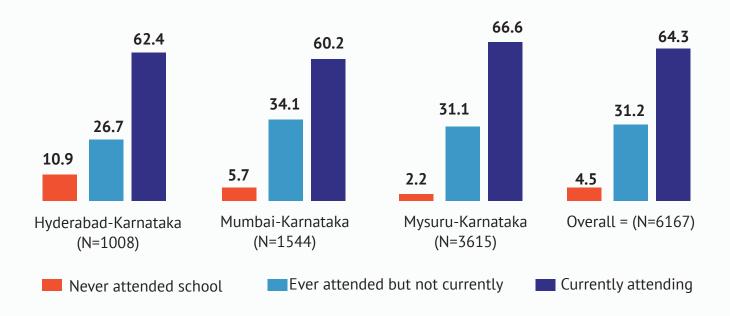
Rank within Region	the:	Drop Out rate 8-9 (SC/ST)	Rank within Region	the:	Transition Rate 8-9 (overall)	Ranl withir Region	the:	Transition Rate 8-9 (SC/ST)	Rank withir Region	the:
3	3	12.1	3	5	86.8	3	4	72.0	5	12
4	7	8.6	5	12	88.7	5	7	59.3	3	5
5	22	9.1	4	11	86.7	2	3	60.1	4	6
2	2	24.1	2	2	84.6	1	1	49.1	2	2
1	1	25.4	1	1	87.3	4	6	36.3	1	1
2	6	9.5	4	9	92.1	2	9	66.5	3	9
6	18	4.9	7	19	95.5	6	18	75.6	5	14
3	8	11.5	1	6	86.5	1	2	65.3	2	8
7	22	5.0	6	18	99.3	7	23	77.8	6	16
5	13	9.7	3	8	95.0	4	16	64.6	1	7
4	9	7.0	5	15	94.1	3	14	72.5	4	13
1	4	10.6	2	7	95.3	5	17	81.0	7	22
5	14	8.0	4	13	93.5	4	12	83.1	12	26
12	22	12.4	2	4	92.7	2	10	85.0	16	30
6	15	20.9	1	3	89.8	1	8	53.2	1	3
9	19	6.4	7	17	93.4	3	11	81.9	9	23
12	22	0.0	13	25	125.6	18	32	80.5	8	21
8	17	6.6	6	16	98.2	7	20	79.8	7	20
7	16	7.1	5	14	95.8	6	19	75.7	3	15
12	22	3.3	8	20	100.0	11	25	86.2	18	32
1	5	9.2	3	10	94.4	5	15	71.1	2	10
10	20	3.1	10	22	99.5	10	24	82.3	10	24
12	22	0.0	13	25	101.2	16	30	78.1	4	17
2	10	0.0	13	25	107.7	17	31	82.8	11	25
4	12	3.1	9	21	98.4	8	21	85.3	17	31
11	21	1.1	12	24	100.5	15	29	79.3	5	18
12	22	0.0	13	25	100.1	12	26	83.7	15	29
12	22	0.0	13	25	100.5	14	28	79.5	6	19
12	22	0.0	13	25	98.8	9	22	83.5	13	27
3	11	2.2	11	23	100.4	13	27	83.6	14	28

Characteristics of children who discontinued educational attainment: an exploration from NSSO data

The information obtained from DISE and Census does not provide an opportunity to analyse either the characteristics of individuals who discontinued their schooling, or the reasons for dropout. Information collected in the 71st round of NSS was used to further explore this aspect. The survey collected information on characteristics of individuals who dropped out of school and reasons for dropout among children aged five years and above. The information on school dropout was obtained from 6167 children aged five years and above, in the state of Karnataka, of who, 16 percent were from Hyderabad-Karnataka region, 25 percent from Mumbai-Karnataka and remaining 59 percent from Mysuru-Karnataka region.

Figure 3.1 shows the distribution of respondents sampled within each region, according to their school continuation status at the time of the survey. Findings show that irrespective of the regions, about three-fifth of the respondents were attending schools at the time the survey was conducted. Among the three regions, the highest percentage of respondents who never attended school belonged to Hyderabad-Karnataka region (11 percent), which was consistent with the results obtained from Census 2011 data. At the same time, about one-third of the respondents from Mysuru-Karnataka region (34 percent) who participated in the survey reported dropout from school at the time of the survey.

Figure 3.1 Percentage of respondents by educational attainment status, NSSO, 2014-15



Discontinuation from schools and the reasons

Table 3.7 presents the profile of children across the three regions who participated in the survey organized by NSS and were out of school (dropped out) at that point in time. On an average, across all the regions, the children who reported dropping out of school had school enrolment at the age of 5 years. Overall, more than 60 percent respondents completed the last class they attended, except for those who belonged to Mumbai-Karnataka region (56 percent). Hence, the reason for dropout from the school does not seem to be to failing the class. However, most of the dropout occurred during or after higher secondary school as 48 percent respondents reported attending higher secondary classes (i.e. class 10th and above) before they dropped out. A noteworthy finding is that a significantly higher proportion of children of Hyderabad-Karnataka region (33 percent) followed by Mumbai-Karnataka region (38 percent) mentioned that they dropped out of school after completing primary class (i.e. class 5th) or upper primary class (class 8th). In other words, as compared to 44 percent children of Mysuru-Karnataka region, about 66 percent from Mumbai-Karnataka and 60 percent from Hyderabad-Karnataka region reported dropping out by the time they completed elementary school (class 1-8). The mean age at discontinuation from school was around 15-16 years which also corroborates with the earlier findings that the majority of children dropped out as they transitioned from upper primary to secondary education, i.e., class 8th to 9th. A comparatively lower mean age at discontinuation in Hyderabad-Karnataka and Mumbai-Karnataka regions (around 14 years) clearly indicates that the school dropout in these two regions were relatively earlier than the Mysuru-Karnataka region where mean age at discontinuation is about 16 years.

Table 3.7 Percentage of respondents currently not attending school by selected characteristics, 2014-15

INDICATORS	Hyderabad- Karnataka region	Mumbai- Karnataka region	Mysuru- Karnataka region	Karnataka
Mean age at enrolment in school	5.2	5.7	5.4	5.4
Completed the last class enrolled (%)	69.8	55.5	63.6	62.3
Class completed before discontinuing schooling				
Primary	33.4	27.6	14.0	20.2
Upper Primary	25.8	38.0	29.9	31.5
Higher Secondary	40.9	34.3	56.2	48.3
Age at discontinuation/drop out from school				
By the age 11	25.2	22.0	8.6	13.8
Between 12-14	26.7	23.0	20.6	21.9
Between 15-17	32.8	26.7	39.6	35.6
At age 18	6.5	17.7	9.2	11.0
After age 18	8.9	10.7	22.0	17.7

INDICATORS	Hyderabad- Karnataka region	Mumbai- Karnataka region	Mysuru- Karnataka region	Karnataka
Mean age at discontinuation	14.1	14.7	16.2	15.6
Reasons for discontinuation				
Engaged in economic activities	47.5	28.2	23.0	27.1
Engaged in domestic activities	23.2	13.6	11.8	13.5
Not interested in education	8.5	20.5	19.8	18.7
Financial constraints	6.6	10.3	22.1	17.4
Unable to cope up with studies/ failure in studies	4.4	2.1	7.2	5.6
Marriage	3.5	12.6	6.6	7.8
Completed desired level/class	3.1	3.0	4.9	4.2
School is far off	0.0	2.5	1.8	1.8
Preparation for competitive examination	0.5	0.2	0.3	0.3
Unfriendly atmosphere at school	0.0	0.0	0.3	0.2
Language/medium of instruction used unfamiliar	0.0	0.3	0.1	0.1
Timings of educational institution not suitable	0.0	0.1	0.1	0.1
Others	2.7	6.6	1.9	3.2
Number of children*	269	527	1126	1922

Source: NSSO 71st round, 2014; *unweighted cases

Table 3.7 also depicts the reasons for discontinuation. Engagement in economic activities has been found as the prime reason for discontinuation from school in all the three regions. However, it was highest in Hyderabad-Karnataka region (48 percent) and lowest in Mysuru-Karnataka region (23 percent). Engagement in domestic activities was the second most important factor, especially in Hyderabad-Karnataka region, which led to high school dropout among children who participated in the survey. While a significantly higher proportion of children from Mumbai-Karnataka region reported less interest in continuing their education and therefore, dropped out of school (21 percent), around 21 percent respondents of Mysuru-Karnataka region dropped out of school due to financial constraints. A few children, especially from the Mumbai-Karnataka region, also reported marriage as a barrier to their school continuation.

Characteristics of secondary schools in Karnataka

The school is the fundamental and foundational unit of an educational system, and the numbers of schools are indicative of the size of a system. This section of the report describes selected school level characteristics (including the quality of infrastructure) that may have some bearing on school continuation.

According to the DISE 2014-15 report, there are about 78690 schools in the state of which around 19 percent (14930 schools) are secondary schools having classes 9th and 10th. Again, of the total secondary schools, only 31 percent schools are registered with the education department while remaining schools are unregistered aided or unaided schools or schools run by social welfare or local body including the Central Government Schools (Table 3.8). In the majority of these schools, the medium of instruction is either English or Kannada. The syllabus taught in the schools are either of CBSE, ICSE, NIOS or the state syllabus (defined by the Department of Public Instruction of the Government of Karnataka). The curriculum includes subjects like science, social studies and mathematics apart from language related subjects. To maximize attendance in schools, the Karnataka Government has launched a midday meal scheme in government and aided schools in which free lunch is provided to the students. At the end of secondary education, the students pursuing the state syllabus have to pass an examination called SSLC to move on to the next level.

Table 3.8 Selected secondary school related characteristics across three regions of Karnataka

INDICATORS	Hyderabad- Karnataka region	Mumbai- Karnataka region	Mysuru- Karnataka region	Karnataka
Total number of schools in the state	12063	18833	47794	78690
Secondary Schools (Class 9-10)	2188	3405	9337	14930
Total number of registered secondary schools (Class 9-10)	909 (41.5)	1105 (32.5)	2600 (27.8)	4614 (30.9)
Staffing in secondary school				•
Number of sanctioned positions	17023	28478	75688	121189
Number of filled positions	14924 (87.7)	25324 (88.9)	67652 (89.4)	107900 (89.0)
Number of male working teachers	9993	18125	41145	69263
Number of female working teachers	4931	7199	26507	38637
Secondary school teacher sex ratio: F/M*1000	493	397	644	558
Potential school going girl child aged 14-15 ¹	190538	274165	622440	1087143
Number of girls per female teacher	39	38	23	28

Note: Values in parenthesis show the percentages

¹ Value is taken from Census 2011 otherwise rest of the indicators are derived from DISE 2014-15 data

It was reported that schools in Karnataka were short of teachers, and therefore, often struggled to complete the syllabus for the examination. The prescribed teacher-student ratio is 1:35. But due to a shortage of teachers, especially in Hyderabad-Karnataka region, the ratio is 1:75°. Table 3.8 shows the number of sanctioned positions (teachers) in a secondary school in Karnataka and across regions and suggest that about 89 percent of the approved posts in the secondary schools are filled. There was no striking difference in the proportion of filled positions, against those sanctioned, across the three regions.

Availability of female teacher(s) is found to be an important factor promoting the continuation of girls schooling. According to previous evidence, girl children believe that the presence of female teachers makes them comfortable in school. However, findings presented in Table 3.8 suggest that the majority of currently working teachers in secondary schools are male. At the overall level, the gender ratio of secondary school teachers was found to be around 558 female teachers per 1000 male teachers. This ratio was as low as 397 in Mumbai-Karnataka region followed by 493 in the Hyderabad-Karnataka region, and highest (644 female teachers per 1000 male teachers) in the Mysuru-Karnataka region. Results also indicate that, at the state level, while there are about 28 girl students per female teacher in the secondary schools, this ratio was as high as 38-39 girls per female teacher in the secondary schools of Mumbai-Karnataka and Hyderabad-Karnataka regions.

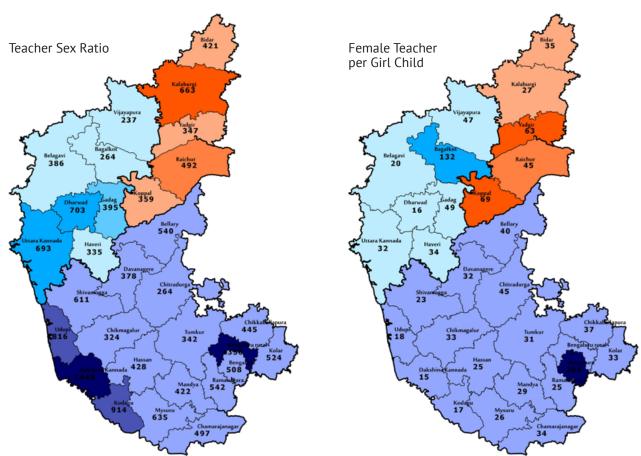


Figure 3.2 shows that availability of certain essential amenities in the secondary schools of Karnataka. Despite the fact that unavailability of separate toilets for boys and girls in the schools was reported as a significant reason for school dropout/discontinuation in previous studies,

⁹ Belur Rashmi, 2016. Teacher Shortage in Government Schools to Hit SSLC Students, Indian Express, 11th January 2016. http://www.newindianexpress.com/states/karnataka/Teacher-Shortage-in-Government-Schools-to-Hit-SSLC-Students/2016/01/11/article3222143.ece

results from this analysis suggests that almost all the registered secondary schools in Karnataka have separate toilets for boys and girls. Moreover, most of these schools also have drinking water, electricity, and library facilities. Additionally, about 82 percent secondary schools reported having a playground, while 74 percent schools have the compound wall. However, about 31 percent registered secondary schools in Hyderabad-Karnataka region do not have the compound wall which is one of the important measures for children's safety, more particularly for girls. The analysis also shows that of all the classrooms available in the registered schools, more than 80 percent are of good quality.

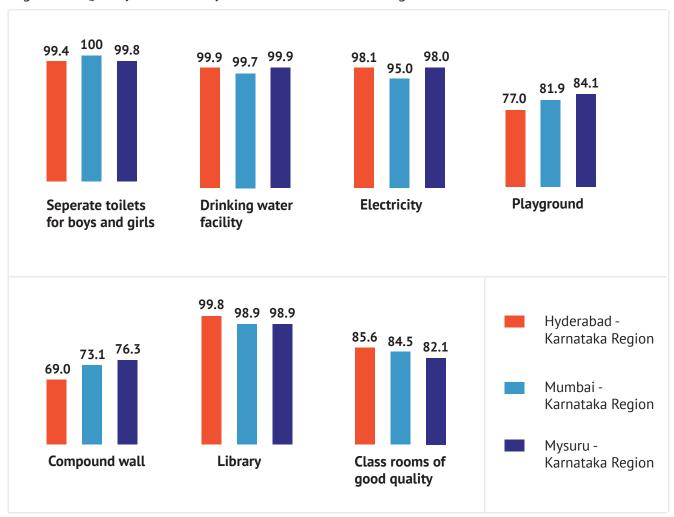


Figure 3.2 Quality of secondary school across different regions of Karnataka

3.9

School to student ratio (SSR), school classroom ratio (SCR) and pupil-teacher ratio (PTR) in registered schools of Karnataka

Table 3.9 depicts selected school related indicators that describe the availability and the quality of registered secondary schools and teaching, namely, school to student ratio (SSR), school classroom ratio (SCR), and the pupil-teacher ratio (PTR). Unavailability of schools, crowded classrooms and less than adequate number of teachers in the school has a significant bearing on children's enrolment and retention.

Table 3.9 SSR, SCR, and PTR in registered schools across three regions of Karnataka

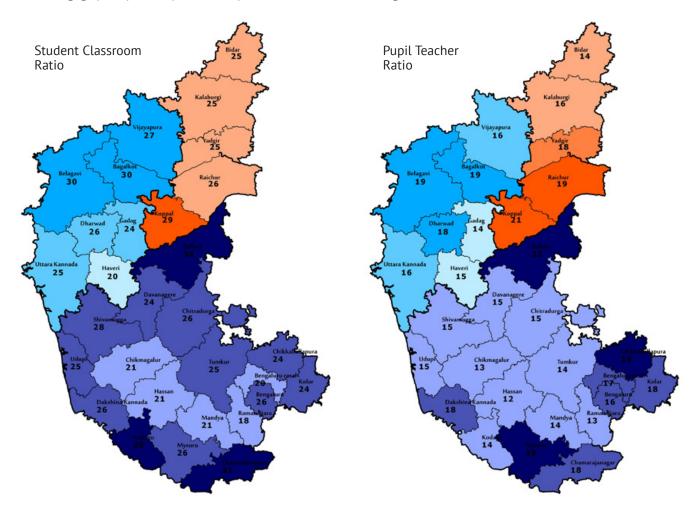
INDICATORS	Hyderabad- Karnataka region	Mumbai- Karnataka region	Mysuru- Karnataka region	Karnataka
Number of potential school going children aged (14-15) ¹	399441	583792	1297664	2280897
Number of secondary schools (Class 9-10)	2188	3405	9337	14930
School to student ratio (SSR) in secondary school	183	171	139	153
Number of classrooms in registered secondary schools (Class 9-10)	4865	5780	14915	25560
Number of teacher's position sanctioned for registered secondary schools (Class 9-10)	8461	9709	26006	44176
Number of teacher's position filled in registered secondary schools (Class 9-10)	7296	8912	22905	39113
Number of enrolled students in registered secondary schools (Class 9-10)	126141	152377	364594	643112
Student Classroom Ratio (SCR)	25.9	26.4	24.4	25.2
Pupil-Teacher Ratio (PTR) for sanctioned posts	14.9	15.7	14.0	14.6
Pupil-Teacher Ratio (PTR) for working teacher	17.3	17.1	15.9	16.4

¹ Value is taken from Census 2011 otherwise rest of the indicators are derived from DISE 2014-15 data

Results show that, at the state level, there is one secondary school per 153 children who are eligible for going to secondary school. This ratio is relatively much higher in the Hyderabad-Karnataka (one school for every 183 secondary school going children) and Mumbai-Karnataka regions (SSR: 171) when compared to the Mysuru-Karnataka region (SSR: 139). This suggests moderately lower availability of secondary schools in Hyderabad-Karnataka and Mumbai Karnataka regions, than in the Mysuru-Karnataka region.

The first indicator chosen to assess the quality of the school is student classroom ratio (SCR) which defines the number of students per classroom. Results show that on an average, there are about 25 children per classroom of a secondary school. No striking variation in SCR was observed across the regions. The pupil-teacher ratio (PTR) and number of teachers' posts sanctioned and filled were the other two indicators used to assess school quality.

At the overall level, as against one teacher expected to cater to about 15 secondary school going children, one teacher is presently teaching 16-17 students. Although there is no significant gap in the sanctioned versus filled posts for teachers in a scondary school, efforts could help bridge the existing gap, especially in the Hyderabad-Karnataka region.



SUMMARY AND CONCLUSION

This report presents a comprehensive picture of the situation of secondary school enrolment and continuation among boys and girls in the state of Karnataka, and within different geographic regions in the state. The report encapsulates the existing social, gender and geographic variations in secondary school enrolment, retention, and completion, using multi-sourced state-representative data sets. This chapter summarizes the key findings and proposes important measures that can help in enhancing the delivery of educational services to the adolescent boys and girls in the state.



Α

Not all children in the state have equal access to education. Girls, especially those belonging to socially deprived groups, have lower enrolment and access to schools

As per findings, the overall Gross Enrolment Ratio (GER) was 77 percent revealing the fact that there is a gap of 23 percent in the secondary school enrolment. This shortfall was as high as 40 percent in the Hyderabad-Karnataka region, followed by 22 percent in Mumbai-Karnataka and 18 percent in the Mysuru-Karnataka regions. There was a substantial gender difference in GER within as well as between the social groups (SC/ST and non-SC/ST groups). A relatively higher proportion of boys than girls were enrolled in secondary classes irrespective of their social caste. Moreover, within each gender, the differences persisted in the levels of enrolment. For example, as compared to girls belonging to non-SC/ST groups, relatively lower proportion of girls from SC/ST community, were enrolled in secondary classes. This difference was more prominent in the Hyderabad-Karnataka and Mumbai-Karnataka regions as compared to the Mysuru-Karnataka region. Findings also revealed that only half of all children aged 14-15 years in the state receive age appropriate schooling. This was again lowest in the Hyderabad-Karnataka region (38 percent).

В

Sizeable proportion of girls, especially those belonging to socially deprived group, reported infrequent school attendance

As per the DISE data, about three-fourth of the children in Karnataka were enrolled in secondary schools, and almost 80 percent were found to be currently attending school, i.e., they attended school on all the days when the school session was going on. This also shows that about 20 percent children who were enrolled in school were either not regular or were absent from school. While three in ten children from Hyderabad-Karnataka region were not found to be in school, about two in ten children from other two regions were also currently not in school.

Findings show a profound gender variation in current school attendance. Within the regions, gender differences in current school attendance were mainly observed in Hyderabad-Karnataka and Mumbai-Karnataka regions. Against 66 percent and 80 percent girls in Hyderabad-Karnataka and Mumbai-Karnataka regions respectively, almost 73 percent and 83 percent boys in the same two regions were currently attending school. The gender gap in current school attendance in these two regions was even more profound among the SC/ST population than the general population. For example, as compared to 66 percent non-SC/ST girls from Hyderabad-Karnataka region, only 56 percent SC/ST girls from the same region were currently attending secondary school. The corresponding estimates in the Mumbai-Karnataka regions were 80 percent and 72 percent respectively. However, no such difference in current school attendance was observed in the Mysuru-Karnataka region.



C

More than half of the children attend government secondary schools; however, a significant proportion from Mysuru-Karnataka region attend private schools for various reasons

According to NSSO data (2014-15), more than half of the children (55 percent) aged 14-15 years were attending government schools for secondary education. However, the proportion of such children attending government school was highest in the Hyderabad-Karnataka region (76 percent) followed by Mumbai-Karnataka (57 percent) and Mysuru-Karnataka (48 percent) regions. The analysis also suggests that almost 40 percent children from Karnataka, while 70 percent from the Hyderabad-Karnataka region reported that they receive free secondary education. This is one of the driving forces behind their retention in the government schools. About one in four children from Mumbai-Karnataka region and one in six from Hyderabad-Karnataka region were compelled to attend private secondary schools because there were no government secondary schools nearby. Contrary to this, less than half of the children aged 14-15 years from Mysuru-Karnataka region were attending the government schools. Results show that children from this region favour quality of education over free education and therefore, about 52 percent preferred attending private secondary schools over the government schools. The primary reasons stated for this preference include better-learning environment (59 percent) and better quality of education (19 percent) in the private schools. Irrespective of the geography (region), about 16-17 percent children aged 14-15 years cited English being the medium of instruction as a pull factor due to which they preferred private schools over the government schools.

D

Girls school experiences were compromised; higher proportion of girls aged 14-15 years never attended schools and dropout was high while transitioning from class 8 to 9

Data from Census 2011 shows that, overall, in the population aged 14-15 years, five per cent children from non-SC/ST community and about eight percent of SC/ST children in the same age group never attended school. Moreover, in comparison to four percent boys aged 14-15, girls, especially those who belong to SC/ST group, were more likely to have never been to school (10 percent) compared to non-SC/ST girls (six percent) of the same age group. Around seven per cent boys aged 14-15 from SC/ST community also never attended school. Hyderabad-Karnataka region continued to show poor performance in the secondary school level attainment. About 16 percent girls in general and 22 percent from SC/ST community of this region never attended school. Similarly, about nine percent girls from SC/ST and five percent from non-SC/ST population from the Mumbai-Karnataka region never attended secondary school. These estimates were relatively smaller for the Mysuru-Karnataka region.

Findings also show that the girls, especially those from SC/ST community, were more likely to drop out of schools while transitioning from class 7th to 8th and class 8th to 9th. The dropout rate was relatively higher when girls transitioned from class 8th to 9th. Boys from SC/ST community were also likely to drop out of school at the upper primary and secondary school levels, compared to boys and girls from non-SC/ST community. Findings reflect relatively higher dropout rates at the secondary level (from 8 to 9) in comparison to upper primary level (i.e. from 7 to 8), being almost double at the secondary level compared to the upper primary level. The school dropout was highest (15 percent) among the SC/ST girls while transitioning from class 8th to 9th compared

to children of all other groups. Again, the extent of school dropout was greatest in the Hyderabad-Karnataka region followed by Mumbai-Karnataka and Mysuru-Karnataka region. Engagements in economic and domestic activities were the two primary reasons cited for the school dropout, particularly among children belonging to the Hyderabad-Karnataka region. A relatively larger proportion of children from Mumbai-Karnataka and Mysuru-Karnataka regions also mentioned that they dropped out of school because they were either not interested in studies or because of financial constraints. Marriage was another important reason for dropping out of secondary school, especially in Mumbai-Karnataka region.

E

The school environment is moderately supportive in enabling girls to pursue their studies

According to the District Information System for Education, Karnataka State has about seventy eight thousand schools, irrespective of the grade and categories. Of these, little less than fifteen thousand schools are secondary schools, of which, only one-third of all secondary schools are registered with the government department. The remaining are either private schools or social welfare schools. The schooling in Karnataka is characterised by a regional imbalance in school to student ratio. On an average, there are about 153 students per registered secondary school. The concentration of pupils per secondary school varies from as low as 139 in Mysuru-Karnataka region to 171 in Mumbai-Karnataka and a high183 in Hyderabad-Karnataka regions. This clearly depicts that registered secondary schools in Hyderabad-Karnataka and Mumbai Karnataka regions are relatively more crowded. This also implies that teachers in such schools have a high burden of students.

Though there is not much difference in the proportion of filled positions of teachers against sanctioned positions, a large percentage of currently working teachers in the secondary school are male teachers. At the state level, gender ratio for teachers was 558 female teachers per 1000 male teachers. This ratio was lowest in recognized secondary schools falling under the Mumbai-Karnataka region (397) followed by the Hyderabad-Karnataka (493) and Mysuru-Karnataka (644) regions. Also, while one female teacher in Mysuru-Karnataka region takes care of about 23 girl children in secondary classes, about one female teacher in the other two regions takes care of 38-39 girl children. Availability of a female teacher is found to be an important factor promoting the continuation of girls schooling. Existing evidence from these regions suggest that a girl child believes that the presence of a female teacher makes them comfortable in school.

Despite the fact that unavailability of separate toilets for boys and girls in the schools has been reported as a significant reason for school dropout/discontinuation in previous studies, results from this analysis suggest that almost all the registered secondary schools in Karnataka have separate toilets for boys and girls. Moreover, all such schools also have drinking water, electricity and library facilities. At the overall level, about 12 percent registered secondary schools in the state do not have the playgrounds while 26 percent schools do not have a compound wall which is an important measure of girls safety.

F

North Karnataka region demands concrete measures to improve the delivery of educational services pertaining to secondary education; more emphasis to be given on girls education, particularly those belong to underprivileged communities

The analysis clearly depicts that indicators on secondary school are relatively poor for the girls as compared to the boys. The situation is even worse for the SC/ST girls and those belonging to the Hyderabad-Karnataka and Mumbai-Karnataka regions. However, this is also true that there exists an inter-regional variation in the performance of girls in secondary education. There are districts within these regions which are performing somewhat better as compared to other districts in the same region, or between the regions.

Findings show that, of the five districts in the Hyderabad-Karnataka region, five districts namely, Yadgir, Raichur, Bidar and Koppal consistently emerge as the poor performing districts in terms of low enrolment in secondary school, low levels of age appropriate schooling, high levels of school dropout, and low quality of teaching. Kalaburagi is another district of this region which has shown poor performance on selected indicators.

In the case of Mumbai-Karnataka region, Bagalkote and Vijayapura are the two districts that clearly demonstrate poor performance with respect to girls' secondary education. Uttar Kannada, Gadag, and Haveri are few other districts within this region which need close attention to promote girls education in secondary schools. Out of 17 districts clubbed in the Mysuru-Karnataka region, only Ballari and Davanagere emerged as the two districts where the performance of girls in secondary school was relatively weak.

Conclusion and implications

This study completed by using multiple data sources depicts the situation of secondary school attainment among boys and girls in Karnataka state, and highlights several important aspects of secondary schooling that needs attention from the government, policy makers, and programme implementers. One of the most important findings that emerged from this report is the regional, social and gender inequality in enrolment to secondary schools, and the school continuation. Girls, especially those belonging to the SC/ST communities, have lesser access to secondary schools. Among those who have been enrolled, a significant fraction of girls from SC/ST communities are not attending school regularly. This calls for the urgent attention of the government and policymakers to address the barriers and find ways to improve girls' access and regular attendance. One of the strategies to increase girls' access to secondary school may possibly be extending free and compulsory education under the Right to Education Act 2009, up to class 10th. At present, this act makes free and compulsory education as a fundamental right for children in the age group of 6-14 years, which covers the initial eight years of schooling. Strengthening the RMSA can also be an important strategy for improving girls' access to secondary education.

The present analysis also highlights the need for improving the quality of education in government secondary schools. As found in the study, more than half of the children in Karnataka, especially those belonging to the northern part of the state, were continuing their secondary education in government schools with low cost of education being an important reason. At the same time, more than half of the children belonging to the southern part of the state (Mysuru-Karnataka region) preferred private institutions over the government schools, due to better learning environment and the quality of education in the private schools. The study also found that a small proportion of children in Hyderabad-Karnataka and Mumbai-Karnataka regions attend private secondary schools due to unavailability of government schools in the vicinity. Considering the high cost of private schooling, there is a possibility for the children abstaining from schools, and such decisions

become even stronger for a girl child, especially if she belongs to the socio-economically deprived groups. Continuing efforts and investment by allocating more funds for improving the quality and number of government secondary schools, especially in the North Karnataka regions, can ensure free education for many more girls in the state.

Study findings also highlighted the fact that a small segment of the population aged 14-15 years had never been to school. Also, there is a considerable school dropout among girls, particularly among those belonging to SC/ST communities, especially while they transition from class 8th to 9th. Such dropouts are mainly guided by their involvement in economic activities and participation in day to day household chores. Marriage is also one of the determining factors of the school dropout. These results reiterate the fact that expansion of education opportunities for girls is a must. In addition, efforts are needed towards promoting gender egalitarian attitude that encourages girls' education, both within, and outside the family. Such efforts should aim at the individual and family level, at boys as well as school management and staff levels so that gender inequitable social norms can be restrained. Focus should also be on creating more friendly, accessible, and safe schools for the girl child. Owing to the findings of skewed sex ratio of working teachers in the secondary school, the recruitment of more female teachers could be among effective policies to make the school environment more supportive of girls' education.

Findings of this study call for designing and implementing a multi-level and multi-sectoral intervention that aims to improve the quality of life of adolescent girls from marginalized communities by keeping them in school, and thereby, delaying their marriage and reducing other risks and vulnerabilities. Retention in and completion of secondary education among girls, especially those belonging to marginalized communities is possible by targeting efforts to improve low enrolment and intensifying retention in education for girls from poor, marginalised and disadvantageous communities. The possible measures include providing special tutorials and career counselling classes to girls to help meet their aspirations of completing secondary education, and building their self-confidence in their own ability to perform better and to aim at education even beyond secondary schooling. As mentioned earlier, sensitising parents to value girl child education, linking families to essential government schemes that provide incentive for girls education, working with boys to promote gender-equitable norms, working with schools to strengthen their capacities to be responsive to girl's needs, and supporting the community structures to understand the importance of girls education are some of the important areas that should be contemplated while designing the multilayer intervention.

The role of non-government organizations (NGO) in promoting secondary school enrolment, retention and completion cannot be overlooked. Although the main responsibility of endorsing secondary education is of the state, NGOs can play a pivotal role in meeting the government's agenda of universalizing secondary education through their ongoing efforts on sensitising families about importance of girls education, and working with schools to build the capacities of teachers and the management committees in delivering quality education and creating safety plans for the schools. Corrospondingly, the coordination between various government departments such as education, women and child development, social welfare and rural administration, and further investment in existing successful programmes like *Kishori Sangha* or *Meena*, mostly in the northern region, can undoubtedly contribute to the government's ambition of universal transition of children upto and beyond the secondary education.

APPENDIX I

Table S1: District level overall estimates on enrollment, GER, and NER across the three regions, Karnataka

- 9,		GER (Overall) GER (SC/ST)					
Region	District	Boys	Girls	Total	Boys	Girls	Total
	Bidar	69.6	70.7	70.1	70.1	67.8	69.0
Hyderabad-	Kalaburagi	65.3	63.0	64.2	63.1	54.5	58.9
Karnataka	Koppal	64.5	58.3	61.5	68.2	52.9	60.7
region	Raichur	60.0	50.9	55.6	57.0	40.2	48.7
	Yadgir	50.8	39.6	45.3	50.5	30.2	40.6
	Hyderabad-Karnataka Region	62.8	57.9	60.4	61.9	49.8	56.0
	,						
	Bagalkote	78.6	70.7	74.7	79.0	64.0	71.5
	Belagavi	81.2	77.1	79.2	81.0	75.4	78.2
Mumbai-	Vijayapura	73.6	62.9	68.4	74.4	55.6	65.3
Karnataka	Dharwad	83.1	83.4	83.2	92.7	85.7	89.3
region	Gadag	79.9	78.9	79.4	82.8	70.8	76.9
	Haveri	73.6	75.2	74.4	73.6	71.0	72.3
	Uttara Kannada	87.0	86.1	86.6	87.9	81.5	84.7
	Mumbai-Karnataka Region	79.5	75.4	77.5	80.0	70.2	75.2
	Bengaluru	80.0	82.8	81.4	94.9	92.5	93.7
	Bengaluru Rural	83.5	83.2	83.4	108.5	101.0	104.8
Mysuru- Karnataka	Ballari	69.1	60.6	65.0	66.4	52.3	59.5
region	Chamarajanagar	76.0	75.8	75.9	84.1	84.4	84.3
	Chikkaballapura	76.9	76.0	76.5	82.8	80.2	81.5
	Chikmagalur	80.6	81.1	80.9	86.7	90.3	88.5
	Chitradurga	80.8	78.8	79.8	88.1	85.1	86.6
	Dakshina Kannada	104.2	102.4	103.3	108.4	111.0	109.6
	Davanagere	79.5	79.3	79.4	82.3	80.0	81.2
	Hassan	84.1	85.8	84.9	96.8	95.2	96.0
	Kodagu	85.7	84.7	85.2	80.4	84.2	82.3
	Kolar	75.2	74.2	74.7	83.0	77.3	80.2
	Mandya	81.6	81.8	81.7	84.3	85.4	84.8
	Mysuru	85.3	85.2	85.3	88.5	90.7	89.6
	Ramanagara	79.3	79.7	79.5	82.9	90.9	86.8
	Shivamogga	82.6	84.4	83.5	86.2	92.4	89.2
	Tumkur	88.9	85.3	87.1	96.3	90.5	93.5
	Udupi	101.4	99.0	100.2	114.3	122.6	118.3
	Mysuru-Karnataka Region	83.0	81.9	82.4	88.4	85.2	86.8
	KARNATAKA	78.5	76.0	77.3	80.4	73.9	77.2

NE	R (Overa	ıll)	Current s	school at	tendance	Current s	school at	tendance	
Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	
51.8	52.1	52.0	79.6	76.8	78.2	76.4	72.0	74.3	
41.6	39.2	40.4	74.6	69.2	72.0	69.6	59.3	64.8	
39.0	35.5	37.3	75.2	68.4	72.0	70.7	60.1	65.7	
34.3	28.5	31.5	71.9	60.5	66.4	65.3	49.1	57.7	
29.9	23.5	26.8	60.4	47.9	54.5	54.8	36.3	46.3	
39.9	36.6	38.3	73.1	65.9	69.7	68.0	56.4	62.6	
	30.0	30.3	73.2	03.7		33.3	20	02.0	
61.2	55.0	58.1	81.6	77.0	79.5	74.8	66.5	71.0	
57.2	52.2	54.8	85.1	82.7	84.0	81.0	75.6	78.5	
48.5	41.6	45.2	80.8	73.6	77.5	78.6	65.3	72.7	
57.1	56.7	56.9	84.5	84.0	84.3	81.3	77.8	79.6	
50.1	50.0	50.1	81.9	78.8	80.4	74.9	64.6	70.1	
55.3	58.0	56.6	80.0	79.1	79.6	77.2	72.5	74.9	
67.2	66.4	66.8	85.7	85.8	85.8	78.3	81.0	79.6	
56.5	53.1	54.9	83.2	80.3	81.8	78.5	71.5	75.2	
57.9	58.6	58.3	85.4	86.2	85.8	83.4	83.1	83.3	
62.3	61.9	62.1	88.1	87.8	88.0	85.9	85.0	85.5	
42.0	36.6	39.4	73.9	64.3	69.3	67.8	53.2	60.9	
58.3	57.5	57.9	78.4	79.4	78.9	79.2	81.9	80.5	
62.9	60.2	61.6	84.8	83.8	84.3	83.0	80.5	81.8	
65.9	66.3	66.1	84.8	86.3	85.5	78.3	79.8	79.0	
59.8	56.0	57.9	81.3	80.3	80.8	77.3	75.7	76.5	
79.1	78.1	78.6	91.6	91.6	91.6	82.6	86.2	84.4	
60.7	60.3	60.5	79.6	78.7	79.2	75.8	71.1	73.6	
62.5	62.7	62.6	85.8	88.3	87.0	82.1	82.3	82.2	
73.1	71.3	72.2	87.3	88.1	87.7	75.1	78.1	76.5	
57.7	55.3	56.5	84.5	83.5	84.0	85.1	82.8	84.0	
61.3	61.7	61.5	85.7	88.2	86.9	83.5	85.3	84.4	
66.9	66.7	66.8	82.2	82.0	82.1	79.6	79.3	79.5	
61.2	61.8	61.5	85.5	87.0	86.2	83.6	83.7	83.7	
62.4	62.0	62.2	83.4	86.6	85.0	76.2	79.5	77.8	
69.2	66.0	67.7	85.9	86.5	86.2	83.6	83.5	83.6	
76.2	75.3	75.8	91.4	90.8	91.1	84.1	83.6	83.8	
62.5	61.2	61.9	84.0	83.8	83.9	88.4	85.2	86.8	
57.0	54.9	56.0	81.9	79.8	80.9	76.6	71.4	74.1	

Appendix I 50

Table S2: District level overall estimates on transition rates across the three regions, Karnataka

			nsition r -8) Over			nsition i -8) Over	
Region	District	Boys	Girls	Total	Boys	Girls	Total
	Bidar	84.9	86.4	85.6	70.1	67.8	69.0
Hyderabad-	Kalaburagi	94.2	96.1	95.1	63.1	54.5	58.9
Karnataka	Koppal	99.6	96.6	98.2	68.2	52.9	60.7
region	Raichur	93.7	89.1	91.5	57.0	40.2	48.7
	Yadgir	93.7	88.8	91.5	50.5	30.2	40.6
	Hyderabad-Karnataka Region	92.9	91.7	92.3	61.9	49.8	56.0
	Bagalkote	97.4	97.6	97.5	79.0	64.0	71.5
	Belagavi	99.6	99.1	99.4	81.0	75.4	78.2
	Vijayapura	89.5	89.5	89.5	74.4	55.6	65.3
Mumbai-	Dharwad	107.2	104.6	105.9	92.7	85.7	89.3
Karnataka region	Gadag	100.4	100.1	100.3	82.8	70.8	76.9
region	Haveri	98.2	98.4	98.3	73.6	71.0	72.3
	Uttara Kannada	99.7	98.4	99.1	87.9	81.5	84.7
	Mumbai-Karnataka Region	98.4	97.9	98.2	80.0	70.2	75.2
	Mambai Kamataka Kegion	JU. 1	71.7	70.2	00.0	70.2	7 3.2
	Bengaluru	101.1	100.7	100.9	93.6	93.5	93.6
Mysuru-	Bengaluru Rural	97.8	95.7	96.8	93.4	92.7	93.1
Karnataka	Ballari	105.1	102.5	103.9	95.5	89.8	92.8
region	Chamarajanagar	98.9	99.5	99.2	97.4	93.4	95.4
	Chikkaballapura	102.5	101.6	102.1	121.3	125.6	123.4
	Chikmagalur	102.2	99.2	100.8	97.5	98.2	97.8
	Chitradurga	97.1	96.1	96.6	95.2	95.8	95.5
	Dakshina Kannada	104.8	102.8	103.8	100.8	100.0	100.4
	Davanagere	95.4	95.1	95.2	94.3	94.4	94.4
	Hassan	99.2	101.0	100.1	98.3	99.5	98.9
	Kodagu	100.5	102.2	101.3	98.4	101.2	99.8
	Kolar	98.0	96.4	97.2	103.2	107.7	105.4
	Mandya	102.3	99.3	100.9	96.0	98.4	97.1
	Mysuru	104.2	103.2	103.7	99.6	100.5	100.0
	Ramanagara	101.3	100.3	100.8	100.5	100.1	100.3
	Shivamogga	100.9	98.8	99.9	98.3	100.5	99.3
	Tumkur	102.2	101.4	101.8	98.9	98.8	98.8
	Udupi	103.1	100.6	101.9	100.2	100.4	100.3
	Mysuru-Karnataka Region	100.5	99.1	99.8	97.5	97.5	97.5
	KARNATAKA	98.7	97.5	98.1	95.5	95.0	95.3

			nsition ra '-8) SC/S			nsition ra 8-9)SC/S	
Region	District	Boys	Girls	Total	Boys	Girls	Total
	Bidar	87.2	88.1	87.6	90.5	88.0	89.3
Hyderabad-	Kalaburagi	93.1	95.0	94.0	85.6	91.7	88.3
Karnataka	Koppal	103.9	100.8	102.5	97.6	91.5	94.9
region	Raichur	94.3	85.6	90.3	83.6	77.0	80.8
	Yadgir	95.0	84.8	90.5	91.3	75.6	84.8
	Hyderabad-Karnataka Region	93.8	90.4	92.2	88.6	85.5	87.3
	Bagalkote	95.0	94.9	95.0	95.0	90.8	93.1
	Belagavi	99.4	99.3	99.4	96.5	96.4	96.4
	Vijayapura	97.8	95.1	96.5	92.1	88.5	90.6
Mumbai-	Dharwad	107.9	103.2	105.7	98.1	95.4	96.8
Karnataka	Gadag	97.9	97.8	97.9	93.1	91.2	92.2
region	Haveri	95.7	95.6	95.7	92.3	93.6	92.9
	Uttara Kannada	95.1	92.8	94.0	98.1	90.6	94.5
	Mumbai-Karnataka Region	98.4	97.3	97.9	94.9	93.1	94.1
	Bengaluru	100.7	101.8	101.2	91.4	90.0	90.7
Mysuru-	Bengaluru Rural	101.8	98.5	100.2	98.4	93.8	96.2
Karnataka	Ballari	97.3	97.1	97.2	84.5	80.2	82.6
region	Chamarajanagar	97.7	99.6	98.6	94.9	94.0	94.5
	Chikkaballapura	103.5	101.0	102.3	127.2	129.6	128.4
	Chikmagalur	103.1	97.7	100.4	92.3	94.1	93.2
	Chitradurga	98.9	97.4	98.2	95.8	93.9	94.9
	Dakshina Kannada	106.6	102.2	104.4	99.7	97.6	98.7
	Davanagere	93.5	93.0	93.3	90.1	91.1	90.6
	Hassan	99.4	99.5	99.4	95.6	96.9	96.3
	Kodagu	98.7	101.7	100.2	96.0	101.6	98.8
	Kolar	98.2	95.7	97.0	105.0	110.0	107.3
	Mandya	99.6	96.9	98.2	93.7	97.3	95.4
	Mysuru	101.1	101.1	101.1	97.6	99.9	98.7
	Ramanagara	96.8	106.5	101.5	115.8	130.6	122.8
	Shivamogga	104.5	102.8	103.6	98.9	104.9	101.8
	Tumkur	102.6	100.6	101.7	98.8	100.3	99.5
	Udupi	98.9	97.4	98.2	97.4	100.2	98.7
	Mysuru-Karnataka Region	100.0	98.8	99.4	97.0	97.3	97.1
	KARNATAKA	81.9	79.8	80.9	94.9	94.3	94.6

Appendix I 52

Table S3: District level overall estimates on dropout rates across the three regions, Karnataka

			ropout ra 7-8) Overa			Propout ra 8-9) Over	
Region	District	Boys	Girls	Total	Boys	Girls	Total
	Bidar	15.2	13.7	14.4	12.7	13.4	13.0
Hyderabad-	Kalaburagi	6.9	4.9	5.9	13.6	12.8	13.2
Karnataka	Koppal	1.0	3.8	2.4	11.1	14.0	12.4
region	Raichur	7.6	11.8	9.6	14.9	16.5	15.6
	Yadgir	7.8	13.5	10.4	8.2	15.5	11.4
	Hyderabad-Karnataka Region	8.0	9.1	8.5	12.7	14.1	13.4
	Bagalkote	3.3	2.8	3.0	5.3	8.4	6.8
	Belagavi	1.7	2.1	1.9	4.6	6.0	5.3
Manual at	Vijayapura	10.5	10.5	10.5	11.1	13.5	12.2
Mumbai- Karnataka	Dharwad	0.0	0.0	0.0	3.9	1.0	2.5
region	Gadag	1.4	1.0	1.2	7.6	6.1	6.9
	Haveri	2.2	1.8	2.0	6.2	6.3	6.2
	Uttara Kannada	0.8	2.1	1.4	3.1	5.2	4.1
	Mumbai-Karnataka Region	2.4	2.7	2.5	5.9	6.8	6.3
	Develope	7 -	F 7	4.5	0.7	0.0	0.6
	Bengaluru	3.5	5.7	4.5	8.3	8.8	8.6
Mysuru-	Bengaluru Rural	1.5	1.1	1.3	8.5	8.6 11.0	8.5
Karnataka region	Ballari	0.0 1.9	0.0 1.3	0.0	6.2 3.5	7.0	8.4 5.2
region	Chamarajanagar Chikkaballapura			1.6 0.0		0.0	
	Chikmagalur	0.0	0.0 0.9	0.0	0.0 3.4	2.2	0.0 2.8
	Chitradurga	3.6	4.6	0.0 4.1	6.0	5.1	5.5
	Dakshina Kannada	0.0	0.0	0.0	0.4	0.4	0.4
	Davanagere	4.9	5.1	5.0	6.1	5.9	6.0
	Hassan	0.8	0.0	0.0	1.7	0.5	1.1
	Kodagu	0.0	0.0	0.0	3.2	0.0	1.4
	Kolar	2.2	3.7	2.9	0.0	0.0	0.0
	Mandya	0.0	1.1	0.0	4.4	2.0	3.2
	Mysuru	0.0	0.0	0.0	1.9	0.4	1.2
	Ramanagara	0.0	0.0	0.0	0.0	0.1	0.0
	Shivamogga	1.9	3.3	2.6	5.2	2.1	3.7
	Tumkur	0.0	0.0	0.0	1.3	1.4	1.3
	Udupi	0.0	1.1	0.0	2.2	1.6	1.9
	Mysuru-Karnataka Region	0.4	1.7	1.0	3.7	3.4	3.6
	KARNATAKA	2.2	3.2	2.7	5.7	5.9	5.8

		Dropout rate (7-8) SC/ST Dropout rate (8-9)SC/ST							
	Region	District	Boys	Girls	Total	Boys	Girls	Total	
		Bidar	12.9	11.9	12.4	9.7	12.1	10.9	
	Hyderabad-	Kalaburagi	7.4	5.5	6.5	14.9	8.6	12.2	
	Karnataka	Koppal	0.0	0.0	0.0	3.3	9.1	5.9	
	region	Raichur	7.2	15.4	11.0	18.0	24.1	20.6	
		Yadgir	7.4	15.8	11.1	11.6	25.4	17.3	
		Hyderabad-Karnataka Region	7.2	10.0	8.5	12.4	15.0	13.6	
		,							
		Bagalkote	5.8	5.6	5.7	5.4	9.5	7.3	
		Belagavi	1.5	1.1	1.3	4.5	4.9	4.7	
	Mumbai-	Vijayapura	2.2	4.9	3.5	7.9	11.5	9.5	
	Karnataka	Dharwad	0.0	0.0	0.0	3.0	5.0	3.9	
	region	Gadag	3.0	3.4	3.2	8.1	9.7	8.8	
		Haveri	4.7	4.7	4.7	8.3	7.0	7.7	
		Uttara Kannada	5.7	7.9	6.8	3.8	10.6	7.0	
		Mumbai-Karnataka Region	2.3	3.1	2.7	5.8	7.6	6.7	
ĺ		Bengaluru	0.0	3.1	1.5	4.3	8.0	6.1	
		Bengaluru Rural	2.5	0.0	1.2	10.9	12.4	11.6	
	Mysuru-	Ballari	2.9	3.1	3.0	17.1	20.9	18.8	
	Karnataka region	Chamarajanagar	2.9	0.9	2.0	5.8	6.4	6.1	
	region	Chikkaballapura	0.0	0.0	0.0	0.0	0.0	0.0	
		Chikmagalur	0.0	2.6	0.0	8.8	6.6	7.7	
		Chitradurga	1.8	3.1	2.4	5.3	7.1	6.2	
		Dakshina Kannada	0.0	0.0	0.0	2.1	3.3	2.7	
		Davanagere	6.7	7.0	6.9	10.4	9.2	9.9	
		Hassan	0.6	0.5	0.6	4.4	3.1	3.7	
		Kodagu	2.3	0.0	0.7	6.2	0.0	3.0	
		Kolar	2.0	4.4	3.2	0.0	0.0	0.0	
		Mandya	0.9	3.5	2.2	6.6	3.1	4.9	
		Mysuru	0.2	0.1	0.1	3.7	1.1	2.5	
		Ramanagara	3.7	0.0	0.0	0.0	0.0	0.0	
		Shivamogga	0.0	0.0	0.0	4.0	0.0	0.8	
		Tumkur	0.0	0.0	0.0	1.4	0.0	0.7	
		Udupi	3.4	4.2	3.8	6.5	2.2	4.5	
		Mysuru-Karnataka Region	0.9	1.9	1.4	4.5	3.7	4.1	
		KARNATAKA	2.6	3.8	3.2	6.4	6.6	6.4	

Appendix I 54

Table S4: District level overall estimates on school related indicators across the three regions, Karnataka

Region	s District	Total number of secondary schools (High school)	Registered schools	Separate toilet for boys and girls
	Bidar	516	162	100.0
Hyderabad-	Kalaburagi	758	284	100.0
Karnataka region	Koppal	283	149	99.3
region	Raichur	414	192	100.0
	Yadgir	217	122	96.7
	Hyderabad-Karnataka Regi	ion 2188	909	99.4
	Bagalkote	440	180	100.0
	Belagavi	993	295	100.0
Mumbai-	Vijayapura	521	152	100.0
Karnataka	Dharwad	408	106	100.0
region	Gadag	294	113	100.0
	Haveri	386	136	100.0
	Uttara Kannada	363	123	100.0
	Mumbai-Karnataka Region	3405	1105	100.0
	Bengaluru	233	63	100.0
N	Bengaluru Rural	2283	138	100.0
Mysuru- Karnataka	Ballari	514	181	100.0
region	Chamarajanagar	209	86	100.0
_	Chikkaballapura	297	111	100.0
	Chikmagalur	333	116	100.0
	Chitradurga	427	114	100.0
	Dakshina Kannada	542	167	100.0
	Davanagere	502	158	100.0
	Hassan	535	241	99.2
	Kodagu	175	47	100.0
	Kolar	343	126	100.0
	Mandya	458	215	100.0
	Mysuru	686	232	100.0
	Ramanagara	292	107	100.0
	Shivamogga	467	164	100.0
	Tumkur	748	228	100.0
	Udupi	293	106	96.2
	Mysuru-Karnataka Region	9337	2600	99.8
	KARNATAKA	14930	4614	99.8

Quality of registered secondary schools (Only registered with education department)

	•	•	, ,	-		•	
Drinking facility	Electricity	Playground	Compound wall	Library	No. of classrooms	Good quality classroom	
99.4	100.0	75.9	75.3	100.0	810	83.7	
100.0	99.6	78.2	60.6	100.0	1394	89.4	
100.0	94.0	86.6	85.9	99.3	877	83.5	
100.0	100.0	72.9	65.1	99.5	1067	86.1	
100.0	94.3	70.5	65.6	100.0	717	82.1	
99.9	98.1	77.0	69.0	99.8	4865	85.6	
100.0	100.0	81.7	74.4	100.0	887	90.4	
100.0	93.6	83.4	76.9	99.7	1560	89.9	
98.0	87.5	80.9	57.9	98.0	684	93.9	
100.0	85.8	77.4	73.6	99.1	592	78.4	
100.0	99.1	89.4	79.6	99.1	516	92.4	
100.0	100.0	79.4	80.9	96.3	880	60.2	
100.0	99.2	79.7	65.9	99.2	661	85.8	
99.7	95.0	81.9	73.1	98.9	5780	84.5	
77.7	73.0	01.7	, 5.1	70.7	3700	0 1.5	
100.0	98.4	84.1	85.7	100.0	438	70.8	
100.0	100.0	78.3	87.7	100.0	1304	91.0	
100.0	100.0	84.0	69.1	89.5	911	88.6	
98.8	94.2	83.7	77.9	97.7	408	85.8	
99.1	94.6	82.0	78.4	100.0	783	75.9	
100.0	99.1	94.0	75.0	100.0	685	77.4	
100.0	96.5	86.0	76.3	97.4	614	81.3	
100.0	100.0	80.2	52.1	100.0	848	81.1	
100.0	100.0	89.9	88.0	100.0	892	82.1	
100.0	98.8	84.2	69.3	100.0	1149	83.4	
100.0	100.0	93.6	72.3	100.0	189	87.8	
100.0	90.5	73.8	80.2	99.2	849	83.0	
100.0	100.0	85.1	74.9	100.0	1180	87.3	
100.0	96.1	83.6	86.2	100.0	1478	81.5	
100.0	100.0	80.4	86.0	100.0	642	74.8	
100.0	95.1	79.3	77.4	98.2	832	73.0	
100.0	99.6	90.4	79.8	100.0	1133	88.5	
100.0	99.1	83.0	63.2	100.0	580	67.8	
99.9	98.0	84.1	76.3	98.9	14915	82.1	
99.9	97.3	82.2	74.1	99.1	25560	83.3	

Appendix I 56

Table S5: District level overall estimates on staffing, SSR, SCR, and teacher sex ratio s across the three regions, Karnataka (contd..)

		Staffing	g in registered	d secondary s	chools	
Region	District	Registered schools	Sanctioned teachers position	No. of working teachers	No. of children enrolled	
	Bidar	162	1575	1439	20108	
Hyderabad-	Kalaburagi	284	2601	2140	35032	
Karnataka	Koppal	149	1344	1215	25202	
region	Raichur	192	1749	1523	28207	
	Yadgir	122	1192	979	17592	
	Hyderabad-Karnataka Regio	n 909	8461	7296	126141	
	Bagalkote	180	1541	1371	26284	
	Belagavi	295	2577	2418	46057	
Mumbai-	Vijayapura	152	1272	1185	18565	
Karnataka	Dharwad	106	922	863	15340	
region	Gadag	113	958	860	12252	
	Haveri	136	1265	1156	17359	
	Uttara Kannada	123	1174	1059	16520	
	Mumbai-Karnataka Region	1105	9709	8912	152377	
	Bengaluru	63	757	712	11308	
Mysuru-	Bengaluru Rural	138	1634	1526	26398	
Karnataka	Ballari	181	1662	1390	30788	
region	Chamarajanagar	86	853	712	12695	
	Chikkaballapura	111	1149	978	18680	
	Chikmagalur	116	1184	1061	14131	
	Chitradurga	114	1133	1064	15690	
	Dakshina Kannada	167	1613	1260	22456	
	Davanagere	158	1570	1483	21641	
	Hassan	241	2298	1999	24073	
	Kodagu	47	493	390	5523	
	Kolar	126	1340	1146	20576	
	Mandya	215	1997	1808	24728	
	Mysuru	232	2247	2006	38751	
	Ramanagara	107	995	845	11343	
	Shivamogga	164	1726	1567	23292	
	Tumkur	228	2269	1964	28060	
	Udupi	106	1086	994	14461	
	Mysuru-Karnataka Region	2600	26006	22905	364594	
	KARNATAKA	4614	44176	39113	643112	

			St	affing in a	ll seconda	ry schools		
Student to school ratio	Student Classroom Ratio	PTR working	Sanctioned teachers position	Working teachers Male	Working teachers Female	Teacher sex ratio	Average girls per female teacher	
124	24.8	14.0	4015	2621	1104	421	35	
123	25.1	16.4	5785	3109	2061	663	27	
169	28.7	20.7	2218	1232	442	359	67	
147	26.4	18.5	3158	1886	927	492	44	
144	24.5	18.0	1847	1145	397	347	62	
139	25.9	17.3	17023	9993	4931	493	39	
146	29.6	19.2	3595	2502	660	264	51	
156	29.5	19.0	8549	5507	2125	386	39	
122	27.1	15.7	4078	2980	706	237	56	
145	25.9	17.8	3436	1770	1244	703	27	
108	23.7	14.2	2500	1584	626	395	32	
128	19.7	15.0	3196	2186	732	335	43	
134	25.0	15.6	3124	1596	1106	693	23	
138	26.4	17.1	28478	18125	7199	397	37	
179	25.8	15.9	2022	1273	647	508	203	
191	20.2	17.3	15979	6378	8520	1336	2	
170	33.8	22.1	3987	2266	1223	540	40	
148	31.1	17.8	1781	1016	505	497	33	
168	23.9	19.1	2303	1443	642	445	36	
122	20.6	13.3	2818	1903	616	324	32	
138	25.6	14.7	3580	2546	673	264	46	
134	26.5	17.8	4744	1601	2318	1448	15	
137	24.3	14.6	4430	2994	1132	378	33	
100	21.0	12.0	4543	2812	1203	428	24	
118	29.2	14.2	1475	638	583	914	16	
163	24.2	18.0	2967	1705	893	524	33	
115	21.0	13.7	3707	2376	1002	422	29	
167	26.2	19.3	5745	3119	1981	635	26	
106	17.7	13.4	2364	1314	712	542	25	
142	28.0	14.9	3940	2217	1354	611	23	
123	24.8	14.3	6573	4262	1457	342	32	
136	24.9	14.5	2730	1282	1046	816	18	
140	24.4	15.9	75688	41145	26507	644	24	
139	25.2	16.4	121189	69263	38637	558	28	

Appendix I 58

APPENDIX II

Table P1: Regional variation in selected indicators on elementary education across three regions, Karnataka

COMPONENTS	INDICATORS
	% habitations not served by schools (% of children aged 7-14 never attended school)
	Number of Schools per 1000 Child Population
ACCESS	Number of registered schools per 1000 child population
	Ratio of Primary to Upper Primary Schools/Sections (only at Upper Primary stage)-all schools
	Ratio of Primary to Upper Primary Schools/Sections (only at Upper Primary stage)-registered schools
	Average Student-Classroom Ratio: Lower primary school
	Average Student-Classroom Ratio: Upper primary school
INFRASTRUCTURE ¹	Average Student-Classroom Ratio: Elementary school
	Schools with SCR > 40: Elementary School
	Schools with PTR > 40: Lower Primary School
	Schools with PTR > 40: Higher Primary School
	Schools with PTR > 40: Elementary School
	% of Schools without Drinking Water Facility
	% of Schools with Common Toilets
	% of Schools with Girls' Toilets
	Pupil-Teacher Ratio (Sanctioned post: Lower Primary School)
	Pupil-Teacher Ratio (Sanctioned post: Upper Primary School)
TEACHERS ¹	Pupil-Teacher Ratio (Sanctioned post: Elementary School)
	Pupil-Teacher Ratio (Working teacher: Lower Primary School)
	Pupil-Teacher Ratio (Working teacher: Upper Primary School)
	Pupil-Teacher Ratio (Working teacher: Elementary School)
	% of Female Teachers (out of sanctioned post)*

Hyderabad-Karnataka region	Mumbai-Karnataka region	Mysuru-Karnataka region	Karnataka
12.0	6.6	5.4	6.9
5	6	7	6
4	4	5	4
0.8	0.7	0.8	0.8
0.8	0.7	1.1	1
17	14	11	13
27	23	18	21
25	21	16	19
1.4	0.5	0.3	0.5
3.0	1.0	0.2	0.8
6.5	3.2	1.0	2.5
4.9	2.2	0.6	1.6
0.1	0.3	0.1	0.1
0.0	0.0	0.2	0.1
99.4	100.0	99.9	99.8
18.0	14.5	11.1	12.9
26.3	24.2	18.9	21.9
24.4	22.3	16.5	19.6
22.7	16.8	13.0	15.3
33.3	28.0	22.5	26.2
31.0	25.8	19.6	23.3
40.9	44.3	55.2	50.0

Appendix II 60

COMPONENTS	INDICATORS				
	% of Female Teachers (out of filled post)*				
	% of Schools with Pupil-Teacher Ratio > 60				
TEACHERS ¹	% of Single-Teacher Schools where the Number of Students >15				
TEACHERS	% of Schools < 3 Teachers				
	% of Teachers without Professional Qualifications				
	Overall Gross Enrolment Ratio: Lower Primary School				
OUTCOME	Overall Gross Enrolment Ratio: Upper Primary School				
	Overall Gross Enrolment Ratio: Elementary School				
	Gross Enrolment Ratio - Scheduled Castes (LPS)				
	Gross Enrolment Ratio - Scheduled Castes (UPS)				
	Gross Enrolment Ratio - Scheduled Castes (ES)				
	Gross Enrolment Ratio - Scheduled Tribes (LPS)				
	Gross Enrolment Ratio - Scheduled Tribes (UPS)				
	Gross Enrolment Ratio - Scheduled Tribes (ES)				
	Gender Parity Index in Enrolment Overall (LPS)				
	Gender Parity Index in Enrolment Overall (UPS)				
	Gender Parity Index in Enrolment Overall (ES)				
	Repetition Rate: LPS				
	Repetition Rate: UPS				
	Repetition Rate: ES				
	Dropout Rate: LPS				
	Dropout Rate: UPS				
	Dropout Rate: ES				
	Ratio of Exit Class over Class I Enrolment (only at Primary Stage)				
	% of Appeared Children Passed (high school education)				
	% of Appeared Children Passed with > 60 percent and more Marks (high school education)				

¹Registered elementary school

^{*}Both registered and unregistered schools NA: Information not available

Hyderabad-Karnataka region	Mumbai-Karnataka region	Mysuru-Karnataka region	Karnataka	
 49.8	49.9	62.5	57.3	
 NA	NA	NA	NA	
 NA	NA	NA	NA	
NA	NA	NA	NA	
NA	NA	NA	NA	
 109.2	102.6	101.1	103.0	
 83.7	90.2	90.5	89.2	
 99.3	97.8	96.9	97.6	
 118.9	115.7	108.9	112.7	
86.4	97.1	98.3	95.3	
 106.2	108.5	104.8	105.9	
 111.3	107.7	111.9	111.0	
 84.1	95.4	98.8	94.1	
 100.7	103.0	106.8	104.4	
0.99	1.00	0.99	0.99	
 0.97	0.99	0.98	0.98	
 0.98	1.00	0.99	0.99	
 0.80	0.65	0.83	0.8	
 0.84	0.63	0.78	0.7	
0.81	0.65	0.81	0.8	
 4.10	3.48	1.21	2.4	
 6.90	2.90	1.10	2.5	
 5.01	3.27	1.17	2.4	
 NA	NA	NA	NA	
 NA	NA	NA	NA	
NA	NA	NA	NA	

Appendix II 62

NOTES

•
 •
•
 •
•
•
 -

