Chapter 4

LITERACY AND EDUCATION

4.1 Introduction

The new horizons for human development involve knowledge-building processes. It will ultimately raise the collective levels of economic and social well being of people within society. The task of improving the educational level among the residents of the district is one of the key factors in expanding personal endowments and building individual capacities. Such an effort will enable in eliminating physical and social barriers that currently obstruct regional development. Thus, improving the level of education becomes the primary instruments that can facilitate human development. It is in this context, an attempt would be made to examine the status of literacy in particular and education in general in the forthcoming analysis. An attempt will also be made to analyse on-going efforts in the direction of improving educational standards at various levels of the forma system prevailing in Tumakuru district.

Literacy levels and education quality is of paramount importance in assessing the overall quality of life in the district. The future potential education guarantees society by imparting critical knowledge to children is extremely important – one that the government must ensure is constantly nourished.

Consider an example; if education makes a person more efficient in commodity production, then this is clearly an enhancement of human capital. This can add to the value of production and also to the income of the person who has been educated. Even at the same level of income, a person may benefit from education, in reading, communicating, arguing in being able to choose in a more informal way, and so on. Thus the benefits of education exceed its role as human capital.

The Tumakuru district has 10 taluks that are quite homogenous in their literacy and education profile with slight variations – this suggests that district wide reforms will work very well in increasing the education quality and literacy levels.

Hence, by opening new horizons for human development, knowledge-building processes ultimately raise collective levels of economic and social well-being within society. Proliferation of education among the residents of the district is the key to expanding personal endowments and building individual capability, so that the physical and social barriers that currently obstruct regional development within the district can be eliminated. Rising levels of education and literacy are the primary instruments that can facilitate the human development process in Tumakuru district.

This chapter will first chart the literacy profile of the district, followed by an analysis of enrolment rates, dropout rates and mainstreaming of children. Then, a student-teacher ratio analysis is followed by per-capita expenditure and radar analysis to give the complete picture of the district education and literacy levels. Finally, future steps to be taken are given to improve the district on most of these aspects.

4.2 Literacy Profile of the District

Table No. 4.1: Literacy Profile of the District -2001 (in No.)

Sl. No.	Name	Literates								
		Rural			Urban			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
1	C.N.Halli	65378	48685	114063	8673	7218	15891	74051	55903	129954
2	Gubbi	81059	59547	140606	6820	5751	12571	87879	65298	153177
3	Koratagere	47553	31896	79449	5298	4295	9593	52851	36191	89042
4	Kunigal	62274	44425	106699	11312	9348	20660	73586	53773	127359
5	Madhugiri	76011	48311	124322	10258	8322	18580	86269	56633	142902
6	Pavagada	64369	38099	102468	10512	8000	18512	74881	46099	120980
7	Sira	79489	51619	131108	18316	14765	33081	97805	66384	164189
8	Tiptur	60473	45542	106015	21226	17780	39006	81699	63322	145021
9	Tumakuru	94266	63292	157558	100900	83644	184544	195166	146936	342102
10	Turuvekere	55847	41553	97400	7307	6052	13359	63154	47605	110759
	DISTRICT	686719	472969	1159688	200622	165175	365797	887341	638144	1525485

Source: Census of India, 2001

The total no. of literates in 2001 was 1525485. The distribution across the rural and the urban areas is 1159688 and 365797.

Among the taluks, Tumakuru taluk has the large no. of literates and the least is in Koratagere taluk.

Table No. 4.2 Literacy Rate of the District Across Taluks-2001 (in Percent)

Sl. No.	Name	Literacy Rate								
		Rural			Urban			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
1	C.N.Halli	69.29	52.42	60.92	77.38	64.56	70.98	70.15	53.72	61.99
2	Gubbi	66.96	50.22	58.68	78.98	70.39	74.81	67.76	51.52	59.74
3	Koratagere	63.46	44.08	53.94	76.46	63.86	70.25	64.56	45.76	55.32
4	Kunigal	61.58	42.49	51.87	73.03	62.93	68.09	63.10	45.03	53.96
5	Madhugiri	62.42	41.01	51.89	75.70	65.25	70.64	63.75	43.38	53.75
6	Pavagada	57.79	35.67	46.96	72.92	58.60	65.95	59.52	38.27	49.13
7	Sira	62.16	41.79	52.15	70.84	60.93	66.05	63.62	44.93	54.46
8	Tiptur	73.30	55.86	64.64	77.75	68.91	73.45	74.41	59.00	66.79
9	Tumakuru	67.78	49.19	58.85	78.05	69.90	74.14	72.73	59.17	66.21
10	Turuvekere	71.54	52.79	62.13	80.91	71.32	76.26	72.51	54.59	63.55
	DISTRICT	65.27	46.13	55.82	76.66	67.28	72.12	67.54	50.21	59.02

Source: Census of India, 2001

The literacy rate for the district as a whole in 2001 was 59.02 per cent and for the male and female it was 67.54 per cent and 50.2 per cent. The literacy rate for the rural and the urban areas is 55.82 per cent and 72.12 per cent respectively. This shows the variations in the literacy in the rural and the urban areas and thus, the rural areas are found to be still lagging in terms of the progress in education. There are significant variations in the literacy rates for the males and females and it is more pronounced in the rural than in the urban areas.

Table No. 4.3: Literacy Profile of the District - 2011 (in No.)

Sl. No.	Name	Literates								
		Rural			Urban			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
1	C.N.Halli	64656	52657	117313	15049	13825	28874	79705	66482	146187
2	Gubbi	89690	72295	161985	7762	7250	15012	97452	79545	176997
3	Koratagere	54433	42062	96495	6057	5482	11539	60490	47544	108034
4	Kunigal	65862	48782	114644	13628	12038	25666	79490	60820	140310
5	Madhugiri	84100	61753	145853	11663	10508	22171	95763	72261	168024
6	Pavagada	73706	52329	126035	11221	9608	20829	84927	61937	146864
7	Sira	91449	67628	159077	22443	20135	42578	113892	87763	201655
8	Tiptur	64574	54046	118620	24685	22673	47358	89259	76719	165978
9	Tumakuru	113619	85299	198918	126065	115205	241270	239684	200504	440188
10	Turuvekere	58233	47265	105498	7129	6527	13656	65362	53792	119154
	DISTRICT	760322	584116	1344438	245702	223251	468953	1006024	807367	1813391

Source: Census of India, 2011

Table No.4.4: Literacy Rate of the District Across Taluks-2011 (in Percent)

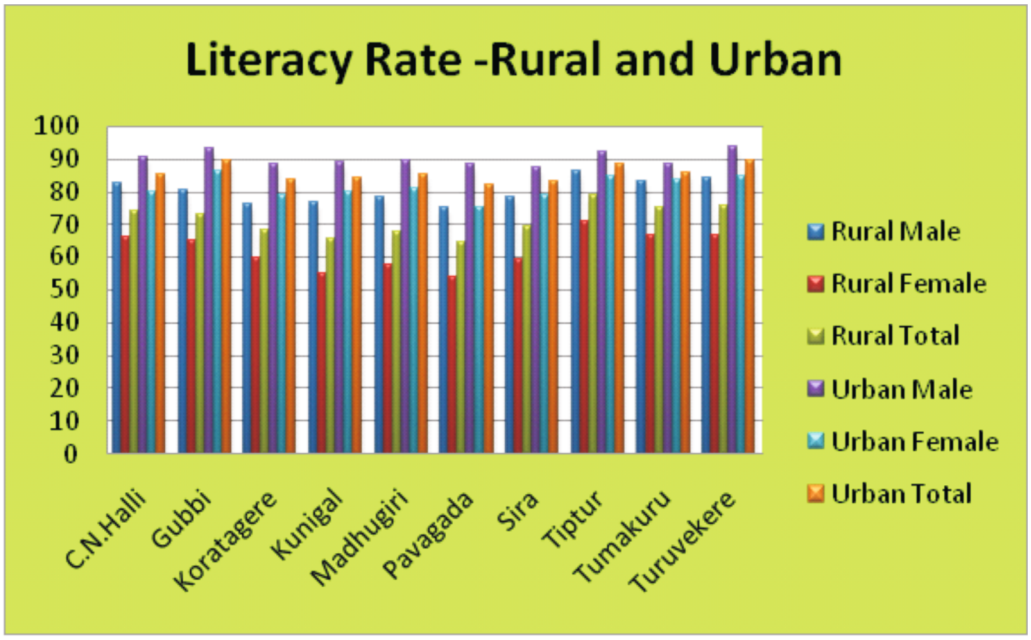
Sl. No.	Name	Literacy Rate								
		Rural			Urban			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
1	C.N.Halli	82.43	66.28	74.34	90.43	79.74	85.02	83.83	68.68	76.23
2	Gubbi	80.58	64.87	72.78	92.96	86.46	89.71	81.45	66.41	73.99
3	Koratagere	76.11	60.04	68.17	88.21	78.91	83.54	77.19	61.76	69.55
4	Kunigal	76.91	54.95	65.51	88.74	79.83	84.4	78.09	58.6	68.31
5	Madhugiri	78.34	57.49	67.99	89.69	80.95	85.32	79.57	60.07	69.88
6	Pavagada	75.25	53.69	64.58	88.21	75.38	81.79	76.74	56.24	66.58
7	Sira	78.49	59.38	69.07	87.33	78.95	83.18	80.09	62.95	71.64
8	Tiptur	86.42	70.79	78.68	91.94	84.6	88.29	87.9	74.57	81.23
9	Tumakuru	83.06	66.52	75.1	88.39	83.47	85.97	85.76	75.29	80.66
10	Turuvekere	84.19	66.91	75.46	93.74	84.72	89.21	85.15	68.67	76.82
	DISTRICT	80.01	61.9	71.04	89.13	82.23	85.71	82.05	66.45	74.32

Source: Census of India, 2011

In order to better understand the educational landscape of the district, the literacy profile needs to be charted. This is undertaken in this section. The above two tables depict the literacy levels and rates for each of the taluks in Tumakuru district, segregated by gender and area of residence.

The total literacy rate of the district including the entire demography is 74.32%. As is noticeable in most districts in the area, the literacy rates of females are lower than that of men on average, 66.45% to 82.05%. Societal pressures could explain this as women might be discouraged from studying and staying enrolled in schools.

Fig.4.1: Literacy Rate -Rural and Urban

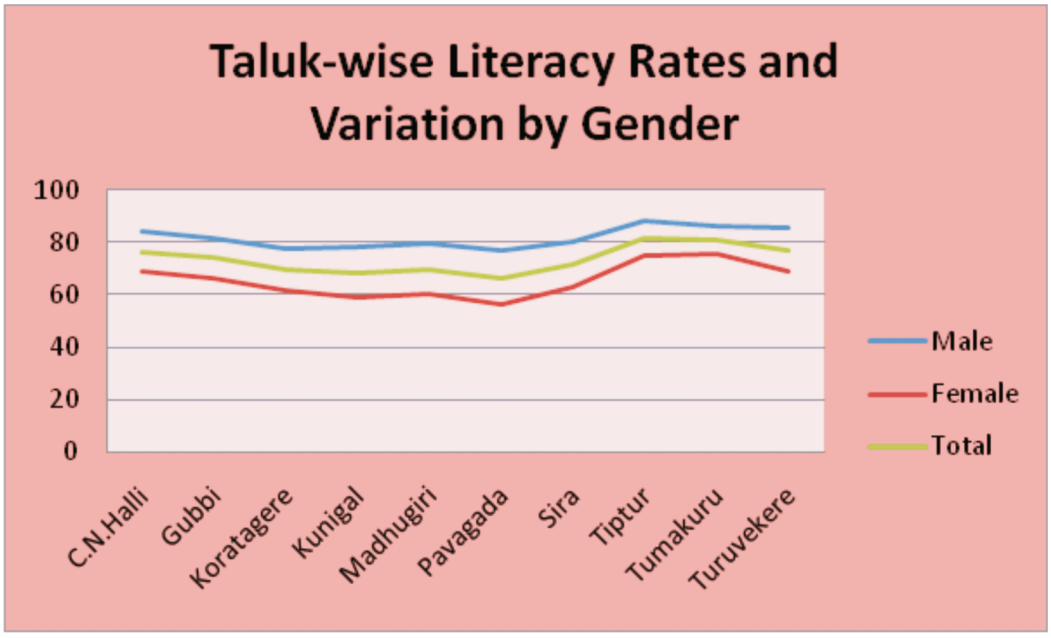


Strong awareness programmes on the benefits of educating the girl child are required to arrest this inequality in the numbers.

4.2.1 Taluk-wise Literacy Rates and Variation by Gender

Pavagada taluk has the lowest literacy levels for males (76.74%) and females (56.24%) in rural and urban areas, while Tiptur has the highest literacy levels (87.9% and 74.57% respectively). Across the taluks, there seems to be homogeneity to the spread of the literacy levels – broadly staying in line with the average of the respective demographic. The difference in total taluk literacy rate seems to be proportional to the number of urban residents in the respective taluk – hence requiring the focus on rural areas for literacy initiatives. This indicates that the district wide reforms targeting specific demographic groups will yield benefits and can be easily replicated across the taluks.

Fig. 4.2: Taluk-wise Literacy Rates and Variation by Gender



4.2.2 Literacy in Rural/Urban Areas and Urban Literacy in Tumakuru

It is also noted and expected that urban literacy rates (85.71%) are much higher than the rural literacy rates (71.04%). An interesting observation is that urban females have a higher literacy rate (82.23%) than the district total (74.32%). This clearly indicates that the illiteracy of rural females (61.9%) is the defining statistic that is reducing the overall district literacy rates. This revelation should spur government campaigns aimed at increasing the literacy of this very important demographic group. Further, rural areas show a large disparity between male and female literacy rates with a difference of 18 per cent while the corresponding difference in the urban areas is only 7 per cent.

4.2.3 Rural Female Literacy

The rural female literacy rates are the lowest for any group in the entire district. The district average is 61.9 per cent for Tumakuru, lower than the urban female literacy rates as well which is 66.45 per cent. As mentioned earlier, Pavagada has the lowest literacy rates for rural females with 53.69 per cent. Encouraging signs from Tiptur is the high rural literacy rates at 70 per cent. Case studies on the success of this taluk should be organised to implement across the district.

4.3 Enrollment

This section studies the Gross and Net Enrolment Rates for children in elementary school for the entire district. Following this, the dropout rates and mainstreaming of children are analyzed to better represent the educational landscape. These statistics are integral to understanding the education that is most important and largely determines literacy rates – elementary education. Further, studying the taluks with high dropout rates will allow the respective authorities to arrest the trend.

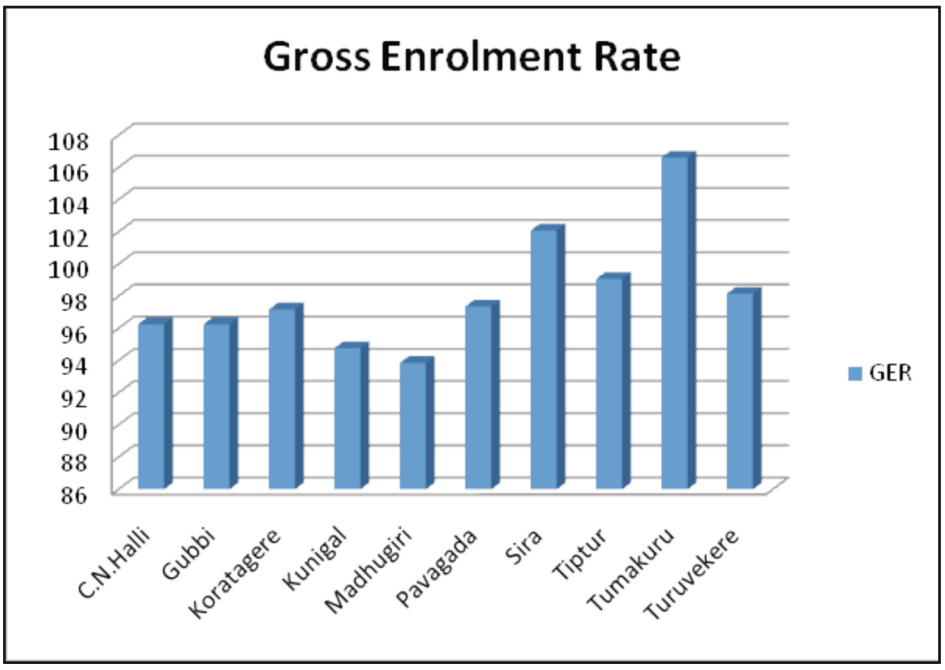
Table No.4.5: Gross Enrolment Rate and Net Enrolment Rate Elementary School -2011 [No. & %]

Sl. No.	Taluk	Gross Enrolment Rate [6-14] Elementary School			Net Enrolment Rate [6-14] Elementary Levels	
		Population 6-14	No.of students in the age group 6-14 enroled in school at several different grade levels	GER	Net Enrolment	NER
1	C.N.Halli	24701	23778	96.26	19840	80.32
2	Gubbi	30518	29377	96.26	25061	82.12
3	Koratagere	20087	19521	97.18	16540	82.34
4	Kunigal	28691	27193	94.78	23443	81.71
5	Madhugiri	34185	32086	93.86	27898	81.61
6	Pavagada	32704	31841	97.36	27135	82.97
7	Sira	39069	39886	102.09	34833	89.16
8	Tiptur	25147	24916	99.08	21518	85.57
9	Tumakuru	73591	78463	106.62	67624	91.89
10	Turuvekere	19087	18738	98.17	16100	84.35
	DISTRICT	327780	325799	99.4	279992	85.42

Source: DDPI, Tumakuru, 2011

The table above depicts the GER and the NER for each taluk in the district along with the district total. The GER for some taluks is above 100 per cent as it merely depicts the number of children enrolled in different grade levels that includes re-enrolment figures from mainstreaming of children and reversing drop outs in some cases. The district total for the GER is 99.40 per cent, which is very impressive. However, it is important to look at the NER to get a true sense of enrolment figures.

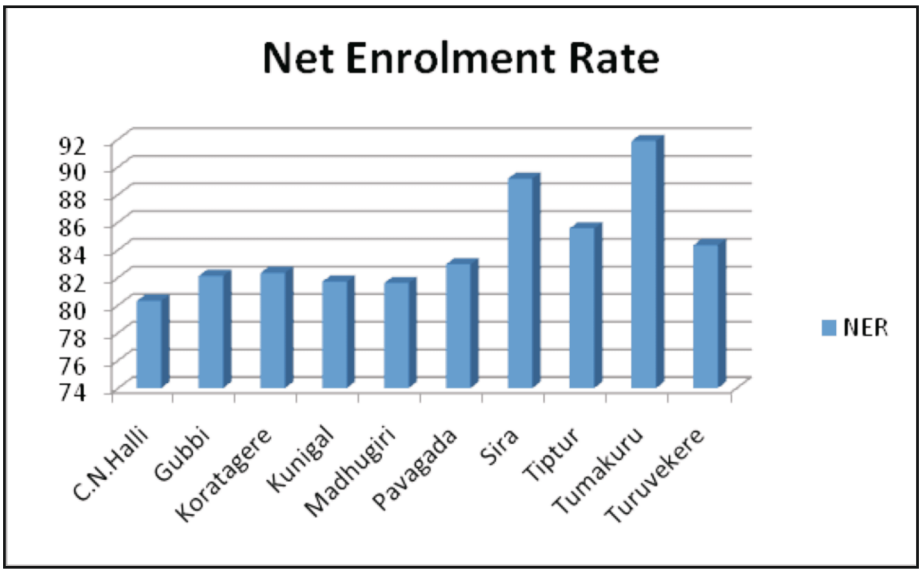
Fig.4.3: Gross Enrolment Rate



Sira and Tumakuru have GER figures over 100 per cent - this could also be explained by constant urbanization in these areas, immigration into the taluk and enrolling children in school that have not been accounted as a part of the population as yet. If this trend is accurate, then this would depreciate the GER of neighboring taluks by a small degree.

The total NER for the district is 85.42 per cent - this figure is more closely linked to the true enrollment of children in elementary education. Even though 85.42 per cent is a high percentage – it is imperative that efforts are taken in the district to make sure this NER increases even further. Educating a child during the elementary stage greatly increases IQ levels, confidence, reduces delinquency and allows the true potential of the district to be achieved in the future years.

Fig.4.4: Net Enrolment Rate



C.N. Halli, Gubbi, Koratagere, Kunigal, Madhugiri and Pavagada are all below the district average and strong efforts have to be made to ensure the Right to Education for these children that are presently missing out.

4.4 Attendance and Dropout, out of School Children and Mainstreaming of Children

Table No 4.6: Drop Out Rates of School Children-2011[No.&%]

Sl. No.	Taluk	Drop out rate in Elementary Education		
		No. of children dropped out	Total enroled children(6-14)	Dropout rate
1	C.N.Halli	93	23719	0.39
2	Gubbi	54	29414	0.18
3	Koratagere	27	19368	0.14
4	Kunigal	110	26745	0.41
5	Madhugiri	22	32235	0.07
6	Pavagada	21	31543	0.07
7	Sira	184	39605	0.46
8	Tiptur	52	24710	0.21
9	Tumakuru	453	78016	0.58
10	Turuvekere	11	18586	0.06
	DISTRICT	1027	323941	0.32

Source : DDPI, Tumakuru, 2011

The above table lists out the dropout rate in elementary education in the district. A total of 1027 children dropped out in the preceding year of data collection, yielding a district average of 0.32 per cent. It is likely that this number is deflated, as it is dependent on clearly identifying children who have dropped out. However, 0.32 per cent is still a low figure and indicates that parents are willing to keep their children in elementary education. In the next few sections the dropout rate for secondary education is studied and the two numbers will be compared for the full trend.

Mainstreaming

Table No. 4.7: Percentage of Drop-out Children Mainstreamed -2011 [No.&%]

Sl. No.	Taluk	Percentage of Drop-out Children mainstreamed		
		No. of drop-out children identified	Mainstreamed	Value
1	C.N.Halli	93	36	38.71
2	Gubbi	54	15	27.78
3	Koratagere	27	22	81.48
4	Kunigal	110	85	77.27
5	Madhugiri	22	19	86.36
6	Pavagada	21	7	33.33
7	Sira	184	86	46.74
8	Tiptur	52	27	51.92
9	Tumakuru	453	58	12.8
10	Turuvekere	11	6	54.55
	DISTRICT	1027	361	35.15

Source: DDPI, Tumakuru, 2011

Tiptur, Sira, Kunigal and Chikkanayakanahalli have the highest dropout rates in the district at elementary education. Pavagada, Madhugiri and Turuvekere all have extremely low dropout rates – more detailed analysis is required to understand this success as well as ratification of the prevailing statistics.

Given the low dropout rates in the district, mainstreaming of children should be effective if the authorities have easy to access information on those children who have ceased to study. Further, some children do not receive formal methods of teaching and these cases need to be identified and brought into the formal setup. Mainstreaming is essential to ensure that no child is left behind.

Of the drop out children identified by the government, only 35.15 per cent have been successfully mainstreamed. This might be due to strong societal pressures that resist the re-enrolment of the child into the educational setup. Given that literacy rates in the district average around 70 per cent, it could be that some parents do not see the benefits of education – a societal norm that needs to be addressed and changed. Koratagere, Kunigal and Madhugiri have extremely high mainstreaming rates – further

study into the methods used could greatly help the remaining taluks in being more effective.

4.5 Secondary School Enrolment and Dropout Rates

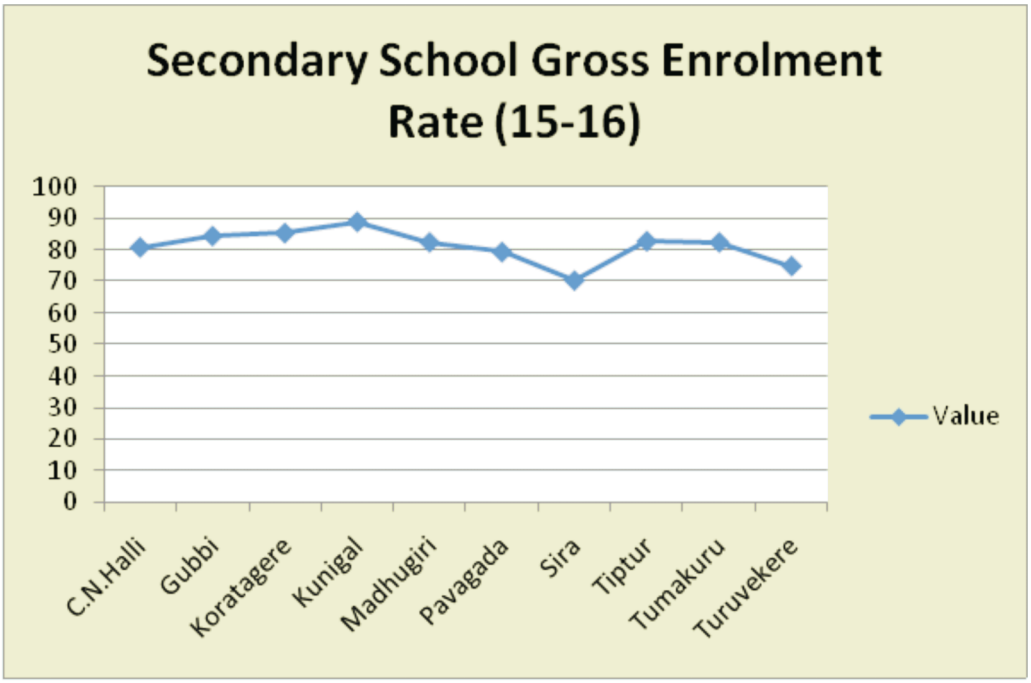
This section deals with Secondary School facilities available in the district, including matrix on enrolment, dropouts, teacher student ratios and the infrastructure index. Given that in the earlier sections it was noticed that the dropout rate was low for elementary education, particular interest will be paid to this matrix. Further, the infrastructure provided by the schools is absolutely integral to fostering a keen learning spirit in children – an analysis of which will shed light on the facilities available.

Table No 4.8: Secondary School Gross Enrolment Rate and Drop-out Rate-2011 [No.&%]

Sl. No.	Taluk	Secondary School Gross Enrolment Rate (15-16)		Drop-out Rate in Secondary Education		
		No. Of Children Enrolled	Value (%)	No. of children dropped out	Total enrolment in that age	Value (%)
1	C.N.Halli	8753	80.92	56	8753	0.64
2	Gubbi	11323	84.5	39	11323	0.34
3	Koratagere	7449	85.42	45	7449	0.6
4	Kunigal	10181	88.97	46	10181	0.45
5	Madhugiri	12367	82.5	93	12367	0.75
6	Pavagada	11581	79.41	45	11581	0.39
7	Sira	14036	70.39	75	14036	0.53
8	Tiptur	9739	82.87	62	9739	0.64
9	Tumakuru	32121	82.5	56	32121	0.17
10	Turuvekere	7464	75	28	7464	0.38
	DISTRICT	125014	81.25	545	125014	0.44

Source : DDPI, Tumakuru,2011

Fig.4.5: Secondary School Gross Enrolment Rate (15-16)



The above table lists out the GER and Dropout rates for Secondary Schools in the Tumakuru district. It is immediately noticed that the average GER for the district (81.25%) is markedly lower than the Elementary School GER. It could be that this is the critical age group where a larger portion of children are dropping out of school and more emphasis could be put on keeping these children in school.

Given that GER figure is slightly inflated compared to the NER, even lesser children are enrolled in Secondary Education in the district than this number implies.

Sira has the lowest Secondary GER with only 70.39 per cent. Kunigal, the highest with 88.97 per cent, is not far from the average and indicates a clustering of respective values for the taluks around the mean. The dropout rate is calculated versus the total enrolment in the Secondary Education age group – it therefore is not an indicator of how many children are missing out on Secondary Education by not participating (GER gives an indication of this), but rather it is how many extra children are missing out on quality education in the concerned age group.

The dropout rate is only at 0.44 per cent and this seems like an extremely small figure, one that is comparable to the dropout rates for Elementary Education. This could imply either that further research is required on the calculation of these figures or that once a student signs up for formal education, there is a very low likelihood that he/she will drop out of school.

4.6 Teacher-Pupil Ratio and Eight Basic Facilities -Infrastructure Index

Table No. 4.9: Teacher-Pupil Ratio by taluks and School Infrastructure Index - 2011 [No. &%]

Sl. No.	Taluk	Teacher-Pupil ratio for secondary education	School Infrastructure Index
1	C.N.Halli	18	0.94
2	Gubbi	19	0.91
3	Koratagere	16	0.93
4	Kunigal	18	0.92
5	Madhugiri	20	0.93
6	Pavagada	13	0.84
7	Sira	20	0.9
8	Tiptur	18	0.9
9	Tumakuru	18	0.89
10	Turuvekere	23	0.92

Source: DDPI, Tumakuru,2011

The above table has the Student Teacher Ratio for Secondary Education and the School Infrastructure Index. The student teacher ratio gives a good idea on the quality of education being received by the pupils as a lower ratio implies that a teacher will have more individual attention to spare for each student. The infrastructure index has been calculated using the SSA Method that ranks schools based on the availability of crucial 8 facilities.

Fig.4.6: Student - Teacher ratio for secondary education

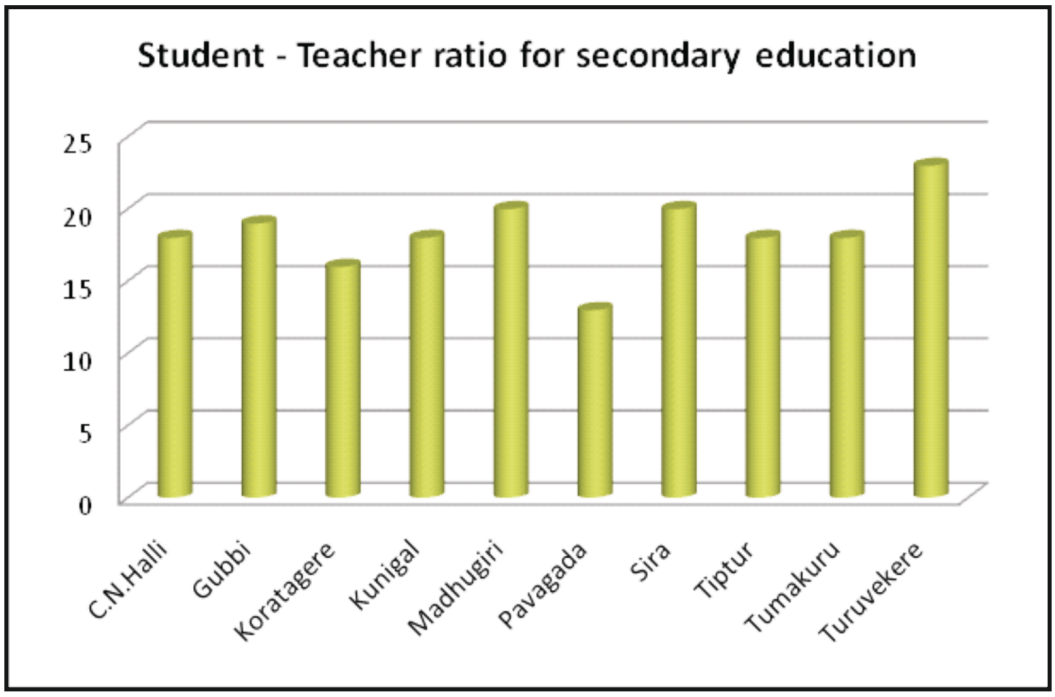
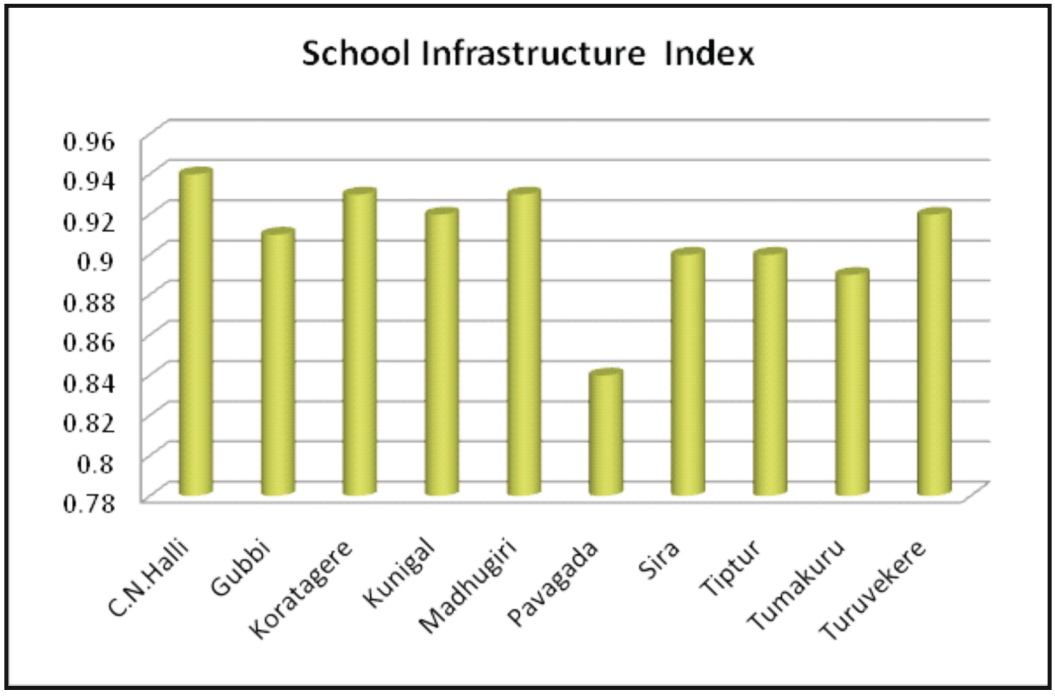


Fig.4.7: School Infrastructure Index



All the taluks perform well on the School Infrastructure Index, though this does not usually guarantee that the schools are using premium facilities effectively. Pavagada is lacking the most in providing good school infrastructure.

There is a constant student teacher ratio almost throughout the entire district. At an average of around 18 for the district, it is not very high that the teachers will have no time to spare for individual attention. This can ensure that the government follows a no child felt behind policy. Coincidentally, Pavagada also has the lowest student-teacher ratio for Secondary Education in the district, which at 13, is considerably lower than the other taluks.

4.7 SSLC and PUC results

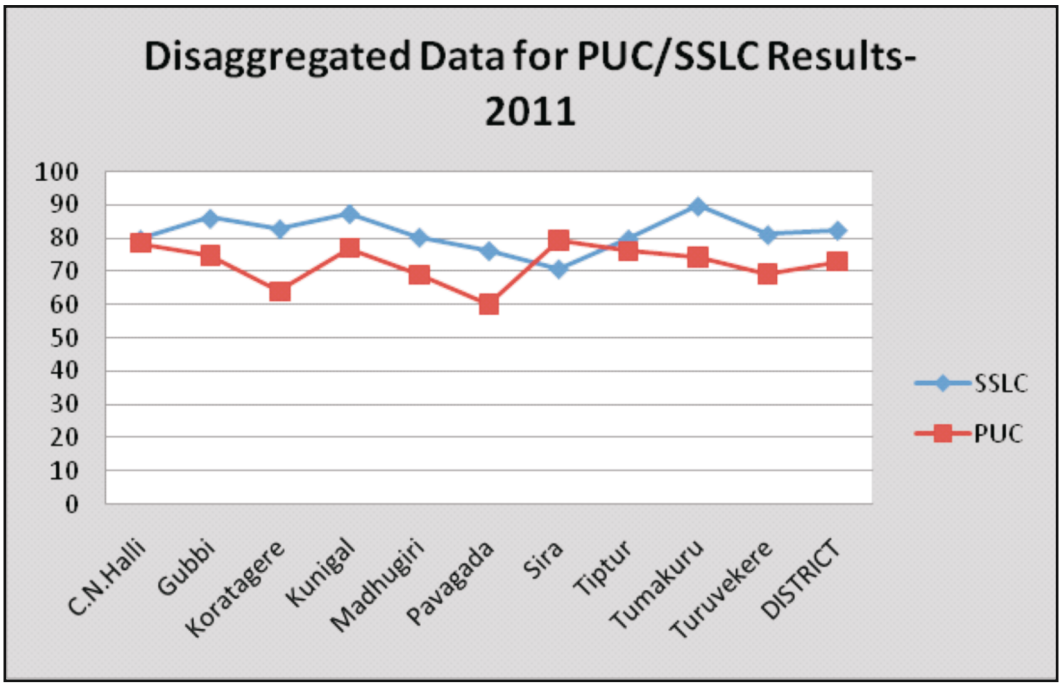
Table No. 4.10 : Disaggregated Data for SSLC and PUC Rsults - 2011 [No.&%]

Sl. No.	Taluk	SSLC			PUC		
		No. of students passed SSLC examination	Total no. of students appearing for SSLC examination	Value (%)	No. of students passed in PUC examination	Total no. of Students appearing for PUC examination	Value (%)
1	C.N.Halli	1971	2474	79.67	915	1162	78.74
2	Gubbi	2948	3426	86.05	1281	1712	74.82
3	Koratagere	1971	2378	82.88	738	1155	63.9
4	Kunigal	2737	3129	87.47	1219	1581	77.1
5	Madhugiri	3149	3920	80.33	1096	1588	69.02
6	Pavagada	2695	3533	76.28	955	1590	60.06
7	Sira	3015	4263	70.72	1463	1840	79.51
8	Tiptur	2107	2642	79.75	1381	1812	76.21
9	Tumakuru	8422	9381	89.78	5049	6784	74.43
10	Turuvekere	1901	2344	81.1	1006	1449	69.43
	DISTRICT	30916	37490	82.46	15103	20673	73.06

Source: DDPI, Tumakuru, 2011

The above table shows the SSLC and PUC pass percentages for the entire district. The district average for the SSLC pass is 82.46 per cent and for the PUC pass is 73.06 per cent. This difference is to be expected as the PUC exams are assumed to be harder given the seniority. Pavagada under performs the largest on the PUC and SSLC pass percentages when we look at the two values together compared to the respective district averages. This could either be symptomatic of teaching quality or the fact that there is migration of people to the more urban taluks, leading to a skew of marks in favour to them.

Fig.4.8: Disaggregated Data for SSLC and PUC Results-2011



Sira shows the reverse trend to the district, having a higher PUC Pass Percentage compared to SSLC Pass Percentage. A review of the Secondary Schooling of Sira could be conducted to get a better understanding of why this particular observation is made.

4.8 Post-Secondary Education including Professional (Engineering/Medicine/ Dental/Nursing) and general degree colleges, ITI/ Polytechnic and other skill development institutions.

This section deals with the types of Post-Secondary Educational opportunities afforded to prospective students in the various districts. These facilities are crucial in creating a highly skilled labour force that can add significant value to society. Medical College, Engineering Colleges and even Polytechnic Institutes offer students a chance at a highly prosperous career and life while advantageously benefitting society.

Table No 4.11: Details of Higher Educational Institutions by type of Management (in numbers)-2011

Sl. No.	Taluk	General Degree Colleges-Govt	General Degree Colleges- Pvt	Medical Colleges-Govt	Medical Colleges-Pvt	Indian System of Medical Colleges-Govt	Indian System of Medical Colleges-Pvt	Dental Colleges-Govt	Dental Colleges -Pvt	Polytechnic-Govt	Polytechnic-Pvt	Engineering- Govt	Engineering- Pvt
1	C.N.Halli	2	2	0	0	0	0	0	0	0	0	0	0
2	Gubbi	1	2	0	0	0	0	0	0	0	0	0	1
3	Koratagere	1	1	0	0	0	0	0	0	0	1	0	0
4	Kunigal	1	2	0	0	0	0	0	0	0	0	0	0
5	Madhugiri	2	3	0	0	0	0	0	0	0	1	0	0
6	Pavagada	1	3	0	0	0	0	0	0	0	0	0	0
7	Sira	2	4	0	0	0	0	0	0	0	0	0	0
8	Tiptur	2	7	0	0	0	0	0	0	0	2	0	2
9	Tumakuru	3	42	0	1	0	1	0	1	1	6	0	5
10	Turuvekere	1	2	0	0	0	0	0	0	1	0	0	0
	District	16	68	0	1	0	0	0	1	2	10	0	8

Source: DDPI, Tumakuru, 2011

The above table lists out the various colleges taluk wise. Migration forces play a strong part in the occurrence of Post-Secondary Educational Colleges because it is more efficient to setup a college in a densely populated area where the demand is appropriate. Large investments are required to set up such colleges and efficiency is important.

There are 16 Government General Colleges to the 68 Private General Colleges. Most of these private colleges are in Tumakuru, a densely packed taluk with lots of urban residents. It is likely that students from other taluks and districts travel to Tumakuru to study. There are no Government Engineering Colleges in the entire district. There are a few private such colleges in Tumakuru and Tiptur. There are also no medical colleges in the

entire district. Though it is likely that students travel to other districts to attend prestigious medical colleges, creating a few such colleges attached to corresponding hospitals in the district could be very strong values add to the district as a whole.

There are more private colleges than government colleges in every type of Post-Secondary Educational Colleges.

4.9 Schemes for promotion of literacy level

Many schemes have been implemented by Government of India and the State government. Some of the schemes implemented for the promotion of literacy are as follows:

4.9.1 Central Government Schemes for School Education

i) Sarva Shiksha Abhiyan:
ii) Kasturba Gandhi Balika Vidyalaya(KGBV):
iii) National Programme for Education of Girls at Elementary Level (NPEGEL):
iv) Mid-Day Meal Scheme (MDMS):
v) The Rashtriya Madhyamik Shiksha Abhiyan:
vi) Scheme for Setting up of 6000 Model Schools at Block Level:
vii) Scheme of Vocationalisation of Secondary Education at +2 level:
viii) Scheme of ICT@ School:
ix) Inclusive Education for Disabled at Secondary stage:
x) Quality Improvement in Schools:
xi) Strengthening of Teachers' Training Institutions
xii) Adult Education and Skill Development Schemes:
xiii) Scheme for Providing Quality Education for Madras(SPQEM) ;
xiv) Setting up of New Polytechnics and Strengthening of Existing Polytechnics

4.9.2 State Government Schemes

I. Special enrolment drive
II. Free education for girls
III. Provision of free school bags and note books to sc/st girls
IV. Free text books
V. Free uniforms :
VI. Repairs in government primary schools
VII. Manoranjan

Of the above said schemes, the Department of Public Instruction is implementing the Akshara Dasoha programme in a big way in the district with a view to improve the attendance, mainstreaming of the school dropouts and to improve the performance of the students attending the school. The total amount provided for the programme during 2011-12 is Rs. 2,323.12 lakhs. The no. of beneficiaries under the programme is 3,4,909. The required personnel are also being hired and their salaries are paid.

4.10 Per Capita Expenditure Analysis

Table No 4.12: Per-capita Expenditure Analysis - 2011 [No.&%]

Sl. No.	Taluk	Per capita Education Expenditure			Percentage of Habitats having Primary School within 1 km.		
		Total Government Expenditure Towards Education	Total Population	Value (Rs.)	No. of habitats having Primary schools within 1km distance	Total no. of habitats	Value (%)
1	C.N.Halli	48205300	212130	227.24	413	438	94.29
2	Gubbi	58930700	262518	224.48	316	328	96.34
3	Koratagere	58072700	167591	346.51	320	321	99.69
4	Kunigal	51958000	225783	230.12	579	580	99.83
5	Madhugiri	109439700	267866	424.41	438	438	100
6	Pavagada	33580500	245194	136.95	296	301	98.34
7	Sira	76259100	313758	243.05	472	472	100
8	Tiptur	138036800	222749	619.7	385	385	100
9	Tumakuru	129453900	592397	218.53	667	674	98.96
10	Turuvekere	157255400	168994	930.54	480	480	100
	DISTRICT	861192100	2678980	321.46	4366	4417	98.85

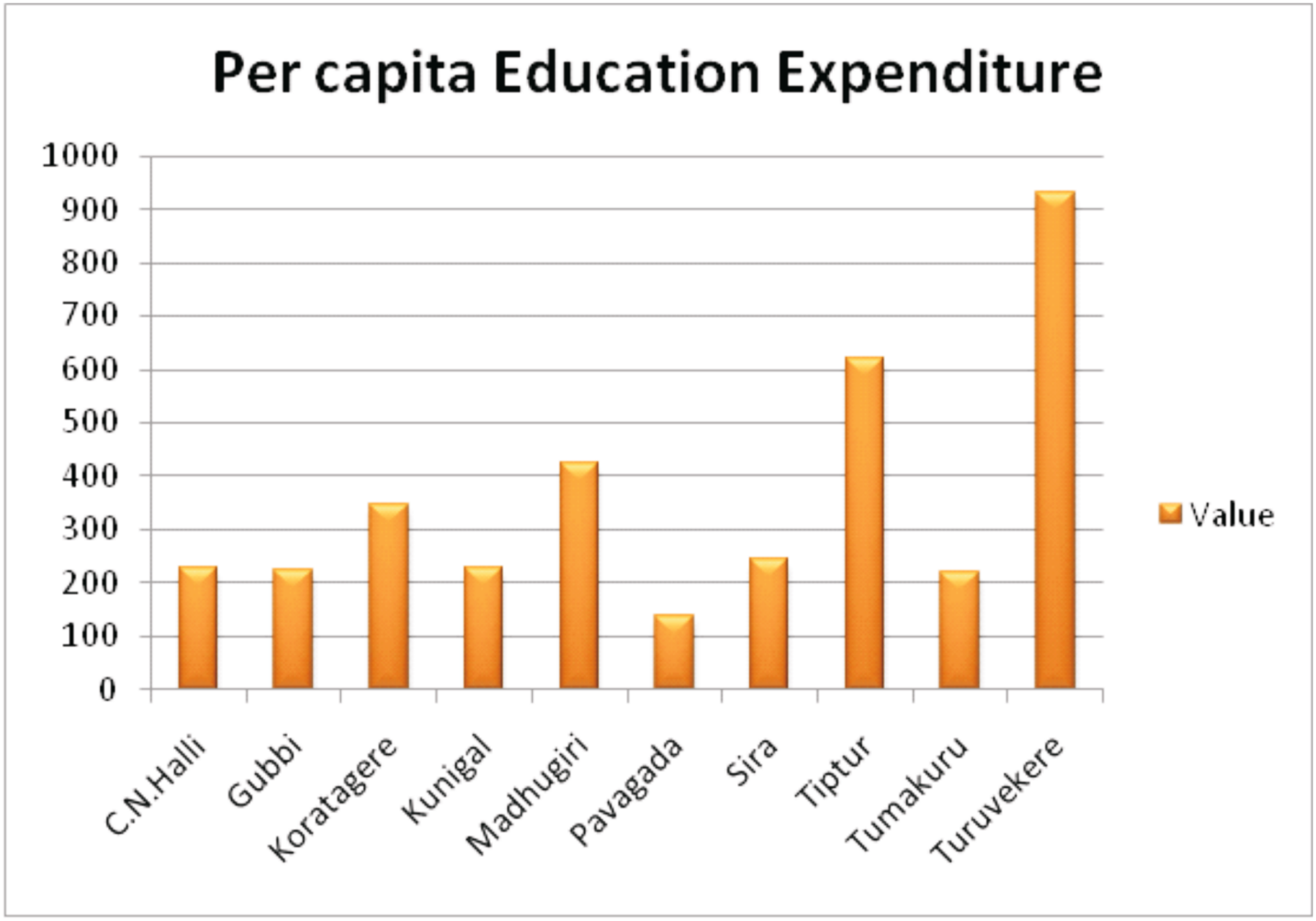
Source: DDPI, Tumakuru, 2011

This section looks at the per capita expenditure of the various taluks of the Tumakuru district on Education. To give perspective, percentage of habitats having a primary school within 1km is also given. It is noticed that across the district, almost all habitats have access to Primary Schools within 1km–this is a great accomplishment and one that speaks of a success in the district. Coupled with the high Elementary Education NER and low dropout rates, it is easy to get the impression that Tumakuru district's Primary Education is making good progress.

The average per capita expenditure for the district on education is Rs. 321.46. This figure seems relatively high given approximately 30 per cent of the population are children. Turuvekere has an alarmingly high Rs. 930 expenditure per capita on education – more research is required to explain this figure. It could be that the population density is really low in the area and budgets are not calibrated per capita when being handed out by the state and district governments.

Pavagada has a remarkably low per capita expenditure at Rs. 137. Given that this taluk performed worse in the infrastructure, there is a scope to increase expenditure and improve the facilities in the schools. Tumakuru only has a per capita expenditure of Rs. 218.53, which is a positive achievement given the high population density of the region. Therefore, the absolute spend in this taluk might be the highest.

Fig.4.9: Per capita Education Expenditure



4.11 Radar Analysis for Education

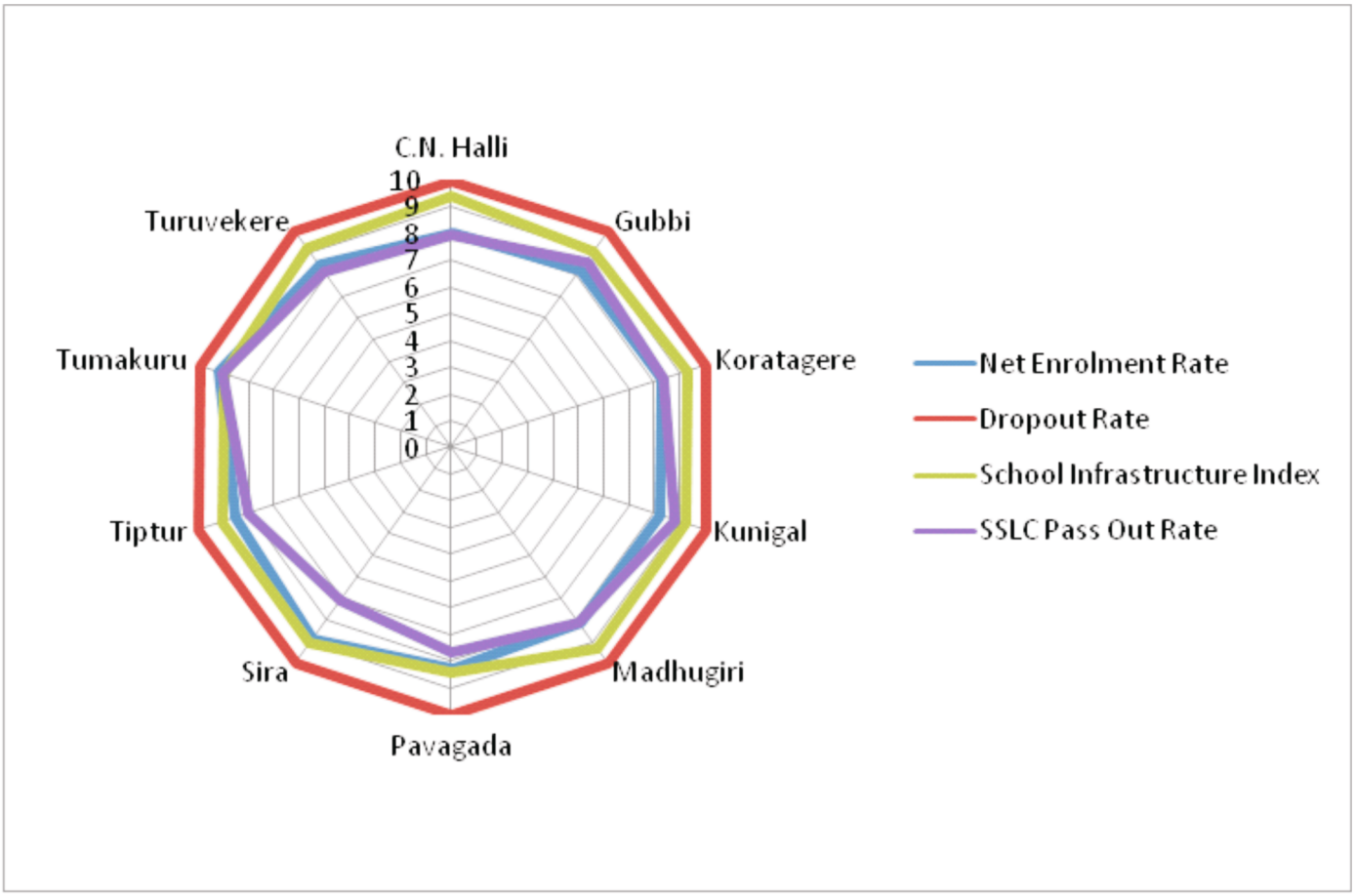


Fig.4.10 : Radar Analysis for Education

This section conducts a radar analysis as set down by the guidelines on key indicators of Education previously discussed in the district. The above graph is the unfilled radar graph for all of the taluks in the district on the following indicators: Net Enrolment Rate (6-14 years), Dropout Rate (6-14 years), School Infrastructure Index and the SSLC Pass Out Rate.

As mentioned earlier in the chapter, the dropout rates for all the taluks are extremely low. This is a remarkable observation and more research is required to figure out the authenticity of the recording procedure. The taluks performs worst on the SSLC Pass out Rate measure, with Sira in particular performing worse than the other taluks.

Once again, the homogeneity of the district becomes clear by looking at the radar graph – each of the taluks has very similar profile of statistics of key indicators. This indicates that top down district wide reforms will work very well in the Tumakuru district. The nearly circular shape of the above radar graph illustrates this point.

As mentioned earlier, Pavagada can afford to spend more money to improve the school infrastructure available in the taluk.

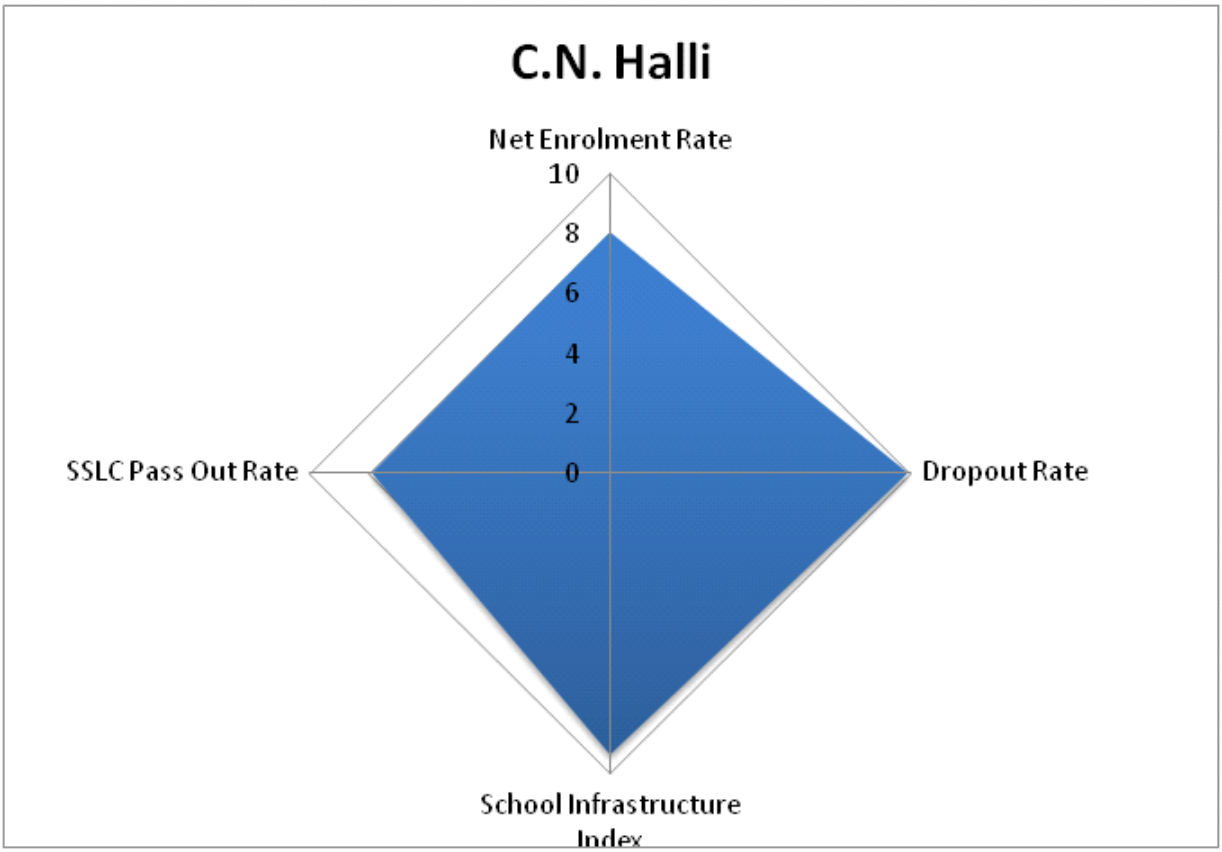


Fig.4.11 : C.N. Halli Radar Analysis for Education

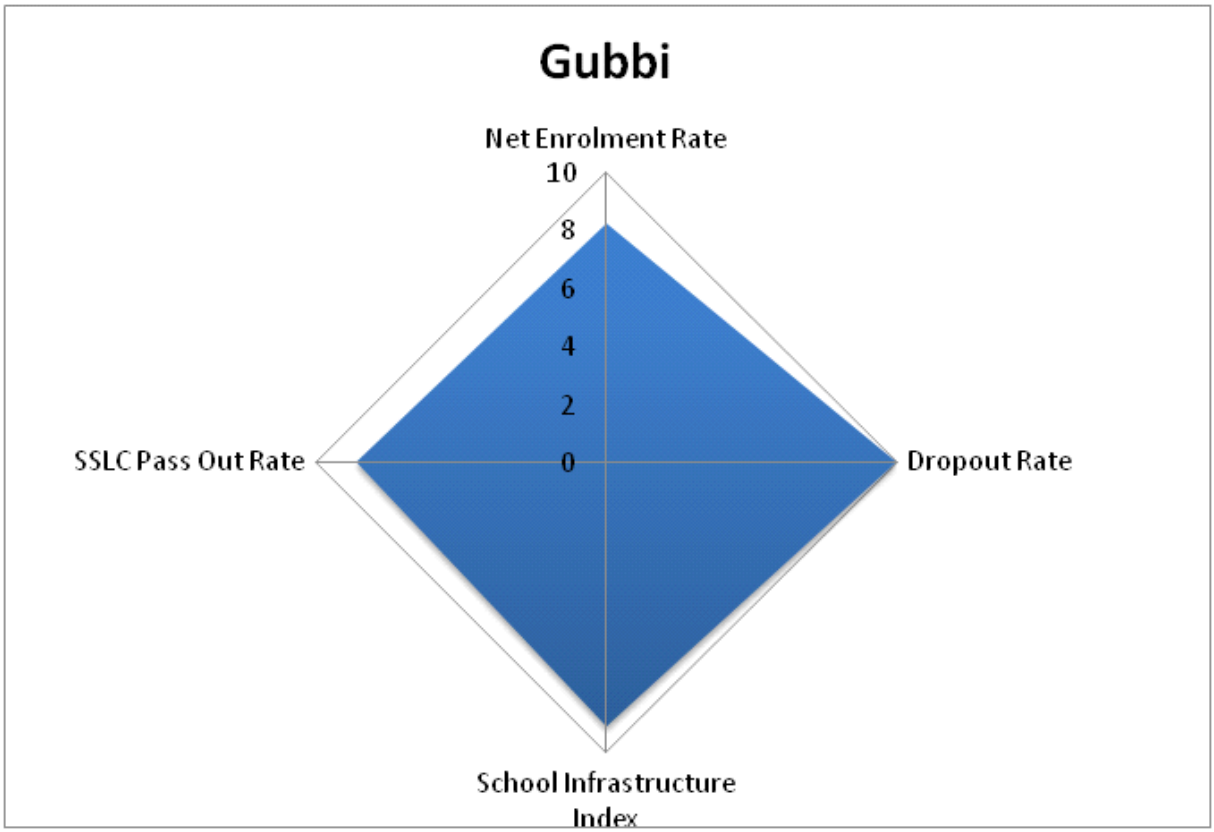


Fig.4.12 : Gubbi Radar Analysis for Education

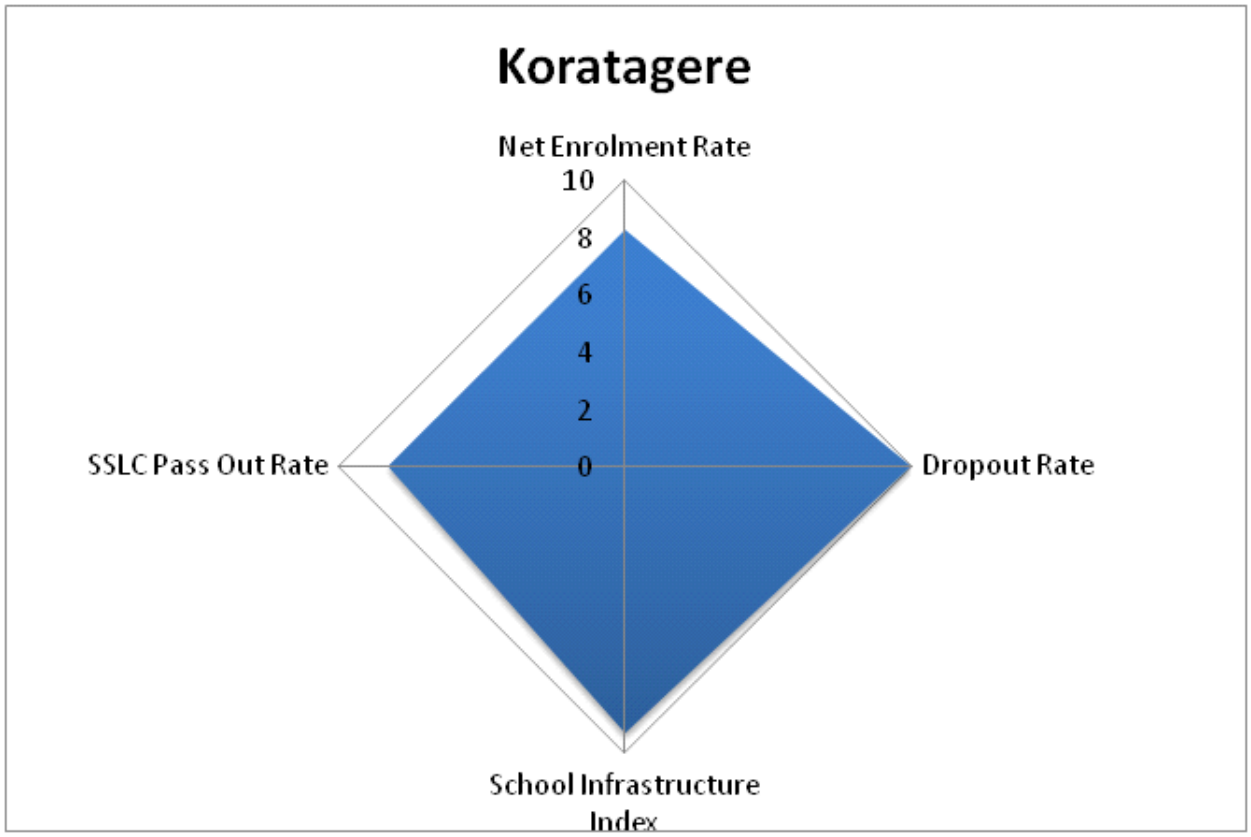


Fig.4.13 : Koratagere Radar Analysis for Education

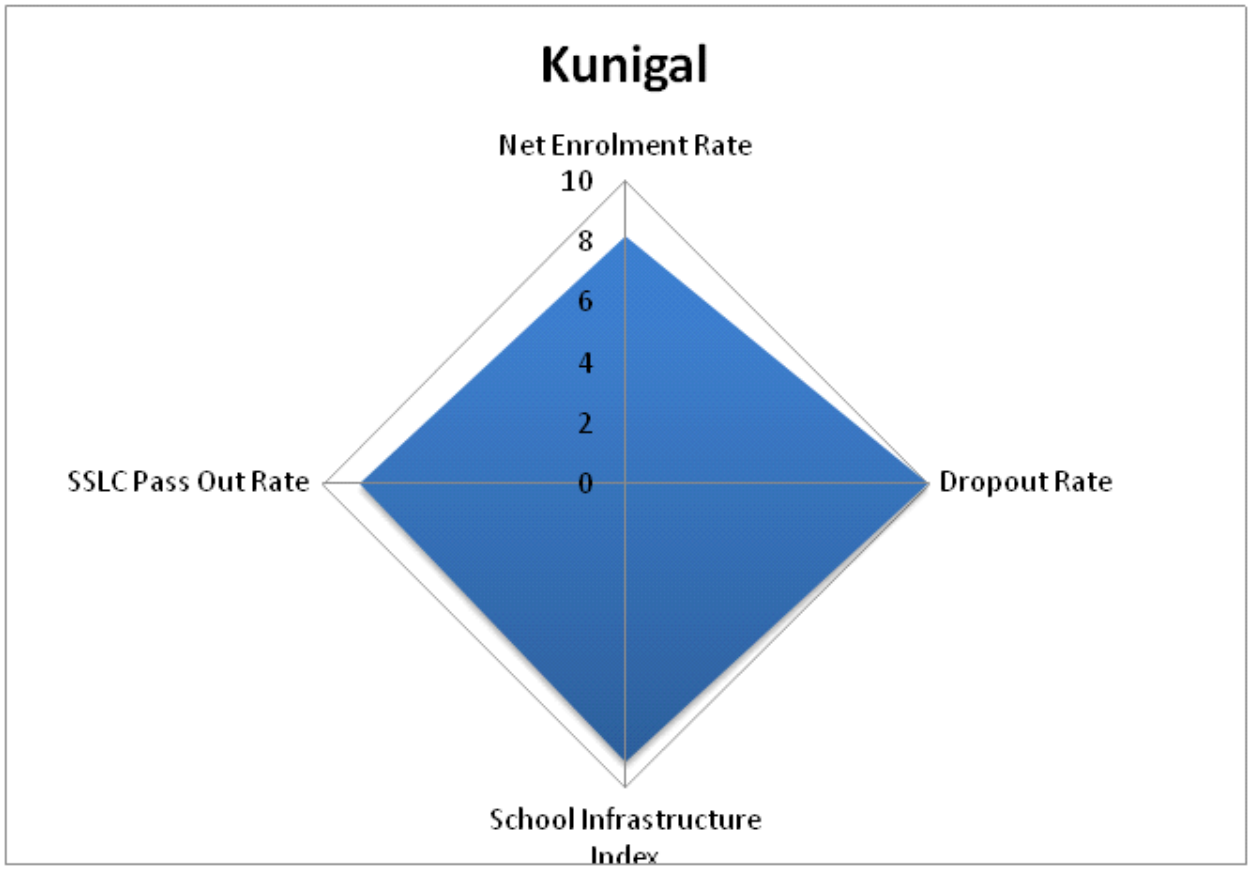


Fig.4.14 : Kunigal Radar Analysis for Education

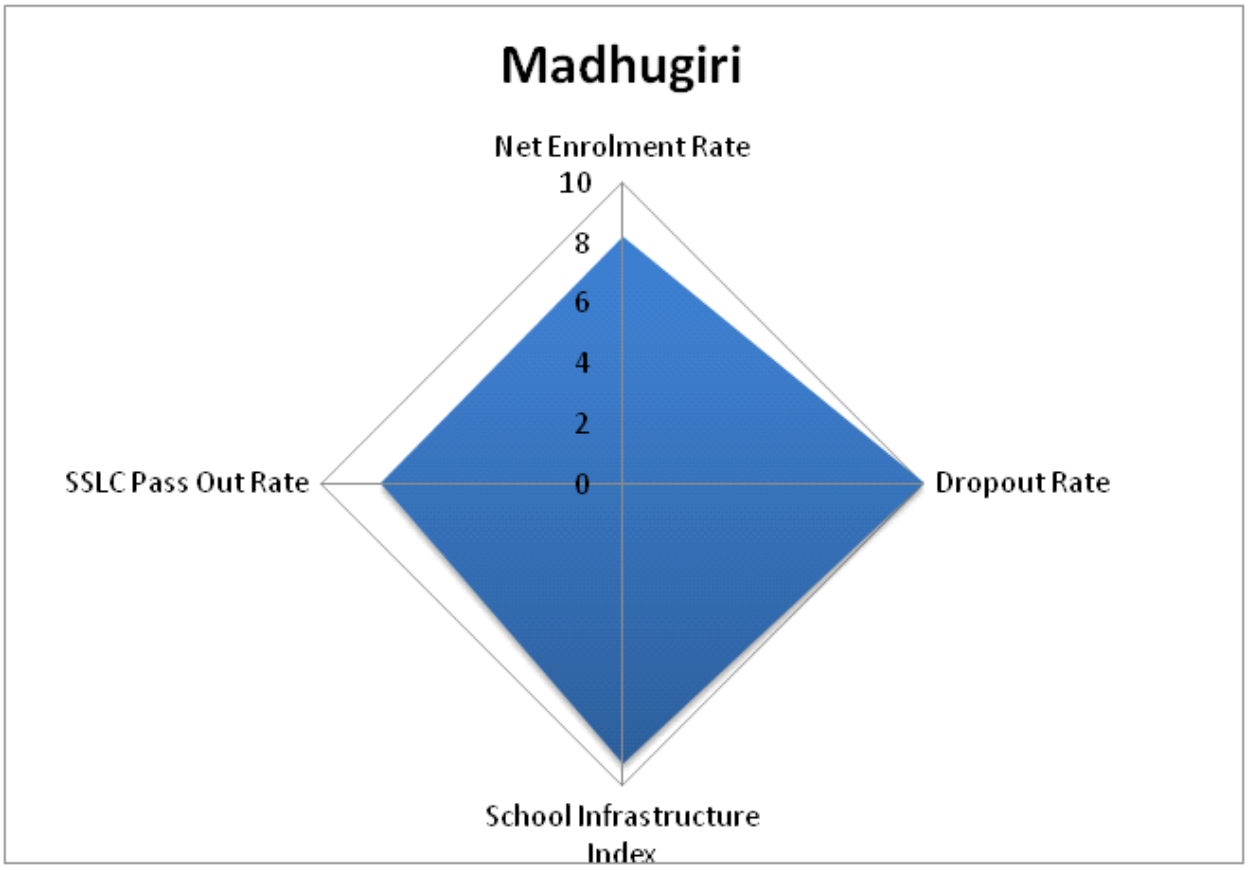


Fig.4.15 : Madhugiri Radar Analysis for Education

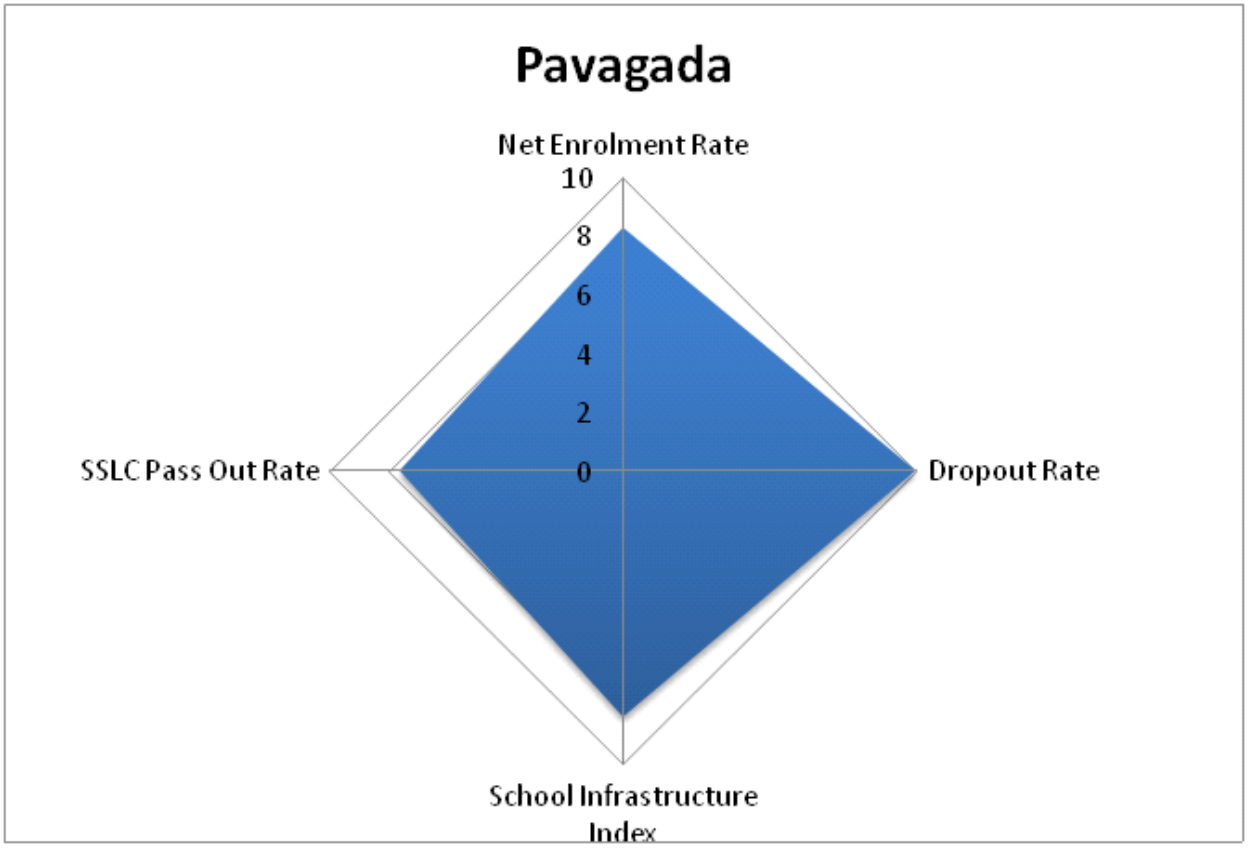


Fig.4.16 : Pavagada Radar Analysis for Education

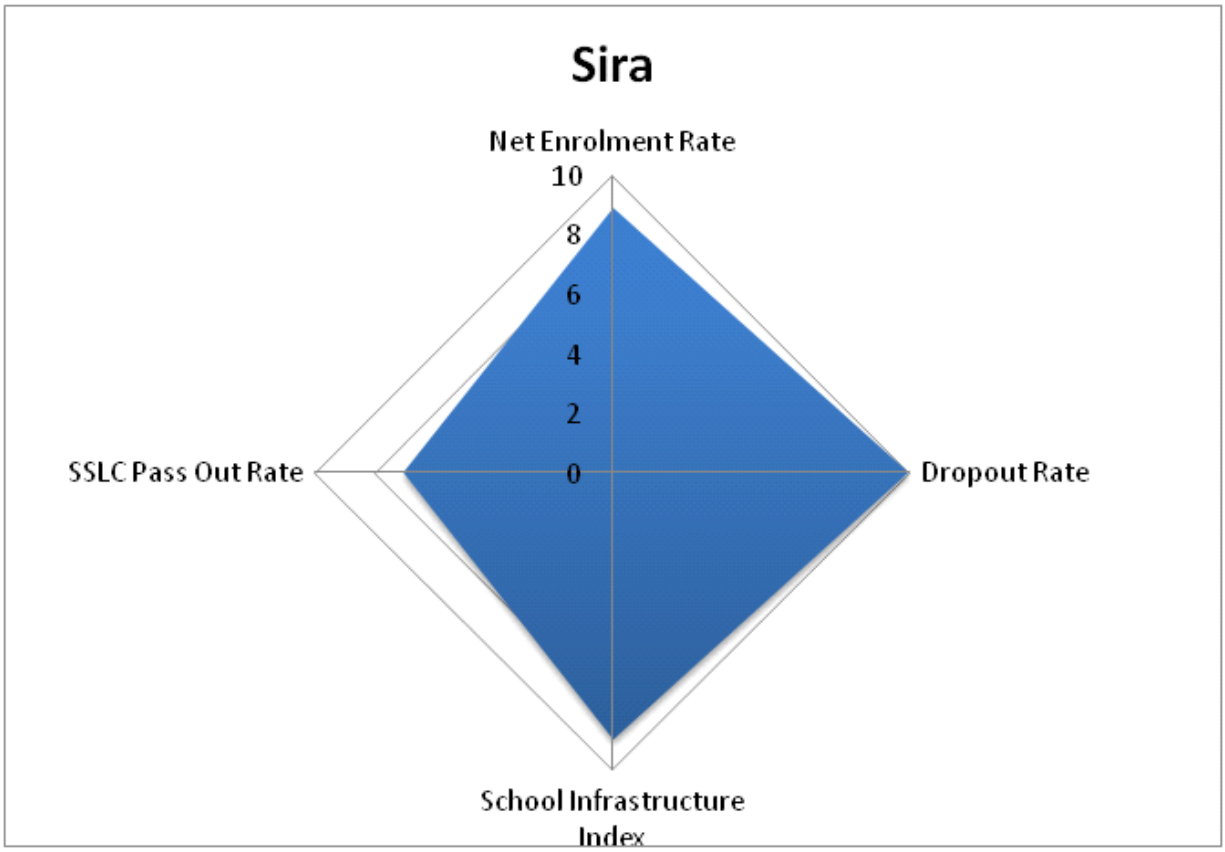


Fig.4.17 : Sira Radar Analysis for Education

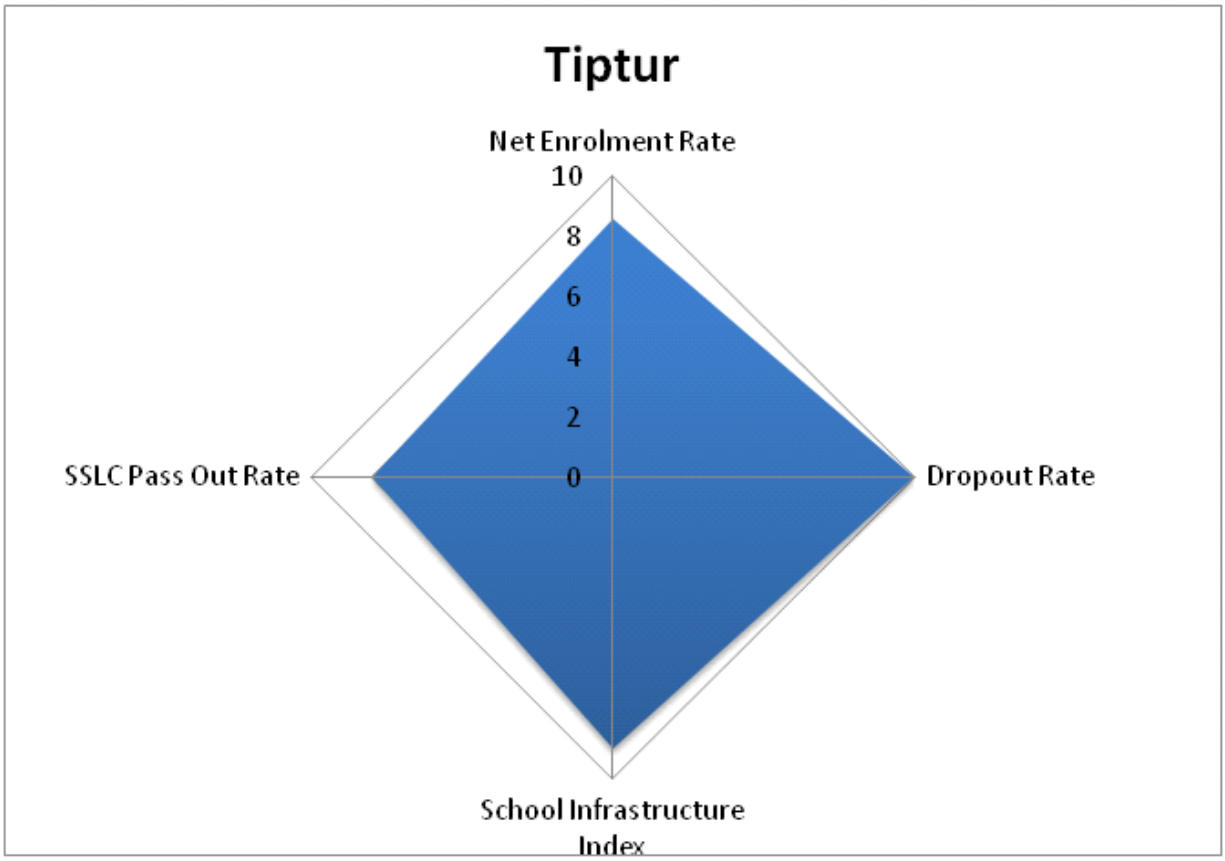


Fig.4.18 : Tiptur Radar Analysis for Education

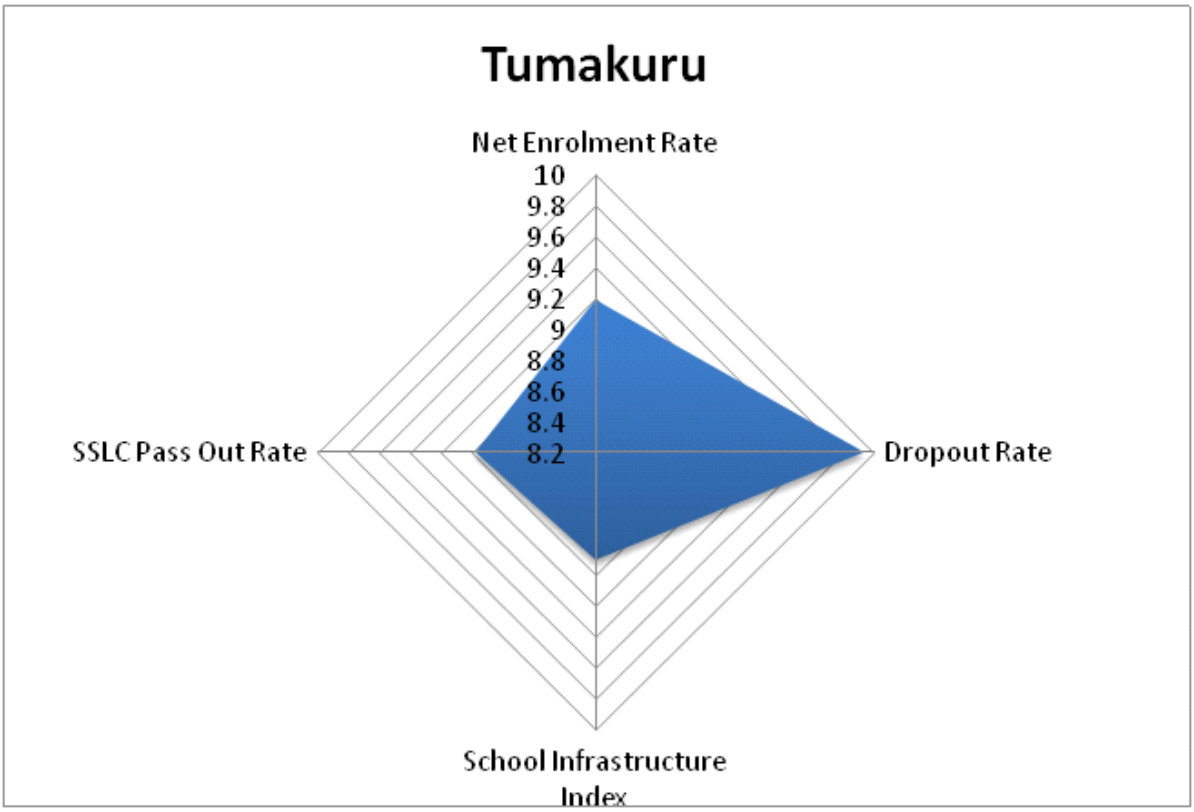


Fig.4.19 : Tumkur Radar Analysis for Education

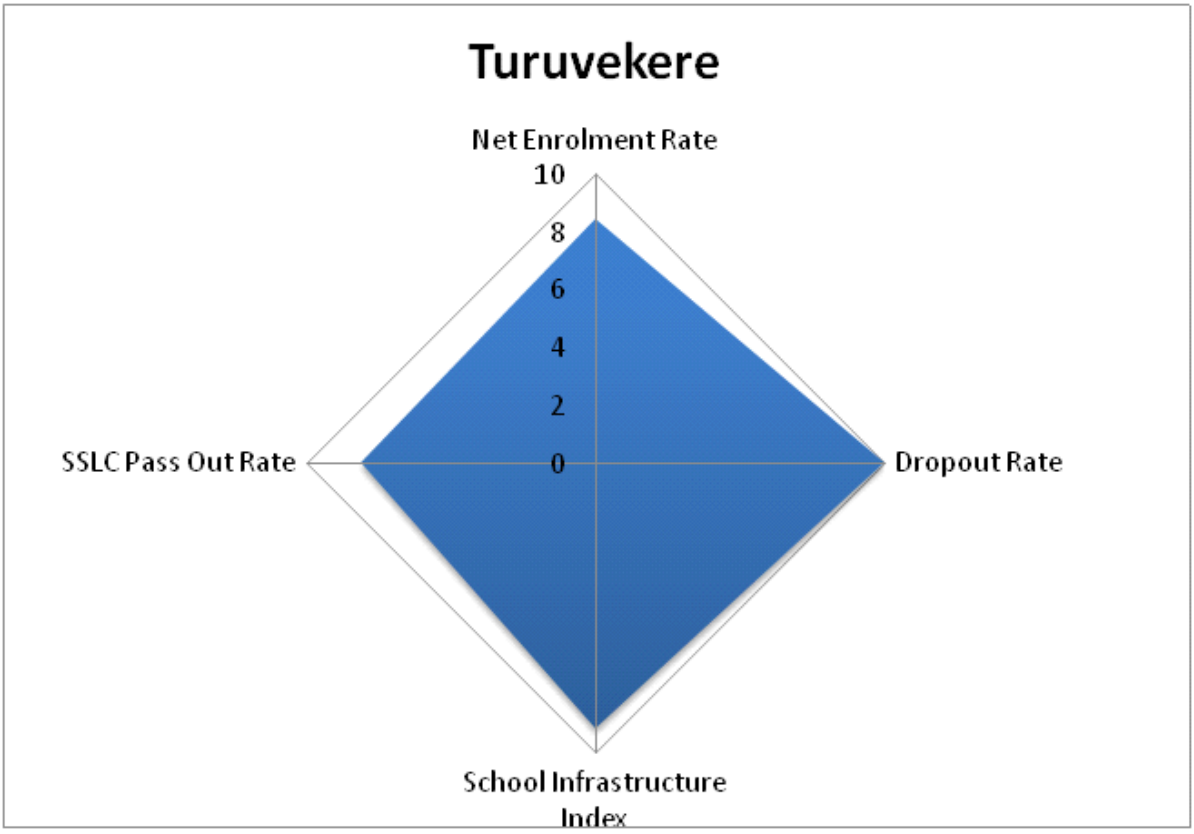


Fig.4.20 : Turuvekere Radar Analysis for Education

4.12 Small Area Study

Impact of Shortage of Teachers on the Quality Education at Government Middle Schools





Fig.4.21 : Impact of Shortage of Teachers on the Quality Education at Government Middle Schools

4.12.1 Introduction

In recent years, investments in Education for All (EFA) programmes have led to substantial expansion of the elementary education sub-sector. Besides improvements in schooling infrastructure, intakes at the primary and upper primary levels have gone up visibly. This trend is likely to continue for the next several years. At the same time, India's impressive sustained economic growth has increased household and labour market demand for secondary and higher education (World Bank 2009). Secondary education's contribution to economic growth demonstrated high social benefits, and support of democratic citizenship calls for increasing public investment at this level, particularly in view of the very large inequalities in access to secondary education by income, gender, social group and region. The challenge is to substantially improve access, equity and quality of secondary schooling simultaneously.

Currently, the role of the state should be to universalize opportunity so as to facilitate all children to attend secondary school, rather than to universalize access (World Bank 2009). Increasing the supply of effective teachers is also a major issue. Government has an important role to play in ensuring equity to access in secondary education.

Targeted, supply- and demand-side programmes for socio-economically disadvantaged groups are called for to improve equity. India needs to make the qualitative investments in teacher education and accountability, curriculum reform, quality assurance, examinations reform, national assessment capabilities and management information systems, which will require time and significant institutional capacity building to succeed at a national scale. The recently launched centrally sponsored scheme for secondary education, Rashtriya Madhyamik Shiksha Abhiyan (RMSA), offers a strategic opportunity to improve access and equity, enhance quality, accountability and ability to measure learning outcomes, and promote standardization of curriculum and examinations across states. In order to develop proper understanding among the planning teams at different levels, the highlights and significant features of the RMSA are given below. The plans may be developed keeping in view these basic characteristics and financial norms of the schemes.

Vision: Making good quality education available, accessible and affordable to all young persons in

the age group of 14-18 years. The vision envisaged to achieve the following:

- Making the secondary schooling provisions available within a reasonable distance of any habitation, i.e. 5 kilometer for secondary schools and 7 -10 kilometers for higher secondary schools;
- Ensuring universal access to secondary education by 2017 (GER of 100%)
- Universal retention by 2020; and
- Higher Level of Equity: Providing access to secondar y education with special references to focus groups - i.e. economically and educationally backward sections, the girls and the disabled children residing in rural areas, and other marginalized categories like SC, ST, OBC and Educationally Backward Minorities

In the light of the above, it was intended to understand the problem of the shortage of teachers in providing quality education to the children studying in the middle schools in the district.

4.12.2 Objectives of the Study

1. To understand the perceptions on the problems relating to the shortage of teachers from the teachers and the educational administrators.
2. To assess the extent of impact on the students and their performance.

4.12.3 Methodology for the Study

A structured questionnaire was designed, pretested and canvassed for the teachers, head masters and the educational officers in the district. The detailed discussions were also held with the selected teachers, students and the parents.

4.12.4 Sample Size

The sample was selected on a purposive sample basis. The total no. of teacher respondents covered was 15. The middle schools in the taluks of Madhugiri and Sira were selected for the study.

Limitation of the Study

Considering the nature of the study, there were certain difficulties in locating the sample respondents. Hence, the total sample covered is only 15.

4.12.5 Findings of the Study

4.12.5.1 Problem of Shortage of Teachers

The respondents were asked to state whether they feel that there was the problem of shortage of teachers in the middle school. To this, most of the teachers [11 out of 15] have stated that the problem exists. The rest of the teachers did not feel that the problem was specific to the middle school and it existed at all levels of education and some of them did not want to express on the policy of the Government.

4.12.5.2 Reasons for the problems

Table No.4.13: Reasons for Lack of Teachers [No.&%]

Sl. No.	Particulars	Number	Percentage
1	Lack of Recruitment	6	28.57
2	Location of the School	4	19.05
3	Poor enforcement of guidelines / rules	7	33.33
4	Others	4	19.05
	Total	**21**	**100.00**

One of the often stated reasons for the problem is reported to be the poor enforcement of rules or flouting of the rules. This accounts for about a third of the total responses. About a fifth of the reasons are related to lack of recruitment. About 19.05 per cent have stated that the location of the schools is also a factor. Thus, the problem is said to be a result of a no. of factors.

4.12.5.3 Prevalence of the Problem

Further, the teachers were asked to state whether the problem was more prevalent in the rural than in the urban schools. To this, most of them have said that the problem exists more in the rural areas. This they have said that many of the teachers posted to rural areas manage to work in the urban areas for various reasons. This is also explained in terms of the easy accessibility, availability of infrastructure in the schools etc., In other words, the problem is said to severely affect the rural students than the urban students.

4.12.5.4 Effect of the Problem

Table No.4.14: Effect of the Shortage of the Teachers for Students and Parents [No.&%]

Sl. No.	Students			Parents		
	Particulars	**Number**	**%**	**Particulars**	**Number**	**%**
1	Lack of Proper Teaching and Guidance	13	40.63	Compulsions of putting students to tuitions	6	40.00
2	Poor educational advancements	9	28.13	Need to provide the required guidance	8	53.33
3	Difficulties in understanding the subject	8	25.00	Others	1	6.67
4	Others	2	6.25			0.00
	Total	**32**	**100.00**	**Total**	**15**	**100.00**

The sample respondents have said that the problem is said to affect the students as well as the parents. The effects on the students are said to be lack of proper teaching and guidance [40.63%], poor educational advancements [28.13%], difficulties in understanding the subject [25%] and others [6.25%]. On the other hand, the effects on the parents are explained in terms of providing tuitions [40%], efforts involved towards providing guidance [53.33%]. In other words, while the students are found to suffer as a result of lack of teachers, the families are found to be helping the students to come out of the problem. The difficulties are said to be severe when teachers teaching subjects English, Maths and Science are said to be not available in the schools. The problem is said to affect them throughout their educational career as well.

4.12.5.5 Effect on the Quality of Education

The inadequate teaching personnel is said to impact the quality of education in the following ways:

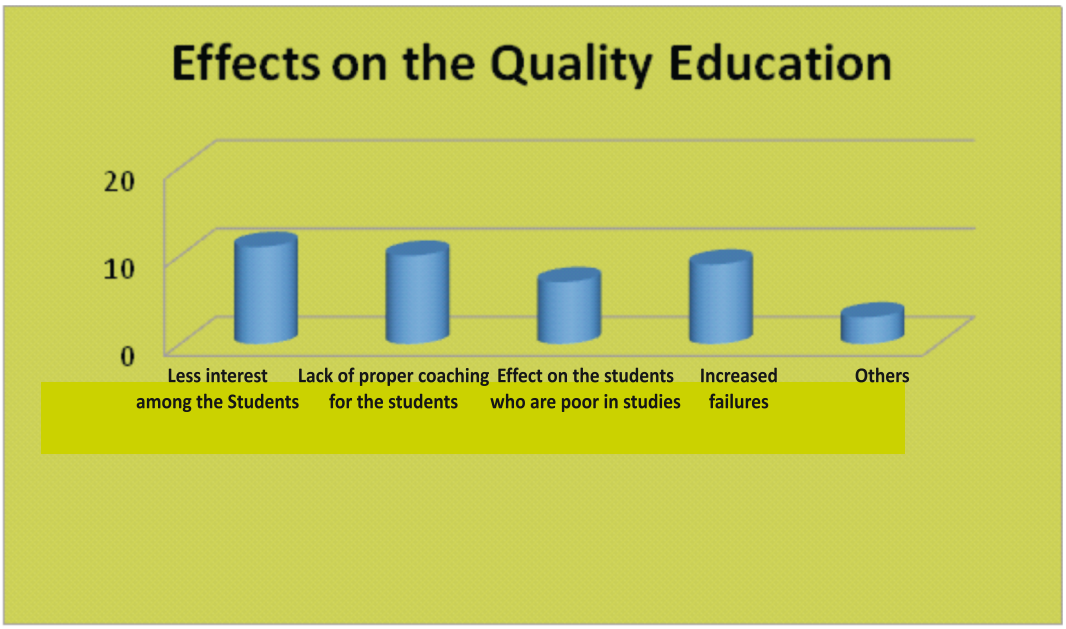
1. Less interest among students
2. Lack of proper coaching for the students
3. Effect on the students who are poor in studies
4. Increased failures
5. Others

Table No.4.15: Effect of the Shortage on the Quality of Education [No.&%]

Sl. No.	Particulars	Number	Percentage
1	Less interest among students	11	27.50
2	Lack of proper coaching for the students	10	25.00
3	Effect on the students who are poor in studies	7	17.50
4	Increased failures	9	22.50
5	Others	3	7.50
	Total	**40**	**100.00**

The problem is said to have a serious effects on the interest levels among the students [see Table]. This is because of the lack of opportunities for the students to get their doubts clarified or to obtain more information about a topic or the issue. It is also said to result in few other problems which will ultimately have an effect on the performance of the students. This is also said to pull the results of the school to the lower level.

Fig.4.22: Effects on the Quality Education



4.12.5.6 Role of the SDMC

The teachers were asked to explain the role of the school development and management committee. To this, the teachers have said that their response is either by way of representation of the problem to the higher authorities or at times they try to motivate the teachers to continue to work in their schools. It is also said that some of the SDMCs manage to have better co-ordination with the department and thus, minimise the problem as well.

4.12.5.7 Suggestions to Resolve the Problem

With a view to resolve the problem and provide quality education, the teachers have suggested that there should be adequate and timely

recruitment of the teachers, proper implementation of the rules as also the provision of good infrastructure in the schools as well. Thus, they feel that the problem needs to be tackled through a multi-pronged strategy.

Thus, the above analysis has revealed that there is a wide gap between the stated objectives towards education and its achievements. While there is urgent need to bridge this gap, it is also important that good administrative measures are imparted as also the capacity building efforts to the teachers in order to make them more efficient and child friendly.

4.13 An Overview and persisting educational gaps in the district

Throughout this chapter the educational landscape of Tumakuru district has been discussed. It is evident that there exists homogeneity in problems faced by all the taluks and therefore, district wide reform will be effective in creating progress in all the key matrices. Pavagada's lowest literacy rates in the district are of greatest importance; there could exist scope in implementing Tiptur's methods that have enabled it to have the highest literacy rates in the district.

A greater emphasis must be laid in the assimilation and recording of disaggregated data from the district on all matters relating to literacy and education. This will enable better analysis of the underlying educational dynamics of the various cohorts in the district.

Efforts must be made to increase adult literacy, as this in turn will encourage parents to keep their children in school – thereby further increasing the literacy of the district. In addition to this, there are recommendations in this chapter for improvement on a taluk level such as Pavagada's need for better school infrastructure compared to the rest of the district. Education being the cornerstone of development and progress, extra care must be taken by the government to put the Tumakuru on the right path towards improvement.



Fig.4.23: Childrens Jatha in Tumakuru



Fig.4.24: School Library, Tumakuru



Fig. 4.25: An Anganawadi at Sira Town



Fig. 4.26: Mid-day Meal Programme at Government Primary School Pavagada