



EDUCATIONAL INFRASTRUCTURE IN GONDIA DISTRICT (M.S.): SPATIAL ANALYSIS

N. K. Bahekar¹ and Yeshwant S. Maskare²

¹S. S. Girls' College, GONDIA-441 601 (M.S.). nilubahekar@redifmail.com

²P. G. Department of Geography, S.S. Girls' College, GONDIA-441 601 (MS).
yashwantmaskare.1@gmail.com

Abstract

Population is an important resources for development. The population affects various demographic variable and it depends on the quality of population on which is decided by the educational level of the group. To improve the education quality of the population educational infrastructure is important. The nature of this infrastructure decides the development in various regions. This hypothesis has been tested in this paper. Educational infrastructure is important quantitatively as well as qualitatively point of view. For quantitative analysis only the no. of educational institute at varies level is important. In the primary school are distributed almost equal but secondary and higher secondary school shows spatial differences. The student's teacher ratio is a good indication of the quality of infrastructure. This ration also shows great variation within the region which ultimately results into educational qualities of the institutions. The northern part of the district is having better educational infrastructure and there chance better development compare to southern tehsils.

Keywords : Demographic variable, Educational infrastructure, Spatial differences, Labour force.

Introduction

“Educational is an important variable affecting demographic behavior” (Bhende, 1996). Population is an important resource for the development of a region. The various qualities of population decide the rate of development in the region. This quality of population is decided by the educational level of the group. The variable of demographic behavior is affected by education. This behavior includes marriage, fertility, mortality, migration as well as participation in the labour force.

Considering the important of education in the development educational infrastructure, their nature and number is very important. In the present period educational infrastructure is provided by the administration as well as the social institute. Administration provide these institute with the aim of covering the needs of population. While private institutes partly consider this social obligation but at the same time they consider the economic size of the institute. Naturally private institute prepare the infrastructure wherever its gives good returns to the institute. The region where government institute may run in loss they are provided for the benefit of the society.

Social educational institutes are of two types. 1) Institutes which get some grant from the government. and 2) the institutes which run on non- grand basis.

While providing the educational infrastructure government considers the distribution and density of population as well as the

transportation facilities. Therefore in the remote places the government institution only functions but even these institutes may not be sufficient to provide the facilities.

Education infrastructure can be analysed from two points of view 1) from quantity point of view and 2) from qualitative point of view.

When they consider the quantitative view point it is necessary to see with the according to government educational standard are their sufficient institute to satisfy the need the population in the region. Government aims and their goal are provides institutions.

Qualitative analysis is very difficult to make because we can set the standard for evaluating the education institution. Therefore the analysis only the quantitative analysis has been made.

Study Region

Gondia district of Maharashtra has been selected for the studying. The district was formed on 1st may 1999 when it was separated from Bhandara district. It lies on Gondia-Mumbai railway rout and it is 1060 kms. away from Mumbai. Gondia lies from 20°40' to 21°38' north latitude and 79°47' to 80°42' east longitude. The total area of the district is 5640.51 sq. kms. Administratively it is divided into 8 tahasils. There are 954 villages in the district. (Figure No.1)

Quantitative Analysis of Educational institutes

There are educational institutes of different levels and their number has been noted (Table 1).

To make the evaluation of their distribution the numbers of total educational institutes in each tehsil have been noted (Table No.1). In the district there are 1654 educational institutes. Gondia tehsil has the highest number 380 while Amgaon tahasil has only 153 institutes. That means there is great spatial difference regarding number of educational institutes. Out of the total institutes number of primary school is 1265 that is 76.48%. Their spatial variation has been noted in the map (Figure. No.2)

The map shows that only in Gondia tahasil in the north are highest. While in the north east corner in Amgaon and Salekasa tahasil it is lowest. That is 153 and 158 institutes. Thus it shows a very large spatial imbalance and spatial difference.

These educational institutes are divided into different categories. In the district there are out of 1654 total institutes 76.48% are primary school. Only in Gondia and Arjuni tahasil percentage is low and it is 71.05 and 72.56 rest of the tahasil it is around 75 to 80%. Out of the total institutes 153 are secondary school. Only in Gondia tahasil the number is 41 while in Salekasa it is only 10. It means there is a spatial equality of secondary school. The number of high school is nearly 10.70% and in Deori 7.18 it is almost equal in all other tahasil. The percentage of college in total institutes is 3.57 and it varies from 1.31 in Amgaon tahasil to 5.26 in Gondia tahasil.

Mere number of institutes does not clarify the situation because the sizes of the institutes vary from place to place to get the correct idea. The number of institutes at various levels have been calculated per '000' population in the district. And it is noted in the table below (Table No.2) as well as it has been shown in the (figure No.2)

Primary school is a major requirement in education and these schools most reach to all the persons in the region. This short of education has been made compulsory and therefore these institutes are found in the entire region. Their distribution is almost equal throughout the district. The same is true about the secondary school and higher secondary school. The only difference is that their number is much smaller similarly the spatial differences are prominent. In Gondia tahasil there are 41 secondary schools while in Salekasa there are

only 10 secondary schools. Similarly in Gondia tahasil there are 49 higher secondary schools while in Goregaon, Salekasa, and Deori there are only 15 higher secondary schools in each tahasil. The number of higher secondary school is nearly 1/3 than the secondary school. This happens because at every stage there are left-outs at major stage of education. And therefore the number of educational institutes and their proportion with population is greatly reduced as the level increases.

The map shows the spatial distribution. In the northern part the number of institutes is lowest compare to population the institutes are less. While in the eastern part of the district the number is much more because of the low population. The same is true about the secondary and higher secondary school. In respect of colleges the spatial distribution is irregular. In Gondia and Goregaon tahasil the number of college is higher in respect of population. (Figure No.3 and 4)

Qualitative distribution of the institutes

As noted earlier the mere number of institutes is of little value. What is the quality of education in imported these institutes is vital. Generally the educational level of the institutes is decided by the teacher student's ratio. If per each teacher a small number of students he can pay proper attention to every student and higher level is achieved by the students. The number of educational institutes of different level and no. of teacher are not found similar.

In case of primary schools the average no. of students per teacher in the district is 25-20 throughout the various tahasil it does not deviate much from this average. It is because a primary teaching is mainly responsibility of the administration.

In respect with secondary education the student teacher ratio of the district is 28.50 there are large spatial differences. In Tirora tahasil the no. of secondary students per teacher is 17.60. While in Amgaon tahasil it is 43.80%. (Table No.3 (i) and (ii))

Regarding higher secondary school the student's teacher ratio for the district is 36.40 and it does not vary much throughout the district. In respect of colleges this ratio is 33.50 and it varies much throughout the district. In Deori tahasil it is 15.97 while in Salekasa it is 107.35. (Table No.3 (i) and (ii) and Fig. No. 5)

A factor that is important which affects the student's teacher ratio is the nature of the institutes. The institutes are either belong to government for their no. of private institutes the chief objectives of these institutes are different.

Private institutes function according to economic loss and for they tries to keep the no. of teacher as low as per possible. While in govt. institutes the teachers are appointed according to rules sometimes the admission in institutes are not full.

So for various variable have been discuss which affect the education infrastructure in the district. To combined effect and nature of each variable they have been brought and equal levels. Firstly the results of each variable were noted and than they were divided into 3 categories higher medium and low. These categories were assign the numbers all the categories the final numbers added together and average was calculated. These

average were there classified and map. Their combined score has been noted below and it has been show in the map. (Table No. 4 and Fig. No. 6)

The map (Figure 6) shows that the educational infrastructure is better in northern part of the district as compare to four southern and eastern tehsils because of urbanization and better transport the infrastructure well develop in the north. In the south those there are sufficient an educational institute of lower level they show more number because of small population it gives a deceptive picture of the situation the backward areas. There is a large scope to improve the quality of education rather than the quantity.

Table 1 Total No. of Educational Institutes in Gondia District – 2012.

Sr. No	Tahasil	Primary	%	Secondary	%	Higher Secondary	%	College	%	Total
1	Tirora	161	80.10	12	5.97	24	11.94	04	1.99	201
2	Goregaon	122	76.25	15	9.38	15	10.78	08	5.00	160
3	Gondia	270	71.05	41	9.38	49	12.89	20	5.26	380
4	Amgaon	122	79.73	13	8.50	16	10.46	02	1.31	153
5	Salekasa	129	81.64	10	6.33	15	9.49	04	2.53	158
6	Sadak Arjuni	136	76.40	15	8.43	19	10.67	08	4.49	178
7	Arjuni Morgaon	156	72.56	27	12.55	24	11.16	08	3.72	215
8	Deori	169	80.86	20	9.57	15	7.18	05	2.39	209
Total		1265	76.48	153	9.25	177	10.70	59	3.57	1654

Source: Socio-economic Bulletin Gondia District-2012.

Table 2 Per '000' Population No. of Educational Institutes in Gondia District -2012

Sr. No	Tahasil	Population	No. of Primary School	%	No. of Secondary School	%	No. of Higher Secondary School	%	No. of College	%	Total	%
1	Tirora	176156	161	0.09	12	0.007	24	0.014	04	0.003	201	0.114
2	Goregaon	124832	122	0.09	15	0.012	15	0.012	08	0.006	160	0.128
3	Gondia	421942	270	0.06	41	0.008	49	0.012	20	0.005	380	0.091
4	Amgaon	130262	122	0.09	13	0.009	16	0.012	02	0.002	153	0.117
5	Salekasa	90682	129	0.14	10	0.011	15	0.017	04	0.004	158	0.174
6	Sadak Arjuni	115662	136	0.11	15	0.013	19	0.016	08	0.005	178	0.154
7	Arjuni Morgaon	148270	156	0.10	27	0.018	24	0.016	08	0.005	215	0.145
8	Deori	114525	169	0.15	20	0.017	15	0.013	05	0.003	209	0.182
Total		1322331	1265	0.09	153	0.012	177	0.013	59	0.004	1654	0.125

Source: 1) Census hand book Gondia Dis-2011.2) Socio-economic Bulletin Gondia District-2012.

Table 3(i) Teacher Student Ratio in Educational Institutes - Gondia District -2012 (No. of Students per Teacher)

Sr. No.	Tahasil	Primary			Secondary		
		No. of Teacher	No. of Students	No. of students per Teacher	No. of Teacher	No. of Students	No. of students per Teacher
1	Tirora	704	18386	26.1	172	3027	17.60
2	Goregaon	543	13328	24.55	139	2526	18.20
3	Gondia	1513	42768	28.30	445	16464	37.00
4	Amgaon	517	12808	24.80	97	4244	43.80
5	Salekasa	483	10443	21.60	57	2253	39.50
6	Sadak Arjuni	507	11105	21.90	133	3148	23.70
7	Arjuni Morgaon	582	14266	24.50	191	5227	27.40
8	Deori	573	13434	23.40	185	3488	18.60
Total		5422	136538	25.20	1419	40377	28.50

Source: Socio-economic Bulletin Gondia District-2012.

Table No. 3(ii) Teacher Student Ratio in Educational Institutes - Gondia District -2012
(No. of Students per Teacher)

Sr. No.	Tahasil	Higher Secondary			College			Total		
		No. of Teacher	No. of Students	No. of students per Teacher	No. of Teacher	No. of Students	No. of students per Teacher	No. of Teacher	No. of Students	No. of students per Teacher
1	Tirora	333	15066	45.20	27	1718	63.63	1236	38197	30.90
2	Goregaon	268	10928	40.80	83	1959	23.60	1033	28741	27.82
3	Gondia	688	21620	31.40	243	7252	29.84	2889	88104	30.50
4	Amgaon	289	8866	30.70	29	969	33.41	932	26887	28.85
5	Salekasa	196	7555	38.50	17	1825	107.35	753	22076	29.32
6	Sadak Arjuni	241	9021	37.40	16	1088	68.00	897	24362	27.16
7	Arjuni Morgaon	323	12042	37.30	48	1383	28.81	1144	32918	28.77
8	Deori	234	8457	36.14	39	623	15.97	1031	26002	25.22
Total		2572	93555	36.40	502	16817	33.50	9915	287287	28.97

Source: Socio-economic Bulletin Gondia District-2012.

Table No. 4: Total Score

Sr. No.	Tahasil	No. of Educational Institutes Per '000' Population	No. of Students Per Teacher	Grand Total
1	Tirora	5	7	12
2	Goregaon	7	8	15
3	Gondia	5	8	13
4	Amgaon	4	8	12
5	Salekasa	10	7	17
6	Sadak Arjuni	9	9	18
7	Arjuni Morgaon	10	7	17
8	Deori	8	10	18

Source: Socio-economic Bulletin Gondia District-2012.



Figure 1



Figure 2

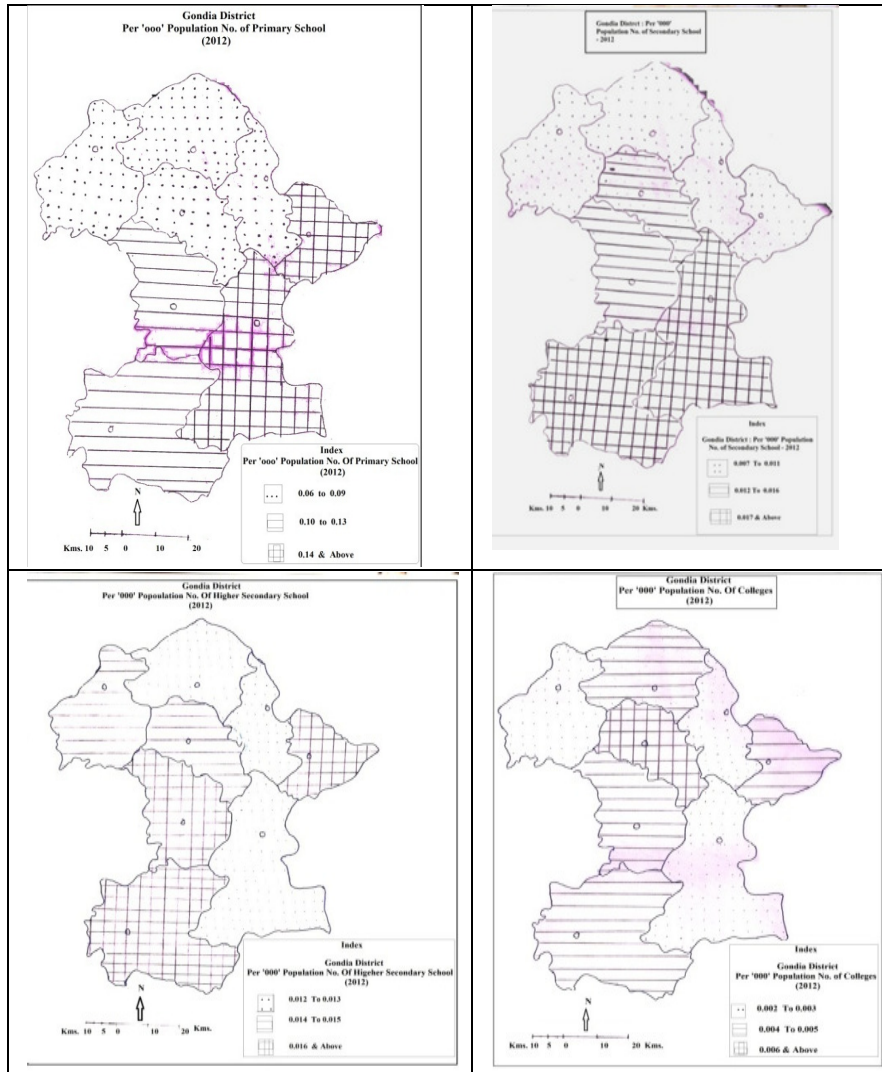


Figure 3: Per '000' Population No. Of Primary, Secondary, Higher Secondary, College Gondia District (2012)

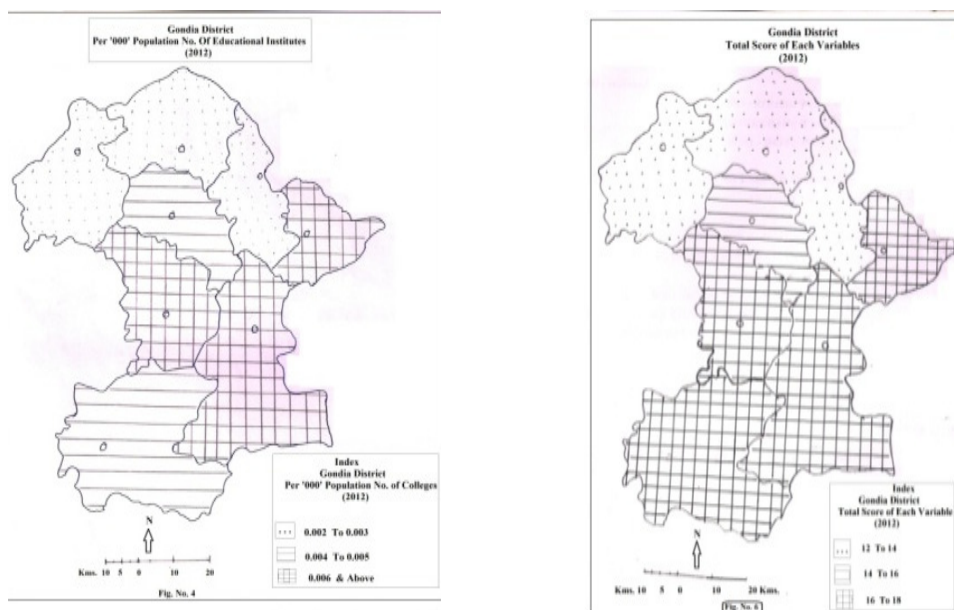


Figure 4

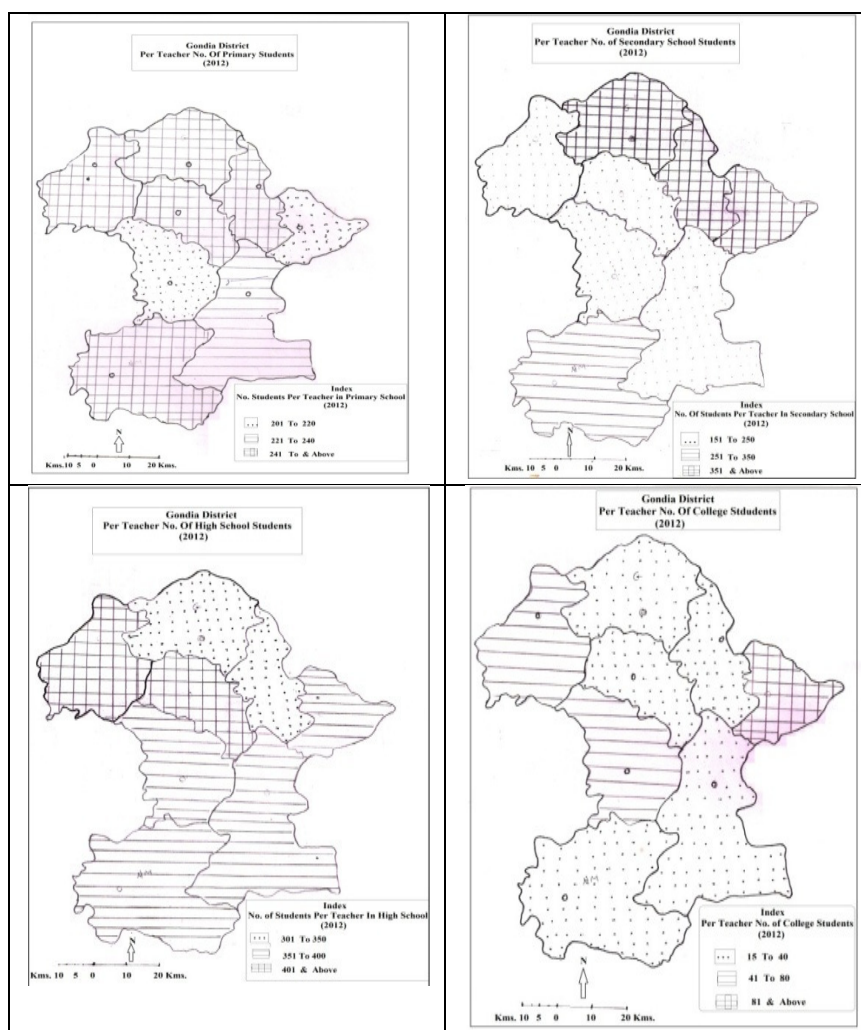


Figure 5 Gondia District : Per Teacher No. Of Primary, Secondary, Higher Secondary, College Students (2012)

Conclusion

Educational infrastructure is important quantitatively as well as qualitatively point of view. For quantitative analysis only the no. of educational institute at varies level is important. In the primary school are distributed almost equal but secondary and higher secondary school shows spatial differences. The student's teacher ratio is a good indication of the quality of infrastructure. This ration also shows great variation within the region which ultimately results into educational qualities of the institutions. The northern part of the district is having better educational infrastructure and there chance better development compare to southern tehsils.

References

- Census Hand book, Gondia District (2011).
- Bahekar, N.K. and Maskare, Y.S., "Population Growth TYPES IN Gondia District of Maharashtra STATE: 2001-2011,
- The Goa Geographer Vol. IX No. I Dec. 2012. ISSN No. 0976 – 786 X, Pp. No. 67-70.
- Maskare, Y.S., and Bahekar, N.K., "current status of forest resources in Gondia District (Maharashtra)", The Goa Geographer Vol. IX No. I Dec. 2013. ISSN No. 0976 – 786 X, Pp. 97-102.
- Socio-economic Bulletin Gondia District-2012.
- Ghosh, B.N, (1987), Fundamental of Population Geography, Sterling publishers private Limited, New Delhi -110 016, pp. 59-61.
- Husain, Majid. Population Geography Part III, Anmol Publication Pvt. Ltd., New Delhi-110 002, pp. 408-415.