International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056
Volume: 08 Issue: 04 | Apr 2021 www.irjet.net p-ISSN: 2395-0072

"RURAL CLUSTER DEVLOPMENT WITH PROVISIONS OF SOCIAL INFRASTRUCTURE FACILITIES IN MANDVI TALUKA

Er. Dhruvang Patel[1]

[1]Student, Department of Town and Country Planning, Sarvajanik College of Engineering and Technology, Surat, India

---

Abstract - *The Urban area is increasing day by day with advancement in development and due to change inland- use. Social Infrastructure facilities are to be improved to meet the future demand. The cities have become the major attraction points for Rural people because of the availability of good infrastructural facilities for Health and Education which in turn responsible for migration. At present, Surat city is emerging as a large metro city and Social infrastructural facilities reaching at high-end standards in the city, this leads to high migration of people from surrounding rural area for a better quality of life. The impact of this urbanization on the settlement has been such that the development efforts and the growth can't be balanced together.*

Therefore, it is desired that a new direction for controlling the growth and, to enhance the basic health and educational facilities in the nearby small towns and villages of the Surat District, just to relieve the pressure on Surat city.

This dissertation work aimed at exploring the possibility of improvement of social infrastructure facilities in villages of Surat District not only to overcome the present problems in Surat city related to urbanization but also to stop the rural migration and to enhance the quality of life of villagers. This village cluster has very good support from the industries located in villages in

development of infrastructure facilities.

Key Words: Rural development, Social Infrastructure, Surat District, Health, Education

1. INTRODUCTION

India is one of the most populated countries in the World. It is ranked second in the whole over the world. In 1947, the rural population of India was 75%, and in 2020 the rural area of India is 65%. In India rate of development in rural area is very low as compared to the urban area. Rural development, means the actions taken for the social development and economic development of the rural area. This is a process of improvement in quality of life as well as people's economic wellbeing living in relatively isolated areas. Development of rural area is also characterized by its emphasis on local infrastructure development strategies. Currently India suffering from poverty, malnourishment, and high mortality rate. The ratio of this problems is high in the rural are as compared to urban area of the country. Need of standard infrastructural facilities in health and education sector felt by Indian Government in order to reduce the health and education issues in the rural communities of the country.

An integrated and broad childhood education and basic health facilities are noted as investment of future social progress of the country for both the urban and the rural areas. India is the country after China having the largest education system in the world. The ratio of operation involved to ensure the quality of Education in the country is very uncommon and challenging. Concurrently, the type of problems affecting the education system are so assorted and often complicated that the solution cannot lie based on any one single factor – it is not about just shortage of skilled teachers or just shortage of political will or lack of resources; all these undoubtedly contribute to the problems, affecting the country's existing education system. There is a need to look into the whole bunch of problems and deal with the issue comprehensively taking into consideration the specific situation of various parts of the community.

1.1 Types of Infrastructure

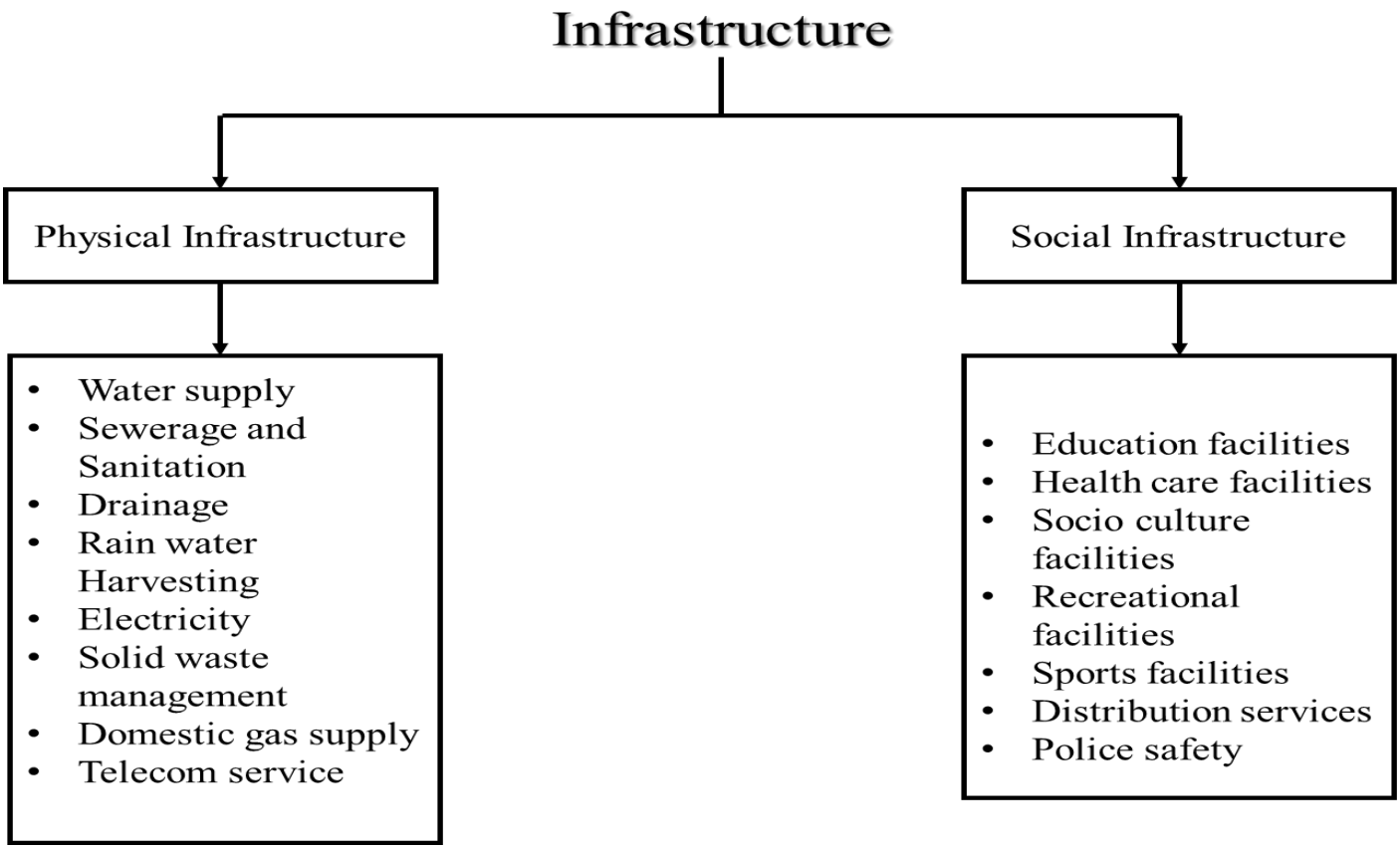

Figure 1 Classification of Infrastructure

1.2 Social Infrastructure

- The quality of life in any urban center depends upon the availability of and accessibility of quality social infrastructure. Social Infrastructure refers to the community facilities, services, and networks that help individuals, families, groups, and communities meet their social needs, maximize their potential for development, and enhance community well-being. 2 The social infrastructure deals with the following aspects:
  1. Health-care facilities
  2. Education facilities
  3. Socio-cultural facilities
  4. Recreational facilities
  5. Sports facilities
  6. Distribution services
  7. Police Safety

2. Aim

To study rural cluster development in villages of Mandvi taluka and provide planning proposal for social infrastructural provision.

3. Study Area Profile

The study area is a cluster of 16 villages Ghantoli, Salaya, Moritha, Titoi, Kalibel, Goddha, Regam, Dadakui, Fulvadi, Kim-dungra, Maldha, Junvan, Choramba, Isar, Devgadh, Tarsadakhurd located in Mandvi Taluka of Surat District. All the villages are located in the tribal area.

Figure2: India Map

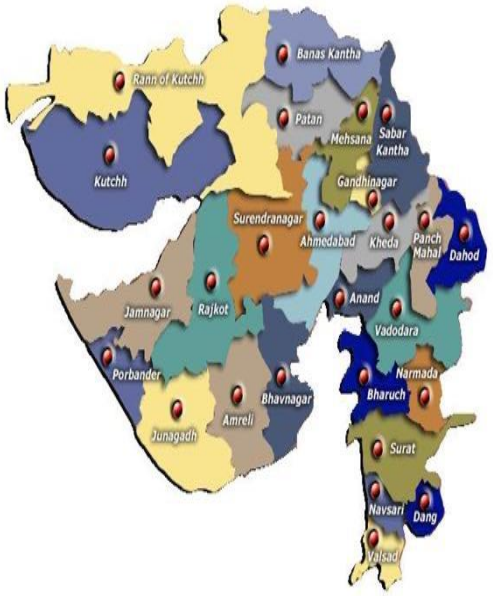

Figure 3: Gujarat Map

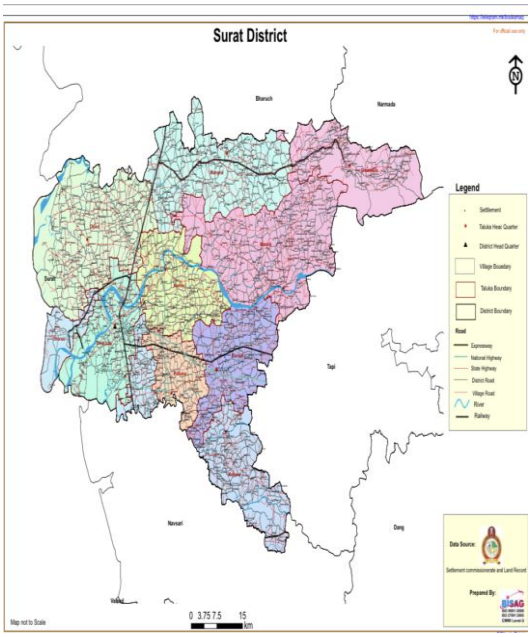

Figure 4: Surat Map

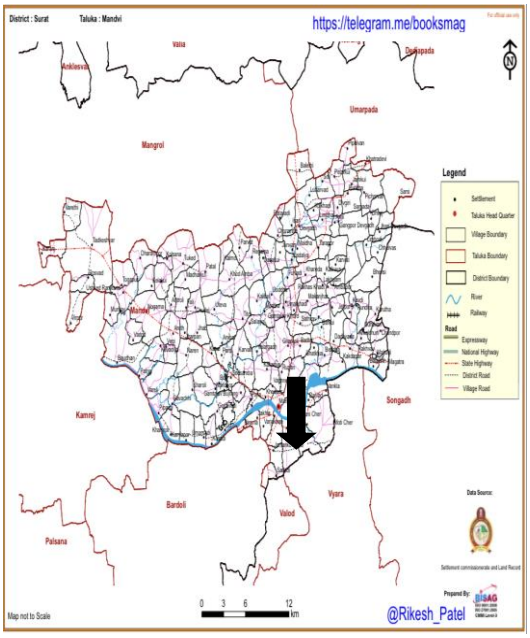

Figure 5: Mandvi Taluka Map

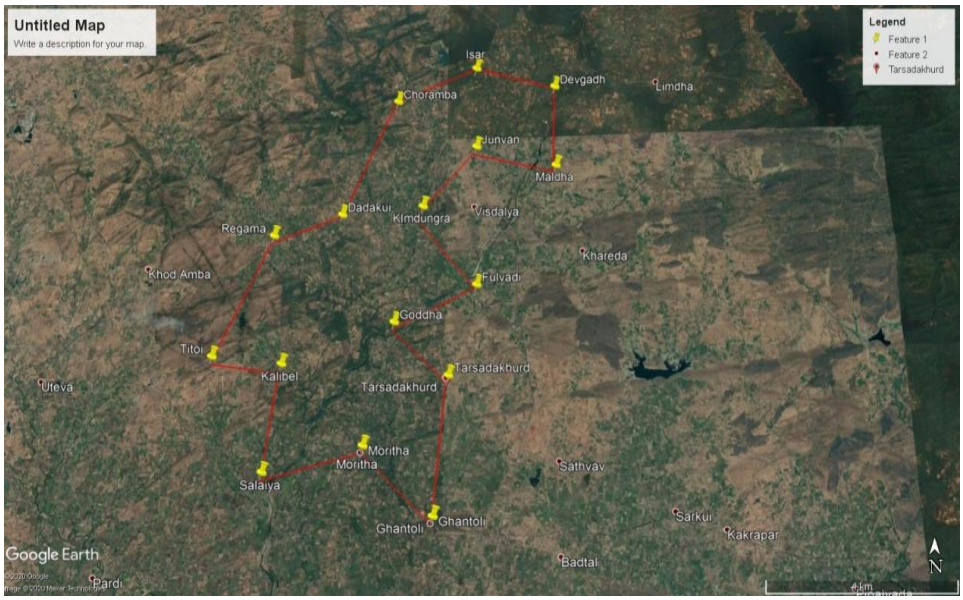

Figure 6 : Rural Cluster of Mandvi Taluka

4. Data collection

4.1 List of Anganwadi in our Cluster:

Table 1: list of Village Anganwadi

Sr. No.	Village Name	Yes	No
01	Ghantoli	✓	-
02	Salaiya	✓	-
03	Moritha	✓	-
04	Titoi	✓	-
05	Kalibel	✓	-
06	Goddha	✓	-
07	Regama	✓	-
08	Dadakui	✓	-
09	Fulvadi	✓	-
10	Kim Dungra	✓	-
11	Maldha	✓	-
12	Junvan	✓	-
13	Choramba	✓	-
14	Isar	✓	-
15	Devgadh	✓	-
16	Tarsadakhurd	✓	-

4.2 Gap Identification

Table 2 : Requirement of Primary school in all village according to URDPFI Guidelines

Village Name	Population	Requirement as per Norms	Existing	Gap
Ghantoli	4372	1	1	0
Salaiya	3428	0	1	0
Moritha	1785	0	1	0
Titoi	1524	0	1	0
Kalibel	502	0	1	0
Goddha	2164	0	1	0
Regama	1868	0	1	0
Dadakui	666	0	1	0
Fulvadi	1661	0	1	0
Kim Dungra	1033	0	1	0
Maldha	1739	0	1	0
Junvan	1156	0	1	0
Choramba	1229	0	1	0
Isar	1884	0	1	0
Devgadh	2667	0	1	0
Tarsadakhurd	1011	0	1	0

5. Conclusions

- One of the main causes of migration is a lack of social infrastructure facilities in the village cluster.Different government policies and guidelines for health, education and social-cultural facility infrastructure were examined in this study to better understand the social infrastructure needs in the village cluster. A questionnaire survey was conducted at each AWC, Primary schools, Health Centers and Social-cultural facilities to identify the issues with the current infrastructure facilities in the village cluster.

- According to a gap analysis, some village lacks basic infrastructural facilities for education, such as Anganwadis, and health, such as Sub-centers, and social-cultural facility, such as community hall. The required number of AWC in Ghantoli village is 6, according to the ICDS guidelines for AWC but there are only three AWC in the village. In this village, new AWCs are proposed. According to IPHS Revised guidelines 2012 for Sub-center, the required number of sub-centers in Devgadh village is one, while currently, sub-center is not there in devgadh village. So one new sub-center is proposed in Devgadh village. The location of the proposed sub-center is identified such that the sub-center can serve the complete village area.

- According to the physical survey, there is currently no government high school in the village cluster. As a result, the village cluster is proposing the construction of one new high school. The school's layout was created following IS 8827:1978. The planned school is situated such that it is almost in the center of the village cluster.

Finally, health, education and social-cultural infrastructure facilities have been proposed, as well as other steps for their upgrade and productive operation. According to the information gathered, each primary school in the cluster has a dropout ratio of about 15-20 %. As a result, below are several suggestions for preventing dropouts. The guidelines state that: Measures for cleanliness have also been included in the plans, according to SBM guidelines for schools.

REFRENCES:

1. Mukherjee, S. (1991). Rural. Health Services. The Indian Journal of Pediatrics, [online] 58, pp.407-414.Availableat: https://link.springer.com/content/pdf/10.1007/BF02750919.pdf [Accessed 16 Sep. 2017].

2. Retnakumar, J. and Arokiasamy, P. (2003). Fertility Decline: And Falling School Enrolment. Economic and Political Weekly, [online] 38(46), pp.4827-4830. Available at: http://www.jstor.org/stable/4414269 [Accessed 14 Dec. 2017].

3. School Infrastructure and Educational Outcomes: A Literature Review, with Special Reference to Latin America. (2018). Brookings Institution Press, [online] 17(1 (Fall 2016), pp.95-130. Available at: http://www.jstor.org/stable/economia.17.1.95 [Accessed 11 Mar. 2018].

4. The Rural Solution How Community Schools Can Reinvigorate Rural Education. (2010). [online] Washington: Center for American Progress, pp.9-11. Available at: http://www.ruraledu.org/user_uploads/file/The_Rural_Solution.pdf [Accessed 28 Dec. 2017].

5. Thomas, S., Frank J, X., Yifan, Y., Mengxue, L. and Junjie, L. (2018). Necessities and challenges to strengthen the regional infrastructure resilience within city clusters. Procedia Engineering, [online] 212, pp.198-205. Available at: https://www.sciencedirect.com/science/article/pii/S1877705818300353 [Accessed 22 Mar. 2018].

6. Arun Pillai, and Dr. Shrikant Charhate, 'Social and Institutional Infrastructural Sufficiency Model Development Using GIS', *International Journal of Engineering Research And*, V5.12 (2016), 323–27 <https://doi.org/10.17577/IJERTV5IS120270>

7. Hamidi, Farideh, Farhad Ghorbandordinejad, Maryam Rezaee, and Mehdi Jafari, 'A Comparison of the Use of Educational Technology in the Developed/Developing Countries', Procedia Computer Science, 3 (2011), 374–77 <https://doi.org/10.1016/j.procs.2010.12.063>

8. Nuzir, Fritz Akhmad, and Bart Julien Dewancker, 'Understanding the Role of Education Facilities in Sustainable Urban Development: A Case Study of KSRP, Kitakyushu, Japan', Procedia Environmental Sciences, 20.December (2014), 632–41 <https://doi.org/10.1016/j.proenv.2014.03.076>