

Rurbanization: An Approach Towards Urbanization of Rural Area

¹Nishant P. Shah ²Ujjval J. Gotawala ³Dr. Dipi A. Patel

^{1,2}U.G Students ³Assistant Professor

^{1,2,3}Department of Civil Engineering

^{1,2,3}C. K. Pithawala College of Engineering & Technology, Gujarat Technological University, Surat, Gujarat, India

Abstract

Today world is growing rapidly and the living standards of society is improving due to development in each and every field. Due to evolution of new affordable technologies world has become small and faster. Despite availability of many infrastructural facilities, the growth in population has outpaced all efforts of development so far. Slow pace of development in villages and pursuit of better life style has led to huge migration from villages to cities. For most villages on one hand some essential infrastructural facilities like children playground, public garden, etc. have been over looked and on the other hand provided infrastructural facilities like drinking water, drainage, etc. have become insufficient. In the present study, Rurbanization of Uchchal village of the Tapi district is carried out. Efforts have been made in this work to identify and plan some of the new infrastructural facility as well as up gradation of existing facilities as per the needs of future population. Selection of infrastructural facilities has been made based on the most urgent needs of people as well as environmental protection and modernization.

Keyword- Rurbanization, Socio cultural Infrastructure, Gap analysis, Uchchal village

I. INTRODUCTION

Around 70% of the State's population is living in rural areas. People in rural areas should have the same quality of life as is enjoyed by people living in sub urban and urban areas. The cascading effects of poverty, unemployment, poor and inadequate infrastructure in rural areas on urban centers causing slums and consequential social and economic tensions is manifesting in economic deprivation and urban poverty. Hence rural development, which is concerned with economic growth and social justice, improvement in the living standard of the rural people by providing adequate and quality social services and minimum basic needs, becomes essential.

A. Rurbanization

Translates to soul of a village and the facilities/amenities of the urban town. It aims to provide urban facilities to rural areas. It includes availing infrastructural facilities like physical, Social, cultural and recreational to the rural population. It aims

- To Improve Education facility.
- To upgrade transportation facility.
- To provide medical & recreational facility.
- To raise life standard of people.
- To increase water supply facility and irrigation system of village.
- To develop solid waste management.
- Proposals for solar lights each and every area should be made possible.

B. Need of the Study

In the present study, the common problems of village are solved by the engineering students. The basic need of rural development program have been alleviation of poverty and unemployment through creation of basic social and economic infrastructure, provision of training to rural unemployed youth and providing employment to marginal Farmers/Laborers to discourage seasonal and permanent migration to urban areas.

C. Objective of the Study

The main objectives of the work are:

- To study the existing elements and parameters of village Uchchal.
- To identify the issues and problems of the village Uchchal.
- To analyze existing social and physical utilities, public and semipublic buildings as well as infrastructure.
- To Design the comprehensive planning for village Uchchal.

D. Scope of the Study

The present study aims to address the existing problems and issues arising in village Uchchal regarding infrastructure facilities, present road connectivity and over all planning of village and its agglomerated area. The scope of study is limited to:

- Physical planning
- Physical and social infrastructure facilities.
- Improve living standard of rural people by helping them develop their skill and subsequently by assisting them in implementing income generating activities in close coordination and cooperation with national and international organizations.
- Implement sustainable and integrated rural development programs related to health, education, agriculture, forestry, land, renewal energy technology, water and environment based on resource endowments and comparative advantages of the working area.

II. STUDY AREA & DATA COLLECTION

A. Village Location

Uchchal is located in District Tapi in Gujarat. Uchchal is 114 km far from the Surat railway station and it is shown in fig. 2. As it comprises 68 villages, small village named Uchchal is also located in this taluka, This Uchchal village has the benefit of river tapi. River tapi passes through the north adjoining side of the village. Uchchal having the importance of tapi in form of Ukai reservoir which is located at 2km away from the Uchchal. The village Uchchal having population about 4233 according to population survey carried out in 2011 year. The Uchchal village having area of 547 hectare. In this village N.H. 6 is passing.



Fig. 1: Location of village Uchchal
Source: Google Map

B. Regional Setting & Linkage of Village

Uchchaltaluka comprises 68 villages, small village named Uchchal is also located in this taluka, and This Uchchal village has the benefit of river tapi. River tapi passes through the north adjoining side of the village. Uchchal having the importance of tapi in form of Ukai reservoir which is located at near distance from the Uchchal.

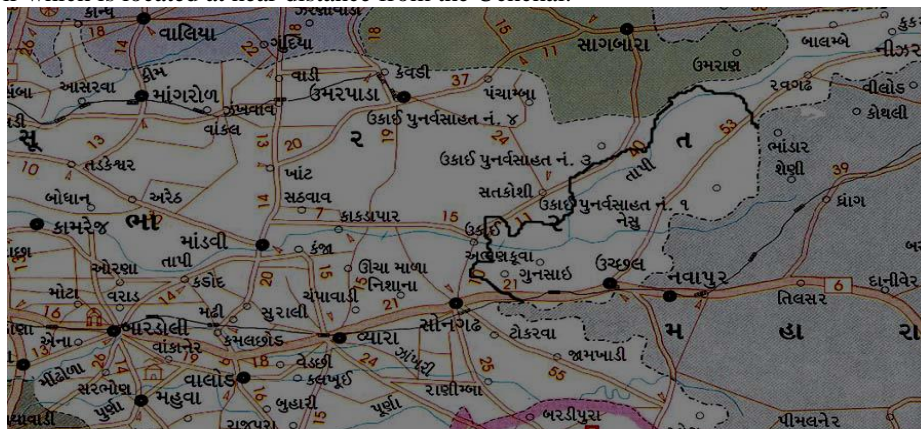


Fig. 2: Linkage of uchchal village to other villages
Source: Google Map

C. Primary Survey Data

The data are collected in the survey and then are analysed to find the gap between existing and required norms. Some of the data collected are given in Table 1. Gap analysis is carried out based on the UDPFI norms.

1) Demographical Detail

Sr. No.	Census	Population	Male	Female
i)	1991	3889	1931	1958
ii)	2001	4105	2082	2023
iii)	2011	4233	2101	2132

2) Geographical Detail

Sr. No.	Description	Information/Detail
i)	Area of Village (Approx.) Coordinates for Location:	547 hectares, Latitude:211714155 & Longitude:73.7411582
ii)	Agricultural Land Area (Approx.)	342 hectares
iii)	Residential Area (Approx.)	19 hectares
iv)	Nearest Town & Distance:	Songadh-22km

3) Occupational Details

Name of Three Major Occupation groups in Village	1.Agricultural
	2.Labour in construction
	3.Herding

4) Physical Infrastructure Facilities

Sr. No.	Descriptions	Information/ Detail	Adequate	Inadequate	Remarks
A.	Main Source of Drinking water				
	[Piped water/ Dug well/ water from spring/ Surface Water(River/ Dam/ Lake/ Pond/ Stream Canal)]	Overhead and underground tanks,Dug well and Piped water	√		In village sources of drinking water are sufficient
Suggestions if any:					
B.	Water tank Facility				
	Overhead Tank	Capacity: 19000 lit	√		Water tank is in well condition
	Underground Sump	Capacity:			
Suggestions if any:					
C.	Drainage Facility				
	Available (Yes/ No)	Yes	√		Drainage facility is available
Suggestions if any: Sewage Plant is Required					
D.	Type of Drainage				
	(Underground Drainage/ Open with outlet/ Open without outlet)	Underground drainage and open with outlet	√		Drainage facility is in good condition

Suggestions if any:					
E.	Road network (All weather road/ Kutchha/ Pucca)				
	Village approach road Main road Internal streets	Flexible	√		Internal streets are in progress for pucca road
Suggestions if any:					
F.	Transport Facility				
	Railway Station (Y/N)	No - 2km from village at Navapura			

Table 1: Data collection and Gap analysis

III. DESIGN PROPOSALS

As per above report of a gap analysis and based on discussion with village people and higher authorities, the design of following infrastructure facilities are carried out for the village Uchchal.

A. Socio Cultural Infrastructure

1) Bus Station

As per survey of Uchchal we find the, Uchchal is Taluka and bus station in village is not available. A bus station at Taluka level to be required so that to provide bus station in village. Then we carried out survey for collection of data related to construction of bus station. It include the all dimension of one bus. Then we will prepare architectural plan. Then we prepare structural design and plan. Then we compute measurement sheet as per suitable specification and prepare abstract sheet and compute cost of proposal from abstract sheet.

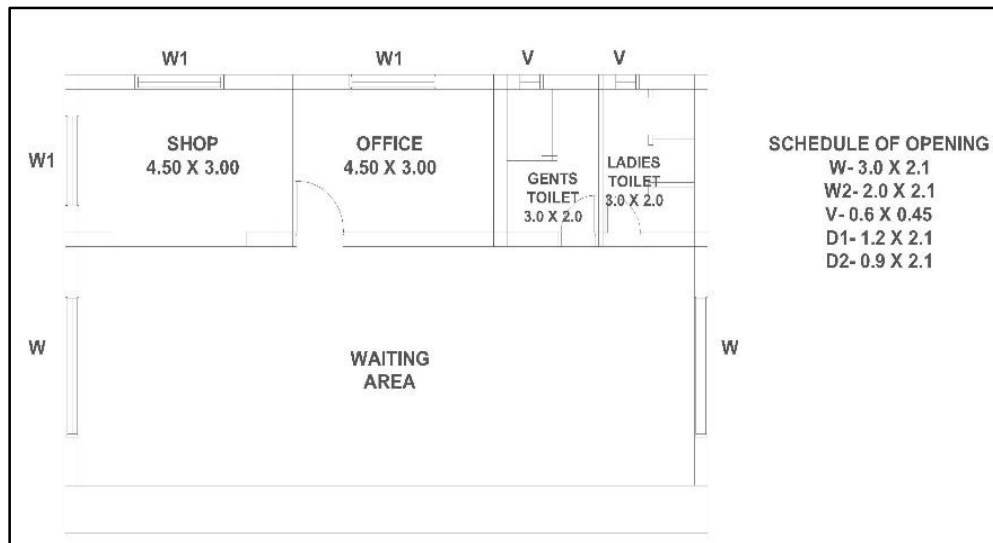


Fig. 3: Proposed plan of Bus station

B. Social Infrastructure

1) Public Latrine Block

As per survey of Uchchal we find, In village 40% person live in kuchcha houses so they are not contain latrine in their house so provide public latrine block. Proposed architectural plan of public latrine block as given below:

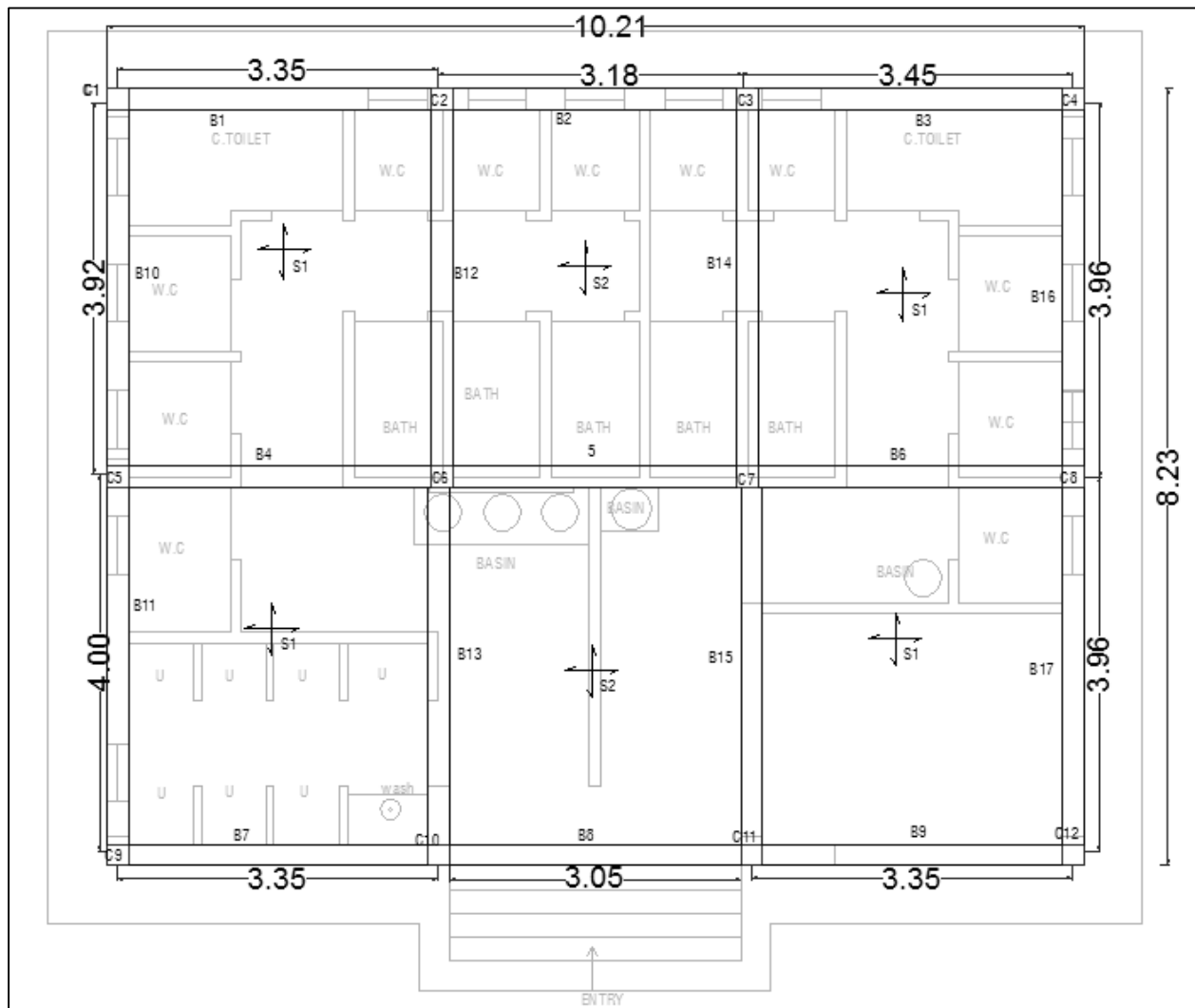


Fig. 4: Plan of public latrine block

IV. CONCLUSION

The proposal of as Public toilet blocks and Bus station socio culture infrastructure at village Uchchal aim to improve the living standard of village people. With this, the migration will decrease, the education standard will increase, and growth of country will increase.

ACKNOWLEDGMENT

We are thankful to our PROF. M. J. PATEL, Dr. S & S. S. GHANDHY GOVERNMENT COLLEGE, and SURAT for their valuable guidance, contant inspiration and their active involvement in our dissertation work.

We are also thankful to DDO, TDO, Sarpanch and staff members of Surat District for providing us with requisite data whenever we approached them. Our special thanks to our all villagers and stake holders for their support during survey.

REFERENCES

- [1] "Ahmedabad Bus Rapid Transit System" Bus station Design, December 2005
- [2] Suresh B, Puneeth HC "Bus stop and Bus bays in Bangalore- A status report" Indian institute of science, Bangalore. 2012
- [3] "Road safety design guidelines for nus rapid transit in indian cities" EMBARQ India. October 2012.
- [4] N. Viswanadham, SowmyaVedula, "Design of smart village" Hyderabad. September 2010.
- [5] "Sustainable Energy for Rural India" Bhudapadvillage,a case study. April 2008.
- [6] "ON TO ACTION-BUILDING A DIGITAL ECOSYSYTEM FOR KNOWLEDGE DIFFUSION IN RURAL INDIA" Kanpur.