

# Vishwakarma Yojana: Phase V an Approach towards Rurbanization in Delad Village

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**Abstract –** *Urbanization has become a common feature of Indian society. Growth of various industries, people started moving towards cities. But a country can never prosper if the villages are not developed as this is an important part of our country's economy. Government of Gujarat has launched the Vishwakarma yojana for the development of village by identifying the requirements of villages. The yojana has the aim to convert rural to rurban means to include city facilities in village without side effects of environment. Under this scheme, villages are surveyed and development schemes are proposed and implemented. Our project is about development of appropriate facility and suggestion for the up gradation of Delad village.*

**Key Words:** Rurbanization, Engineering Store, Sustainable Design, E-Gov Common Service Centre.

## 1. INTRODUCTION

In the vishwakarma yojana, our allocated village is Delad. It is situated near sayan in surat district so it is essential to develop the delad village under the district for the growth of state also for country. 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 playground, public recreational centre, etc have been overlooked and on other hand provided infrastructural facilities which are essential. As per the present scenario, the village has larger area but lack of infrastructures and facilities. They all have separate toilets at home by participating in Swachchh Bharat Abhiyan. The coordination between the villagers is good. The village has also won prize for its 'Samras' and 'nirmal gram award'. The villagers migrates to urban areas for better facilities. On the basis of collected data from Techno-economic survey & smart village survey, we found GAP between existing facilities and required facilities as per norms. Based on the GAP analysis, we provided repair & maintenance of village approach road & panchayat building, proposed designs of E-gov common service centre, engineering store, recreational park and walkway, irrigation system etc. we proposed the designs of CFL/LED, energy saving via energy audit and efficient motor pumping to reduce the cost.

## 1.1 Study Justification

Vishwakarma yojana is government base project. In this project we study village area and we want to give technical solution of the problem of villages at the engineering point of view. In this project infrastructure base problem of village are solved by the students.

The basic need of rural development program have been removal of poverty and unemployment through creation of basic infrastructure, provision of training to rural unemployed people and providing employment to farmers to discourage from the permanent migration to city.

Rural areas are sparsely settled places away from the influence of large cities and towns. Such areas are distinct from more intensively settled urban and suburban areas, and also from unsettled lands such as outback or wilderness. People live in village, on farms and in other isolated houses.

Rural areas can have an agricultural character, though many rural areas are characterized by an economy based on logging, mining, oil and gas exploration, or tourism. Though various Gov. Departments are involved in various infrastructural development works, a holistic view and modern solutions (aesthetic, vaastushastra) etc. can be provided by new engineer under vishwakarma yojana. The students with this view do study of villages.

## 1.2 Study Area

The Delad village is situated in the Surat district. Its geographical coordinates are 21° 12' 30" North 72° 32' 30.54" East. The latitude 21.2 and longitude 72.82 are the geo-coordinate of the Delad. The other nearest city from Delad is Sayan and its distance is 2 KM. Delad is located around 21 kilometers away from its district head quarter surat. Surrounding villages from Delad are as follows.

Kosad-8.5KM,Sayan-2KM,Vasvari-4KM,Gothan-3KM.



**Fig -1:** Delad map

### 1.3 Scope of Study

#### 1. Sustainability:

- Clean drinking water
  - Sanitation
  - primary& secondary education
  - Drainage
  - Electricity
  - Solid waste management
- utilizing renewable source
- Housing& livelihood
- Public Health Centre

#### 2. Technology:

- Irrigation facilities
- Delivery of government services
- Telecommunication & internet facilities
- ATM Machines

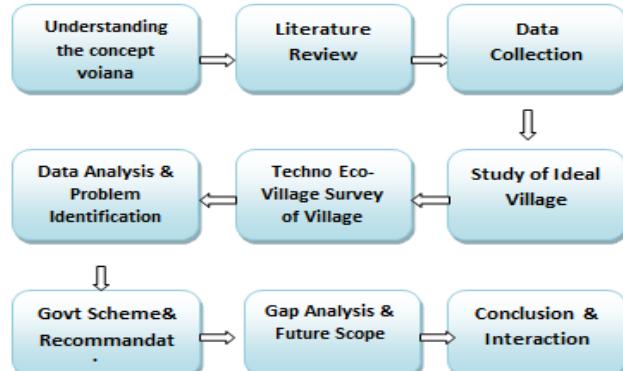
#### 3. Connectivity:

- Physical connectivity to towns and other places through roads
- Easy and cheap means of transportation
- Financial connectivity

#### 4. Community Involvement:

- Planning for village development
- Stable panchayti raj
- Influencing personal and community behavior

### 1.4 Methodology Steps



**Fig -2:** Methodology Steps

### 1.5 Data Collection

In delad village, we have done first surveys like techno economic survey, smart village survey, mission antyodaya yojana, sansad aadarsh gram yojana forms and after filling data analysis of it. various details like geographical , demographical, occupational, agricultural, tourism, educanal facilities, health facilities, sanitation facilities ,drainage , drinking water facilities, electricity, irrigation facility, housing condition, socio cultural facilities, physical infrastructural facility, sustainable infrastructure facilities and other facilities.

In delad village, out of 4028 population, there are 876 families. houses are made by concrete and brickes. out of 713 hectors ,647 hector is agricultural land and sugarcane is the main crop.as there are so many industries, about 134 small and big ,it plays an important role in village income and employment.in basic facilities there is 2 plants of ro water and drainage system is both surface and subsurface.

The roads are black bituminous and cc roads also there. there is a one 30 MW substation in the village which is enough for residential and industrial purpose and also connectivity from sayan subcentre. sanitation and irrigation is properly done. houses are mostly about 80% are PUCCA and 20 % are KUTCHA .in village there is no engineering store, ecommon service centre and park or garden. for educational purpose, one primary school and 3 agnawadi is there. there is also facility of bank with atm and newly constructed panchayat building.

We suggested the 3 design proposal in the village as per analysis .

### 1.6 Design Proposal

In design proposal out of three design one design is engineering store. At present in delad village there is about 350 industrial electricity connection. As there is many no of industries, we visited and took an interview. From interview, we knew that there is more industrial

area of various manufacturing, productions, looms, workshops etc. But there is no any engineering store which provide them any spare parts of electrical, mechanical and civil parts. They also needs the cold storage for storage.

### Sustainability Of Proposal

This engineering store contains various department ,from which various industries can get their parts and service immediately, so the time spent on damage or repair will be less and the production is more.



**Fig 3:** Engineering Store plan

After calculating the quantities and final estimation is about 21,43,563 rs. From survey it is recommended as early as granted by government.

### 3. CONCLUSION

Based on the collection of the data of the village and survey work done in both semester we have to do some improvement in the Delad village and do some repair work in the village. We have to provide some facilities in the village like repair and re-habitation of the existing school building etc. There is a room which is not in good condition in primary school so it needs re-construction.as per the demand of villagers and review of sarpanch/talati we propose the design of the recreational park, engineering store, egov- common service centre, efficient motor pump, irrigation system, etc. In Delad village there is less number of street lights so it should install new LED street lights for less power consumption and good

efficiency also in households. It is also require to connect the grid of village with nearby substation. Because the village grid only connected with Delad sub-station. It is also required to build an e-governance common service centre. In addition, the primary health is also needed as per villagers.

Therefore, we can say if all the missing amenities are provided then it may stop the migration of rural people towards the urban area. This can cause reduce the load on urban areas. And this amenities designed by us is helpful for better development of village as physically as well as socially, which improves the overall lifestyle of people.

We achieved an impressive growth rate in the overall infrastructural development; the agricultural infrastructure development is not evenly distributed in village. The study of various energy saving concepts and renewable and/or sustainable energy programme have led us to the conclusion that the goal of "Vishwakarma Yojana Project" can be achieved by taking proper efforts towards development of rural areas by developing the required infrastructure and implementing the applicable and suitable energy efficient methods. Since energy demand is always going to be more than the energy supply, energy saving is the only way to achieve "rurbanization" which is the ultimate aim of Vishwakarma Yojana Project.

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