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# Redevelopment of Primary Health Centre for Village Sisodra

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## Abstract

Vishwakarma Yojana is an approach towards Rurbanization, it has been proposed to provide the benefit of real world experience to engineering students and apply their technical knowledge in the planning, development and management of rural infrastructure facilities. Rurbanization means urban facilities and amenities in rural area, developing village with help of rural soul and urban amenities. Sisodra (Ganesh) is a Village in Navsari Taluka in Navsari District of Gujarat State, India. It is located 5 KM North from Navsari and 305 KM from State capital Gandhinagar. In this village there are essential infrastructural facilities like Water Supply, Road Network and Electricity, primary school, secondary and higher secondary school etc have been good and sufficient on the other hand there is lack of infrastructural facilities like drainage, public library, public toilet, and public garden. Here in this paper we researched on a Primary Health Centre which is in village but in poor condition.

**Keyword- Provision of Urban Amenities in Rural Area, Problems of Rural People, Rurbanization, Rural Development, Sustainable Development**

## I. INTRODUCTION

In India around 70% of population lives in villages. The people in village should have same facilities and utilities as urban and sub-urban areas.

The cascading effects of unemployment, poverty, inadequate and poor infrastructure in rural areas on urban centres 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 for people, improvement in the living standard of the rural people by providing quality social services and minimum basic needs, becomes essential.

As a measure to strengthen the grass root level democracy, the Government is constantly endeavouring to empower Panchayat Raj Institutions in terms of functions, powers and finance. Gram sabha, NGOs, Self-help Groups and PRIs have been accorded adequate role to make participatory democracy meaningful and effective.

By this Vishwakarma yojana project government, want technical solution of the problem of villages at the engineering point of view. In this project the common problem of village is solved by the engineering student.

## II. OBJECTIVES OF STUDY

- To study the existing elements and parameters of village Sisodra(Ganesh).
- To identify the issues and problems of the "village Sisodra(Ganesh)".
- To analyses existing social and physical utilities, public and semi-public buildings as well as infrastructure.
- To Design the comprehensive planning for village Sisodra(Ganesh).
- 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.
- To provide a comparative analysis of the economic, social and environmental context for rural development.

## III. METHODOLOGY

The method involves sequential steps which starts from studying literature review and leads to recommendations and suggestions at the end. Firstly, the data is collected from field survey, literature review and government and local offices. The data is then analysed and by analysing the data, different planning proposal (physical, social, infrastructural) are proposed. And also a planning based on renewable energy sources is proposed. Further recommendations and suggestions are given to implement in the village.

| *VILLAGE NAME: - SISODRA(GANESH)* | | | *POPULATION: - 8406* | | |
|---|---|---|---|---|---|
| *No* | *Facility* | *Planning Commission/UDPFI Norms* | *Existing* | *Required As per Norms* | *Gap* |

| | | | | | |
|---|---|---|---|---|---|
| *1* | *Education* | | | | |
| | *Aanganwadi* | *Each Village – 1* | *10* | *6* | *-* |
| | *Primary School* | *Each Village – 1* | *4* | *6* | *2* |
| | *Secondary School* | *Per 7,500 population - 1* | *2* | *2* | *-* |
| | *Higher Secondary School* | *Per 15,000 Population - 1* | *1* | *1* | *-* |
| | *College* | *Per 1,25,000 Population - 1* | *0* | *0* | *-* |
| | *Tech. Training Institute* | *Per 1,00,000 Population - 1* | *1* | *0* | *-* |
| | *Agriculture Research Centre* | *Per 1,00,000 Population - 1* | *0* | *0* | *-* |
| *Note:- Ample amount of educational institutes are there in village gap of 2 is there in primary school section as per norms but, village requirements are fulfilled mainly by existing 2 private school having capacity of 300 students per school.* | | | | | |
| *2* | *Medical Facility* | | | | |
| | *Gov./Panchyat Dispensary or Sub PHC or Health Centre* | *Each Village - 1* | *2* | *1* | *-* |
| | *PHC & CHC* | *Per 20,000 population - 1* | *0* | *1* | *-* |
| | *Child Welfare and Maternity Home* | *Per 10,000 population - 1* | *1* | *1* | *-* |
| | *Hospital* | *Per 1,00,000 Population - 1* | *0* | *0* | *-* |
| *3* | *Transportation* | | | | |
| | *Pucca Village Approach Road* | *Each village - 1* | *Adequate* | | |
| | *Bus/Auto Stand provision* | *All Villages connected by PT (ST Bus or Auto) - 1* | *Adequate* | | |
| *4* | *Drinking Water* | | | | |
| | *Water Facilities* | | *Adequate* | | |
| | *Over Head Tank* | *1/3 of Total Demand* | *Adequate* | | |
| | *U/G Sump* | *2/3 of Total Demand* | | *Not available* | |
| *5* | *Cremation Ground* | *Per 20,000 population - 1* | *1* | *1* | *-* |
| *6* | *Post Office* | *Per 10,000 population - 1* | *0* | *2* | *2* |
| *7* | *Gram Panchayat Building* | *Each individual/group panchayat – 1* | *1* | *1* | *-* |
| *8* | *APMC* | *Per 1,00,000 Population - 1* | *1* | *1* | *-* |
| *9* | *Fire Station* | *Per 1,00,000 Population - 1* | *0* | *1* | *-* |
| *10* | *Police Station* | *Per 15,000 Population - 1* | *0* | *1* | *1* |
| *11* | *Community Hall* | *Per 10,000 population - 1* | *0* | *1* | *1* |

From the gap analysis it can be noticed that there is gap for police station, primary school, community hall and post office. That means these needs to be provided in the village as per norms given by UDPFI. So below are recommendations and suggestions for the village development based by gap analysis.

## IV. RECOMMENDATION

*A. Drinking Water*

There is no drinking water purify system. It can be solved by providing any simple mineral water plant.

*B. Sanitation*

*1) Sewage System*

By providing closed / underground drainage system we can secure the people from many diseases and there will be less pollution.

*2) Solid Waste Dumping Place*

There is no place where solid waste can dump or can reuse or renewable energy plant in Sisodra (Ganesh). They dump most of the waste in sewage system.

A bio-gas plant or vermin-compost plant can solve major part of this problem

*3) Transportation*

In Sisodra (Ganesh) there is no proper public transportation. Village have a bus stand but no proper bus service.

*4) Recreation Area*

In Sisodra (Ganesh) as a recreation area they have a pubic garden but no developed space for other recreational activity like community hall.

*5) Rain Water Harvesting*

In Village there is no rain water collection system exist. By providing on some big structure rain water can be collect and used.

| *PUBLIC BUILDINGS* | *SUGGESTIONS* |
|---|---|
| *Garden* | *Proper benches, loans maintenance needed* |
| *Anganwadi* | *The repair should be done for water supply* |

| | |
|---|---|
| *Transportation* | *Improvements in few internal roads, and a proper bus schedule* |
| *Health Facilities* | *There is only one private clinic is there. Primary health centre should be provided with the adequate quantity of staff. And maintenance of it.* |
| *Renewable energy Source* | *Bio-gas plant needed* |
| *Sanitation* | *Prevision of better sewage system and solid waste collection system* |
| *Village Pond* | *Rectification of lake* |
| *Police Station* | *Provision of police station in village* |
| *Street Light* | *Solar Street light* |
| *Others* | *Maintenance of pond is required* |

*Table 2: Suggestions*

## V. DESIGN OF PHC

*A. Details of PHC Building*

No. of rooms : 3 (Medical room, clinic room, storage room)
Medical room : 3.53 m× 3.07 m
Clinic room : 3.53 m× 2.80 m
Storage room :3.20 m× 3.87 m
Otta : 3.41 m× 2.13 m
No. of doors : 3
No. of windows : 6

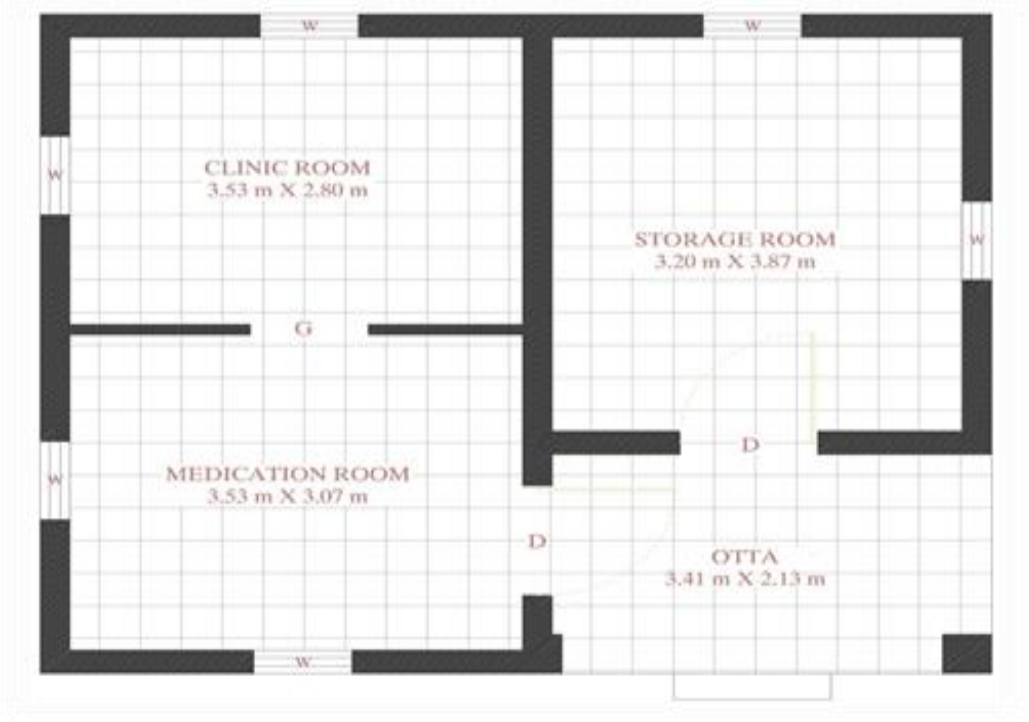


Fig. 1: plan of PHC

The Primary Health Centre which is available in public garden. It consists of 3 rooms medication, Clinic and Storage room
The current Condition of PHC is RCC work, the structure is in good condition, but the wooden work and flooring is in poor condition and the area surround the PHC is unhygienic.
We redesign the building for flooring paint in both sides within Rs. 35,180/- approx.

## VI. CONCLUSION

By providing PHC, it will help villagers to improve their health. They will not have to go at neighboring town for health checkup. It will save time, money and resources. It will improve the overall health of villager dwellers. In case of emergency it can save many lives if PHC is available in the village itself.

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