

Vishwakarma Yojna: An Approach Towards Rurbanisation Mithali Village Panchmahal, Gujarat

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ABSTRACT

The Vishwakarma Yojana aims to bridge the gap between rural and urban areas by enhancing infrastructure and providing essential services while preserving the village's cultural essence. This initiative promotes sustainable and self-reliant rural development by identifying key challenges through surveys and proposing practical solutions.

Mithali village, located in Shehra Taluka, Panchmahal District, Gujarat, has a population of 2,945 (2011 Census) and primarily relies on agriculture and dairy farming for its economy. However, the village faces inadequate infrastructure, including poor roads, lack of sanitation facilities, and outdated public buildings such as the Panchayat office and community hall. The bus stop is poorly maintained, while water supply and waste management systems require significant improvement.

To address these issues, the project proposes the development of a Main Gate, modern Panchayat Office, Bus Stop, House Plans, Post Office, and Community Hall. These upgrades aim to enhance the village's infrastructure, improve living standards, and promote sustainable growth. By fulfilling the basic needs of the community, this initiative strives to reduce rural-to-urban migration and create a model for future rural development.

KEYWORDS: Rural Development, Infrastructure Improvement, Sustainable Growth, Sanitation, Agriculture-Based Economy.

I. INTRODUCTION

Rural development is important for improving the quality of life in villages. It focuses on providing better infrastructure, healthcare, sanitation, and education. With increasing urbanization, villages often get left behind, facing issues like poor roads, lack of proper facilities, and limited services. To bridge this gap, the Vishwakarma Yojana works towards bringing sustainable development and modern infrastructure to rural areas.

Mithali village, located in Shehra Taluka, Panchmahal District, Gujarat, has a population of 2,945 (2011 Census). The village mainly depends on agriculture and dairy farming for livelihood. However, it faces several challenges, such as damaged roads, lack of proper sanitation, and outdated public buildings. The Panchayat office is old

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Village details:

Village Name: Mithali

Taluka: Shehra

District: Panchmahal

Pin Code: 389120

State: Gujarat

Area :

Population: 2945 (As Per Census 2011)

Households: 542

Nearest Town: Godhra



FIG. 1 VILLAGE MAP

II. NEED OF THE STUDY

The Vishwakarma Yojana is a step towards rurbanization by the Government of Gujarat, aimed at transforming rural areas with modern facilities. Under this scheme, GTU students and faculty visit villages, interact with locals, and assess the current infrastructure. They then propose development plans to enhance the village's overall condition.

This study is necessary to:

- Reduce rural-to-urban migration by making villages more liveable.
- Improve basic services like water supply, sanitation, and transportation, reducing dependence on cities.
- Add modern features to villages while preserving their traditional identity.
- Enhance the quality of life for villagers by providing better infrastructure and amenities.
- Make villages economically self-reliant, benefiting nearby areas too.

III. OBJECTIVES OF THE STUDY

- To enhance basic physical infrastructure by improving water supply, transportation, sewerage, and solid waste management in the village.
- To strengthen social infrastructure by upgrading healthcare and education services, ensuring better delivery of facilities to the villagers.
- To promote integrated rural development by providing quality housing, better connectivity, and creating local employment opportunities.
- To construct internal roads within the village and establish efficient transportation systems to connect nearby village clusters.
- To identify and upgrade sanitation facilities, including sewer lines, drainage systems, dumping sites, and electricity connections.
- To renovate village lakes, water tanks, and wells, and build rainwater harvesting structures for sustainable water conservation.
- To promote sustainable growth by enhancing the overall living standards and infrastructure of the village.

IV. STYDY AREA

Mithali is a village located 12 KM from District headquarters Godhra and 14.7 KM from Shehera town. It lies approximately 150 KM from the State Capital, Gandhinagar. Mithali is situated in Shehera Taluka of Panchmahal District in Gujarat State.

Nearby villages include Sampa Gaam (7.2 KM), Pasnal (7.8 KM), Khandiya (4.7 KM), and Morning Dungara (3.8 KM). The village is surrounded by Godhra Taluka towards the West, Shehera Taluka towards the North and East, and Kalol Taluka towards the South-West.

Mithali is a rural village where agriculture is the main source of livelihood. The village is part of Mithali Gram Panchayat and has been selected under the Vishwakarma Yojana for infrastructure development and sustainable planning.



FIG. 2 MITHALI VILLAGE

V. LITERATURE REVIEW

Rural development plays an important role in improving the quality of life for people living in villages. It focuses on strengthening infrastructure, providing better education and healthcare, and promoting sustainable agricultural practices. In rural areas, basic facilities like roads, sanitation, and public buildings are often underdeveloped, which affects the daily lives of villagers and pushes them towards cities in search of better opportunities.

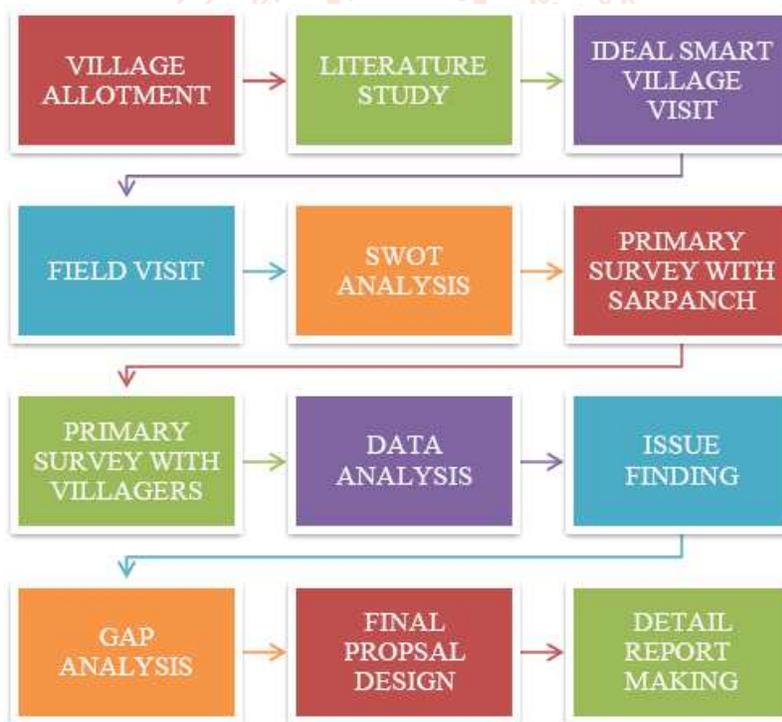
Various government schemes, such as Pradhan Mantri Gram Sadak Yojana (PMGSY) for road connectivity and Pradhan Mantri Awas Yojana (PMAY) for affordable housing, have been launched to improve rural infrastructure. However, due to slow implementation and lack of maintenance, many villages still face issues like poor roads, limited public services, and inadequate sanitation.

Research also highlights the importance of sustainable practices in rural development. Solutions like rainwater harvesting, waste management, and solar-powered street lighting help villages become self-reliant and eco-friendly. For example, using green building techniques in public infrastructure can reduce energy consumption and improve sustainability.

In the case of Mithali village, the Vishwakarma Yojana project aims to identify the existing gaps and offer practical solutions. Through surveys and direct interaction with villagers, the project proposes new infrastructure designs such as a main gate, modern Panchayat office, upgraded bus stop, post office, and a community hall. These developments aim to enhance the living standards of villagers and promote overall growth.

By implementing sustainable and practical solutions, rural villages like Mithali can experience better infrastructure, improved services, and a higher quality of life.

VI. METHODOLOGY



VII. SCOPE OF THE STUDY

This study focuses on understanding the current condition of Mithali village in Panchmahal district, Gujarat, through a detailed techno-economic survey. Based on the findings, we aim to improve basic amenities such as agricultural support, milk cooperative services, educational facilities, recreational spaces, and literacy rate.

Using gap analysis, we will identify the missing facilities and suggest development strategies. These will include planning for better physical infrastructure (like roads and houses), social infrastructure (like schools and health centers), and the use of renewable energy sources.

The main goal is to improve the lifestyle of the people in Mithali village by helping them develop new skills and supporting them in starting income-generating activities. This will be done with the support of national and international organizations.

From our survey, we now understand what the village truly needs. We will work hard to propose and develop these facilities in Mithali. Our aim is to bring useful urban-like amenities to the village while protecting its traditional identity.

Since most of India's population lives in villages, developing villages like Mithali is the first step towards building a stronger and smarter nation under the concept of Rurbanization. The basic amenities include clean drinking water, proper sanitation, good housing, all-weather roads, electricity, cooking fuel, digital connectivity, healthcare, education, playgrounds, and other necessary services.

VIII. DATA COLLECTION

The data collection process is the first and most important step of this project. Information about Mithali village is gathered from official records of the Sarpanch, Talati Mantri, and Anganwadi workers. The team also interacts with villagers to understand their needs.

The data is collected through village surveys, physical inspection, and a techno-economic survey. Reliable sources like the 2011 Census reports, government publications, and other official reports are used. Information from magazines, journals, and feedback from villagers also helps in understanding the village's condition and planning improvements.

➤ PRIMARY SURVEY DETAILS

The primary survey was conducted to identify the general problems faced by the villagers in their daily lives. Through direct interaction and inquiries, the team gathered information about the challenges villagers experience and their suggestions for possible solutions. The survey also helped understand the infrastructural facilities they wish to have in the village.

During the survey, villagers from different age groups and social statuses were asked several questions, including:

- Do you have sufficient water supply for your needs?
- What irrigation facilities do you use, and are they adequate?
- Are you satisfied with the road network in the village?
- What are your main sources of income?
- What kind of medical facilities are available in the village?
- What is your primary need for better living conditions?
- Which facility or improvement would you prioritize?
- How do you dispose of waste in the village?
- Are you satisfied with the available healthcare services?

IX. AWARENESS ACTIVITY

As part of the village development initiative under Vishwakarma Yojana, a Plantation and Cleanliness Drive was conducted in Mithali village. The activity aimed to raise awareness about environmental conservation, promote cleanliness, and encourage villagers to maintain a hygienic environment.



FIG. 3 PLANTATION DRIVE



FIG.4 CLANLINESS DRIVE

X. SUSTAINABLE PLANNING PROPOSAL

A. Observations

Based on our primary survey and interaction with the villagers, it was found that Mithali village has basic public infrastructure, but most of it is in poor condition and lacks modern facilities. The Gram Panchayat building is old and needs renovation. There is no proper main gate to define the entrance of the village. The existing school building is usable but lacks sufficient classrooms and anganwadi space. Although the bus stop and post office exist, they are outdated and do not have modern facilities or proper structure. There is also no proper public toilet facility, which affects hygiene and sanitation in the village.

B. Recommendation:

After surveying the village, we found that Mithali has public buildings and basic facilities, but most of them are in poor condition and lack modern features.

- **Main Gate:** There is no proper entrance gate for the village. So, a strong and attractive main gate should be built to give the village a unique identity and pride.
- **Panchayat Office:** The existing Gram Panchayat building is old and not in good shape. It should be renovated or newly designed with better facilities.
- **Bus Stand:** The village has a bus stand, but it lacks modern features. A newly designed bus stop with proper seating, shelter, and lighting should be constructed.
- **Post Office:** The current post office is outdated and lacks proper facilities. It should be upgraded with a modern look and improved services for the villagers.
- **House Plan:** Many houses in the village are old and weak. A simple, strong, and cost-effective house design should be proposed for better living conditions.
- **Community Hall:** There is a need for a proper community hall where villagers can gather for events, meetings, and cultural activities. This hall should be spacious and well-equipped.

C. Suggestion:

Mithali village does not have a proper main gate, so building a strong and welcoming gate is important. The Gram Panchayat office is old and needs renovation for better official work. The existing bus stand and post office are outdated and should be upgraded with modern facilities. A standard house plan can help villagers build better homes. A community hall is also needed for village meetings and social functions.

XI. DESIGN PROPOSAL:

Based on the survey and identified needs, the following infrastructure designs are proposed for Mithali village:

1. Main Gate

We are providing a Main Gate design to give Mithali village a distinct identity. It will make the entrance more welcoming and create a better impression for visitors.



FIG.5 3D DESIGN OF MAINGATE

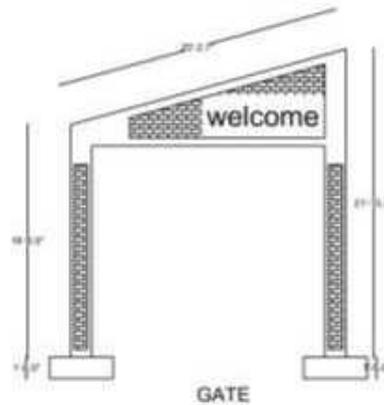


FIG. 6 PLAN OF MAINGATE

2. Panchayat Office

We are proposing a new Panchayat Office design to improve administrative efficiency. The office will have better seating, ventilation, and lighting, making it more functional for villagers and officials.



FIG.7 3D OF PANCHAYAT OFFICE

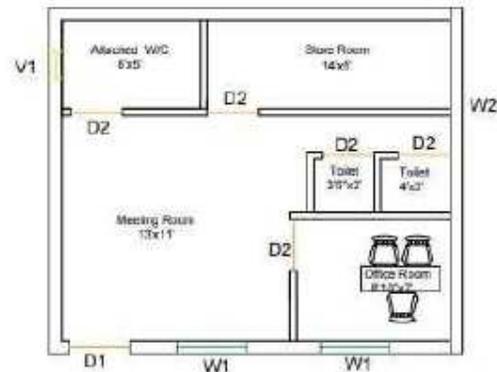


FIG.8 PLAN OF PANCCHAYAT-OFFICE

3. Bus Stand

We are providing a Bus Stand design to offer safe and comfortable waiting space for passengers. It will have proper seating, shade, and signage.



FIG. 9 3D OF BUS STAND

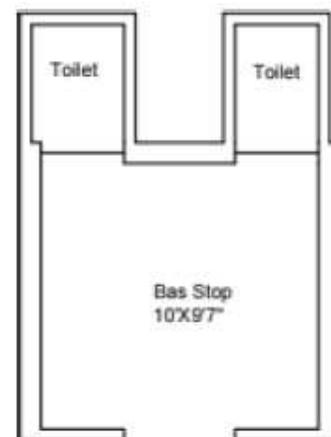


FIG. 10 PLAN OF BUS STOP

4. House Plan

We are providing a simple house plan under the Pradhan Mantri Awas Yojana. This will help villagers build affordable and durable houses.



FIG.10 3D OF HOUSE PLAN FIG. 12 PLAN OF HOUSE

5. Post Office

We are proposing a Post Office design to ensure villagers have easy access to postal services. It will have service counters, seating, and storage space.



FIG. 13 3D OF POST-OFFICE FIG. 14 PLAN OF POST-OFFICE

6. Community Hall

We are providing a Community Hall design for social gatherings and cultural events. It will have better seating, ventilation, and lighting, making it more functional and comfortable.



FIG. 15 3D OF COMMUNITY-HALL

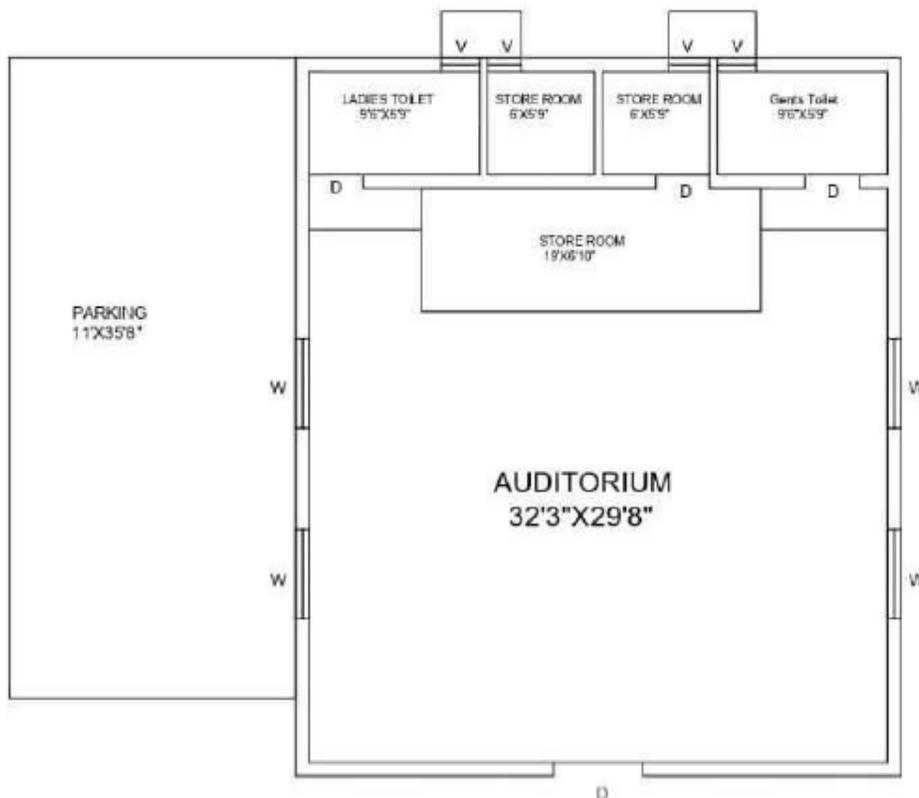


FIG. 16 PLAN OF COMMUNITY HALL

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