

DETAIL PROJECT REPORT

VISHWAKARMAYOJNA: VIII
AN APPROACH TOWARDS RURALIZATION
PIPALAVA_Village
AMRELI_District

PREPARED BY

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YEAR: 2020-21
GUJARAT TECHNOLOGICAL UNIVERSITY
Chandkheda,Ahmedabad– 382424 Gujarat

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ON

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AN APPROACH TOWARDS
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**GUJARAT TECHNOLOGICAL UNIVERSITY
Chandkheda, Ahmedabad– 382424 Gujarat**

CERTIFICATE

This is to certify that the following students of Degree/Diploma Engineering successfully submitted

Detail Project Report for,

VILLAGE: PIPALAVA

DISTRICT: AMRELI

Under

Vishwakarma Yojana: Phase-VIII

Impartial full fill men to the project to offered by,

GUJARAT TECHNOLOGICAL UNIVERSITY, CHANDKHEDA

During the academic year 2020-21.

This project work has been carried out by the under our supervision and guidance.

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ABSTRACT

Vishwakarma Yojana is providing the benefits of real work experience to engineering students. Urbanization is to bring peace of mind to the villagers by providing them the basic amenities and still keeping the village soul. This project gives one idea for Development of rural villages. Also gives procedure how they fulfill basic requirement of the villages.

Pipalava is medium a village located in Liliya Taluka of Amreli district, Gujarat with total 226 families residing. The Pipalava village has population of 1078 of which 555 are males while 523 are females as per Population Census 2011. The total geographical area of village is 788.7 hectares. It is located 23 KM towards west from District headquarters Amreli. 268 KM from State capital Gandhinagar. Pipalava Pin code is 365535 and postal head office is Liliya.

There is one overhead water tank in Pipalava. Around 40% of the houses are pucca while 60% of the houses are kutchha. Village is connected with 24 hour electricity supply. The development of city will lead the people to develop their villages otherwise there will be more migration towards cities, which will setup RURBAN planning.

In Pipalava village some physical and social facilities are better like street light, Aanganwadi, cement concrete road, primary school. In the village lack of basic facilities like general market, High School and Ext.

For development Pipalava village we are try to provide required facilities like public library as a socio-culture infrastructure, health center as a physical infrastructure facility, General Toilets.

Based on survey we tried to give design of basic facilities to fulfill their needs. By providing this basic facility to village for reduce urban city pressure and decrease migration rate, which is ultimate aim of Vishwakarma Yojana.

Key Words: Smart village, Ideal village, Rurbanisation, SAGY(sansadadarsh gram yojna)Survey,

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ABBREVIATIONS

SHORT NAME / SYMBOL	FULL NAME
DDO	District Developer Officer
TDO	Taluka Developer Officer
NGO	Non-Governmental Organization
CHC	Community Health Center
PHC	Primary Health Center
NRuM	National Rurban Mission
BOD	Biochemical Oxygen Demand
COD	Chemical Oxygen Demand
BRTS	Bus rapid transit system
RMTS	Rajkot Mass transport service
EPF	Eco-friendly Plastic Fuel
PMGSY	Pradhan Mantri Gram Sadak Yojana
IAY	Indira Awas Yojana
PPP	Public Private Partnership
BIM	Building Information Modelling
NH	National Highway
IS	Indian Standards
PT	Public Transport
GDP	Gross Domestic Product
R.O.	Reverse Osmosis
HVAC	Heating, Ventilation & Air Conditioning System
ATMS	Advance traffic Management System
SH	State Highway
BIM	Building Information Modeling
CPU	Central Processing unit
PVC	Poly vinyle Chloride
M	Meter
MM	Millimeter
IPC	Inter Personal Communication
In	Inch
VY	Vishwakarma yojana
Gj	Gujarat
PIN	Postal Index Number
RCC	Reinforced cement concrete
S	Strength
W	Weakness
O	Opportunities
T	Threats
Ft	Feet
CAD	Computer aid design
BM	Bench mark

Chapter-1 Ideal village visit from District of Gujarat State:-

1.1 Background & Study Area Location:-

(A) Background:-

(1) Pali, (Sevaliya) - Gujarat's Urban village:-

- According to Census 2011 information the location code or village code of Pali(Sevaliya) village is 388245.
- It is situated 15Km away from Thasra taluaka and 78Km away from City Kheda.
- The total geographical area of village is 1446.95 hectares. Pali (Sevaliya) has total population of 16202 peoples.
- Malvan is nearest town to Pali(Sevaliya) Which is approximately 3Km away.

(B) Study Area:-

Name of village	Pali (sevaliya)
Taluka	Thasra
Distric	kheda
Population	16202
Total area of	1446.95
No. of	3210
Since	1920

Table 1. Study area



Fig 1:- Location Detail Of Pali(Sevaliya) Village

(2) Thamna:-

- According to Census 2011 information the location code or village code of Thamna village is 516875.
- It is situated 3Km away from Umreth taluaka and 27Km away from City Anand.
- The total geographical area of village is 1212.78 hectares. Thamna has total population of 5147 peoples.
- Umreth is nearest town to Thamna which is approximately 3Km away.

(B) Study Area:-

Name of	Thamna
Taluka	Umreth
Distric	Anand
Population	5147
Total area of	1212.78
No. of	1064
Since	1904

Table 2. Study area



Fig 2:- Location Detail of Thamna Village

1.2 Concept: Ideal Village, Normal Village:-

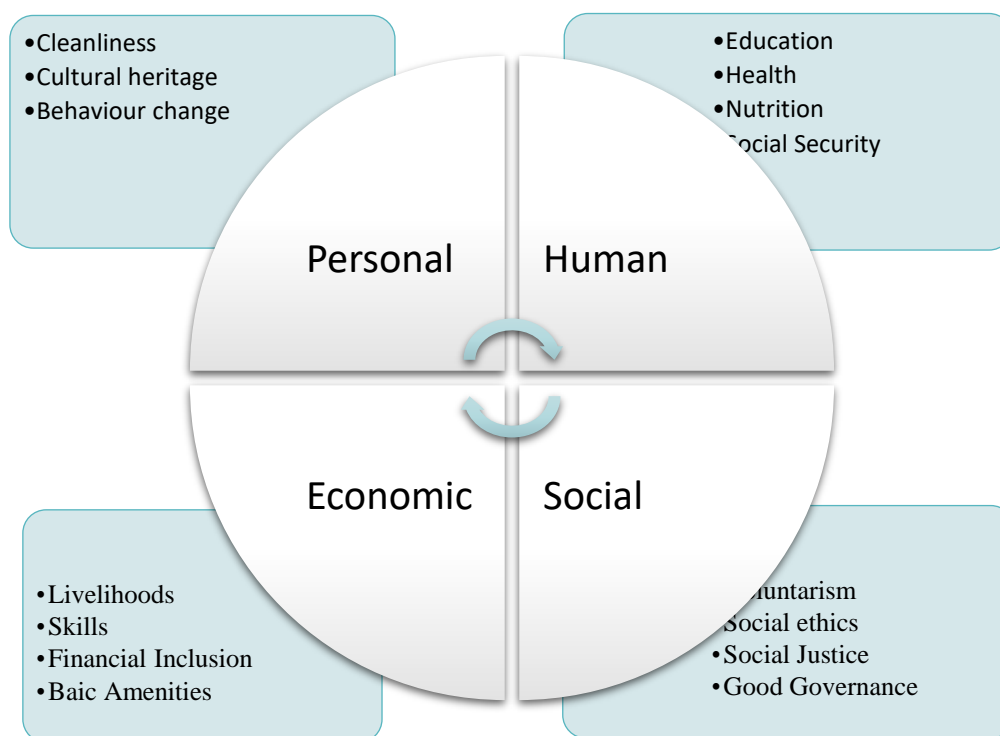


Fig 3:- Concept of ideal village

- An ideal village will be so constructed as to lend itself to perfect sanitation. It will have cottages with sufficient light and ventilation built of a material obtainable within a radius of five miles of it.
- A village is a small settlement usually found in a rural setting. It is generally larger than a "hamlet" but smaller than a "town". Some geographers specifically define a village as having between 500 and 2,500 inhabitants. In most parts of the world, villages are settlements of people clustered around a central point.

1.2.1 Objectives of the Study:-

Main objectives of the study are:

Development of the village as a district entity equipped with all basic/essential facilities to ensure quality of life even to poorest of poor of residents, through the provision of...

- Clean or safe drinking water (Narmada water)
- Sanitation (underground sewage system along with treatment plant).
- Medical facilities (Dispensary).
- Pavement of street & Street lighting.
- Ponds/Ark/garden/ greenbelt.
- Information technology and computer education.
- Security (by camera or man).

- School and children play house.
- Water storage (ESR, Underground Water tank).

An ideal village should have all possible provisions and basic intra-structures for the all-round development of the people living there. The life in such a village would be such as would never lure a person to leave his home and dwell in an urban area.

1.2.2 Example/ Live Case Studies of Ideal Village of India:-

Example of ideal village:

1. Hiwarebazaar, Maharashtra:-

Amid the desperate denizens scrounging for water in the drought-affected parts of Maharashtra stands a village that has not felt the need to call a single water tanker – in fact, it hasn't called for one since 1995. The village also has 60 millionaires and the highest per-capita income in India.

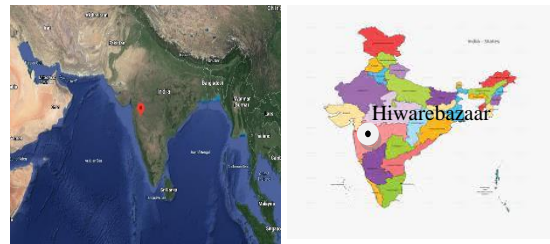


Fig 4:- Location Details

Facing a major water crisis each year because of the measly rainfall it gets, the village decided to shun water-intensive crops and opted for horticulture and dairy farming. Their consistent water conservation initiatives led to rising groundwater levels and the village started to prosper. Today, the village has 294 open wells, each brimming with water just as the village brims with prosperity.

2. Gangadevipalli, Andhra Pradesh:-

If India lives in its villages, then the model it perhaps must follow is Gangadevipalli, a hamlet in Andhra Pradesh's Warangal district where every house has the bare necessities of life, and more. From regular power and water supply to a scientific water filtration plant, a community-owned cable TV service and concrete, well-lit roads, this model village has been steadily gaining in prosperity thanks to a disciplined and determined community that has also managed to work in harmony towards goals set collectively.

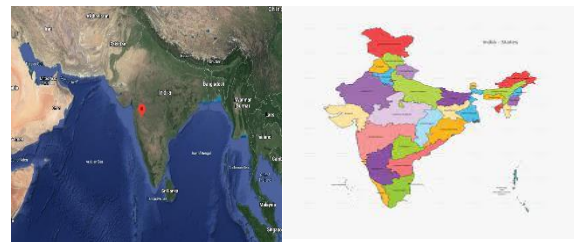


Fig 5:- Location Details

1.2.3 The Idea of a model/Smart Village:-

Smart Village refers to a concept developed in rural area that provides solutions to problems occurred and improves the quality of life. The main problems faced by rural areas are cover poverty, low level of education, and limited access to technology. Smart village concept emerged due to some different characteristics between rural and urban areas hence, this research was intended to propose the model of smart village examined through initial interview in village sample of Banyuwangi, literature reviews related to smart city, smart village, and smart rural. Then, the results were confirmed and adjusted to support local regulations. This research created a smart village model that was capable to be a guide for

each village to develop towards better future. The proposed smart village model was categorized into 6 dimensions including 1) Governance, (2) Technology, (3) Resources, (4) Village Service, (5) Living, and (6) Tourism. This research is expected to be applied to villages in other Regencies by adjusting the characteristics of each region.

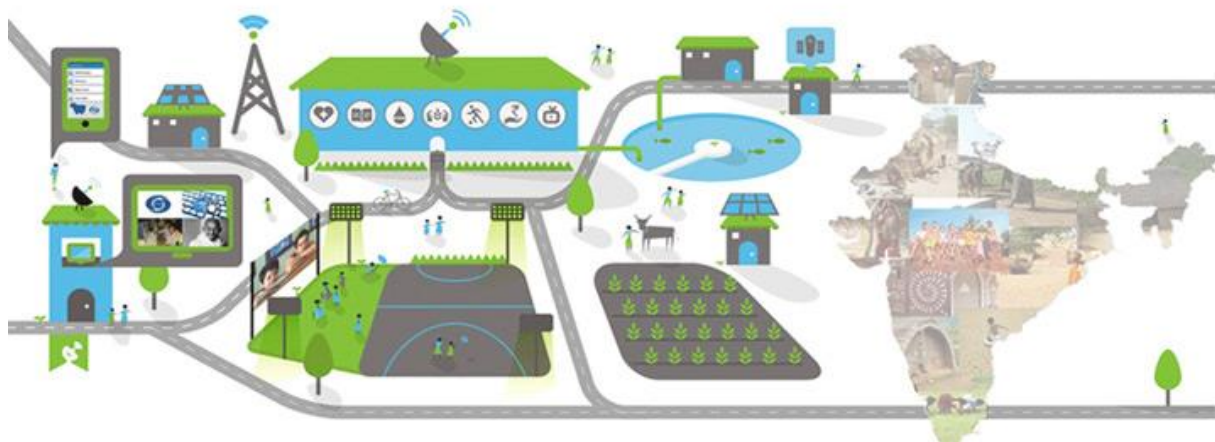


Fig 6:- Model Smart Village

1.3 Detail Study (Socio economic, physical, and demographic and infrastructure details) Of Ideal Village Pali (Sevaliya):-

1.3.1 Socio Economic:-

Majority Crops taken in village are Tobacco, Cotton, Wheat, Peanut, Sugarcane, Millet and Vegetables. Major three occupation of village is agriculture, labor work and local business.

1.3.2 Physical Growth:-

Sustainability	Connectivity	Technology
<ul style="list-style-type: none"> • Clean drinking water and sanitation • Better health-with special focus on maternal and child health • Housing and livelihood • Clean drinking water and sanitation • Environmental sustainability 	<ul style="list-style-type: none"> • Physical connectivity to towns and other places through road. • Easy and cheap means of transportation. • Renewable sources. 	<ul style="list-style-type: none"> • Delivery of government services. • ICT and space technology in the aid of farmers. • Land records modernization. • Remote sensing for resource mapping and better utilization of existing assets.

Fig 7:- Physical Growth

1.3.3 Demographic Growth:-

- Pali(Sevaliya) is a large village located in Thasra of Kheda district, Gujarat with 3210 families residing.
- The Pali(Sevaliya) Village has population of 16202 of which 8392 males while 7810 are females as per population Census 2011.
- In Pali(Sevaliya) village population of children with age 0-6 is 2099 which makes 12.96 % of population of village. Average Sex Ratio of Pali(Sevaliya) village is 931 which is higher than Gujarat state average of 919. Child Sex Ratio for the Pali as per census is 929, higher than Gujarat average of 890.
- Pali(Sevaliya) village has higher literacy rate compared to Gujarat. In 2011, literacy rate of Pali(Sevaliya) village was 83.36 % compared to 78.03 % of Gujarat. In Pali(Sevaliya) Male literacy stands at 91.99 % while female literacy rate was 74.08 %.

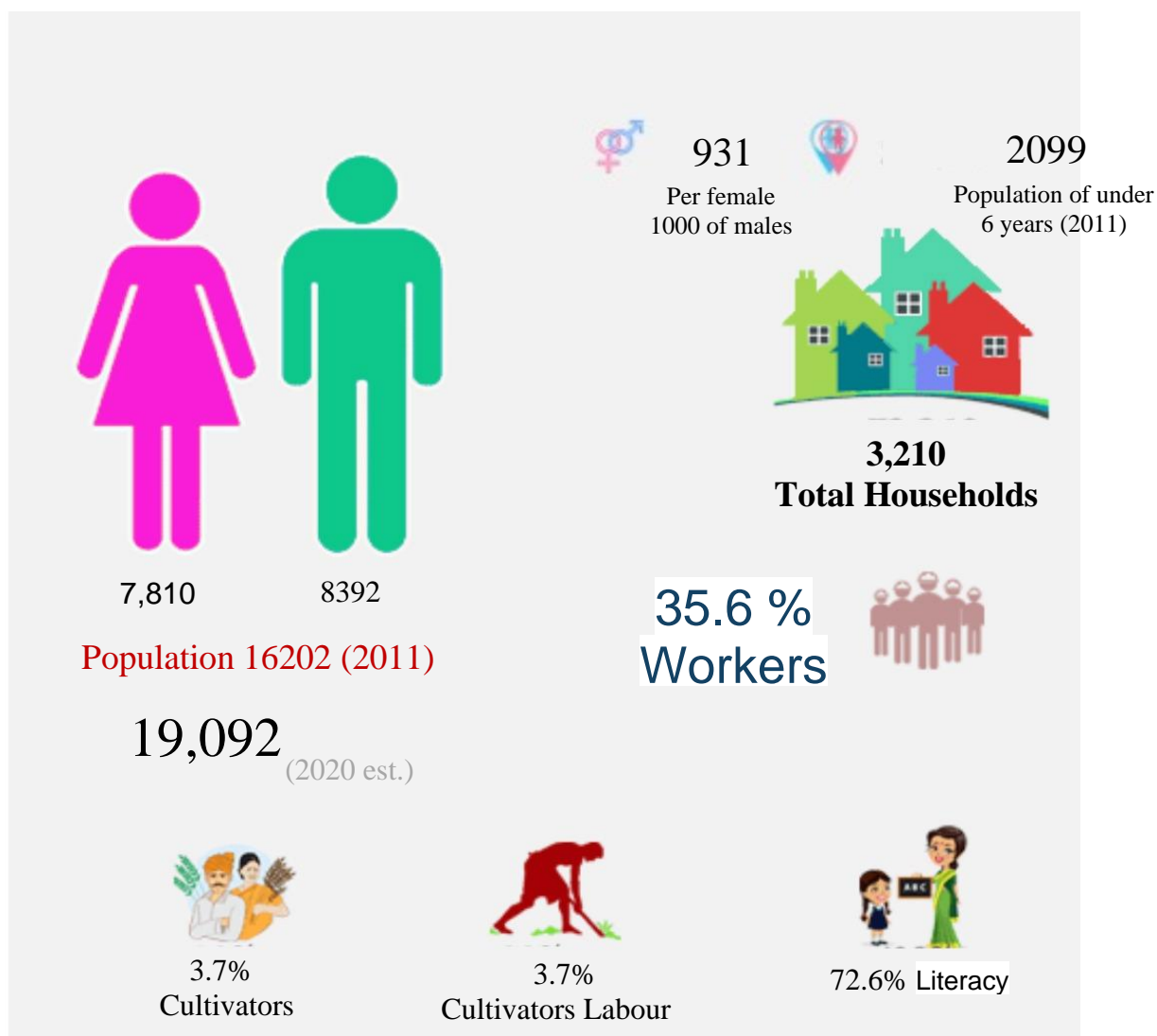


Fig 8:- Demographic growth

1.3.4 Infrastructures Facilities:-

An ideal village should have following as facility:-

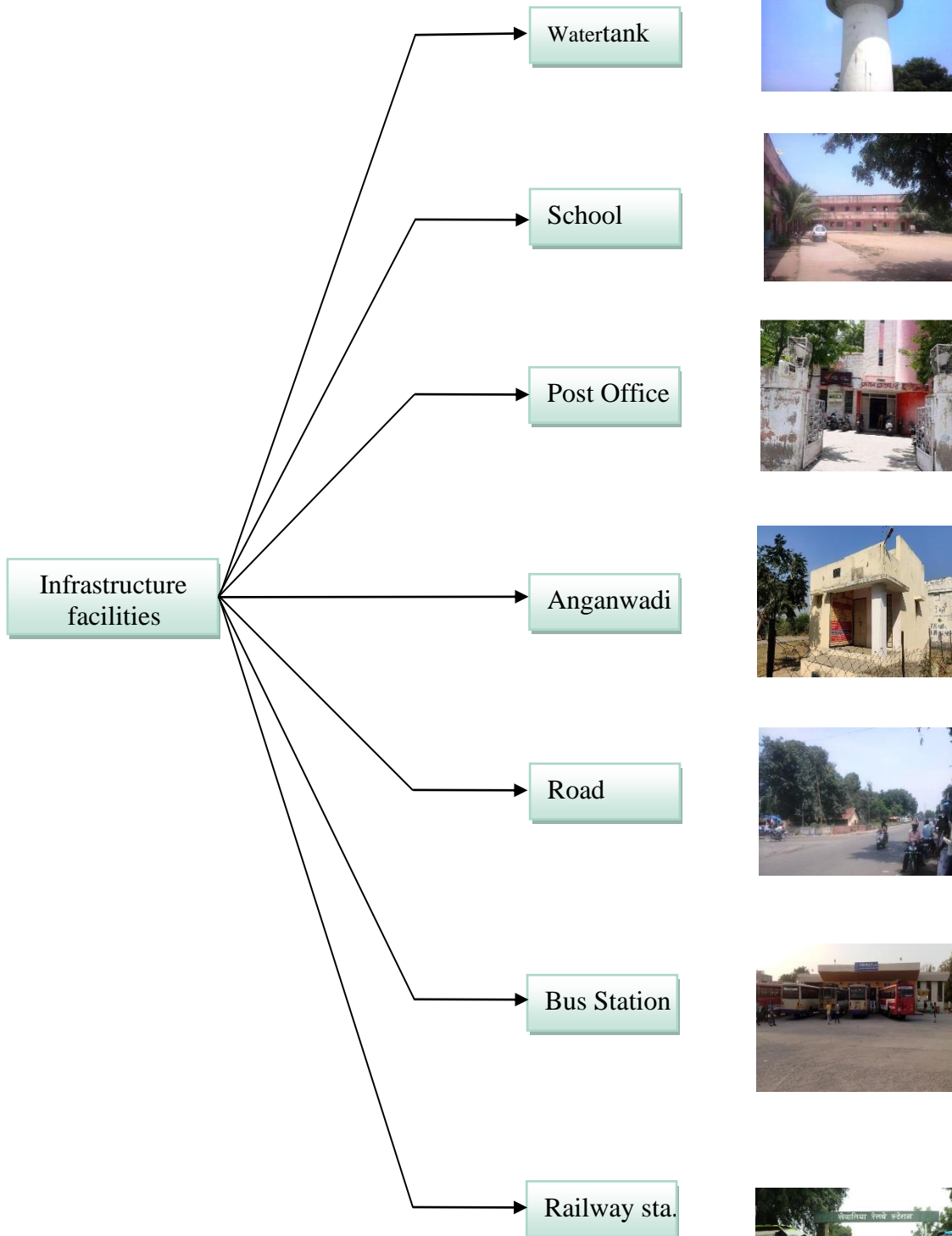


Fig 9:- Facilities of Ideal Village Pali(Sevaliya)

1.4 Swot Analysis of Ideal Village:-

Strength	Weakness	Opportunities	Threats
Transportation facilities	No public library	Improving in waste management	Lack of funds and technical knowledge in agricultural fields
Proper drainage facilities	No public latrines	Provide public toilet in village	Lack of awareness of villagers about educations
Bank facilities	No sanitation facilities	To rise the living standard of people	Lack of increase literacy rate
Health facilities	No chic (community health center) available	Woman empowerment	Lack of decrease migration

Table 3. SWOT analysis

1.5 Benefits of the Visits of Ideal Village:-

- We saw the strength of village and weakness of village.
- We saw all type of basic and primary facility available.
- To realize environment of village.
- To realize improved our communication skills
- We discussed the good and bad thing about village from villagers.

1.6 Resources:-

- The rural population plays an important role in village development and if they are supported by urban men in the village the output can be seen in very short time. Though they make half of the country's population, villagers have remained as an oppressed group from the beginning of the Independence. Though some efforts are made but still a lot has to be done to make considerable difference in the lives of village population. Villager's participation in almost all fields has been required to get maximum benefit. Self Help Groups are an important source of income to women in villages. The education, natural resources and its proper use at all level and proper village administration is most important part in village development.
- The author has studied the problems in village development with respect to various resources and has done decent contribution and has systematically discussed the activities that can be conducted to get the best results

Chapter-2.PIPALVA Literature Review:-

2.1 Introduction: Urban & Rural:-

Urban:-

- An urban area is the region surrounding a city. Most inhabitants of urban areas have nonagricultural jobs. Urban areas are very developed, meaning there is a density of human structures such as houses, commercial buildings, roads, bridges, and railways. "Urban area" can refer to towns, cities, and suburbs.



Fig 10:- Urban area

Rural:-

- A rural area is an open swath of land that has few homes or other buildings, and not very many people like as village.
- A rural area is an open swath of land that has few homes or other buildings, and not very many people. Agriculture is the primary industry in most rural areas. Most people live or work on farms or ranches. Hamlets, villages, towns, and other small settlements are in or surrounded by rural areas.



Fig 11:- Rural area

2.2 Importance of the Rural Development:-

- Rural development is the process of improving the quality of life and economic well-being of people living in rural areas, often relatively isolated and sparsely populated areas.
- Rural development is a dynamic process which is mainly concerned with the rural areas.
- Agricultural growth, putting up of economic and social infrastructure, fair wages as also housing and house sites for the landless, village planning, public health, education and functional literacy, communication etc.

Importance of agricultural sector:-

- Increase in per capita income`
- Major source of employment
- Reduction in poverty
- Supply of food
- Source of national income
- Supply of raw material

2.3 Ancient Village / Different Definitions of Rural Areas Village:-

- Rural area is geographical area that is located outside urban area or town or cities. It have consists low population density and small settlement or less community as compared to the town or cities. It must have covered more agriculture land.

- A Village is a group of human settlement or community, larger than a hamlet but smaller than a town, with a population nearly around a few thousand to a few thousand. (As per census since 1991 population was village between 2000 to 5000). Village is also involved in the rural area.
- India is a country with a rich history of ancient village. It is one of the oldest civilizations in the world, and has been ruled by several dynasties and kingdoms throughout its history. That village has consisted of past cultural, knowledge, tradition and commerce.
- In India, total ancient village is 96.

➤ Example of Ancient village: - (Malana, Himachal Pradesh)

- Malana is an ancient Indian village in the state of Himachal Pradesh. This solitary village in the Malana Nala, a side valley of the Parvati Valley to the north-east of Kullu Valley, is isolated from the rest of the world.

2.4 Scenario: Rural / Urban Village Of India Population Growth:-

- Agenda of census of India is to release of provisional population totals-Rural urban distribution. Population of Rural and Urban area (in crore)

	2001	2011	Difference
India	102.9	125.03	22.13
Urban	28.6	37.7	9.1
Rural	74.3	83.3	9.0

Table 4. Population of Rural and Urban areas as per census 2001 and 2011

For the first time since independence, the absolute increase in population is more in urban areas than in rural area.

Rural-Urban Distribution: 72.21% & 66.62%

Level of urbanization increased from 27.80% in 2001 census to 30.16% in 2011.

Literacy rates (in %)

	2001	2011	Difference
India	65	74	+9.0
Urban	59.7	68.9	+9.2
Rural	80.3	85	+4.7

Table 5. Literacy Rates in Rural and Urban areas as per Census 2001 and 2011 Literacy Rates (in %)

The improvement in literacy rate in rural area is two times that in urban areas.

The rural urban literacy gap which was 20.6% points in 2001, has come down to 16.1% points in 2011.

	2001	2011	Difference
Male			
India	75.9	82.1	+6.2
Urban	86.2	89.6	+3.4
Rural	70.8	78.7	+7.9
Female			
India	53.8	65.5	+11.7
Urban	73	80	+7.0
Rural	46.2	58.9	+12.7

Table 6. Literacy Rates in Rural and Urban area as per the males and females (in %)

2.5 Gujarat Population 2011:-

Total population	6,03,83,638
Total population of male	3,14,82,283
Total population of female	2,89,01,345

Table 7. Gujarat population 2011



Fig 12:- Map

2.6 Rural Development Issues - Concerns – Measures:-

- There are mainly five types of problem create in rural development

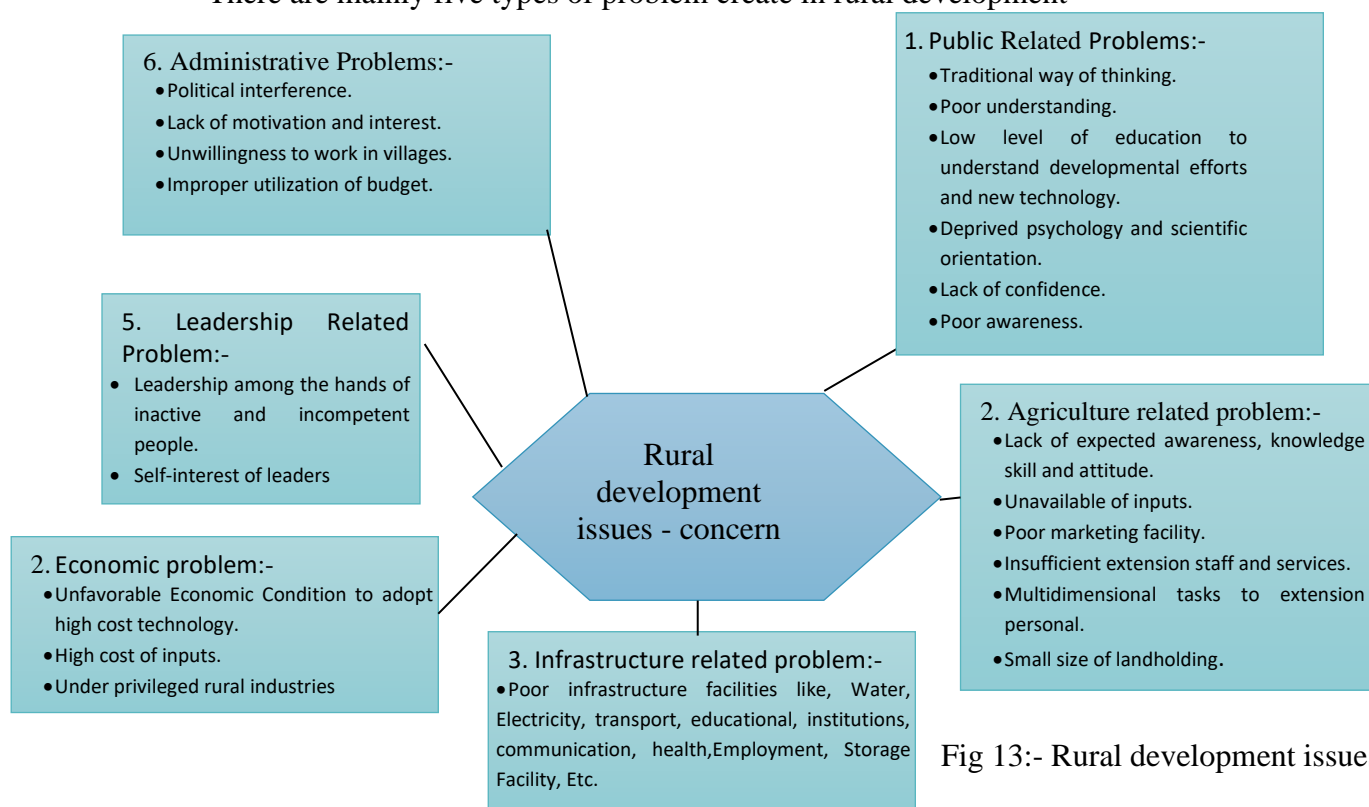


Fig 13:- Rural development issues

- **VARIOUS MEASURES FOR RURAL DEVELOPMENT:-**

The success of sustainable rural development depends on, inter alia, developing and implementing comprehensive strategies for dealing with climate change, drought, desertification and natural disaster. Related actions include:

- a) Promoting poverty eradication in rural areas.
- b) Promoting pro-poor planning and budgeting at the national and local levels
- c) Addressing basic needs and enhancing provision of and access to services as a precursor to improve livelihoods and as an enabling factor of peoples engagement in productive activities
- d) To develop infrastructure facility of rural area.
- e) To develop transportation facilities like bus-stop, road connectivity.
- f) More job opportunities.
- g) To develop agriculture, animal husbandry and areas.
- h) Sustainable development.
- i) Sanitation facilities.

2.7 Other Projects / Schemes in Other Projects for the Development of the Rural Area Is the Public Private Partnership (PPP)

Public-Private-Partnership - The Concept:-

Public-private-partnership (PPP, 3P, or P3) is a cooperative arrangement between two or more public and private sectors, typically of a long-term nature. In other words, it involves government and business that work together to complete a project and/or to provide services to the population. Public-private partnerships have been implemented in multiple countries, are primarily used for infrastructure projects, such as the building and equipping of schools, hospitals, transport systems, and water and sewerage systems.

Chapter-3 Smart (Cities/ Village) Concept Idea and Its Visit (Punsari Village):-

3.1 Concepts and Definitions:-

Concept:-

Creating a "smart village" is necessary to solve the problems of urban population growth and rapid urbanization. The basic concept of smart village is to collect community efforts and strength of people from various streams and integrate it with information technology to provide benefits to the rural community.

Definition:-

Smart village means all the facilities like; sanitation system, drainage system, electricity, transportation facilities, are available in the village.

3.2 Benchmark of Smart Cities:-

Sr. No.	Parameter	Benchmark
1	Transport	<p>Maximum travel time of 30 minutes in small & medium size cities and 45 minutes in metro politan areas.</p> <p>Dedicated and physically segregated bicycle tracks with width of 2 m or more, one in each direction, should be provided on all streets with carriage way larger than 10m.</p> <p>High quality and high frequency mass transport within 800 m (10- 15-minute walking distance) of all residences in areas over 175persons / ha of built area.</p> <p>Continuous unobstructed footpath for 2 m wide on either side of all street with Row 12 m more.</p>
2	Spatial Planning	<p>175 persons per Ha along transit corridors.</p> <p>At least 30% residential and 30 commercial/institutional in every TOD Zone within 800m of Transit Stations</p> <p>95% of residences should have daily needs retail, parks, primary schools and recreational areas accessible within 400 m walking distance.</p> <p>95% residences should have access to employment and public and institutional transport or bicycle or walk.</p> <p>At least 20% of all residential units to be occupied by economically weaker sections in each Transit Oriented Development Zone 800m from Transit.</p>

3 .	Water Supply	24 x 7 supply of water 135 liters of per capita supply of water 100% household with direct water supply connections 100% metering of water connections 100% efficiency in collection of water related charges
4 .	Sewerage & Sanitation	100% households should have access to toilets 100% schools should have separate toilets for girls 100% households should be connected to the waste water network 100% efficiency in the collection and treatment of waste water 100% efficiency in the collection of sewerage network
5 .	Solid management	100% collection of municipal solid waste 100% collection of municipal solid waste 100% households are covered by daily door-step Collection system. 100% recycling of solid waste 100% segregation of waste at source, i.e. bio- degradable and non-degradable waste
6 .	Electricity	100% households have electricity connection 24x7 supply of electricity 100% metering of electricity supply 100% recovery of cost Tariff slabs that work towards minimizing waste
7 .	Storm storage	100% coverage of road network with storm water drainage network Aggregate number of incidents of water logging reported in a Year = 0 100 % rainwater harvesting
8 .	Health Care facilities	Availability of telemedicine facilities to 100% residents 30 minutes emergency response time 1 hospital for every 15,000 residents Nursing home, child, welfare and maternity. center - 25 to 30 beds per lakh population
9 .	Telephone connections	100% households have a telephone connection including mobile

Table 8. Benchmark of smart cities

3.3 Technological Options:-

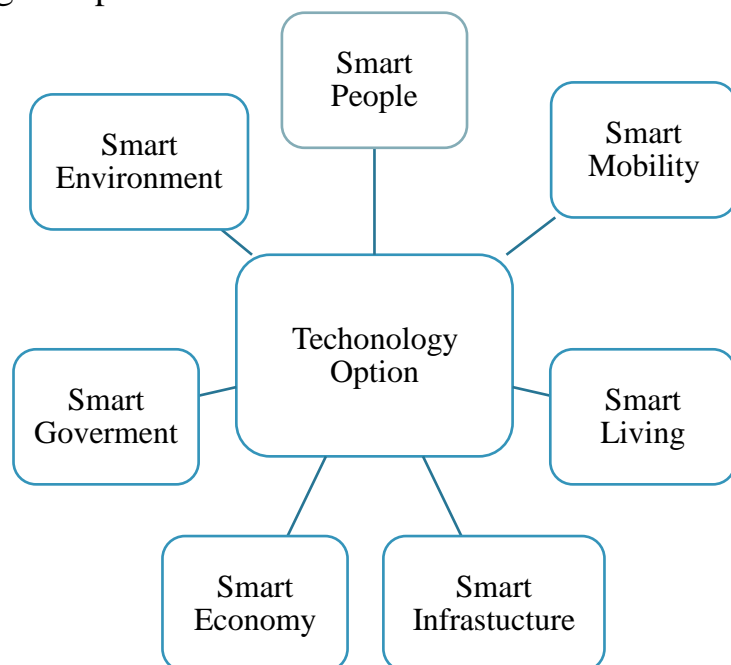


Fig 14:- Technological Option

3.4 Issues & Challenges:-

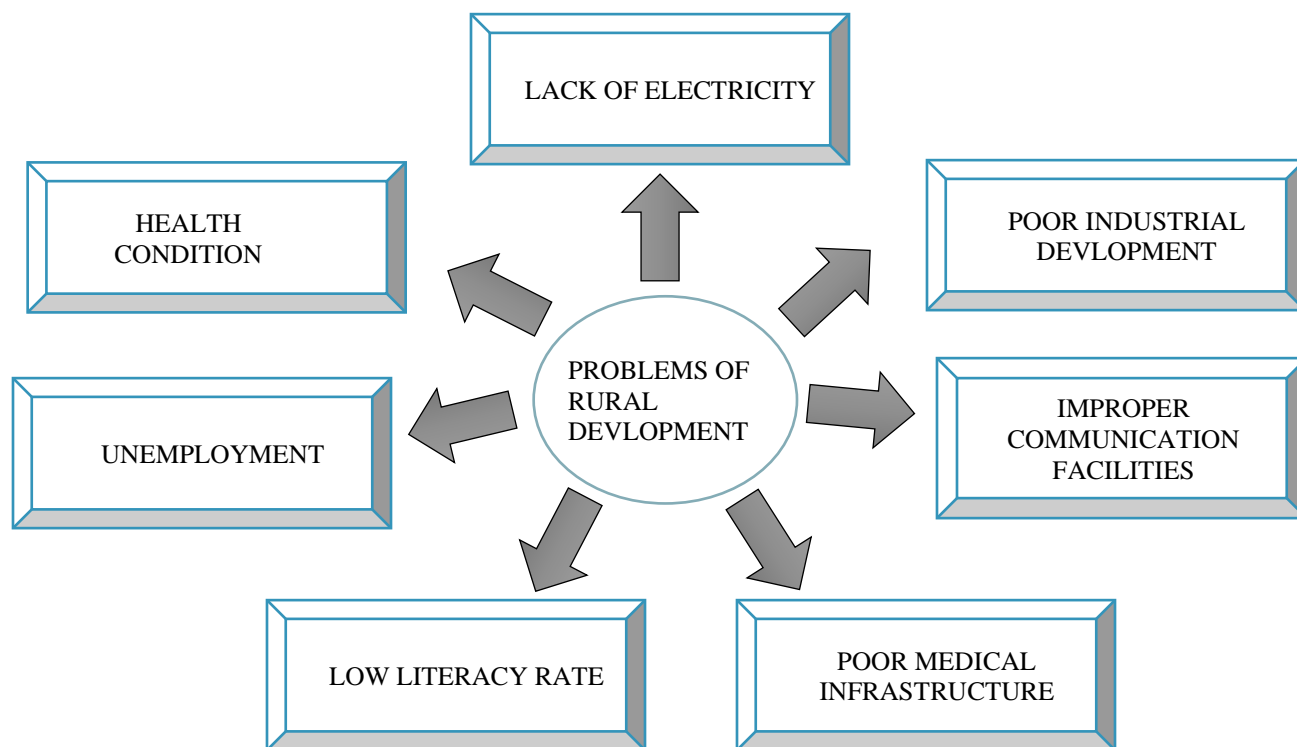


Fig 15:- Issues and challenges

3.5 Smart Infrastructure:-

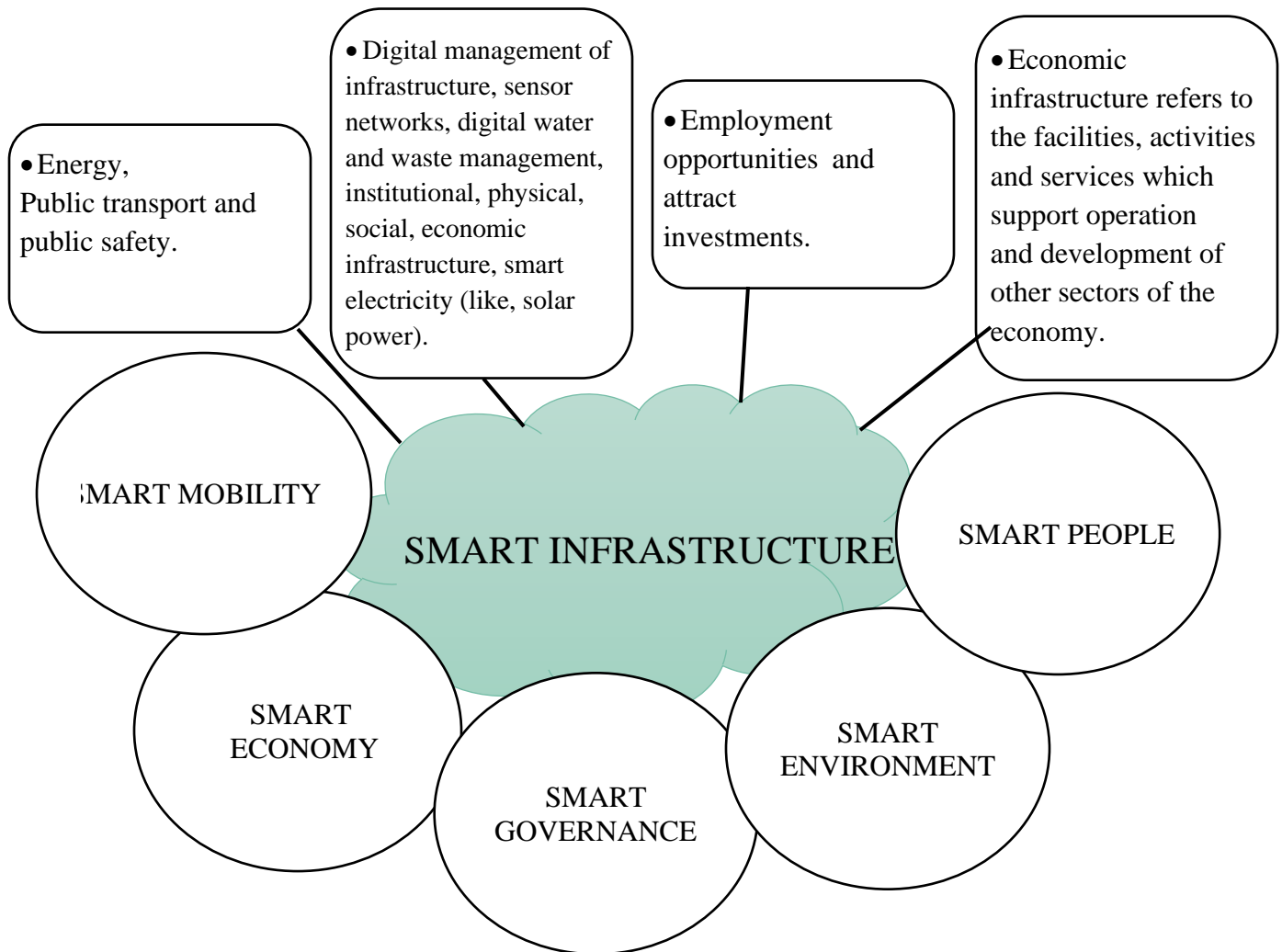


Fig 16:- Smart infrastructure

- Smart Infrastructures comprise several operators from different domains of activity, such as energy, public transport and public safety.
- Smart infrastructure has many components like Digital management of infrastructure, sensor networks, digital water and waste management, institutional, physical, social, economic infrastructure, smart electricity (like, solar power).
- Economic Infrastructure includes developing proper infrastructure that generates employment opportunities and Attract investments.

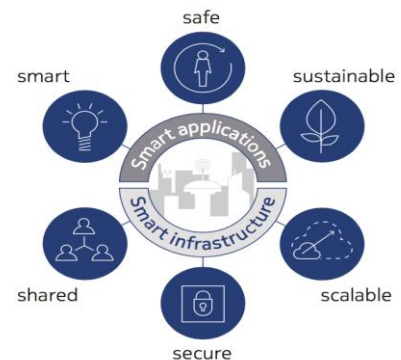


Fig 16:- Smart infrastructure

- Economic infrastructure refers to the facilities, activities and services which support operation and development of other sectors of the economy.
- Smart Information and Communications Technology (smart ICT) has the potential to transform the way we plan and manage infrastructure.

3.6 Cyber Security:-

Cyber security is the one of the key components of smart cities. It is important to remember that cyber security is a citywide issue and not just a technology risk. Cyber security is a prerequisite for all smart cities in existence, development or in plans of development.

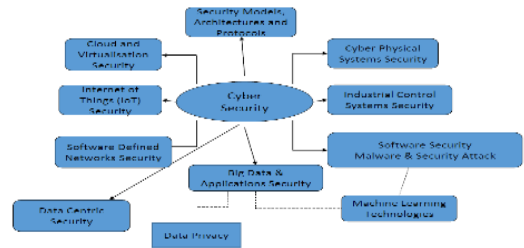


Fig 17:-cyber security

3.7 Retrofitting- Redevelopment- Greenfield Development District Cooling:-

GREEN BUILDING:-

- Green building is the practice of increasing the efficiency with which buildings and their sites use energy, water, and materials, and of reducing impacts on human health and the environment for the entire life-cycle of a building.
- Green building is the practice of creating structures and using processes that are environmentally responsible and resource-efficient throughout a building's life-cycle from sitting to design, construction, operation, maintenance, renovation and deconstruction.
- Pollution's devastating effects on the environment have become more obvious in recent years, sparking a movement to promote energy efficiency, less reliance on fossil fuels, and are duce in air and water pollution.
- 1Green building brings together a vast array of practices, techniques, and skills to reduce and ultimately eliminate the impacts of buildings on the environment and human health.
- The United States of America (USA) and Canada have developed demonstration projects on a large scale for DH (district heating) or DC (district cooling).



Fig 18:- Green Building

3.8 Strategic Options for Fast Smart Cities Development:-



Fig 19:- Smart city frame work (solution)

3.9 Initiatives in Village Development by Local Self-Government:-

- Local government is called self-government because it is the government of the local people of their own at grassroots level of democracy.
- The person who lives with the people of village becomes the Sarpanch of the village and take part in development.
- The main function of the Zila Parishad is to work for the Village Panchayats and Block Samitis. The Zila Parishad has also the responsibility of implementing the programmes coming under the Five Year Plan. The Zila Parishad also prepares plans for the district.
- The modern system is based imparts on traditional Panchayat governance, in part on the vision of mahatma Gandhi and in part by the work of various committees to harmonize the highly centralized in Indian governmental administration with a degree of local autonomy the result was intended to create greater participation in local government by people and more effective implementation of rural development programs.

1. DeenDayalAntyodayaYojana	2. Mission Antyodaya
3. National Rurban Mission	4. National Social Assistance Programme
5. Pradhan Mantri Awaas Yojana	6. Pradhan Mantri Gram Sadak Yojana
7. Prime Minister's Rural Development Fellowship	8. Rural Self Employment Training Institutes
9. SansadAdarsh Gram Yojana	10. Nehru Yuva Kendra Sangathan

Table 9:- Development scheme

Chapter-4 about (PIPALAVA):-

4.1 Introduction:-

- The Pipalava is located in Liliya taluka of Amreli district in Gujarat, India. It is situated 3km away from liliya and 22km away from district Amreli.

4.1.1 Introduction to Pipalava Village Details:-

- According to Census 2011 information total population is 1078. In female population is 523 and male population is 555. The village code of Pipalava is 365535. The total Geographical area of village is 788.32 hectares. Vaghaniya is nearest town to pipalava is 3km away.

4.1.2 Justification/ Need of the Study:-

- By this vishwakarma yojana project Government want technical solution of the problem of the village at the engineering point of view. In this project the common problem of the village area 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.
- Through various government departments are involved in various infrastructural development work, holistic view and modern solutions etc. can be provided by new engineers under vishwakarma yojana.

4.1.3 Study Area:-

Name of	Pipalava
Taluka	Liliya
District	Amreli
Population	1078
Total area	788.32 Hectares
No. of	226
Since	1860



Fig 20:- Study area

Table 10:- Study area

4.1.4 Objectives of the Study:-

- To analysis of Socio Economic of Village.
- To identify the existing facility of village.
- To Propose the Infrastructure with design.
- Scarcity to Design and develop the various components of Village.

4.1.5 Scope of the Study:-

- By studying the present status of Village Pipalava in terms of basic public service like toilets, library, computer room and many more. To better understand of infrastructure and their design for future development.
- Create employment assist and opportunities in tourism development activities and exploration of tourist's spots in the region.

4.1.6 Methodology:-

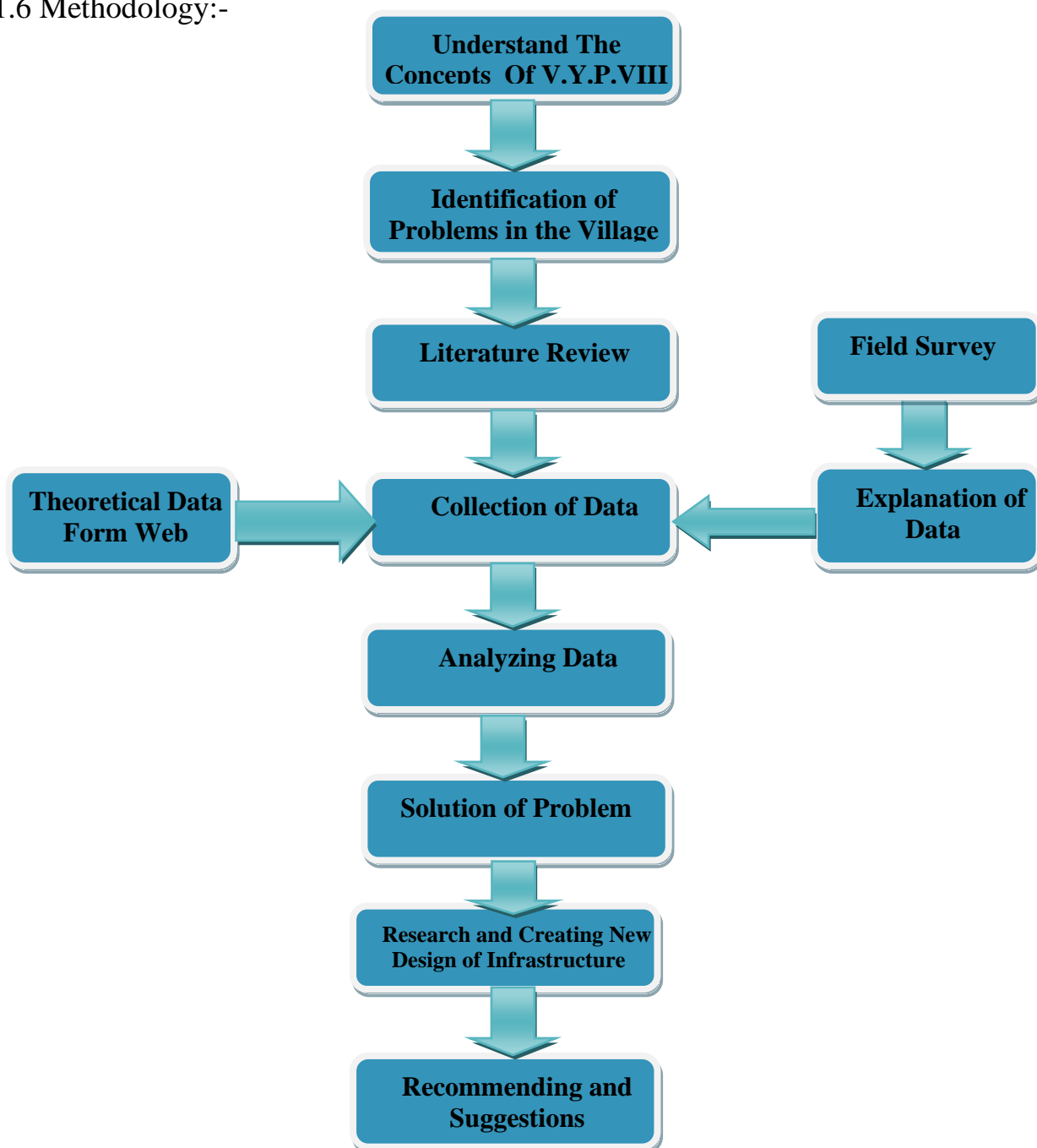


Fig 21:- Methodology

4.1.7 Available Methodology for development of related to Civil/Electrical

- Drinking Water, Drainage System, Water treatment Plant, Solid Waste management/Liquid waste management.
- Concept of various type of method for Transportation and Road Network.
- Irrigation Facilities.
- Community Hall, Public Toilet and public Library.
- Pond/Lake/Playground and Garden.
- Infrastructure like school/college building, public hub, Residential area, Industries and many more.
- Environment Factors like Tree Plantation etc.
- Education Facilities like school Building, High School Building.
- In the Field of Technology like E-village, Wi-Fi and many more
- Streetlight with Solar Panel, CCTV cameras and Speaker.

4.2 Pipalva Study Area Profile:-

4.2.1 Study Area Location:-

Village name	Pipalva
Taluka name	Liliya
District	Amreli
State	Gujarat
Country	India
Continent	Asia
Pincode	365535
Population	1078(Census 2011)
Nearest Town	Liliya(2km)
Language	Gujarati,Hindi

Table 11:- Detail of Pipalva village

4.2.2 Economic Generation Profile/Bank:-

The Agriculture is largest sector of the village's economy and second largest sector is husbandry.

4.2.3 Social Scenario:-

Human world is composed of individuals. Individuals interact with one another for the fulfillment of their needs. We have that found that all villagers of this village are not connected with today technology and environment. Major occupation in this village is farming and husbandry and local business. There are no other job opportunities. The major population is get income through the farming.

4.2.4 Study Area Land Use Description:-

As per Survey the remaining study area should be utilized for amendment of our Designs.

We have given designs of,

- Public health care
- Primary school
- Gram panchayat

4.3 Data Collection of Pipalava:-

4.3.1 Methods for Data Collection:-

Data collection of village is the most main important for development of any village. Without data we cannot identify or any idea to development of village in future. A complete baseline survey was undertaken which involved household census survey, Bio- physical survey and Village level data collection from Sarpanch. This gave in the details of the demographic profile and physical profile of the village, the literacy percentage, current population, cattle population, average milk production of the cattle and various schemes running in current time and their benefits. Technical & Bio-physical survey was undertaken to identify various natural resources available in the village.

4.3.2 Primary Survey Details:-

Heath Facilities

Sr.	Description	Availability (nearby)
1.	Sub health center	1Nos.
2.	Government Hospital	3km away
3.	Private Clinic	0Nos
4.	Surgical doctor	0Nos
5.	Blood Bank	23km away
6.	Medical shop	0Nos
7.	Ambulance Facilities	0Nos

Table 11:- Heath facilities

Education Facilities

Sr. No.	Descriptions	Information/ Detail
1.	Anganwadi	1Nos
2.	Primary School	1Nos
3.	Secondary School	0Nos
4.	Higher Secondary School	0Nos
5.	Transportation facilities	1 nos
6.	Science stream	6 km away
7.	College Nearby village	23km away
8.	Nearby I.T.I center	10km away

Table 12:- Education facilities

4.3.3 Average Size of the House- Geo-Tagging of House:-

In Pipalava average 5 persons in each household. The approx. ratio of houses is 40% pucca houses and 60% kuccha houses. And the pukka house is were only brick masonry and concrete build. There is about 226 house out of which 220 are residing.



Fig 22:- Average size of the house

4.3.4 No of Human Being in One House:-

In Pipalava village no there have around industrial zone. So there all most people do the work at surat. So many people are lock out yours house and his going to surat and her family. All of 25% was lock down hoses in pipalava village.



Fig 23:- No of human being in one house

4.3.5 Material Available Locally In the Village and Material Out Sourced By the Villagers:-

➤ Major economic option of the village is farming so there are no more locally material available like standard bricks, aggregates, concrete and reinforcements. So, this material is brought from nearest city for construction of the houses.



➤ Second major economic option of the village is milk dairy.



4.3.6 Geographical Detail:-

Fig 24:- Material available in the village

The Pipalava village is located in the state Gujarat having state code 24 and having the village pin code 365450. Amreli is the district of this village with district pin code 365535. The total geographical area in which this village is expanded in 788.32 hectares.

4.3.10 Physical Infrastructure Details:-

Heath Facilities

Sr.	Description	Availability (nearby)
1.	Sub health center	1Nos.
2.	Government Hospital	3km away
3.	Private Clinic	0Nos
4.	Surgical doctor	0Nos
5.	Blood Bank	23km away
6.	Medical shop	0Nos
7.	Ambulance Facilities	0Nos

Education Facilities

Sr. No.	Descriptions	Information/Detail
1.	Anganwadi	1Nos
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4.	Higher Secondary School	0Nos
5.	Transportation facilities	1 nos
6.	Science stream	6 km away
7.	College Nearby village	23km away
8.	Nearby I.T.I center	10km away

Table 13:- Physical infrastructure

4.3.7 Occupational Detail – Occupation Wise Details / Majority Business:-

Name of occupation groups in village

- Agricultural
- husbandary
- Business
- Others

4.3.9 Male Female Details:-

As per census 2011 in the village there are 555 males and 523 females in village.

4.4 Infrastructure Details:-

4.4.1 Drinking Water:-

For drinking Purpose ground water tank, tube well, tap water available is also available in village.



Fig 25:- Drinking Water

4.4.2 drainage and Sanitation Network:-

- Underground drainage.

4.4.3 Transportation & Road Network:-

Main road of village are in good condition and all main roads are of black topped. Road maintenance is required in some areas of village. The internal street road is both pucca and kutchha. Other transport facility.



Fig 26:- Transportation

4.4.4 Housing Condition:-

Basically in Village also the brick masonry based residential units are constructed. All most 75 % of house hold condition is good. And 25% of house hold.

4.4.5 Social Infrastructure Facility:-



Fig 27:- Social infrastructure

4.4.6 Health facility:-|

A health facility is, in general, any location where healthcare is provided. Health facilities range from small clinics and doctor's offices to urgent care centers and large hospitals with elaborate emergency rooms and trauma centers.



Fig 28:- Health Facility

4.4.7 Education Facility:-

For Education Purpose Primary School is available. Secondary school is not available. For college education students goes to city areas.



Fig 29:- Education Facility

4.4.8 Technology Mobile / WIFI/Internet Usage Details in%

Pipalava village is not a Wi-Fi village. An approximately only 30-40 % person uses technology or mobile or internet.

4.4.9 Sport Activity as Gram Panchayat

There is the cricket ground at Sport Activity as Gram Panchayat.



Fig 30:- Play ground

4.4.10 Socio-Cultural Facility

It is a physical manifestation of technology along with the cultural aspects of the society in order to project a venue that promotes its culture giving an opportunity to the youth to move ahead with time

4.4.11 Community Hall

In village one community hall is provided by government of India. Community hall is multipurpose uses like Storage, mating room and Ext.



Fig 31:- Community hall

4.4.16 Sustainable Infrastructure Facilities

There are no sustainable facilities available in the village like bio – gas plant, solid waste management plant and rain water harvesting system.

4.4.17 any other details

In the village, the road facility needs maintenance. Water logging problem occurs every monsoon.

4.5 Electrical Concept:-

4.5.1 Renewable Energy Source Planning Particularly For Villages:-

In pipalva village there are many homes use renewable energy like solar energy,

- Solar water heater
- Solar light, etc....

4.5.2 Irrigation Facilities:-

There are many types of irrigation technique utilize in farming.

- Furrow irrigation system
- Drip irrigation system

4.5.3 Electricity Facilities with Area:-

In part of living area government provide 24*7 electricity provided and other part of village like farming area in six hours day electricity provided.

4.6 Existing Institution Like – Village Administration – Detail Profile:-

4.6.1 Bachat mandali:-

In pipalva Nagarik-sahakari co-operative mandali are available.

4.6.2 Plantation for the Air Pollution:-

In pipalva every environment day in village' ssarpanch and other villagers plant trees together on the day and protects them throughout the year.

4.6.3 Rain Water Harvesting - Waste Water Recycling:-

- In pipalva there are many people in the village who irrigation with rain water use rain water harvesting method.
- There is no any recycling system available for waste water.

4.6.4 Agricultural Development:-

- pipalva villagers there are uses many technique of irrigation system for farming like, drip irrigation method, furrow method, sprinkler irrigation method.
- In pipalva there 60 to 70% farmers now use tractors instead of plows to plowing the land.

Chapter-5 Technical Options with Case Studies:-

5.1 Concept (Civil):-

5.1.1 Advance Sustainable construction techniques / Practices and Quantity Surveying:-

Sustainable construction isn't just about using the latest materials; it's also about using building methods that improve renewable and sustainable efforts. Some of these methods include: Cutting materials exactly in order to reduce waste. Controlling waste management, such as sorting out and recycling waste.

➤ **Green Construction:-**

Green building also known as green construction or sustainable building refers to both a structure and the application of processes that are environmentally responsible and resources-efficient throughout a building's life-cycle: from planning to design, construction, operation, maintenance, renovation, and demolition.



Fig.32 Green construction

The concept of sustainable development can be traced to the energy crisis and environmental pollution concerns of the 1960s and 1970s. The Rachel Carson book, “silent spring”, published in 1962, is considered to be one of the first initial efforts to describe sustainable development as related to green building. In the UK, the BRE green Guide to specifications offers ratings for 1500 building materials based on LCA.



FIG.33 Eco Friendly House

The aim is to ensure the building and construction methods are cost-effective, durable, and reduce the overall effects on the environment and human health with a central focus on efficient and human health with a central focus on efficient use of energy and resources, water preservation, improved occupational health, and reducing pollution and wastage.

An Eco-house is an environmentally low-impact home designed and built using materials and technology that reduces its carbon footprint and lowers its energy needs. Eco-homes are measured in multiple ways meeting sustainability needs such as water conversation, reducing wastes through reusing and recycling materials, controlling pollution to stop global warming, energy generation and conservations, and decreasing CO₂ emissions.

5.1.2 Soil Liquefaction:-

Soil liquefaction occurs when a saturated or partially saturated soil substantially loses strength and stiffness in response to an applied stress such as shaking during an earthquake or other sudden change in stress condition, in which material that is ordinarily a solid behaves like a liquid.

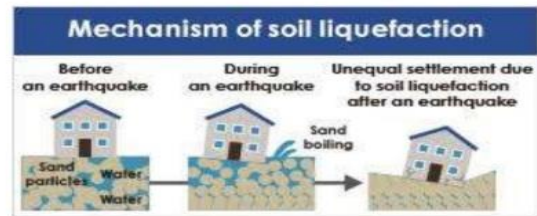


Fig 34:- Soil liquefaction

➤ Soil Liquefied Term History:-

In soil mechanics, the term "liquefied" was first used by Allen Hazen in orientation to the year 1918 failure of the Calaveras Dam in California.

5.1.3 Transport Infrastructure /System:-

- Mode of transport is a term used to distinguish between different ways of transportation or transporting people or goods. The different modes of transport are air, water, and land transport, which includes Rails or railways, road and off-road transport.
- In general, transportation is used for moving of people, animals, and other goods from one place to another.
- (motorized) vehicles necessary for transport according to the chosen mode (car, airplane, ship, truck and rail)



Fig 35:- Transport System

✚ Concept of Various Type of Method for Transportation:-

➤ Bicycle:-

Bicycles can be used to travel from one place to another and is the easiest and ecofriendly mode of transportation. Bicycles are the most convenient transport to use. By using bicycles people will stay fit and there will be no damage to the environment.



Fig 36:- Bicycle

➤ Car:-

The most popular type of transport, most people use cars daily for short and long journeys. Cars have many advantages such as their ease of use and convenience, getting you exactly where you want to be without additional buses, trains or walking needed to get to your final destination. To save money you can carpool with friends or work colleagues when possible.



Fig 37:- car

➤ Aero Planes:-

Air transport is an important enabler to achieving economic growth and development. Air transport facilitates integration into the global economy and provides vital connectivity on a national, regional, and international scale.



Fig 38:- Aero planes

➤ Buses:-

Urban or suburban services is the most common type of public transport bus service and is used to transport large numbers of people in urban areas, or to and from the suburbs to population centers. Buses are available in all cities, towns and most villages. They are ideal for those short journeys from one part of a town to another. Short journeys may take longer than



expected on a bus due to the frequent stops and routes which cover a lot of the area to accommodate everyone.

Fig 38:- Buses

➤ Trains:-

Rail transport is also known as train transport. It is a means of transport, on vehicles which run on tracks (rails or railroads). It is one of the most important, commonly used and very cost effective modes of commuting and goods carriage over long, as well as, short distances. Rail transports used for both good Sand people and is a popular method of public transport.



Fig 39:- Trains

➤ BOATS:-

Travelling by sea is usually by ferry or cruise ship. Ferries are often used for short sea crossings to the continent or many of the islands around main land Britain such as the isle of land. You can take your vehicle with you to use when you reach your destination which can make this a more convenient option compared to a plan or train.



Fig 40:- Boats

5.1.4 Vertical Farming:-

Vertical farming is the practice of rising crops in perpendicularly stacked layers. It often incorporates controlled-environment agriculture, which want to optimize plant growth, and soilless farming techniques such as hydroponics, aquaponics, and aeroponics.

➤ Hydroponics:-

Hydroponics is a type of horticulture and a division of hydroculture, which is a method of raising plants, usually crops, not including soil, by using mineral nutrient solutions in an aqueous solvent. Hydroponics offers many advantages, one of them being a reduce in water usage for



Fig 41:- Hydroponics

➤ Aquaponics:-

Aquaponics refers to any coordination that combines straight aquaculture (raising aquatic animals such as snails, fish, crayfish or prawns in tanks) with hydroponics (cultivating plants in water) in a symbiotic surroundings environment. In normal aquaculture, excretions from the animals being raised can build up in the water, mounting toxicity.



Fig 42:- Aquaponics

➤ Aeroponics:-

- The creation of aeroponics was provoked by the initiative of NASA (the national aeronautical and space administration) to find a capable way to grow plants in space in the 1990s.
- Different conventional hydroponics and aquaponics, aeroponics does not require any liquid or solid medium to grow up plants in. Instead, a liquid solution with nutrients is misted in air chambers where the plants are balanced



Fig.43:- Aeroponics

5.1.5 Corrosion Mechanism, Prevention & Repair Measures Of Rcc Structure:-

- Concrete is fairly strong mechanically, it is extremely susceptible to chemical attack and thus structure gets broken and even fail unless some preventive measures are adopted to counteract this and thereby raising the durability of structure.
- In the case of reinforced concrete structure (RCC) the ingress of wetness or air may lead to corrosion of steel, cracking and spalling of concrete cover thereby falling durability of concrete structure. Repair has been recommended as the protective solution for damaged structure due to corrosion.
- The adoption of corrosion refuge measures in new structure, such as the use of high-quality design and construction practices, sufficient concrete cover depth, low-permeability concrete, corrosion inhibitors, and coated reinforcing steel, is significantly falling the occurrence of reinforcing steel corrosion in new construction.



Fig 44:- Effect of corrosion in reinforcement

- Different conventional hydroponics and aquaponics, aeroponics does not require any liquid or solid medium to grow up plants in. Instead. A liquid solution with Nutrients is misted in air chambers where the plants are balanced.

5.1.6 Sewage Treatment Plant:-

- Sewage treatment is the procedure of remove contaminants from municipal wastewater, containing frequently household sewage in adding some industrial wastewater.
- Physical, chemical, and biological processes are used to reduce contaminants and generate treated wastewater (or treated effluent) that is secure enough for release into the surroundings.



Fig 45:- Sewage Treatment Plant

➤ Origins of Sewage:-

- Sewage is generated by inhabited, institutional, commercial and industrial establishments. It includes household waste liquid from toilets, baths, showers, kitchens, and sinks demanding into sewers.
- In many areas, sewage as well includes liquid waste from industry and commerce.

➤ Process Steps:-

- Sewage treatment normally involves three stages, called primary, secondary and tertiary treatment.

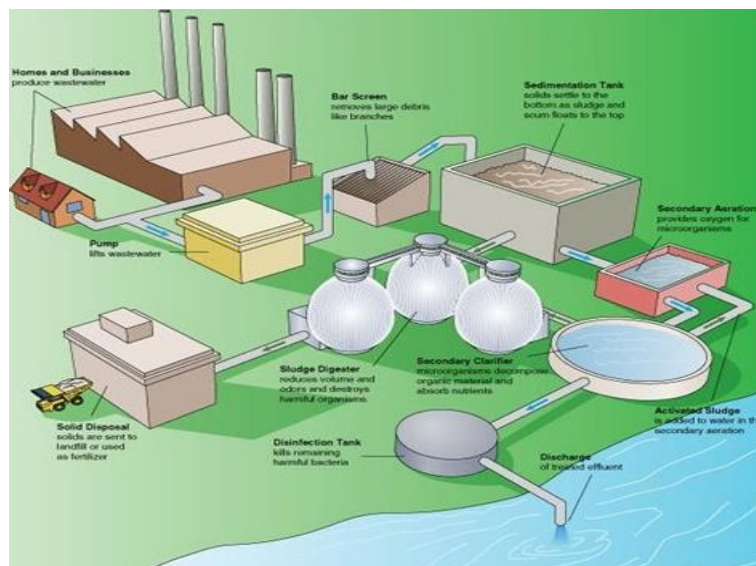


Fig 46:- sewage treatment plant:-

Chapter-6 SWATCHH BHARAT ABHIYAN (CLEANINDIA):-

Swachhbharat mission (SBM), Swachh Bharat abhiyan (SBA), or clean India Mission is a country-wide movement initiated by the Government of India in 2014 to eliminate open defecation and get better solid waste management (SWM). Phase 1 of the task last till October 2019. Phase 2 will be implemented among 2020-21 and 2024-25.

Initiated by the Government of India, the mission intended to achieve an “open-defecation free” (ODF) India by 2 October 2019, the 150th centenary of birth of Mahatma Gandhi. The objectives of the first phase of the mission contain eradication of manual scavenging, generating consciousness and bringing about a behavior change regarding cleanliness practices, an Increase of capacity at the local level. The second phase of task aims to maintain the open defecation free status and improve the management of solid and liquid waste.

The campaign is officially launched on 2 October 2014 at Rajghat, New Delhi by Prime Minister Narendra Modi. It is India's largest cleanliness drive to date with three million government employees and students from all parts of India participating in 4043 cities, towns, and rural community.

➤ Components of SBM (Village):

- 1) Construction & Usage of Individual Household Latrines (IHHL)
- 2) Solid and Liquid Waste Management (SLWM)
- 3) Community Sanitary Complexes (CSCs)

(1) Construction & Usage of Individual Household Latrines (IHHL):-

Construction and convention of Individual Household Latrines (IHHLs) is one of the primary components of SBM (G). A duly completed household hygienic latrine shall include of a Toilet Unit including a substructure which is sanitary (that safely confines human feces and eliminates the require of human handling before it is fully decomposing), a super structure, with water ability and hand wash unit for cleaning and hand washing. It is an inherent principle that the toilet has to be constructed by individual households after insist creation so that use of toilet is ensured with a sense of ownership of the beneficiary. There are various models of toilets available based on secure sanitation technologies like the Twin Pit, Septic tank, Bio toilets, amongst others. The MDWS encourages development of other safe technologies and States shall disseminate information about available technologies and their costs to the receiver to make an informed choice.

(2) Solid and Liquid Waste Management (SLWM):-

With the objective of achieving “ODF Plus” status and to improve sanitation, hygiene and the general superiority of life in rural areas, the feature of Solid and Liquid Waste Management (SLWM) assumes greater significance. All Gram Panchayats (GPs) are to be targeted for treatment with a SLWM project. The objective is to start SLWM projects in all GPs without delay. Communities/Gram Panchayats have to be aggravated to come forward and insist for such a system, which they have to afterward operate and maintain. Once the demand is produced, to ensure that the resources are used proficiently, SLWM is to be in use up in project mode for each

GP with financial assistance capped for a GP on number of household basis to allow all GPs to implement sustainable SLWM projects.

Major Activities under SLWM Are As Follows:-

➤ For Solid Waste Management:-

- Collection, segregation and safe disposal of household garbage, decentralized systems like household droppings and biogas plants shall be allowable.
- Activities related to most reuse of organic solid wastes as droppings should be adopted. Such technologies may include vermi-composting or any other composting method, individual and community biogas plants.
- Funds allocated for SLWM may be used to implement safe disposal solutions for menstrual waste (used sanitary cloths and pads) and setting up incinerators in Schools, Women's Community Sanitary Complexes, Primary Health Centre, or in any other suitable place in village and collection mechanisms etc. can be in use up.

➤ For Liquid Waste Management:-

- Methods adopted for management of liquid wastes may focus on most reuse of such waste for agriculture purposes with least operation and maintenance costs.
- Collection of waste water, near to the ground cost drainage/ small bore system, soakage pit may be adopted. Treatment of waste water the subsequent technologies may inter-alia be considered.

However, States To Identify Suitable Technologies.

Waste Stabilization Pond (WSP) technology

- Duckweed based waste water treatment
- Anaerobic decentralized west



Fig 47:- Solid and liquid waste management

(3) Community Sanitary Complexes(CSCs):-

Community Sanitary Complexes comprising of suitable number of toilet seats, bathing cubicles, washing platforms, wash basins etc. are set up in a place in the village acceptable and accessible to all. Such complexes shall be constructed only when there is lack of space in the village for construction of household toilets and the Community/ GP owns up the liability of their operation and maintenance. They can be made at public places, markets and bus stands etc. The proposal for putting up CSCs will be permitted by the State Level Scheme Sanctioning Committee (SLSSC).

Maintenance of such complex is essential for which Gram Panchayat should own the final liability and their Operation and Maintenance (O&M) should be assured.

Chapter-7 VILLAGE CONDITION DUE TO COVID-19:-

7.1 Taken Steps In Allocated Village Related To Existing Situation:-

- What Is Covid-19?
- Corona disease came in the year 2019, so it is known as covid-19.
- COVID-19 is an infection caused by the “novel corona virus”. Common symptoms are:
 - Fever
 - Dry cough
 - Breathing Difficulty
 - Some patients also have aches and pains, nasal congestion, runny nose.

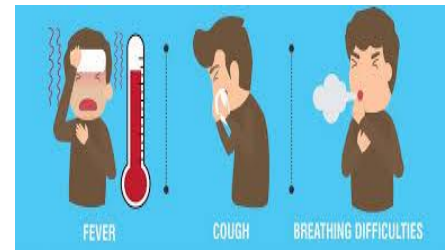


Fig 48:- Covid-19

➤ Steps Taken To Spread For Prevention/Avoid Of Covid-19.

(A) Practice Social Distancing:-



Fig 49:- Practices social distancing

- Avoid gatherings
- Maintain a safe distance
- Stay at home
- Avoid physical contact
-

(B) Practice good hygiene:-

- Wash your hands regularly using soap and water.
- Do not emit or shout in public places to avoid the spread of droplets.
- Do not finger your eyes, nose and mouth with unclean hands.

7.2 Any Other Steps Taken By The Villagers:-

- When corona was at its peak, the villagers followed a strict lock-down as per the government's guidelines and rules.
- Indigenous medicines such as ayurvedik kadha were sold in the village which could be useful for health.
- Maintain social distancing in vegetable market.
- The villagers have been wearing masks since the first case of coronavirus.
- The villagers used to come together to check the health of the people coming from the village outside before entering the village and to quarantine those who looked suspicious.

7.3 CASES OVERVIEW:-

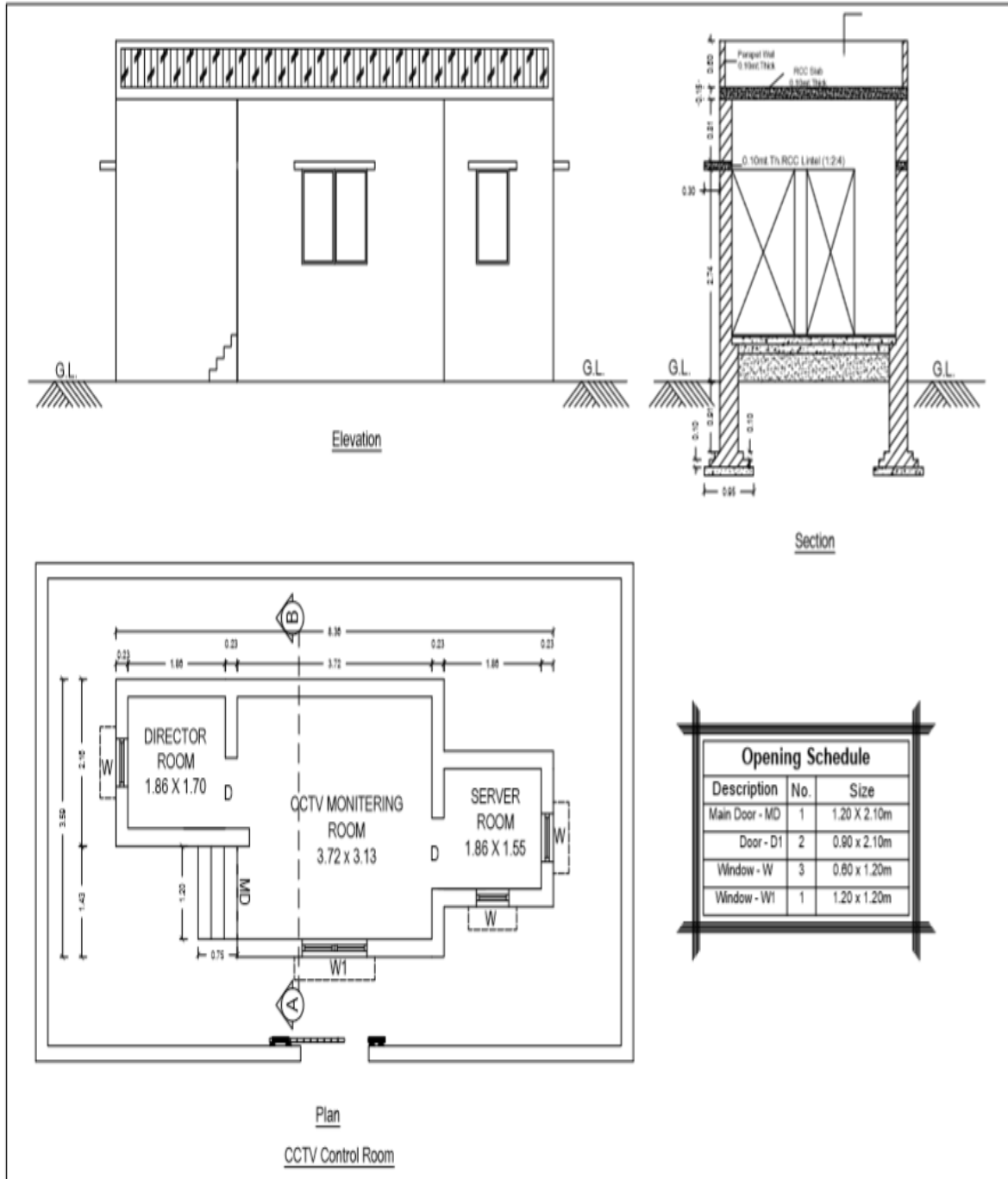
SR NO.	NAME OF VILLAGE /DISTRICT/ STATE	TOTAL CASE	RECOVERED	DEATH
1.	PIPALVA	2	2	00
2.	AMRELI	2503	2265	38
3.	GUJRAT	181K	164K	3760
4.	INDIA	8.55M	7.92M	127K
5.	WORLD-WIDE	50M	33.2M	1.26M

Table 14. Cases of allocated village to world-wide (since 22/3/2019 to 10/11/2019)

➤ Activity by Students:-

Chapter-8 Sustainable Design Planning Proposal (Prototype Design) -

I – CCTV CONTROL ROOM:-



NAME OF WORK : CONSTRUCTION WORK OF CCTV CONTROL ROOM

ABSTRACT SHEET				
Total Estimated Cost of Rs.314500.00		<i>Rate as per Amreli R&B SOR 2015-16</i>		
Item No. & Description	Total Qty.	Rate	Per	Amount
Item No. 1				
Foundation				
		85.90		
	20.60	85.90	Cumt.	1,769.54
Item No. 2				
PCC				
		2106.00		
	2.60	2106.00	Cumt.	5,475.60
Item No. 3				
Foundation And Plinth				
		1912.00		
	25.70	1912.00	Cumt.	49,138.40
Item No. 4				
Copping				
		2712.00		
	2.10	2712.00	Cumt.	5,695.20
Item No. 5				
Murum Filling				
		250.00		
	10.50	250.00	Cumt.	2,625.00
Item No. 6				
Concrete Work In Foundation				
		2758.00		
	2.80	2758.00	Cumt.	7,722.40
Item No. 7				
Brick work				
		2549.00		
	22.10	2549.00	Cumt.	56,332.90
Item No. 8				
Slab				
(iii) Slab having more than 10 cm. and up to 13 cm. thickness		4503.00		
	3.60	4503.00	Cumt.	16,210.80
Item No. 9				
Lintel				
		4868.00		
	0.80	4868.00	Cumt.	

				3,894.40
Item No. 10				
TMT Bar				
		45.00		
	418.00	45.00	Kg.	18,810.00
Item No.11				
Aluminum Section				
		2022.00		
	3.60	2022.00	Sqmt.	7,279.20
Item No.12				
Door				
		2671.00		
	1% L.S.	26.71		
	7.60	2697.71	Sqmt.	20,502.60
Item No. 13				
15mm Thick Single Coat Cement Plaster				
		103.00		
	87.10	103.00	Sqmt.	8,971.30
Item No. 14				
20mm Thick Single Coat Cement Plaster				
		205.00		
	138.50	205.00	Sqmt.	28,392.50
Item No. 15				
Vitrified Tile				
		757.00		
	17.70	757.00	Sqmt.	13,398.90
Item No. 16				
Door				
		2131.00		
	6.30	2131.00	Sqmt.	13,425.30
Item No. 17				
Wall painting (two coats)				
		49.60		
	87.10	49.60	Sqmt.	4,320.16
Item No. 18				
Wether Proof Exterior Emulsion Paint				
		72.00		
	138.50	72.00	1.00	9,972.00
Item No. 19				
G.I. Rain water Spout				
		72.20		
	2	72.20	Each	

				144.40
Item No. 20				
Point Wiring				
	12	350.00	No.	4,200.00
Total Amounts Rs.....				278,280.60
Add 3% Contingency Charge Rs.....				8,348.42
Add 10% Water and Draneige Charge Rs.....				27,828.06
Net Amounts Rs.....				314,457.07
Say Amounts Rs.....				314,500.00

NAME OF WORK : CONSTRUCTION WORK OF CCTV CONTROL ROOM

MEASUREMENT SHEET						
Item No. & Description	Nos.	Length	Width	Depth	Quantity	Total Qty.
Item No. 1						
Foundation						
Horizontal	2	4.80	0.60	1.20	6.91	
""	1	1.57	0.60	1.20	1.13	
""	1	2.43	0.60	1.20	1.75	
Vertical	2	6.24	0.60	1.20	8.99	
""	1	2.43	0.60	1.20	1.75	
						Say:
				Total	20.52	20.60
						Cumt.
Item No. 2						
PCC						
Horizontal	2	4.80	0.60	0.15	0.86	
""	1	1.57	0.60	0.15	0.14	
""	1	2.43	0.60	0.15	0.22	
Vertical	2	6.24	0.60	0.15	1.12	
""	1	2.43	0.60	0.15	0.22	
						Say:
				Total	2.57	2.60
						Cumt.
Item No. 3						
Foundation And Plinth						
At Foundation Level						
Horizontal	2	4.80	0.60	1.05	6.05	
""	1	1.57	0.60	1.05	0.99	
""	1	2.43	0.60	1.05	1.53	
Vertical	2	6.24	0.60	1.05	7.86	
""	1	2.43	0.60	1.05	1.53	
At Plinth Level						

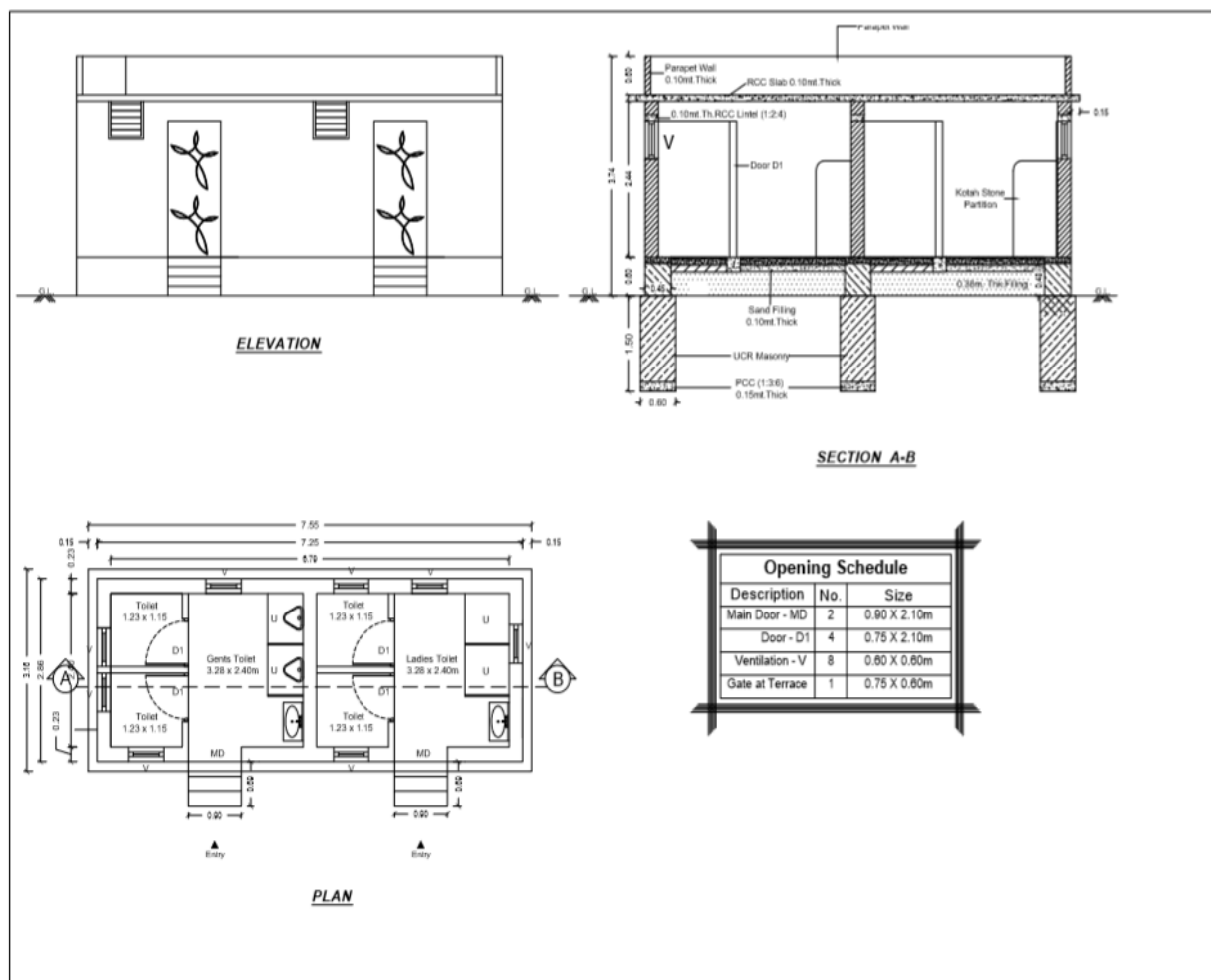
Horizontal	2	4.80	0.60	0.45	2.59	
	1	1.57	0.60	0.45	0.42	
	1	2.43	0.60	0.45	0.66	
Vertical	2	6.24	0.60	0.45	3.37	
	1	2.47	0.60	0.45	0.67	
						Say:
				Total	25.67	25.70
						Cumt.
Item No. 4						
Copping						
Horizontal	2	4.80	0.60	0.12	0.69	
	1	1.57	0.60	0.12	0.11	
	1	2.43	0.60	0.12	0.17	
Vertical	2	6.24	0.60	0.12	0.90	
	1	2.47	0.60	0.12	0.18	
						Say:
				Total	2.06	2.10
						Cumt.
Item No. 5						
Murrum Filling						
	1	3.88	6.01	0.45	10.49	
						Say:
				Total	10.49	10.50
						Cumt.
Item No. 6						
Concrete Work In Foundation						
	1	3.88	6.01	0.12	2.80	
						Say:
				Total	2.80	2.80
						Cumt.
Item No. 7						
Brick work						
Horizontal	1	6.27	0.23	3.05	4.40	
	1	3.95	0.23	3.05	2.77	
	1	2.55	0.23	3.05	1.79	
	2	2.09	0.23	3.05	2.93	
Vertical	1	1.70	0.23	3.05	1.19	
	1	1.20	0.23	3.05	0.84	
	1	2.48	0.23	3.05	1.74	
	1	1.55	0.23	3.05	1.09	
	1	1.70	0.23	3.05	1.19	
	1	0.65	0.23	3.05	0.46	
Parapet						
Horizontal	1	6.27	0.23	1.05	1.51	
	1	3.95	0.23	1.05	0.95	
	1	2.55	0.23	1.05	0.62	
	2	2.09	0.23	1.05	1.01	
Vertical	1	1.70	0.23	1.05	0.41	
	1	1.20	0.23	1.05	0.29	

	1	1.57	0.23	1.05	0.38	
	1	1.55	0.23	1.05	0.37	
	1	0.79	0.23	1.05	0.19	
	1	0.65	0.23	1.05	0.16	
			Total (A)		24.30	Cumt.
Deduction :						
Main door - MD	1	1.20	0.23	2.10	0.58	
Door - D	2	0.90	0.23	2.10	0.87	
Window - W	3	0.60	0.23	1.20	0.50	
Window - W1	1	1.20	0.23	1.20	0.33	
			Total (B)		2.28	Say:
			Net Quantity (A-B)		22.02	22.10
						Cumt.
Item No. 8						
Slab						
(iii) Slab having more than 10 cm. and up to 13 cm. thickness						
Slab	1	2.32	2.16	0.15	0.75	
""	1	3.95	3.59	0.15	2.13	
	1	2.09	2.01	0.15	0.63	
						Say:
				Total	3.51	3.60
						Cumt.
Item No. 9						
Lintel						
Lintel						
Horizontal	1	6.27	0.23	0.12	0.17	
	1	3.95	0.23	0.12	0.11	
	1	2.55	0.23	0.12	0.07	
Vertical	2	2.09	0.23	0.12	0.12	
	1	1.70	0.23	0.12	0.05	
	1	1.20	0.23	0.12	0.03	
	1	2.48	0.23	0.12	0.07	
	1	1.55	0.23	0.12	0.04	
	1	1.70	0.23	0.12	0.05	
	1	0.65	0.23	0.12	0.02	
						Say:
				Total	0.72	0.80
						Cumt.
Item No. 10						
TMT Bar						
	No.	Qty.	Weight / Cumt			
Copping	1	2.10	60.00		126.00	
Slab	1	3.60	70.00		252.00	
Lintel	1	0.80	50.00		40.00	Say:
				Total	418.00	418.00
						Kg.
Item No.11						
Aluminum Section						

Window- W	3	0.60	-	1.20	2.16	
Window- W1	1	1.20	-	1.20	1.44	
						Say:
				Total	3.60	3.60
						Sqmt.
Item No.12						
Door						
Main door - MD	1	1.80	-	2.10	3.78	
Door - D	2	0.90	-	2.10	3.78	
						Say:
				Total	7.56	7.60
						Sqmt.
Item No. 13						
15mm Thick Single Coat Cement Plaster						
Inside wall						
Director Room	2	1.86	-	3.05	11.35	
	2	1.70	-	3.05	10.37	
Celing	1	1.86	1.70		3.16	
CCTV monitoring Room	2	3.72	-	3.05	22.69	
	2	3.13	-	3.05	19.09	
Celing	1	3.72	3.13		11.64	
Server Room	2	1.86	-	3.05	11.35	
	2	1.55	-	3.05	9.46	
Celing	1	1.86	1.55		2.88	
				Total(A)	101.99A
Deduction						
Main door - MD	1	1.80	-	2.10	3.78	
Door - D	4	0.90	-	2.10	7.56	
Window - W	3	0.60	-	1.20	2.16	
Window - W1	1	1.20	-	1.20	1.44	
				Total(B)	14.94B
	Net Quantity (A-B)				87.05	87.10
						Sqmt.
Item No. 14						
20mm Thick Single Coat Cement Plaster						
Outside wall						
Horizontal	1	6.27	-	4.70	29.47	
	1	2.55	-	4.70	11.99	
	1	3.95	-	4.70	18.57	
	2	2.09	-	4.70	19.65	
Vertical	1	2.16	-	4.70	10.15	
	1	1.20	-	4.70	5.64	
	1	0.65	-	4.70	3.06	
	1	0.93	-	4.70	4.37	
	1	2.01	-	4.70	9.45	
Chhajah - Top & Bottom						
Window -W	6	0.90	0.45	-	2.43	

Window - W1	2	1.50	0.45	-	1.35	
Parapet Inside	1	22.06	-	1.05	23.23	
Steps - Riser	3	2.26	-	0.15	1.02	
Tread	3	2.26	0.25	-	1.70	
				Total	142.05	
Deduction						
Window - W	3.00	0.60	-	1.20	2.16	
Window - W1	1.00	1.20	-	1.20	1.44	
				Total	3.60	Say:
			Net Quantity		138.45	138.50
						Sqmt.
Item No. 15						
Vitrified Tile						
Directore Room	1	1.86	1.70	-	3.16	
CCTV monitoring Room	1	3.72	3.13	-	11.64	
Server Room	1	1.86	1.55	-	2.88	
						Say:
				Total	17.69	17.70
						Sqmt.
Item No. 16						
Door						
Door - MD	1	1.20	-	2.10	2.52	
Door - D	2	0.90	-	2.10	3.78	
						Say:
				Total	6.30	6.30
						Sqmt.
Item No. 17						
Wall painting (two coats)						
Qty. as per				Item No. 13	87.10	
						Say:
				Total	87.10	87.10
Item No. 18						Sqmt
Wether Proof Exterior Emulsion Paint						Say:
Qty. as per				Item No. 14	138.50	138.50
						Sqmt
Item No. 19						
G.I. Rain water Spout	2	-	-	-	2	2
						Each
Item No. 20						
Point Wiring						
	12	-	-	-	12	12
						No.

II – TOILET BLOCK:-



NAME OF WORK : CONSTRUCTION WORK OF TOILET BLOCK

ABSTRACT SHEET

Total Estimated Cost of Rs.293100.00		Rate as per Amreli R&B SOR 2015-16			
Item No. & Description	Total Qty.	Rate	Per	Amount	
Item No. 1					
Excavation for foundation		85.90			
	18.30	85.90	Cumt.	1,571.97	
Item No. 2					
PCC		2106.00			
	2.90	2106.00	Cumt.	6,107.40	
Item No. 3					
Foundation And Plinth					

		1912.00		
	21.10	1912.00	Cumt.	40,343.20
Item No. 4				
Copping				
		2712.00		
	1.00	2712.00	Cumt.	2,712.00
Item No. 5				
Plinth Beam				
		5452.00		
	0.40	5452.00	Cumt.	2,180.80
Item No. 6				
Murum Filling				
		250.00		
	4.40	250.00	Cumt.	1,100.00
Item No. 7				
Sand Filling				
		382.00		
	1.10	382.00	Cumt.	420.20
Item No. 8				
Brick work				
		2549.00		
	10.80	2549.00	Cumt.	27,529.20
Item No. 9				
Half brick				
		360.00		
	20.90	360.00	Sqmt.	7,524.00
Item No. 10				
Slab				
(iii) Slab having more than 10 cm. and up to 13 cm. thickness		4777.00		
	2.40	4777.00	Cumt.	11,464.80
Item No. 11				
Lintel				
		4868.00		
	0.50	4868.00	Cumt.	2,434.00
Item No. 12				
TMT Bar				
		45.00		
	318.00	45.00	Kg.	14,310.00
Item No.13				
Ventilation				
		463.00		

	2.90	463.00	Sqmt.	1,342.70
Item No. 14				
15 mm Thick Plaster Single Coat Cement Plaster- Inner Plaster				
		103.00		
	92.40	103.00	Sqmt.	9,517.20
Item No. 15				
20 mm Thick Plaster Cement Plaster-Outrer Plaster				
		205.00		
	92.30	205.00	Sqmt.	18,921.50
Item No. 16				
White Glazed Tiles				
		520.00		
	8.00	520.00	Sqmt.	4,160.00
Item No. 17				
Polished Kota Stone				
		653.00		
	9.40	653.00	Sqmt.	6,138.20
Item No. 18				
White Glazed Tiles for Dedo				
		539.00		
	65.20	539.00	Sqmt.	35,142.80
Item No. 19				
Water tank				
1000 Liter Capacity		4.60		
	2000	4.60	Ltr	9,200.00
Item No. 20				
110mm Dia U.P.V.C Pipe				
(B) 110mm Dia.		525.00		
	20.00	525.00	Rmt.	10,500.00
Item No. 21				
25mm Dia P.V.C Pipe				
[B] 25mm		63.80		
	60.00	63.80	Rmt.	3,828.00
Item No. 22				
Gun metal check				
[C] Copper metal (i) 25mm dia		485.00		
	2	485.00	Each	970.00
Item No. 23				
Bib Taps				
15mm Dia.		217.00		
	10	217.00	Each	

				2,170.00
Item No. 24				
Water Closet Squatting Pan [Indian type W.C. pan]				
(A) Vitreous China (i) Long pattern - colour		589.00		
	6	589.00	Each	3,534.00
Item No. 25				
Footrest to Long Pattern Squatting Pan water closet.				
		86.50		
	6	86.50	Each	519.00
Item No. 26				
Wash basin				
[ii] Flat back washbasin 550mm x 400mm size		889.00		
	2	889.00	Each	1,778.00
Item No. 27				
Sockpit up To 5cmt				
		2686.00		
	2	2686.00	Each	5,372.00
Item No. 28				
Nahni trap				
Nahni Trap		381.00		
	4	381.00	Each	1,524.00
Item No. 29				
M.S. grills				
		63.60		
	9.00	63.60	Kg.	572.40
Item No. 30				
Priming Coat For M.S.Grills				
		22.00		
	0.50	22.00	Sqmt.	11.00
Item No. 31				
Painting two Coats For M.S.Grills				
		55.20		
	0.50	55.20	Sqmt.	27.60
Item No. 32				
Polished Kota Stone For Urinals				
		664.00		
	3.30	664.00	Sqmt.	2,191.20
Item No. 33				
Door				
		2131.00		
	10.30	2131.00	Sqmt.	21,949.30
Item No. 34				
Wall painting (two coats)				
		49.60		

	27.20	49.60	Sqmt.	1,349.12
Item No. 35				
Wether Proof Exterior Emulsion paint				
		72.00		
	92.30	72.00	Sqmt.	6,645.60
Item No. 36				
G.I. Rain water Spout				
		72.20		
	4	72.20	Each	288.80
Item No. 37				
Urinal				
		661.00		
	2	661.00	Each	1,322.00
Item No. 38				
Chromium Plated Brass Half Trun Flush cock				
		294.00		
	4	294.00	Each	1,176.00
Item No. 39				
Point Wiring				
	10	350.00	Point	3,500.00
Total Amounts Rs.....				271,347.99
Add 3% Contingency Charge Rs.....				8,140.44
Add 5% Water Charge Rs.....				13,567.40
Net Amounts Rs.....				293,055.83
Say Amounts Rs.....				293,100.00

NAME OF WORK : CONSTRUCTION WORK OF TOILET BLOCK

MEASURMENT SHEET						
Item No. & Description	Nos.	Length	Width	Depth	Quantity	Total Qty.
Item No. 1						
Excavation for foundation						
Horizontal	2	7.41	0.60	1.50	13.34	
Vertical	3	1.82	0.60	1.50	4.91	
						Say:
				Total	18.25	18.30
						Cumt.
Item No. 2						

PCC						
PCC - Horizontal	2	7.41	0.60	0.15	1.33	
Vertical	3	1.82	0.60	0.15	0.49	
PCC Bedding	2	2.95	1.96	0.10	1.16	
Deduction for beam	-2	1.96	0.23	0.10	-0.09	
	-2	1.01	0.23	0.10	-0.05	
						Say:
				Total	2.84	2.90
						Cumt.
Item No. 3						
Foundation And Plinth						
At Foundation Level - Horizontal	2	7.41	0.60	1.35	12.00	
Vertical	3	1.82	0.60	1.35	4.42	
At Plinth Level - Horizontal	2	7.25	0.45	0.50	3.26	
Vertical	3	1.96	0.45	0.50	1.32	
						Say:
				Total	21.01	21.10
						Cumt.
Item No. 4						
Copping						
Horizontal	2	7.25	0.45	0.10	0.65	
Vertical	3	1.96	0.45	0.10	0.26	
						Say:
				Total	0.92	1.00
						Cumt.
Item No. 5						
Plinth Beam						
Vertical	2	1.96	0.23	0.23	0.21	
Horizontal	2	1.01	0.23	0.23	0.11	
						Say:
				Total	0.31	0.40
						Cumt
Item No. 6						
Murum Filling						
Plinth	2	2.95	1.96	0.38	4.39	
						Say:
				Total	4.39	4.40
						Cumt.
Item No. 7						
Sand Filling						
Plinth	2	2.95	1.96	0.10	1.16	
Deduction for beam	-2	1.96	0.23	0.10	-0.09	
	-2	1.01	0.23	0.10	-0.05	
						Say:
				Total	1.02	1.10
						Cumt.
Item No. 8						
Brick work						
Horizontal	2	7.25	0.23	2.44	8.14	

Vertical	3	2.40	0.23	2.44	4.04	
Step	2	0.90	0.23	0.15	0.06	
	2	0.90	0.23	0.30	0.12	
	2	0.90	0.23	0.45	0.19	
	2	0.90	0.23	0.60	0.25	
				Total	12.80	Cumt.
Deduction :						
Main door - MD	2	0.90	0.23	2.13	0.88	
Ventilation - V	8	0.60	0.23	0.60	0.66	
Lintel - Horizontal As Per	Item No. 11				0.50	
				Total	2.04	Say:
			Net Quantity		10.75	10.80
						Cumt.
Item No. 9						
Half brick						
Partition						
Vertical	2	2.40	-	2.13	10.22	
Horizontal	2	1.23	-	2.13	5.24	
Parapet - Horizontal	2	7.55	-	0.60	9.06	
Vertical	2	2.66	-	0.60	3.19	
				Total	27.72	Sqmt.
Deduction						
Door - D1	4	0.75	-	2.13	6.39	
Terrace Gate	1	0.75	-	0.60	0.45	
				Total	6.84	Say:
			Net Quantity		20.88	20.90
						Sqmt
Item No. 10						
Slab						
(iii) Slab having more than 10 cm. and up to 13 cm. thickness						
Slab	1	7.55	3.16	0.10	2.39	
						Say:
				Total	2.39	2.40
						Cumt.
Item No. 11						
Lintel						
Lintel - Horizontal	2	7.25	0.23	0.10	0.33	
Vertical	3	2.40	0.23	0.10	0.17	
						Say:
				Total	0.50	0.50
						Cumt.
Item No. 12						
TMT Bar						
	No.	Qty.	Weight / Cumt			
Copping	1	1.00	60.00		60.00	
Plinth Beam	1	0.40	175.00		70.00	
Slab	1	2.40	70.00		168.00	
Lintel	1	0.50	40.00		20.00	Say:

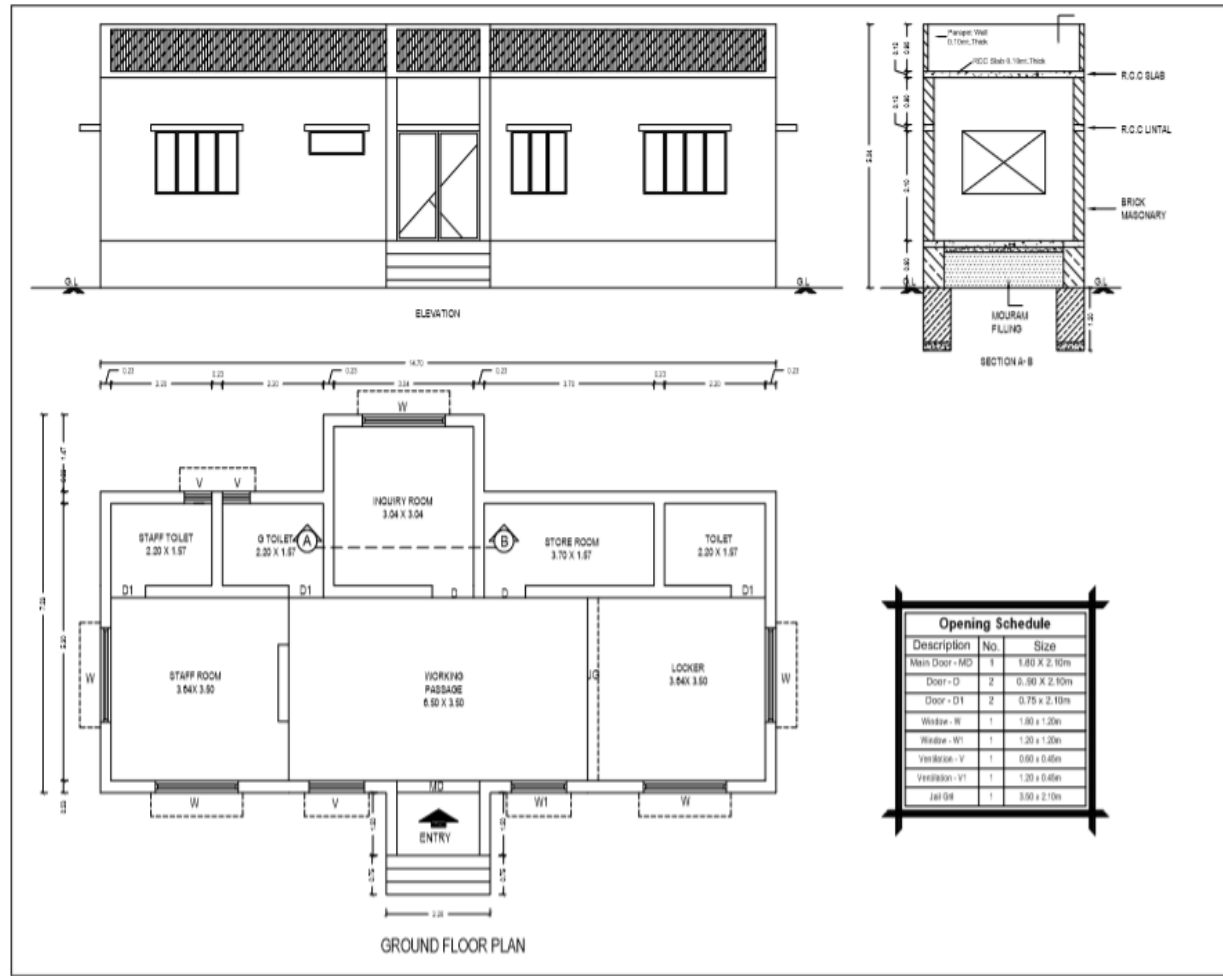
				Total	318.00	318.00
						Kg.
Item No.13						
Ventilation						Say:
Ventilation	8	0.60	-	0.60	2.88	2.90
						Sqmt.
Item No. 14						
15 mm Thick Plaster Single Coat Cement Plaster- Inner Plaster						
Inside wall - Gents Toilet						
Horizontal	2	3.28	-	2.44	16.01	
Vertical	2	2.40	-	2.44	11.71	
Partition - Horizontal	2	1.23	-	2.13	5.24	
Vertical	2	2.40	-	2.13	10.22	
Ceilling	1	3.28	2.40	-	7.87	
Inside wall - Ladies Toilet						
Horizontal	2	3.28	-	2.44	16.01	
Vertical	2	2.40	-	2.44	11.71	
Partition - Horizontal	2	1.23	-	2.13	5.24	
Vertical	2	2.40	-	2.13	10.22	
Ceilling	1	3.28	2.40	-	7.87	
				Total	102.11a
Deduction						
Main Door - MD	1	0.90	-	2.13	1.92	
Door - D1	4	0.75	-	2.13	6.39	
Ventilation - V	4	0.60	-	0.60	1.44	
				Total	9.75b
				Net Quantity (a-b)	92.36	92.40
						Sqmt.
Item No. 15						
20 mm Thick Plaster Cement Plaster-Outrigger Plaster						
Outside wall						
Horizontal	2	7.25	-	3.74	54.23	
Vertical	2	2.86	-	3.74	21.39	
Ceilling Projection - Top & Bottom	4	7.55	0.15	-	4.53	
"	4	3.16	0.15	-	1.90	
Parapet Inside - Horizontal	2	7.05	-	0.60	8.46	
Vertical	2	2.66	-	0.60	3.19	
Steps - Riser	8	0.90	-	0.15	1.08	
Tread	6	0.90	0.23	-	1.24	
				Total	96.02	
Deduction						
Main Door - MD	1	0.90	-	2.13	1.92	
Ventilation - V	4	0.60	-	0.60	1.44	
Terrace Gate	1	0.75	-	0.60	0.45	
				Total	3.81	Say:
				Net Quantity	92.22	92.30
						Sqmt.

Item No. 16						
White Glazed Tiles						
Gents Toilet	2	1.23	1.15	-	2.83	
Ladies Toilet	2	1.23	1.15	-	2.83	
Riser	8	0.90	-	0.15	1.08	
Tread	6	0.90	0.23	-	1.24	
						Say:
				Total	7.98	8.00
						Sqmt.
Item No. 17						
Polished Kota Stone						
Gents Toilet	1	1.95	2.40	-	4.68	
Ladies Toilet	1	1.95	2.40	-	4.68	
						Say:
				Total	9.36	9.40
						Sqmt.
Item No. 18						
White Glazed Tiles for Dedo						
Dedo - Gents Toilet						
Toilet - Horizontal	4	1.23	-	2.44	12.00	
Vertical	4	1.15	-	2.44	11.22	
Passage - Horizontal	2	1.95	-	2.44	9.52	
Vertical - Urinal Side	1	2.40	-	2.44	5.86	
Dedo - Ladies Toilet						
Toilet - Horizontal	4	1.23	-	2.44	12.00	
Vertical	4	1.15	-	2.44	11.22	
Passage - Horizontal	2	1.95	-	2.44	9.52	
Vertical - Urinal Side	1	2.40	-	2.44	5.86	
Steps - Risers	8	0.90	-	0.15	1.08	
				Total	78.28a
Deduction						
Main Door - MD	2	0.90	-	2.13	3.83	
Door - D1	4	0.75	-	2.13	6.39	
Ventilation - V	8	0.60	-	0.60	2.88	
				Total	13.10b
	Net Quantity(a-b)				65.18	65.20
						Sqmt.
Item No. 19						
Water tank						
1000 Liter Capacity	2	1000	-	-	2000	2000
						Litre
Item No. 20						
110mm Dia U.P.V.C Pipe						
(B) 110mm Dia.	2	10.00	-	-	20.00	20.00
						Rmt.
Item No. 21						
25mm Dia P.V.C Pipe						
[B] 25mm	2	30.00	-	-	60.00	60.00

						Rmt.
Item No. 22						
Gun metal check						
[C] Copper metal (i) 25mm dia	2	-	-	-	2	2
						Each
Item No. 23						
Bib Taps						
15mm Dia.	10	-	-	-	10	10
						Each
Item No. 24						
Water Closet Squatting Pan [Indian type W.C. pan]						
(A) Vitreous China (i) Long pattern - colour						
For Toilet	4	-	-	-	4	
For Urinal In Ladies Block	2	-	-	-	2	
				Total	6	6
						Each
Item No. 25						
Footrest to Long Pattern Squatting Pan water closet.						
Qty. as per	Item No. 24				6	6
						Each
Item No. 26						
Wash basin						
[ii] Flat back washbasin 550mm x 400mm size	2	-	-	-	2	2
[i] In white colour						Each
Item No. 27						
Sockpit up To 5cmt						
	2	-	-	-	2	2
						Each
Item No. 28						
Nahni trap						
Nahni Trap	4	-	-	-	4	4
						Each
Item No. 29						
M.S. grills						
for Terrace Gate	1	0.75	-	0.60	0.45	
				Total	0.45	Sqmt
		0.45	X 20 Kg./ Sqmt.		9.00	9.00
						Kg.
Item No. 30						
Priming Coat For M.S.Grills						Say:
Qty. as per	Item No. 29				0.45	0.50
						Sqmt.
Item No. 31						
Painting two Coats For M.S.Grills						Say:
Qty. as per	Item No. 30				0.50	0.50
						Sqmt

Item No. 32						
Polished Kota Stone For Urinals						
As Partition in Urinals - Gents Toilet	2	0.60	-	1.20	1.44	
As Partition in Urinals - Ladies Toilet	2	0.75	-	1.20	1.80	
						Say:
				Total	3.24	3.30
						Sqmt.
Item No. 33						
Door						
D1	4	0.75	-	2.13	6.39	
Main Door - MD	2	0.90	-	2.13	3.83	
						Say:
				Total	10.22	10.30
						Sqmt.
Item No. 34						
Wall painting (two coats)						
Qty. as per	Item No. 14				92.40	
Deduction for dedo	Item No. 18				-65.20	
						Say:
	Net Total				27.20	27.20
Item No. 35						Sqmt
Wether Proof Exterior Emulsion paint						Say:
Qty. as per	Item No. 15				92.30	92.30
						Sqmt
Item No. 36						
G.I. Rain water Spout	4	-	-	-	4	4
						Each
Item No. 37						
Urinal						
Urinal	2	-	-	-	2	2
						Each
Item No. 38						
Chromium Plated Brass Half Trun Flush cock						
	4	-	-	-	4	4
						Each
Item No. 39						
Point Wiring						
	10	-	-	-	10	10
						Point

III – POLICE STATION:-



NAME OF WORK : CONSTRUCTION WORK OF POLICE SATION

ABSTRACT SHEET

Total Estimated Cost of Rs.853500.00		Rate as per Amreli R&B SOR 2015-16		
Item No. & Description	Total Qty.	Rate	Per	Amount
Item No. 1				
Foundation		85.90		
	46.40	85.90	Cumt.	3,985.76
Item No. 2				
PCC		2106.00		
	25.90	2106.00	Cumt.	54,545.40
Item No. 3				
Foundation And Plinth				

		1912.00		
	65.60	1912.00	Cumt.	125,427.20
Item No. 4				
Copping				
		2712.00		
	3.90	2712.00	Cumt.	10,576.80
Item No. 5				
Murum Filling				
		250.00		
	27.40	250.00	Cumt.	6,850.00
Item No. 6				
Concrete Work In Foundation				
		2758.00		
	7.30	2758.00	Cumt.	20,133.40
Item No. 7				
Brick work				
		2549.00		
	47.00	2549.00	Cumt.	119,803.00
Item No. 8				
Slab				
(iii) Slab having more than 10 cm. and up to 13 cm. thickness		4503.00		
	10.80	4503.00	Cumt.	48,632.40
Item No. 9				
Lintel				
		4868.00		
	2.00	4868.00	Cumt.	9,736.00
Item No. 10				
TMT Bar				
		45.00		
	1090.00	45.00	Kg.	49,050.00
Item No.11				
Aluminum Section				
		2022.00		
	12.30	2022.00	Sqmt.	24,870.60
Item No.12				
Ventilation				
		463.00		
	2.00	463.00	Sqmt.	926.00
Item No.13				
Door				

		2671.00		
	1% L.S.	26.71		
	7.60	2697.71	Sqmt.	20,502.60
Item No.14				
PVC DOOR				
		1632.00		
	6.30	1632.00	Sqmt.	10,281.60
Item No. 15				
15mm Thick Single Coat Cement Plaster				
		103.00		
	332.10	103.00	Sqmt.	34,206.30
Item No. 16				
20mm Thick Single Coat Cement Plaster				
		205.00		
	273.10	205.00	Sqmt.	55,985.50
Item No. 17				
White Glazed Tiles				
		520.00		
	10.40	520.00	Sqmt.	5,408.00
Item No. 18				
Vitrified Tile				
		757.00		
	63.30	757.00	Sqmt.	47,918.10
Item No. 19				
Water Tank				
1000 Liter Capacity		4.60		
	2000	4.60	Ltr	9,200.00
Item No. 20				
110mm Dia U.P.V.C. Pipe				
(B) 110mm Dia.		525.00		
	50	525.00	Rmt.	26,250.00
Item No. 21				
25mm Dia P.V.C. Pipe				
[B] 25mm		63.80		
	60	63.80	Rmt.	3,828.00
Item No. 22				
Gun metal				
[C] Copper metal (i) 25mm dia		485.00		
	2	485.00	Each	970.00
Item No. 23				
Bib Taps				

15mm Dia.		217.00		
	1% L.S.	2.17		
	10	219.17	Each	2,191.70
Item No. 24				
Water Closet [Indian type W.C. pan]				
(A) Vitreous China (i) Long pattern - colour		589.00		
	6	589.00	Each	3,534.00
Item No. 25				
Footrest				
		86.50		
	6	86.50	Each	519.00
Item No. 26				
Wash Basin				
[ii] Flat back washbasin 550mm x 400mm size		889.00		
	4	889.00	Each	3,556.00
Item No. 27				
Socketpit of 5.00 Cum.				
		2686.00		
	1	2686.00	Each	2,686.00
Item No. 28				
Door				
		2131.00		
	4.80	2131.00	Sqmt.	10,228.80
Item No. 29				
Wall painting (two coats)				
		49.60		
	332.10	49.60	Sqmt.	16,472.16
Item No. 30				
Wether Proof Exterior Emulsion Paint				
		72.00		
	273.10	72.00	1.00	19,663.20
Item No. 31				
G.I. Rain water Spout				
		72.20		
	4	72.20	Each	288.80
Item No. 32				
Point Wiring				
	20	350.00	No.	7,000.00
Total Amounts Rs.....				755,226.32
Add 3% Contingency Charge Rs.....				22,656.79

Add 10% Water and Draneige Charge Rs.....	75,522.63
Net Amounts Rs.....	853,405.74
Say Amounts Rs.....	853,500.00

NAME OF WORK : CONSTRUCTION WORK OF POLICE SATION

MEASURMENT SHEET						
Item No. & Description	Nos.	Length	Width	Depth	Quantity	Total Qty.
Item No. 1						
Foundation						
Horizontal	1	5.45	0.60	1.20	3.92	
""	1	3.50	0.60	1.20	2.52	
""	1	6.95	0.60	1.20	5.00	
""	1	13.50	0.60	1.20	9.72	
""	1	14.70	0.60	1.20	10.58	
Vertical	1	4.56	0.60	1.20	3.28	
""	1	1.02	0.60	1.20	0.73	
""	1	2.95	0.60	1.20	2.12	
""	1	1.02	0.60	1.20	0.73	
""	2	0.87	0.60	1.20	1.25	
""	1	1.02	0.60	1.20	0.73	
""	1	1.02	0.60	1.20	0.73	
""	1	4.56	0.60	1.20	3.28	
""	2	1.20	0.60	1.20	1.73	
						Say:
				Total	46.36	46.40
						Cumt.
Item No. 2						
PCC						
Horizontal	1	5.45	0.60	0.15	0.49	
""	1	3.50	0.60	0.15	0.32	
""	1	6.95	0.60	0.15	0.63	
""	1	13.50	0.60	0.15	1.22	
""	1	14.70	0.60	0.15	1.32	
Vertical	1	4.56	0.60	0.15	0.41	
""	1	1.02	0.60	0.15	0.09	
""	1	2.95	0.60	0.15	0.27	
""	1	1.02	0.60	0.15	0.09	
""	2	0.87	0.60	0.15	0.16	
""	1	1.02	0.60	0.15	0.09	
""	1	1.02	0.60	0.15	0.09	
""	1	4.56	0.60	0.15	0.41	
""	2	1.20	0.60	0.15	0.22	
PCC Bedding						
Staff Toilet	1	1.87	1.24	0.33	0.77	

G Toilet	1	1.98	1.24	0.33	0.81	
Inquiry Room	1	2.60	2.71	0.33	2.33	
Store Room	1	3.48	1.24	0.33	1.42	
Toilet	1	1.87	1.24	0.33	0.77	
Staff Room	1	3.31	3.17	0.33	3.46	
Working Passage/Locker	1	10.04	3.17	0.33	10.50	
						Say:
				Total	25.85	25.90
						Cumt.
Item No. 3						
Foundation And Plinth						
At Foundation Level						
Horizontal	1	5.45	0.60	1.05	3.43	
""	1	3.50	0.60	1.05	2.21	
""	1	6.95	0.60	1.05	4.38	
""	1	13.50	0.60	1.05	8.51	
""	1	14.70	0.60	1.05	9.26	
Vertical	1	4.56	0.60	1.05	2.87	
""	1	1.02	0.60	1.05	0.64	
""	1	2.95	0.60	1.05	1.86	
""	1	1.02	0.60	1.05	0.64	
""	2	0.87	0.60	1.05	1.10	
""	1	1.02	0.60	1.05	0.64	
""	1	1.02	0.60	1.05	0.64	
""	1	4.56	0.60	1.05	2.87	
""	2	1.20	0.60	1.05	1.51	
At Plinth Level						
Horizontal	1	5.30	0.45	0.78	1.86	
""	1	3.50	0.45	0.78	1.23	
""	1	6.80	0.45	0.78	2.39	
""	1	13.80	0.45	0.78	4.84	
""	1	14.70	0.45	0.78	5.16	
Vertical	1	4.86	0.45	0.78	1.71	
""	1	1.24	0.45	0.78	0.44	
""	1	3.17	0.45	0.78	1.11	
""	1	1.24	0.45	0.78	0.44	
""	1	1.02	0.45	0.78	0.36	
""	1	1.02	0.45	0.78	0.36	
""	1	1.24	0.45	0.78	0.44	
""	1	1.24	0.45	0.78	0.44	
""	1	4.86	0.45	0.78	1.71	
""	1	4.86	0.45	0.78	1.71	
""	2	1.20	0.45	0.78	0.84	
						Say:
				Total	65.57	65.60
						Cumt.
Item No. 4						
Copping						
Horizontal	1	5.30	0.45	0.12	0.29	

""	1	3.50	0.45	0.12	0.19	
""	1	6.80	0.45	0.12	0.37	
""	1	13.80	0.45	0.12	0.75	
""	1	14.70	0.45	0.12	0.79	
Vertical	1	4.86	0.45	0.12	0.26	
""	1	1.24	0.45	0.12	0.07	
""	1	3.17	0.45	0.12	0.17	
""	1	1.24	0.45	0.12	0.07	
""	1	1.02	0.45	0.12	0.06	
""	1	1.02	0.45	0.12	0.06	
""	1	1.24	0.45	0.12	0.07	
""	1	1.24	0.45	0.12	0.07	
""	1	4.86	0.45	0.12	0.26	
""	1	4.86	0.45	0.12	0.26	
""	2	1.20	0.45	0.12	0.13	
						Say:
				Total	3.85	3.90
						Cumt.
Item No. 5						
Murrum Filling						
Staff Toilet	1	1.87	1.24	0.45	1.04	
G Toilet	1	1.98	1.24	0.45	1.10	
Inquiry Room	1	2.60	2.71	0.45	3.17	
Store Room	1	3.48	1.24	0.45	1.94	
Toilet	1	1.87	1.24	0.45	1.04	
Staff Room	1	3.31	3.17	0.45	4.72	
Working Passage/Locker	1	10.04	3.17	0.45	14.32	
						Say:
				Total	27.35	27.40
						Cumt.
Item No. 6						
Concrete Work In Foundation						
Staff Toilet	1	1.87	1.24	0.12	0.28	
G Toilet	1	1.98	1.24	0.12	0.29	
Inquiry Room	1	2.60	2.71	0.12	0.85	
Store Room	1	3.48	1.24	0.12	0.52	
Toilet	1	1.87	1.24	0.12	0.28	
Staff Room	1	3.31	3.17	0.12	1.26	
Working Passage/Locker	1	10.04	3.17	0.12	3.82	
						Say:
				Total	7.29	7.30
						Cumt.
Item No. 7						
Brick work						
Horizontal	1	4.85	0.23	3.00	3.35	
""	1	3.50	0.23	3.00	2.42	
""	1	6.35	0.23	3.00	4.38	
""	1	14.24	0.23	3.00	9.83	
""	1	14.70	0.23	3.00	10.14	

Parapet	1	5.08	0.23	0.90	1.05	
""	1	3.50	0.23	0.90	0.72	
""	1	6.58	0.23	0.90	1.36	
""	1	14.70	0.23	0.90	3.04	
Vertical	1	5.30	0.23	3.00	3.66	
""	1	1.57	0.23	3.00	1.08	
""	1	3.50	0.23	3.00	2.42	
""	2	3.04	0.23	3.00	4.20	
""	1	1.57	0.23	3.00	1.08	
""	1	5.30	0.23	3.00	3.66	
""	2	1.20	0.23	3.00	1.66	
			Total (A)		54.04	Cumt.
Deduction :						
Main door - MD	1	1.80	0.23	2.10	0.87	
Door - D	2	0.90	0.23	2.10	0.87	
Door - D1	3	0.75	0.23	2.10	1.09	
Window - W	5	1.80	0.23	1.20	2.48	
Window - W1	1	1.20	0.23	1.20	0.33	
Ventilation - V	2	0.60	0.23	0.45	0.12	
Ventilation - V1	1	1.20	0.23	1.20	0.33	
Opening - O	1	0.90	0.23	2.10	0.43	
Opening - O1	1	1.13	0.23	2.10	0.55	
			Total (B)		7.08	Say:
			Net Quantity (A-B)		46.96	47.00
						Cumt.
Item No. 8						
Slab						
(iii) Slab having more than 10 cm. and up to 13 cm. thickness						
Slab	1	14.70	5.76	0.12	10.16	
""	1	3.50	1.47	0.12	0.62	
						Say:
				Total	10.78	10.80
						Cumt.
Item No. 9						
Lintel						
Lintel						
Horizontal	1	4.85	0.23	0.12	0.13	
""	1	3.50	0.23	0.12	0.10	
""	1	6.35	0.23	0.12	0.18	
""	1	14.24	0.23	0.12	0.39	
""	1	14.70	0.23	0.12	0.41	
Vertical	1	5.30	0.23	0.12	0.15	
""	1	1.57	0.23	0.12	0.04	
""	1	3.50	0.23	0.12	0.10	
""	2	3.04	0.23	0.12	0.17	
""	1	1.57	0.23	0.12	0.04	
""	1	5.30	0.23	0.12	0.15	
""	2	1.20	0.23	0.12	0.07	

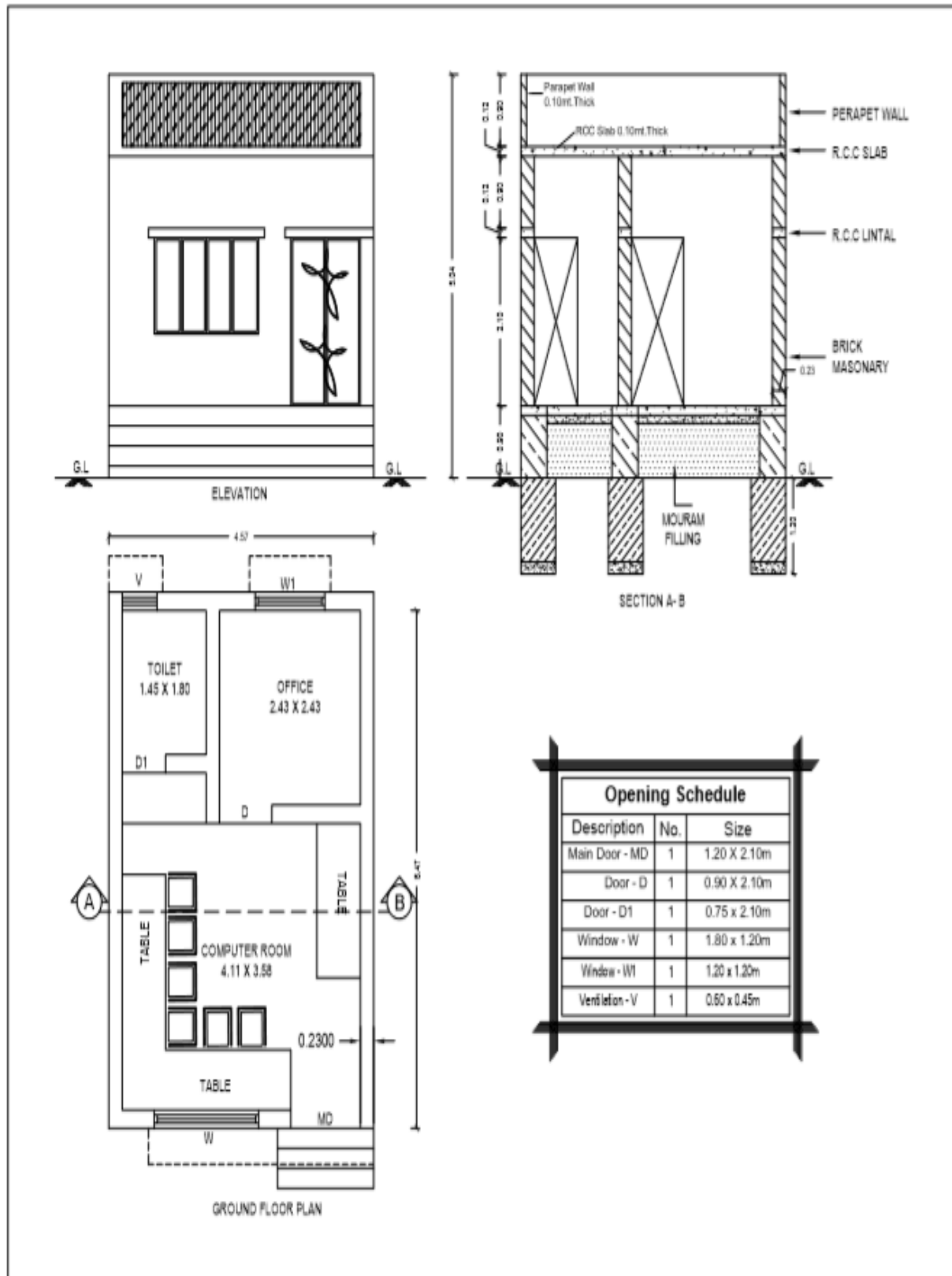
						Say:
				Total	1.91	2.00
						Cumt.
Item No. 10						
TMT Bar						
	No.	Qty.	Weight / Cumt			
Copping	1	3.90	60.00		234.00	
Slab	1	10.80	70.00		756.00	
Lintel	1	2.00	50.00		100.00	Say:
				Total	1090.00	1090.00
						Kg.
Item No.11						
Aluminum Section						
Window- W	5	1.80	-	1.20	10.80	
Window- W1	1	1.20	-	1.20	1.44	
						Say:
				Total	12.24	12.30
						Sqmt.
Item No.12						
Ventilation						
Ventilation - V	2	0.60	-	0.45	0.54	
Ventilation - V1	1	1.20	-	1.20	1.44	
						Say:
				Total	1.98	2.00
						Sqmt.
Item No.13						
Door						
Main door - MD	1	1.80	-	2.10	3.78	
Door - D	2	0.90	-	2.10	3.78	
						Say:
				Total	7.56	7.60
						Sqmt.
Item No.14						
PVC DOOR						
Door - D1	4	0.75	-	2.10	6.30	
						Say:
				Total	6.30	6.30
						Sqmt.
Item No. 15						
15mm Thick Single Coat Cement Plaster						
Inside wall						
Staff Toilet	2	2.20	-	3.12	13.73	
""	2	1.57	-	3.12	9.80	
Ceilling	1	2.20	1.57	-	3.45	
G toilet	2	2.20	-	3.12	13.73	
""	2	1.57	-	3.12	9.80	
Ceilling	1	2.20	1.57	-	3.45	
Inquiry Room	4	3.04	-	3.12	37.94	

Ceilling	1	3.04	3.04	-	9.24	
Store Room	2	3.70	-	3.12	23.09	
""	2	1.57	-	3.12	9.80	
Ceilling	1	3.70	1.57	-	5.81	
Toilet	2	2.20	-	3.12	13.73	
""	2	1.57	-	3.12	9.80	
Ceilling	1	2.20	1.57	-	3.45	
Staff Room	2	3.64	-	3.12	22.71	
""	2	3.50	-	3.12	21.84	
Ceilling	1	3.64	3.50	-	12.74	
Working Passage/Locker	2	6.50	-	3.12	40.56	
""	1	3.50	-	3.12	10.92	
Ceilling	1	6.50	3.50	-	22.75	
Locker	2	3.64	-	3.12	22.71	
""	1	3.50	-	3.12	10.92	
Ceilling	1	3.64	3.50	-	12.74	
Entry	2	1.43	-	3.12	8.92	
Ceilling	1	1.43	1.43	-	2.04	
				Total(A)	355.68A
Deduction						
Main door - MD	1	1.80	-	2.10	3.78	
Door - D	2	0.90	-	2.10	3.78	
Door - D1	3	0.75	-	2.10	4.73	
Window - W	2.50	1.80	-	1.20	5.40	
Window - W1	0.50	1.20	-	1.20	0.72	
Ventilation - V	1	0.60	-	0.45	0.27	
Ventilation - V1	0.50	1.20	-	1.20	0.72	
Opening - O	1	0.90	-	2.10	1.89	
Opening - O1	1	1.13	-	2.10	2.37	
				Total(B)	23.66B
				Net Quantity (A-B)	332.02	332.10
						Sqmt.
Item No. 16						
20mm Thick Single Coat Cement Plaster						
Outside wall						
Horizontal	2	14.70	-	5.04	148.18	
Vertical	2	8.43	-	5.04	84.97	
Chhajah - Top & Bottom						
Window -W	5	2.00	0.45	-	4.50	
Window -W1	1	1.40	0.45	-	0.63	
Ventilation - V	1	1.64	0.45	-	0.74	
Ventilation - V1	1	1.40	0.45	-	0.63	
Parapet Inside - Horizontal	2	14.24	-	0.90	25.63	
Vertical	2	6.77	-	0.90	12.19	
Steps - Riser	3	2.26	-	0.15	1.02	
Tread	3	2.26	0.25	-	1.70	
				Total	280.18	
Deduction						

Window - W	2.50	1.80	-	1.20	5.40	
Window - W1	0.50	1.20	-	1.20	0.72	
Ventilation - V	1	0.60	-	0.45	0.27	
Ventilation - V1	0.50	1.20	-	1.20	0.72	
				Total	7.11	Say:
				Net Quantity	273.07	273.10
						Sqmt.
Item No. 17						
White Glazed Tiles						
Staff Toilet	1	2.20	1.57	-	3.45	
G Toilet	1	2.20	1.57	-	3.45	
Toilet	1	2.20	1.57	-	3.45	
						Say:
				Total	10.36	10.40
						Sqmt.
Item No. 18						
Vitrified Tile						
Staff Room	1	3.64	3.50	-	12.74	
Inquiry Room	1	3.04	3.04	-	9.24	
Working Passage/Locker	1	6.50	3.50	-	22.75	
Store Room	1	3.70	1.57	-	5.81	
Locker	1	3.64	3.50	-	12.74	
				Total	63.28	63.30
						Sqmt.
Item No. 19						
Water Tank						
1000 Liter Capacity	2	1000	-	-	2000	2000
						Litre
Item No. 20						
110mm Dia U.P.V.C. Pipe						
(B) 110mm Dia.	1	50.00	-	-	50.00	50.00
						Rmt.
Item No. 21						
25mm Dia P.V.C. Pipe						
[B] 25mm	2	30.00	-	-	60.00	60.00
						Rmt.
Item No. 22						
Gun metal						
[C] Copper metal (i) 25mm dia	2	-	-	-	2	2
						Each
Item No. 23						
Bib Taps						
15mm Dia.	10	-	-	-	10	10
						Each
Item No. 24						
Water Closet [Indian type W.C. pan]						
(A) Vitreous China (i) Long pattern -						

colour						
For Toilet	6	-	-	-	6	
				Total	6	6
						Each
Item No. 25						
Footrest						
Qty. as per	Item No. 24				6	6
						Each
Item No. 26						
Wash Basin						
[ii] Flat back washbasin 550mm x 400mm size	4	-	-	-	4	4
[i] In white colour						Each
Item No. 27						
Sockpit of 5.00 Cum.						
	1	-	-	-	1	1
						Each
Item No. 28						
Door						
Door - D1	3	0.75	-	2.10	4.73	
						Say:
				Total	4.73	4.80
						Sqmt.
Item No. 29						
Wall painting (two coats)						
Qty. as per	Item No. 15				332.10	
						Say:
				Total	332.10	332.10
Item No. 30						Sqmt
Wether Proof Exterior Emulsion Paint						Say:
Qty. as per	Item No. 16				273.10	273.10
						Sqmt
Item No. 31						
G.I. Rain water Spout	4	-	-	-	4	4
						Each
Item No. 32						
Point Wiring						
	20	-	-	-	20	20
						No.

IV – CYBER CAFE:-



NAME OF WORK : CONSTRUCTION WORK OF POLICE STATION

ABSTRACT SHEET				
Total Estimated Cost of Rs.365000.00		<i>Rate as per Amreli R&B SOR 2015-16</i>		
Item No. & Description	Total Qty.	Rate	Per	Amount
Item No. 1				
Foundation				
		85.90		
	19.60	85.90	Cumt.	1,683.64
Item No. 2				
PCC				
		2106.00		
	2.50	2106.00	Cumt.	5,265.00
Item No. 3				
Foundation And Plinth				
		1912.00		
	27.10	1912.00	Cumt.	51,815.20
Item No. 4				
Copping				
		2712.00		
	1.60	2712.00	Cumt.	4,339.20
Item No. 5				
Murum Filling				
		250.00		
	7.70	250.00	Cumt.	1,925.00
Item No. 6				
Concrete Work In Foundation				
		2758.00		
	2.10	2758.00	Cumt.	5,791.80
Item No. 7				
Brick work				
		2549.00		
	19.10	2549.00	Cumt.	48,685.90
Item No. 8				
Slab				
(iii) Slab having more than 10 cm. and up to 13 cm. thickness		4503.00		
	3.70	4503.00	Cumt.	16,661.10
Item No. 9				
Lintel				
		4868.00		
	0.70	4868.00	Cumt.	3,407.60
Item No. 10				
TMT Bar				
		45.00		
	390.00	45.00	Kg.	17,550.00
Item No.11				
Aluminum Section				

		2022.00		
	3.60	2022.00	Sqmt.	7,279.20
Item No.12				
Ventilation				
		463.00		
	0.30	463.00	Sqmt.	138.90
Item No.13				
Door				
		2671.00		
	1% L.S.	26.71		
	7.60	2697.71	Sqmt.	20,502.60
Item No.14				
PVC DOOR				
		1632.00		
	6.30	1632.00	Sqmt.	10,281.60
Item No. 15				
15mm Thick Single Coat Cement Plaster				
		103.00		
	108.60	103.00	Sqmt.	11,185.80
Item No. 16				
20mm Thick Single Coat Cement Plaster				
		205.00		
	133.30	205.00	Sqmt.	27,326.50
Item No. 17				
White Glazed Tiles				
		520.00		
	2.70	520.00	Sqmt.	1,404.00
Item No. 18				
Vitrified Tile				
		757.00		
	23.30	757.00	Sqmt.	17,638.10
Item No. 19				
Water Tank				
1000 Liter Capacity		4.60		
	2000	4.60	Ltr	9,200.00
Item No. 20				
110mm Dia U.P.V.C. Pipe				
(B) 110mm Dia.		525.00		
	50	525.00	Rmt.	26,250.00
Item No. 21				
25mm Dia P.V.C. Pipe				
[B] 25mm		63.80		
	60	63.80	Rmt.	3,828.00
Item No. 22				
Gun metal				
[C] Copper metal (i) 25mm dia		485.00		
	1	485.00	Each	485.00
Item No. 23				
Bib Taps				

15mm Dia.		217.00		
	1% L.S.	2.17		
	3	219.17	Each	657.51
Item No. 24				
Water Closet [Indian type W.C. pan]				
(A) Vitreous China (i) Long pattern - colour		589.00		
	1	589.00	Each	589.00
Item No. 25				
Footrest				
		86.50		
	1	86.50	Each	86.50
Item No. 26				
Wash Basin				
[ii] Flat back washbasin 550mm x 400mm size		889.00		
	4	889.00	Each	3,556.00
Item No. 27				
Sockpit of 5.00 Cum.				
		2686.00		
	1	2686.00	Each	2,686.00
Item No. 28				
Door				
		2131.00		
	1.60	2131.00	Sqmt.	3,409.60
Item No. 29				
Wall painting (two coats)				
		49.60		
	108.60	49.60	Sqmt.	5,386.56
Item No. 30				
Wether Proof Exterior Emulsion Paint				
		72.00		
	133.30	72.00	1.00	9,597.60
Item No. 31				
G.I. Rain water Spout				
		72.20		
	2	72.20	Each	144.40
Item No. 32				
Point Wiring				
	12	350.00	No.	4,200.00
Total Amounts Rs.....				322,957.31
Add 3% Contingency Charge Rs.....				9,688.72
Add 10% Water ChargeRs.....				32,295.73
Net Amounts Rs.....				364,941.76
Say Amounts Rs.....				365,000.00

NAME OF WORK : CONSTRUCTION WORK OF POLICE STATION

MEASUREMENT SHEET						
Item No. & Description	Nos.	Length	Width	Depth	Quantity	Total Qty.
Item No. 1						
Foundation						
Horizontal	3	4.57	0.60	1.20	9.87	
""	1	0.71	0.60	1.20	0.51	
Vertical	2	5.50	0.60	1.20	7.92	
""	1	1.69	0.60	1.20	1.22	
						Say:
				Total	19.52	19.60
						Cumt.
Item No. 2						
PCC						
Horizontal	3	4.57	0.60	0.15	1.23	
""	1	0.71	0.60	0.15	0.06	
Vertical	2	5.50	0.60	0.15	0.99	
""	1	1.69	0.60	0.15	0.15	
						Say:
				Total	2.44	2.50
						Cumt.
Item No. 3						
Foundation And Plinth						
At Foundation Level						
Horizontal	3	4.57	0.60	1.05	8.64	
""	1	0.71	0.60	1.05	0.45	
Vertical	2	5.50	0.60	1.05	6.93	
""	1	1.69	0.60	1.05	1.06	
Plinth						
Horizontal	3	4.57	0.45	0.78	4.81	
""	1	1.01	0.45	0.78	0.35	
Vertical	2	5.80	0.45	0.78	4.07	
""	1	1.99	0.45	0.78	0.70	
						Say:
				Total	27.02	27.10
						Cumt.
Item No. 4						
Copping						
Horizontal	3	4.57	0.45	0.12	0.74	
""	1	1.01	0.45	0.12	0.05	
Vertical	2	5.80	0.45	0.12	0.63	
""	1	1.99	0.45	0.12	0.11	
						Say:
				Total	1.53	1.60
						Cumt.
Item No. 5						
Murum Filling						

	1	3.37	3.36	0.45	5.10	
	1	2.21	1.99	0.45	1.98	
	1	1.01	1.36	0.45	0.62	
						Say:
				Total	7.70	7.70
						Cumt.
Item No. 6						
Concrete Work In Foundation						
Computer Room	1	3.37	3.36	0.12	1.36	
Office	1	2.21	1.99	0.12	0.53	
Toilet	1	1.01	1.36	0.12	0.16	
						Say:
				Total	2.05	2.10
						Cumt.
Item No. 7						
Brick work						
Horizontal	2	4.57	0.23	3.12	6.56	
""	1	2.43	0.23	3.12	1.74	
Vertical	2	6.24	0.23	3.12	8.96	
""	1	1.57	0.23	3.12	1.13	
""	1	2.66	0.23	3.12	1.91	
""	1	1.45	0.23	3.12	1.04	
			Total (A)		21.33	Cumt.
Deduction :						
Main door - MD	1	1.20	0.23	2.10	0.58	
Door - D	1	0.90	0.23	2.10	0.43	
Door - D1	1	0.75	0.23	2.10	0.36	
Window - W	1	1.80	0.23	1.20	0.50	
Window - W1	1	1.20	0.23	1.20	0.33	
Ventilation - V	1	0.60	0.23	0.45	0.06	
			Total (B)		2.27	Say:
		Net Quantity (A-B)			19.07	19.10
						Cumt.
Item No. 8						
Slab						
(iii) Slab having more than 10 cm. and up to 13 cm. thickness						
Slab	1	4.57	6.70	0.12	3.67	
						Say:
				Total	3.67	3.70
						Cumt.
Item No. 9						
Lintel						
Lintel						
Horizontal	2	4.57	0.23	0.12	0.25	
""	1	2.43	0.23	0.12	0.07	
Vertical	1	6.24	0.23	0.12	0.17	
""	1	1.57	0.23	0.12	0.04	
""	1	2.66	0.23	0.12	0.07	

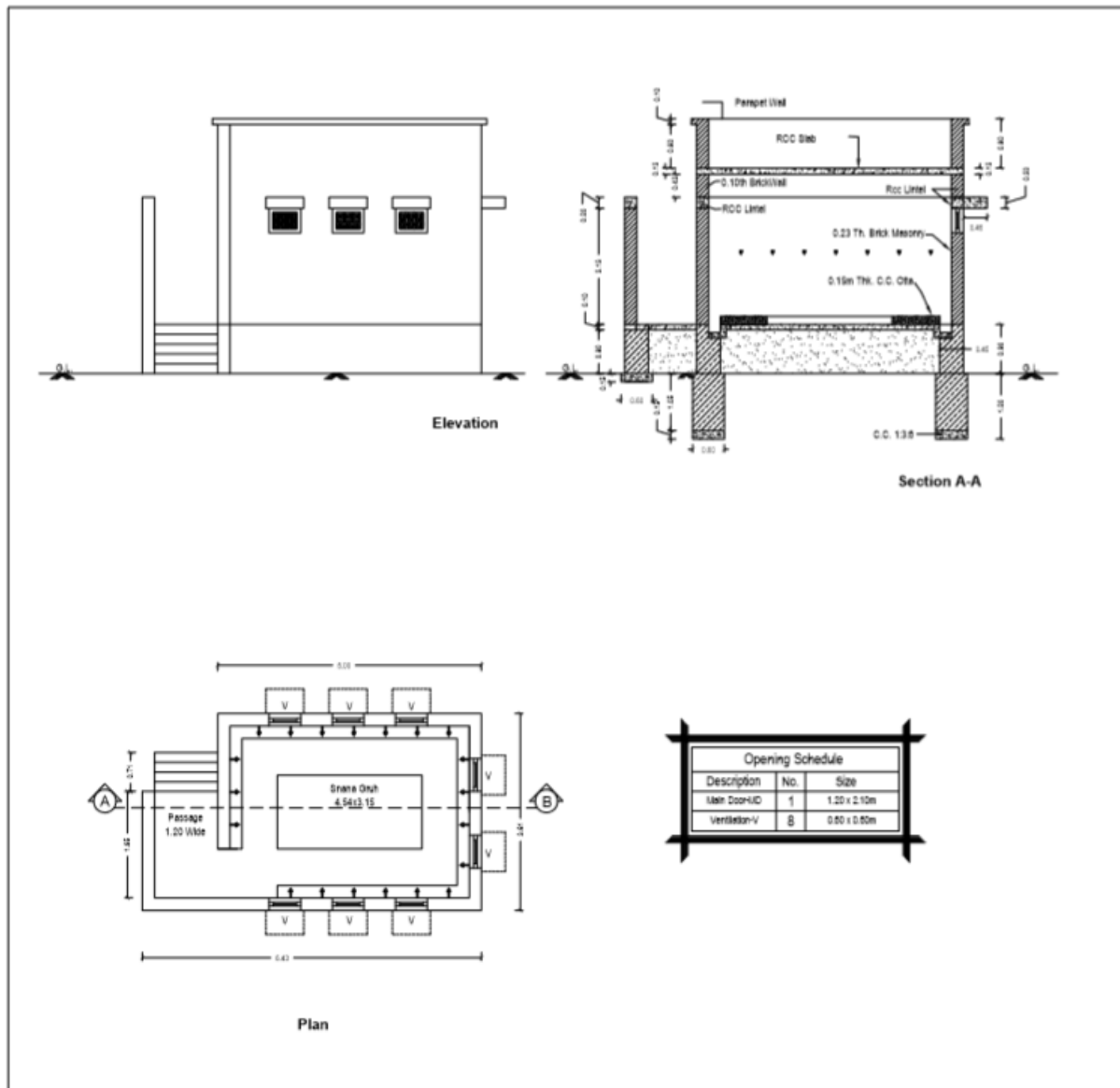
'''	1	1.45	0.23	0.12	0.04	
						Say:
				Total	0.65	0.70
						Cumt.
Item No. 10						
TMT Bar						
	No.	Qty.	Weight / Cumt			
Copping	1	1.60	60.00		96.00	
Slab	1	3.70	70.00		259.00	
Lintel	1	0.70	50.00		35.00	Say:
				Total	390.00	390.00
						Kg.
Item No.11						
Aluminum Section						
Window- W	1	1.80	-	1.20	2.16	
Window- W1	1	1.20	-	1.20	1.44	
						Say:
				Total	3.60	3.60
						Sqmt.
Item No.12						
Ventilation						
Ventilation - V	1	0.60	-	0.45	0.27	
						Say:
				Total	0.27	0.30
						Sqmt.
Item No.13						
Door						
Main door - MD	1	1.80	-	2.10	3.78	
Door - D	2	0.90	-	2.10	3.78	
						Say:
				Total	7.56	7.60
						Sqmt.
Item No.14						
PVC DOOR						
Door - D1	4	0.75	-	2.10	6.30	
						Say:
				Total	6.30	6.30
						Sqmt.
Item No. 15						
15mm Thick Single Coat Cement Plaster						
Inside wall						
Computer Room	2	4.11	-	3.12	25.65	
	2	3.58	-	3.12	22.34	
Celing	1	4.11	3.58		14.71	
Office	2	2.43	-	3.12	15.16	
	2	2.43	-	3.12	15.16	
Celing	1	2.43	2.43		5.90	
Toilet	2	1.45	-	3.12	9.05	
	2	1.80	-	3.12	11.23	

Celing	1	1.45	1.80		2.61	
				Total(A)	121.82A
Deduction						
Main door - MD	1	1.20	-	2.10	2.52	
Door - D	2	0.90	-	2.10	3.78	
Door - D1	2	0.75	-	2.10	3.15	
Window - W	1	1.80	-	1.20	2.16	
Window - W1	1	1.20	-	1.20	1.44	
Ventilation - V	1	0.60	-	0.45	0.27	
				Total(B)	13.32B
				Net Quantity (A-B)	108.50	108.60
						Sqmt.
Item No. 16						
20mm Thick Single Coat Cement Plaster						
Outside wall						
Horizontal	2	6.70	-	5.04	67.54	
Vertical	2	4.57	-	5.04	46.07	
Chhajah - Top & Bottom						
Window -W	2	2.10	0.45	-	1.89	
Window -W1	2	1.50	0.45	-	1.35	
Ventilation - V	2	0.90	0.45	-	0.81	
Parapet Inside - Horizontal	2	4.57	-	0.90	8.23	
Vertical	2	6.24	-	0.90	11.23	
				Total	137.11	
Deduction						
Window - W	1	1.80	-	1.20	2.16	
Window - W1	1	1.20	-	1.20	1.44	
Ventilation - V	1	0.60	-	0.45	0.27	
				Total	3.87	Say:
				Net Quantity	133.24	133.30
						Sqmt.
Item No. 17						
White Glazed Tiles						
Toilet	1	1.45	1.80	-	2.61	
						Say:
				Total	2.61	2.70
						Sqmt.
Item No. 18						
Vitrified Tile						
Computer Room	1	4.11	3.58	-	14.71	
Office	1	2.43	2.43	-	5.90	
Toilet	1	1.45	1.80	-	2.61	
						Say:
				Total	23.23	23.30
						Sqmt.
Item No. 19						
Water Tank						
1000 Liter Capacity	2	1000	-	-	2000	2000

						Litre
Item No. 20						
110mm Dia U.P.V.C. Pipe						
(B) 110mm Dia.	1	50.00	-	-	50.00	50.00
						Rmt.
Item No. 21						
25mm Dia P.V.C. Pipe						
[B] 25mm	2	30.00	-	-	60.00	60.00
						Rmt.
Item No. 22						
Gun metal						
[C] Copper metal (i) 25mm dia	1	-	-	-	1	1
						Each
Item No. 23						
Bib Taps						
15mm Dia.	3	-	-	-	3	3
						Each
Item No. 24						
Water Closet [Indian type W.C. pan]						
(A) Vitreous China (i) Long pattern - colour						
For Toilet	1	-	-	-	1	
				Total	1	1
						Each
Item No. 25						
Footrest						
Qty. as per	Item No. 24				1	1
						Each
Item No. 26						
Wash Basin						
[ii] Flat back washbasin 550mm x 400mm size	4	-	-	-	4	4
[i] In white colour						Each
Item No. 27						
Sockpit of 5.00 Cum.						
	1	-	-	-	1	1
						Each
Item No. 28						
Door						
Door - D1	1	0.75	-	2.10	1.58	
						Say:
				Total	1.58	1.60
						Sqmt.
Item No. 29						
Wall painting (two coats)						
Qty. as per	Item No. 15				108.60	
						Say:
				Total	108.60	108.60
Item No. 30						Sqmt
Wether Proof Exterior Emulsion Paint						Say:

Qty. as per	Item No. 16				133.30	133.30
						Sqmt
Item No. 31						
G.I. Rain water Spout	2	-	-	-	2	2
						Each
Item No. 32						
Point Wiring						
	12	-	-	-	12	12
						No.

V – PUBLIC BATH:-



NAME OF WORK : ESTIMATE FOR CONSTRUCTION WORK OF SNANAGRUH

ABSTRACT SHEET

Estimated Cost Rs. 396900.00

Amreli R&B SOR Year : 2015-16

Item No. & Description	Quantity	Rate	Per	Amount
Item No. 1				
Foundation		85.90		
	17.50	85.90	Cumt.	1502.91
Item No. 2				
P.C.C		2255.00		
	3.69	2255.00	Cumt.	8326.02
Item No. 3				
Foundation		1742.00		
	15.86	1742.00	Cumt.	27620.72
Item No. 4				
Copping		2712.00		
	0.85	2712.00	Cumt.	2306.56
Item No. 5				
Chhajja		5322.00		
	0.29	5322.00	Cumt.	1519.96
Item No. 6				
Slab		4503.00		
	3.20	4503.00	Cumt.	14400.59
Item No. 7				
Lintel		4868.00		
	18.66	4868.00	Cumt.	90855.38
Item No. 8				
T M T bar FE-415		44.30		
	477.00	44.30	Kg	21131.10
Item No. 9				
Brick Work		2973.00		
	18.66	2973.00	Cumt.	55487.48
Item No.10				
Half brick masonry		381.00		
	4.59	381.00	Sqmt	1748.79
Item No. 11				
Murum Filing		287.00		
	11.99	287.00	Cumt.	3440.56
Item No. 12				
Precast Cement Concrete Jali		487.00		
	2.16	487.00	Sqmt	1051.92
Item No. 13				
5 mm thick cement plaster		117.00		
	57.71	117.00	Sqmt	6751.49

Item No. 14				
20mm thick cement plaster		205.00		
	85.89	205.00	Sqmt	17607.45
Item No. 15				
Wall painting		49.60		
	57.71	49.60	Sqmt	2862.17
Item No. 16				
Weather Proof Exterior Emulsion Pain		72.00		
	85.89	72.00	Sqmt	6184.08
Item No. 17		1.00		
Polished Kota stone		760.00		
	22.72	760.00	Sqmt	17267.20
Item No. 18				
Providing and laying Kota stone slab 25 mm.		664.00		
	4.73	664.00	Sqmt	3140.99
Item No. 19				
Coloured glazed tiles		891.00		
	55.31	891.00	Sqmt	49281.21
Item No. 20				
Water Tank		4.60		
	1000.00	4.60	Ltr.	4600.00
Item No. 21				
Nahni Trap		351.00		
	6	351.00	No.	2106.00
Item No. 22				
Gun metal check		485.00		
	2	485.00	No.	970.00
Item No. 23				
Bib taps		217.00		
	20	217.00	No.	4340.00
Item No. 24				
U.P.V.C. Pipe				
(A) 15mm dia.		84.90		
	15.00	84.90	Rmt	1273.50
(B) 25mm dia.		107.00		
	15.00	107.00	Rmt	1605.00
(D) 40mm dia.		173.00		
	15.00	173.00	Rmt	2595.00
Item No. 25				
U.P.V.C. SWR				
		918.00		
(A) 160mm dia.	10.00	918.00	Rmt	9180.00
		525.00		
(B) 110mm dia.	10.00	525.00	Rmt	5250.00
Item No. 26				
G.I. Rain water spout				
		72.20		
	4	72.20	No.	288.80

Item No. 31				
Point wiring		350.00		
	8	350.00	Pts.	2800.00
Total Amounts Rs.....				367,494.86
Add 3% Contingency Charge Rs.....				11,024.85
Add 5% Water Charge Rs.....				18,374.74
Net Amounts Rs.....				396,894.45
Say Amounts Rs.....				396,900.00

MEASUREMENT SHEETS						
Item No. & Description	Nos.	Length	Width	Depth	Quantity	Total Qty.
Item No. 1						
Foundation						
	2	6.60	0.45	1.60	9.50	
	3	3.70	0.45	1.60	7.99	
				Total :	17.50	17.50
					Cumt.	Cumt.
Item No. 2						
P.C.C						
	2	6.60	0.45	0.15	0.89	
	3	3.70	0.45	0.15	0.75	
	2	0.60	0.45	0.10	0.05	
	1	5.55	3.60	0.10	2.00	
				Total :	3.69	3.69
					Cumt.	Cumt.
Item No. 3						
Foundation						
	2	6.60	0.45	1.45	8.61	
	3	3.70	0.45	1.45	7.24	
				Total :	15.86	15.86
					Cumt.	Cumt.
Item No. 4						
Copping						
	2	6.60	0.35	0.10	0.46	
	3	3.70	0.35	0.10	0.39	
				Total :	0.85	0.85
					Cumt.	Cumt.
Item No. 5						
Chhajja						
Chhajja	4	0.70	0.85	0.12	0.29	0.29
					Cumt.	Cumt.
Item No. 6						
Slab						
Slab	1	6.50	4.10	0.12	3.20	3.20
					Cumt.	Cumt.

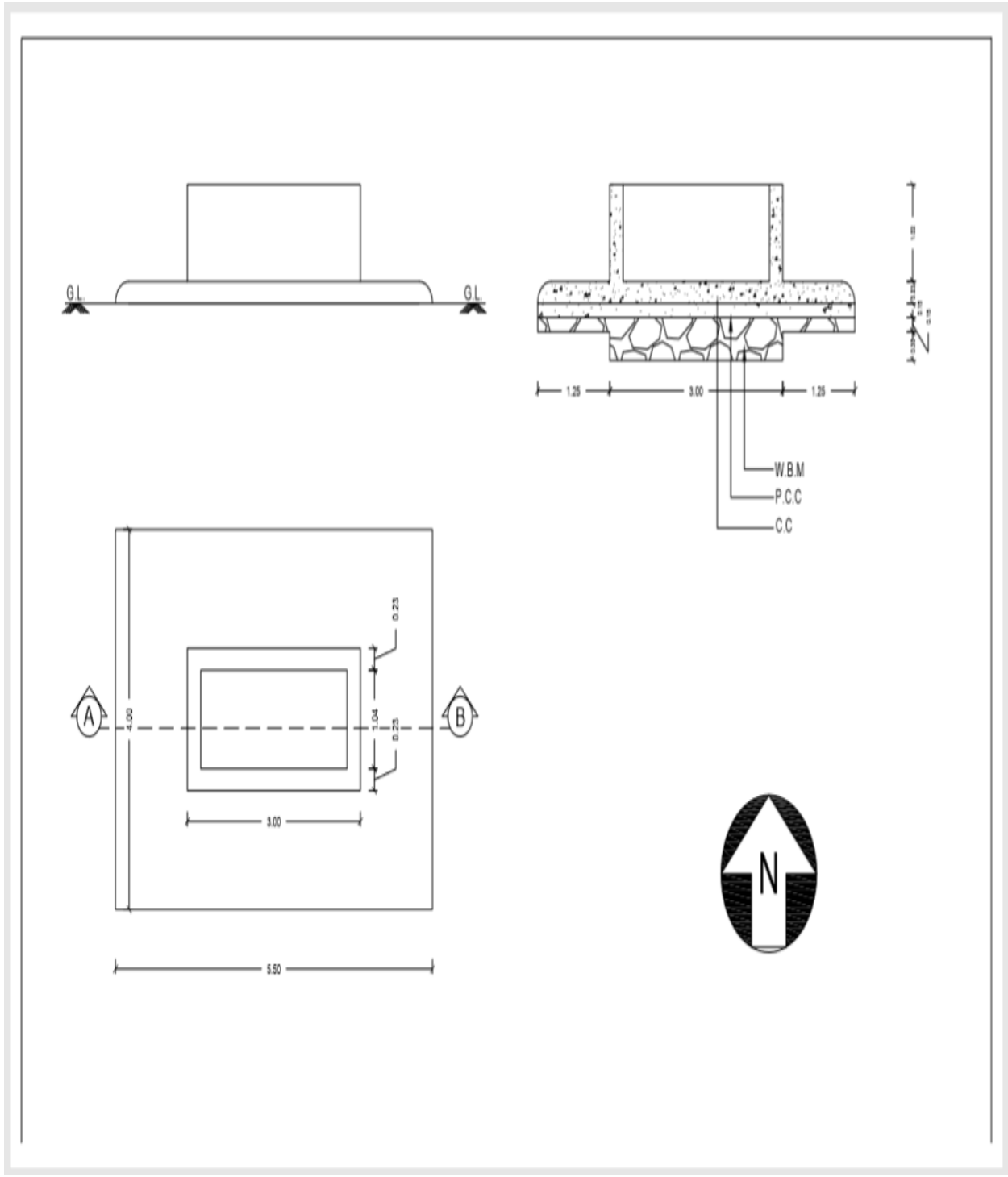
Item No. 7						
Lintel						
Lintel	2	6.60	0.23	0.12	0.36	
	2	3.70	0.23	0.12	0.20	
	1	1.60	0.23	0.12	0.04	
				Total:	0.61	0.61
					Cumt.	Cumt.
Item No. 8						
T M T bar FE-415						
Copping	0.85	90.00	Kg. / Cumt.		76.55	
Chajja Slab	0.29	90.00	Kg. / Cumt.		25.70	
Lintel	0.61	90.00	Kg. / Cumt.		55.14	
Slab	3.20	100.00	Kg. / Cumt.		319.80	
				Total :	477.19	477.00
					Kg	Kg.
Item No. 9						
Brick Work						
Plinth Brick	2	6.60	0.35	0.60	2.77	
	3	3.70	0.35	0.60	2.33	
For Wall	2	6.50	0.23	2.65	7.92	
	1	1.60	0.23	2.65	0.98	
	2	3.70	0.23	2.65	4.51	
	2	1.10	0.23	0.30	0.15	
				Total :	18.66	18.66
					Cumt.	Cumt.
Item No.10						
Half brick masonry						
	1	6.50	-	0.45	2.93	
	1	3.70	-	0.45	1.67	
				Total:	4.59	4.59
					Sqmt.	Sqmt.
Item No. 11						
Murrum Filing						
	1	5.55	3.60	0.60	11.99	
					0.00	
				Total:	11.99	11.99
					Cumt.	Cumt.
Item No. 12						
Precast Cement Concrete Jali						
	8	0.60	-	0.45	2.16	
				Total :	2.16	2.16
					Sqmt.	Sqmt.
Item No. 13						
5 mm thick cement plaster						
In Side	1	4.60	-	2.80	12.88	
	2	4.85	-	2.65	25.71	
	1	3.20	-	2.65	8.48	
	1	3.80	-	2.80	10.64	
				Total :	57.71	57.71

					Sqmt.	Sqmt.
Item No. 14						
20mm thick cement plaster						
Out Side	1	6.50	-	4.20	27.30	
	2	3.70	-	4.20	31.08	
	1	6.55	-	4.20	27.51	
				Total :	85.89	85.89
					Sqmt.	Sqmt.
Item No. 15						
Wall painting						
As Per It. No. 10 Qty.	-	-	-	-	57.71	57.71
						Sqmt.
Item No. 16						
Weather Proof Exterior Emulsion Pain						
As Per It. No. 11 Qty.	-	-	-	-	85.89	85.89
						Sqmt.
Item No. 17						
Polished Kota stone						
	1	5.15	-	3.60	18.54	
	1	3.80	-	1.10	4.18	
				Total :	22.72	22.72
					Sqmt.	Sqmt.
Item No. 18						
Providing and laying Kota stone slab 25 mm.						
Trade	4	1.43	-	0.18	1.03	
Riser	5	1.43	-	0.18	1.29	
Door Frame	2	2.13	-	0.23	0.98	
"	1	0.90	-	0.23	0.21	
Otta side	2	2.74	-	0.15	0.82	
"	2	1.35	-	0.15	0.41	
				Total :	4.73	4.73
						Sqmt
Item No. 19						
Coloured glazed tiles						
	1	5.30	-	2.70	14.31	
	1	3.80	-	2.00	7.60	
	2	4.85	-	2.00	19.40	
	1	3.20	-	2.00	6.40	
	1	3.80	-	2.00	7.60	
				Total :	55.31	55.31
						Sqmt.
Item No. 20						
Water Tank						
	1	1000	-	-	1000	1000
						Ltr.
Item No. 21						
Nahni Trap						

	6	-	-	-	6	6
						No.
Item No. 22						
Gun metal check						
	2	-	-	-	2	2
						No.
Item No. 23						
Bib taps						
	20	-	-	-	20	20
						No.
Item No. 24						
U.P.V.C. Pipe						
(A) 15mm dia.	1	15.00			15.00	15.00
						Rmt.
(B) 25mm dia.	1	15.00			15.00	15.00
						Rmt.
(D) 40mm dia.	1	15.00			15.00	15.00
						Rmt.
Item No. 25						
U.P.V.C. SWR						
(A) 160mm dia.	1	10.00			10.00	10.00
						Rmt.
(B) 110mm dia.	1	10.00			10.00	10.00
						Rmt.
Item No. 26						
G.I. Rain water spout						
	4				4	4
						No.
Item No. 27						
Flush door						
	1	2.05	-	1.05	2.15	2.15
					Sqmt.	Sqmt.
Item No. 28						
Gun metal chek						
[E] 40mm dia	1	-	-	-	1	1
					No.	No.
Item No. 29						
Gully Chamber						
	1	-	-	-	1	1
					No.	No.
Item No. 30						
Chine Mosaic						
	1	6.25	-	3.85	24.06	24.06
					Sqmt.	Sqmt.
Item No. 31						
Point wiring						

	8	-	-	-	8.0	
				Total :	8.0	8.0
						Pts.

VI – AVEDO:-



NAME OF WORK : ESTIMATE FOR CONSTRUCTION WORK OF SNANAGRUH**ABSTRACT SHEET**

Estimated Cost Rs. 74800.00

Amreli R&B SOR Year : 2015-16

Item No. & Description	Quantity	Rate	Per	Amount
Item No. 1				
Foundation		85.90		
	7.95	85.90	Cumt.	682.91
Item No. 2				
Metling		650.00		
	4.65	650.00	Cumt.	3022.50
Item No. 3				
P.C.C		2255.00		
	1% L.C.	22.55		
	3.30	2277.55	Cumt.	7515.92
Item No. 4				
C.C Work		4503.00		
	6.96	4503.00	Cumt.	31346.77
Item No. 5				
T M T bar FE-415		44.30		
	487.00	44.30	Kg	21574.10
Item No. 6				
20mm thick cement plaster		205.00		
	18.34	205.00	Sqmt	3760.03
Item No. 7				
Weather Proof Exterior Emulsion Pain		72.00		
	18.34	72.00	Sqmt	1320.60
Total Amounts Rs.....				69,222.82
Add 3% Contingency Charge Rs.....				2,076.68
Add 5% Water Charge Rs.....				3,461.14
Net Amounts Rs.....				74,760.64
Say Amounts Rs.....				74,800.00

NAME OF WORK : ESTIMATE FOR CONSTRUCTION WORK OF SNANAGRUH**MEASURMENT SHEETS**

Item No. & Description	Nos.	Length	Width	Depth	Quantity	Total Qty.
Item No. 1						
Foundation						
	1	5.50	4.00	0.30	6.60	
	1	3.00	1.50	0.30	1.35	
				Total :	7.95	7.95
					Cumt.	Cumt.
Item No. 2						
Metling						
	1	3.00	1.50	0.30	1.35	

	1	5.50	4.00	0.15	3.30	
				Total :	4.65	4.65
					Cumt.	Cumt.
Item No. 3						
P.C.C						
	1	5.50	4.00	0.15	3.30	
				Total :	3.30	3.30
					Cumt.	Cumt.
Item No. 4						
C.C Work						
	1	5.50	4.00	0.23	5.06	
	2	3.00	0.23	1.02	1.41	
	2	1.04	0.23	1.03	0.49	
				Total:	6.96	6.96
					Cumt.	Cumt.
Item No. 5						
T M T bar FE-415						
C.C.Work	6.96	70.00	Kg. / Cumt.		487.29	
				Total :	487.29	487.00
					Kg	Kg.
Item No. 6						
20mm thick cement plaster						
	2	1.04	-	1.02	2.12	
	2	2.54	-	1.02	5.18	
	2	1.50	-	1.02	3.06	
	2	3.00	-	1.02	6.12	
	2	3.00	-	0.23	1.38	
	2	1.04	-	0.23	0.48	
				Total :	18.34	18.34
					Sqmt.	Sqmt.
Item No. 7						
Weather Proof Exterior Emulsion Pain						
As Per It. No. 6 Qty.	-	-	-	-	18.34	18.34
						Sqmt.

Chapter-9 Description of All The Proposed Designs Including Total Existing Scenario Of Implementation:-

- The main intention of technical economic survey and is for study of all villages' basic scenario and gap analysis.
- In our project work our first target to survey basic facilities and if there is not available any basic facilities than provide and after that we may plan to improve the existing facilities of village.
- Our main aim is to work according to the new upcoming town planning scheme in Pipalava village.
- Based on these plans, our next target will be to provide regular maintenance program, which helps in sustaining the structure for longer duration.
- Obtaining information related to the ongoing schemes in the village and the government work that has been completed and the work that is still going on.
- Also, due to lack in maintenance, villagers avoid consuming it and which make the structures obsolete.

Chapter-10 Conclusion:-

As per our actual visit of PIPLVA village we found the current scenario and condition of village. As Village is located far from urban area (city) the few facilities in village is not very much available. Cotton, Wheat is major crops grown in village. Village is connected with local public transport of Amreli and near other cities. There is underground drainage system in main localities. Village is lacking for the proper solid waste management and Public toilet and other many facilities are needed to be provided.

After analyzing all the data, we found that village needs some new facilities and some facilities need maintenance. We provided three new designs for our village, A Public Library, Public toilet and Cyber café to fulfill the requirement of existing population. Also village need initiative for the approach to various Govt. schemes by local bodies.

By providing such facilities it will be quite easy for all the people of village to connect to peoples of outer world and it will be helpful to create more opportunities for village peoples.

After providing the facilities suggested, we tried to approach towards smart village concept. With the help of Yojana and Village governance we have tried to make the village digital by providing E-facilities in later half. Also it is important to maintain the existing facilities rather than new development.

We can only approach to digital facilities and sustainable technology and connectivity for our village. Because we cannot directly approach to latest technologies, we have to consider its future scope also. Now a day's awareness is more required rather than technology. Also aware the people of the village use this new technology and facilities for their own benefit in the future. Due to the lack of basic facilities it is necessary to first provide basic facilities and after that we will provide-facilities.

Chapter-11 References Refereed For This Project:-

➤ BOOKS:-

1. Design of Reinforced Concrete Structures by S.Ramamrutham.
2. Professional practice and valuation by Dr. R. P.Rethaliya.
3. Guidelines of Smart village by Gujarat government.
4. Building construction by A. s.kotadiya.


➤ CODE:-

- System of record(SOR) (Year2015-16)
- IS 456 : 2000 Indian Standard PLAIN AND REINFORCED CONCRETE - CODE OF PRACTICE

Chapter-12 Annexure Attachment:-

12.1. Survey Form of Allocated Village Scanned Copy Attachment in the Report:-

Gujarat Technological University,
Ahmedabad, Gujarat



Vishwakarma Yojana: Phase VIII
Techno Economic Survey

Techno Economic Survey

Vishwakarma Yojana: Phase VIII

ALLOCATED VILLAGE SURVEY

An approach towards “Rurbanisation for Village Development”

Name of District:	Amreli
Name of Taluka:	Liliya
Name of Village:	Pipalava
Name of Institute:	Smt. Shantaben Kharibhai Graduate Engineering College, Amreli
Nodal Officer Name & Contact Detail:	Nishant R. Bheda
Respondent Name: (Sarpanch/ Panchayat Member/ Teacher/ Gram Sevak/ Aaganwadi worker/Village dweller)	કચ્છીયા ગામના સરપંચ, અંકેશભાઈ, પાલવાડી ગામના પંચાયત, મી. ભાગ્ય, જી, અમરેલી.
Date of Survey:	

I. DEMOGRAPHICAL DETAIL:

Sr. No.	Census	Population	Male	Female	Total Number of House Holds
1.	2001				
2.	2011	1078	555	528	226

II. GEOGRAPHICAL DETAIL:

Sr. No.	Description	Information/Detail
1.	Area of Village (Approx.) (In Hect.)	788.72 hec.
2.	Forest Area (In hect.)	-
3.	Agricultural Land Area (In hect.)	130.93 hec.
4.	Residential Area (In hect.)	651.42 hec.
5.	Other Area (In hect.)	6.37 hec
6.	Distance to the nearest railway station (in kilometers):	Liliya Mala (1.5km)

Gujarat Technological University,
Ahmedabad, Gujarat



Vishwakarma Yojana: Phase VIII
Techno Economic Survey

7.	Name of Nearest Town with Distance:	Liliya (3km)
8.	Distance to the nearest bus station (in kilometers):	Liliya bus stand
9.	Whether village is connected to all road for the any facility or town or City?	

III. OCCUPATIONAL DETAILS:

Name of Three Major Occupation groups in Village	1.	Agriculture
	2.	Local business
	3.	Animal husbandary

Major crops grown in the village:	1.	Wheat
	2.	Garrel
	3.	Cotton

IV. PHYSICAL INFRASTRUCTURE FACILITIES:

Sr. No.	Descriptions	Detail	Adequate	Inadequate	Remarks
A.	Main Source of Drinking water				
1.	PIPED WATER Piped Into Dwelling Piped To Yard/Plot Public Tap/Standpipe Tube Well Or Bore Well		yes yes yes yes		
2.	DUG WELL Protected Well Un Protected Well		yes yes		
3.	WATER FROM SPRING Protected Spring Unprotected Spring Rainwater Tanker Truck Cart With Small Tank		yes		
4.	SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ Irrigation Channel Bottled Water Hand Pump		yes		

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Vishwakarma Yojana: Phase VIII
Techno Economic Survey

(Insert/Specify) Lake/ Pond					
Suggestions if any:					
B.	Water Tank Facility				
	Overhead Tank	Capacity: 1,00,000 litres ✓			
	Underground Sump	Capacity:			
Suggestions if any:					
C.	The Type of Drainage Facility				
	A. UNDERGROUND DRAINAGE				
1					
Suggestions if any:					
D.	Road Network :All Weather/ Kutchha (Gravel)/ Black Topped pucca/ WBM				
	Village approach road	All weather	Kutchha		
	Main road	Bituminous			
	Internal streets	Earthen			
	Nearest NH/SH/MDR/ODR Dist. in kms.	SH 3 Km			
Suggestions if any:					
E.	Transport Facility				
	Railway Station (Y/N) (If No than Nearest Rly Station---Kms)	Liliya 3 Km			
	Bus station (Y/N) Condition: (If No than Nearest Bus Station---Kms)	In village.			
	Local Transportation (Auto/ Jeep/Chhakda/ Private Vehicles/ Other)	Auto, Private vehicles			
Suggestions if any:					
F.	Electricity Distribution				
	(Y/N) Govt./ Private (Less than 6 hrs./ More Than 6 hrs)	24 hr. electricity			No Power cut



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Vishwakarma Yojana: Phase VIII
Techno Economic Survey

	Power supply for Domestic Use				
	Power supply for Agricultural Use	8 hr in day	✓		Alternative day and night
	Power supply for Commercial Use	24 hr	✓		
	Road/ Street Lights		✓		
	Electrification in Government Buildings/ Schools/ Hospitals	24 hr	✓		
	Renewable Energy Source Facilities (Y/N)	NO			
	LED Facilities				
Suggestions if any:					
G.	Sanitation Facility				
	Public Latrine Blocks If available than Nos.			inadequate	
	Location Condition			inadequate	
	Community Toilet (With bath/ without bath facilities)			inadequate	
	Solid & liquid waste Disposal system available			inadequate	
	Any facility for Waste collection from road			inadequate	There are some facilities like dustbin
Suggestions if any:					
H.	Main Source of Irrigation Facility:				
	TANK/POND				
	STREAM/RIVER				
	CANAL				
	WELL ✓	50 ft. Tubewell	✓		
	TUBE WELL ✓	50 ft. of well			
	OTHER (SPECIFY)				
Suggestions if any:					
I.	Housing Condition:				
	Kutchha/Pucca (Approx. ratio)	60 ft. Pucca	40 ft. Kutchha		



**V. SOCIAL INFRASTRUCTURAL FACILITIES:**

Sr. No.	Descriptions	Information/ Detail	Adequate	Inadequate	Remarks
J.	Health Facilities:				
	ICDS (Anganwadi)	3	✓	1 X	
	Sub-Centre			X	
	PHC			X	
	BLOCK PHC			X	
	CHC/RH			X	
	District/ Govt. Hospital			X	
	Govt. Dispensary			X	
	Private Clinic			X	
	Private Hospital/			X	
	Nursing Home			X	
	AYUSH Health Facility			X	
	sonography /ultrasound facility			X	
	If any of the above Facility is not available in village than approx. distance from village: ...4....kms.				
	Suggestions if any:				
K.	Education Facilities:				
	Aganwadi/ Play group	3	✓		
	Primary School	1 Govt.	✓		
	Secondary school	NO	X	✓	
	Higher sec. School			✓	
	ITI college/ vocational Training Center			✓	
	Art, Commerce & Science /Polytechnic/ Engineering/ Medical/ Management/ other college facilities			✓	



Gujarat Technological University,
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Techno Economic SurveyIf any of the above Facility is not available in village than approx. distance from
village:kms.

Suggestions if any:

L.	Socio- Culture Facilities	Condition	Location	Available (YES)	Available (NO)
	Community Hall (With or without TV)				✓
	Public Library (With daily newspaper supply: Y/N)				✓
	Public Garden				✓
	Village Pond				✓
	Recreation Center				✓
	Cinema/ Video Hall				✓
	Assembly Polling Station				✓
	Birth & Death Registration Office			✓	✓

If any of the above Facility is not available in village than approx. distance from
village: 4.....kms.

Suggestions if any:

M.	Other Facilities	Condition	Location	Available (YES)	Available (NO)
	Post-office				✓
	Telecommunication Network/ STD booth				✓
	General Market				✓
	Shops (Public Distribution System)				✓
	Panchayat Building	old building		✓	
	Pharmacy/Medical Shop				✓
	Bank & ATM Facility				✓
	Agriculture Co-operative Society				✓
	Milk Co-operative Soc.				✓
	Small Scale Industries				✓
	Internet Cafes/ Common Service Center/Wi Fi				✓
	Youth Club				✓
	Mahila Mandal			✓	

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Credit Cooperative Society Agricultural Cooperative Society Milk Cooperative Society Fishermen's Cooperative Society Computer Kiosk/ e-chaupal / Mills / Small Scale Industries					✓
Other Facility					
Suggestions if any:					
N.	Other Facilities	Condition		Available (YES)	Available (NO)
	1. Have these programme implemented the village?				NO
	2. Are there any beneficiaries in the village from the following programme?				NO
	3. Janani Suraksha Yojana				NO
	4. Kishori Shakti Yojana				NO
	5. Balika Samridhi Yojana				NO
	6. Mid-day Meal Programme				NO
	7. Integrated Child Development Scheme (ICDS)			yes	
	8. Mahila Mandal Protsahan Yojana (MMPY)			yes	NO
	9. National Food for work Programme (NFFWP)				NO
	10. National Social Assistance Programme				NO
	11. Sanitation Programme (SP)				NO
	12. Rajiv Gandhi National Drinking Water Mission				NO
	13. Swarnjayanti Gram Swarozgar Yojana			yes	
	14. Minimum Needs Programme (MNP)			yes	NO
	15. National Rural Employment Programme				NO
	16. Employee Guarantee Scheme (EGS)				NO
	17. Prime Minister Rojgar Yojana (PMRY)				
	18. Jawahar Rozgar Yojana (JRY)			yes	
	19. Indira Awas Yojana (IAY)				
	20. Samagra Awas Yojana (SAY)				NO
	21. Sanjay Gandhi Niradhar Yojana (SGNY)				NO
	22. Jawahar Gram Samridhi Yojana (JGSY)				
	23. Other (SPECIFY)				



**VI. SUSTAINABLE /GREEN INFRASTRUCTURE FACILITIES:**

Sr. No.	Descriptions	Information/ Details	Adequate	Inadequate	Remarks
1.	Adoption of Non-Conventional Energy Sources/ Renewable Energy Sources			Inadequate	
2.	Bio-Gas Plant Solar Street Lights Rain Water Harvesting System			Inadequate	
3.	Any Other				

VII. DATA COLLECTION FROM VILLAGE

Sr. No.	Descriptions	Information/ Details	Adequate	Inadequate	Remarks
1.	Village Base Map Available: Hard Copy/Soft Copy			Inadequate	
2.	Recent Projects going on for Development of Village			Inadequate	
3.	Any NGO working for village development			Inadequate	
4.	Any natural calamity in the village during the last one year: EARTHQUAKES FLOODS CYCLONE DROUGHT LANDSLIDES AVALANCHE OTHER (SPECIFY)			Inadequate	



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VIII. ADDITIONAL INFORMATION/ REQUIREMENT:

Sr. No.	Descriptions	Information/ Detail	Remarks
1.	Repair & Maintenance of Existing Public Infrastructure facilities, School Building Health Center Panchayat Building Public Toilets & any other	Good - Good. -	No health center No Public Center
2.	Additional Information/ Requirement		
3.	During the last six months how many times CLEANING FOGGING..... Drive was undertaken in the village?		in corona time period.

IX. Smart Village / Heritage Details


Sr. No.	Descriptions	Information/ Detail	Remarks
1.	IS THERE ANY THING FOR THE VILLAGE ENHANCEMENT POSSIBLE ?	Public toilet Public bath	

Note: Photographs/ Video/ Drawings of all existing Infrastructure facilities & conditions should be taken by students of respective villages for their record and information.

For Any Administration queries/ Difficulties:
GTU VY Section
Contact No – 079-23267588
Email ID: rurban@gtu.edu.in

12.2 Survey Form of Smart Village Scanned Copy Attachment in the Report:-

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Techno Economic Survey

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Vishwakarma Yojana: Phase VIII

SMART VILLAGE SURVEY

An approach towards "Rurbanisation for Village Development"

Name of District:	Amreli Kheda
Name of Taluka:	Tharasa
Name of Village:	pali (seruliya)
Name of Institute:	Smt. santaben habibhai (Gargeta)
Nodal Officer Name & Contact Detail:	Prof. Nihal bhedra 95557 13503 / 87801 92466
Respondent Name: (Sarpanch/ Panchayat Member/ Teacher/ Gram Sevak/ Aanganwadi worker/ Village dweller)	Phanavakumar Mahendrabhai Patel 90965 31919
Date of Survey:	27/11/2020

I. DEMOGRAPHICAL DETAIL:

Sr. No.	Census	Population	Male	Female	Total Number of House Holds
1.	2001	16202	7610	8592	226
2.	2011	1078	555	523	3210

II. GEOGRAPHICAL DETAIL:

Sr. No.	Description	Information/Detail
1.	Area of Village (Approx.) (In Hect.)/Coordinates for Location:	17.86 km ²
2.	Forest Area (In hect.)	-
3.	Agricultural Land Area (In hect.)	586 ha
4.	Residential Area (In hect.)	1200 ha
5.	Other Area (In hect.)	-
6.	Distance to the nearest railway station (in kilometers):	120 m

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7.	Name of Nearest Town with Distance:	Lilipya (3 Km) Rustampura
8.	Distance to the nearest bus station (in kilometers):	Seradiya railway station (0.7 km)
9.	Whether village is connected to all road for the any facility or town or City?	

III. OCCUPATIONAL DETAILS:

Name of Three Major Occupation groups in Village	1.	Agriculture
	2.	Animal husbandry
	3.	Local business
Major crops grown in the village:	1.	Wheat
	2.	Cotton
	3.	Grave

IV. PHYSICAL INFRASTRUCTURE FACILITIES:

Sr. No.	Descriptions	Detail	Adequate	Inadequate	Remarks
A.	Main Source of Drinking water				
1.	PIPED WATER Piped Into Dwelling Piped To Yard/Plot Public Tap/Standpipe Tube Well Or Bore Well		✓ ✓ ✓ ✓ ✓		
2.	DUG WELL Protected Well Un Protected Well		✓ ✓		
3.	WATER FROM SPRING Protected Spring Unprotected Spring Rainwater Tanker Truck Cart With Small Tank		✓		
4.	SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ Irrigation Channel Bottled Water Hand Pump Other(Specify) Lake/ Pond		✓		



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Suggestions if any:				
B.	Water Tank Facility			
	Overhead Tank	Capacity:	1,00,000 litres	
	Underground Sump	Capacity:		
Suggestions if any:				
C.	The Type of Drainage Facility			
	A. UNDERGROUND DRAINAGE		✓	
	1			
	2			
	B. OPEN WITH OUTLET			
	C. OPEN WITHOUT OUTLET			
Suggestions if any:				
D.	Road Network :All Weather/ Kutchha (Gravel)/ Black Topped pucca/ WBM			
	Village approach road		Concrete	
	Main road		Bituminous	
	Internal streets		C.C.	
	Nearest NH/SH/MDR/QDR Dist. in kms.		SH 12 (0.1 km)	
Suggestions if any:				
E.	Transport Facility			
	Railway Station (Y/N) (If No than Nearest Rly Station---Kms)		YES In Village.	
	Bus station (Y/N) Condition: (If No than Nearest Bus Station---Kms)		YES In Village.	
	Local Transportation (Auto/ Jeep/Chhakda/ Private Vehicles/ Other)		Auto Chhakda Private Vehicles.	
Suggestions if any:				
F.	Electricity Distribution			
	(Y/N) Govt./ Private (Less than 6 hrs./ More Than 6 hrs)		More than 6 hrs	

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	Power supply for Domestic Use		Yes		
	Power supply for Agricultural Use		Yes		Attractive. in
	Power supply for Commercial Use		Yes		area day at night
	Road/ Street Lights		Yes		
	Electrification in Government Buildings/ Schools/ Hospitals		Yes		
	Renewable Energy Source Facilities (Y/ N)		No.		
	LED Facilities				
Suggestions if any:					
G.	Sanitation Facility				
	Public Latrine Blocks If available than Nos.		Yes		
	Location Condition				
	Community Toilet (With bath/ without bath facilities)			No.	
	Solid & liquid waste Disposal system available			No.	
	Any facility for Waste collection from road		Yes		Some already on day to day
Suggestions if any:					
H.	Main Source of Irrigation Facility:				
	TANK/POND				
	STREAM/RIVER				
	CANAL				
	WELL				
	TUBE WELL				
	OTHER (SPECIFY)				
Suggestions if any:					
I.	Housing Condition:				
	Kutcha/Pucca (Approx. ratio)		60% Pucca and 20% Kutcha		



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Techno Economic Survey**Y. SOCIAL INFRASTRUCTURAL FACILITIES:**

Sr. No.	Descriptions	Information/ Detail	Adequate	Inadequate	Remarks
J.	Health Facilities:				
	ICDS (Anganwadi)	2			
	Sub-Centre	1			
	PHC	1			
	BLOCK PHC				
	CHC/RH				
	District/ Govt. Hospital	1			
	Govt. Dispensary	1			
	Private Clinic	3			
	Private Hospital/	1			
	Nursing Home				
	AYUSH Health Facility	Yes			
	sonography /ultrasound facility	Yes			
	If any of the above Facility is not available in village than approx. distance from village:kms.				
	Suggestions if any:				
K.	Education Facilities:				
	Anganwadi/ Play group	2			
	Primary School	1			
	Secondary school	1			
	Higher sec. School	1			
	ITI college/ vocational Training Center	No.			
	Art, Commerce & Science /Polytechnic/ Engineering/ Medical/ Management/ other college facilities				
	If any of the above Facility is not available in village than approx. distance from village:kms.				



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Suggestions if any:

L.	Socio- Culture Facilities	Condition	Location	Available (YES)	Available (NO)
	Community Hall (With or without TV)	old condition		✓ yes	
	Public Library (With daily newspaper supply: Y/N)				✓ no
	Public Garden			yes	no.
	Village Pond				
	Recreation Center			yes	
	Cinema/ Video Hall				no.
	Assembly Polling Station				no.
	Birth & Death Registration			yes	

If any of the above Facility is not available in village than approx. distance from village:kms.

Suggestions if any:

M.	Other Facilities	Condition	Location	Available (YES)	Available (NO)
	Post-office	old condition		yes	
	Telecommunication Network/ STD booth				no.
	General Market	old condition		yes	
	Shops (Public Distribution System)	Good		yes	
	Panchayat Building	old condition		yes	
	Pharmacy/Medical Shop	Good		yes	
	Bank & ATM Facility	Good		yes	
	Agriculture Co-operative Society				NO.
	Milk Co-operative Soc.				NO.
	Small Scale Industries				NO.
	Internet Cafes/ Common Service Center/ Wi Fi				NO.
	Youth Club				NO.
	Mahila Mandal			Yes	

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Credit Cooperative Society Agricultural Cooperative Society Milk Cooperative Society Fishermen's Cooperative Society Computer Kiosk/ e-chaupal / Mills / Small Scale Industries					No.
Other Facility					
Suggestions if any:					
N.	Other Facilities	Condition		Available (YES)	Available (NO)
	1. Have these programme implemented the village?			Yes	
	2. Are there any beneficiaries in the village from the following programme?			Yes	
	3. Janani Suraksha Yojana				
	4. Kishori Shakti Yojana				
	5. Balika Samridhi Yojana			Yes	
	6. Mid-day Meal Programme				
	7. Intergrated Child Development Scheme (ICDS)			Yes	
	8. Mahila Mandal Protsahan Yojana (MMPY)				
	9. National Food for work Programme (NFFWP)				
	10. National Social Assistance Programme				
	11. Sanitation Programme (SP)			Yes	
	12. Rajiv Gandhi National Drinking Water Mission				
	13. Swarnjayanti Gram Swarozgar Yojana			Yes	
	14. Minimum Needs Programme (MNP)			Yes	
	15. National Rural Employment Programme				
	16. Employee Guarantee Scheme (EGS)			Yes	
	17. Prime Minister Rojgar Yojana (PMRY)			Yes	
	18. Jawahar Rozgar Yojana (JRY)				
	19. Indira Awas Yojna (IAY)				
	20. Samagra Awas Yojana (SAY)				
	21. Sanjay Gandhi Niradhar Yojana (SGNY)			Yes	
	22. Jawahar Gram Samridhi Yojana (JGSY)				
	23. Other (SPECIFY)				



Gujarat Technological University,
Ahmedabad, GujaratVishwakarma Yojana: Phase VIII
Techno Economic Survey**VI. SUSTAINABLE /GREEN INFRASTRUCTURE FACILITIES:**

Sr. No.	Descriptions	Information/ Details	Adequate	Inadequate	Remarks
1.	Adoption of Non-Conventional Energy Sources/ Renewable Energy Sources			Inadequate	
2.	Bio-Gas Plant Solar Street Lights Rain Water Harvesting System			Inadequate	
3.	Any Other				

VII. DATA COLLECTION FROM VILLAGE

Sr. No.	Descriptions	Information/ Details	Adequate	Inadequate	Remarks
1.	Village Base Map Available: Hard Copy/Soft Copy		Adequate		
2.	Recent Projects going on for Development of Village		Adequate		
3.	Any NGO working for village development			No.	
4.	Any natural calamity in the village during the last one year: EARTHQUAKES FLOODS CYCLONE DROUGHT LANDSLIDES AVALANCHE OTHER (SPECIFY)			No.	

VIII. ADDITIONAL INFORMATION/ REQUIREMENT:

Sr. No.	Descriptions	Information/ Detail	Remarks
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1.	Repair & Maintenance of Existing Public Infrastructure facilities, School Building Health Center Panchayat Building Public Toilets & any other	Yes	
2.	Additional Information/ Requirement		
3.	During the last six months how many times CLEANING FOGGING..... Drive was undertaken in the village?		

IX. Smart Village / Heritage Details

Sr. No.	Descriptions	Information/ Detail	Remarks
1.	IS THEIR ANY THING FOR THE VILLAGE ENHANCEMENT POSSIBLE ?		Yes

Note: Photographs/ Video/ Drawings of all existing Infrastructure facilities & conditions should be taken by students of respective villages for their record and information.

For Any Administration queries/ Difficulties:
GTU VY Section
Contact No – 079-23267588
Email ID: rurban@gtu.edu.in

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12.3 Survey Form of Ideal Village Scanned Copy Attachment in the Report:-

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For

Vishwakarma Yojana: Phase VIII

IDEAL VILLAGE SURVEY

An approach towards Rurbanisation for Village Development

Name of Village:	Thanna
Name of Taluka:	Umreth
Name of District:	Anand
Name of Institute:	Smt. Chantaben Haribhai Graduate Engineering College, C. G. Amreli
Nodal Officer Name & Contact Detail:	Nishal R. Bheda
Respondent Name: (Sarpanch/ Panchayat Member/ Teacher/ Gram Sevak/ Aanganwadi worker/Village dweller)	Rekhaben Parmeshbhai Patel. 9601155029
Date of Survey:	

1. Demographical Detail:

Sr. No.	Census	Population	Male	Female	Total House Holds
i)	2001				
ii)	2011	5147	2599	2548	1064

2. Geographical Detail:

Sr. No.	Description	Information/Detail
i)	Area of Village (Approx.) (In Hectar)	1212.78 hac
	Coordinates for Location:	
	Forest Area (In hect.)	-
	Agricultural Land Area (In hect.)	75 hac
	Residential Area (In hect.)	937.78 hac
	Other Area (In hect.)	200 hac
	Water bodies	
	Nearest Town with Distance:	Umreth (3km)



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Ahmedabad, GujaratVishwakarma Yojana: Phase VIII
Techno Economic Survey3. Occupational Details:

Name of Three Major Occupation groups in Village	1.	Agriculture
	2.	Animal husbandry
	3.	Farming.

4. Physical Infrastructure Facilities:

Sr. No.	Descriptions	Detail	Adequate	Inadequate	Remarks
A.	Main Source of Drinking water				
	<ul style="list-style-type: none"> • Tap Water (Treated/ Untreated) • RO Water • Well (Covered/ Uncovered) • Hand pumps • Tube well/ Borehole • River/ Canal/ Spring/ Lake/ Pond 		Yes Yes Yes Yes	No. No.	
	Suggestions if any:				
B.	Water Tank Facility				
	Overhead Tank	Capacity:	1,00,000		
	Underground Sump	Capacity:	No		
	Suggestions if any:				
C.	Drainage Facility				
	Available (Yes/ No)		Yes		
	Suggestions if any:				
D.	Type of Drainage				
	Closed/ Open		Closed		
	If Open than Pucca / Kutchcha				
	Whether drain water is discharged directly in to Water bodies/ Sewer plants		Sewer Plant		
	Suggestions if any:				



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F.	Road Network : All Weather/ Kutchha (Gravel)/ Black Topped pucca/ WBM			
	Village approach road		Yes	
	Main road		Yes	
	Internal streets		Yes	
	Nearest NH/SH/MDR/ODR Dist. in kms.			
Suggestions if any:				
F.	Transport Facility			
	Railway Station (Y/N) (If No than Nearest Rly Station---Kms)		Yes 7 Km	
	Bus station (Y/N) Condition: (If No than Nearest Bus Station---Kms)		Yes in village	
	Local Transportation (Auto Jeep/Chhakda/ Private Vehicles/ Other)		Auto Chhakda Private Vehicles	
Suggestions if any:				
G.	Electricity Distribution			
	(Y/N) Govt./ Private (Less than 6 hrs./ More Than 6 hrs)		Yes more than 6 hrs	
	Power supply for Domestic Use		Yes 24 hrs	
	Power supply for Agricultural Use		Yes 6 hrs/day	
	Power supply for Commercial Use		Yes 24 hrs	
	Road Street Lights		Yes	



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Techno Economic Survey

Electrification in Government Buildings/ Schools/ Hospitals	Y	Yes		
Renewable Energy Source Facilities (Y/ N)		No.		
LED Facilities		No.		
Suggestions if any:				
H. Sanitation Facility				
Public Latrine Blocks If available than Nos.		Yes		
Location Condition		Good		
Community Toilet (With bath/ without bath facilities)		No		
Solid & liquid waste Disposal system available		No.		
Any facility for Waste collection from road		Yes		Some collection distribution
Suggestions if any:				
I. Irrigation Facility:				
Main Source of Irrigation (Stream/ River/ Canal/ Well/ Tube well/ Other)		well tube well		
Suggestions if any:				
J. Housing Condition:				
Kutcha Pucca (Approx. ratio)		Pucca = 80% Kutcha = 20%		

5. Social Infrastructural Facilities:

Sr. No.	Descriptions	Information	Adequate	Inadequate	Remarks
		Detail			



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K.	Health Facilities:				
	Sub center/ PHC/ CHC /Government Hospital/ Child welfare & Maternity Homes (If Yes than specify No. of Beds) Condition: <i>Good</i>		<i>Yes</i>		
	Private Clinic/Private Hospital/ Nursing Home		<i>No</i>		
	If any of the above Facility is not available in village than approx. distance from village:kms.				
Suggestions if any:					
L.	Education Facilities:				
	Aaganwadi/ Play group		<i>Yes</i>		
	Primary School		<i>Yes</i>		
	Secondary school		<i>Yes</i>		
	Higher sec. School		<i>NO</i>		
	ITI college/ vocational Training Center		<i>NO</i>		
	Art, Commerce & Science /Polytechnic/ Engineering/ Medical/ Management/ other college facilities		<i>NO</i>		
	If any of the above Facility is not available in village than approx. distance from village:kms.				
Suggestions if any:					
M.	Socio- Culture Facilities				
	Community Hall (With or without TV) Location:		<i>NO</i>		



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Condition:				
Public Library (With daily newspaper supply: Y/N)		NO.		
Location:				
Condition:				
Public Garden		NO		
Location:				
Condition:				
Village Pond		NO		
Location:				
Condition:				
Recreation Center		NO		
Location:				
Condition:				
Cinema/ Video Hall		NO		
Location:				
Condition:				
Assembly Polling Station		NO.		
Location:				
Condition:				
Birth & Death Registration Office		Yes		
Location:				
Condition:		Good.		
If any of the above Facility is not available in village than approx. distance from village:kms.				
Suggestions if any:				
N.	Other Facilities			
	Post-office		Yes	
	Telecommunication Network/ STD booth		NO.	

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General Market		yes		
Shops (Public Distribution System)		yes		
Panchayat Building		yes		
Pharmacy/Medical Shop		yes		
Bank & ATM Facility		yes		
Agriculture Co-operative Society		no		
Milk Co-operative Soc.		no		
Small Scale Industries		yes		
Internet Cafes/ Common Service Center/Wi Fi		NO.		
Other Facility				
Suggestions if any:				

6. Sustainable /Green Infrastructure Facilities:

Sr. No.	Descriptions	Information/ Details	Adequate	Inadequate	Remarks
O.	Adoption of Non-Conventional Energy Sources/ Renewable Energy Sources			Inadequate	
P.	Bio-Gas Plant Solar Street Lights Rain Water Harvesting System			Inadequate	
Q.	Any Other				

7. Data Collection From Village

Village Base Map	
Available: Hard Copy/Soft Copy	



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Techno Economic Survey

Recent Projects going on for Development of Village	NO
Any NGO working for village development	NO

8. Additional Information/ Requirement:

Sr. No.	Descriptions	Information/ Detail	Remarks
1.	Repair & Maintenance of Existing Public Infrastructure facilities (School Building, Health Center, Panchayat Building, Public Toilets & any other)	Yes	
2.	Additional Information/ Requirement		

9. Smart Village Proposal Design

Sr. No.	Descriptions	Information/ Detail	Remarks
1.			

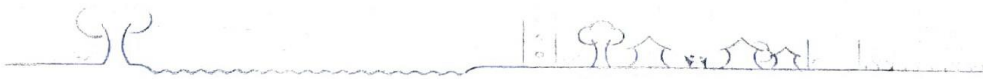
Note: Photographs/ Video/ Drawings of all existing Infrastructure facilities & conditions should be taken by students of respective villages for their record and information.

For Any Administration queries/ Difficulties:

GTU VY Section:

Contact No – 079-23267588

Email ID: rurban@gtu.edu.in



12.4 Gap Analysis of the Allocated Village:-

Facilities	Planning Commission/UDPFI Norms	PIPLVA			
		Population 1078			
		Existing	Required as per Norms	Gap	
Education					
Anganwadi	Each Village(per population) 2500	3	1	+2	
Primary School	Each Village(per population) 2500	3	1	+2	
Secondary School	Per 7,500 population	2	0	+2	
Higher Secondary School	Per 15,000 Population	1	0	+1	
College	Per 125,000 Population	0	0	0	
Tech. Training Institute	Per 100000 Population	1	0	+1	
Agriculture Research Centre	Per 100000 Population	0	0	0	
Medical Facility					
Gov./Panchayat Dispensary.	Each Village	1	1	0	
PHC & CHC	Per 20,000 population	1	1	0	
Child Welfare and Maternity Home	Per 10,000 population	0	0	0	
Hospital	Per 100000 Population	0	0	0	
Transportation					
Internal road Approach Road	Each village must have Good quality roads.	Internal roads are adequate. Approach road is adequate.			
Bus/Auto Stand provision	All Villages connected by PT (ST Bus or Auto)	1	1	0	
Drinking Water					
Water Facilities		Adequate			
Over Head Tank	Total Demand	Adequate	2 lac. Liter Capacity.	0	
Public Latrines	per 20,000 population	0	6	-	
Cremation Ground	Per 20,000 population	1	0	+1	

Post Office	Per 10,000 population	1	1	0
Gram Panchayat Building	Each individual/group panchayat	1	1	0
APMC	Per 100000 Population	0	0	0
Fire Station	Per 100000 Population	0	0	0
Police Station	Per 15000 Population	1	1	0
Community Hall	Per 10000 Population	1	1	0

Table.15 Gap analysis & summary of allocated village

12.5 Village Interaction with Sarpanch Report:-

Piplva Village, Taluka: Liliya, District: Amreli

To know or to understand the actual necessities of village it's required to visit village and interact with Sarpanch, Talati and Other village dwellers.

Techno economic survey forms give much information about village by interacting with Talati and Sarpanch. But interaction with village dwellers and observation of village condition is required. We visited allocated village pipalava and also visited ideal village and Smart village pali (Sevaliya). We meet to Sarpanch and Talati of Piplva village. They both are very dynamic person and gave us the detailed information and data whenever we required we visited all the internal part of the village and interacted with villagers directly and ask them about the present situation of village. We conducted a Techno-economic survey of Pipalava village. After all, we analyzed the gap analysis and provided the necessary facilities to village. We saw that as per UDPFI norms there are some non-adequate facilities.

We provide Public bath, Public toilet and Cyber café for village at primary basis.

We also send our design proposal to Gram Panchayat of PIPALAVA Village. In this way we approach to various problems faced by villagers and various criteria given by GTU.

➤ Summary Of Good Photographs In Table Format:-

12.6 Sarpanch Letter Giving Information About The Village Development:-

ગ્રામ... સેક્ટોર... સંગઠન...

સ્વરુઢ ગામ ગોકુળ ગામ

પીપળવા ગ્રામ પંચાયત કચેરી

મુ. પીપળવા, તા. લીલીયા, જિ. અમરેલી.

જા.નં.

તા. / /

આપી દાખલો લખી આપવામાં આવે છે કે ગ્રામીણ શૌનાલ્પને વૈશેલાઈ ગજેરા સ્વેચ્છુનીયશૈંગ ના છાત્રો દ્વારા પીપળવા ગામમાં વિકાસ કરવામાં આવેલ છે.

તેમને બધી સુવિધાઓનો સર્વો કરેલ છે. અને અમોએ આપલ બધી મારીતી સાચા છે. જેની ખાત્રી બદલ આ દાખલો (લખી) આપવામાં આવે છે.

કુલિયા, ૨૦/૨-૨૦૨૦

સરપંચ

પીપળવા ગામ

તા. લીલીયા, જિ. અમરેલી

Vishwakarma Yojana:

Village,

District

