DETAIL PROJECT REPORT

VISHWAKARMA YOJANA : PHASE VIII
AN APPROACH TOWARDS RURBANISATION
VILLAGE : NANI PARABADI
TEHSIL : DHORAJI
DISTRICT : RAJKOT

PREPARED BY

Team ID : 114827

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SAL COLLEGE OF ENGINEERING

HEMA V. VANAR
NODAL OFFICERS NAME

YEAR: 2020-21

GUJARAT TECHNOLOGICAL UNIVERSITY
Chandkheda, Ahmedabad – 382424 Gujarat

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ON

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CERTIFICATION

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

Detail Project Report for
VILLAGE – NANIPARABADI
TEHSIL – DHORAJI
DISTRICT - RAJKOT

Under

Vishwakarma Yojana: Phase-VIII

in partial fulfillment of the project offered by

GUJARAT TECHNOLOGICAL UNIVERSITY, CHANDKHEDA
during the academic year 2020-21.

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

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College name:	**SAL COLLEGE OF ENGINEERING**
College Stamp:	

Vishwakarma yojana is basically for the rural areas which are need actual development in areas to provide better life style and fulfill basic amenities of the villagers.
In this yojana we can try to reduce the distance between the rural and urban areas and also we can try to make a better connectivity between the rural and urban areas.

The main objective of this yojana is –"creation of all the basic facilities or infrastructure such as Connectivity, civic, physical infrastructure along with the provision of economy generation by maintaining the natural surroundings of the area is the key element of this yojana" **NANI PARABADI** is a village in DHORAJI taluka in RAJKOT District of Gujarat State, India. It is located 83 km towards east from district headquarters RAJKOT and 18 km away from the DHORAJI.

According to our survey in this village water supplied to the people is sufficient. Drainage system is not available. The condition of roads is Poor except entrance. There is no transportation facility in the village. In the village lack of basic facilities like public toilet, poor condition of panchayat building, Drainage system, there is no health center, Poor network connectivity, shortage of water for irrigation there is no public garden etc.

For the better future prospect they have to improve their infrastructure and also use some advance technologies . For development of the village infrastructure facilities like panchayat building, secondary school and public facilities like bus station are required. For sustainable development of the village rain water harvesting system, solar street light may be provided. For cleaning purpose Bio-Gas plant provided.

Based on the survey we tried to give design of required basic facilities to fulfill their needs. By providing these basic facilities to villagers migration rate will be decreased. We can also implement the waste collection system and drainage system in the village so villagers can live life healthy. We can also provide better network connectivity in the village and also the mobilelibrary in the village so
villagers can improve their knowledge. It is the ultimate goal of the vishwakarma yojana.

Key Words:

1. Rurbanization
2. Sustainable development
3. Infrastructure facility

4 Smart development

ACKNOWLEDGEMENT

We are highly indented to **Gujarat Technological University**, Ahmedabad for providing us such opportunity to work under Vishwakarma Yojana to get real work experience and applying our technical knowledge in the development of Villages.

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We are also thankful to our **Prof**.(**Dr.) Rupesh vasani sir Principal**, faculties of our colleges for their encouragement and support to complete this project work.

An act of gratitude is expressed to our internal guide / Evaluator,
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Above all we would like to thank our Parents, family members and Friends for their encouragement and support rendered in completion of the present this work.

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ABBREVIATIONS

Short Name / Symbol	Full Name
PHC	Primary Health Center
CHC	Community Health Center
TDO	Taluka Developer Officer
DDO	District Developer Officer
PPP	Public Private Partnership
NGO	Non Governmental Organization
PURA	Provision of Urban Amenities in Rural Area
CSS	Centrally Sponsored Schemes
BOD	Biochemical Oxygen Demand
COD	Chemical Oxygen Demand
DEWATS	Decentralized Wastewater System
ZWM	Zero Waste Management
DRDA	District Rural Development Agency
EPF	Eco–friendly Plastic Fuel
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
PMGSY	Pradhan Mantri Gram Sadak Yojana
IAY	Indira Aawas Yojana
NruM	National Rurban Mission
PHC	Primary Health Center

Chapter 1: Ideal Village Visit From District Of Gujarat State:

1.1 Background Study location

Map of PUNSRI

Satellite view of Punsri

1.1 Background

The Image That Come In Minds Of A Typical Indian Village Consists Of Rugged Roads, Frequents Power Cuts, Improper Working Of Schools, Improper Water Distribution, Garbage's Everywhere. But Not In Case Of punsri Village Of Gujarat In India.
The Village Is Located In Sabarkantha District Of Gujarat, India.

The Village Is Located At About 93 Km From Science City, Ahmedabad. The Village Has Suitable Climates And Is Free From Any Natural Calamities And Has Fertile Land. Around 98% Of The People In The Village Are Dependent On Agriculture And Milk Production For Livelihood. The Major Crops Cultivated In The Village Are Cotton, Wheat And Potato. With Key Infrastructure Facilities Provided By The Gram Panchayat, The Lives Of Villagers Have Improved Significantly. This, In Turn, Has Improved The Income Levels And Consumption Level Of Villagers.

The Village Is Facilitates With Modern Amenities And Facilities. The Village Has Concrete Roads, RO Plants For Water Purification, Solar Powered Street Lights, Regular Electricity, Primary Health Center, A Toilet In Each House, Proper Sanitation And Drainage System Which Is Completely Underground, Banking Facilities, ATM Facilities.

Adding On To The List The Village Has Air Conditioned Primary Schools Equipped With CCTV Cameras And Smart Education Technology, Speakers At The Junctions, Speakers At The Junctions, WI-FI Connectivity And An Independent Gram Panchayat.There is also a one bus service which is run by villagers.

The Panchayat Has Installed A Reverse Osmosis Plant In 2010 To Ensure The Supply Of Clean Drinking Water To The Villagers. During Wedding And Other Ceremonies Water Tankers Are Arranged. Drinking Water Taps Are Available For All. The Gram Panchayat Has Created 3.5 Km Of Underground Drainage System. The Village Has An Area Of 1.5 Square Km. The Gram Panchayat Has Spent 1.5crore To Build A Wall To Wall Extended Concrete Road Inside The Village.

Street lights

The Village Has Set Up The Electricity Generation Plant For The Generation Of Electricity By Waste Generated In The City.. A Tractor Trailer Collects Waste Twice In A Day From The Village. The Government Has Installed A 66 Kv Sub-Station In The Village That Supplies 24x7 Power To Village. This Has Helped In Improving The Lives Of People And Helped The Panchayat To Implement Various Other Infrastructure Facilities. There Have Been Around 350 Street Lights Have Been Set Up With LED Lights, Which Run On Solar Power.

Street Light & C.C.T.V. Camera

Wifi Connectivity

The Village Has Wi-Fi Connectivity Since 2010 And Has Entered Into A Lease Line Agreement With Reliance Communication. The Gram Panchayat Takes 10rs Per Month For Unlimited Internet Excess With A Speed Of 3 Mbps. CCTV Camera Installation At Key Locations Has Helped Maintain A Civil Discipline Inside The Village. Similarly, Cctv Cameras Have Been Installed Inside The Schools And Health Centre And It Consists 124 Cameras In Whole Village At Every Street And Corners. For The Announcement Of Any Instructions In Emergency Situation They Have Installed 140 Speakers On Every Streets Of This Village, Which Is Directly Operated From The Panchayat.

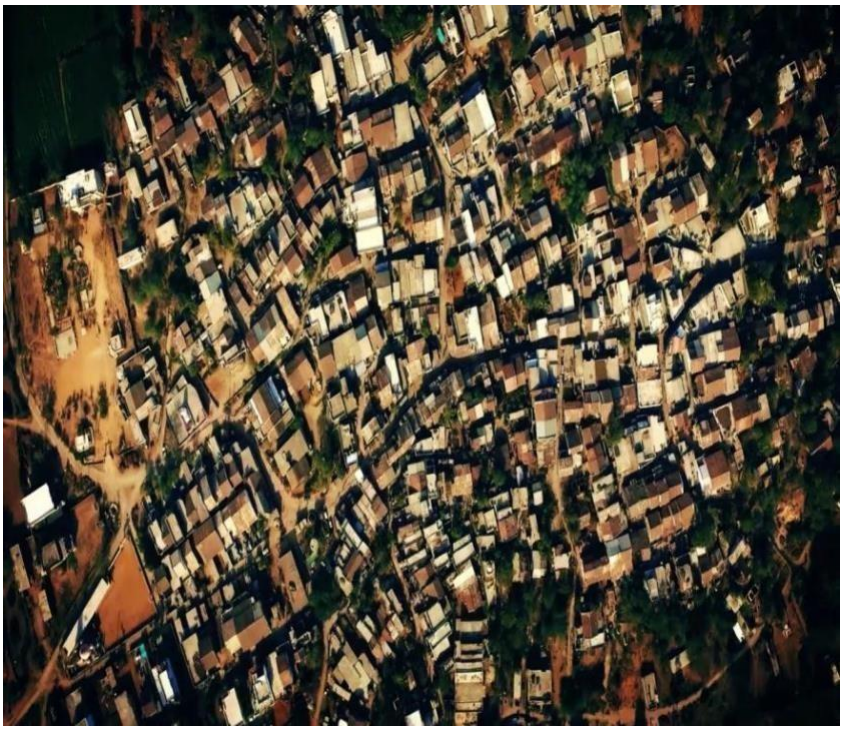
Primary School

There Are Five Primary Schools In Punsri. All The Five Schools Have CCTV Cameras Placed To Enable Parents Check Their Wards' Performance Without Interrupting The Lectures And Also To Keep A Watch On The Teachers.[7] The School Drop-Out Rate Is Zero In Punsari. The Village Was Rated B+ During Ganotsav 2011 Which Is An Annual Education Campaign Run By The State Government. Similarly, There Are Eight Anganwadi Centers Running In The Village With 450 Kids Enrolled. There Is One Milk Bank And One Outpost Police Station. There Is Proper Sanitization With All Houses Having A Toilet.

Anganwadi

The Gram Panchayat Has Digitized All Land Records, Which Can Be Accessed By Anyone By Paying Adnominal Fee Of Rs 10. Similarly, The Gram Panchayat Facilitates People In Paying Electricity And Other Utility Bills. This Has Brought Transparency In The System And Helped In Implementing Infrastructure Facilities Faster. The Gram Panchayat Has A Swift Approach Towards Development Where They Spend In Creating Fixed Assets Whereas Day To Day Running Has Been Outsourced To Private Individuals Who Ensure The Facilities Remain Profitable As A Commercial Activity. Currently, The Gram Panchayat Has A 75 Lakh Surplus Fund Against A Net Debt Of 10 Lakh In 2006. All The People In The Village Have Opened Bank Accounts. However, Loans For Consumer Durables Are Not Prevalent. Every People In The Village Have Their ADHAAR Card And Election Card.

Study Area Location:



punsri village

Country: - INDIA
State: - GUJARAT
District: - SABARKANTHA
Coordinates: - 23’20’59.46”N 73’8’12.48”E

Concept: Ideal Village

Objectives :

To Improve The Living Standards Of The Peoples By Providing Various Basic And Non- Basic Facilities In The Village.
To Increase The Literacy Rate Of The Village By Providing The Primary And Secondary Schools In Village And Also By Improving The Facilities Available In This Schools.
Prevent Distress Migration from Rural to Urban Areas, Which Is A Common Phenomenon In India's Villages Due To Lack Of Opportunities And Facilities That Guarantee A Decent Standard Of Living.
Provision Of Security To The Village By Providing Cctv Cameras And Street Lights In The Village.
Provision Of Better Infrastructure Facilities, Ex: Residential And Agricultural Infrastructure.
Provide Easier, Faster And Cheaper Access To Urban Markets For Agricultural Produce Or Other Marketable Commodities Produced In Such Villages

Example/Live Case Studies Of Ideal Village Of India/Gujarat

(A) Punsri

Punsri Is Located In Gujarat ,Puts Metos To Shame. Funded By A Indian Government And Village Own Funding Model, Punsri Is No Nri Blessed Zone. The Village Also Boasts Of Minibus Commute System , Free Wi-Fi Zone, Mobile Library, Cctv Cameras, Speakers System Etc.

(B) Dharnai

Dharnai , A Village In Bihar Has A Fully Solar Powered System For Electicity. With The Aid Of Greenpeace , Dharnai Declared Itself An Energy Independent Village.

(C) Pothanikkad (Kerala) The Village With 100% Literacy Rate. :

Unsurprisingly In Kerala, Pothanikkad Village Was The First In The Country To Achieve A 100% Literacy Rate. Not Only Does The Village Boast Of City-Standard High-Schools, But It Also Has Primary Schools And Private Schools. Guess The Number Of People The Village Has Educated? Well, According To The 2001 Census There Are 17563 Residents Living In The Village.

(D) Mawlynnong (Meghalaya) Asia's Cleanest Village:

Mawlynnong, A Small Village In Meghalaya, Was Awarded The Prestigious Tag Of 'Cleanest Village In Asia' In 2003 By Discover India Magazine. Located At About 90 Kms From Shillong, The Village Offers A Sky Walk For You To Take In The Beauty As You Explore It. According To Visitors, You Cannot Find A Single Cigarette Butt/Plastic Bag Lying Around There.

The Idea Of Model/Smart Village

By Moving People And Businesses To Smart Villages, Revenue, Resources And Job Opportunities Will Increase In Rural India, While Cities Can Decongest. The Idea Of An "Adarsh Gram" Or Model Village Has Been Explored Earlier As Well, Most Notably Through The Pradhanmantri Adarsh Gram Yojana, Launched By The Central Government In 2009-10. The Scheme Was Implemented In Pilot Mode In 1000 Villages Of Assam, Bihar, Himachal Pradesh, Rajasthan And Tamil Nadu, With An Allocation Of Rs 10 Lakh Per Village. This Limit Was Later Raised To Rs 20 Lakh Per Village. The Target Villages Under The Scheme Were Those With More Than 50% Of The Population Belonging To Scheduled Castes (Scs). Additionally, Stategovernments Have Also Taken Steps In This Direction. Himachal Pradesh Launched A Mukhya Mantri Adarsh Gram Yojana Along Similar Lines In 2011, With The Allocation Of Rs 10 Lakh Per Village.

Key Elements

A 21st Century Model Village In India Needs To Incorporate Certain Key Themes Which Would Be Essential For Its Success.
Key Elements Of A Model Village Are Given Below:

A. Better Road Network
B. Drainage System
C. Ro Plant
D. Bus Service
E. Electro-Osmosis Plant
F. Recreational Facilities
G. Skill Development Centre
H. Mobile Library

Resources

For An Mp, There Are 3 Primary Resource Streams Which Can Be Utilized For This Purpose:

- Funds Under Existing Schemes Across Different Sectors Such As Health, Education, Skill Development, Livelihood Etc Could Be Utilized, And Based On The Specific Demands Of The Village; Resources Could Be Channelized Into The Development Of The Village. Some Important Centrally Sponsored Schemes (Css) Which Could Be Utilized Are Nrlm, Nhm, Ssa, Nrega, Brgf, Rkvy And Mid-Day Meal Scheme.
- Mplad Funds (Rs 5 Crore Per Year) Could Be Utilized For The Construction Of High Quality, Sustainable Assets Such As School Buildings, Hospitals, Anganwadi Centres And School Kitchens For Mid-Day Meals. Funds Could Also Be Channelized Into Road Construction, And The Construction Of Toilets In Schools And Homes, Particularly For Girls.
- Csr Funds, Of Which A Much Larger Corpus Is Available After The Latest Amendment To The Companies Act, Could Also Be Used For The Purpose Of Infrastructure Development In The Constituency.
- Gram Panchayats Could Also Raise Loans, If Legally Permitted To Do So Under The State Panchayati Raj Acts Like In The Case Of Kerala.

Physical And Demographic Profile

The Population Of Punsri Was 5500 As Per 2011 Cencus Of India Which Has Increased To 5500 In 2011. As Of June 2012, The Population Is 6000.

Economic Profile

In 2006 The Economic Condition Of The Village ‘Punsri’ Was Not Good. But After The New Sarpanch Is Elected In 2006 The Village Has Done A Tremendous Development In Economy, Life Style Of Peoples, Scopes Of Jobs Etc. In The Last Decade. With The Help Of Goverments Various Schemes And Opportunity The Economy Of The Village Has Raised.

Social Scenario

This Village Generally Consist Of A Large Number Of Rajpur Families And Other Communities.The Main Source Of Income Is Farming, Gardening Of Varieties Of Fruitslike Lemonh, Amala, Mangoes, Plums, Chickus, Papaiya Etc.Of Late People Have Migrated To Other Town & Cities In Surch Opf Job. Earlier People Of Rajput Community Were Recruited By Government In Police & Army., This Days Community Has Entered Different Proffesion Like. The Population Of Village Today Is 10000 Appx.

Infrastructure Facilities

In The Punsri Village There Are Good Infrastructure Facilities As Compared To Other Villages Like, Banks, Playgroups, Primary Health Center, Mobile Library, Skill Development Center, Primary School Etc.

How To Develop The Ideal Village / Key Elements Of Ideal Village

To Make Any Village An Ideal Village, We Need To Provide This Key Elements Or Facilities In That Village.

A. Better Road Network

Roads in punsri village

B. Drainage System
C. Ro Plant

RO Plant in punsri village

D. Bus Service

Bus service in punsri village

E. Electro-Osmosis Plant

Electro-Osmosis plant in punsri village

F. Recreational Facilities

G. Skill Development Centre.

H. Mobile Library

Mobile library in punsri village

SWOT Analysis Of Ideal Village

Strength	Weakness	Opportunities	Threats
Proper Drainage Facilities	Improper Disposal Of Waste	Improving In Waste Management	Lack Of Awareness Of Villagers About Cleaning
Transportation Facilities	Improper Layout Of Village	Woman Empowerment	Lack Of Awareness Of Villagers About Educations
Sanitation Facilities	No Facilities For Higher Secondary Education	Educational Awareness	Lack Of Funds And Technical Knowledge In Agricultural Fields

Table 1. SWOT analysis of ideal village

Future Prospects :

In This Village The Gram Panchayat Is Planning To Build A College In The Village, So That The Students In The Village Will Not Have To Go To Other Village For Graduation Studies And So Their Time And Money Both Will Be Saved.

Benefits Of The Visits

After Visiting The Ideal Village We Learn What Is Truly Be Called An Ideal Village And What We Need To Kept In Mind While Doing This Project About Our Village. We Also Learn What Points We Need To Focus In Making Our Village An Ideal One.

Case Study Of Any Other State Ideal Village / Any Other From Outside Gujarat…

Ankapur - A Modern Village:

Ankapur Has Been Recognized As A Modern Village By Many Agencies Including International Rice Research Institute (Irri) Manila, Philippines. For Outstanding achievement In The Field Of Agriculture Development. Besides Cultivating Commercial Crops And Vegetables On A Large Scale.

Ankapur Is A Small, Self Sufficient, Progressive Model Village Located In Armoor Mandal, Nizamabad District, And Telangana Region Of Andhrapradesh.

This Village Is Considered One Of The Model Village In The Country Due To An Overall Development In General And Agriculture Development In Particular. In Recent Years Ankapur Has Earned The Great Name In Agriculture Development. The Farmers Have Started Adopting Modern Methods And They Have Succeeded In Substituting Substistence Orientation With Commercialization.

Mawlynnong (Meghalaya):

Mawlynnong (Meghalaya) Asia‘S Cleanest Village:

Mawlynnong, A Small Village In Meghalaya, Was Awarded the Impressive Tag Of Cleanest Village In Asia' In 2003 By Discover India Magazine. Located At About 90 Kms From Shillong, The Village Offers A Sky Walk For You To Take In The Beauty As You Explore It. According To Visitors, You Cannot Find A Single Cigarette Butt/Plastic Bag Lying Around There.

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Chapter 2: Village Literature Review - Civil

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.

Urban area

Rural:

A Rural Area Is An Open Swath Of Land That Has Few Homes Or Other Buildings, And Not Very Many People. A Rural Areas Population Density Is Very Low. Many People Live In A City, Or Urban Area. Their Homes And Businesses Are Located Very Close To One Another.

Rural area

Ancient Villages / Different Definition Of: Rural Area /Villages:

A Village Is A Community Larger Than Hamlet But Smaller Than Town Having Population Range Between Hundreds To Few Thousands. Villages Are Permanent Dwellings. In Past Villages Were Usually Form Of Community Involved In Agriculture Practice.

Definition of Rural Area:

- Census Board Define "Urbanized Area Which Is Of Group Having Population Density Of At Least Thousand People Per Square Mile". Whereas "Rural Area Is Any Non-Urban Or Non-Highly Rural Area".
- The Majority Of The Population Of The Region Involved In Agricultural Practice Is Known As Rural Area.

Scenario: Rural / Urban India & Gujarat As Per Census 2011 (Population Growth):

Nani Parabadi Village Census Data:

Particulars	Total	Male	Female
Total No. Of Houses	470	-	-
Population	2118	1079	1039
Child (0-6)	175	-	-
Literacy	74.03%	87.56%	61.35%
Total Workers	954	514	440

Table 2. Nani Parabadi village census data (2011)

Rural Issues & Concerns:

Despites Of Having Facilities Of Basics Amenities In The Village The Villages Have Many Problems Due To Which The Village Growth Had Decreased.
The Following Are The Concern And Issue:

- Bad Road Network
- Unplanned Irrigation System
- Insufficient Sewer Line
- Poor Condition Of Houses
- Poor Conditions Of Public Buildings
- Unavailability Of Hospitals

Various Measures For Rural Development

The Rural Development Is A Process Of Increasing The Quality Of The Life And Living Standards Of The People Of The Village By Providing Them Various Rural Facilities.

The Development Of The Rural Areas Can Be Done By Providing The Villagers Various Facilities Which Includes:

- Better Infrastructure
- Proper Houses
- Pure And Safe Drinking Water
- Better Road Network
- Better Transit System
- Provision of Recreational Areas
- Rain Water Harvesting Facilities

Various Guidelines/Norms For Villages For The Provisions Of Different Infrastructure Facilities.

The Foremost Priority With The Government Is To Enhance Quality Of Life In Villages So That It Is On A Par With Urban Areas, The Department Said. The Department Has Asked Gps To Make The Amenities Available Through Ongoing Schemes, Including The Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA).

Since The Government Is Committed To Provide At Least 55 Litres Per Capita Day (LPCD) Of Water To Every Family In A Village, The Gps Should Focus On Providing Individual Households Tap Connections.

At The Same Time, Focus Should Also Be Given To Construction Of Toilets For Each Household Under The MNREGA And The Nirmal Bharat Abhiyan. Schools And Anganwadis In Villages Should Be Provided With Toilets Even As Panchayats Have To Take Steps Towards Solid Waste Management, The Department Said.

Importance in rural context:

- 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. Education, Entrepreneurship, Physical Infrastructure, And Social Infrastructure All Play An Important Role In Developing Rural Regions.

- By Developing The Rural Areas We Can Improve Life Style Of TheResidential.
- By Developing The Rural Area We Can Make Easy Life Style Of The Villagers.
- By Developing The Rural Area We Can Solve The Problems About Migration.
- By Developing The Rural Areas We Can Prevent The Unemployment.
- By Developing The Rural Areas We Can Increase The Literacy Ratio.
- By Developing The Rural Areas We Can Increase Growth Rate Of The Country.

Sustainable Village Development Concept:

- Sustainable Development Is The Organizing Principle For Meeting Human Development Goals While At The Same Time Sustaining The Ability Of Natural Systems To Provide The Natural Resources And Ecosystem Services Upon Which The Economy And Society Depend. The Desired Result Is A State Of Society Where Living And Conditions And Resource Use Continue To Meet Human Needs Without Undermining The Integrity And Stability Of The Natural Systems.

Other Projects And Schemes:

Recently The Gram Panchayat Had Raised The Fund For The Construction Of New Primary School For The Better Future Of The Village . The Gram Panchayat With The Help Of The Government Has Carried Out The Construction Of The Road Network From The Last Year.

Chapter 3: Smart Cities/ Village Concept As Per Your Idea And Its Visit:

Concepts, Definition And Practices:

Smart Cities/ Village Concept

What Is Smart Village:

In Smart Villages Access To Sustainable Energy Services Acts As A Catalyst For Development – Enabling The Provision Of Good Education And Healthcare, Access To Clean Water, Sanitation And Nutrition, The Growth Of Productive Enterprises To Boost Incomes, And Enhanced Security, Gender Equality And Democratic Engagement.

The Challenge:

Unfortunately It Is A Fact That, In The World Today, 1.3 Billion People Remain Without Access To Electricity. In Addition, 3 Billion Are Still Cooking On Dangerous And Inefficient Stoves. Many Of Them Live In Remote Rural Village Communities. Until Such Communities Have Access To Modern Energy Services, Little Progress Can Be Made To Develop Their Economies And Improve Their Lives.

Smart Cities Bench Marks, Standards And Performance Measurement Indicators:

- The Main Benchmarks Of The Smart Cities/Villages Are,
- Clean Metalled Roads
- Literacy And Compulsory Education Up To Final Basic Course
- Work And Means Of Earning
- Proper Inter And Intra Village Connectivity
- Dust Free Lanes & Streets
- Hygienic And Clean Water Supply And Access To All
- Houses Of Worship For All
- Primary And Secondary Schools With Industry Driven Education
- Library With E-Library Facility
- Professional Institutions Within An Area Of 10 Kms
- Proper Means For Health Check-Up And Treatment
- Access To Multi-Facility Hospital Within An Area Of 10 Km.
- Empowered Panchayats For Settling Disputes
- Produce Its Own Grains, Vegetable, Fruits And Khadi
- Fixed Place For Evacuation
- Wi Fi/ Broadband Connectivity
- Recreation And Playgrounds For Adults And Children
- Village Theatre, School And Public Hall

For Smart Village:

Following Mandatory Targets Are Necessary To Achieve Before Declaring Any Gram Panchayat A Smart Village. State Government Can Make Changes In The Mandatory Targets From Time To Time By Considering Certain Programs Or Targets.

- 100% Vaccination
- 0% Drop Out Ratio
- Open Defecation Free Village
- 90% Tax Collection
- Compulsory Door To Door Solid Waste Disposal
- Distribution Of ATVT Services At E-Gram Center
- ‘A’ Grade Primary School
- 100% Individual Toilet
- Remove Encroachments On Public Roads
- Malnutrition - No Child Should Be In ‘RED Zone’

- Mandatory Organizing Four Gram Sabha In A Year With 50% Presence
- 100% Implementation Of Direct Deposit Of Government Assistance Into
- Beneficiary's Account. (D.B.T.)
- 100% Enrollment Of Children In Anganwadi.
- To Update Revenue/ Gram Panchayat Records.
- Road Side Plantation In The Village.
- 100% Wi-Fi Village.

Technological Options For Smart Cities:

- Smart Energy.
- Smart Mobility.
- Smart Infrastructure.
- Smart Public Services.
- Smart Care.

Road Map And Safe Guards For Smart Cities:

- India Is A Country Of Villages. Any Product Or Solution That Has To Succeed And Be Popular In The Country Has To Be Of Direct Relevance To Village Life Of This Country. As Per Census Of India 2011, The Country Has A 69% Rural Population Spread Across More Than 600,000 Villages. Now, That Being The Case, No Marketer Worth His Salt Can Ever Dream Of Ignoring Rural India.

- Globally The Concept Of 'Smart City' Is A Significant Initiative That Seeks To Improve The Quality Of Life Of Urban Citizens. In India Too The New Central Government's Stated Priority Of Building 'Smart Cities' Has Found A Relatively Modest Budgetary Allocation Of Rs. 7,060 Crore For FY 2014-15, Though Its Significance For The Long Term Can Be Much Larger. Be It The Push Of The 'Smart City' Concept From Solution Providers, Real Estate Developers Or The Government Itself, The Concept Finds Wide Appeal. The Government Of India's Stated Plan To Set Up 100 Smart Cities Across The Country Has The Potential To Be A Game-Changer In The Country's Urban Landscape And The Lives Of Ordinary Citizens.

Issues & Challenges:

Smart City Council Of Is Facing Many Issues And Challenges In The Smart City Project. Some Of The Issues Are Shown Below,

- Retrofitting Existing Legacy City Infrastructure To Make It Smart
- Financing Smart Cities
- Availability Of Master Plan Or City Development Plan
- Three-Tier Governance
- Providing Clearances In A TimelyManner
- Dealing With A MultivendorEnvironment
- Capacity Building Programme

Smart Infrastructure:

Smart Infrastructure

Smart Infrastructure Is One Of The Main Points In The Smart Village Development. It Is Essential To Provide Smart Homes In The Smart Cities/Villages.

- The Main Points Of Smart Infrastructure Are,
- Energy Efficient Buildings
- Low Cost Houses
- Use Of Environment Friendly Materials
- Use Of Solar Rooftops For Saving Energy
- Rain Water Harvesting
- Recycling Of Used Water
- Recycling Of Waste Products

Cyber Security:

- Cyber Security In The Context Of Smart Cities Is A Hot Topic. The Objective Of Smart Cities Is To Optimize The City In A Dynamic Way To Offer A Better Quality Of Life To The Citizens Through The Application Of Information And Communication Technology (ICT). The Range Of Areas Where Cities Can Become Smarter Is Extensive: It Is An Evolution Of Connected Cities With The Prevalence Of Data Exchange At A Larger Scale. The Increase Of Data Exchange Controls Multiple Services And Assets Leads To More Automation In The City.

- As Several Critical Services Become Interconnected, The Need For Cyber Security Surges To Protect Data Exchanges, Privacy As Well As The Health And Safety Of Citizens. However, There Is Currently No Harmonized Guideline Or Standard To Model These Data Exchanges. This Leads IPT Operators, Municipalities, Policy Makers As Well As Manufacturers, Solution Providers And Vendors To Adopt Specific Solutions With Low Scalability And Disparate Requirements.

District Cooling And Heating :

Air Condition from Hammond Services,

In The Southeast, Air Conditioners Are Almost Crucial Pieces Of Equipment For Home Comfort. However, It Can Be Difficult To Find The Right Air Conditioner For Your Home, One That Will Provide Enough Cool Air In The Summer To Cool Your Home Without Driving Your Energy Costs Through The Roof. We Can Help! At Hammond Services, We Can Help You Choose The Perfect Air Conditioner For Your Home, Install It Professionally, And Even Maintain/Repair It In The Years Ahead.

Energy Efficient And Affordable Air Conditioners,

When It Comes Down To Selecting A New Air Conditioner For Your Home, There Are A Few Things You Should Consider. First Of All Is Efficiency. By Choosing An Energy Efficient Model, You Can Be Sure Your Money Is Being Well Spent And Isn‘T Being Thrown Away With Inefficiencies. Get The Most Bang For Your Buck With An Air Conditioner That Won‘T Cost A Fortune To Run. Reliability You Can Count On.

As A Carrier Factory Authorized Dealer, Our Commitment To Quality Products You Can Count On Is Clear. We’re Confident When We Say That With The Proper Maintenance, You Can Count On Our Air Conditioners To Operate Efficiently For Years To Come. If You‘Re Having Trouble Choosing An Air Conditioner For Your Home, Contact Us Today – We Can Help You Weigh Your Options.

The Average Annual Temperature Of The District (SABARKANTHA):

TEMPRATURE			
Months	**Normal**	**Warmest**	**Coldest**
January	20.1°C	28.3°C	11.8°C
February	22.2°C	30.4°C	13.9°C
March	27.3°C	35.6°C	18.9°C
April	31.7°C	39.8°C	23.7°C
May	33.9°C	41.5°C	26.2°C
June	32.8°C	38.4°C	27.2°C
July	29.5°C	33.4°C	25.6°C
August	28.2°C	31.8°C	24.6°C
September	29.1°C	34.0°C	24.2°C
October	28.5°C	35.8°C	21.1°C
November	24.7°C	32.8°C	16.6°C
December	21.3°C	29.3°C	13.2°C

Table 3. The Average Annual Temperature Of The District (SABARKANTHA)

Green Building :

- A Green Building Is A Structure That Is Environmentally Responsible And Resource-Efficient Throughout Its Life-Cycle. These Objectives Expand And Complement The Classical Building Design Concerns Of Economy, Utility.
- Green Buildings May Incorporate Sustainable Materials In Their Construction (E.G., Reused, Recycled Content, Or Made From Renewable Resources).
- Create Healthy Indoor Environments With Minimal Pollutants (E.G., Reduced Product Emissions).
- And Feature Landscaping That Reduce Water Usage (E.G., By Using Native Plants That Survive Without Extra Watering).
- A Green Building Is A Structure That Is Environmentally Responsible And Resource-Efficient Throughout Its Life-Cycle. These Objectives Expand And Complement The Classical Building Design Concerns Of Economy, Utility. Durability And Comfort.

Green building

Features Of A Green Building:

- Minimal Disturbance To Landscapes And Site Condition
- Use Of Non-Toxic And Recycled / Recyclable Material
- Efficient Use Of Water And Water Recycling
- Use Of Energy Efficient And Eco-Friendly Equipment.
- Use Of Renewable Energy
- Quality Of Indoor Air Quality For Human Safety And Comfort
- Effective Controls And Building Management Systems

Strategic Options For Fast Development:

- The Strategic Components Of Area-Based Development In The Smart Cities Mission Are City Improvement (Retrofitting), City Renewal (Redevelopment) And City Extension (Greenfield Development) Plus A Pan-City Initiative In Which Smart Solutions Are Applied Covering Larger Parts Of The City.
- Below Are Given The Deions Of The Three Models Of Area-Based Smart City Development:
- Retrofitting Will Introduce Planning In An Existing Built-Up Area To Achieve Smart City Objectives, Along With Other Objectives, To Make The Existing Area More Efficient And Livable.
- Redevelopment Will Effect A Replacement Of The Existing Built-Up Environment And Enable Co-Creation Of A New Layout With Enhanced Infrastructure Using Mixed Land Use And Increased Density.
- Greenfield Development Will Introduce Most Of The Smart Solutions In A Previously Vacant Area (More Than 250 Acres) Using Innovative Planning, Plan Financing And Plan Implementation Tools (E.G. Land Pooling/ Land Reconstitution) With Provision For Affordable Housing, Especially For The Poor.

India's Urban Water And Sanitation Challenges And Role Of Indigenous Technologies

India Is A Very Much Density Populated Country With Almost Population Of 134crore Approximately And Majority Of The Population Are Residing In Villages. Despites Of Having Various Facilities For Sanitation And Water Supply, Some Parts Of The Country Are Lack In Proper Supply Of The Water, People Had To Went To Well Or Hand Pumps In Order To Get The Water To Carry Out Their Various Domestic Purpose. Also Some Parts Of The Country Are Not Having Proper Drainage System, They Are Lacked Of Having Proper Sewer Line, Manhole, Various Biogas Plants, Water Treatment Plants, Maintenance Of Sewer Lines Due To Which They Have No Other Option To Carry Out They Daily Activities.

The Provision Of The Various Technologies Such As Water Treatment Plant With Technologies Like Water Filter Tanks, Aeration Tanks, Sedimentation Tank, Flocculation Tanks, Better Water Supply Pipes And Networks Increase The Quality Of The Water Supply.
Also We Have Technologies In Sanitation Department Which Includes, Proper Underground Sewer Lines, Manholes, Facilities Of Public Toilets Etc.

• Indigenous Water Purification Technologies:

These Technologies Can Improve The Drinking Water Quality Of Smaller Villages As Well As Larger Cities. It Uses The Pressure Driven Membrane Processes. These Are Suitable For All Capacity Units E.G. They Are Adaptable From Household Level Unit Or Community Level Unit To Large Scale Unit. Water Purification Technologies Make Use Of The Nuclear Energy And Solar Energy Also.

• Environment Friendly Plasma Technologies:

Solid Waste Dumping Sites Or Landfill Sites Need More Amount Of Land Which Is Not Available In Urban Areas. Incineration Of Solid Waste Pollutes The Environment If The Incinerators Are Not Designed Or Operated Properly. Thermal Plasma Technology Is Ideally Suited For Waste Treatment. By Plasma Technology Hazardous & Toxic Compounds Are Broken Down To Elemental Constituents At High Temperatures; Inorganic Materials Are Converted To Vitrified Mass; And Organic Materials Are Pyrolysis Or Gasified, Converted To Flue Gases (H2 & CO) & Lower Hydrocarbon Gases When Operated At Low Temperature (500 – 600OC). Disposal Of Carcass Is Also Being Thought Of Using Plasma Pyrolysis.

• Role Of Environmental Isotope Techniques In The WaterResources Development And Management:

There Are Two Type Of Isotopes, Stable Isotopes And Radioactive Isotopes. Isotope Techniques Are Used To Find Out The Type Of Contamination In Surface Water And Ground Water, The Sources And Origin Of Contamination, Pollutant Dispersion In Surface Water Bodies, To Assess The Groundwater Salinity, To Assess The Changes Due To Long-Term Exploitation Of Groundwater, For Hydro-Chemical Investigation And To Carry Out Geochemical Evolution Of Groundwater.

• The BARC UF Membrane Technology For Domestic WaterPurifiers:

Water Filters Manufactured By Sondhka Based On Membrane Based Water Purification Technology Has Been Developed By BARC. Benefits Of BARC Poly Sulfone Membrane Are High Tech 0.02micron Or 20nm, Simple Form Factor, Rugged (Life Of More Than 1 Year) And Low Maintenance (About Rs. 500 Per Year). It Is Very Easy To Use And Very Low-Cost Solution For The Water Contamination.

• Deployment Of BARC Domestic Water Purifier In Rural Area Through AKRUTI Program:

Rural Human & Resource Development Facility Is Disseminating BARC Technologies, Namely Nisargruna Biogas, Soil Organic Carbon Testing Kit, Seed Bank, Domestic Water Purifier, Weather Forecasting, LLL, RIA, FSD, VTD; Under The AKRUTI(Advance Knowledge Of Rural Technology Implementation) Program. Activities Carried Out Under The AKRUTI Program Are Surveys For Safe Drinking Water, Interaction With The Villagers, Entrepreneurship Development For Domestic Water Purifier Production And Awareness Programs For Benefits Of Use Purified Water. RHRDF Has Also Launched A Scheme For Safe Drinking Water For Village Under CSR

- **Radiation Hygienization Of Municipal Sewage Sludge:**

The Sewage Is The Waste Water Generated From Domestic Premises And Consists Mainly Of Human Waste. It Typically Contains 99.9% Water And About 0.1% Solid. The Solid Waste In Sewage Is Typically Organic In Nature And Is Broken Down In The Sewage Treatment Plants Resulting In Sewage Sludge As A Byproduct. In Radiation Hygienization Process Dry Sludge Generated At STP'S Is Hygienized Using Radiation Technology Using Standard Gamma Facility At A Dose Of 10 Kgs. Such Radiation Plants Are Operating In India For Sterilizing Medical Products.

Initiatives In Village Development By Local Self-Government

The Village Grampanchayat Has Taken Various Steps For The Betterment Of The Village Through Various Government Schemes And Raising The Funds From The Governments.

With The Help Of The Government The Village Had Developed Better And Sustainable Road Networks, Proper Drainage System, Proper Water Supply With RO Facilities, Sufficient Electric Supply, Better Infrastructure Facilities Etc. Also They Have Provided Bus Facility For The Village Peoples To Help Them In Travelling In Between Other Villages And Also Grampanchayat Has Provided More Than 140 Cctv Camerasin Village For The Safety Purpose.

- Financial Systems. Constraints On Government Budgets And The Rigidities Of The Present System Of Intergovernmental Transfers Prevent An Adequate Response Of Traditional Arrangements To The Challenge Of Urbanization. A New And More Decentralized System Of Public And Private Financial Intermediaries Will Be Required. The Establishment Of The NHB Represents An Important Step: An Apex Institution That Will Stimulate The Creation Of A Network Of Mortgage Financing. The NCU Also Calls For The Creation Of Urban Infrastructure Development Banks To Permit Local Governments To Borrow For Infrastructure.

- Non-Governmental Organizations. Given The Size Of The Job And The Difficulty Governmental Agencies Have In Dealing Directly In Some Aspects Of The Development Of Urban Areas (Eg, Stimulating Informal Sector Enterprise And Provision Of Shelter) There Is A Recognition Of The Need For New And Expanded Ngo's To Assist In Facilitating The Urbanization Process.

Smart Initiatives By District Municipal Corporation:

The Village Grampanchayat Has Taken Initiatives For The Betterment Of The People Like, They Had Developed The 'Reverse Osmosis Plant', Which Provide Pure And Hygienic Water Supply And Also Provide Cool Water To The Every House Of The Village.
The Village Has Also Developed Solid Waste Treatment Plant In Order To Use The Solid Waste For Various Purposes. The Village Has Also Adopted The Smarter Facilities Like CCTV Cameras, Speakers, Wi-Fi Connectivity.

Contributed Working By Government/ NGO / Other Digital Country Concepts:

The S.B.I. Gives A Digital Banking To The Gram Panchayat.
Telecom Company Gives Internet On Reasonable Prices.
Some Donor Gives Money For The Village Development .

How To Implement Other Countries Smart Village Projects In Indian Village Context:

By Learning About Other Countries Village Situation We Can Make Some Report On It And Try To Implement That Facilities In Our Indian Village.
By Learning About Problems Of Indian Village We Can Find Solution And After That We Have To Try To Solve That Problems.

By Improving The Construction Technologies Of India.

By Adopting The Best Ideas From The Other Countries Village.

Try To Convince A Investor To Invest From Out Side Of India.

By Hiring The Engineers And Staff From Foreign Countries.

By Taking Concepts From Other Countries Village And Try To Convince The Indian Villager To Help In Development.

Ch 4: About NANI PARABADI:

INTRODUCTION

Nani parabadi is A Village In Dhoraji Taluka In Rajkot District Of Gujarat State, India. It Is Located 83 KM Towards South From District Head Quarters Rajkot. 16 KM From Nearest Town Dhoraji. Nani parabadi Pin Code Is 360360 Gram Panchayat Building Is In Good Condition The Educational Status Of The People In The Of Nani parabadi Is So not Good, Nani parabadi Havn't School, But There Are Only 7th Std In The School. But There has No Water Supply, The Main Water Source Of The Village Is Bore Well Or Hand Pump.

The Main Source Of Income Is Farming.
Some People Are Also Doing The Job In Companies And Government Sectors. Some Are Having A Shops In Village

People With Various Casts Are Living Together In The Village.

Some Of The People Are Migrate To The City Area For The Better Future And Education.

The Population Of The Village Is 2118.

Study Justification/ Need Of The Study

We Are As A Students Doing The Study About The Village 'Nani parabadi' To Understand The Infrastructural, Agricultural And Economic Condition Of The Village. Than After To Propose Some Ideas About Improving The Facilities In This Village And To Make Those Peoples Lives Easier To Live In.

Study Area (Broadly Define):

Study Area Mainly Includes The Study Of The Village Nani parabadi, Which Is Located 83 KM Towards From South District Head Quarters Rajkot And 16 KM From Dhoraji.

Objectives Of The Study

Following Are The Various Objectives Of The Study:

- To Provide Basic Physical Infrastructure – Water Supply, Transport, Sewerage And Solid Waste Management Should Be The Priority Focus And Be Provided.
- To Provide Insufficient Social Infrastructure Like Health And Education Facilities And To Ensure Proper Delivery Of Facilities To Village Dwellers.
- To Promote Integrated Development Of Rural Areas With Provision Of Quality Housing, Better Connectivity, Employment Opportunities And Supporting Physical And Social Infrastructure.
- Reduce Migration From Rural To Urban Areas Due To Lack Of Basic Services And Sufficient Economic Activities In Rural Areas.
- Electricity Connection Like Street Lighting That Is Energy Efficient And Eco-Friendly.
- Identification Of Sanitation Facilities That Need Improvement.

Scope of the Study:

- By Studying The Present Status And Techno-Economic Survey Of Nani parabadi Village In Rajkot District Of The Gujarat State In Terms Of Basic Services, Public Amenities, Other Infrastructural Facilities For The Need Of The People And To Prepare A Report On The Expected Socio-Economic Growth Of The Area With The Consultation Of TDO, DDO And Sarpanch; Will Help Full In Providing Better Facilities And Services In Village.

- From The Gap Analysis, Development Strategies For Village Development Will Be Proposed And Planning Proposals For Physical Infrastructure, Social Infrastructure And Renewable Energy Source Will Be Suggested For The Village. The Study Will Focus On The Development Of The Village.

Methodology Study/ Frame Work:

- Firstly, We Studied What Are Various Objectives And The Need Of The Vishwakarma Yojana.
- Then We Completed Our Literature Review That Includes The Basic Definitions Of Rural Area, Urban Area, Rurbanisation, Sustainable Development Etc.
- We Also Visited An Ideal Village Named Punsri Which Is Also Located In The Taluka In Sabarkantha District. There We Understood What Kind Of Facilities Are Required In The Village And How To Implement It.
- After This We Met Our Village Sarpanch, Talati Mantri And Other Gram Panchayat Members.
- We Collected All The Required Data Related To The Various Facility And Completed Our Techno-Economic Survey And Smart Village Form.

Objects Related To Civil:

- To contribute to the development and maintenance of building andinfrastructural facilities and systems, especially in the local and neighbouring regions.
- To making better infrastructure for the villagers.
- To improve the quality of the construction and also the development of the structure.
- To making their life smooth by making road networking and also try to connectthem with the urban area.

Nani Parabadi:

Study Area Location:

Study Area Location

Country	India
State	Gujarat
District	Rajkot
Sub-District	Dhoraji
Nearest Town	Dhoraji 16 km
Area	391.32 Hectares
Government	Gram Panchayat
Population	2118
Time Zone	Ist (Utc+5:30)
Pin Code	360360

Table 4. Primary details of Nani parabadi village

Physical & Demographical Growth:

Particulars	Total	Male	Female
Total No. Of Houses	470	-	-
Population	2118	1079	1039
Child (0-6)	175	-	-
Literacy	74.60%	87.03%	61.35%
Total Workers	954	578	376
Main Worker	635	-	-
Marginal Worker	209	15	194

Table 5. Physical & Demographical Growth

Physical Growth

- Primary School
- Water Tank
- Post Office
- Dairy
- Temple

Brief History Of Village:

Nani parabadi Village Is Situated In Rajkot District. People Of This Village Are Living In Very Peaceful Manner. This Village Having Very Proud History. Agriculture Is The Main Profession Of This Village. Still The Village Is Waiting For Industrial Development, Education, Drinking Water And Roads Are The Main Concerns Of This Village. Young Generation Is Attracted Towards Mobile, Laptop And Computer Technology These Days. If Banks And Finance Institutes Proved Loan And Other Financial Support To The Villagers, This Village Will See The Real Development. Medical And Health Services Must Be Improved.

Economic Profile / Banks

About The Economic Profile Of This Village, Many Citizens' Work Interest Is Farming And Labor Work. The Village Doesn't Have Any Better Facilities Regarding Infrastructure But Has Good Electrification System Which Distributed 24*7 Hours For Domestic Use And 8 Hours For Agricultural Use. Village Does Not Have Good Drainage System Because There Is Open Drainage Etc. Dairy And Milk Production Is Also The Prime Source Of Income.

Actual Problem Faced By Villagers And Smart Solution:

PROBLEMS:

1. Transportations
2. Shortage Of Irrigation Water
3. Drainage System
4. Internal & External Road
5. Waste Collection
6. Rain Water Does Not Harvesting
7. Unemployment
8. Poor Infrastructure
9. Migration
10. Network Connectivity
11. Lack Of Awareness
12. Health Centre
13. Community Hall
14. School
15. Bus Station
16. Lack Of Awareness About Smart Technologies
17. Old Agriculture Methods
18. Bank

SOLUTION:

1. Make A Better Transportations Facilities
2. To Improve Irrigation Methods And Provide Sufficient Water
3. Make A Proper Drainage System And Storage Of The Water
4. Make A Bituminous Road For External Road ,And R.C.C. Roads For Internal Roads And Also Try Paver Blocks
5. Make A Waste Collection System In Village And Try To Use That Wastage For Producing Electricity
6. Make A Rain Water Harvesting And Try To Store Maximum Rain Water Which Is Stored Properly
7. To Make A Home Industries For Prevent The Unemployment And Also Villagers Can Earn The Money From It. So Their Economy Will Be Increase
8. Make A Good Infrastructure For The Village So Their Life Time Is Increase And AlsoIt Will Be Long Lasting.
9. Make A Better Life Style For The Villagers To Prevent Migration.
10. Try To Make A Better Connectivity By Help Of Government Or A Telecom Company.
11. Try To Aware The Villagers By Posterring And Printed On The Walls.
12. Make A Primary Health Centre With The Sufficient Staff.
13. Make A Community Hall For Social Functions And Village Meetings
14. Make A Primary And Secondary Schools For The Children Of Villages
15. Make A Bus Station For Improving The Facility Of Transportation.
16. Aware The Villagers For The Usage Of The Smart Technologies And Better Knowledge.
17. Improving Agriculture Methods And Try To Make Better And Effective Farming.
18. Make A Gramin Bank For The Villagers To Improve Their Savings And Economical Status.

Social Scenario:

It Was Found That All The People Of This Village Are Not Very Much Connected With Today's Technology Environment Rather Than Their Main Major Working Area. The Major Crops Produced In The Village Are Cotton, Dangar, Wheat And Vegetables. The Major Population Is Get Income Through The Farming And Dairy There Are No Other Job Opportunities. The Education Is Limited To Primary School.

Base Location Map, Land Map, Gram Tal Map:

Map of Nani parabadi village

Satellite map of Nani parabadi village

Preservation Of Tradition, Festivals, Cuisine:

- By Promoting The Traditions Of The Village We Can Try To Make It Long Lasting.
- Make A Brief Report Or Stories On The Traditions, Festival And Cuisine.
- We Can Aware The Children And The Youth Of The Village By Telling Them About Their Traditions And Their Festivals.
- We Can Arrange The Functions And Programs On Their Traditional Festival
- We Can Also Do The Events And Competition In Their Cultural Festival
- We Have To Aware The People Which Are Living In The Urban Areas About Tradition Of The Village And Also About The Cuisine.
- We Have To Find The People Which Are Migrated From The Village And Try To Convince Them To Come And Participate In The Festivals.
- We Can Also Do A Stage Programme In The Urban Areas To Aware And Give Them Knowledge About Tradition Of The Village.
- By Using Smart Technology We Can Make It Viral To The Different Religions And Different Countries.
- We Have To Make It Interesting To The People For Preservation Of The Tradition,Festivals And Cuisine.

Reasons Of Migration / Trends Of Migration / Problems And Potentials Of Migrate:

Unemployment

Poverty

Poor Health

Status For Better

Education For Better

Future

Poor Connectivity With Urban Areas

Lack Of Awareness Poor

Infrastructure

Atmosphere

Data Collection:

Methods For Data Collections:

There Is Not Any Specific Method About Collecting The Data For The Project But, There Are Several Methods That We Have Used For The Collection Of The Data Which Includes,

- Data Collection By Visiting The Site
- By Referring Journals
- By Internet Search
- By Searching In Other Projects

Primary Survey Details:

Nani parabadi Is A Village In Dhoraji Taluka In Rajkot District Of Gujarat State, India. It Is Located 83 Km Towards South From District Head Quarters Rajkot. 375 Km From State Capital Gandhinagar. Nani parabadi Pin Code Is 360360 Gram Panchayat Building Is In Dead Condition The Educational Status Of The People In The Of Nani parabadi Is So Good, Nani parabadi Have School, But There Are Only 7th Std In The School. But There Are No Water Supply, No Indoor Toilets. The Main Water Source Of The Village Is Bore Well Or Hand Pump.

Average Size Of The House:

Average Size Of The House Is 318 Sq Ft .

No Of Human Being In One House:

There Are 3-6 People In One House

Materials

The Materials Used Locally In Nani parabadi Is Brick, Cement, Aggregate Etc. Which Are Normally Common In Urban Areas. There Is Only 10 To 15 Percent Of The Houses Which Are Built Of Earthwork.

Out Sourced Material:

The Outsourced Material Should Be Used In Villages Is Like Fertilizer, Steel, Cement, Aggregate Etc.

Any Costing:

Costing Will Be Shown In Latter Chapters

Geographical Details:

Village Name	Nani parabdi
Taluka Name	Dhoraji
District	Rajkot
Language	Gujarati
Area	391.32 Hectares

Table 6 : Geographical Details of Nani parabadi

Demographical Details

Particulars	Total	Male	Female
Total No. Of Houses	470	-	-
Population	2118	1079	1039
Child (0-6)	175	-	-
Literacy	74.60%	87.03%	61.35%

Table 7. Demographical Details

Occupational Details:

In This Village 70 % People Connected With Agriculture Activities It's The Village's Main Source Of Income. But Village Has The Milk Production Business So That's A Income Of Source Too There Are Approx. 10 % People Are Connected With Milk Production And Other Are Doing Labour Work For Money.

Agricultural Details / Organic Farming / Fishery:

In This Village There Are Some Normal Agricultural Crops Available But, There Is Not Any Organic Farming Or Fish Culture Available Here.

Manufacturing Hub / Ware Houses:

There Is No Manufacturing Hub In This Village But, There Are Few Ware Houses In This Village To Store Crops.

Tourism Cluster:

Nani parabadi Village Is Not A Part Of Any Kind Of Tourism Cluster.

Services Cluster:

There Is Not Any Service Cluster In Nani Parabadi Village.

Male / Female Details:

Particulars	Total	Male	Female
Total No. Of Houses	470	-	-
Population	2118	1079	1039
Child (0-6)	175	-	-

Table 8. Male / Female Details

Occupation Wise Detail:

Major Occupation Of Village People Is Agriculture.

- Agriculture – 70%
- Milk Production- 10%
- Daily Wages- 20%

Physical Infrastructure Facility:

The Village Is Boon With The Following Physical Infrastructure Facilities

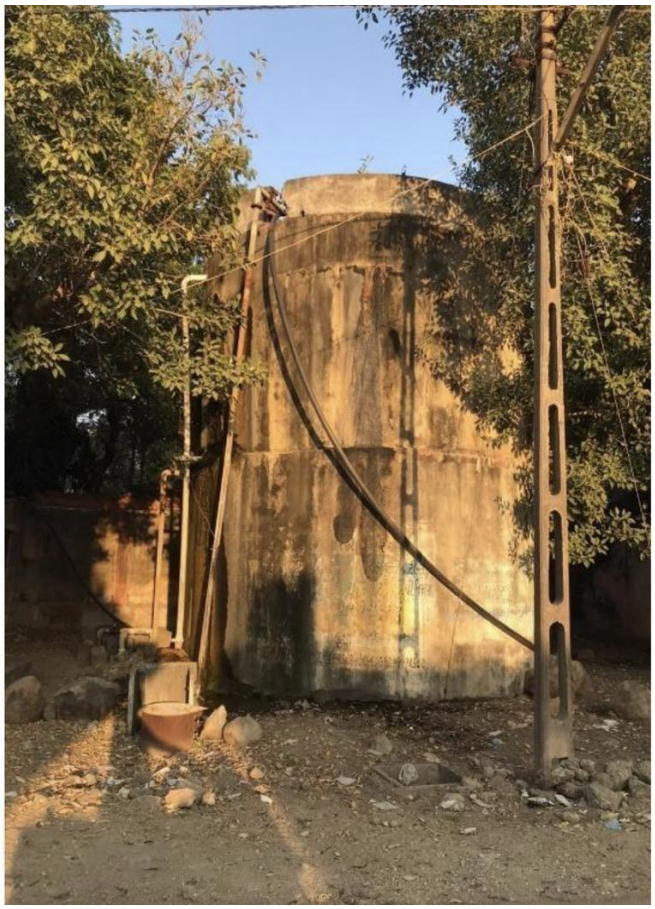
- Primary School(under construction)
- Water Tanks
- Open Drainage
- Panchayat Building Good Condition
- Milk Dairy

Infrastructure Details:

Drinking Water:

For Drinking Purpose 1 Elevated Water Tank, Sumps And Tube Well And Tap Water Available. Some People Also Use Hand Pump For Water Purpose.

Capacity : 1,00,000
Litres Height: 15 Meter



Water tank, Nani parabadi

Drainage Network:

There is not enough drainage system in Nani parabadi .

Drainage System In Nani parabadi

Transportation & Road Network:

For Transport Network Railway Station, Available Within 18 Km In Dhoraji . Bus Station Is Not Available In Nani Parabadi. Mainly People Use Local Transport Like Auto Rickshaw, Jeep, Chhakda Etc. Approach Road Of Village Is Dhoraji Highway Is Bituminous Road. Main Road Of Village Is Bituminous. Internal Street Roads Are Not Available But Some Place Paver Blocks Are Fixed.

Rough road of Nani Parabadi

Road Network in Nani Parabadi

Housing Condition:

There Are 470 Households In The Village. 70% Households Are Pucca And 30% Are Kutcha. Some Of The Houses Have Number Plates On The Outside Wall.

House in Nani Parabadi

Social Infrastructure Facilities:

Health:

Primary health centre is available in Nani parabadi Village. Its Located at almost centre area of village, Which have 6 Bed capacities and it is not adequate as per population of village. All the primary health services available in village

Primary Health centre, Nani parabadi

Education:

There Is A Primary School In The Village Which Has 7th Std. But Now A Days Because Of Poor Infrastructures it under construction.

Primary School in NaniParabadi Village

Community Hall:

There Is No Community Hall .

Library:

There Is No Library In Village

Solar Street light

solar street lights

Technology Mobile/ WIFI / Internet Usage Details. In %:

Very Few Peoples Of Nani parabadi Is Aware Of Any Kind Of Mobile Technology And Internet Which Mostly Includes Youngsters.

Sports Activity As Gram Panchayat

There Is No Sports Activities Conducted Through Gram Panchayat.

Socio-Cultural Facilities

There Is No Social Cultural Facilities.

Public Garden /Park/Playground

Not Available

Other Recreation Facilities

Not Available

Other Facilities

Post Office, Shops, Panchayat Building, Agriculture And Milk Co-Operative Facilities Are Available.

Sustainable Infrastructure Facilities & Repair & Maintenance OfExisting Public Infrastructures:

- The Village Need A Gram Panchayat Building
- Solid Waste Management Plant Is Also Needed Because They Just Dumped The Waste On The Land And It Create Foul Environment.
- Village Needs Better And Closed Drainage System. They Flush All The Sewage Into Water Bodies.
- Village Need A Bio Gas Plant So That Use Of Unconventional Fuel Is Reduced.
- Most Of The Roads Of The Village Is Kutcha Road So The Roads Is Very Damaged By Rainy Season So The Maintenance Of The Road Is Required.

Existing Condition Of Public Buildings:

There Is One Public Building In The Village Gram Panchayat Building And Its In Fair Condition.The Drainage Is Open And It Needs To Redesign. The Roads Need A Maintenance.

Maintenance of existing Public Infrastructures

In The Nani Parabadi Village There Are Few Structures Which Require Maintenance.

- School Building Flooring
- Gram Panchayat Building
- Temple
- Post Office

Any Other Details

One Overhead Water Tanks Are Available And One Milk Dairy Is Available.

Renewable Energy Source Planning Particularly For Villages

Renewable Energy Plays An Important Role In Reducing Greenhouse Gas Emissions. When Renewable Energy Sources Are Used, The Demand For Fossil Fuels Is Reduced. Unlike Fossil Fuels, Non- Biomass Renewable Sources Of Energy (Hydropower, Geothermal, Wind, And Solar) Do Not Directly Emit Greenhouse Gases

. Solar Energy Is Commonly Used On Public Parking Meters, Street Lights And The Roof Of Buildings. Wind Power Has Expanded Quickly, Its Share Of Worldwide Electricity Usage At The End Of 2014 Was 3.1%. Most Of California's Fossil Fuel Infrastructures Are Sited In Or Near Low-Income Communities, And Have Traditionally Suffered The Most From California's Fossil Fuel Energy System.

These Communities Are Historically Left Out During The Decision-Making Process, And Often End Up With Dirty Power Plants And Other Dirty Energy Projects That Poison The Air And Harm The Area. These Toxicants Are Major Contributors To Health Problems In TheCommunities.

Irrigation Facility :

For Irrigation Purpose 60% Of The Farmers Are Depending On The Well And Rain Water.
Canal Facility Is Available In The Village But Some Reasons Shortage Of Water Will Occur.

Farmers Are Not Using Irrigation Technologies Like : Drip Irrigation, Sprinkle Irrigation.

Existing Institution Like - Village Administration – Detail Profile:

Mahila Forum:

There Is No Any Mahila Forum In The Village.

Plantation For The Air Pollution:

In Nani parabadi Village The Plantation Are Done By Some Farmers For The Agricultural Purposes.

Rain Water Harvesting:

There Is Only Open Drain Channel So The Rain Water Is Not Harvesting Properly.

Agricultural Development:

There Is No Agricultural Development.

Any Other:

Infrastructure Are Very Poor.
Basic Facilities Are Not Available.
Transportations Are Not Available Easily.

waterfront devlopment case study in riverfront .

CASE STUDY: SABARMATI RIVERFRONT DEVELOPMENT

KPMG (Klynveld Peat Marwick Goerdeler), one of world's top advisory firms has included Sabarmati Riverfront Development Project in '100 most Innovative Projects' in the field of urban regeneration (2012) that make cities livable as well as sustainable.

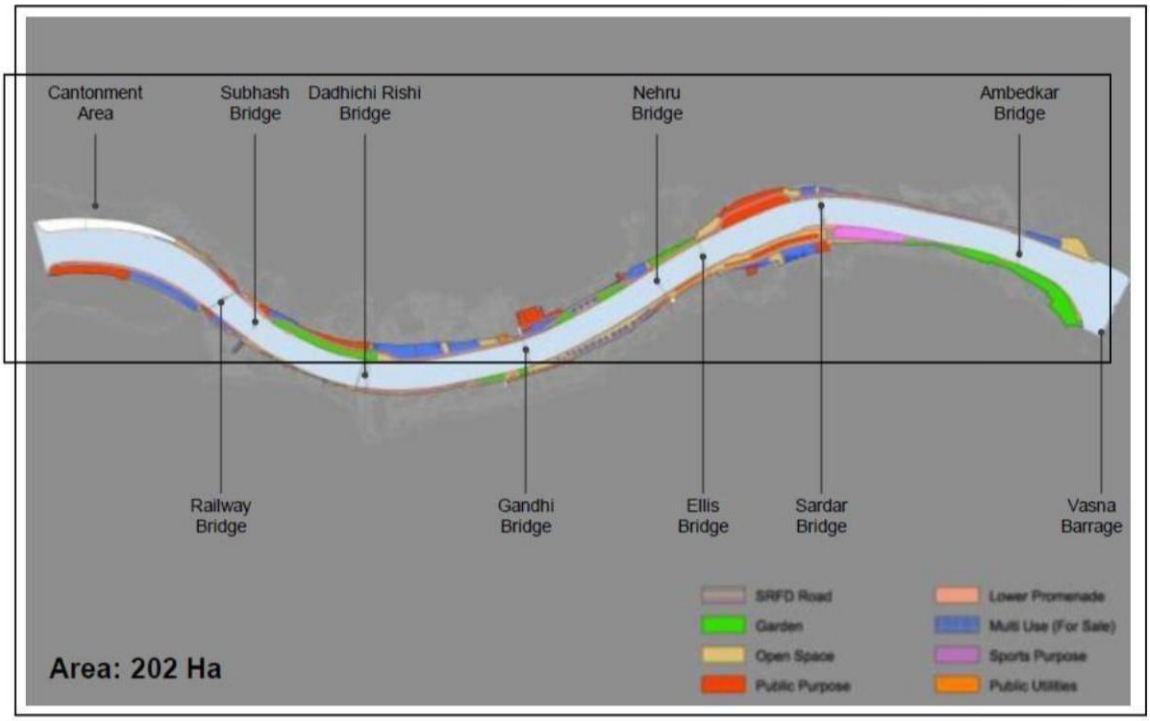
Ahmedabad Municipal Corporation (AMC) received HUDCO National Award 2012 for innovative infrastructure development for the riverfront project. The project consists both banks of the Sabarmati or a 10.5 km stretch, creating approximately 202 hectares of reclaimed land. There is a water management system for minimizing flooding and clean up the river with new sewage treatment infrastructure.

The Sabarmati River Front Development Corporation Limited (SRFDCL) is established in 1997 for the development of the riverfront in the city. (1) SRFDCL reached out to a number of NGOs and citizen groups for planning and implementation. The process of implementation was done by build, maintain, operate and transfer. SRFDCL appointed Independent Third Parties to supervise the private sector contractors who were selected on fixed time and rate. The fund for the project is set out by different sources that are equity capital, loan fund and proceeds from land sales

Riverfront Land Use-

The proposed development is of mix land use that includes commercial, recreational and residential developments within the both side of river bank from Gandhi Bridge to Sardar Bridge.

Sr. No.	Sanctioned Land Use	Area Sq. m.	Area Ha.	%
1.	Road	4,44,378	44	22
2.	Garden	2,74,585	27	14
3.	Open space	3,71,198	37	18
4.	Public purpose	2,88,875	29	14
5.	Lower Promenade	2,66,462	27	13
6.	Multi use for sale	2,94,083	29	14
7.	Sports	72,503	7	4
8.	Residual	15,787	2	1
.	Total	20,27,871	202.8	



Development in D

The major component of the project concludes embankment and reclamation works, construction of road and installation of infrastructures such as water, sewer network, storm water drainage, etc., resettlement and rehabilitation work, construction of promenades and garden and maintenance of public spaces.

Rehabilitation of Slum Dwellers.

There were around 12000 hutments on both side of river bank that cover nearly 20% of the critical project area. More than 10000 families are allotted with houses for resettlement, and 9078 odd families have already been shifted. Each house is of 26.77 sq m carpet area. Commonly the relocation of a slum is provided on the outskirt of the city, but in this case, it is located near to the prime location of the city.

Dhobi Ghat.

Around 172 Dhobis were using both the bank of the river for washing activities. On the eastern bank of the river near Vasna Barrage is constructed as dhobi ghat spread over approx. 9400 sq.mt area has utility area of about 600 sq.mt. There are seven blocks in modern Dhobi Ghat, and each block has 24 units with well-developed water supply and drainage system with a water meter for inlet watering.

However, a mega city like Ahmedabad requires a proper event management ground facilities. So that an area of 60.00 aq.mt, spread between Sardar Bridge and Ellis Bridge on the west bank has been designed for hosting events such as the Kite Festival, the Marathon, the Cyclothon and Garib Kalyan Mela are organized.

URBAN FORESTRY

Between Vasna Barrage and Ambedkar Bridge, the unique afforestation project is situated over 1 lakh NHCE 2017 Dipali Paneria 5 sq.mt area. The natural forestry is being developed with different plant species from Gujarat, including certain very rare species.

To intercept the sewer running into the river and divert it to the treatment plants, the interceptor sewer system was constructed. Earlier the sewage from 36 drainage points directly falls into the river that makes the water dirty, mosquito ridden and unhealthy environment. Now, there is an extreme change in the environment around the river because all sewage goes to a pumping station for transformation it to river quality.

Promenade

.

A key feature of this project is a two-level, continuous walk on both sides of river bank built just above the water level for pedestrian and cyclists. So there will be no private ownership of river bank, and the whole stretch is open for every citizen.

Project Benefits and Impacts.

- Now it is possible to retain surface water in the river all year around.
- The ground strata are recharged with storage of 12.5 million cubic meter river water.

• More than 250 MLD sewage is diverted from the river and pollution is eliminated.

• The river is protected from the scour and stopped the erosion of the river banks with Diaphragm walls.

• 202 ha. land is available by retaining wall on both sides for further development for the city and flood protection.

• The embankments provided with wide walkways, green space with tree plantation and many other facilities.

• Rehabilitation of resettlement of 10000 slum dwellers in great pukka houses.

• Traditional users of a river like washer men and unorganized vendors are now provided with organized facilities.

• Easy access to the river water through Ghats, Stairs/ Ramps.

Chapter:-6 Swatchh Bharat Abhiyan (Clean India)

6.1 Swatchhta needed in allocated village -Existing Situation with photograph:

1 : Swachta needed in village

- Village street and roads have lots of waste which lower the beautiful look of village.
- Waste water should be disposed in Madhu river instead of sewer
- There is public toilet village especially for poor people
- Cattle dung is dumped everywhere instead of collecting at one place.
- There are dust containers or wastte collecting vehicle.
- Awareness in village people is low for cleanliness in village.
- There are some small accumulation of water in village part which causes mosquito nuisance.

2 : Guidelines – Implementation in allocated village with Photograph :

Swachta implemented in village

Cleanliness provided in school, hospital and agganwadi.

Road cleaning by the village people near theirhouse

Providing awareness among the village people.

Proper disposal of cattle dungs.

Avoiding throwing of waste on the street which causes illness.

Avoiding accumulation of water in village which causes mosquito nuisance.

Providing Swach bharat posters at public places which brings awareness in villages

Proper disposal of waste water.

Lowering household dump waste.

Growing more trees and plants

3 : Activities Done by Students for allocated village

We have visited the Sarpanch of village and and other several village people and provided various information about swach bharat abhiyan and benefits to villagers by which they decided to implement swach bharat abhiyan in village.

Chapter 7 :- Village condition due to Covid-19 :

1: Taken steps in allocated village related to existing situation with photograph

Figure 7.1: Closed Situation in village due to COVID-19

square measure up to now affected in Rajkot, Gujarat by novel corona virus covid-19. 15 out of 39 have recovered. In that one case of thirty year old guy comes from Parabadi village Sadly, zero patients have died thanks to corona virus in Rajkot, Gujarat. Twenty four patients are still in hospital and recovering.

Lockdown at school, Aganwadi, banks, religious worship places and alternative public buildings.

Most individuals are staying at home to fight against Covid 19 individuals pandemic

Increase in awareness in village folks by creating social distancing and sporting mask.

Decrease in traveling outside of village specially by employees, employers and alternative business folks.

School and school students which are studying in or outside the village are advised to study on-line from there home.

People of villagers were fresh recent and healthy food like vegetables fruits and that they avoid outside food as so much as possible.

2: Activities Done by Students in Parabadi village Clean with Photographs :

Creating awareness regarding what's Covid-19 virus, however it unfolds and explaining however social distancing checks spread of coronavirus.

Demonstrating however sporting of masks will scale back the danger of infecting others and protective ourselves.

Correct methodology of exploitation and discarding the masks Distribution of masks to the villagers.

Demonstration of correct methodology of laundry with soap.

Effective use of sanitizers and distribution of sanitizers to the panchayet cleansing workers

F

Bringing awareness in village people

3: Any other steps taken by the villagers :

- In all gram panchayat of village use of Social Media whatsapp group has been wont to produce awareness among the lots within the villages.

- Data at the grassroots level is being given to the are by swing posters everyplace. Regular cleansing operations area unit being administrated.

- Face masks area unit being distributed to the voters by Gram panchayat members and social organizations and citizens are being told not to touch their eyes, nose, and mouth, wash hands with soap often and maintain personal distance.

- In conjunction with ration distribution to villagers, fodder for abandoned cattle is also being provided by a work organization

.

Ch 8: Sustainable Design Planning Proposal (Prototype Design)- Part-I(Scenario / Existing Situation /Proposed Design In Auto Cad / Recapitulation Sheet / Measurement Sheet / Abstract Sheet / Sustainability Of Proposal):

In Our Allocated Village "Nani Parabadi" There Is No Infrastructure Development And Also There Is No Any Public Buildings For The Villagers.The Village Has Not Even A Bus Station For The Busses So That's Why There Is No Any Transportations Facilities Like State Transport.In That Village There Is No Any Public Garden For The Villagers To Seat And Also There Is No Any Play Ground For The Children Also The Village Has Not A Proper Infrastructure Or Building For The School And Also There Is No Any Community Hall For The Purposes Of The Social Functions And Also For The Meetings Of Villagers. Nani Parabadi Has Not A Primary Health Center For The Primary Treatment Of The Villagers. Gram Panchayat Is Also In The Dead Condition.
So In The Village The Infrastructure Is Very Poor That's Why We Suggest Or We Propose Some Designs For The Village.

Proposed Design:

1. Public Toilet.
2. Community Hall.
3. Bus Stand.

Recommendations Of The Design:

- There Is No Bus Station For The Transportation Service
- There Is No Big Primary Health Center For The Villagers.
- There Is No Any Community Hall For The Social Functions And Meetings.
- Infrastructure Are Very Poor.
- Gram Panchayat Is Also Not In Good Condition.
- There Is No Any Rain Water Harvesting System.
- There Is No Any Public Garden For The Villagers And Also There Is No AnyChildren Play Ground.
- There Is Some Roads Are Very Damaged And Also They Are Full Off Water In Rainy Weather So We Can Construct The Roads.

Suggestions / Benefit Of The Villagers:

- By Making The Bus Stand The Transportation Facility For The Public Is Increased
- By Making A Primary Health Center We Can Increase The Health Status Of The Villagers.
- By Making A Community Hall We Can Increase Sociality In The Villagers.
- By Making A Rain Water Harvesting System We Can Stored The Water And Solve The Problems Of The Villagers Which Are Related To The Water.
- By Making The Public Garden And Children Play Area We Can Make A Better Environment For The Village.
- By Making The Roads We Can Improve The Transportations System For The Villagers.

1) Public Toilet

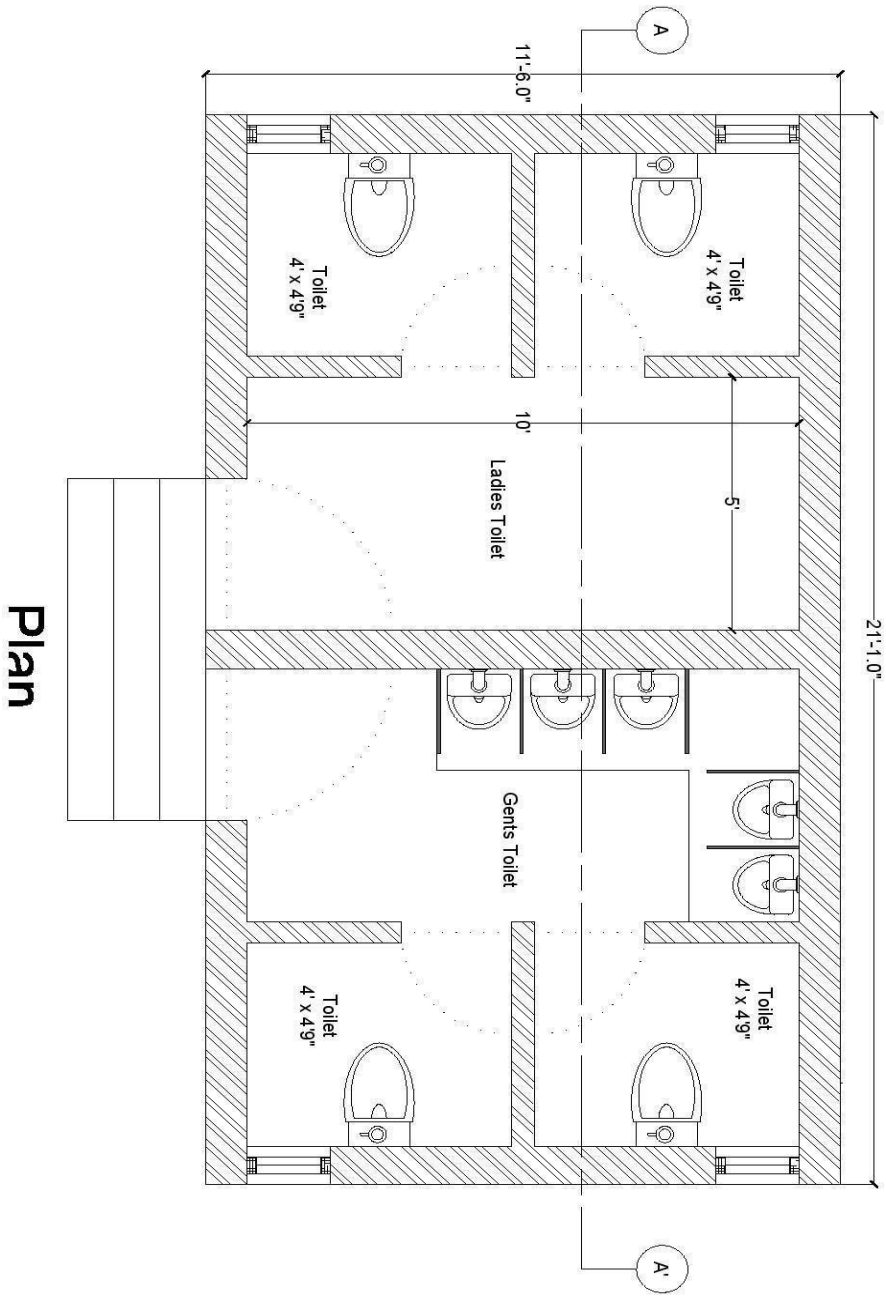
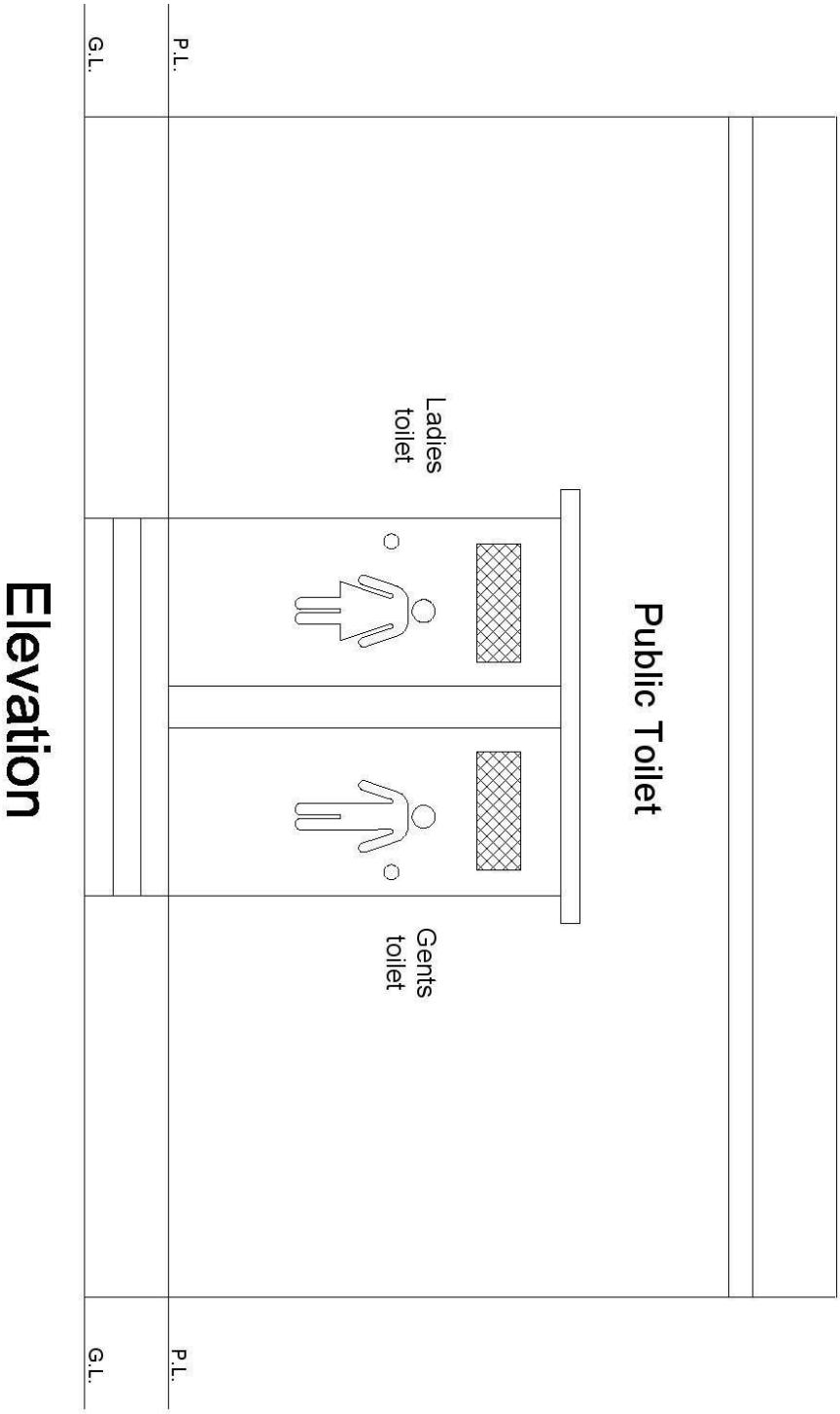


Figure 8.1 Plan of Public Toilet



Elevation of Public toilet

Quantity Sheet

Sr. No.	Item	Quantity
1	**Excavation in foundation**	
	Type 1 wall	10.16 m^3
	Type 2 wall	2.33 m^3
	Total Quantity	**12.50 m^3**
2	**PCC 1:10 in foundation**	
	Type 1 wall	2.99 m^3
	Type 2 wall	0.68 m^3
	Total Quantity	**4.27 m^3**
3	**Random rubble masonry in foundation**	
	Type 1 wall	7.17 m^3
	Type 2 wall	1.64 m^3
	Total Quantity	**8.81 m^3**
4	**Un coursed masonry in foundation**	
	Type 1 wall	3.75 m^3
	Type 2 wall	0.85 m^3
	Total Quantity	**4.6 m^3**
5	**R.C.C Coping at plinth level**	
	Type 1 wall	1.13 m^3
	Type 2 wall	0.25 m^3
	Total Quantity	**1.38 m^3**
6	**Earth filling**	
	Total area with full depth	**5.38 m^3**
7	**Brick work up to parapet wall**	
	Type 1 wall	16.01 m^3
	Type 2 wall	3.37 m^3
	Steps	0.52 m^3
	Deductions for openings	1.72 m^3
	Total Quantity	**32.81 m^3**
8	**R.C.C Slab**	**2.36 m^3**
9	**Plaster work for inner walls**	
	Toilet	39.78 m^2
	Outer room	65.46 m^2
	Deductions	9.76 m^2
	Total quantity	**95.48 m^2**
10	**Plaster work for outer walls**	
	Long walls	55 m^2
	Short walls	30.1 m^2
	Deductions	5.72 m^2
	Total Quantity	**79.38 m^2**

11	**Tiles flooring**	
	Toilet	7.26 m^2
	Outer area	9.54 m^2
	Steps	1.7 m^2
	Total Quantity	**18.50 m^2**
12	**Painting work for inner & outer side**	**175 m^2**
13	**Parapet wall (Masonry)**	
	Long wall	1.40 m^3
	Short wall	0.7 m^3
	Total Quantity	**2.10 m^3**
14	**Parapet wall (Plaster)**	**4.2 m^3**
15	**Frames for doors & windows**	**3.63 m^3**

Abstract sheet

Sr. No.	Item	Qty	Rate	Per	Amount
1	Excavation in foundation	12.50	92	m^3	1150
2	PCC 1:10 in foundation	4.27	5315	m^3	22695.05
3	Random rubble masonry in Foundation	8.81	2792	m^3	24597.52
4	Un coursed masonry in foundation	4.6	3396	m^3	15621.6
5	R.C.C Coping at plinth level	1.38	5492	m^3	7578.96
6	Earth filling	5.38	116	m^3	624.08
7	Brick work	34.91	5837	m^3	203769.7
8	R.C.C Slab	2.36	4825	m^3	11387
9	Plaster work for inner walls	95.48	94	m^2	8975.12
10	Plaster work for outer walls	79.38	112	m^2	8890.56
11	Plaster work for parapet walls	4.2	112	m^2	470.4
12	Tiles work	18.50	988	m^2	18278
13	Painting work for inner & outer side	175	260	m^2	45500
14	Frame work for doors and windows	3.63	1450	m^3	5263.5
				Total	374801.46
				Add 2% Administrative charges	382297.48
				Add 3% Contingencies charges	393766.40
				Add 10% Contractor Profit	443143
				Grand total	**Say 4,43,000**

2) Community hall

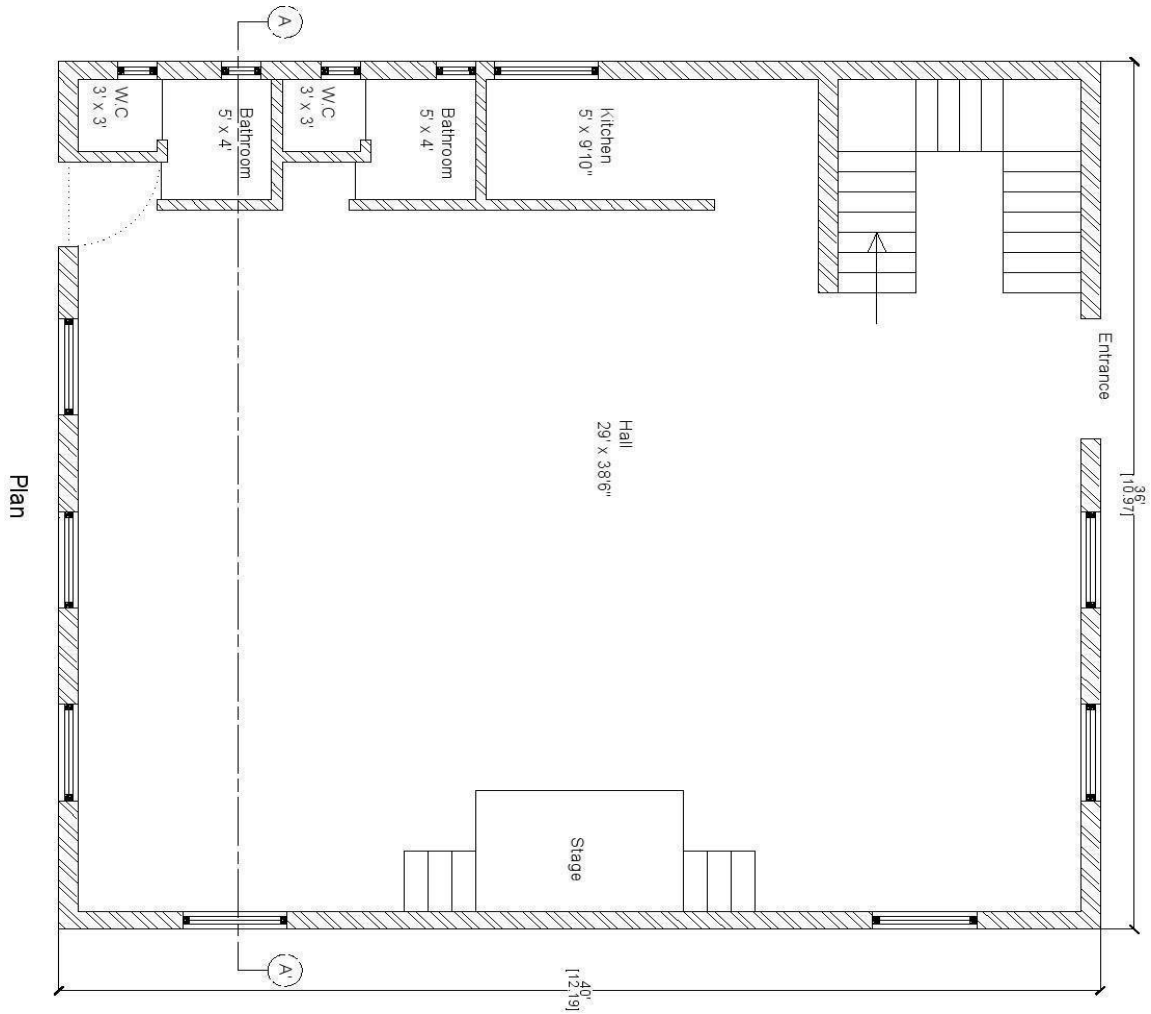
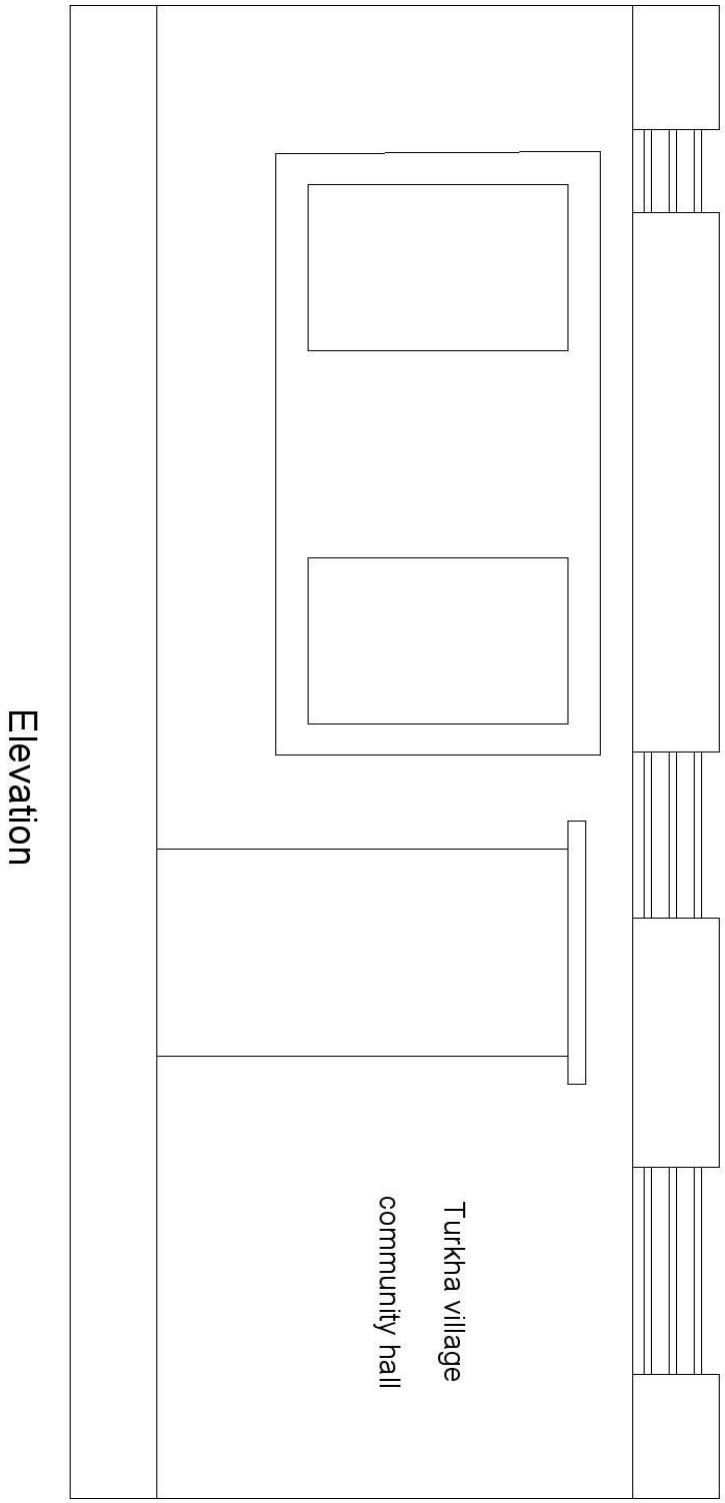


Figure 8.7: Plan of Community hall



Elevation of Community hall

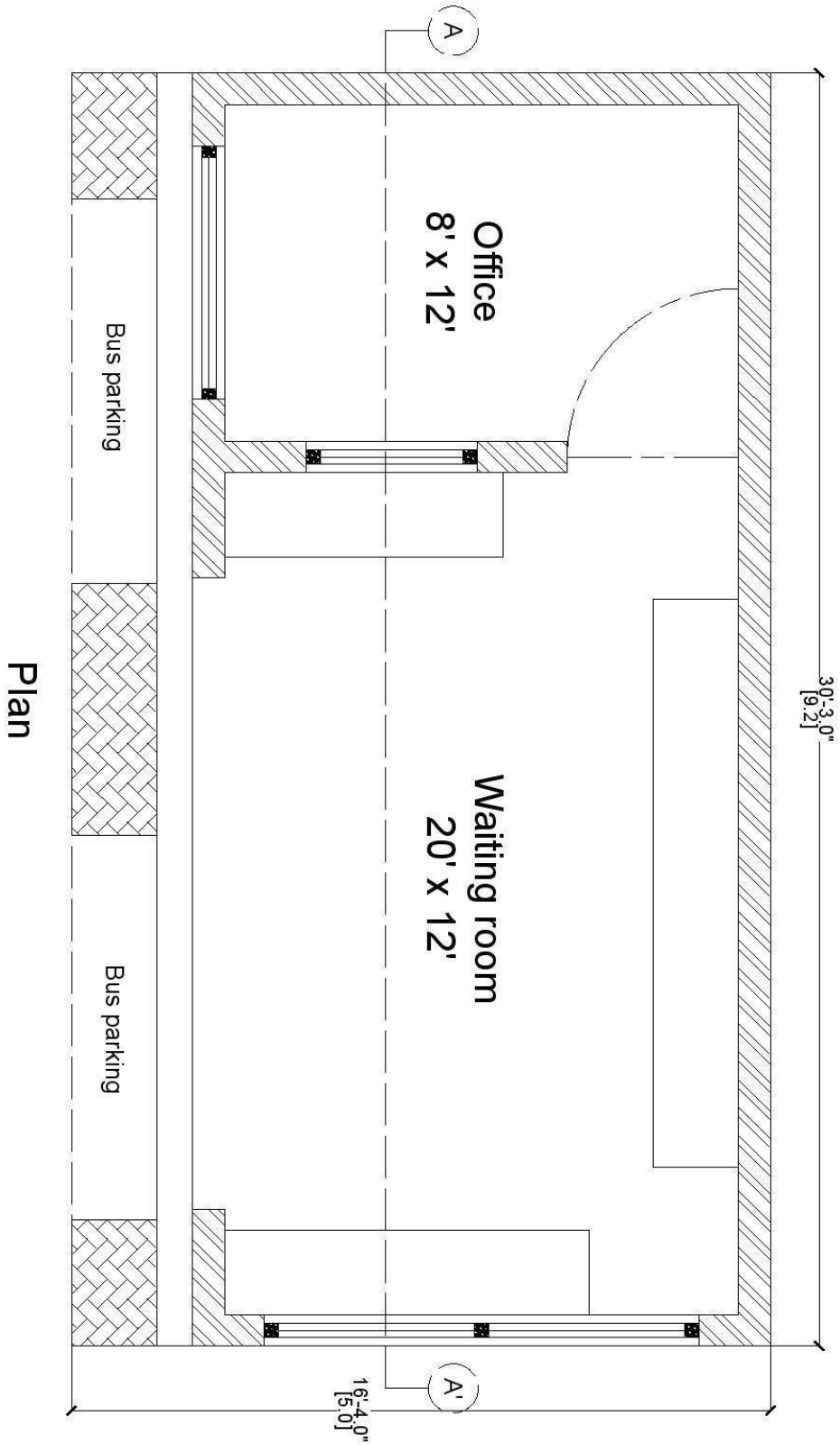
Quantity Sheet

Sr. No.	Item	Quantity
1	**Excavation in foundation**	
	Type 1 wall	37.06 m^3
	Type 2 wall	8.51 m^3
	Total Quantity	**45.57 m^3**
2	**PCC 1:10 in foundation**	
	Type 1 wall	9.19 m^3
	Type 2 wall	1.78 m^3
	Total Quantity	**10.97 m^3**
3	**Random rubble masonry in foundation**	
	Type 1 wall	27.93 m^3
	Type 2 wall	6.4 m^3
	Total Quantity	**34.30 m^3**
4	**Un coursed masonry in foundation**	
	Type 1 wall	14.98 m^3
	Type 2 wall	3.83 m^3
	Total Quantity	**18.81 m^3**
5	**R.C.C Coping at plinth level**	
	Type 1 wall	2.56 m^3
	Type 2 wall	0.655 m^3
	Total Quantity	**3.22 m^3**
6	**Moorum filling**	
	Full hall area	**71.83 m^3**
7	**Brick work up to parapet wall**	
	Type 1 wall	36.86 m^3
	Type 2 wall	3.85 m^3
	Deductions for openings	7.9 m^3
	Total Quantity	**32.81 m^3**
8	**R.C.C Slab**	**17.36 m^3**
9	**Plaster work for inner walls**	
	Hall	225.94 m^2
	Kitchen	40.12 m^2
	W.C	26.11 m^2
	Bathroom	12.83 m^2
	Entry point in Hall 1	10.24 m^2
	Entry point in Hall 2	11.97 m^2
	Deductions	18.86 m^2
	Total quantity	**308.9 m^2**

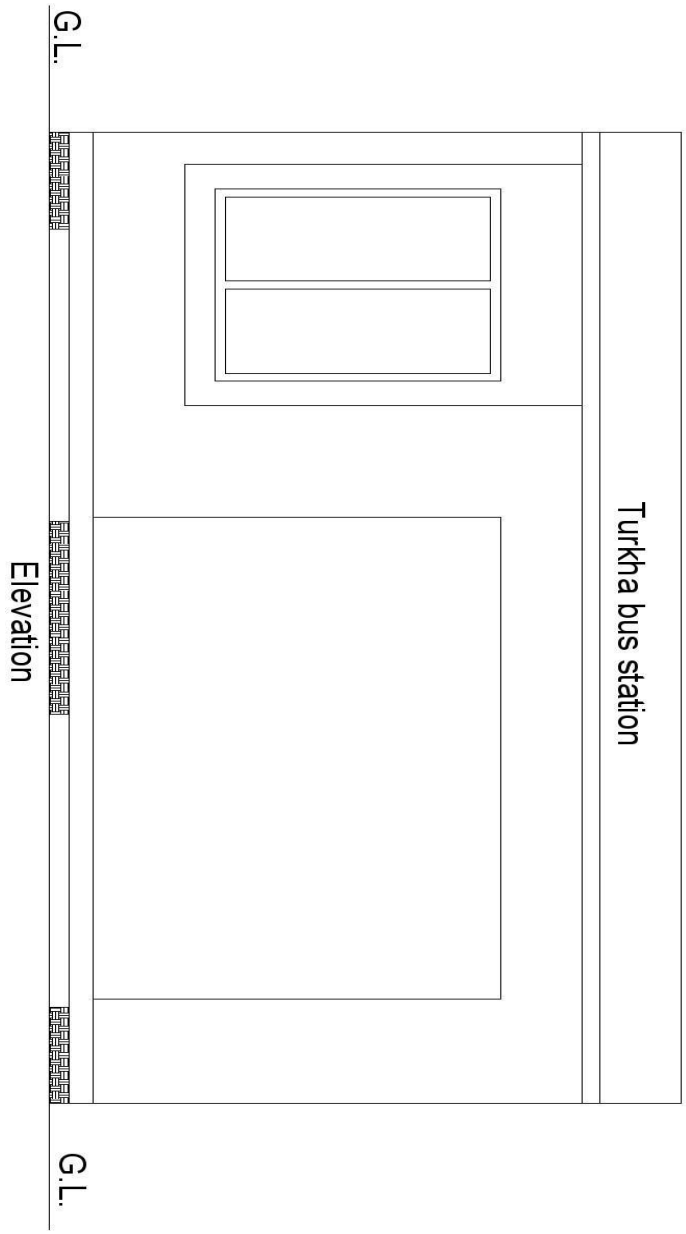
10	**Plaster work for outer walls**	
	Long walls	106.11 m^2
	Short walls	118.43 m^2
	Deductions	10.92 m^2
	Total Quantity	**213.62 m^2**
11	**Tiles flooring**	
	Hall	103.43 m^2
	W.C	1.67 m^2
	Bathroom	1.83 m^2
	Kitchen	5.7 m^2
	Staircase	7.7 m^2
	Total Quantity	**120.33 m^2**
12	**Painting work for inner & outer side**	**522.50 m^2**

Abstract sheet

Sr. No.	Item	Qty	Rate	Per	Amount
1	Excavation in foundation	45.57	92	m^3	4192.44
2	PCC 1:10 in foundation	10.97	5315	m^3	58313.00
3	Random rubble masonry in Foundation	34.30	2792	m^3	95764.22
4	Un coursed masonry in foundation	18.81	3396	m^3	63873.68
5	R.C.C Coping at plinth level	3.22	5492	m^3	17685.65
6	Moorum filling	71.83	116	m^3	8308.57
7	Brick work up to parapet wall	32.75	5837	m^3	191158.47
8	R.C.C Slab	17.36	4825	m^3	83762
9	Plaster work for inner walls	308.9	94	m^2	29027.34
10	Plaster work for outer walls	213.62	112	m^2	24045.06
11	Tiles flooring	120.33	988	m^2	118886.04
12	Painting work for inner & outer side	522.50	260	m^2	135850
				Total	830867
				Add 2% Administrative charges	847484
				Add 3% Contingencies charges	872908
				Add 10% Contractor Profit	960198
				Grand total	**Say 960000**


A
Office
8' x 12'
Bus parking
Waiting room
20' x 12'
Bus parking
A'
30'-3.0"
[9.2]
16'-4.0"
[5.0]

Plan



Elevation of bus stand

Quantity Sheet

Sr. No.	Item	Quantity
1	**Excavation in foundation**	
	Long wall	25.80 m^3
	Short wall	9.41 m^3
	Total Quantity	**35.21 m^3**
2	**PCC 1:10 in foundation**	
	Long wall	4.29 m^3
	Short wall	1.56 m^3
	Total Quantity	**5.86 m^3**
3	**Random rubble masonry in foundation**	
	Long wall	12.90 m^3
	Short wall	4.60 m^3
	Total Quantity	**17.60 m^3**
4	**Un coursed masonry in foundation**	
	Long wall	5.37 m^3
	Short wall	2.16 m^3
	Total Quantity	**7.54 m^3**
5	**R.C.C Coping at plinth level**	
	Long wall	1.28 m^3
	Short wall	0.51 m^3
	Total Quantity	**1.80 m^3**
6	**Earth filling**	**3**
	Total area with full depth	**22.48 m**
7	**Brick work up to slab level**	
	Long wall	20.14 m^3
	Short wall	9.24 m^3
	Steps & Platform	0.97 m^3
	Deductions for openings	6.41 m^3
	Total Quantity	**23.94 m^3**
8	**R.C.C (Seal Level)**	
	Long wall	0.55 m^3
	Short wall	0.25 m^3
	R.C.C (Lintel Level)	
	Long wall	0.70 m^3
	Short wall	0.30 m^3
	Deductions	**No**
	Total Quantity	**1.80 m^3**
	R.C.C Slab	**6.21 m^3**
9		

10	**Plaster work for inner walls**	
	Office plaster work	52.64 m^2
	Waiting room plaster work	122.08 m^2
	Deductions	30.50 m^2
	Total quantity	**144.21 m^2**
11	**Plaster work for outer walls**	
	Long walls	109.84 m^2
	Short walls	37.77 m^2
	Deductions	27.40 m^2
	Total Quantity	**120.20 m^2**
12	**Tiles work – Kotah stone**	
	Office	8.86 m^2
	Waiting room	32.22 m^2
	Other remaining space	1.31 m^2
	Steps & Platform	5.75 m^2
	Total Quantity	**48.14 m^2**
13	**Painting work for inner & outer side**	**260 m^2**
14	**Parapet wall (Masonry)**	
	Long wall	3.26 m^3
	Short wall	1 m^3
	Total Quantity	**4.26 m^3**
15	**Parapet wall (Plaster)**	**8.50 m^3**
16	**Frames for doors & windows**	**16.50 m^3**

Abstract sheet

Sr. No.	Item	Qty	Rate	Per	Amount
1	Excavation in foundation	35.21	92	m^3	3239.32
2	PCC 1:10 in foundation	5.86	5315	m^3	31145.9
3	Random rubble masonry in foundation	17.60	2792	m^3	49139.2
4	Un coursed masonry in foundation	7.54	3396	m^3	25605.84
5	R.C.C Coping at plinth level	1.80	5492	m^3	9885.6
6	Earth filling	22.48	116	m^3	2607.68
7	Brick work	23.94	5837	m^3	139737.8
8	R.C.C (Seal & Lintel)	1.80	4825	m^3	8685
8	R.C.C Slab	6.21	4825	m^3	29963.25
9	Plaster work for inner walls	144.21	94	m^2	13555.74
10	Plaster work for outer walls	120.20	112	m^2	13462.4
11	Plaster work for parapet walls	8.50	112	m^2	952
12	Tiles work	48.14	1015	m^2	48862.1
13	Painting work for inner & outer side	260	125	m^2	32500
14	Frame work for doors and windows	16.50	750	m^3	12375
				Total	421716.81
				Add 2% Administrative charges	430150.32

	Add 3% Contingencies charges	443054.82
	Add 10% Contractor Profit	487360.30
	Grand total	**Say 4,87,000**

Reason for Students recommending this design:

- There is no bus station for transportation
- Fun There is no community hall for social functions and meetings.
- Infrastructural facilities are very poor.
- There is no gram panchayat office
- There is no system to store rainwater.
- Village has no public garden for the people and there are no children play Ground.
- More than half of the roads are in damaged condition.
- There is no cemetery in village.
- There is one public toilet which is not use because it is in very bad condition.
- There is no Public library
- There many cattle dung heaps which can be used to produce natural gas in biogasplant.

Benefits of villagers :

- By providing Gram panchayat office wecan solve local problem of villagers.
- Transport facilities for the public have been enhanced by constructing bus stands
- By creating a community hall, we can increase the community among the villagers.
- We can store water by creating a rainwater harvesting system problems of villagepeople related towater.
- We can make it better by creating a public garden and children's play area
- By building roads we can improve the transportation system for the villagers.
- By development of cemeteryin village people can perform cremation programs fortheir loved ones.
- By development of biogas plant we can produce natural gas from cattle dung andother waste.
- By providing library we can increase knowledge and learning of village people.

Chapter:-9 Proposing designs for Future Development of the Village for the PART-II Design:

In the next semester we will provide various designs as shown below :

Overhead Tank : Overhead tank will design of 8 lac capacity based upon population of village which can sufficient to fulfill the basic water requirements of people

Biogas plant : Turkha village is consist of large number of cattle which produces large number of cattle dung and black soil from public sewer can be used to produce natural biogas, so the design of biogas plant is very important.

Road design : Road condition in village is poor or broken condition which causes difficulty for villagers in transportation. Construction of road is required especially in monsoon season because water accumulation causes muddy road which causes mosquito nuisance as well as muddy road which makes total disturbance for villagers.

Water treatment plant : Waste water from the village is directly drained into the Madhu river which causes pollution of river water, increase in death of river creatures such as fishes, under water plant etc. Morever polluted water cannot used for domestic and agricultural purposes. So we will design water treatment plant which filter and makes water pollution free before discharging into river.

Chabutras : The main purpose of designing chabutras is to provide grains,water,and shelter to all the birds. It also decrease in death of birds during all the season and it also improves asthetic view of village.

Public library : Most of the people of Turkha village are low educate and have low general knowledge specially youngsters of village are low educate which causes unemployment in various sectors ,so the design of library is very important which provides various books, magazine and newspaper for purpose of reading and increasing knowledge.

Chapter:-10 Conclusion of the Entire Village Activities of the Project :

Development is required for each rural and urban associate areas for higher livelihood and data technology can provide effective answer. There are thriving technologies accessible, which are enforced in urban areas. There's tremendous pressure on urban landscapes thanks to migration of rural people for lively hood. Good Villages won't solely reduce this migration however additionally irrigate the population result urban to geographical area.

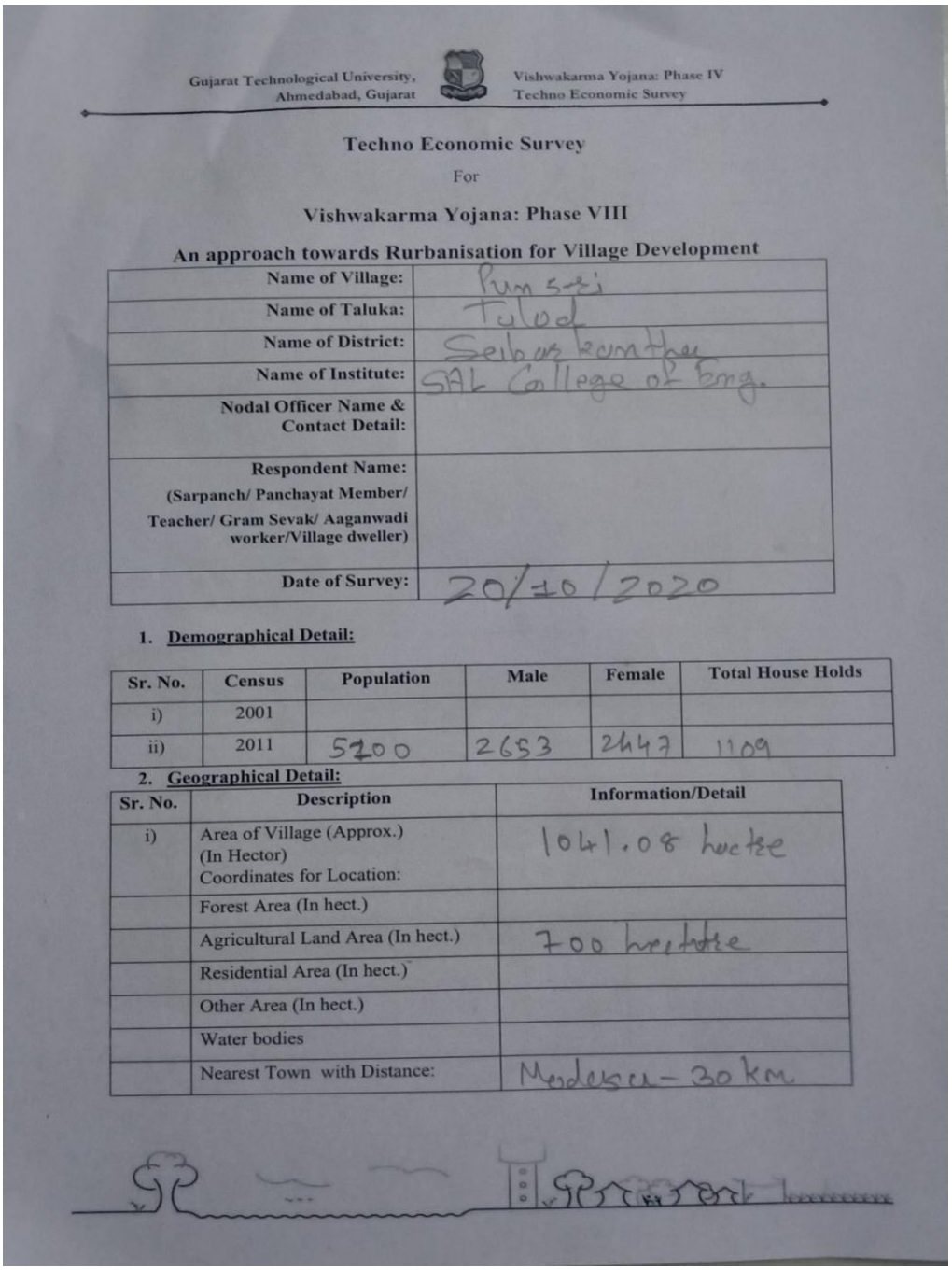
Smart village construct can have potential to uplift the grass-root level of the country, thence adding feather within the overall development of Republic of India. Failure to utilize info technology tools for rural development is due to lack strategy, unfocused designing and specially watching and execution of the activities. All these activities ought to be self-addressed supported the varied rural things. A specially designed appropriate framework for rural areas on the grounds of Science, Technology , Engineering, Regulations and Management can play necessary role to create next generation good village.

Benefit of the good village efforts square measure foretold to be tremendous .Smart village construct has high replication potential in different countries of developing world. The construct of good village might also be extended to little cities and conjointly townships close the large cities

Chapter:-11 References refereed for this project

- https:/ www.censusindia.gov.in • https:// www.google.com
- Building and Town Planning by Dr. R P Rethaliya
- Professional Practice and Valuation by Dr. R P Rethaliya
- http://censusindia.gov.in – Census department website
- UDPFI Guideline 2014
- Schedule of rate 2014
- http://vy.gtu.ac.in – vishwakarma literatures
- Google maps

Chapter 12: Annexure Atteachment Ideal/Smart Village Survey Form :



Gujarat Technological University, Ahmedabad, Gujarat — Vishwakarma Yojana: Phase IV Techno Economic Survey

Techno Economic Survey

For

Vishwakarma Yojana: Phase VIII

An approach towards Rurbanisation for Village Development

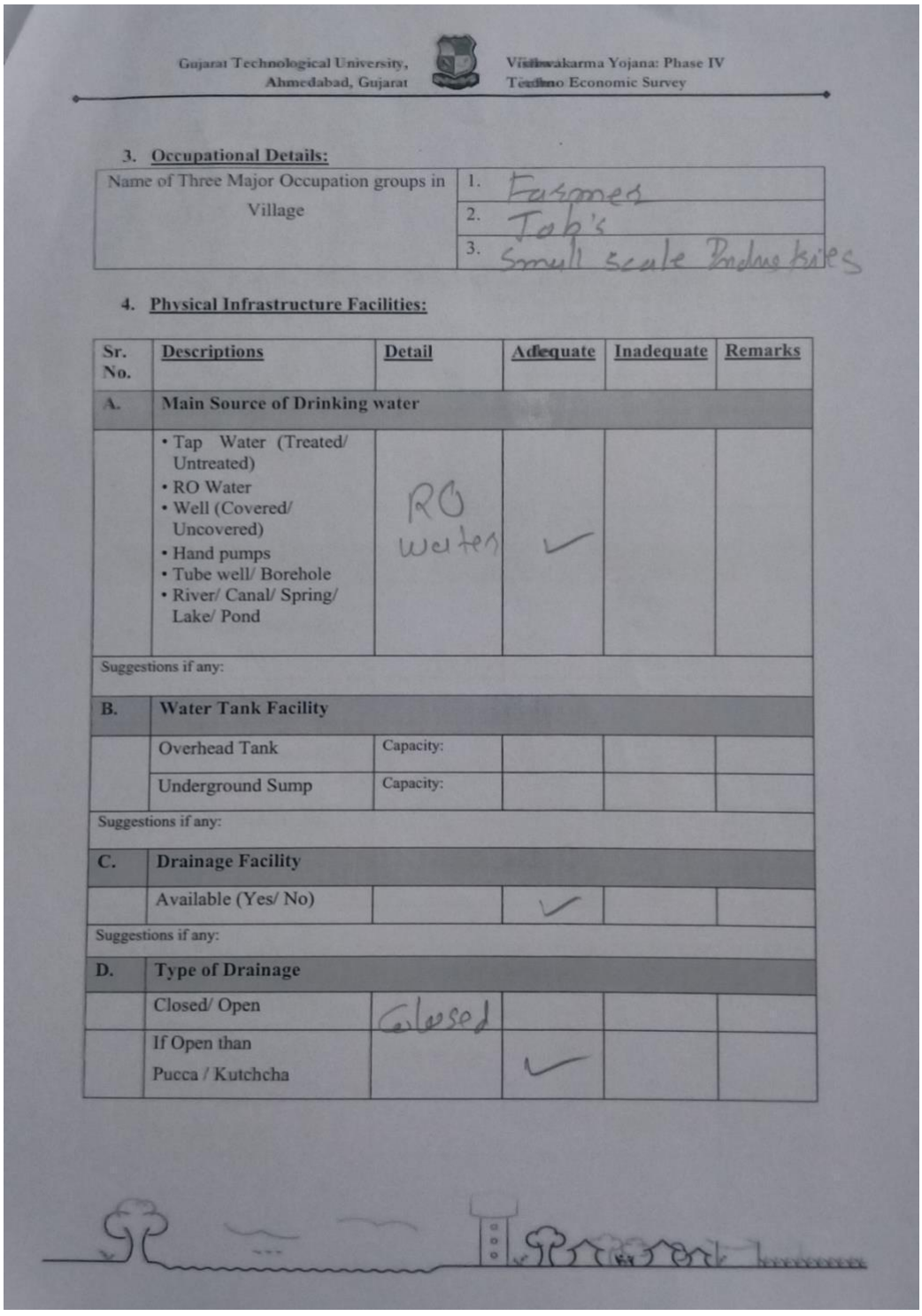
Name of Village:	Punsari
Name of Taluka:	Tulod
Name of District:	Saibar kantha
Name of Institute:	SAL College of Eng.
Nodal Officer Name & Contact Detail:	
Respondent Name: (Sarpanch/ Panchayat Member/ Teacher/ Gram Sevak/ Aaganwadi worker/Village dweller)	
Date of Survey:	20/10/2020

1. **Demographical Detail:**

Sr. No.	Census	Population	Male	Female	Total House Holds
i)	2001				
ii)	2011	5200	2653	2447	1109

2. **Geographical Detail:**

Sr. No.	Description	Information/Detail
i)	Area of Village (Approx.) (In Hector) Coordinates for Location:	1041.08 hectre
	Forest Area (In hect.)	
	Agricultural Land Area (In hect.)	700 hectare
	Residential Area (In hect.)	
	Other Area (In hect.)	
	Water bodies	
	Nearest Town with Distance:	Modasa - 30 km



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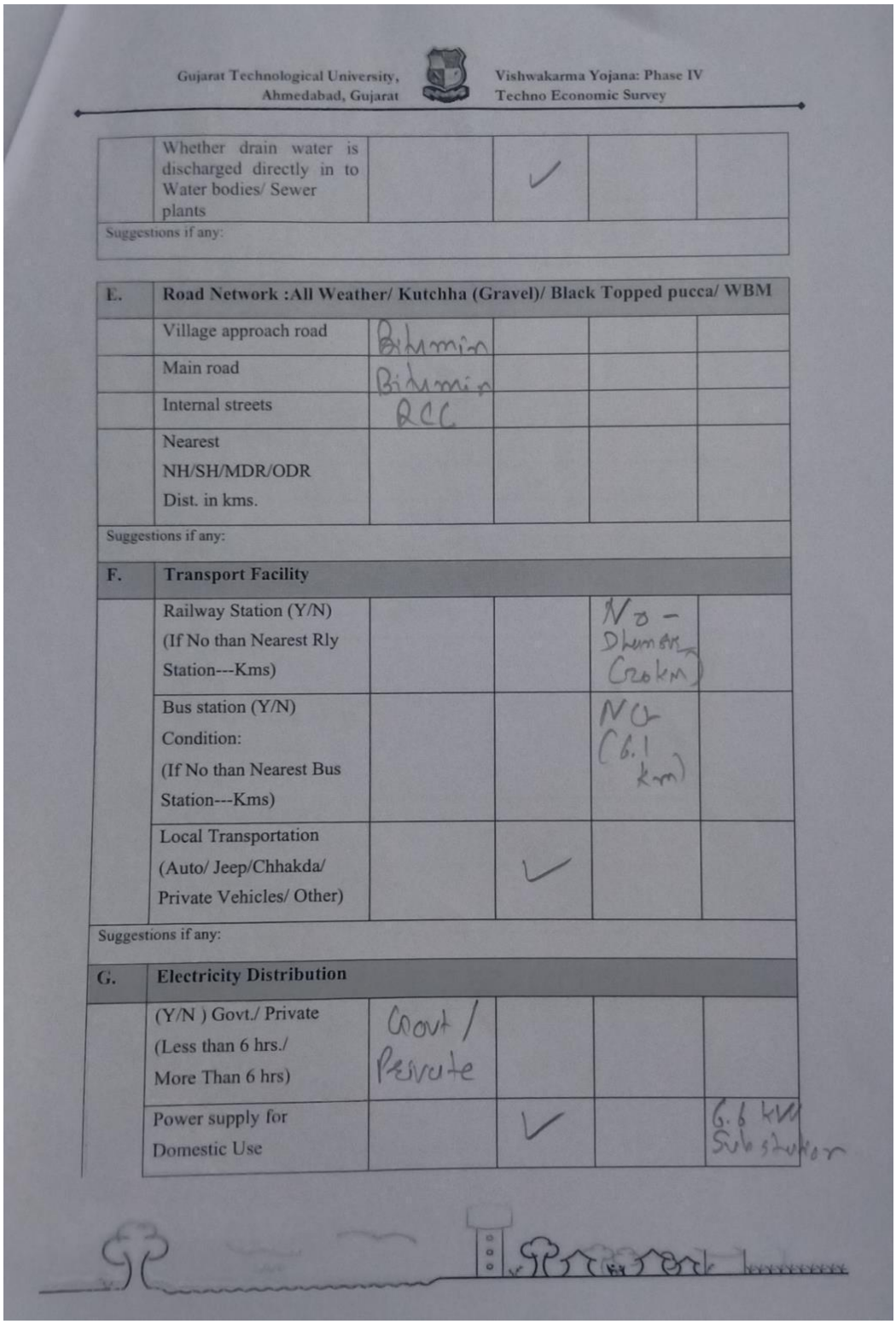
Vishwakarma Yojana: Phase IV
Techno Economic Survey

3. Occupational Details:

Name of Three Major Occupation groups in Village	1. Farmers 2. Job's 3. Small scale Industries

4. Physical Infrastructure Facilities:

Sr. No.	Descriptions	Detail	Adequate	Inadequate	Remarks
A.	**Main Source of Drinking water**				
	• Tap Water (Treated/ Untreated) • RO Water • Well (Covered/ Uncovered) • Hand pumps • Tube well/ Borehole • River/ Canal/ Spring/ Lake/ Pond	RO water	✓		
Suggestions if any:					
B.	**Water Tank Facility**				
	Overhead Tank	Capacity:			
	Underground Sump	Capacity:			
Suggestions if any:					
C.	**Drainage Facility**				
	Available (Yes/ No)		✓		
Suggestions if any:					
D.	**Type of Drainage**				
	Closed/ Open	Closed			
	If Open than Pucca / Kutchcha		✓		



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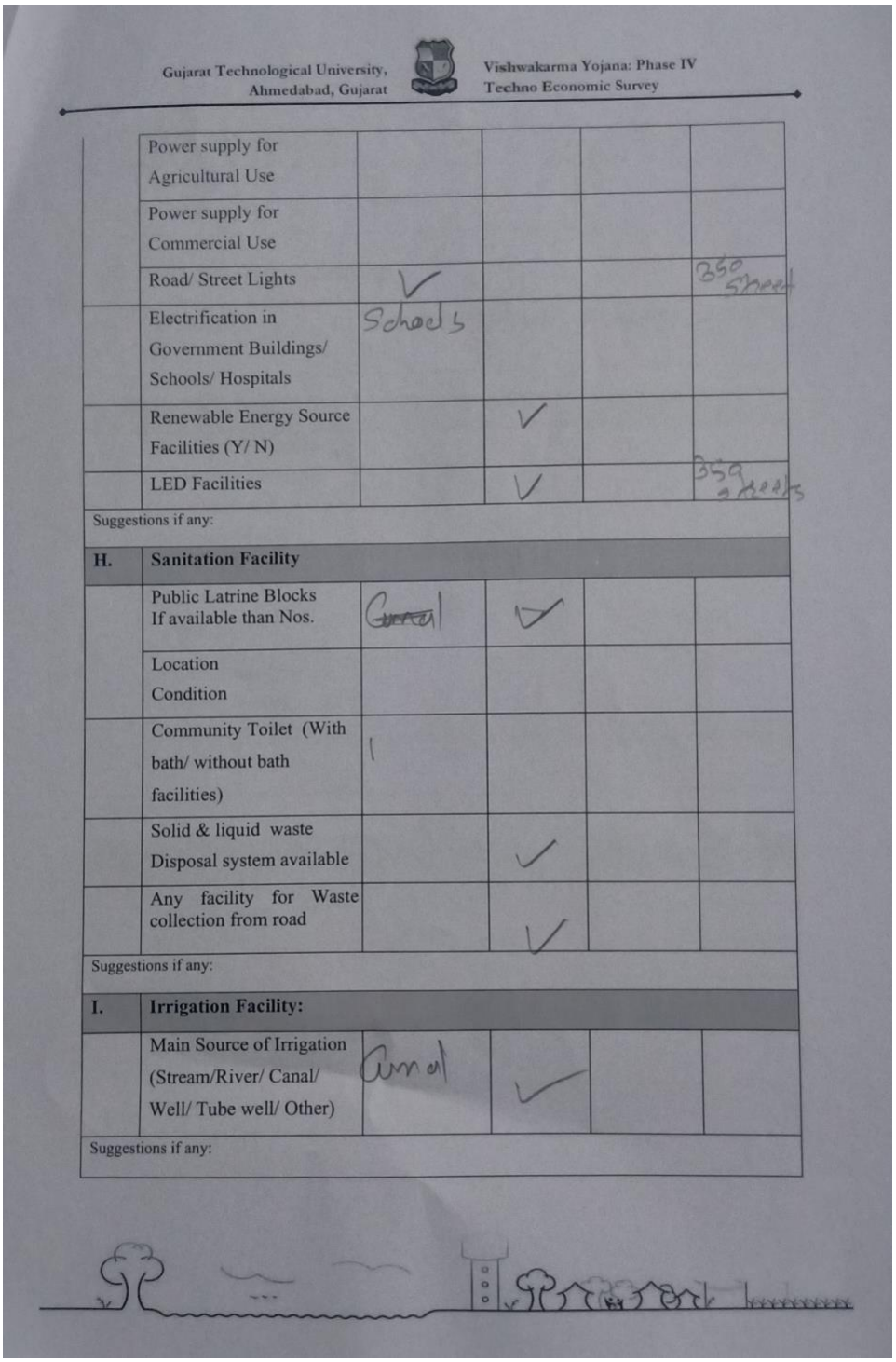
Vishwakarma Yojana: Phase IV
Techno Economic Survey

	Whether drain water is discharged directly in to Water bodies/ Sewer plants		✓		
Suggestions if any:					

E.	**Road Network :All Weather/ Kutchha (Gravel)/ Black Topped pucca/ WBM**				
	Village approach road	Bitumin			
	Main road	Bitumin			
	Internal streets	RCC			
	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)			No - Dhuman (20 km)	
	Bus station (Y/N) Condition: (If No than Nearest Bus Station---Kms)			No (6.1 km)	
	Local Transportation (Auto/ Jeep/Chhakda/ Private Vehicles/ Other)		✓		
Suggestions if any:					
G.	**Electricity Distribution**				
	(Y/N) Govt./ Private (Less than 6 hrs./ More Than 6 hrs)	Govt / Private			
	Power supply for Domestic Use		✓		6.6 KV Substation



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	Power supply for Agricultural Use				
	Power supply for Commercial Use				
	Road/ Street Lights	✓			350 Street
	Electrification in Government Buildings/ Schools/ Hospitals	Schools			
	Renewable Energy Source Facilities (Y/ N)		✓		
	LED Facilities		✓		359 Streets
Suggestions if any:					
H.	**Sanitation Facility**				
	Public Latrine Blocks If available than Nos.	Gural	✓		
	Location Condition				
	Community Toilet (With bath/ without bath facilities)	1			
	Solid & liquid waste Disposal system available		✓		
	Any facility for Waste collection from road		✓		
Suggestions if any:					
I.	**Irrigation Facility:**				
	Main Source of Irrigation (Stream/River/ Canal/ Well/ Tube well/ Other)	Canal	✓		
Suggestions if any:					

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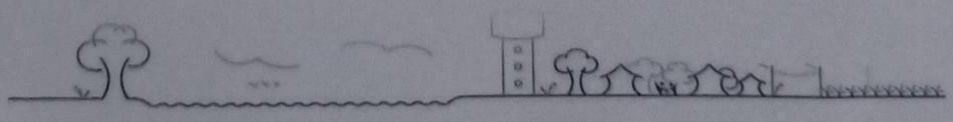
J.	Housing Condition:				
	Kutchha/Pucca (Approx. ratio)	Pucca	✓		

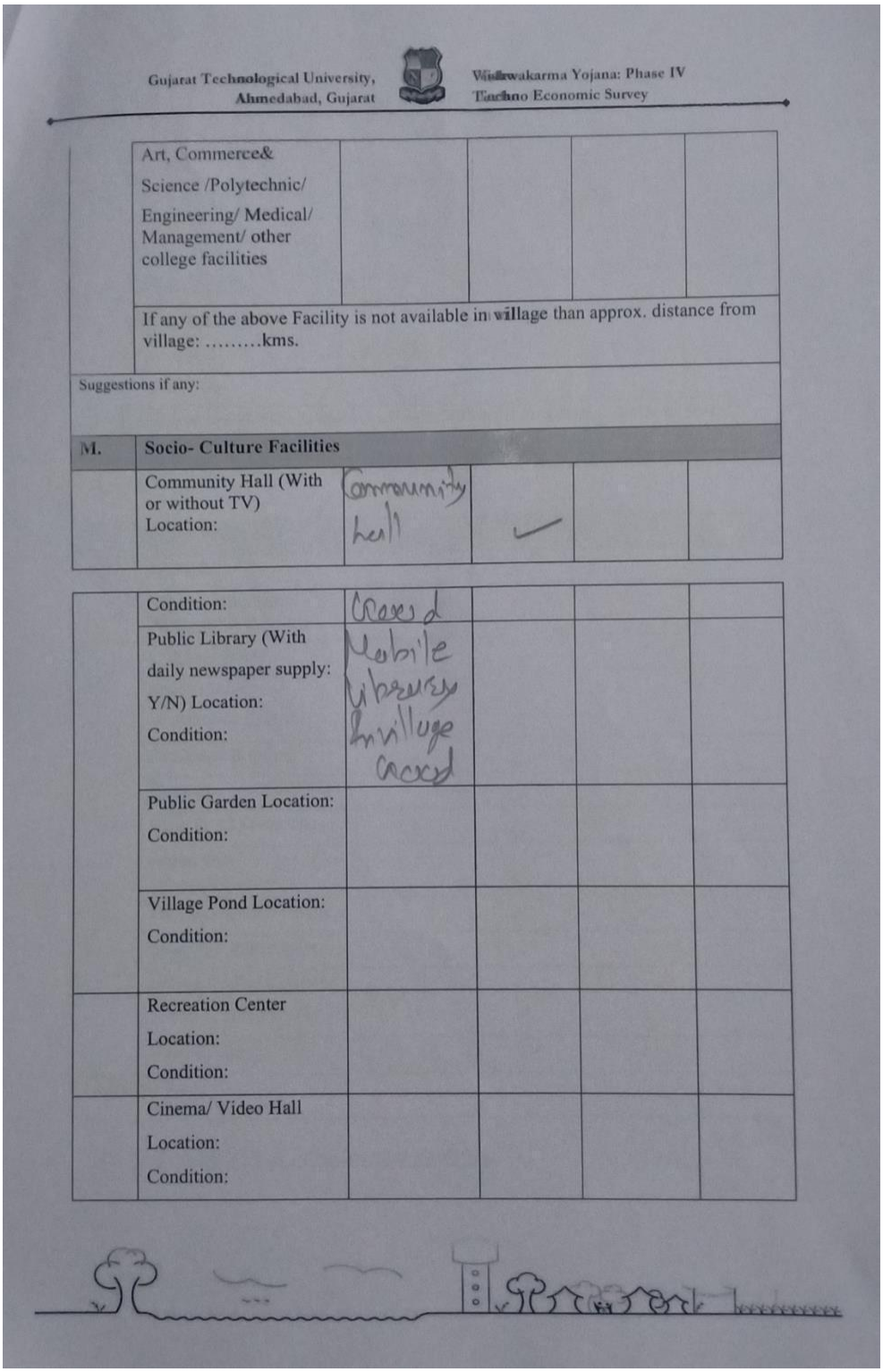
5. **Social Infrastructural Facilities:**

Sr. No.	Descriptions	Information/ Detail	Adequate	Inadequate	Remarks

K.	Health Facilities:				
	Sub center/ PHC/ CHC /Government Hospital/ Child welfare & Maternity Homes (If Yes than specify No. of Beds) Condition:	Primary Health Centre Good			
	Private Clinic/Private Hospital/ Nursing Home				
	If any of the above Facility is not available in village than approx. distance from village: ..30..kms.				
Suggestions if any:					

L.	Education Facilities:				
	Aaganwadi/ Play group	8 No.s.	✓		
	Primary School	1			
	Secondary school	1			
	Higher sec. School	1			
	ITI college/ vocational Training Center				





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	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.				
Suggestions if any:					
M.	**Socio- Culture Facilities**				
	Community Hall (With or without TV) Location:	Community hall	✓		
	Condition:	Closed			
	Public Library (With daily newspaper supply: Y/N) Location: Condition:	Mobile libraries in village closed			
	Public Garden Location: Condition:				
	Village Pond Location: Condition:				
	Recreation Center Location: Condition:				
	Cinema/ Video Hall Location: Condition:				

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Vishwakarma Yojana: Phase IV
Techno Economic Survey

	Assembly Polling Station Location: Condition:	School Good	✓		
	Birth & Death Registration Office Location: Condition:	Panchayat Panchayat Good			

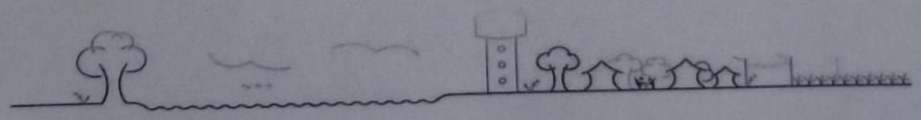
If any of the above Facility is not available in village than approx. distance from village: .....kms.

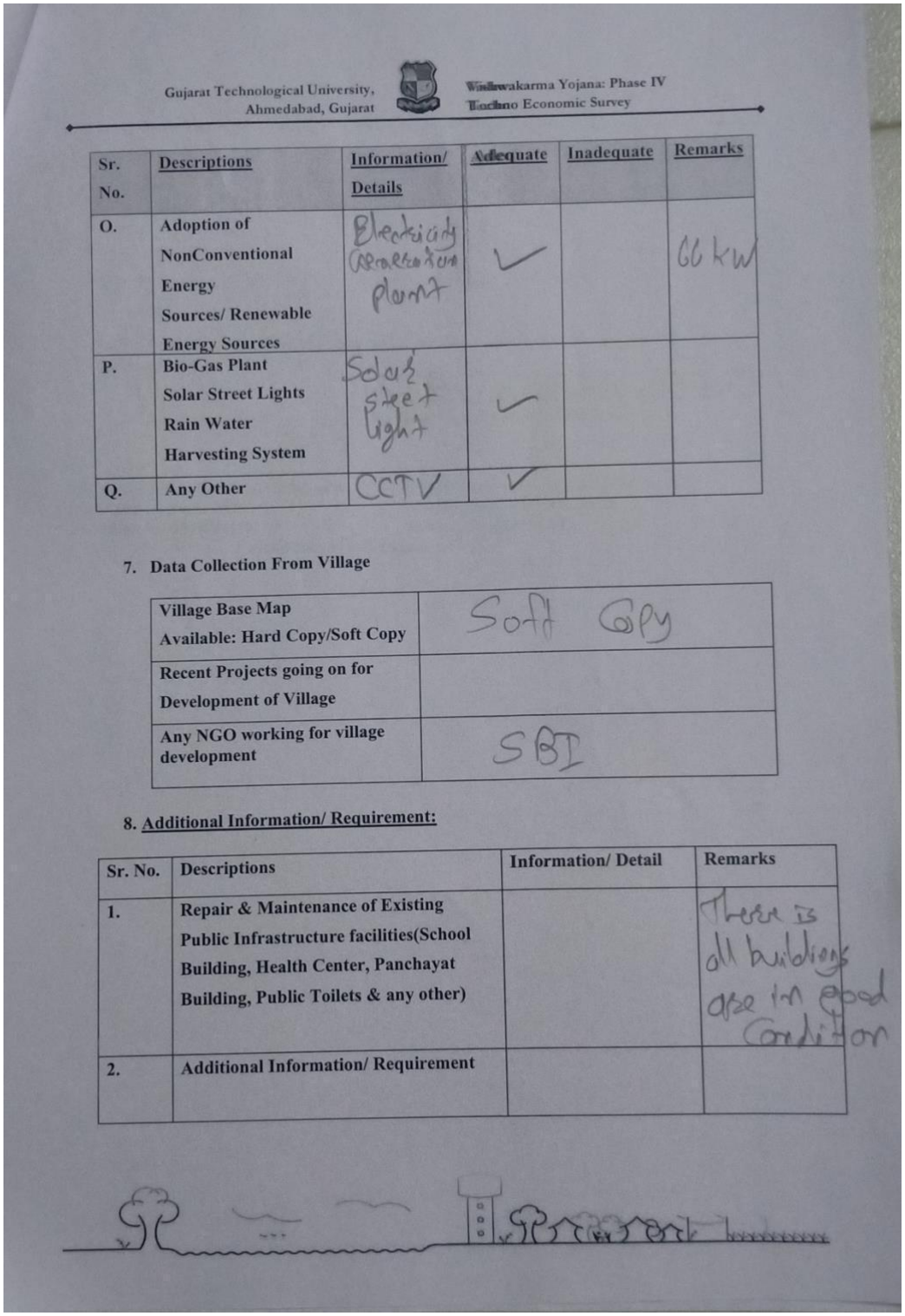
Suggestions if any:

N.	Other Facilities				
	Post-office		✓		
	Telecommunication Network/ STD booth		✓		
	General Market		✓		
	Shops (Public Distribution System)		✓		
	Panchayat 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	Wifi	✓		
	Other Facility	RO Plant	✓		

Suggestions if any:

6. **Sustainable /Green Infrastructure Facilities:**





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Sr. No.	Descriptions	Information/ Details	Adequate	Inadequate	Remarks
O.	Adoption of NonConventional Energy Sources/ Renewable Energy Sources	Electricity generation plant	✓		66 kW
P.	Bio-Gas Plant Solar Street Lights Rain Water Harvesting System	Solar street light	✓		
Q.	Any Other	CCTV	✓		

7. Data Collection From Village

Village Base Map Available: Hard Copy/Soft Copy	Soft Copy
Recent Projects going on for Development of Village	
Any NGO working for village development	SBI

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)		There is all buildings are in good condition
2.	Additional Information/ Requirement		

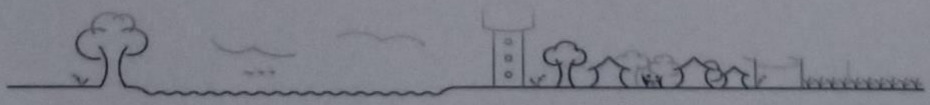
Note: Photographs/ Video/ Drawings of all existing Infrastructure facilities & conditions

should be taken by students of respective villages for their record and information.

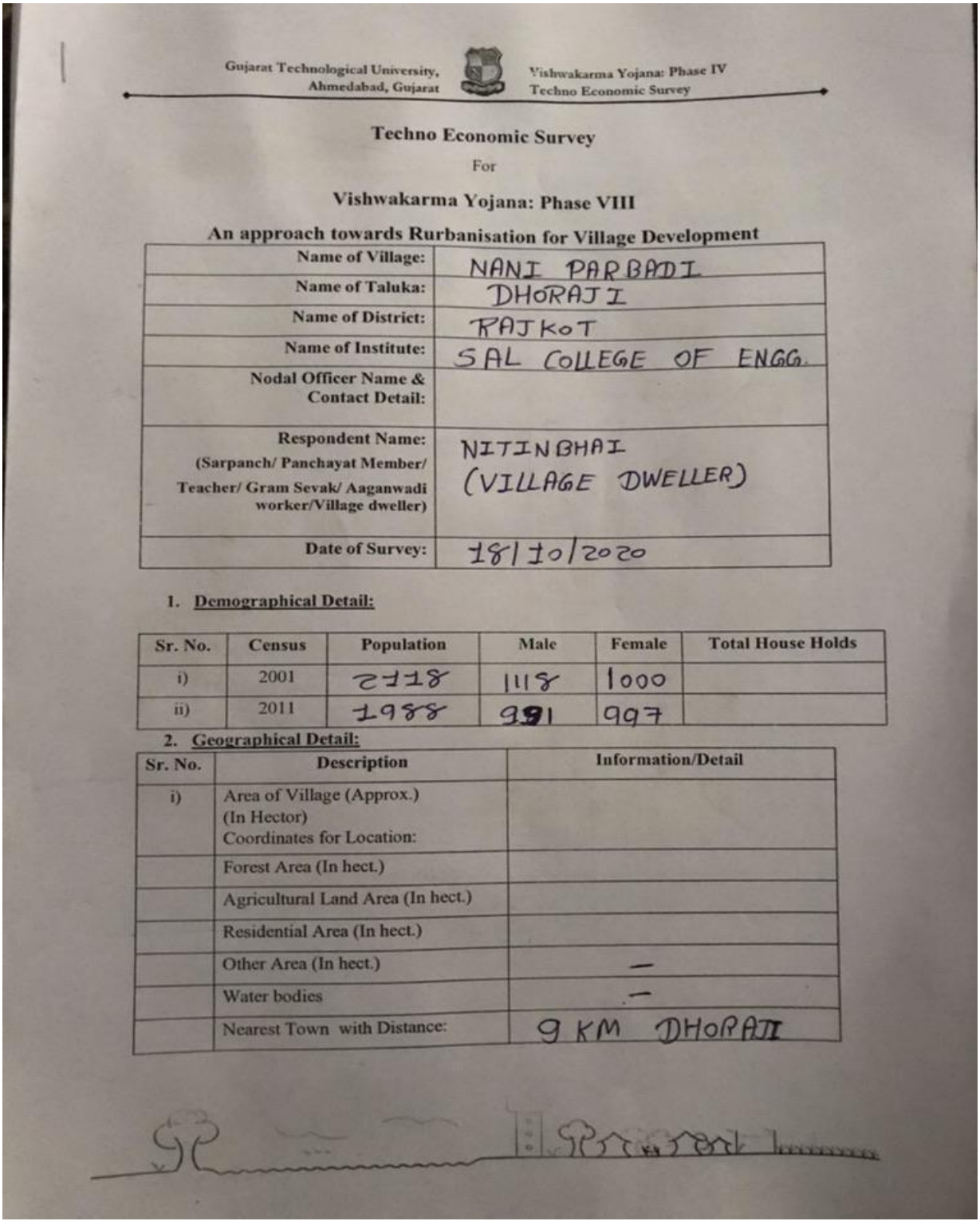
For Any Technical queries/ Difficulties:
Ms Jagruti Shah, OSD
Contact no. 9978980170

For Any Administration queries/ Difficulties:
Ms. Darshana Chauhan, OSD
Contact No. 9909944891

Email ID: rurban@gtu.edu.in



Techno-Economic Survey Form Nani Parabadi village



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Vishwakarma Yojana: Phase IV
Techno Economic Survey

Techno Economic Survey

For

Vishwakarma Yojana: Phase VIII

An approach towards Rurbanisation for Village Development

Name of Village:	NANI PARBADI
Name of Taluka:	DHORAJI
Name of District:	RAJKOT
Name of Institute:	SAL COLLEGE OF ENGG.
Nodal Officer Name & Contact Detail:	
Respondent Name: (Sarpanch/ Panchayat Member/ Teacher/ Gram Sevak/ Aaganwadi worker/Village dweller)	NITINBHAI (VILLAGE DWELLER)
Date of Survey:	18/10/2020

1. **Demographical Detail:**

Sr. No.	Census	Population	Male	Female	Total House Holds
i)	2001	2118	1118	1000	
ii)	2011	1988	991	997	

2. **Geographical Detail:**

Sr. No.	Description	Information/Detail
i)	Area of Village (Approx.) (In Hector) Coordinates for Location:	
	Forest Area (In hect.)	
	Agricultural Land Area (In hect.)	
	Residential Area (In hect.)	
	Other Area (In hect.)	–
	Water bodies	–
	Nearest Town with Distance:	9 KM DHORAJI

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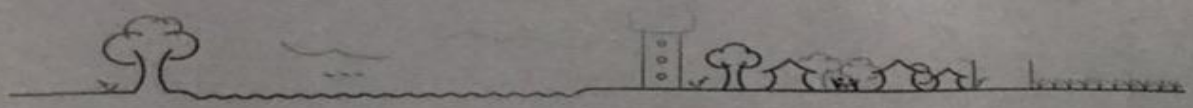
Vishwakarma Yojana: Phase IV
Techno Economic Survey

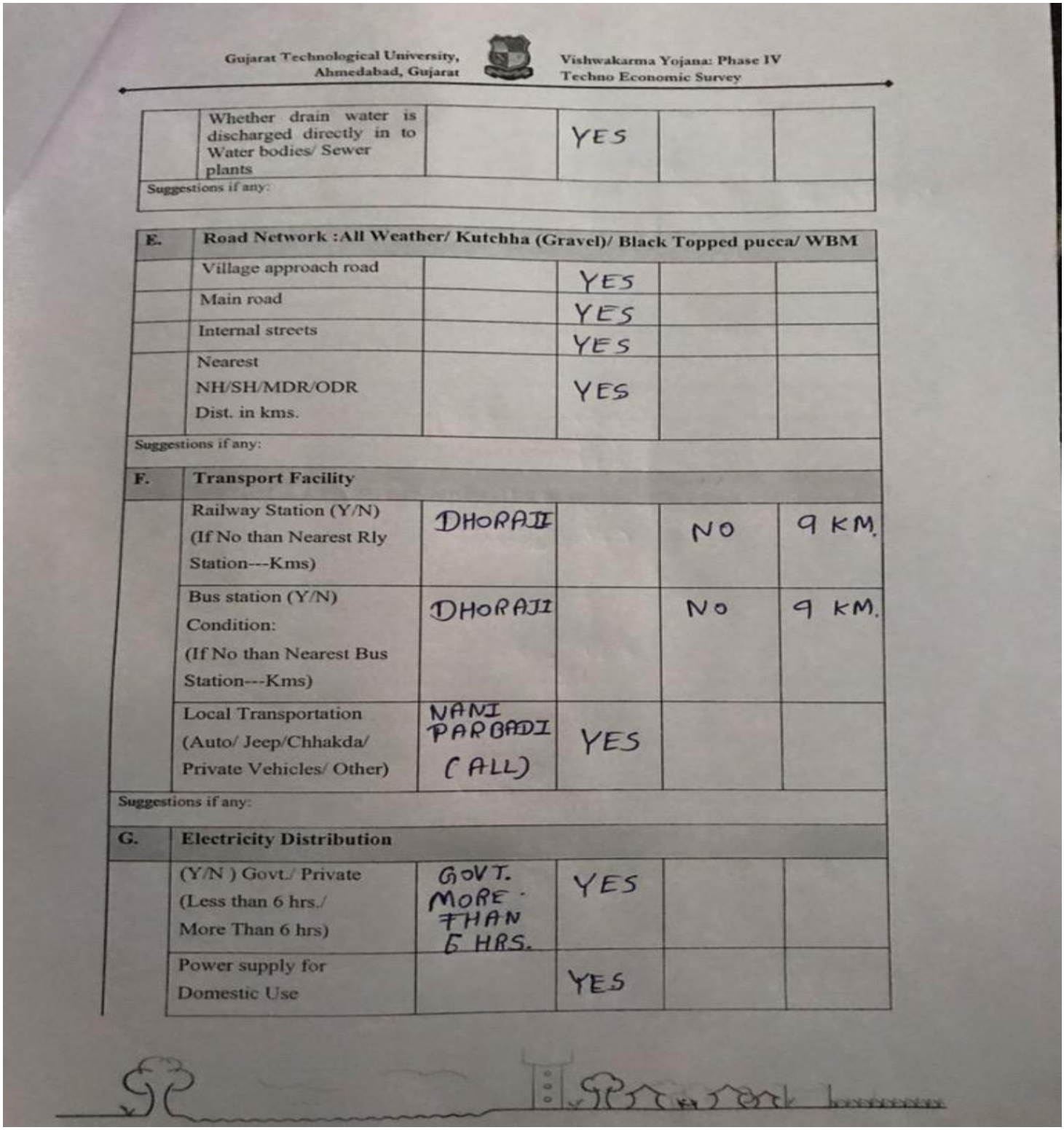
3. Occupational Details:

Name of Three Major Occupation groups in Village	1. FARMER
	2. SMALL SCALE BUISSNESS
	3. JOB'S

4. Physical Infrastructure Facilities:

Sr. No.	Descriptions	Detail	Adequate	Inadequate	Remarks
A.	**Main Source of Drinking water**				
	• Tap Water (Treated/ Untreated)	YES	YES		
	• RO Water		YES		
	• Well (Covered/ Uncovered)		YES		
	• Hand pumps				
	• Tube well/ Borehole	BOREHOLE			
	• River/ Canal/ Spring/ Lake/ Pond	RIVER, CANAL	YES		
Suggestions if any:					
B.	**Water Tank Facility**				
	Overhead Tank	Capacity: 1 LAKH	YES		
	Underground Sump	Capacity:			
Suggestions if any:					
C.	**Drainage Facility**				
	Available (Yes/ No)	YES			
Suggestions if any:					
D.	**Type of Drainage**				
	Closed/ Open	CLOSED	YES		
	If Open than Pucca / Kutchcha				





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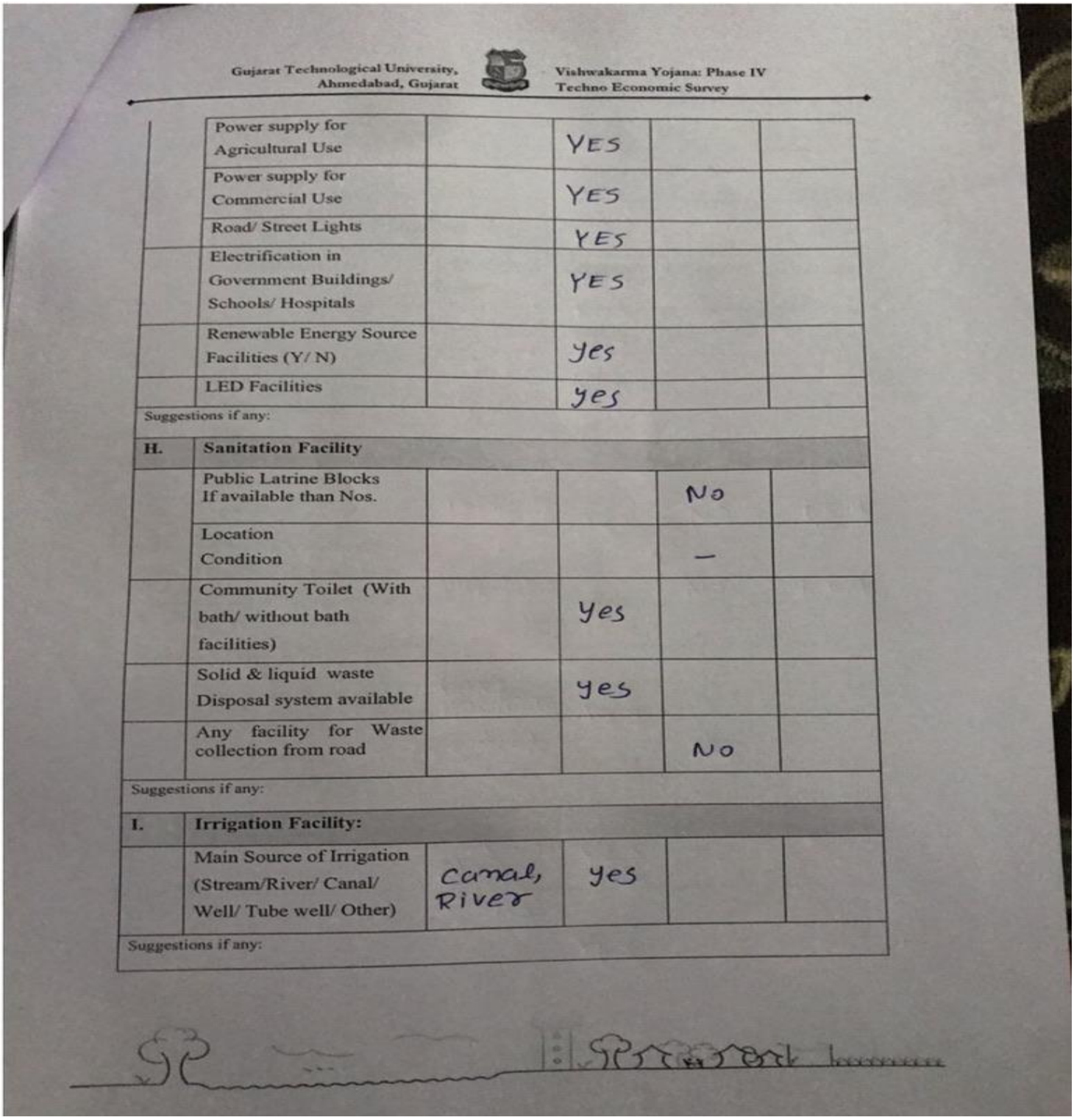
Vishwakarma Yojana: Phase IV
Techno Economic Survey

	Whether drain water is discharged directly in to Water bodies/ Sewer plants		YES		
Suggestions if any:					

E.	**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.		YES		
Suggestions if any:					
F.	**Transport Facility**				
	Railway Station (Y/N) (If No than Nearest Rly Station---Kms)	DHORAJI		NO	9 KM.
	Bus station (Y/N) Condition: (If No than Nearest Bus Station---Kms)	DHORAJI		NO	9 KM.
	Local Transportation (Auto/ Jeep/Chhakda/ Private Vehicles/ Other)	NANI PARBADI (ALL)	YES		
Suggestions if any:					
G.	**Electricity Distribution**				
	(Y/N) Govt./ Private (Less than 6 hrs./ More Than 6 hrs)	GOVT. MORE THAN 6 HRS.	YES		
	Power supply for Domestic Use		YES		



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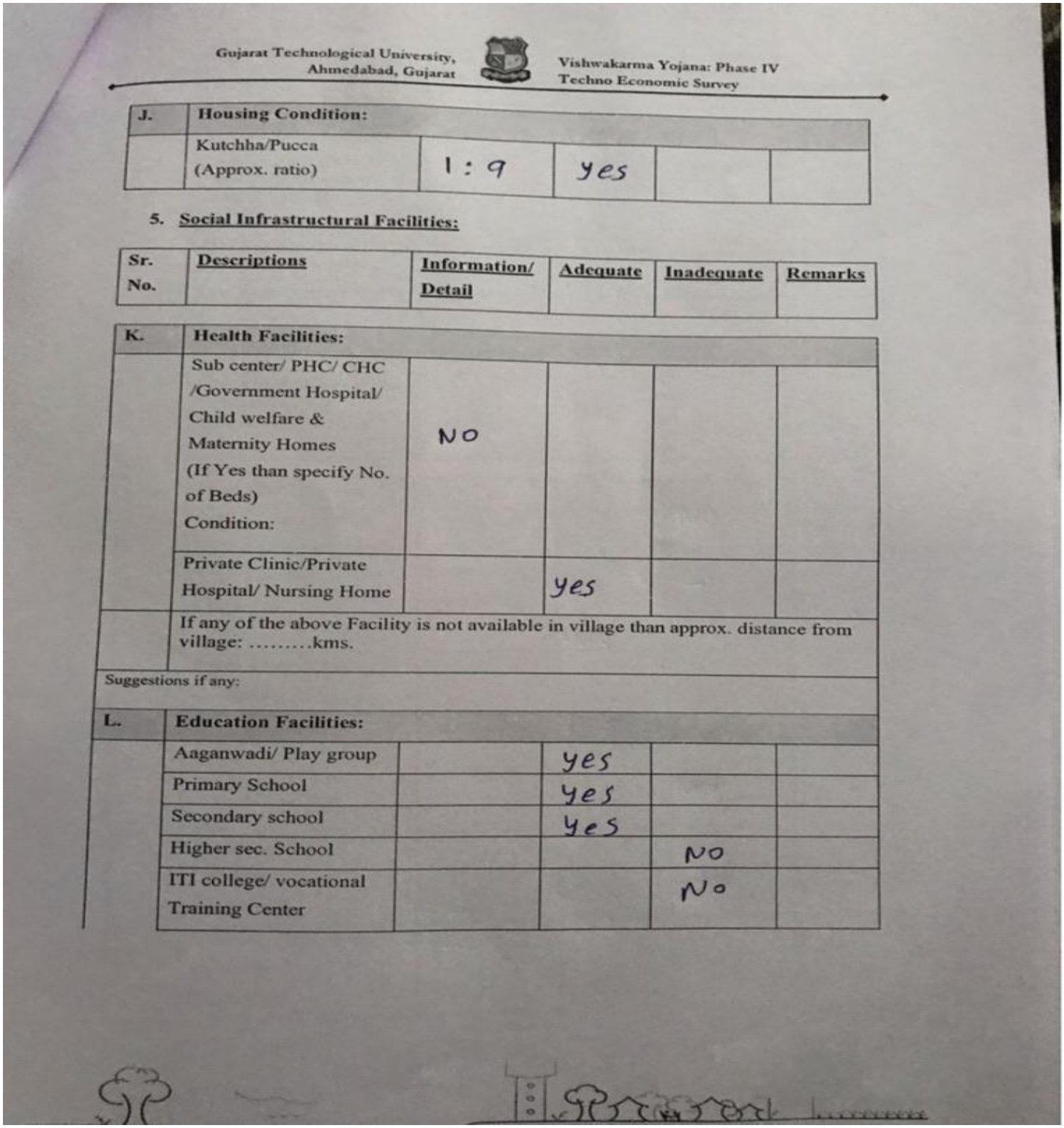
Techno Economic Survey

	Power supply for Agricultural Use		YES		
	Power supply for Commercial Use		YES		
	Road/ Street Lights		YES		
	Electrification in Government Buildings/ Schools/ Hospitals		YES		
	Renewable Energy Source Facilities (Y/ N)		yes		
	LED Facilities		yes		
Suggestions if any:					
H.	**Sanitation Facility**				
	Public Latrine Blocks If available than Nos.			No	
	Location Condition			–	
	Community Toilet (With bath/ without bath facilities)		yes		
	Solid & liquid waste Disposal system available		yes		
	Any facility for Waste collection from road			No	
Suggestions if any:					
I.	**Irrigation Facility:**				
	Main Source of Irrigation (Stream/River/ Canal/ Well/ Tube well/ Other)	Canal, River	yes		
Suggestions if any:					



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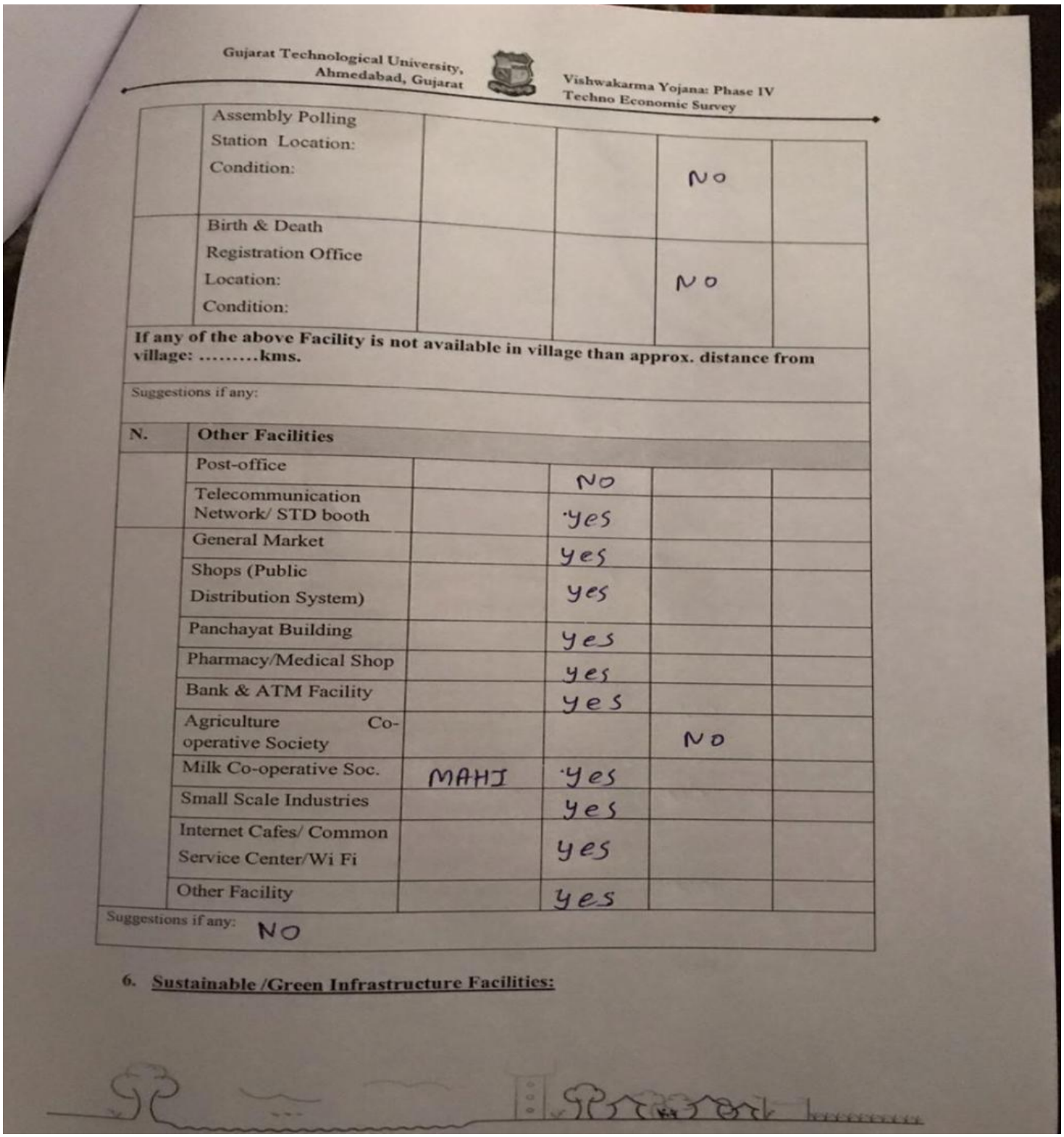
Vishwakarma Yojana: Phase IV
Techno Economic Survey

J.	Housing Condition:				
	Kutchha/Pucca (Approx. ratio)	1 : 9	yes		

5. **Social Infrastructural Facilities:**

Sr. No.	Descriptions	Information/ Detail	Adequate	Inadequate	Remarks
K.	Health Facilities:				
	Sub center/ PHC/ CHC /Government Hospital/ Child welfare & Maternity Homes (If Yes than specify No. of Beds) Condition:	NO			
	Private Clinic/Private Hospital/ Nursing Home		yes		
	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		yes		
	Primary School		yes		
	Secondary school		yes		
	Higher sec. School			NO	
	ITI college/ vocational Training Center			No	

	Art, Commerce& Science /Polytechnic/ Engineering/ Medical/ Management/ other college facilities			NO	
	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:		yes		
	Condition:				
	Public Library (With daily newspaper supply: Y/N) Location: Condition:	daily newspaper supply	yes		
	Public Garden Location: Condition:			NO	
	Village Pond Location: Condition:			NO	
	Recreation Center Location: Condition:			NO	
	Cinema/ Video Hall Location: Condition:			NO	



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Techno Economic Survey

	Assembly Polling Station Location: Condition:			No	
	Birth & Death Registration Office Location: Condition:			No	

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		No		
	Telecommunication Network/ STD booth		yes		
	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.	MAHI	yes		
	Small Scale Industries		yes		
	Internet Cafes/ Common Service Center/Wi Fi		yes		
	Other Facility		yes		

Suggestions if any: NO

6. **Sustainable /Green Infrastructure Facilities:**

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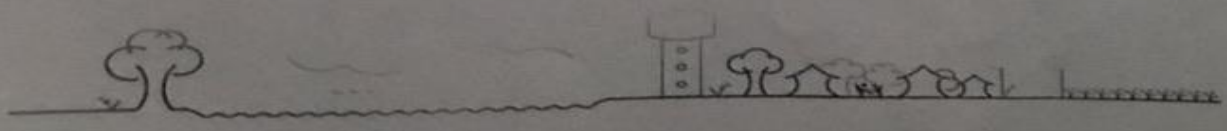
Sr. No.	Descriptions	Information/ Details	Adequate	Inadequate	Remarks
O.	Adoption of NonConventional Energy Sources/ Renewable Energy Sources		YES		
P.	Bio-Gas Plant Solar Street Lights Rain Water Harvesting System		– YES YES YES		
Q.	Any Other			NO	

7. Data Collection From Village

Village Base Map Available: Hard Copy/Soft Copy	SOFT COPY
Recent Projects going on for Development of Village	PRIMARY SCHOOL
Any NGO working for village development	

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)	SCHOOL, BUS STAND, HOSPITAL	
2.	Additional Information/ Requirement		



Note: Photographs/ Video/ Drawings of all existing Infrastructure facilities & conditions

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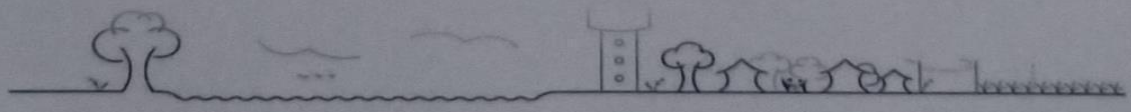
Email ID: rurban@gtu.edu.in



Gap Analysis:

VILLAGE GAP Analysis					
Village Facilities		Planning Commission/UDPFI Norms	Village Name	Nani Parabadi(dist. Rajkot)	
		Population: 2118			
		Existing	Required as per Norms	Future Projection Design	**Gap**
Social Infrastructure re Facilities					
Education					
Anganwadi	Each or Per 2500 population	1	2	-	**-1**
Primary School	Each Per 2500 population	1(under construction)	1	-	**0**
Secondary School	Per 7,500 population	0	0	-	**0**
Higher Secondary School	Per 15,000 Population	0	0	-	**0**
College	Per 125,000 Population	0	0	-	**0**
Tech. Training Institute	Per 100000 Population	0	0	-	**0**
Agriculture Research Centre	Per 100000 Population	0	0	-	**0**
Skill Development Center	Per 100000 Population	0	0	-	**0**
Health Facility					
Govt/Panchayat Dispensary or Sub PHC or Health Centre	Each Village	0	1	-	**-1**
Primary Health & Child Health Center	Per 20,000 population	0	0	1	**0**
Child Welfare and Maternity Home	Per 10,000 population	0	0	-	**0**
Multispecialty Hospital	Per 100000 Population	0	0	-	**0**

Public Latrines	1 for 50 families (if toilet is not there in home, specially for slum pockets & kutcha house)	0	1	1	**-1**
Physical Infrastructure Facilities					
Transportation			Adequate		
Pucca Village Approach Road		Each village	Adequate	**10 km approach road**	
Bus/Auto Stand provision		All Villages connected by PT (ST Bus or Auto)	Inadequate	**No pick up stand available (connected by ST bus, auto)**	
Drinking Water (Mini. 70 lpcd)			Adequate		
Over Head Tank		1	50000 lit.		
U/G Sump		0	0		
Drainage Network - Open			Inadequate		
Drainage Network - Cover			Inadequate		
Waste Management System			Inadequate		
Socio- Cultural Infrastructure Facilities					
Community Hall	Per 10000 Population	0	1	1	**-1**
community hall and Public	Per 15000 Population	0	1	1	**-1**
Library					
Cremation Ground	Per 20,000 population	0	1	-	**-1**
Post Office	Per 10,000 population	1	0	-	**+1**
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**
Public Garden	Per village	0	1	1	**-1**
Police post	Per 40,000Population	0	1	-	**-1**

Shopping Mall	**Shops are available**		
Electrical D design			
Electricity Network	Adequate		
Any Smart Village Facility			
Technology			
	ESR cap	0	
	Sump cap	0	
	Lat	**0**	

Table 9 : Gap analysis

Summary of All Infrastructure designs in Table Format:

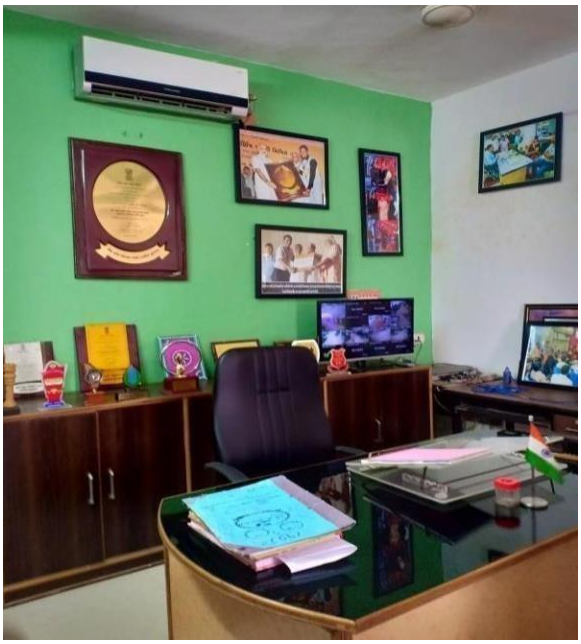
Sr NO.	Designs
1.	PUBLIC TOILET
2.	COMMUNITY HALL
3.	BUS STAND
4.	HOSPITAL

Table 10 : summary of all Infrastructure designs

Photos Of Punsri Village

Punsri Gram Panchayat

Punsri Primary School



Punsri Gram Panchayat

Punsri R.O. WaterplantOffice

Punsri Jan sampark karayalaya

Village Interaction Report with the photograph as a report format

A REPORT

ON

Interactive Presentation
(Vishwakarma Phase 8) At

Nani Parabadi Village, Rajkot District

As per the circular of GTU guidelines, GTU had informed all the team members of Vishwakarma Yojana to present their work in the allocated village for the successful and effective implementation of Vishwakarma Yojana Phase-8 . Under their guidelines the members of the team of Nani Parabadi village presented the plan for the development of the village at Nani Parabadi gram panchayat office.

Sarpanch, Talati, and all the other member of the panchayat, village dwellerswere present were present to know how the development of the village can be done. Some of them also gave their own ideas and the facilities which are required in the village.

We presented our work under the guidelines of VY Phase-8. We also made them understand about the main objective of the project, its benefits for the development of village and other issues and concerns prevailing in the village.

We explained them about the various designs we are going to proposed in the village for its development. The designs which we are going to proposed were designated as Physical infrastructure, Social infrastructure, Social and Cultural facilities, Repair and Maintenance of Existing structures and the most important facility of Sustainable/ Renewable Energy Source of planning.

Figure : WITH SARPANCH OF NANI PARABADI

With Sarpanch of Nani Parabadi Village

Suggestions / Benefit of the villagers:

There are following structures need to build up to Progress of village and their people:

Physical Infrastructure Facilities should need such as: Higher secondary school, closed drainage system, panchayat building, sanitation facilities,Child Welfare centered.

Social Infrastructure Facilities should need such as: Police station, hospitals, community Housing, General market, etc.

Socio-Cultural Infrastructure Facilities should need such as: Govt. grocery shop, Community hall, Library, Auditorium, Recreational activities, pick up stand etc.

Sustainable Infrastructure Facilities should need such as: Green building, organic waste controller, Natural Resources (petrol, diesel), Solar system, Biogas plant, Rain Water Harvesting, etc.

If these structures available in the village, Villager can easily gather advantages of the system and they not need to depend on other town, good drainage system and sanitation facility in village ensure the good health and well-being of people.