DETAIL PROJECT REPORT

VISHWAKARMA YOJNA: VIII

AN APPROACH TOWARDS RURBANISATION

BHATIWADA Village

DAHOD District

PREPARED BY

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YEAR: 2020-21

GUJARAT TECHNOLOGICAL UNIVERSITY
11 Chandkheda, Ahmedabad – 382424 Gujarat

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ON

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CERTIFICATE

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

Detail Project Report for,

VILLAGE : BHATIWADA

DISTRICT : DAHOD

Under

VishwakarmaYojana: 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 the under our supervision and guidance.

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ABSTRACT

The Next Two Billion People will live in cities and town; so we need To Plan Now. Almost all future population growth in the next 40 years will be absorbed by cities of the Developing world, which are unprepared for such rapid expansion. Planning needs to Begin now to take advantage of the many benefits cities can offer. While cities Concentrate poverty, they also provide the best means of escaping it. Cities have long Been the engines of economic growth. Densely populated areas can be more Environmentally sustainable than sprawling communities and allow for more efficient Provision of services. The ideas, connections and activities in cities often generate the Solutions to the problems they create.

People in rural areas should have the same quality of life as is enjoyed by people living In sub urban and urban areas. Further there are cascading effects of poverty, Unemployment, poor and inadequate infrastructure in rural areas on urban centers Causing slums and consequential social and economic tensions manifesting in economic Deprivation and urban poverty. Hence Rural Development which is concerned withEconomic growth and social justice, improvement in the living standard of the rural People by providing adequate and quality social services and minimum basic needs Becomes essential. The present study deals with the same. VishwakarmaYojana is one of the approaches to reduce urban city Pressure and lower The migration rate by developing village with a 'rural soul' but with all urban amenities That a city may have. The developmental work in villages that could undertake as per the Need of the village in particular includes Physical, Social and Renewable infrastructure Facilities.

The name of the allocated vilaage is bhatiwada. Which is situated in near dahod district. In thwdahod major population is schedule tribes. Bhatiwada village is has four Lake are available.one major primary health center and one minor primary health center is available. The village is connected with all type of wheather road and village roads like RCC roads.

Key Words: Rural Development, Rurbanzation, Infrastructure facilities, Sustainable development, etc.

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SansadAdarsh Gram Yojana :

SansadAdarsh gram yojna is a rural development programme broadly focusing upon the development in the villages which includes social development, cultural development and spread motivation among the people on social mobilization of the village community.[1] The programme was launched by the Prime Minister of India, NarendraModi on the birth anniversary of Jayaprakash Narayan, on 11 October 2014.

The distinct feature of this Yojana is that it is

a) demand driven
b) inspired by society
c) based on people's participation.

1.2 Concept:ideal village,Normal village

1.2.1 Objectives:

Key objectives of the Yojana include:

The development of model villages, called Adarsh Grams, through the implementation of existing schemes, and certain new initiatives to be designed for the local context, which may vary from village to village.

Creating models of local development which can be replicated in other villages.

The plan:

SansadAdarsh Gram Yojana was initiated to bring themember of parliamentof all the political parties under the same umbrella while taking the responsibility of developing physical and institutional infrastructure in villages and turn them into model villages.[3]Under this yojana, eachmember of parliamentneeds to choose one village each from the constituency that they represent, except their own village or their in-laws village and fix parameters and make it a model village by 2019.

Thereafter, they can take on two or three more villages and do the same by the time the next general elections come along in 2019, and thereafter, set themselves ten-year-long village or rural improvement projects.[1]Villages will be offered smart schools, universal access to basic health facilities andPucca housingto homeless villagers.

Strategies:

- In order to convert the identified village into an Adarsh Gram through the specified activities, the following are the possible strategies:

- Entry point activities to energize and mobilize the communitytowards positive common action Participatory planning exercise for identifying peoples' needs and priorities in an integrated manner
- Converging resources from Central Sector and Centrally Sponsored Schemes and also other State schemes to the extent possible.
- Repairing and renovating existing infrastructure to the extent possible.
- Strengthening the Gram Panchayats and peoples' institutions within them
- Promoting transparency and accountability.

1.2.2 Example/Live case studies of ideal village in India/Gujarat:

Over View of Bavka :

The village BAVKA is very small village. The area is trible. There is a very old SHIVA temple. Special thing is that this temple is little version of KHAJURAO temple of MP. THE Place is scenic place.

Locality Name :Bavka
TalukaName :Dahod
District :Dohad
State : Gujarat
Language : Gujarati and Hindi
Current Time 11:11 AM
Date: Friday , Nov 06,2020 (IST)
Time zone: IST (UTC+5:30)
Elevation / Altitude: 313 meters. Above Seal level
Telephone Code / Std Code: 02673

1.2.3 The idea of ideal/smart village

Smart Village is a concept adopted by national, state and local governments of India, as an initiative focused on holistic rural

development, derived from Mahatma Gandhi's vision of Adarsh Gram (Ideal Village) and Swaraj (Self Reliance).

Let's make a little change in question- How can we develop a village as a Model/Ideal/Smart village in India?

Smart Village = Ideal Village + Digital Village

All past governments promised to develop ideal villages in the country whereas this present government led by Mr. Narendra Modi went one step ahead to make smart village.

1.2.4 Ancient History Civil /Electrical concept about Indian Village /other Countries Perspective about village and its new Development

BAWKA SHIVA TEMPLE：

History :

It was built during the reign of the last Chaulukya ruler Bhima II (r. c. 1178 – 1240 CE).[2] Archaeologist MadhusudanDhaky has placed this temple after NilkanthaMahadeva temple of Miani (VS 1260, 1204 CE). But there is an inscription dated VS 1290 (1234 CE).[3] According to local legend, it was built by a Devdasi (temple dancer) in a single night. It was damaged by Mahmud of Ghazni.[better source needed] The temple was neglected for years and several artifacts of the temples were stolen. The temple is inscribed as the Monument of National Importance (N-GJ-77) by the Archaeological Survey of India (ASI). It was restored by ASI in 2009.[4] (Wikipedia)

The bawka village falls in dahod district situacted in Gujrat srate, with the population 10820. The male and Female population are 5506 and 5314 respectively.The size of the area is about 19.51 square kilometer.

Figure - 1

1.3 Detail study (socio economic, physical, infrastructure, details) of ideal village BAVKA

Bavka is a Village in DahodTaluka in Dohad District of Gujarat State, India. It is located 11 KM towards west from District head quartersDahod. 16 KM from . 193 KM from State capital GandhinagarBavka Pin code is 389152 and postal head office is Jesawada .Vajelav (3 KM) , Jesawada (3 KM) , Gadoi (3 KM) , Chandawada (4 KM) , Nimnalia (4 KM) are the nearby Villages to Bavka. Bavka is surrounded by GarbadaTaluka towards East ,DahodTaluka towards East , DhanpurTaluka towards South ,LimkhedaTaluka towards west .Dahod , Jhabua , Godhra , Lunawada are the near by Cities to Bavka.

Colleges near Bavka

- P.t.c College Of Sanjeli
- Address : Near A Silpan R Joshi Memorial High SchoolGodhra Road Sanjeli
- Govt. Engineering College, Dahod
- Address : Opp. Navjivan Arts And Science College, zalodRaod, Dahod
- Arts Commence College Zalod
- Address :Government Engineering College, Dahod
- Address :Oppisite. Navjivan Science Collegdahod—zalodRd;dahod; Gujarat 389151
- J & R B. Ed. College
- Address : Navjeevan Arts & Commerce Colleg Campus; JhalodRd;dahod – 389 151

Schools in Bavka

AadivasiAashramShala
Address :bavka , dahod , dohad , Gujarat . PIN- 389151 , Post – Dahod
Chandawada
Address :bavka , dahod , dohad , Gujarat . PIN- 389151 , Post – Dahod
BavkaMulkaPri.shala
Address :bavka , dahod , dohad , Gujarat . PIN- 389151 , Post – Dahod
BavkaMu.gamtal

Address :bavka , dahod , dohad , Gujarat . PIN- 389151 , Post – Dahod

Govt Health Centers near Bavka

1) Nagrala , PHC NAGRALA , NAGRALA GAMTA; , JESAVADA ROAD 2) Jekot , GRAMIN BANK PASAL NISHAL PASE , NISHAL.F , JEKOT

3) Govt.Hosp. Dahod. , Dahod , Near BhaginiSamajDahod , Dahod

Bavka Maps

Figure -2 and figure-3

1.4 SWOAT ANALYSIS

A SWOT analysis is a compilation of your company's strengths, weaknesses, opportunities and threats. The primary objective of a SWOT analysis is to help organizations develop a full awareness of all the factors involved in making a business decision.

1.5 Future prospects of Development of the ideal village:

We have interaction with village and they have suggested somepossible future prospects of development of bavka village. And we personally obsessed that things & those suggested area as follows

- ★ Rainwater storage by harvesting
- ★ Cold storage

- ★ Biogas plants
- ★ Solar street lights
- ★ Library
- ★ Hospital
- ★ NGOs

1.6 Benefits of the visits of ideal village:

★ Bawka is a developed village. Village have good road connectivity by bitumen or RRC roads. 70% villager are depends on agricultural.

★ Also availability of PHC, Anganwadi, Gram panchayat, community Hall, school, etc are present.

By visiting the village we got an insight about

- ★ The ancient history of village
- ★ Lifestyle of village
- ★ Economic conditions
- ★ Social conditions
- ★ Environmen of village
- ★ Facilities available in village

1.7 Civil aspects required in ideal village:

We have observed the balance of commercial, residential and recreational land use in the Jarod village but as per the feedback which were given by villagers some facilities are lacking in the village from civil aspects and these are, Gas Pipelines, Biogas Plant, Cold Storage Area, Rain Water Harvesting, Solar Street Lights, Public WiFi Connection, Fire Station , etc.

Moreover, by providing skill development centers for the youth, panchayat should also focus on enabling the youth to setup the self-employment units. Water harvesting, Ground water recharge and improvement of village tanks/lakes are also projects to be pursued.

Chapter 2. BHATIWADA VILLAGE Literature Review – (Civil Concept)

2.1 Introduction: Urban & Rural village concept

Definition of URBAN & AREA:

★ According to the current delineation, released in 2012 and based on the 2010 decennial census, rural areas comprise open country and settlements with fewer than 2,500 residents. Urban areas comprise larger places and densely settled areas around them. Urban areas do not necessarily follow municipal boundaries.

★ A place having minimum population of 5000.

★ Population density of 400 persons per sqkilometer or higher.

★ 75% plus of the male working population involved in non -agricultural employment activity

Definition of RURAL AREA:

★ The Census Bureau defines rural as any population, housing, or territory NOT in an urban area. The green area on the map to the right represents all the area in the United States that is classified as rural based on this definition. The Census Bureau's rural definition is closely tied to the urban definition.

2.2 Importance of the Rural development

Rural development is important not only for the majority of the population residing in a rural area but the growth of rural activities is necessary to stimulate the speed of overall economic expansion of the nation.

Rural development is pretended to be noticeable importance in the country today than in the olden days in the process of the evolution of the nation. It is a strategy trying to obtain improved rural creation and productivity, higher socio-economic equality, and ambition, stability in social and economic development.

The primitive task is to decrease the famine roughly about 70 percent of the rural population, implement sufficient and healthy food. Later, serve fair equipment of clothing and footwear, a clean environment and house, medical attention, recreational provision, education, transport, and communication.

2.3 Ancient Villages / Different Definition of Rural Urban Villages:

Difference between Villages in Ancient India and Villages of Today!
Mahatma Gandhi is often quoted as having said: "Real India lives in its villages." The fact that in the early decades of the 20th century, India's urban segment constituted only 11 per cent of the total population gave strength to his argument. It was the villages in which 89 per cent of the population lived. That made India an agricultural country.

The development of Village India, for Gandhi, was the development of India.
Illiteracy, ignorance, and poverty characterized the vast population of rural India. Gandhi organized mass movements to draw attention to the problems of the rural people, and also to involve the peasants in the freedom struggle. Social scientists also became interested in studying rural problems, particularly the deteriorating rural economy.

The growing rural discontent also worried the British Government. It felt the need to investigate the actually existing conditions. S.J. Patel, in his book Agricultural
Laborers in Modern India and Pakistan, talks about the growth of village studies: With the end of the First World War, the beginnings of an agrarian crisis was accompanied by the entry of peasants into the political arena, as exemplified during the Champaran and Kaira campaigns led by Gandhiji. As a result, the cultivator of the soil began to attract consid-erable attention from students of Indian society. G. Keatings and Harold Mann in Bombay, Gilbert Slater in Madras, and E.V. Lucas in the Punjab initiated intensive studies of particular villages and general agricultural problems.

The results of these investigations evoked great interest and stressed the necessity for still further study. Economists and social anthropologists later joined the movement of village studies. In the 1950s, several studies of individual villages were undertaken. In 1955, four major publica-tions came out, three of which were anthologies of articles written by social anthropologists/sociologists on the villages studied by them, and the fourth one was a full-length monograph – the very first and by an Indian social scientist.

The anthologies were Rural Profiles (edited by D.N. Majumdar), India's Villages (edited by M.N. Srinivas), and Village India (edited by Mckim Marriott). S.C. Dube authored the full-length monograph on a village in Andhra Pradesh under the title, Indian Village. With the arrival of these publications, a new trend of village studies was ushered in Indian sociology.

These studies shattered the stereotypical images of the Indian village, and also provided accounts of the caste system as it obtains now, different from the prevailing book view and the upper caste view. In the past, many scholars had painted an idyllic picture of the village. People believed what Sir Charles Metcalfe, a British administrator, once wrote about the village communities of India.

Figure-4

2.4 Scenario: Rural / Urban village of India population Growth:

The growth rate of population for India in the last decade was 17.64%. The growth rate of population in rural and urban areas was 12.18% and 31.80%respectively.

Bihar (23.90%) exhibited the highest decadal growth rate in rural population

TABLE NO. -1

Current Population of India in 2012	**1,220,200,000 (1.22 billion)**
Total Male Population in India	**628,800,000 (628.8 million)**
Total Female Population in India	**591,400,000 (591.4 million)**
Sex Ratio	**940 females per 1,000 males**
Age structure	
0 to 25 years	50% of India's current population
Currently, there are about 51 births in India in a minute.	
India's Population in 2011	1.21 billion
India's Population in 2001	1.02 billion
Population of India in 1947	350 million

Current Population of India - India, with 1,220,200,000 (1.22 billion) people is the second most populous country in the world, while China is on the top with over 1,350,044,605 (1.35 billion) people. The figures show that India represents almost 17.31% of the world's population, which means one out of six people on this planet live in India. Although, the crown of the world's most populous country is on China's head for decades, India is all set to take the numerouno position by 2030. With the population growth rate at 1.58%, India is predicted to have more than 1.53 billion people by the end of 2030.

More than 50% of India's current population is below the age of 25 and over 65% below the age of 35. About 72.2% of the population lives in some 638,000 villages and the rest 27.8% in about 5,480 towns and urban agglomerations. The birth rate (child births per 1,000 people per year) is 22.22 births/1,000 population (2009 est.) while death rate (deaths per 1000 individuals per year) is 6.4 deaths/1,000 population. Fertility rate is 2.72 children born/woman (NFHS-3, 2008) and Infant mortality rate is 30.15 deaths/1,000 live births (2009 estimated). India has the largest illiterate population in the world. The literacy rate of India as per 2001 Population Census is 65.38%, with male literacy rate at 75.96% and female at 54.28%. Kerala has the highest literacyrate at 90.86%, Mizoram (88.80%) is on the second position and Lakshadweep (86.66%) is on third.

Every year, India adds more people than any other nation in the world, and in fact the individual population of some of its states is equal to the total population of many countries. For example, Population of Uttar Pradesh (state in India) almost equals to the population of Brazil. It, as per 2001 Population Census of India, has 190 million people and the growth rate is 16.16%. The population of the second most populous state Maharashtra, which has a growth rate of 9.42%, is equal to that of Mexico's population. Bihar, with 8.07%, is the third most populous state in India and its population is more than Germany's. West Bengal with 7.79% growth rate, Andhra Pradesh (7.41%) and Tamil Nadu (6.07%) are at fourth, fifth and sixth positions respectively. The sex ratio of India stands at 933. Kerala with 1058 females per 1000 males is the state with the highest female sex ratio. Pondicherry (1001) is second, while Chhatisgarh (990) and Tamil Nadu (986) are at third and fourth places respectively. Haryana with 861 has the lowest female sex ratio.

Some of the reasons for India's rapidly growing population are poverty, illiteracy, high fertility rate, rapid decline in death rates or mortality rates and immigration from Bangladesh and Nepal. Alarmed by its swelling population, India started taking measures to stem the growth rate quite early. In fact India by launching the National Family Planning programme in 1952 became the first country in the world

to have a population policy. The family planning programme yielded some noticeable results, bringing down significantly the country's fertility rate. In 19652009, the contraceptive usage more than tripled and the fertility rate more than halved. The efforts did produce positive results, however, failed to achieve the ultimate goal and the population of India since getting independence from Britain in 1947 increased almost three times. Whereas India has missed almost all its targets to bring the rate of population growth under control, China's 'One Child Policy' in 1978, has brought tremendous results for the latter. The policy claims to have prevented between 250 and 300 million births from 1978 to 2000 and 400 million births from 1979 to 2012

Source: http://hetv.org/india/india-population-2012.htm

2.5 Scenario: Rural / Urban village of Gujarat as per Census 2011 and latest:

As per details from Census 2011, Gujarat has population of 6.04 Crores, an increase from figure of 5.07 Crore in 2001 census. Total population of Gujarat as per 2011 census is 60,439,692 of which male and female are 31,491,260 and 28,948,432 respectively. In 2001, total population was 50,671,017 in which males were 26,385,577 while females were 24,285,440. The total population growth in this decade was 19.28 percent while in previous decade it was 22.48 percent. The population of Gujarat forms 4.99 percent of India in 2011. In 2001, the figure was 4.93 percent.

Recently as per Gujarat census data, 83.92% houses are owned while 13.54% were rented. In all, 65.95% couples in Gujarat lived in single family. In 2011, 57.87% of Uttar Pradesh population had access to Banking and Non-Banking Finance Corporation. Only 3.13% of Uttar Pradesh population had internet facility which is likely to improve in 2021 due to Jio. 6.10% of family in Uttar Pradesh owned car while 34.14% owned two wheller. In few months we will also get details of election data for Gujarat.

Source:https://www.census2011.co.in/census/state/gujarat.html

2.6 Rural Development Issues - Concerns - Measures

PROBLEMS IN RURAL DEVELOPMENT

1. People related 2. Agricultural related problems 3. Infrastructure related problems 4. Economic problems 5. Leadership related problems 6. Administrative problems 1.PEOPLE RELATED PROBLEMS ● Traditional way of thinking. ● Poor

understanding. ● Low level of education to understand developmental efforts and new technology. ● Deprived psychology and scientific orientation. ● Lack of confidence. ● Poor awareness. ● Low level of education. 2. AGRICULTURE RELATED PROBLEM ● Lack of expected awareness, knowledge, skill and attitude. ● Unavailability of inputs. ● Poor marketing facility. ● Insufficient extension staff and services. ● Multidimensional tasks to extension personnel. ● Small size of landholding.

INFRASTRUCTURAL RELATED PROBLEM

Poor infrastructure facilities like-: ● Water ● Electricity ● Transport ● Educational institutions ● Communication ● Health ● Employment ● Storage facility etc 4. ECONOMIC PROBLEMS ● Unfavorable economic condition to adopt high cost technology. ● High cost of inputs. ● Under privileged rural industries 5. LEADERSHIP RELATED PROBLEM ● Leadership among the hands of inactive and incompetent people. ● Self interest of leaders. 6. ADMINISTRATIVE PROBLEMS ● Political interference. ● Lack of motivation and interest. ● Unwillingness to work in villages. ● Improper utilization of budget. ● No proper monitoring of programs and lack in their implementation

Some Rural Issues in India Poverty:

Poverty in India is still a major issue even in this day and age. The population of people living below the poverty line in India is the highest in the world and the problem is not going away. If you've ever been to India then you'll understand - from the moment the place hits the ground the poverty is evident, indeed it is the idea of such extreme poverty which puts people of the idea of travelling to India in the first place. A number of factors are responsible for poverty in the rural areas of India. Rural populations primarily depend on agriculture as their livelihoods, which in turn, is highly dependant on rain patterns and monsoons. Inadequate rain and improper irrigation facilities can obviously cause low, or in some cases, zero production of crops followed by the obvious but sometimes catastrophic repercussions that often follows. An Indian family unit can be often very large, which can exacerbate the effects of poverty. Also, the caste system which is still found a lot in India (although it is getting less) is a major reason for rural poverty for it keeps people locked in the endless cycle with less facilities and opportunities for the lower castes. The government has planned and implemented poverty eradication programs, but the benefits of all these programs have yet to reach the core of the country.

Poverty in India - the statistics

● 50% of Indians don't have proper shelter; ● 70% don't have access to decent toilets (which inspires a multitude of bacteria to host their own disease party); ● 35% of households don't have a nearby water source; ● 85% of villages don't have a secondary school (how can this be the same government claiming 9% annual growth?); ● Over 40% of these same villages don't have proper roads connecting them.

Water:

Earlier this year,Safe Water Network released a detailed and comprehensive report that takes stock of the progress of community safe water solutions in the country. This report on the drinking water situation in India addresses some of the key questions we are seeking to answer as investors – finding profitable companies that can deliver affordable water for the masses. here are some facts on the drinking water situation in India that will make you sit up and take note of the problem. 1) It is estimated that only 18% of a total rural population of 833 million Indians have access to treated water. In comparison, 41% of the rural population, or 346 million people, own mobile phones. 2) Only about one-third of rural households in India are reached by piped water supplies. The balance two-third of rural households is still living 'beyond the pipe'. The 2011 census estimates that 138 million rural households, or about 685–690 million people, lack access to safe drinking water. 3) More than half of the pipes in rural areas in India deliver untreated water. 4) Access to safe water varies greatly from state to state. 36% of the rural population in Andhra Pradesh has access to treated water while, in Bihar, less than 2% of the rural population receives treated water.

Education:

When we talk about education in India, we can't just talk about how education is in urban cities of India, without going deep into rural education that constitutes almost 90% of the schools being located in rural areas.

Female foeticide:

This is a major social problem in India and has cultural connections with the dowry system that is ingrained in Indian culture, despite the fact that it has been prohibited by law since 1961.In India a strong preference for sons over daughters exists, unlike in Western cultures. Increasing human trafficking and continuous presence of female foeticide,infanticide had placed India as the world's fourthmost dangerous place for women, as per a survey conducted by Thomson Reuters' Trustlaw Women, a hub of legal information and legal support for women's rights . Female foeticide is in practice in India from the time of advent of technological advancements in

medical field like prenatal sex determination in the 1990s. However, earlier to this, female childs were killing after their birth in many regions of the country.

2.7 Various infrastructure guidelines with the Norms for Villages for the provisions of different infrastructure facilities

Earlier town planning was a piecemeal process but after Independence the city planning experienced tremendous growth & challenges for resettlement due to political changes. • Several resettlement, new Industrial base towns & urban centers were under process of planning & masters & town planners conclude that land use plans are needed to guide development of urban centers to promote orderly development & healthy living environment. • For this purpose the ministry of Urban affairs & employment, governing of India organized a national workshop on master plan approach during February 24-25, 1995. The research study of this workshop awarded as UDPFI – Urban development plans formulation and implementation guidelines.

The Need of guidelines:

The study of UDPFI norms and standards is needed to evolve: □System that is dynamic, flexible and efficient. □Process that is less time consuming. □Innovative ideas of land assembly and fiscal resource mobilization □Simple & effective form of laws, rules and regulations.

Urban Development Planning system It consist of a. Perspective plan: □20-25 years duration . □Includes Maps & Diagrams . □State government's goal, policies, strategies of urban local authority regarding spatio-economic development. b. Development plan : □Conceived within Frame work of approved Perspective plan. □Medium Duration for 5 years. □Proposals for socio-economic & spatial development of urban centers Including land use.

Annual plan:

Conceived within the frame work of Development plan. □ Details of new & ongoing projects for local authority to implement in financial year □Necessary fiscal resources mobilization. d. Plan of Projects/schemes: •Conceived within the frame work of approved development Plan. •Includes detailed working layouts with cost of development, source of Finance & recovery instruments for Execution by a public or private agency.

Norms and standards Distribution of land use Traffic and Transportation Infrastructure Commercial facilities Recreational facilities • Developed area average densities • Work force • Proposed land use structure of urban centers in plain area.

Urban center classification Settlement type Population Plain areas Hill areas Small town Less than 50,000 Less than 20,000 Medium town 50,000- 5lakh 20,000 less than 80,000 Large cities More than 5 lakh 80,000 and more Population based.

Distribution of Land Use Settlement type Persons per Hectare(pph) in Plain areas Hill areas Small town 75-125 45-75 Medium town 100-150 60-90 Large cities 100-150 60-90 Metro cities 125-175 - Developed area average densities:- • The Densities of medium town & large cities are considered similar for sustainability. • The density of 125 pph is max. factor for small town & average for medium town & large cities & minimum for Metro cities for their identification & survival.

2.8 Other Projects / Schemes of Gujarat / Indian Government :

SansadAdarsh Gram Yojana :

SansadAdarsh gram yojna is a rural development programme broadly focusing upon the development in the villages which includes social development, cultural development and spread motivation among the people on social mobilization of the village community.[1] The programme was launched by the Prime Minister of India, NarendraModi on the birth anniversary of Jayaprakash Narayan, on 11 October 2014.
The distinct feature of this Yojana is that it is (a) demand driven (b) inspired by society (c) based on people's participation.

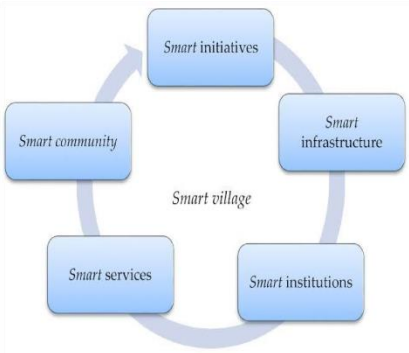
- Mission mangalam
- MGNREGA SCHEME
- Swachhbharat mission
- Pradhan mantriAwasyojna
- Watershed development program

Source:https://ruraldev.gujarat.gov.in/index.htm

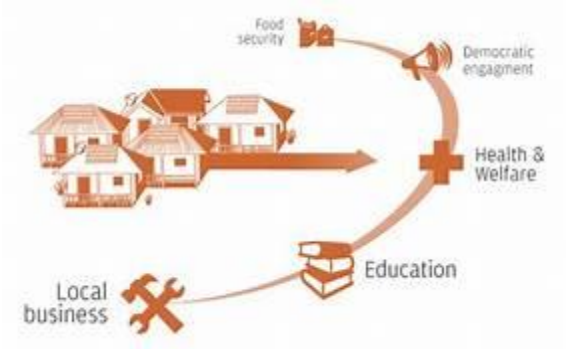
Chapter 3. Smart (Cities / Village) Concept Idea and its Visit - (Civil Concept)

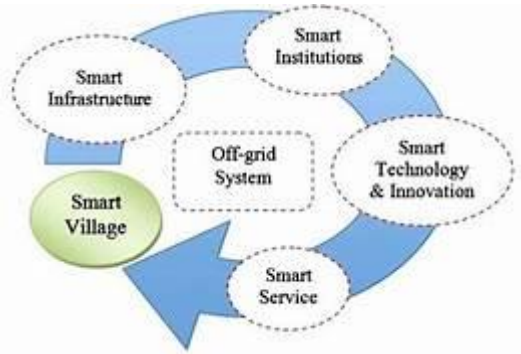
3.1 Introduction: Concepts, Definitions and Practices

CONCEPT: Abstract smart village refer to a correct development in rural area that provides solutions to problems occurred and improves the quality of life. The main problems faced by rural areas are cover POVERTY, LOW LEVEL OF EDUCATION, and LIMITED ACCESS OF TECHNOLOGY.



DEFINATION : Smart village is concept adopted by national, state government na d local
Government of india as an initiative focused on hollystic rural development,derived from
Mahtma gandhi's vision of adarsh gram yojna.





The Smart Villages concept is also closely aligned to Ireland's new 'Smart Community' initiative, launched in January 2019. This innovative initiative is a new approach that aims to bring exposure to digital content and technology in rural

communities, and also to support rural dwellers in discovering the value of using digital in their daily lives.

SMART Village: shankhalpur, District:Mehsana

- Village : Shankhalpur
- District: Mahesana
- Taluka: Becharaji

Shankhalpur village which is situated in mahesana district Gujarat. InShankhalpur All basic amenities are available. Shankhalpur is the Gujarat's best Smart village. The following facilities are available in village.

- CCTV
- RCC Road
- Grampanchayat
- Solid waste management
- Door to door collection of garbage
- Schools are like primary, high school, secondary school
- PHC
- Private hospital
- Piped water
- Tap water
- Public toilet

3.2 Vision-Goals, Standards and Performance Measurement Indicators

The Smart Villages Initiative over the period 2014-2017. As explained in more detail in the next section, smart villages provide many of the benefits of 21st century life to rural communities, and reflect a level of rural development consistent with achieving the Sustainable Development Goals (SDGs). Building on the catalytic impact of sustainable energy services, in turn enabling the connectivity made possible by modern information and communication technologies, residents of smart villages lead healthy and fulfilling lives, achieve their development potential, earn a decent living, and are connected to the outside world.

The aim of the Smart Villages Initiative over this three-year period has been to identify the framework conditions necessary for the provision of energy services to villages to enable the livelihood opportunities, provision of services (healthcare, education, clean water, and sanitation) and empowerment embodied in the Smart Villages concept. Such framework conditions include policies and regulations, the business environment, access to finance, and development of skills. As noted in the International Energy Agency's 2016 World Energy Outlook (IEA 2016) in respect of access to sustainable energy services, 'countries can make a major difference with good policy choices and political will'.

Google Map of shankhalpur village

Source:Google maps

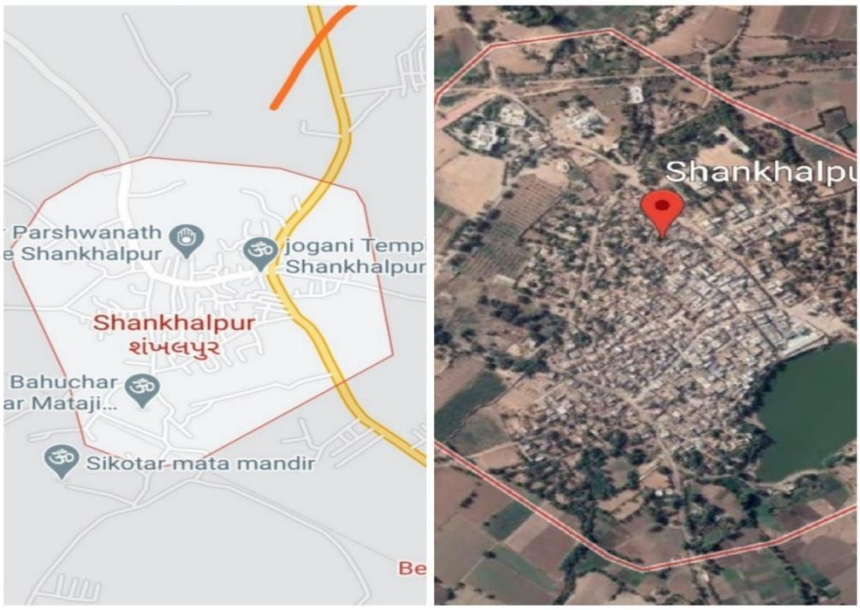


Figure -5 and figure-6

DETAILS OF SHANKHALPUR VILLAGE

Locality name	Shsnkhslpur
Taluka name	Becharaji
District	Mehsana

State	Gujarat
Sarpanch name	
Pin code	384210
Post office	Becharaji

TABLE NO. - 2

DEMOGRAPHIC DETAILS

Shankhalpur 2011 census details	
Total population	4170
Total no of houses	942
Female population	48.1%
Total literacy rate	65.5%
Female literacy rate	27.8%
Schedule tribe population	0.2%
Schedule caste population	17.7%
Working population	46.3%
Childe (0-6) as per 2011	502

TABLE NO.-3

INFRASTRUCTURE OF SMART VILLAGE

PHOTOS OF SHANKHALPUR SMART VILLAGE

Figure -7

Chapter 4. About BHATIWADA VILLAGE

4.1 Introduction About Bhatiwada village

Bhatiwada village is situated near dahod city. It is 10km away from the dahod city. The total population of the bhatiwada village is 7394 (as per census 2011).total male population is 3685 and female is 3709. Total household in the village is 1088.The bhatiwadavillagw has four lake with one irrigation canal. Also 2 primary school and 1 high school and higher secondary school. PHC center is available and also one sub center available.

Major of of the crops grown in the village is maize,gram,wheat. Major occupation in village is agricultural and animal husbandary.

TABLE NO : 4

BHATIWADA VILLAGE OVERVIEW	
Gram panchayat	Bhatiwada
Block/Taluka	DAHOD
District	DAHOD
State	GUJARAT
Pin code	389151
Area	1234.89 ha.
Population	7394
Household □	1088
Assembly constituency	Dahod
Parliamentary constituency	Dahod
Nearest town	Dahod (6.5)
District Magistrate	Shree Vijay kharadi (IAS)
Member of parliament	Shree JasvantBhabhor

TABLE NO: 11

Demographic details					
Sr. No	Census	Population	Male	Female	Total number of house holds
1.	2001	5555	2700	2855	800
2.	2011	7394	3685	3709	1088

TABLE NO: 5

Geographic details		
Sr. No.	Description	Information
1	Area of village	1234.89 Hector
2.	forest area □	NA
3.	Agricultural area	70% (Approx)
4.	Residential area	30% (approx)
5.	Other area	NA
6.	Distance to the nearest railway station	10KM
7.	Name of nearest town with distance	7KM
8.	Whether village is connected to all road for the any facilities or town or city ?	YES

TABLE NO :6

Economic profile	
Agriculturalist	70%
Laboure works	20%
Business	10%

4.3.Data Collection Bhatiwada village (Photograph/Graphs/Charts/Table)

For data collection we first contact village SARPANCH (Dineshbhaimeda) and Talati and collect the Basic details of the bhatiwada village. From the panchayat We collect the demographic, Geographic and economic conditions of bhatiwada Village. Than we travel through out the village and visit the villagers, anganw Primary school, high school, PHC hospitaBhatiwada village is 6.5 km away from DahodCity.Village has a total 4 Lake/pond so 50% area are irrigated by lake water another by dugwell/lif irrigation system.

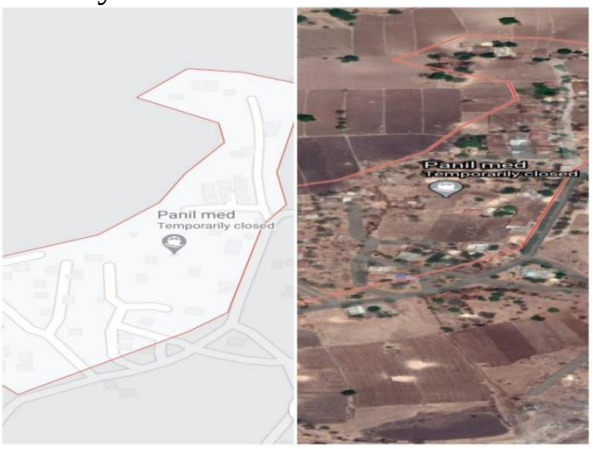


figure -8 and figure - 9

4.4Infrastructure Details (With Exiting Village Photograph)

1.GRAM PANCHAYAT

Bhatiwada village has a old Grampanchayat which required maintenance or new construction of the building. Panchayat is office use for sitting arrangements for sarpanch and talati for their official work. Now the gram panchayat have provided all services which are related to the villagers like income certificate, caste certificate, rashan card, Birth certificate, Notryy etc.

Figure -10

VARIOUS SCHEMES OF GOVERNMENT OF GUJARAT

1.NationalRurban Mission About the Mission

As per Census of India statistics, the rural population in India, stands at 833 million, constituting almost 68% of the total population. Further, the rural population has shown a growth of 12% during the 2001-2011 period and there has been an increase in the absolute number of villages by 2279 units, during the same period.

Large parts of rural areas in the country are not stand-alone settlements but part of a cluster of settlements, which are relatively proximate to each other. These clusters typically illustrate potential for growth, have economic drivers and derive locational and competitive advantages. Hence, making a case for concerted policy directives for such clusters. These clusters once developed can then be classified as 'Rurban'. Hence taking cognizance of this, the Government of India, has proposed the Shyama Prasad MukherjiRurban Mission (SPMRM), aimed at developing such rural areas by provisioning of economic, social and physical infrastructure facilities.

Taking also into view, the advantages of clusters, both from an economic view point as well as to optimize benefits of infrastructure provision, the Mission aims at development of 300 Rurban clusters, in the next five years. These clusters would be strengthened with the required amenities, for which it is proposed that resources be mobilized through convergence of various schemes of the Government, over and above which a Critical Gap Funding (CGF) would be provided under this Mission, for focused development of these clusters.

Mission's Vision

The National Rurban Mission (NRuM) follows the vision of "Development of a cluster of villages that preserve and nurture the essence of rural community life with focus on equity and inclusiveness without compromising with the facilities perceived to be essentially urban in nature, thus creating a cluster of "Rurban Villages".

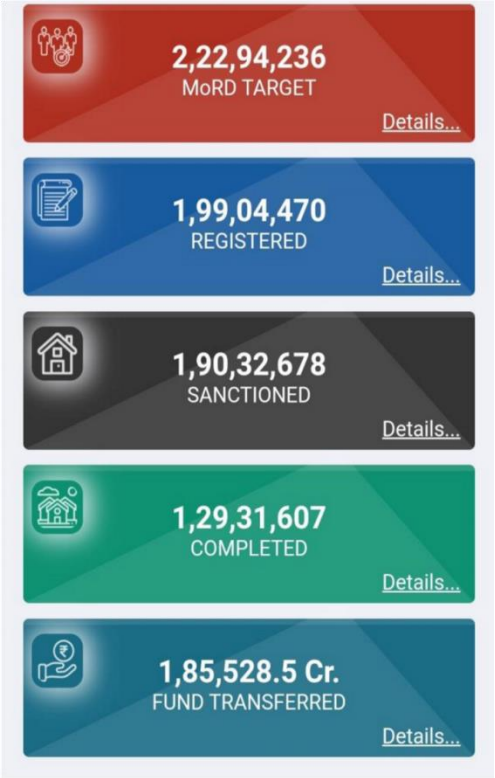
Mission's Objective

The objective of the National Rurban Mission (NRuM) is to stimulate local economic development, enhance basic services, and create well planned Rurban clusters.

Mission's Outcomes

The larger outcomes envisaged under this Mission are: i. Bridging the rural-urban divide-viz: economic, technological and those related to facilities and services. ii. Stimulating local economic development with emphasis on reduction of poverty and unemployment in rural areas. iii. Spreading development in the region. iv. Attracting investment in rural areas.

Source: http://rurban.gov.in/



2.PradhanmantriAwasyojna :

Source:https://pmayg.nic.in/netiay/home.aspx

ग्रामीणविकासमंत्रालयप्रधानमंत्रीआवासयोजना-ग्रामीण

1.Public housing programme in the country started with the rehabilitation of refugees immediately after independence and since then, it has been a major focus area of the Government as an instrument of poverty alleviation. Rural housing programme,as an independent programme , started with Indira AwaasYojana (IAY) in January 1996. Although IAY addressed the housing needs in the rural areas,

certain gaps were identified during the concurrent evaluations and the performance Audit by Comptroller and Auditor General (CAG) of India in 2014. These gaps, i.e. nonassessment of housing The shortage, lack of transparency in selection of beneficiaries, low the quality of the house and lack of technical supervision, lack convergence, loans not availed by beneficiaries and weak the mechanism for monitoring was limiting the impact and outcomes of the programme.

2.To address these gaps in the rural housing program and in view of Government's commitment to providing "Housing for All'' by the scheme 2022, the of has IAY has been re-structured into Pradhan MantriAwaasYojana –Gramin (PMAY-G) w.e.f. 1st April 2016.

3.PMAY-G aims at providing a pucca house, with basic amenities, to all houseless householder and those households living in kutcha and dilapidated house, by 2022. The immediate the objective is to cover 1.00 crore household living in kutcha house/dilapidated house in three years from 2016-17 to 2018- 19.The minimum size of the house has been increased to 25 sq.mt (from20sq.mt) with a hygienic cooking space. The unit assistance has been increased from Rs. 70,000 to Rs. 1.20 lakh in plain and from Rs75,000 to Rs 1.30 lakh in hilly states, difficult areas and IAP district. The beneficiary is entitled to 90.95 person day of unskilled labour from MGNREGS. The assistance for construction of toilet shall be leveraged though convergence with SBM-G, MGNREGS or any other dedicated the source of funding. Convergence for piped drinking water, electricity connection, LPG gas connection etc. different Government programmers are also to be attempted.

4.The cost of unit assistance is to be shared between Central and State Government in the ratio 60:40 in plain areas and 90:10 for North Eastern and the Himalayan States. From the annual budgetary grant for PMAY-G,90% of funds is to be released to States/UTs for the construction of new house under PMAY-G This would also include 4%allcation towards Administrative expenses .5%of the budgetary grant is to be retained at the central Level as reserve found for special Projects. The annual allocation to the states is to be based on the Annual Action Plan (AAP) approved by the Empowered Committee and the found to States /UTs is to be released in tow equal installments.

5.Once of the most important features of PMAY-G is the selection of beneficiary. To ensure that assistance is targeted at those who are genuinely deprived and that the selection is objective and verifiable, PMAY-G instead of selecting a the beneficiary from among the BPL households selects beneficiary using housing deprivation parameters in the Socio Economic and Caste Census (SECC), 20

11 date which is to be verified by the Gram Sabhas. The SECC data captures specific deprivation related to housing among households. Using the data households that are houseless and living in 0,1 and 2 kutcha wall and kutcha roof

houses can be segregated and targeted . The Permanent Wait List so generated also ensures that the states have the ready list of the household to be covered under the scheme in the coming years (through Annual Select Lists) leading to better planning of implementation. To adders grievances in beneficiary selection an appellate process has also been put in place.

6.Towards better quality of construction, setting up of a Nation Technical Support Agency (NTSA) at the national level is envisaged. One of the major constraints in quality house construction is the lack of the sufficient number of skilled masons. To address this, a pan-India training and certification programme of Masons has been launched in the States/UTs. This will, in addition, and career progression for rural masons. For timely construction/completion to ensure good quality of house construction, it has also been envisaged to tag a PMAY-G the beneficiary with a field level Government functionary and a Rural Mason.

7.The beneficiary to be assisted by in-house construction with a bouquet of house design typologies inclusive of disaster resilience features the are suitable to their local geo-climatic conditions . These designs are developed through an elaborate public consultative process. This exercise will ensure that the beneficiary does not over-construct in the initial stages of house building which often results in the incomplete house or the beneficiary is forced to borrow money to complete the house.

8.InPMAY-G, programme implementation and monitoring is to be carried out through an end to end e-Governance model- Using AwaasSoft and Awaas App. While AwaasSoft is a work –flow enabled, web-based electronic service delivery platform through which all critical function of PMAY-G, right from identification of beneficiary to providing construction linked assistance (throghPFMS),will be carried out; AwaasApp-a the mobile application is to be used to monitor real time, evidence based progress of house construction through date and time stamped and georeferenced photographs of the house. The tow IT application help identify the slip ups in the achievement of targets during the course of implementation of the programme. All payments to beneficiary is to be through DBT to beneficiary's Bank/post office accounts registered in AwaasSoftMIS.

9.The States have to come up with their Annual Action Plan of PMAY-That will include a plan for convergence in with other Government programme . The mechanism for convergence in PMAY-G is also to be strengthened through a system to system real-time transfer of information between the programme that are to converge with PMAY-G.

10.A willing beneficiary is to be facilitated to avail institution finance up to Rs.70,000.-which would be monitored through the SLBC, DLBC and DLBC.

11.The programme implementation is to be monitored not only electronically, but also through community participation (Social Audit), Member of Parliament (DISHA Committee), Central and State Government officials, National Level Monitors etc.

3.DEENDAYAL ANTYODAYA YOJANA - NRLM

Deendayal Antyodaya Yojana - NRLM

Aajeevika - National Rural Livelihoods Mission (NRLM) was launched by the Ministry of Rural Development (MoRD), Government of India in June 2011.

Aided in part through investment support by the World Bank, the Mission aims at creating efficient and effective institutional platforms of the rural poor, enabling them to increase household income through sustainable livelihood enhancements and improved access to financial services.

NRLM set out with an agenda to cover 7 Crore rural poor households, across 600 districts, 6000 blocks, 2.5 lakh Gram Panchayats and 6 lakh villages in the country through self-managed Self Help Groups (SHGs) and federated institutions and support them for livelihoods collectives in a period of 8-10 years.

In addition, the poor would be facilitated to achieve increased access to rights, entitlements and public services, diversified risk and better social indicators of empowerment. DAY-NRLM believes in harnessing the innate capabilities of the poor and complements them with capacities (information, knowledge, skills, tools, finance and collectivization) to participate in the growing economy of the country.

In November 2015, the program was renamed DeendayalAntayodayaYojana (DAY-NRLM).

4.PradhanMantri Gram SadakYojana

National Rural Infrastructure Development Agency
Ministry of Rural Development, Government of India

The Pradhan Mantri Gram SadakYojana (PMGSY), was launched by the Govt. of India to provide connectivity to unconnected Habitations as part of a poverty reduction strategy. Govt. of India is endeavoring to set high & uniform technical & management standards & facilitating policy development and planning at State level in order to ensure sustainable management of the rural roads network

5.DeenDayalUpadhyayaGrameenKaushalyaYojana (DDU-GKY)

DDU-GKY
Deen Dayal Upadhyaya Grameen Kaushalya Yojana
Empowering India • Powering the World

Vision: Transform rural poor youth into an economically independent and globally relevant workforce

The Ministry of Rural Development (MoRD) announced the DeenDayalUpadhyayaGrameenKaushalyaYojana (DDU-GKY) AntyodayaDiwas, on 25th September 2014. DDU-GKY is a part of the National Rural Livelihood Mission (NRLM), tasked with the dual objectives of adding diversity to the incomes of rural poor families and cater to the career aspirations of rural youth.

DDU-GKY is uniquely focused on rural youth between the ages of 15 and 35 years from poor families. As a part of the Skill India campaign, it plays an instrumental role in supporting the social and economic programs of the government like the Make In India, Digital India, Smart Cities and Start-Up India, Stand-Up India campaigns. Over 180 million or 69% of the country's youth population between the ages of 18 and 34 years, live in its rural areas. Of these, the bottom of the pyramid youth from poor families with no or marginal employment number about 55 million.

The National Policy for Skill Development & Entrepreneurship 2015 has identified a skills gap of 109.73 million in 24 key sectors by the year 2022. This number cannot be achieved without addressing the BoP 55 million from rural India. Also, a FICCI and Ernst – Young study published in 2013 identified a shortage of over 47 million

skilled workers across the globe by 2020. This presents an unprecedented opportunity for India to train its BoP youth population and place them in jobs across the world and realize its demographic dividend.

DDU-GKY takes pride in its partners and their ability to add value. Innovation from partners is encouraged to build scale and capacity… its unique implementation structure involves partners, who are by nature, committed to changing lives and are experts in their areas, they form a part of the Skilling Ecosystem integrated by DDU-GKY. Partners are supported through investment, capacity building, strategies for retention, linkages to international placement and technology support for training purposes.

DDU-GKY is present in 28 States and UTs, across 689 districts, impacting youth from over 7,426 blocks. It currently has over 1,575 projects being implemented by over 717 partners, in more than 502 trades from 50 industry sectors. Over 9.9 Lakh candidates have been trained and over 5.3 Lakh candidates have been placed in jobs as on 1st April, 2020. From 2012, DDU-GKY has so far committed an investment of more than INR 5,600 Crores, impacting rural youth pan-India.

6.THE MAHATMA GANDHI NATIONAL RURAL EMPLOYMENT GUARANTEE ACT 2005

Ministry Of Rural Development, Government Of India

Primary health center

Routine Immunization In India :

Delivering effective and safe vaccines through an efficient delivery system is one of the most cost effective public health interventions. Immunization programs aim to reduce mortality and morbidity due to Vaccine Preventable Diseases (VPDs).

Following the successful global eradication of smallpox in 1975 through effective vaccination programs and strengthened surveillance, the Expanded Program on Immunization (EPI) was launched in India in 1978 to control other VPDs. Initially, six diseases were selected: Diphtheria, Pertussis, Tetanus, Poliomyelitis, Typhoid and childhood tuberculosis. The aim was to cover 80% of all infants. Subsequently, the program was universalized and renamed as Universal Immunization Program (UIP) in 1985. Measles vaccine was included in the program and typhoid vaccine was discontinued. The UIP was introduced in a phased manner from 1985 to cover all districts in the country by 1990, targeting all infants with the primary immunization schedule and all pregnant women with tetanus-toxoid Immunization.

The UIP envisages achieving and sustaining universal immunization coverage in infants with three doses of DPT and OPV and one dose each of measles vaccine and BCG, and, in pregnant women, with two primary doses or one booster dose of TT. The UIP also requires a reliable cold chain system for storing and transporting vaccines, and attaining self-sufficiency in the production of all required vaccines.

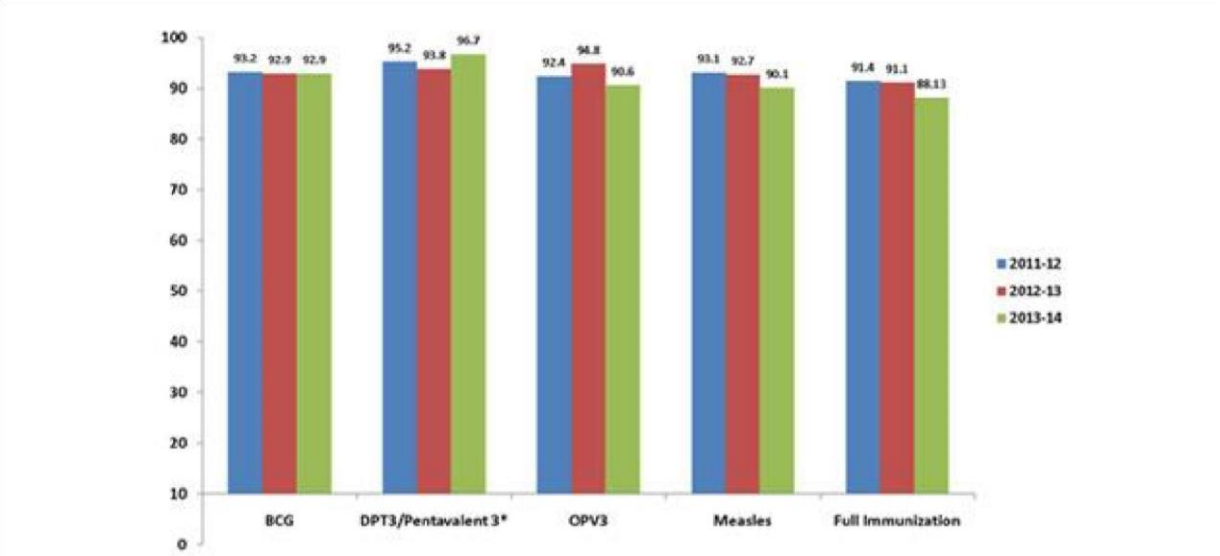
In 1992, the UIP became a part of the Child Survival and Safe Motherhood Program (CSSM), and in 1997, it became an important component of the Reproductive and Child Health Program (RCH). The Cold-chain system was strengthened and training program was launched extensively throughout the country. Intensified polio eradication activities were started in 1995-96 under the Polio Eradication program, beginning with National Immunization Days (NIDs) and active surveillance for acute flaccid paralysis (AFP). The Polio Eradication Program was set up with the assistance of the National Polio Surveillance Project.

FIGURE NO: 11

Milestones in the Immunization Program in India

Immunization Coverage in Gujarat

Gujarat has improved on the various indicators of Reproductive and Child Health but there are still areas for improvement in Immunization Program.



(Source: HMIS, *Pentavalent vaccine was rolled out from 2013-14 in place of DPT vaccine)

1.MukhyamantriAmrutum scheme:

Background:

A large number of households are pushed into poverty as a result of high costs of household spending on health care. The Below Poverty Line (BPL) population is especially vulnerable to the catastrophic health risks. To address this key vulnerability faced by the BPL population in the Gujarat, the State Government has launched a medical care scheme called MukhyamantriAmrutum (MA) Yojana. The objective of the scheme is to improve access of BPL families to quality medical and surgical care for the treatment of identified diseases involving hospitalization, surgeries and therapies through an em panel network of health care providers.

2.RogiKalyanSamiti (A Poor Patients Benefit Scheme)

Background

The Government of Gujarat established a society for helping patients below the poverty line with medical care. In an innovative scheme the Department of Health, Government of Gujarat, has put 4 crores as fixed deposit. The interest incurred is spent on the medical expenditure of poor patients up to a limit of 15, 000/ per patient. Since the program became operational a total of 944 patients have been benefited and 1,23,08,400 have been spent on relief till 14th July 2004. Benefit utilization has increased in the last 2-3 years significantly. In the year 01-02 relief of 4.31 lakh was utilized which increased to 12.80 lakhs in 02-03 and 80.54 lakhs in the year 03-04.

Illnesses Covered in this Scheme

- ★ Major cardiac illness (including congenital heart disease) requiring coronary by-pass surgery, angioplasty, valve replacement, implantation of pacemaker etc.
- ★ All types of cancer
- ★ Major neurological problems requiring neurosurgical treatment such as head injuries, brain tumours, stroke, brain fever (encephalitis), hydrocephalus etc
- ★ Major nephrological problems requiring dialysis, immunotherapy, kidney transplantation, lithotripsy (for kidney stones) and other specialized procedures for kidney disease etc.
- ★ Major ophthalmological problems such as retinal detachment requiring laser treatment, keratoplasty and other specialized procedures for disease for the disease etc.
- ★ Any other super specialty treatment identified by the Governing Body

3.BalSakhaYojana :

Background :

In Gujarat each year 12,00,000 children are born and many of mothers die during this process of pregnancy and child birth. Malnutrition and lack of proper required health care for mothers and children are major determinants of maternal and child health. Poor development status of newborn, lack of adequate and timely care and poor nutrition lead to thousands of children dying in the State before they even reach their first birthday. These are serious maternal and child health problems and require urgent attention.

Gujarat state has already implemented various schemes like ChiranjeeviYojana, BalBhogYojana, Nutritious food with vitamins Yojana(Vitamin YuktaPoshanAhar), kanyakelavaniYatra for saving the precious lives of mothers and children, fighting against malnutrition, take care of primary education and particularly education of girl child. However, there is a need to consolidate efforts and redouble energies to attack the evils of maternal and child Mortality.

With these aims especially to reduce IMR to 30 from current 50 per thousand live births, NirogiBalakYojna is being launched in NirogiBalVarsh 2008 as an initiative to achieve improved health and education and ensure overall human development in the State. Since Neonatal Mortality Rate accounts for 60% of IMR, it is now high time to focus on interventions to reduce mortality in first month of life. It is proposed to address this issue by forming strong service delivery mechanism for delivery of neonatal care through Public Private Partnership with practicing private pediatricians on the lines of ChiranjiviYojna through this innovative BalSakhaYojna.

The BalSakhaScheme :

Under this scheme, all babies born to BPL mothers in the State (approximately 3,00,000 births per annum) will be covered for neonatal care by partnering pediatricians, including care in their Neonatal Intensive Care Unit (level 2) at no cost to the beneficiary. After initialization and stabilization of the Scheme, the Scheme may be extended to cover all infants up to one year age.Up to October -09 284 private pediatricians are enrolled and 31151 new born attended under BalSakhayojana.

The Scheme will be Operationalized in Two Parts

- BalsakhaYojana Part 1
- BalsakhaYojana Part 2

BalsakhaYojana Part 1Balsakha Yojana Part 2

4.JananiSurakshaYojana

JananiSurakshaYojana (JSY) is a safe motherhood intervention under the National Health Mission (NHM) being implemented with the objective of reducing maternal and neo-natal mortality by promoting institutional delivery among the poor pregnant women. The Scheme has contributed immensely in increasing the Institutional deliveries among the BPL, ST and SC population. The progress of

Scheme has been remarkable since inception and is expected to achieve good results in the years to come.

After Hon'ble Supreme Court's instructions, 500/- of JSY benefit is being paid 8 to 12 weeks before delivery without any age, parity and place restriction to BPL, SC & ST women and additional benefit (200/- for rural area and 100/- for urban area) are being paid to the beneficiaries before discharge from health facility. All JSY benefits are being made through bearer cheques only since Sept. 2010.

Physical Verification

The JSY payments are made after collecting all relevant documents before delivery by ANM/FHW. The JSY payment vouchers and supporting documents are verified by M.O.–PHC. Thereafter Block Health Officers, District Health Officials carry out cross verification of selected samples on regular basis.

Monitoring

The JSY Scheme is being monitored largely through periodic monitoring visits by Block Health Officials, District Health Officials and State Health Officials.

Grievance Redressal

Any grievance related to JSY i.e. less payment, inordinate delays in making payments etc. are being seriously treated; prompt corrective and preventive actions are being taken by Health Officials. All necessary steps are being taken to achieve desired outcome from this scheme.

4.4.1 Drinking Water / Water Management Facilities

In the Bhatiwada village peoples are depends on the Dugwell, hand pump, Borwell for the drinking purpose. Some time the Borewell has not available water yield. So Dugwell is the main source for the drinking purpose. In bhatiwadaGamtal the Tap water by the Water tank is available.

FIGURE NO: 12

Dugwells:

Dugwells are useful for Winter irrigation where the water is not available. Major irrigation in the village is area is irrigated by dugwells.

FIGURE NO: 13

4.4.2 Drainage Network / Sanitation Facilities

Bhatiwada village has not available any drainage system through out the village.

4.4.3 Transportation & Road Network

Bhatiwada village is connect with All Major distinct rod and village roads. Also available the RCC road through out the Village. The National highway is just near at the 5 Km from the village.

4.4.4 Housing condition :

In the village the housing condition of the people are good. The Government of India provide house by Pradhan mantriAwasyojna. Major occupation live in pucca house ancient type scissors types roofs.

Figure-14

4.4.5 Social Infrastructure Facilities , Health , Education , Community Hall , Library

Bhatiwada village has two Primary Schools and one High school. The one primary school is situated at Gamtal area another is situated in 3km away from the Gamtal area.

The village has Primary health center and recently availability of library is good initiative of the village's tribal youth.Grampanchayat has a one small community Hall which use as a panchayat office because the panchayat office required maintenance or ne what construction.

4.4.7 Technology Mobile/ WIFI / Internet Usage Details

Gujarat Fibre Grid Network Limited

Gujarat Fibre Grid Network Limited is implementing BharatNet Phase-II project for 7692 Gram Panchayat (including 170 District Centres and Taluka Centres) of the state of Gujarat. The Gram Panchayats (GPs) to be connected under BharatNet Phase-II has been divided into two packages (Package-A and Package-B), each containing a group of GPs for convenience of implementation. GFGNL has selected Project Implementing Agency (PIA) for implementing the entire project on Engineering Procurement and Construction (EPC) basis and Third Party Auditor (TPA) for validating the entire execution done by PIA.

4.4.8 Sports Activity as Gram Panchayat

The bhatiwada village has two big ground are available. The various sports activities are like cricket, volleyball, football, kabbady, khokho are played.

4.4.9 Socio-Cultural Facilities , Public Garden/Park/Playground /Pond/ Other

Bhatiwada village has naturaly four Pond/lake are available. Which are use for irrigation purpose and recreational. Public garden is not available.

FIGURE NO: 15

In bhatiwada village the majot population is enganged with agriculture. Farmer required more water during the winter for farming of wheat and vegetable. due to naturally availability of pods it is easy to farming.

4.5 Existing Institution like - Village Administration – Detail Profile

The following Institutions are available in village

- ★ Doodhmandali
- ★ Sakhimandal
- ★ BachatMandali

Chapter 5. Technical Options with Case Studies (FOR ANY ONE TOPIC, Take a new concept design , prototype model with actual costing)

5.1 Vertical farming

INTRODUCTION

"We live vertically so why can't we farm vertically" Vertical farming is the practice of growing produced in vertical stacked layers. The practice can use soil, hydrophonic or aeroponic growing methods. Vertical farm attempt to produce food in challenging environment, like where arable land is rare or unavailable. The method helps mountainside towns, dessert and cities grow different types of fruits and vegetables by using skyscraper like designs and precision agriculture methods. Most vertical farms use enclosed structures similar to greenhouse that stcak vertically, either directly above each other or staggered for better natural light exposure. If saving space is utmost importance, hydroponic methods as a growing medium as a soil allow for reduce weight and lower water up by to 70%. The use of aeroponics further reduces weight and water requirements. Most vertical farms are either hydroponic or aeoponic and do not have run off, which would make the potted plants heavier. Vertical farming typically uses the mix of natural lights and artificial lights. Artificial lights are often LED based and may be driven by a renewable power source such as solar power or wind turbines. Supporters of vertical farming praise the impact it can have now and in the future to increase food security and have a positive impact on human health. It could decreed forestation and pollution, and help urban areas be self-sufficient. Critics of vertical farming claim the most designs don't efficient deliver the necessary artificial light to keep the design green many vertical farms have hefty electrical bills to produce yields. Furthermore, is disputed as critics argue that the problem is not a lack of farmable land but inefficient usage. Due to limited access of land for farming, tasks so as to pave the way for adding to food needs. Many aspects press on food industry as processing such as : growth of population and its growing needs accordingly, reduction of natural sources due to growing cities, earth erosion, different forms of contamination, advent of biofuels, restrictions imposed on food production techniques affected by customers and rules providers which requires better quality, less use of chemicals and many useful environmental attempts from" farm to fork"

Aim: To study about the concept of vertical farming in India.

Objectives:
1. To study about the purpose of vertical farming in India.
2. To study about the growth and development of vertical Farming in India.
3. To learn the advantages and dis-advantages of vertical Farming.

Limitations: The study is limited to Indian vertical farming practices only due to time and money constraints.

REVIEW OF LITERATURE

Purpose of vertical farming in India

Their goal is to create a hydroponics model cultivating farm fresh unaffected by weather or soil /conditions. They will be grown in a protected, green house environment. Only a expert gardener knows how difficult it can be grow plants and how much extra care it takes with special attention to soil, fertilizer and light. One can't get the process right and expect good yields without getting his/her hands dirty. But to make their work a lot easy and convenient, many startups in India are working on hydroponics farming. Hydroponics or growinral nutrient solutions in water solvent. Additionally, this indoor farming technique induces plant growth, making the process 50% faster than growth in soil and the method is cost affective. Mineral nutrient solutions are used to feed plants in water. g plants in water or sand, rather than soil, is done using mine

World scenario of vertical farming.

In 2013 the association for vertical farming was founded in Munich, Germany. As of 2014, vertical fresh farm was operating inn buffalo, New York, specializing in salad greens, herbs and sprouts. In march the world's then largest vertical farm opened in Scranton, Pennsylvania, built by green spirit farms. Old, abandoned urban factories make for nice vertical farms. But they might be best suited for environments like the United Arab Emirates, where arable land is limited but sunshine, which can be used for clean energy, is nearly limitless.

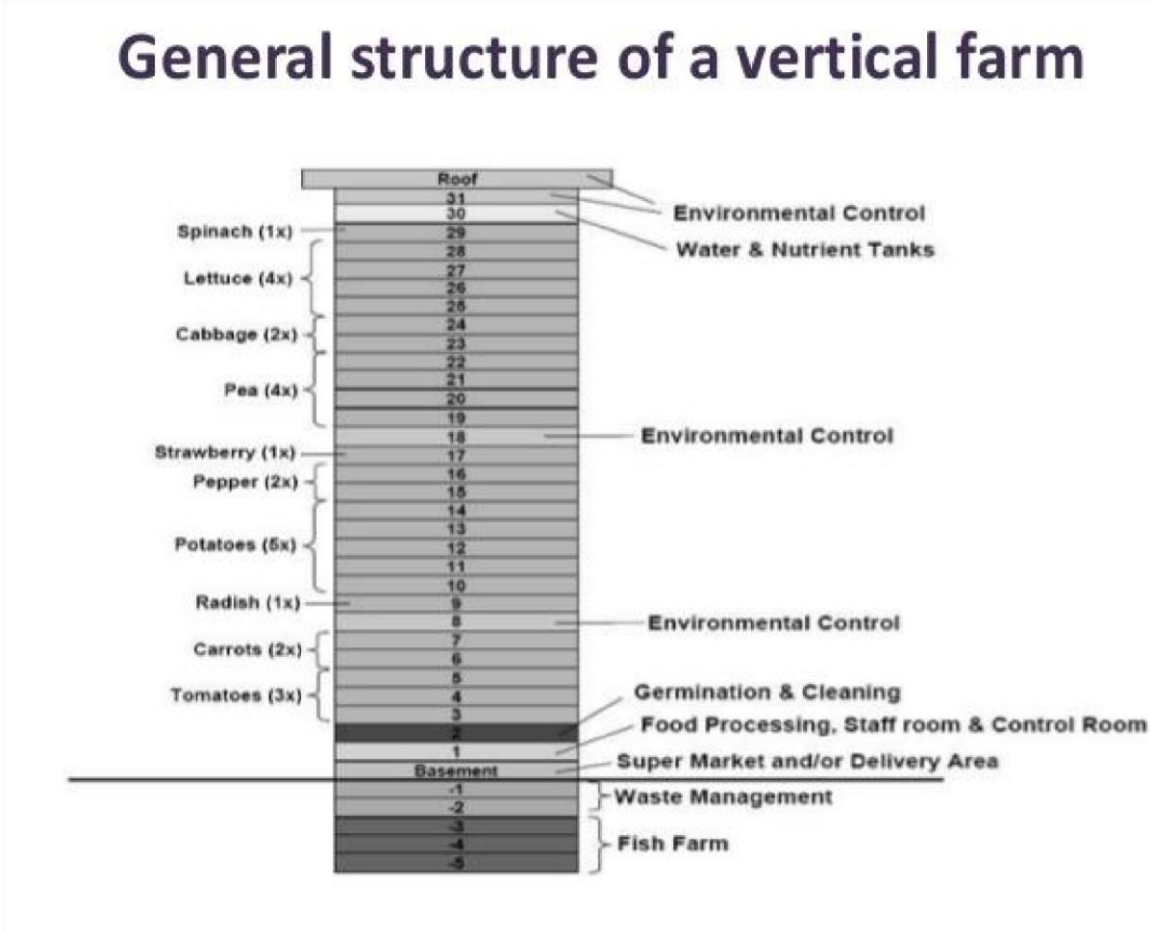
Position of vertical farming in India

Vertical farming is limited in India at present to high value crops only. Cultivation under polyhouse and net house is done mostly in case of export oriented flowers and some vegetables. Vertical farming is also in vogue for production of disease

free nursery in case of banana, sugarcane, citrus fruits and many flowring plants. Most common and successful vertical farming ex; mushroom cultivation. Temperature and humidity controlled condition are economically possible to be created at limited space. The scope of vertical farming is how ever increasing fast in India. The scheme has been reflected as one of the high priority area. Good technical and financial support is now available for establishing vertical farming units and protective agriculture.

General structure of vertical farming

The vertical farms differ from one city to another. More general tips on this structure as well as more design and concepts of vertical farming are explain in the following structure



Lighting

Lighting is a key issue in VF. To manage the production line, whether the vertical farm is planned to be totally using artificial light or both artificial and natural light should be taken into account. The same issues need to be considered in designing the facility . There are two options available: LED (light emitting diode) or HPS (high-pressure sodium). The range of light intensity needed for enhancing the growth of vegetation is contingent on the setting and time, product, heat and CO2 content of the air around plants. Considering all these, the normal range of light intensity utilized is 50-200 mol/m2/s or about 4100-16400lx including highpressure sodium lamps. The light required in closed space for vegetation growth is about 18 hours a day. In order to maximize how much light enters (and at the same time minimize how much light needed to be produced), they use light shelves. Every window has got the tallest height up to 3.5 meters which are actually the height of each floor.

Natural Lighting

The design of the building is such that absorbs as much light as possible. Especially the roof can be designed so as to get the highest amount of energy from the sun in all seasons in places where the weather is moderate. Other parts of the building can receive sunlight too which is a viable option. In standardized onefloor greenhouses, the main source of energy for lighting is the sun. In a vertical farm, any decrease in the density of stacking inside the building is accompanied by an increase in building cubature. Although natural daylight is the main source of energy received from the outside, there needs to be daylight concentration, direction and distribution strategies conceived so as to use sunlight effectively throughout seasons. The idea of the vertical farm can be applied to many different places and types of weather with divergent amounts of light. Since this concept is quite flexible, it usually leads to modular construction plans and uses diverse ideas in architecture. It also takes advantage of multiple façade modules that integrate ideas that guide lighting. Clearly, sticking solar panels on top of each other has not been suggested by anyone before. Similarly, layers of plants cannot be stacked on top of each other if there is not a reasonable replacement for the light required

Solar Cell

All operations within the system need to be highly efficient especially the photosynthesis of plants. In order to use the energy of the sun maximally in vertical farms, non-PAR waves (Photosynthetically active radiation) should be filtered since they are not absorbed by chlorophyll. These waves need to be filtered by selected solar cells and need to be used for producing photovoltaic energy. Recently different semi-transparent cells are made. But fewer attempts have been made to make such cells particularly transparent for photosynthetically active wavelengths. The employing red/purple colors with the highest degree of absorption (535 nm) as the basis of desensitized solar cells can be a useful way to produce selected solar cells. Since in VF the area of the vegetation growth is multiplied by the number of stories, PAR, as obtained from natural sources, is not adequate. In order to cut down on the need for supplemental artificial light, solar energy needs to be gathered by a system of mirrors from the buildings around the city. This would help to raise the outcome of selective photovoltaic generators and also promote PAR in a vertical farm. What was gained from the energy model showed that sufficient energy was obtainable from certain aspects of the site in order to satisfy the needs

for energy (light and water both) within one month? The results show that adequate amounts of energy can be gained from solar panels inserted on roofs or the façade of the building where they can absorb sunlight and there are pumping facilities too. The third dimension needed lighting and was quite practical. The eventual three dimensions led to the lack of energy that is there was a need for more panels that the building to hold.

LED

As mentioned previously, besides natural light, there is a need for artificial lighting too and one such source can be LEDs (Light Emitting Diodes). LEDs that have a longer life and lowering price are decent choices. There are many alternatives that can help to provide for night interruption (NI) or Day Extension (DE) but LEDs are increasingly used as a source of light for plants. Among their advantages are a long life, efficiency in energy, the capability of targeting particular light wavelengths to better manage the photoperiod. This can be realized by using LED lamps that consist of several dimmable diodes which have a divergent color spectrum. This type of lamp may be programmed so as to produce a light fit to the requirements of plants. LED technology helps to save energy by adjusting the strength of light as well as its spectrum via a method devised in Chalmers University . Another advantage of LEDs is that they regulate the proportion of red color (R) and far-red (FR) to get the best answers from plants. If this proportion is low, the stem elongation is also increased. This is a shade avoidance technique in which plants are shaded by those surrounding them. The optimal mixture of R/FR as well as red/blue is under investigation right now. But, there is a need for further research about awide range of ornamental plants. As an instance, just red light is used for lettuce. There was a poor correspondence between high-pressure sodium lamps and the spectrum used by plants during photosynthesis. Not much of the red and blue light plants need is received. But, they receive a lot of infrared light that is detrimental to some products, and also the yellow light that cannot be used very much. Such organizations as NASA in a controlled environment for agriculture space investigated LEDs and found them as the best lamps requiring red and blue to make a good environment for plants to grow. Red light is required for photosynthesis while the blue is for creating an optimal environment for plant morphogenesis. This is all to enable food production in closed contexts. Red and blue are the best colors for LEDs.

Control Environment System

HVAC Sub-system

Temperature, air conditioning, and ventilation system are allimportant in designing of VF. The following privileges of HVAC (Heating, ventilation and air conditioning) system make it suitable for VF: indoor quality of air, saving energy, consistency of moisture and heat in vertical farms provided by the shades of plants. The building which uses the least energy possible is highly efficient in saving energy.cooling of the building which depends on the geographical coordinates of the vertical farm. Using regenerative energy needs to be supported by sensible and sufficient distribution and transfer systems. The following are suggested to be within this procedure: use of geothermal equipment, heat pumps, and solar energy plants for heating or cooling along with the opportunity of using ground water or surface water.Water supported systems translocate thermal loads. To realize regenerative energy, earth canals are used along with air collectors to adjust the required healthy quality of the air outside. There is a constant monitoring of the heating conditions of the inner area in individual sections of a vertical farm.

Smart Devices

As a totally automated operation, VF makes a great use of sensors and actuators (known as smart equipment) that also interact with other systems with no human interference. In order to realize VF as a technology, there needs to be a comprehensive calculating system which is constantly aware of the environment and helps to generate proper information and services. There is a database which covers every information about the crops and the probable diseases. Even in conditions where the crops grow inside buildings, there is a need for outdoor weather when the ventilation system. Information about the weather is gained from weather forecast in real time and based on this information appropriate decisions can be made. Information about the context is required to make the right decisions about selecting the controller.

Water required

70% of the existing fresh water would go for modern farming. Much of this loss in because of the artificial watering of farms also most of the irrigation water gets loss due to evaporation. The evaporation is natural procedure but their exist a bigger problem which is the water that goes out of the farm as run off which is useless for drinking. When farms are transfers to indoors, less water is lost due to the above mention reason that can be use in plant growth instead. The amount of water needed for hydroponic agriculture was estimated to the one litre for each sq.ft a

day. There are number of techniques used in vertical farming to resist the lack of water.

Renewable energy in vertical farming

The current energy need to be quantified is to specify the amount of energy required to empower a target building and also whether reusable energy could be satisfy the target demand of the building or not. The vertical farm need the following; lighting and temperature for plant to grow, and ventilators, heat pump use to manipulate the climate, pumps use for diluting nutrients, agitators use to control plants. Vertical farming was presided by renewable technologies which emerged long ago as highly transforming. There are many types of socio or economic organizations that follow these technologies.

Advantages of vertical farming

Vertical farming has many advantages such as that it allows maximum crop yield. Vertical farming can allow crops to be grown at all times throughout the year, as it is not weather depended. It can also be grown throughout the entire day and night as it uses LED lights since photosynthesis can occur at all times. It reduce the transportation as it will be cheaper for transportation since you can built vertical farms in cities. It is eco-friendly as decreased need for transportation means pollution. Since the water is used in control manner, water 8 | P a g e looses are very minimum. Vertical farming only use 10% of the water that traditional method is used. Currently 70% of the accessible potable water is used for agriculture this can be decrease using vertical farming. So it is healthier, safer and more ecofriendly.

Data collection Primary data:

The primary data was collected from different pod of the agents of India. Secondary data: Secondary data was collected by different websites.

Data analysis

The researcher took the primary data after looking about the presentations of different environmental agents. It was found that all the agents and operator found the potential in vertical farming and would like to suggest the development and

concept of vertical farming in other cities of India. The research operates same responses from all the presentations and operators; hence the data was not tabulated.

Conclusion

Agriculture is one of the activities that play the main role in supporting a human in the world. However, drinking water is already in shortage stage, but, most of the available freshwater, is already using for agriculture. More than 20 percent of the fossil fuels annually is using for agriculture in industrialized countries. Farming has become more fund centralized during the last years. Developing the high-tech farming systems are the results of the energy sources and new methods of farming. Moreover, overpopulation of cities needs new agricultural methods so as to bring conventional farming inside cities. A single technological strategy cannot be a panacea to the ever-growing food production system. Instead, there is a need for a mixture of multiple techniques to guide us towards the 21- century green revolution. Vertical farming is one of the greatest interesting examples of somewhat new that may contribute to these answers. Others have mentioned to this occurrence as controlled environment agriculture or agriculture integrated building also have basically involved it as technical elements within the superior phenomenon of urban or local agriculture with different food production. Vertical Farming has the potential way for sustainable progress to produce food or related services in urban areas. The goals and future vision have been planned with the purpose of generating sustainable cities around the world. To sum it up, to create a city context where most of human food needs are met by self production and recycling and reusing drinkable water would not be far-fetched since the required technologies are already availed. Where there is strong enough motivation and adequate social pressure, prospective eco-city can be actualized soon enough. 9 | P a g e The recent traditional farming approaches due to a great imbalance in the environment. In the other hand, the recent environmental approach caused by concentrated traditional farming approaches that contribute to the ecological problem has been overviewed. Agriculture it still plays a very significant role in many cities. It causes thousands of acres of forest land to be plowed up sacrificing thousands of acres of land. Endmost, it appears that the concept of the vertical farm in the city center of urban areas could solve a lot of real issues related to food production and environmental degradation. Then no harvests would fail by severe weather phenomenon like droughts, floods, and hurricanes, etc. Hence, the vertical farming making of a sustainable city environment that encourages the people to live there for the safe and healthy environment, cleaner air, safe drinking water, safe usage of public

liquid waste, new employment chances, and less abandoned lots and constructions. Vertical farming has the benefit of a seasonally wet and warm weather. They can easily minimize cooling and heating water, use of indoor temperature and artificial light and also. Sustainability of city Building Integrated Agriculture have a plentiful amount of natural resources such as long hours of sunlight and enough water from daily rain to cultivate. As a conclusion, the number of technologies provided for decreasing the agricultural effect on the earth as well as oceans is restricted although it helps to sustain the increasing human population. From our perspective, VF is among the few novel paths to fully delve into the following 10 to 20 years particularly if we really aim to live in a balance with other living organisms and not to threaten their life nor ours. Optimally, VF is required to be: a. cheap and affordable b. resistant and securely operable c. not requiring financial subsidies or external support. In case these conditions are met in a dynamic, all-inclusive research programs, farming in cities can supply many foods for 60% of the population who reside in cities up until 2030. VF has the potential for success in proper conditions. It simultaneously helps to reduce poverty, adds to food safety, and increases contextual sustainability and human well-being.

Suggestions and recommendations.

- Vertical farms are very powerful concept in part because they do not requires soil to yield crops.
- Research has showed it is possible to produced experimental plants under 100% LEDs with no negative outcomes on plants.
- Vertical farming can allow crops to be grown at all times throughout the year, as it is not weather dependent.
- Vertical farming can reduce transportation cost as it will be cheaper for transportation since you can build vertical farm in cities, so you don't need to import the crops from other region

.

- The basic advantages of vertical farming is that it uses very minimal water. Since the water is used in a controlled manner, water losses is very minimal.

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Source :google search

Chapter 6. Swachh Bharat Abhiyan (Clean India)

Swachh Bharat Mission, Swachh Bharat Abhiyan, or Clean India Mission is a country-wide campaign initiated by the Government of India in 2014 to eliminate open defecation and improve solid waste management. Phase 1 of the mission lasted till October 2019. Phase 2 will be implemented between 2020–21 and 202425. Wikipedia
Official website: swachhbharat.mygov.in
Launch year: 2014
Status: Active
Launched by (prime minister): NarendraModi
Location: New Delhi
Slogan: One step towards cleanliness

In our allocated village BHATIWADA the majority of the people are use toilet.
The government provide subsidies of 12000 ruppes for making toilet.

FIGURE NO: 16

Chapter 7. Village condition due to Covid-19

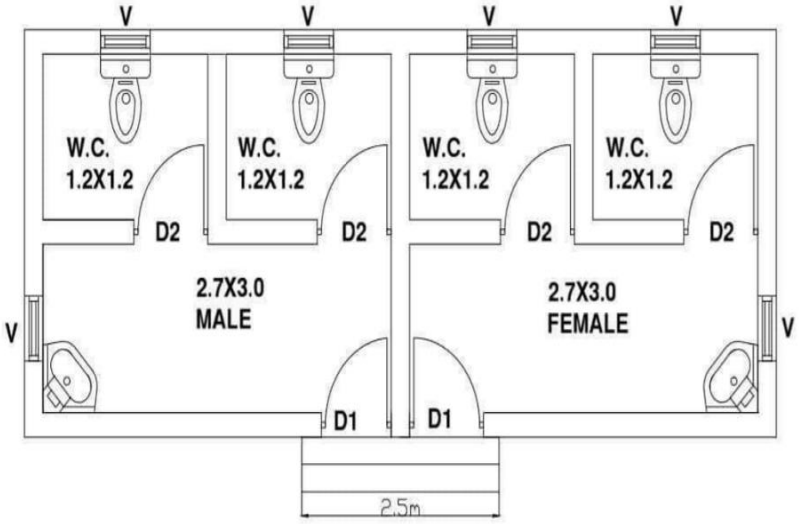
Due to covid 19 the government has announced Lockdown in 23 March 2020. The villagers are working outside the village at Vadodara, Surat, Ahmedabad, Bhavnagar, the return to migrant to the village. Due to covid 19 losses their work. Due to not availability of work people are shortage of money. But the central government provide the basic food like wheat, Rice and sugar freely. Government also announced various package for the Aatmanirbharbharat.

The mega Rs 20 lakh crore stimulus package announced on Tuesday by PM Modi includes previously announced measures to save the lockdown-battered economy, and focuses on tax breaks for small businesses as well as incentives for domestic manufacturing. The combined package works out to roughly 10 per cent of the GDP, making it among the most substantial in the world after the financial packages announced by the United States, which is 13 per cent of its GDP, and by Japan, which is over 21 per cent of its GDP.

The Rs 20 lakh crore package includes Rs 1.7 lakh crore package of free foodgrains to poor and cash to poor women and elderly, announced in March, as well as the Reserve Bank's liquidity measures and interest rate cuts. While the March stimulus was 0.8 per cent of GDP, RBI's cut in interest rates and liquidity boosting measures totaled to 3.2 per cent of the GDP (about Rs 6.5 lakh crore).

Chapter 8. Sustainable Design Planning Proposal (Prototype Design)-Part- I

1.Public Toilet : Plan and Elevation

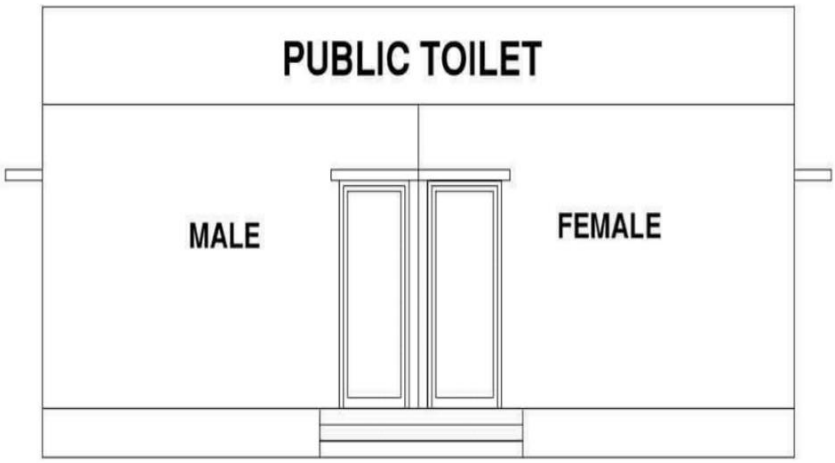


PLAN OF PUBLIC TOILET

SCHEDULE OF OPENING

TYPE	NO.	SIZE
D1	2	1.2x2.1
D2	4	1.00x2.1
V	6	0.6X0.6

ALL DIMENSIONS ARE IN METER



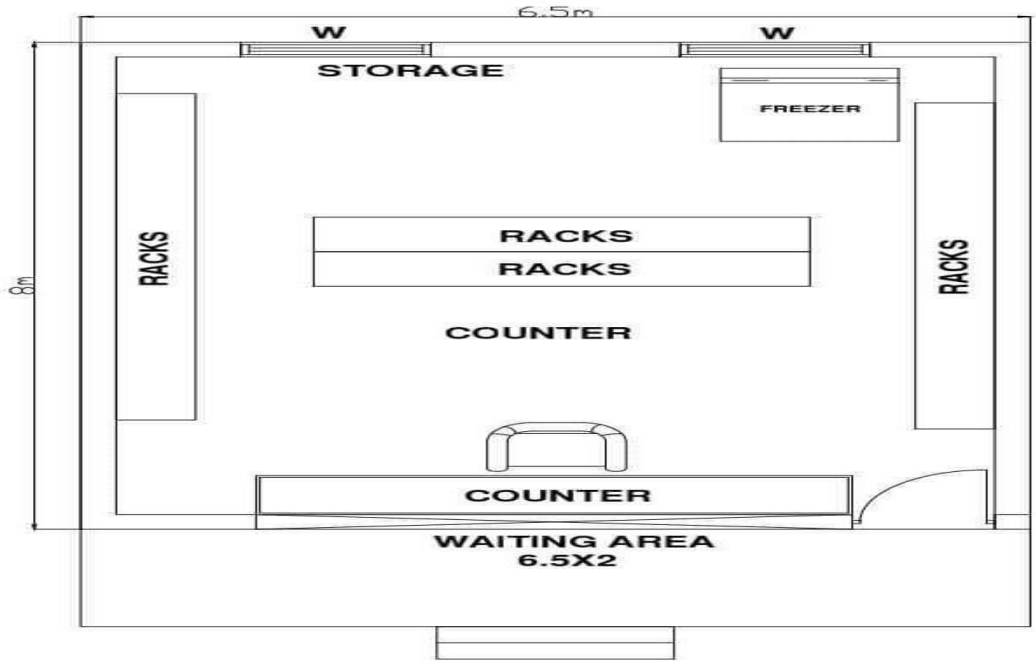
ELEVATION OF PUBLIC TOILET

Measurement Sheet (TABLE NO-7)						
Public toilet						
Sr. No	**Description**	**No.**	**Length (m)**	**Width (m)**	**Height (m)**	**Quantity**
1	Excavation	1	28.8	0.9	1.1	**28.51 m^3**
2	Brick bat in foundation	1	28.8	0.9	0.3	**7.77 m^3**
3	Brick masonry up to plinth	1	31.2	0.5	0.4	**16.54**
4	Total filling work	1				**21.50 m^3**
5	P.C.C. in plinth 1:4:8	1	6.3	4.8	0.12	**3.63 m^3**
6	Brick work super structure with deduction 9.4 cubic meter	1	32.4	0.3	3	**19.40 m^3**
7	Total R.C.C. work (Lintle, slab, chhaja, beam, column)	1				**7.38 m^3**
8	Total Reinforcement in Kg.	1				**580 kg**
9	Total plaster	1				**160 m^2**

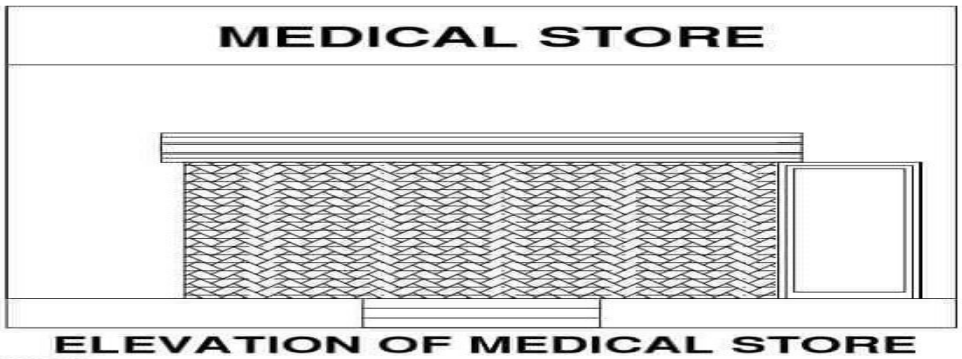
Sr. No.	Item Description	Quantity	Per	Rate (Rs)	Amount (Rs)
1	Excavation	28.51	m3	85	2425
2	P.C.C. 1:3:6	11.4	m^3	3200	36480
3	Brick work in super structure	16.54	m^3	3200	52930
4	Brick work in super structure	9.4	m^3	3500	32900

5	Total R.C.C. work	7.38	m^3	8800	64944
6	Filling Work	22.50	m^3	50	1125
7	Total Reinforcement	580	kg	45	26100
8	Plastering	160	m^2	150	24000
9	Door and Window	0.32	m^3	36712	11750
				Total = **252700**	

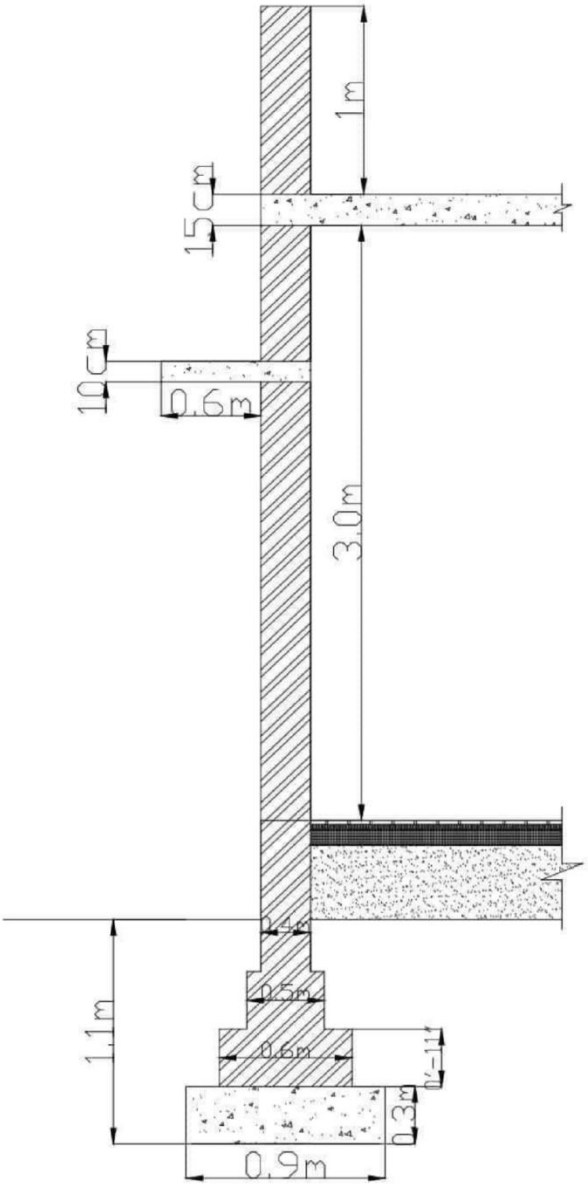
2. Medical store: Plan and elevation



PLAN OF MEDICAL STORE



ELEVATION OF MEDICAL STORE



CROSS SECTION

Measurement Sheet
(TABLE NO- 8)

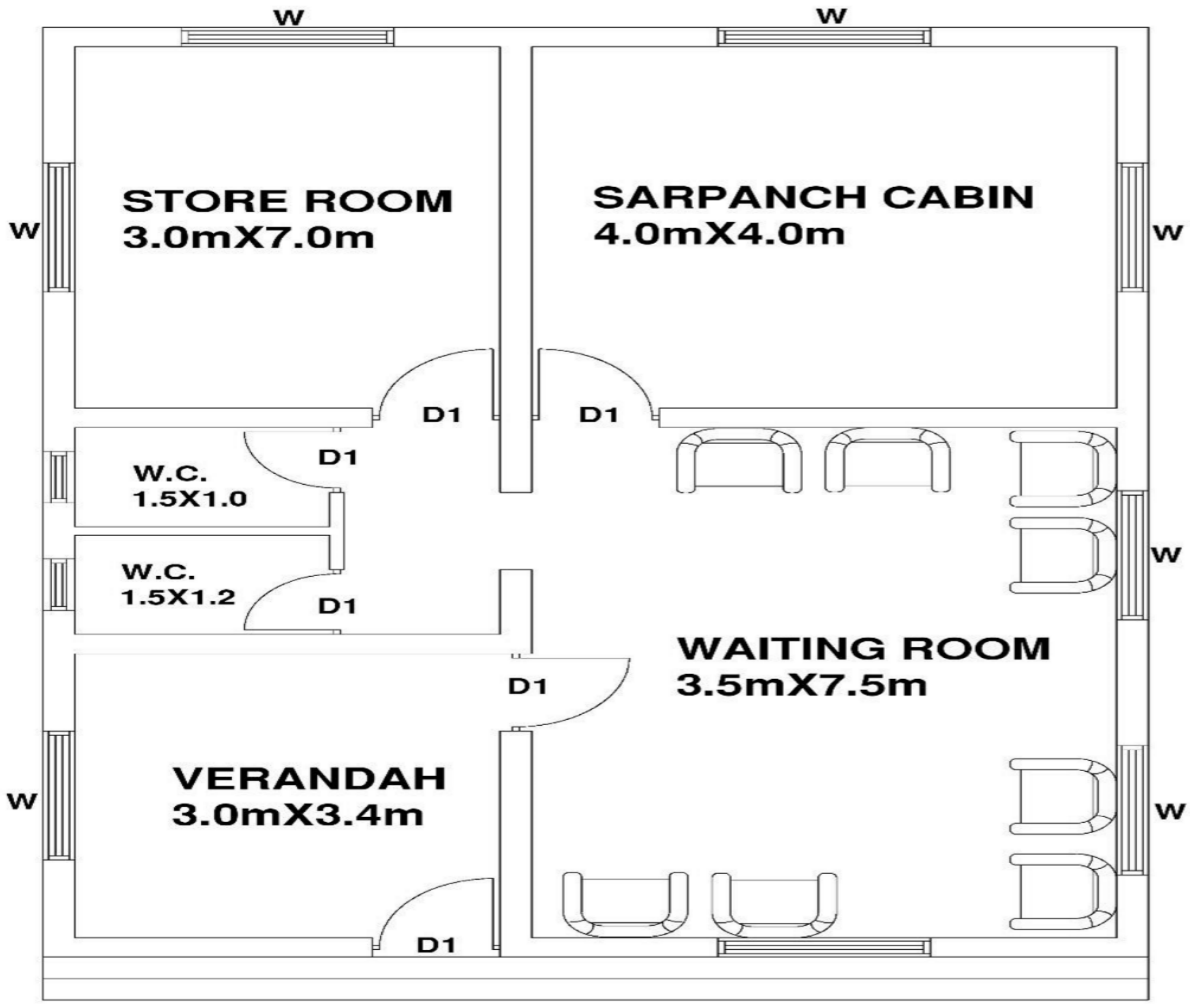
Medical store

Sr. No	Description	No.	Length (m)	Width (m)	Height (m)	Quantity
1	Excavation	1	27.8	0.9	1.1	**27.52 m^3**
2	Brick bat in foundation	1	27.8	0.9	0.3	**7.5 m^3**
3	Brick masonry up to plinth	1	27.8	0.5	0.4	**12.50 m^3**
4	Total filling work	1	7.4	5.9	0.45	**34.66 m^3**
5	P.C.C. in plinth 1:4:8	1	8	6.5	0.12	**6.24 m^3**
6	Brick work super structure with deduction 9.4 cubic meter	1	27.8	0.3	3	**21.25 m^3**
7	Total R.C.C. work (Lintle, slab, chhaja, beam, column)	1				**10.07 m^3**
8	Total Reinforcement in Kg.	1				**790 kg**
9	Total plaster	1				**102.7 m^2**

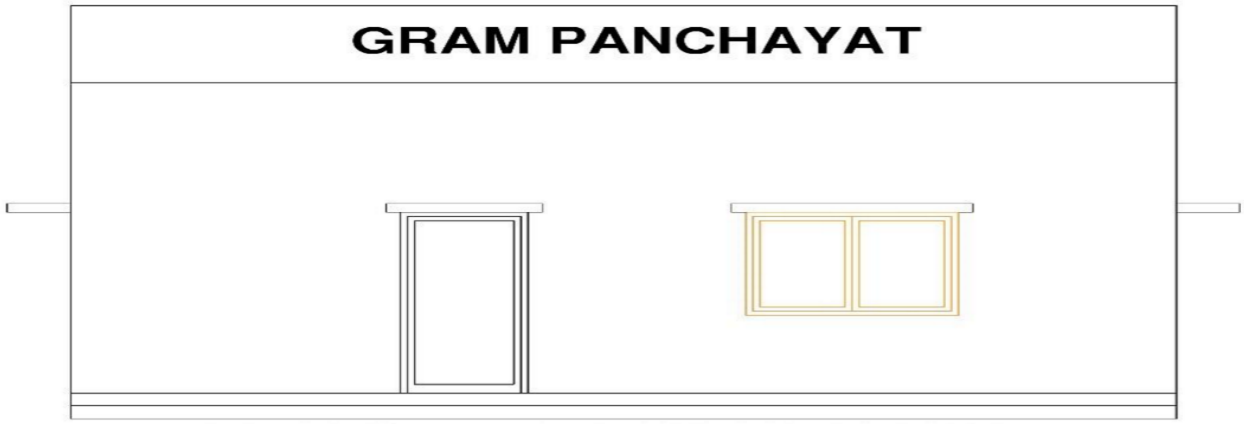
Sr. No.	Item Description	Quantity	Per	Rate (Rs)	Amount (Rs)
1	Excavation	27.52	m3	85	2340
2	P.C.C. 1:3:6	7.5	m^3	3200	24000
3	Brick work in super structure	12.50	m^3	3200	40000
4	Brick work in super structure	27.92	m^3	3500	97720

5	Total R.C.C. work	10.07	m^3	8800	88616
6	Filling Work	34.65	m^3	50	1735
7	Total Reinforcement	790.5	kg	45	35575
8	Plastering	102.7	m^2	150	15405
9	Door and Window	0.151	m^3	36712	5510
				Total = **309901**	

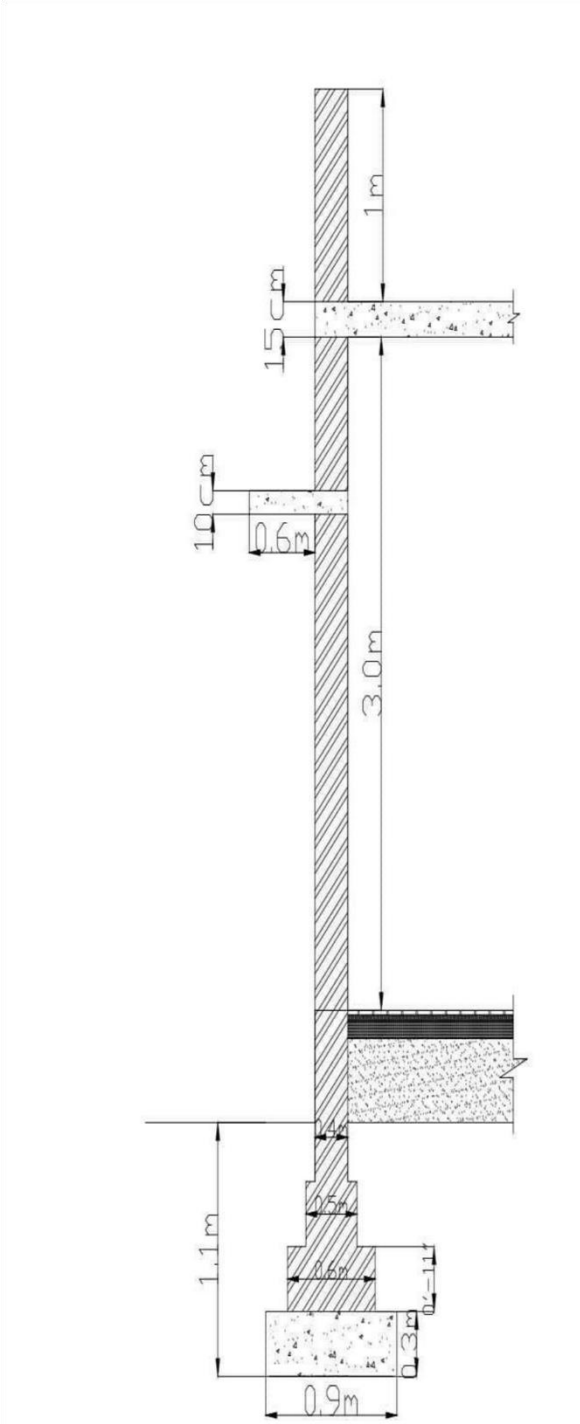
3. Gram Panchayat : Plan and elevation



PLAN OF GRAM PANCHAYAT



ELEVATION OF GRAM PANCHAYAT



CROSS SECTION

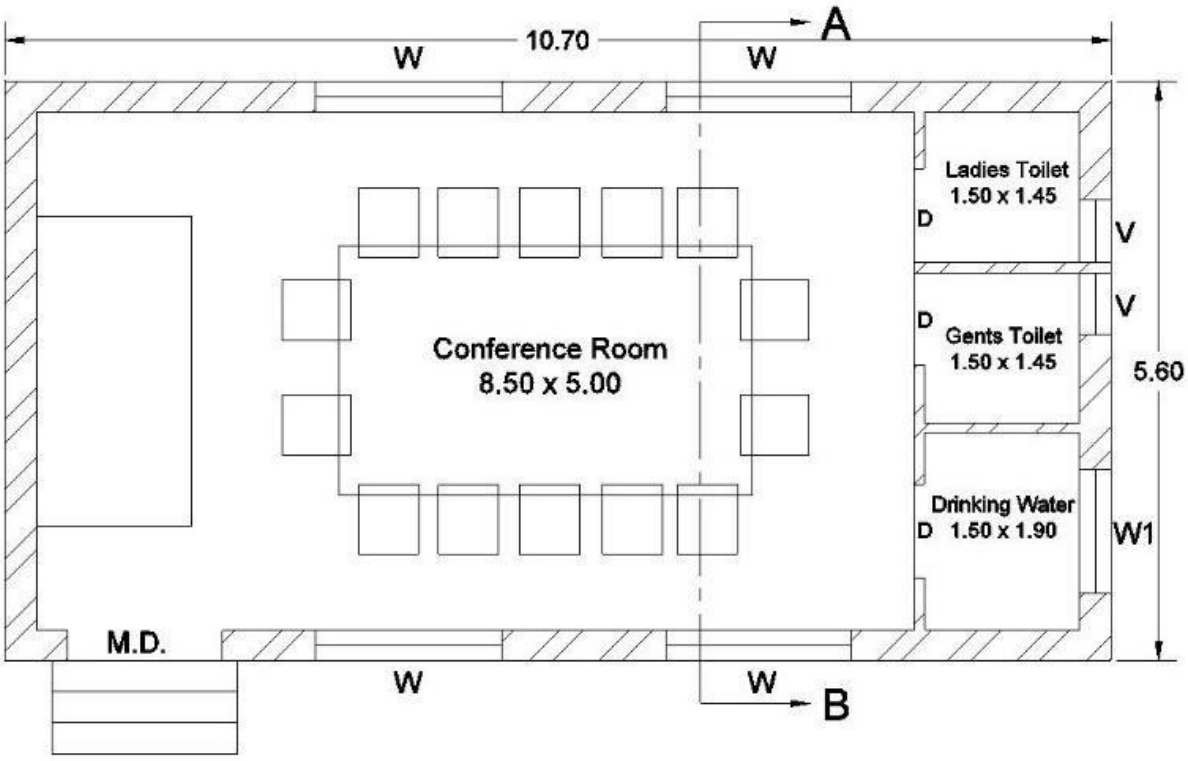
SCHEDULE OF OPENING		
TYPE	NO.	SIZE
D1	2	1.2x2.1
D2	4	1.00x2.1
V	6	0.6X0.6
ALL DIMENSIONS ARE IN METER		

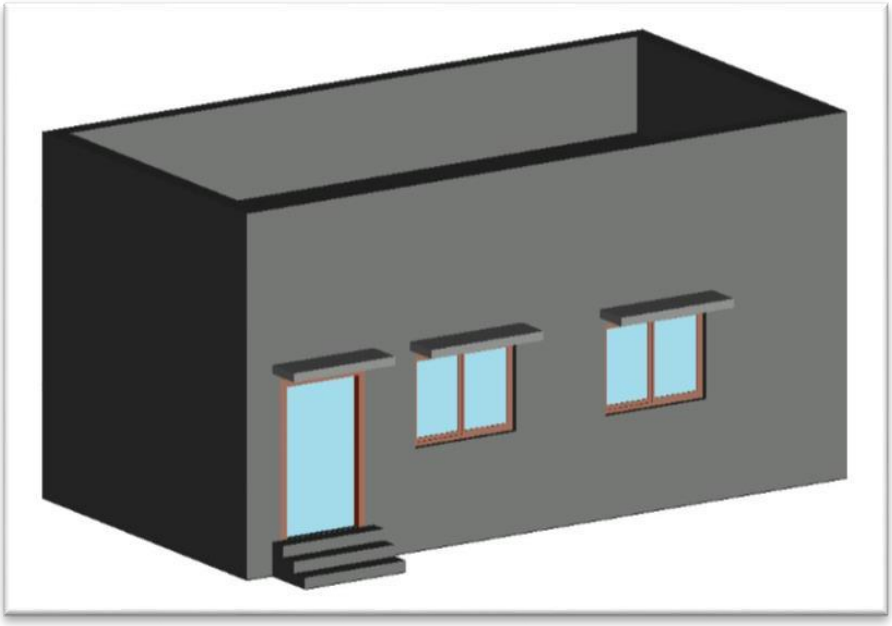
Measurement Sheet (TABLE NO- 9)						
Gram panchayat						
Sr. No	**Description**	**No.**	**Length (m)**	**Width (m)**	**Height (m)**	**Quantity**
1	Excavation	1	52.7	1.3	1.5	**102.76 m^3**
2	Brick bat in foundation	1	52.7	1	0.1	**7.86 m^3**
3	Brick masonry up to plinth	1	56.7	0.4	1.7	**38.28 m^3**
4	Total filling work	1				**96.70 m^3**
5	P.C.C. in plinth 1:4:8	1	10.6	7.6	0.4	**32.22 m^3**
6	Brick work super structure with deduction 9.4 cubic meter	1	56.7	0.3	3	**41.06 m^3**
7	Total R.C.C. work (Lintle, slab, chhaja, beam, column)	1				**19 m^3**
8	Total Reinforcement in Kg.	1				**1492 kg**
9	Total plaster	1				**309.2 m^2**

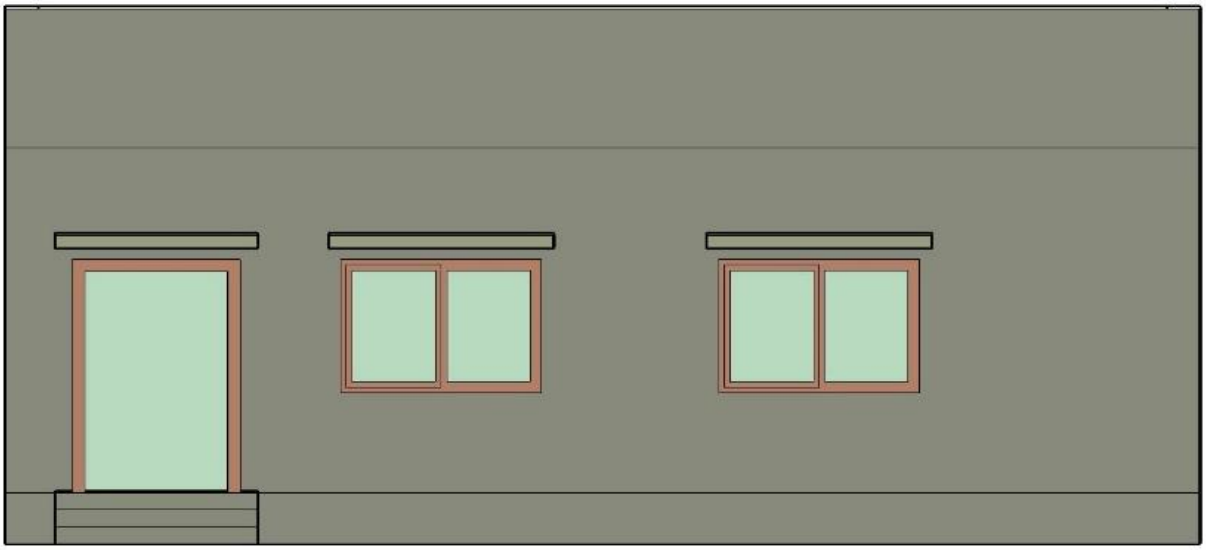
Sr. No.	Item Description	Quantity	Per	Rate (Rs)	Amount (Rs)
1	Excavation	102.76	m_3	85	8735
2	P.C.C. 1:3:6	9.67	m^3	3200	30950
3	Brick work in super structure	46.185	m^3	3200	147790

4	Brick work in super structure	50.22	m^3	3500	175770
5	Total R.C.C. work	19	m^3	8800	167200
6	Filling Work	96.7	m^3	50	4840
7	Total Reinforcement	1492	kg	45	67140
8	Plastering	309.20	m^2	150	46400
9	Door and Window	0.56	m^3	36712	20650
				Total = **669385**	

4.Conference room



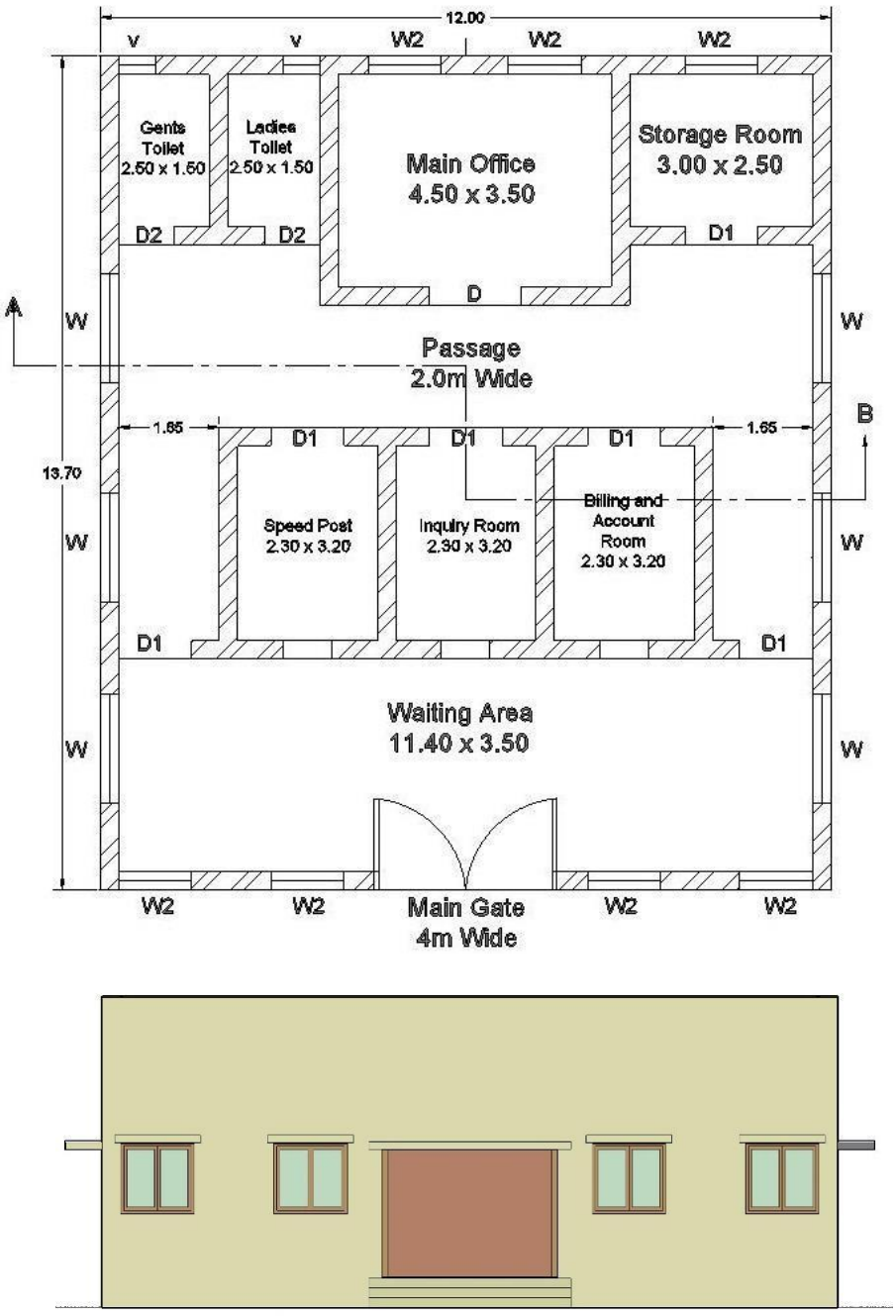




MEASUREMENT SHEET(TABLE NO -10)						
Item No.	DESCRIPTION	NO	LENGTH	WIDTH	DEPTH	TOTAL
1	Earthwork in excavation for foundation Net center line L= 31.3m	1	31.3	1	1.1	34.43
2	Brick bad cement concrete for foundation	1	31.3	0.9	0.3	8.451
3	Brick masonry work upto foundation	1	31.3	0.2	1.25	7.825
4.	First class brick masonry work CM 1:6	1	31.3	0.2	3	18.78
5	Refilling in foundation	1				18.16
6	Pcc in 1:4:8 CC for plinth	1	14.70	5.6	0.12	7.19
7	RCC for slab in 1:1.5:3 CC	1	10.70	5.60	0.12	7.20
8	RCC for chhajja					0.40

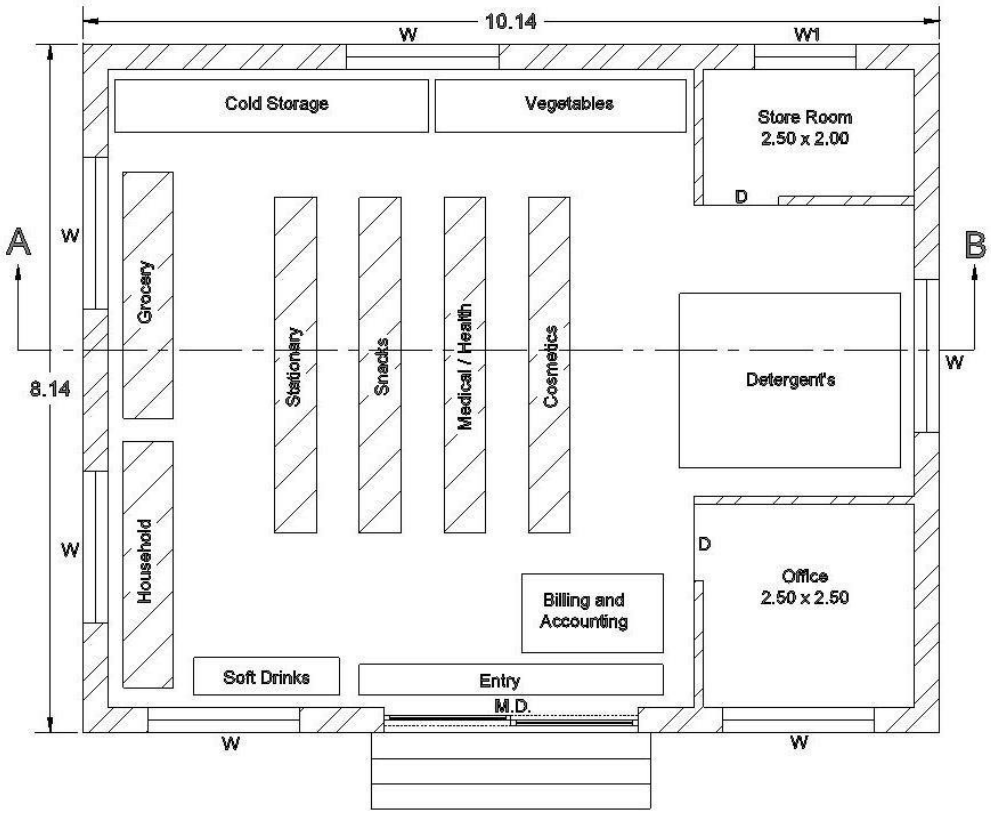
	1:1.5:3 CC					
	RCC for beam					2.25
	RCC for column	6	0.25	0.25	3	1.13
Total RCC = 10.98 m^3						
8	Total reinforcement 1 % of total RCC work = 1*10.988*7850/100 = 861.99KG					862 KG

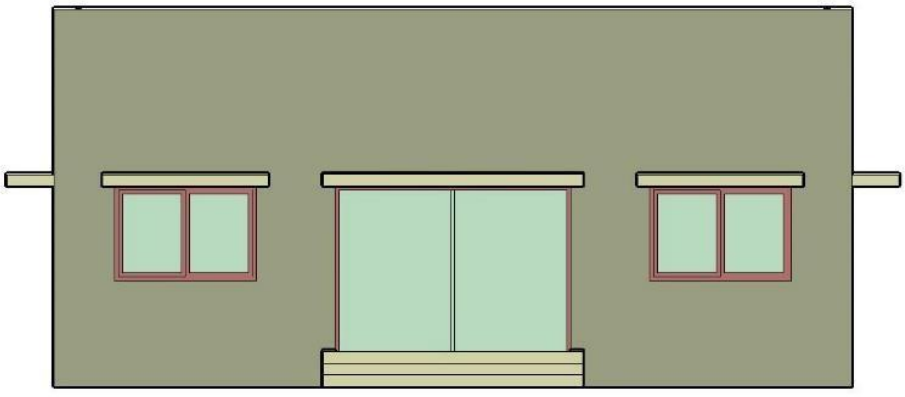
5.Post office



MEASUREMENT SHEET (TABLE NO – 11)						
Item no	Description	No	Length	Width	Depth	Quantity
1	Earthwork in excavation for foundation Net center line L= 48.7	1	48.7	1	1.1	53.57
2	BBCC for foundation	1	48.7	0.9	0.3	13.15
3	Brickwork upto GL	1	48.7	0.3	0.8	11.67
4	First class brick work above GL	1	48.7	0.3	3.45	50.40
5	Total refilling work 53.57-24.82+18.81					47.56
6	TOTAL RCC work	1	13.1	11.4	0.12	17.92
	RCC work in slab	1	13.7	12	0.12	19.73
	RCC in chhajja	-	-	-	-	0.40
	RCC for column	8	0.25	0.25	3	1.5
	RCC for beam	-	-	-	-	2.5
TOTAL RCC WORK = 23.13						
8	1 % REINFORCEMENT OF TOTAL WORK = 1*23.13*7850/100 =1815.70 kg					1816kg

6.Super market





MEASURMENT SHEET (TABLE NO -12)						
ITEM NO	DESCRIPTION	NO	LENGTH	WIDTH	DEPTH	QUANTITY
1	Earthwork excavation in foundation	1	35.76	1	1.1	39.34
2	BBCC for foundation	1	35.76	0.9	0.3	9.65
3	Brick work upto ground level	1	35.76	0.3	0.8	8.58
4	First class brickwork above ground level CM 1:6	1	35.76	0.3	3.45	37.01
5	Total refilling work	1	-	-	-	43.17
6	Total PCC work 1:4:8 CC	1	9.74	7.44	0.12	9.05
7	TOTAL RCC work					
	Slab	1	10.14	8.14	0.12	9.90
	chhajja	8	1	0.3	0.08	0.02
	column	8	0.25	0.25	3	1.5
	Beam	4	0.3	0.25	9.14	2.74
TOTAL RCC WORK = 14.34						
8	Total reinforcement 1 % of total RCC work = 1*14.34*7850/100 =1125.22 KG					1126 KG

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

1.Recreational park
2.Library
3.High school
4.Coaching center
5.Road side arboriculture.

Chapter 10. Conclusion of the Entire Village Activities of the Project

Early of the 7th semester we start the survey for ideal, smart and allocated village. Our idel village visit is not organized due to covid-19 pandemic. So we collect the by phone call to the sarpanch and by the online source like google. Our smart village visit is also not done because it's very long distance from the Dahod district and also due to covid 19 pandemic.

After decrease the effects of pandemic we start Technoeconomic survey. We travel in the village and collect the data is for necessary. Also survey the the existing conditions of the village.

Base line survey is a benchmark for any intervention during and post implementation of any development programme. A detailed baseline survey was undertaken which involved household census survey, Bio-physical survey and Village level data collection from Sarpanch. This gave in the details of the demographic profile of the village, the literacy percentage, SC/ST population, number of BPL household, cattle population and net consumption rate in the village, average milk production of the cattle and various schemes running and their benefits Bio-physical survey was undertaken to identify various natural resources available in the village. It included the soil typology, well in the area, crop taken in the field, Cropping pattern, fertilizer used and various sources of irrigation in the field.

PRIMARY SURVEY DETAILS:

Primary survey is done in order to collect the basic information about various facilities available in the village. In this survey data is collected by various means like house to house means door to door survey, by interviewing people, school teachers, shop keepers, and other public. Accuracy of this data is not sufficient means that data based on primary survey is not reliable or very accurate. Variances in the data happened due to different views of people. We checked the infrastructure condition of different buildings like school, gram-panchyat, police station, banks, etc. And also check the condition of various basic amenities like water supply, drainage, electricity, solid waste management, railway station, bus station, hospitals, PHC, etc.

SECONDARY SURVEY:

Secondary survey includes data collection from variou government offices like gram panchyat, police station, phc, etc. We collect the data related total population of the Bhatiwadavillage,male female ratio,literacy rate of village, growth rate,number of schools,various government schemes running for village development,area of village, agricultural area of village,major occupations, major crops taken, water supply source for drinking as well as irrigation water ETC.

Chapter 11. References refereed for this project

1. Wikipedia
2. onefivenine.com
3. census india 2001/2011
4. UDFPI norms
5. Google map
6. Google Earth app
7. onefinine.com
8. https://rural.nic.in/secc2011/gujarat
9. https://nhm.gujarat.gov.in/pri-hea-cen-list.htm

Chapter 12. Annexure attachment

1.Ideal village survey form

5

Techno Economic Survey

For

Vishwakarma Yojana: Phase VIII

IDEAL VILLAGE SURVEY

An approach towards Rurbanisation for Village Development

Name of Village:	BAVKA
Name of Taluka:	DAHOD
Name of District:	DAHOD
Name of Institute:	GOVERNMENT ENGINEERING COLLEGE DAHOD
Nodal Officer Name & Contact Detail:	PROF. D.K. OZA MO. NO.:-9426788105
Respondent Name: (Sarpanch/ Panchayat Member/ Teacher/ Gram Sevak/ Aaganwadi worker/Village dweller)	PASAYA BHARATBHAI KALUBHAI (Sarpanch)
Date of Survey:	08/09/2020

1. **Demographical Detail:**

Sr. No.	Census	Population	Male	Female	Total House Holds
i)	2001	7193	3640	3553	
ii)	2011	9384	4775	4609	1587

2. **Geographical Detail:**

Sr. No.	Description	Information/Detail
i)	Area of Village (Approx.) (In Hector) Coordinates for Location:	2321.77 hectares
	Forest Area (In hect.)	401.2 hectares
	Agricultural Land Area (In hect.)	1416.30 hectares
	Residential Area (In hect.)	514.1 Hectares

	Other Area (In hect.)	No
	Water bodies	80.3 hectares
	Nearest Town with Distance:	DAHOD , dahod is nearest town to bavka which is 15km away.

3. Occupational Details:

Name of Three Major Occupation groups in Village	1. AGRICULTURE
	2. SEMI INDUSTRIAL
	3. JOB

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	YES(Untreated) NO YES(uncovered) YES YES YES	NO NO	YES YES	Tap connections are located in a few areas.
Suggest ions if any:					
B.	**Water Tank Facility**				
	Overhead Tank	Capacity: 1 Lakh liters	No	Yes	closed
	Underground Sump	Capacity:			
Suggest ions if any:					
C.	**Drainage Facility**				
	Available (Yes/ No)	NO	-	-	
Suggest ions if any: FOR SEWAGE THEY HAVE PROVIDED SEPTIC TANK.					

G.	Electricity Distribution				
	(Y/N) Govt./ Private (Less than 6 hrs./ More Than 6 hrs)	Yes (government) More than 6hrs.	Yes	No	24hrs electricity available.
	Power supply for Domestic Use	Yes MORE THAN 6hrs	Yes	No	24 hrs available
	Power supply for Agricultural Use	Yes more than 6 hrs	Yes	No	12 hrs
	Power supply for Commercial Use	Yes	Yes	No	
	Road/ Street Lights	Yes	No	Yes	Most of roads do not have provided street lights.
	Electrification in Government Buildings/ Schools/ Hospitals	Yes	Yes		
	Renewable Energy Source Facilities (Y/ N)	Yes	No	Yes	Only provided on gram panchayat and schools.
	LED Facilities	No	No	Yes	
Suggestions if any:					
II.	**Sanitation Facility**				
	Public Latrine Blocks If available than Nos.	Yes 3	No	Yes	
	Location Condition	GAMATAL FALIYA GOOD Condition			
	Community Toilet (With bath/ without bath facilities)	YES (With bath)			

	Solid & liquid waste Disposal system available	NO	No	Yes	
	Any facility for Waste collection from road	NO	No	Yes	
Suggest ions if any:					
I.	**Irrigation Facility:**				
	Main Source of Irrigation (Stream/River/ Canal/ Well/ Tube well/ Other)	Stream, Well, tube well	yes		ground water level is high.
Suggest ions if any:					
J.	**Housing Condition:**				
	Kutchha/Pucca (Approx. ratio)				98% houses are 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:	2	YES	No	
	Private Clinic/Private Hospital/ Nursing Home	NO	–	–	private clinic 6km away from bavka. at jesawada.

	If any of the above Facility is not available in village th an approx. dista nce from village: .....kms.				
Suggesti ons if any: Veterinary hospital facility available.					
L.	**Education Facilities:**				
	Aaganwadi/ Play group	17	YES	No	
	Primary School	9	YES	NO	upto 5th standard
	Secondary school	1	YES	NO	
	Higher sec. School	1	YES	NO	A few students also go to JESAWADA, DAHOD.
	ITI college/ vocational Training Center	1	YES	No	A few students also go to JESAWADA, DAHOD.
	Art, Commerce& Science /Polytechnic/ Engineering/ Medical/ Management/ other college facilities	NO	-	-	Students go to DAHOD for graduation.
	If any of the above Facilit y is not available in village than suggest. distance from village: .....kms.				
6uggest ions if any: Navjivan Arts and commerce collage Dahod which is 18km away from BAVKA.					
M.	**Socio- Culture Facilities**				
	Community Hall (With or without TV) Location:	Yes at gram panchayat	Yes	No	without TV.
	Condition:				

N.	Other Facilities				
	Post-office	Yes	Yes	No	
	Telecommunication Network/ STD booth	Yes	Yes	No	More than 80% people used mobile phone
	General Market	NO	-	-	People go to jesawada to shopping.
	Shops (Public Distribution System)	Yes	Yes	No	
	Panchayat Building	Yes	Yes	No	
	Pharmacy/Medical Shop	No	No	Yes	6km away. at jesawada
	Bank & ATM Facility	Yes	Yes	No	some peoples goes at jeasawada.
	Agriculture Co-operative Society	No	-	-	at Jasawada
	Milk Co-operative Soc.	Yes	Yes	No	In current situation closed.
	Small Scale Industries	No			available at dahod(17km away)
	Internet Cafes/ Common Service Center/Wi Fi	Yes	Yes	No	
	Other Facility	No			
Suggestions if any:					

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

Sr. No.	Descriptions	Information/ Details	Adequate	Inadequate	Remarks
O.	Adoption of Non-Conventional Energy Sources/ Renewable Energy Sources	No	-	-	
P.	Bio-Gas Plant Solar Street Lights Rain Water Harvesting System	Yes(community) Yes Yes	No No No	Yes Yes Yes	Solar street lights and RWHS are available only at school and gram panchayat.
Q.	Any Other	No			

7. **Data Collection From Village**

Village Base Map Available: Hard Copy/Soft Copy	Soft copy

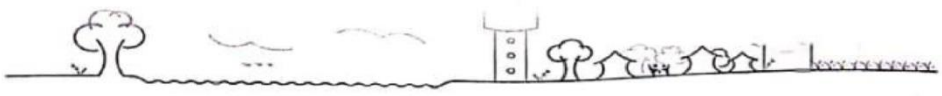
Recent Projects going on for Development of Village	-Pradhan mantri awas yojana -Pradhan mantri gram sadak yojana, etc.
Any NGO working for village development	Self help groups

		- Should provide Rain Water Harvesting System - Develop gruh udhyog - e-gram service - Emphasize the use of solar device - Improve farming productivity	

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

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

પટ્ટાવાળા ફાલ્ગુન
સરપંચ
ગ્રામ પંચાયત બાવકા
તા.જી.દાહોદ



2.Smart village suevey form

Techno Economic Survey

Vishwakarma Yojana: Phase VIII

SMART VILLAGE SURVEY

An approach towards **"Rurbanisation for Village Development"**

Name of District:	Sabar Kantha
Name of Taluka:	Talod
Name of Village:	Punsari
Name of Institute:	Government Engineering College Dahod
Nodal Officer Name & **Contact Detail:**	D.K. OZA +919426788106
Respondent Name: **(Sarpanch/ Panchayat Member/ Teacher/ Gram Sevak/ Aaganwadi worker/Village dweller)**	
Date of Survey:	

I. DEMOGRAPHICAL DETAIL:

Sr. No.	Census	Population	Male	Female	Total Number of House Holds
1.	2001				
2.	2011	5100	2653	2447	1109

II. GEOGRAPHICAL DETAIL:

Sr. No.	Description	Information/Detail
1.	Area of Village (Approx.) (In Hector)Coordinates for Location:	1395.65
2.	Forest Area (In hect.)	0
3.	Agricultural Land Area (In hect.)	1100 hectares
4.	Residential Area (In hect.)	
5.	Other Area (In hect.)	
6.	Distance to the nearest railway station (in kilometers):	
7.	Name of Nearest Town with Distance:	TALOD
8.	Distance to the nearest bus station (in kilometers):	
9.	Whether village is connected to all road for the any facility or town or City?	yes

III. OCCUPATIONAL DETAILS:

Name of Three Major Occupation groups in Village	1. agricultural
	2. animal husbandry, dairy
	3. small scale industries

Major crops grown in the village:	1 PEARLMILLET/BAJRA.
	2. WHEAT
	3. GROUND NUT

IV. PHYSICAL INFRASTRUCTURE FACILITIES:

Sr. No.	Descriptions	Detail	Adequate	Inadequate	Remarks

A.	Main Source of Drinking water				
1.	**PIPED WATER** Piped Into Dwelling Piped To Yard/Plot Public Tap/Standpipe Tube Well Or Bore Well				
2.	**DUG WELL** Protected Well Un Protected Well				
3.	**WATER FROM SPRING** Protected Spring Unprotected Spring Rainwater Tanker Truck Cart With Small Tank				
4.	**SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/** Irrigation Channel Bottled Water Hand Pump Other(Specify)**Lake/ Pond**				

Suggestions if any:					
B.	**Water Tank Facility**				
	Overhead Tank	Capacity:			
	Underground Sump	Capacity:			
Suggestions if any:					
C.	**The Type of Drainage Facility**				
	A. UNDERGROUND DRAINAGE 1 2 B. OPEN WITH OUTLET C. OPEN WITHOUT OUTLET				
Suggestions if any:					

D.	**Road Network :All Weather/ Kutchha (Gravel)/ Black Topped pucca/ WBM**				
	Village approach road	Black Topped pucca			
	Main road	RCC			
	Internal streets	RCC			
	Nearest NH/SH/MDR/ODR Dist. in kms.				
Suggestions if any:					
E.	**Transport Facility**				
	Railway Station (Y/N) (If No than Nearest Rly Station---Kms)	no			
	Bus station (Y/N) Condition: (If No than Nearest Bus Station---Kms)	yes			
	Local Transportation (Auto/ Jeep/Chhakda/ Private Vehicles/ Other)	Panchayat bus			village own transportation facilities
Suggestions if any:					
F.	**Electricity Distribution**				
	(Y/N) Govt./ Private (Less than 6 hrs./ More Than 6 hrs)	Yes Own power station. More Than 6 hrs.			66 kv punsari sub station
	Power supply for Domestic Use	24 hrs			
	Power supply for Agricultural Use	8 hrs			
	Power supply for Commercial Use	24 hrs			
	Road/ Street Lights	yes			
	Electrification in Government Buildings/ Schools/ Hospitals	Yes			

	Renewable Energy Source Facilities (Y/ N)	yes			
	LED Facilities	yes			
Suggestions if any:					
G.	**Sanitation Facility**				
	Public Latrine Blocks If available than Nos.				
	Location Condition				
	Community Toilet (With bath/ without bath facilities)				
	Solid & liquid waste Disposal system available	yes			
	Any facility for Waste collection from road	Door to door waste collection			
Suggestions if any:					
H.	**Main Source of Irrigation Facility:**				
	TANK/POND STREAM/RIVER CANAL WELL TUBE WELL. OTHER (SPECIFY)				
Suggestions if any:					
I.	**Housing Condition:**				
	Kutchha/Pucca (Approx. ratio)				

V. SOCIAL INFRASTRUCTURAL FACILITIES:

Sr. No.	Descriptions	Information/ Detail	Adequate	Inadequate	Remarks
J.	**Health Facilities:**				
	ICDS (Anganwadi) Sub-Centre PHC BLOCK PHC CHC/RH District/ Govt. Hospital Govt. Dispensary Private Clinic Private Hospital/ Nursing Home AYUSH Health Facility sonography /ultrasound facility	8 1			
	If any of the above Facility is not available in village than approx. distance from village: .....kms.				
Suggestions if any:					
K.	**Education Facilities:**				
	Aaganwadi/ Play group	8			
	Primary School	5 (1-8 std)			
	Secondary school				
	Higher sec. School	1 (9-12 std)			
	ITI college/ vocational Training Center	1			

	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:					
L.	**Socio- Culture Facilities**	Condition	Location	Available (YES)	Available (NO)
	Community Hall (With or without TV)				
	Public Library (With daily newspaper supply: Y/N)	Village own newspaper			
	Public Garden				
	Village Pond				
	Recreation Center				
	Cinem a/ Video Hall				No
	Assembly Polling Station	1 good		yes	
	Birth & Death Registration	1 good		yes	
If any of the above Facility is not available in village than approx. distance from village: more than 10 kms.					
Suggestions if any:					
M.	**Other Facilities**	Condition	Location	Available (YES)	Available (NO)
	Post-office			yes	
	Telecommunication Network/ STD booth			yes	
	General Market				

	Shops (Public Distribution System)			yes	
	Panchayat Building			yes	
	Pharmacy/Medical Shop				
	Bank & ATM Facility	2,2		yes	
	Agriculture Co-operative Society				
	Milk Co-operative Soc.			yes	
	Small Scale Industries			yes	
	Internet Cafes/ Common Service Center/Wi Fi			yes	
	Youth Club				
	Mahila Mandal			yes	

	Credit Cooperative Society Agricultural Cooperative Society Milk Cooperative Society Fishermen's Cooperative Society Computer Kiosk/ e-chaupal / Mills / Small Scale Industries			Yes yes	
	Other Facility				
Suggestions if any:					
N.	**Other Facilities**	**Condition**		**Available (YES)**	**Available (NO)**

	1. Have these programme implemented the village? 2. Are there any beneficiaries in the village from the following programme? 3. Janani Suraksha Yojana 4. Kishori Shakti Yojana 5. Balika Samriddhi Yojana 6. Mid-day Meal Programme 7. Intergrated Child Development Scheme (ICDS) 8. Mahila Mandal Protsahan Yojana (MMPY) 9. National Food for work Programme (NFFWP) 10. National Social Assistance Programme 11. Sanitation Programme (SP) 12. Rajiv Gandhi National Drinking Water Mission 13. Swarnjayanti Gram Swarozgar Yojana 14. Minimum Needs Programme (MNP) 15. National Rural Employment Programme 16. Employee Guarantee Scheme (EGS) 17. Prime Minister Rojgar Yojana (PMRY) 18. Jawahar Rozgar Yojana (JRY) 19. Indira Awas Yaojna (IAY) 20. Samagra Awas Yojana (SAY) 21. Sanjay Gandhi Niradhar Yojana (SGNY) 22. Jawahar Gram Samridhi Yojana (JGSY) 23. Other (SPECIFY)				

VI. SUSTAINABLE /GREEN INFRASTRUCTURE FACILITIES:

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

VII. DATA COLLECTION FROM VILLAGE

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

VIII. ADDITIONAL INFORMATION/ REQUIREMENT:

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

IX. Smart Village / Heritage Details

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

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

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

3.Allocated village survey form

Techno Economic Survey

Vishwakarma Yojana: Phase VIII

ALLOCATED VILLAGE SURVEY

An approach towards "Rurbanisation for Village Development"

Name of District:	Dahod
Name of Taluka:	Dahod
Name of Village:	Bhatiwada
Name of Institute:	Government engineering college dahod
Nodal Officer Name & Contact Detail:	Prof. D. K. OZA
Respondent Name: (Sarpanch/ Panchayat Member/ Teacher/ Gram Sevak/ Aaganwadi worker/Village dweller)	Meda Dineshbhai Mendalbhai (Sarpanch) સરપંચ ગ્રામ પંચાયત,ભાટીવાડા તા.ઝે.દાહોદ.
Date of Survey:	

I. DEMOGRAPHICALDETAIL:

Sr. No.	Census	Population	Male	Female	Total Number of House Holds
1.	2001	5555	2700	2855	800
2.	2011	7394	3685	3709	1088

II. GEOGRAPHICALDETAIL:

Sr. No.	Description	Information/Detail
1.	Area of Village (Approx.) (In Hector)Coordinates for Location:	1234.89 hect.
2.	Forest Area (In hect.)	not available
3.	Agricultural Land Area (In hect.)	70%
4.	Residential Area (In hect.)	30%
5.	Other Area (In hect.)	No
6.	Distance to the nearest railway station (in kilometers):	10km

7.	Name of Nearest Town with Distance:	Dahod (7.5km)
8.	Distance to the nearest bus station (in kilometers):	2km
9.	Whether village is connected to all road for the any facility or town or City?	Yes

III. OCCUPATIONAL DETAILS:

Name of Three Major Occupation groups in Village	1.Agriculture
	2.Animal Husbandry
	3.semi industrial

Major crops grown in the village:	1.Maize
	2.Gram
	3.Wheat

IV. PHYSICAL INFRASTRUCTUREFACILITIES:

Sr. No.	Descriptions	Detail	Adequate	Inadequate	Remarks
A.	**Main Source of Drinking water**				
1.	**PIPED WATER** Piped Into Dwelling Piped To Yard/Plot Public Tap/Standpipe Tube Well Or Bore Well	Pablic tap available Bore well available	Available in bhatiwada Galtal Available in all Bolck	Required in Other area	
2.	**DUG WELL** Protected Well Un Protected Well	Yes Yes Yes			
3.	**WATER FROM SPRING** Protected Spring Unprotected Spring	No			
4.	Rainwater Tanker Truck Cart With Small Tank **SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/** Irrigation Channel Bottled Water Hand Pump	Yes Yes Dam available 4 ponds available 1 canal available			

	Other(Specify)**Lake/ Pond**	No			
Suggestions if any:					
B.	**Water Tank Facility**				
	Overhead Tank	Capacity:			
	Underground Sump	Capacity:			
Suggestions if any:					
C.	**The Type of Drainage Facility**				
	A. UNDERGROUND DRAINAGE 1	No	–	–	
Suggestions if any:					
D.	**Road Network :All Weather/ Kutchha (Gravel)/ Black Topped pucca/ WBM**				
	Village approach road	Black topped pucca	Yes		
	Main road	Black topped pucca	Yes		
	Internal streets	RCC	Yes		
	Nearest NH/SH/MDR/ODR Dist. in kms.	NH 9km MDR 3.5km	Yes		
Suggestions if any:					
E.	**Transport Facility**				
	Railway Station (Y/N) (If No than Nearest Rly Station---Kms)	No (10km)			
	Bus station (Y/N) Condition: (If No than Nearest Bus Station---Kms)	No	No		
	Local Transportation (Auto/ Jeep/Chhakda/ Private Vehicles/ Other)	Yes available	Yes		
Suggestions if any:No suggestions					
F.	**Electricity Distribution**				
	(Y/N) Govt./ Private (Less than 6 hrs./ More Than 6 hrs)	Yes More than 6 hrs	Yes		

	Power supply for Domestic Use	Yes			
	Power supply for Agricultural Use	Yes Available			Available in two shift Day Or night (12 hrs day Or night)
	Power supply for Commercial Use	Yes			
	Road/ Street Lights	Yes	No		Fee Solar street lights available
	Electrification in Government Buildings/ Schools/ Hospitals	Yes	Yes		
	Renewable Energy Source Facilities (Y/ N)	No	No		
	LED Facilities	No	No		
Suggestions if any:No					
G.	**Sanitation Facility**				
	Public Latrine Blocks If available than Nos.	Available 2 nos.			
	Location Condition	Good			
	Community Toilet (With bath/ without bath facilities)	No			
	Solid & liquid waste Disposal system available	No			
	Any facility for Waste collection from road	No			
Suggestions if any:No					
H.	**Main Source of Irrigation Facility:**				
	TANK/POND STREAM/RIVER CANAL WELL TUBE WELL. OTHER (SPECIFY)	4 ponds are mai source of irrigation. 1 canal available	Yes		
Suggestions if any:No					
I.	**Housing Condition:**				
	Kutchha/Pucca (Approx. ratio)				70% kutchha 30% pucca

V. SOCIAL INFRASTRUCTURALFACILITIES:

Sr. No.	Descriptions	Information/ Detail	Adequate	Inadequate	Remarks
J.	**Health Facilities:**				
	ICDS (Anganwadi) Sub-Centre PHC BLOCK PHC CHC/RH District/ Govt. Hospital Govt. Dispensary Private Clinic Private Hospital/ Nursing Home AYUSH Health Facility sonography /ultrasound facility	Yes 11 Anganwadi available Yes No No No No No No No No			Condition:Good
	If any of the above Facility is not available in village than approx. distance from village:10kms.				
Suggestions if any:					
K.	**Education Facilities:**				
	Aaganwadi/ Play group	11 Anganwadi	Yes		All Aangawadi working well.
	Primary School	2 two primary schools	Yes		
	Secondary school	1	Yes		
	Higher sec. School	1	Yes		
	ITI college/ vocational Training Center	No			
	Art, Commerce& Science /Polytechnic/ Engineering/ Medical/ Management/ other college facilities	No (Available in Dahod town)			

	If any of the above Facility is not available in village than approx. distance from village:10kms.				
Suggestions if any: No suggestions					
L.	**Socio- Culture Facilities**	Condition	Location	Available (YES)	Available (NO)
	Community Hall (With or without TV	Good	Near PHC	Yes Without TV	
	Public Library (With daily newspaper supply: Y/N)				No
	Public Garden				No
	Village Pond				Yes
	Recreation Center				No
	Cinema/ Video Hall				No
	Assembly Polling Station			Yes	
	Birth & Death Registration Office	Good	Gram panchayat	Yes	
If any of the above Facility is not available in village than approx. distance from village:10kms.					
Suggestions if any:					
M.	**Other Facilities**	Condition	Location	Available (YES)	Available (NO)
	Post-office				No
	Telecommunication Network/ STD booth				No
	General Market				Yes
	Shops (Public Distribution System)				Yes
	Panchayat Building	Required maintenance		Yes	
	Pharmacy/Medical Shop				No
	Bank & ATM Facility				No
	Agriculture Co-operative Society			Yes	
	Milk Co-operative Soc.			Yes	
	Small Scale Industries				No
	Internet Cafes/ Common Service Center/Wi Fi				No
	Youth Club				

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

					No No No NA

VI. SUSTAINABLE /GREEN INFRASTRUCTUREFACILITIES:

Sr. No.	Descriptions	Information/ Details	Adequate	Inadequate	Remarks

1.	**Adoption of Non-Conventional Energy Sources/ Renewable Energy Sources**	NA			
2.	**Bio-Gas Plant Solar Street Lights Rain Water Harvesting System**	NA			
3.	**Any Other**	NA			

VII. DATA COLLECTION FROMVILLAGE

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

VIII. ADDITIONAL INFORMATION/ REQUIREMENT:

Sr. No.	Descriptions	Information/ Detail	Remarks
1.	**Repair & Maintenance of Existing Public Infrastructure facilities, School Building Health Center Panchayat Building Public Toilets & any other**	Repair & Maintenance of panchayat building is necessary	Design a new PANCHAYAT BUILDING.
2.	**Additional Information/ Requirement**	No	No
3.	**During the last six months how many times CLEANING …….. FOGGING…….. Drive was undertaken in the village?**		

IX. Smart Village / HeritageDetails

Sr. No.	Descriptions	Information/ Detail	Remarks
1.	IS THEIR ANY THING FOR THE VILLAGE ENHANCEMENT POSSIBLE ?	GICD near the villagegrowth can increase in few years	

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

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

12.4 Gap Analysis of the Allocated Village

GENERAL:

First of all we collect the data related to bhatiwada village from our survey by various means like gram panchayat, house to house survey. Thn after we compared our data with UDFPI guidelines. And bu comparing the village data with standard UDFPI GUIDELINE we have done GAP ANALYSIS by following table.

GAP ANALYSIS:

Following table show the key observation for the village which show insufficiency or oversufficiency of facilities.

TABLE NO.:- 13 GAP ANALYSIS

FACALITIES	PLANNING COMMISION/UDFPI NORMS	BHATIWADA		
		POPULATION: 7394		
		Existing	As per UDFPI norms	GAP
EDUCATION				
Anganwadi	Each village	11	1	0
Primary school	Each village	2	1	0
Secondary school	Per 7500 population	1	1	0
Higher	Per 15000 population	1	2	0

secondary school				
College	Per 125000 population	0	0	0
Tech. Training Institute	Per 100000 population	0	0	0
Agriculture research Center	Per 100000 population	0	0	0
Medical facilities				
Gov./Panchayat Dispensary.	Each Village	1	1	0
PHC & CHC	Per 20,000 population	1	1	0
Child Welfare and Maternity Home	Per 10,000 population	0	1	1
Hospital	Per 100000 Population	0	0	0
TRANSPORTATI ON				
internal road Approach Road	Each village must have good quality roads.	Internal roads are Inadequate.Approach road is adequate.		

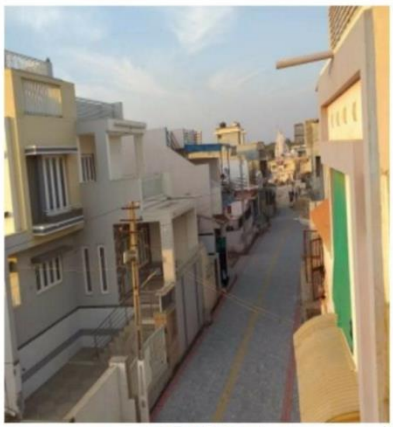
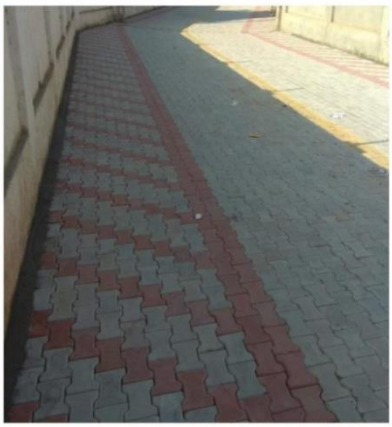
Bus/Auto Stand provision	All Villages connected by PT (ST Bus or Auto)	0	1	1
DRINKING WATER				
WATER FACILITIES		ADEQUATE		
Over Head Tank	Total demand	Adequate	2 lac. Litre capacity.	0
Public Latrines	per 20,000 population	0	60	60
Cremation Ground	Per 20,000 population	0	0	0
Post Office	Per 10,000 population	0	1	1
Gram Panchayat Building	Each individual/group panchayat	1(not well)	1	1
APMC	Per 100000 Population	0	0	0
Fire Station	Per 100000 Population	0	0	0
Police Station	Per 15000 Population	0	1	0
Community Hall	Per 10000 Population	1	1	0

12.7 Summary of Good Photographs in Table Format

(villag visits, Ideal,Smart Village or any other) Photos of allocated village BHATIWADA

PHOTOS OF ALLOCATED VILLAGE

PHOTOS OF SMART VILLAGE SANKHALPUR

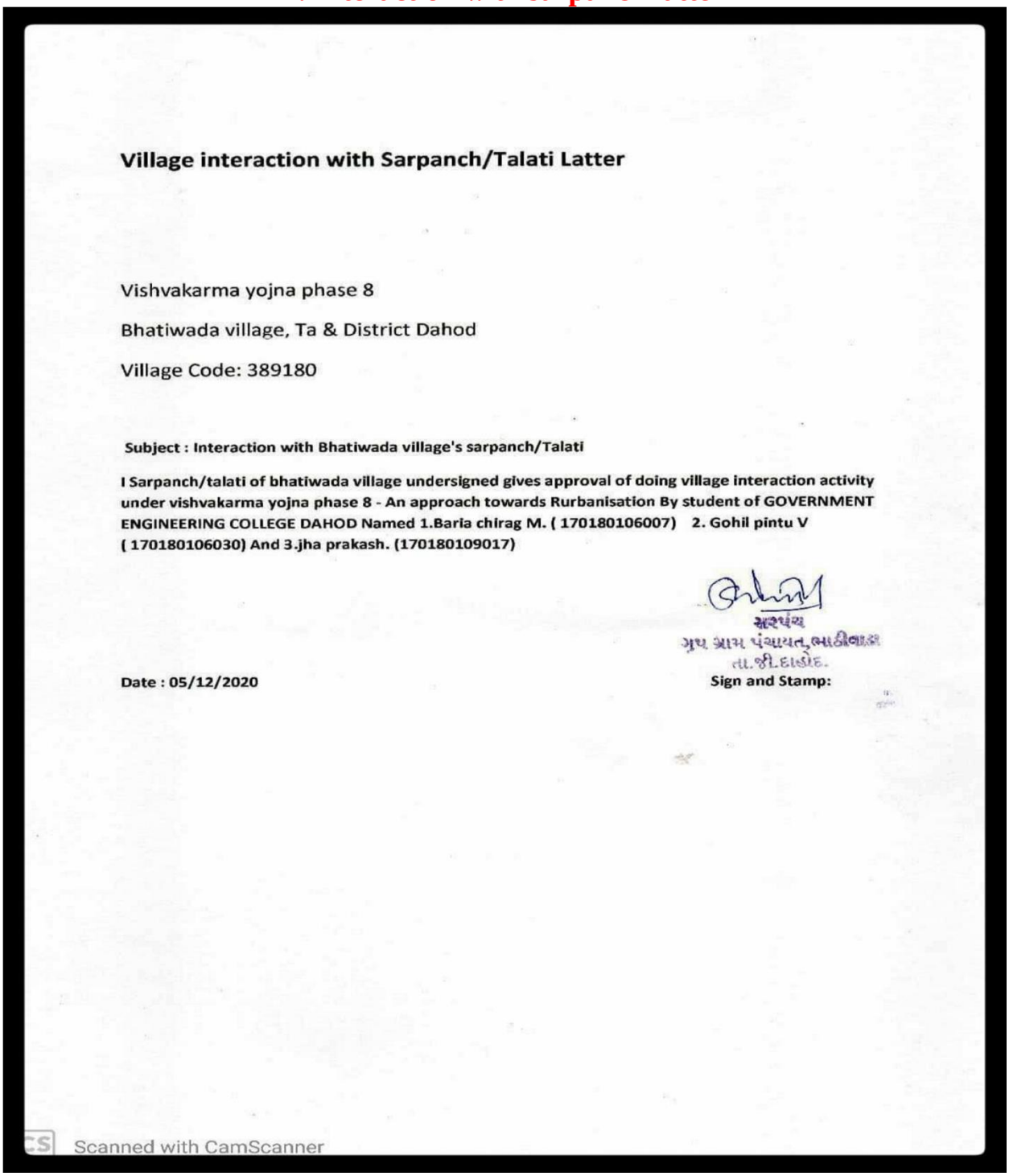



લીલો કચરો
સૂકો કચરો


IN SERVICE OF SHANKHALPUR VILLAGE
Waste Collection Van
FOUNDATION


12.8 Village Interaction with sarpanch Report with the photograph

1. Interaction with sarpanch latter



Village interaction with Sarpanch/Talati Latter

Vishvakarma yojna phase 8

Bhatiwada village, Ta & District Dahod

Village Code: 389180

Subject : Interaction with Bhatiwada village's sarpanch/Talati

I Sarpanch/talati of bhatiwada village undersigned gives approval of doing village interaction activity under vishvakarma yojna phase 8 - An approach towards Rurbanisation By student of GOVERNMENT ENGINEERING COLLEGE DAHOD Named 1.Baria chirag M. (170180106007) 2. Gohil pintu V (170180106030) And 3.jha prakash. (170180109017)

સરપંચ
ગ્રામ પંચાયત,ભાઠીવાડા
તા.જી.દાહોદ.

Date : 05/12/2020

Sign and Stamp:

Scanned with CamScanner

2. Approval latter for swachhata&covid 19 awareness

APPROVAL LATTER FOR SWACHHATA & COVID 19 AWARENESS

Vishvakarmayojnaphase8

Bhatiwadavillage,Ta&DistrictDahod

VillageCode:389180

Subject: Approval of doing Awerness activities of Swachhta and Covid 19 Awerness at bhatiwada village.

ISarpanch/talatiofbhatiwadavillageundersignedgivesapprovalofdoing Awerness activities of Swachhta and Covid 19 Awerness at bhatiwada village undervishvakarmayojnaphase8-AnapproachtowardsRurbanisationBystudentofGOVERNMENTENGINEERINGCOLLEGEDAHODNamed1.BariachiragM.(170180106007)2.GohilpintuV(170180106030)And3.jhaprakash.(170180109017)

Date : 05/12/2020

sign and stamp:

3.Approval latter For proposed Design Approval

APPROVAL LATTER FOR PROPOSED DESIGN APPROVAL

Vishvakarma yojna phase 8

Bhatiwada village, Ta & District Dahod

Village Code: 389180

SUBJECT : APPROVAL OF DESIGN PROPOSAL FOR BHATIWADA VILLAGE

I Sarpanch/talati of bhatiwada village undersigned gives approval of Design proposal for bhatiwada village doing village under vishvakarma yojna phase 8 - An approach towards Rurbanisation By student of GOVERNMENT ENGINEERING COLLEGE DAHOD Named 1.Baria chirag M. (170180106007) 2. Gohil pintu V (170180106030) And 3.jha prakash. (170180109017)

- ★ **Approved main designe proposal for part**
  1.Public toilet
  2. Madical store

Date : 05/12/2020

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તા.જી.દાહોદ.

Sign and stamp: