

# FEASIBILITY STUDY OF SMART VILLAGE

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**Abstract-** A Smart City connects human capital, social capital and ICT infrastructure in order to address public issues, achieve a sustainable development and increase the quality of life of its citizens.

- Smart Village is also defined as a community with a vision of the future that involves the application of information and communication technologies in a new and innovative way to empower its residents, institutions and regions.
- The concept of smart village has become a global phenomenon that exists all over the world. What has made this a globally increasing phenomenon is undoubtedly the recent development in information communication technologies. Integration of ICTs in projects aiming to empower rural communities in different countries is evident of the positive impact on rural people's economic empowerment.
- The present study aimed to address the major issues faced by the community of farmer 'sin the Smart village Charadu in Gujarat and put forward a practical strategic plan to implement the Smart Village project successfully.
- The concept behind the 'smart village' is that modern energy access acts as a catalyst for development – in education, health, food security, productive enterprise, environment and participatory democracy – that in turn

supports further improvements in energy access.

## Index Terms-

- To make easy, rapid, comfortable transportation facility.
- Increase the rate of job opportunities.
- Lifestyle of peoples will be improved.
- Water problems are removing.
- The value of land & other properties will be increase.

## I. OBJECTIVE OF STUDY

- Identify the components and prepare list of works.
- To collect the information (Survey work).
- To connect the village with the mega cites by good roads.
- To make an easy transportation for goods or people.
- Develop the bring public participation through PPP.
- To suggest the appropriate recommendation and develop the new facility.

## II. STUDY AREA LOCATION

- Name of Village:-Charadu
- Tal. Dis.-:Mahesana



Fig.no.1.1 Selected study area (Charadu Village)

### III. ANALYSIS OF VILLAGE

- 0.0.1 Village Information
- Population: -5500
  - Cast of peoples in village (Thakor (98%), Raval, Panchal, Par mar, Patel.)
  - 30% of Village Area has Under Drainage System.
  - 60% of populations are lives in Farms.
  - 24 hours electricity available.
- 0.0.2 Land information
- Total Area of Village :- 906 hector
  - Residential Area :- 15 hectores
  - Farm Lands :- 876 hectores One Under Ground Water Tank:- ( 50,000 liters Capacity )
  - Two Over Head Water Tanks:- ( 1 lacks Liters Capacity )
  - 85 Tube Wells are in village.
  - Two Lakes are in Village.

### IV. SOLUTION

#### 1) Water requirement

- As per Indian std. water usage per person 135 liters used
- So village population  $5500 \times 135 = 742500$  liters required for normal usage
- For agricultural usage as per normal calculation for water 796 hector per hector water require average 500125 lit so 398099500 liters .
- So total water storage available for normal usage as per normal calculation 85 tube well average water use 22000 lit two time in day =  $22000 \times 2 = 44000$  liters x 85 tube well = 3740000 water available for farming as tube well
- Water tank capacity 100000 liters
- Two lake water capacity 269252500

#### 2)Transport facility

- First off require proper road with bitumen wmm proper rigid or some flexible pavement require so easily transport available
- So easy transport for good or agricultural material. As grow fast and make made different compony invest it who may interested in agricultural product.
- So opportunities of villager for job are increase thus the people are observed and

they follow like those movement and improve study stability and open demand for study so great opportunities for villager and their nominates.

#### 3)Rain water harvesting

- Used particular part percolation well as defined that water table level so reduced the water table level keep below the under ground surface of water level.
- 1) Roof top surface rain water harvesting it apply for (1- Catchment , 2- transportion of water 3- First flush, 4-Filter)
- 2)Surface run off

#### 4)wastage management

- 5types are used for waste (Refuse,Reduce,Reuse,Repuprpose,Recycle)
- **Landfill:** this method involves burying off the waste and this is the most common practice for the disposal of waste around the Globe. This method used for recycling or used for compositing work and their used for agricultural section.

### V. SUMMARY

Including above chapter & this chapter we describes the related to details of various methods proposed for the present studies are presented and details of selected study area location. The details of data collection and data analysis required to full fill the proposed methodology will be presented in the next chapter

### REFERENCES

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