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Smart Village

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Abstract : *This project report deals with study and developmen of village as a smart village.We define smart village as bundle of services of which are delivered to its residence and businesses in an effective and efficient manner. " Smart Village " is that modern energy access acts as a catalyst for development in education , health, security, productive enterprise , environment that in turns support further improvement in energy access . In this report we focuses on improved resource use efficiency , local self -governance , access to assure basic amenities and responsible individual and community behavior to build happy society . We making smart village by taking smart decisions using smart technologies and services.*

Keywords: *Magic Pit or Soakpit, RO Plant, Biogas & Production, Rain Water Harvesting , Solar Street Light*

I. INTRODUCTION

In India there are 6,00,000 villages out of them 1,25,000 villages are backward so there is a need for designing and building the village as a smart village . With modernization and urbanization people migrate from one place to another place for different facilities such as education , employment and affinity of people towards the locality or city. Village ismain criteria for development of nation. So, develop the village in such a way that which is self -dependant in providing the services, employment and well connected to the rest of the world i.e. smart village . The smart village corrects the social oversight by providing accommodations for sustainable family relationships without disturbing the lifestyle of different generations . The vision of smart village is that modern energy access can act as catalyst for development in education , health , productive enterprise, clean water, sanitation, environmental sustainability and participatory democracy which helps to support further improvement in access to energy . Initially the concept of development of village is of Mahatma Gandhi i.e. swaraj and suraj village. But, now days it is newly termed as smart village. We know that, India is a developing nation, with the help of smart village we can make India as a SS nation. Now days, our government also gives strong focus on smart village. Government implements so many schemes on smart village.

OBJECTIVE

Provide basic infrastructure. Quality of life . Clean & Sustainable environment . apply smart solutions . Functional Toilets potable water electricity available in school , health entrees . Awareness of Good technology that can be implemented in village , farms & nearby places . e.g. Drip Irrigation , Solar Panel Lighting systems on streetlights etc. Maintain its Identity, Culture & Heritage. Home with access to toilets safe drinking water and regular power. A smart villag knows all information about its citizen available resources applicable services and schemes.

II. METHODOLOGY

Magic Pit or Soakpit:

Green Magic pit can offer a cost efficient opportunity for partial treatment of waste -grey or storm water and relatively safe way of discharging it into the environment and therewith recharging groundwater bodies. As waste water percolates through the soil from amagic pit, small particles are filtered out by the soil matrix and organics are digested by micro - organisms . Sub-soil layers are water permeable in order to avoid fast saturation

Ro Plant:

Reverse osmosis (RO) is a water purification technology that uses semipermeable membrane to remove ions, molecules and larger particles from drinking water. About 60% of diseases afflicting the rural population are waterborne. So, instead of spending money on medical facilities use clean drinking water. Total population of the JAVALGAO village is near to 5000.

Biogas P lant:

Biogas is a mixture of different gases produced by Breakdown of organic matter in the absence of oxygen. Biogas can Biogas can be produced from raw materials such as agricultural waste, manure,municipalwaste,plantmaterial, sewage green waste or foodwaste.

Rain Water Harvesting :

There Rainwater Harvesting is a technique of collection and storage of rainwater natural reservoirs and tanks , or the infiltration of surface water into subsurface aquifers Directly fromroof tops and stored in tanks, Monsoon runoff and water in swollen streams during the monsoon and Monsoon runoff and water in swollen streams during the monsoon.

Solar Street Light:

While Solar street lights harness energy from the sun to provide an alternative source of energy to conventional street lighting Zero running cost Guarantied working in rainy weather. No schedule maintenance for up to 5 years Environment friendly 100% powered by the sun.

III. CONCLUSION

- Locally produced and locally consumed energy.
- Creation of job.
- Contribution to global environment.
- For farmer e-learning etc. facility that will be able to ask there quarries online.
- New technologies in education, e-learning, desktop publishing, horoscope generation of interested person of the village. Transportation of village into comfortable & safe space that enhance quality.

REFERENCES

[1] David fresh water 2000, Direct and indirect rural development policy in a neo conservatine North America..

[2] Dr. Milind kulkarni 2010, International journal of research in engg science & technology.

[3] Zhao Whiffing 2009, International journal of research in engg science & technology

[4] N Viswanadham 2010, Service Science & Engineering Research in India: Agenda for the third Service Revolution in India, Report presented to the Science Advisory Council to the Prime Minister of India,.

[5] Townships for Sustainable Cities 2012 Drivers of National Competitiveness, National Competitiveness council report, National Competitiveness council.