E-ISSN NO:-2349-0721



Impact factor: 6.03

CREATION OF MODEL OF SMART VILLAGE THROUGH TECHNO-SOCIO ASPECT

Sagar Diwakarrao Malkhede

Civil Engineering Department Prof. Ram Meghe Institute of Technology and Research Amravati , India Sagar.malkhede@gmail.com

Suyog Ramrao Dhawade

Civil Engineering Department
Prof. Ram Meghe Institute of Technology and Research
Amravati , India
sdhawade.sdp@gmail.com

Abstract-

Smart village represents the new engine of growth in global development of knowledge capitalism.

- Smart village initiative focuses on improved resource-use efficiency, empowered local self-governance, access to basic amenities and responsible individual and community behaviour to build a vibrant and happy society.
- Now need of the hour is- strategy, integrated planning and above all monitoring and execution of the activities using appropriate governance models.

Keywords— Smart village, Techno-socio aspect.

1. INTRODUCTION

In the Indian context, villages are the heart of the nation. Hence for the development of the nation we have to start from the roots or heart of the nation which is village. And for that first we have to first analysed the current scenario of the Villages in the rural India. In our study we visited some villages to acquire more knowledge related to our topic. Our survey revealed that there are many facilities which are not available properly in the villages till now. Such as water supply, proper drainage system and lacking of educational facilities, medical facilities and many more, for fulfilling there needs people has to migrate towards arban areas. There is lack of awareness among the people about different irrigation techniques and how to use that techniques.

Smart village initiative focuses on improved resource-use efficiency, empowered local self-governance, access to assured basic amenities and responsible individual and community behaviour to build a vibrant and happy society. The concept of "Smart Village" will address the multiple challenges faced for sustainable development of rural India. A "Smart Village" will provide long-term social, economic, and environmental welfare activity for village community, which will enable and empower enhanced participation in local governance processes, promote entrepreneurship and build more resilient communities. At the same time, a "Smart Village" will ensure proper sanitation facility, good education, better infrastructure, clean drinking water, health facilities, environment protection, resource use efficiency, waste management, renewable energy etc, will look after many sustainable goals.

Components of Smart village are as follows:

1. Transperent Bus-stop: In village we are providing Bus-stop which is constructed with the use of glass. The glasses which are using for the construction of Bus-stop is magneto-glass, which is transparent and durable and cost effective. The function of magneto-glass is as similar as solar panels. It absorbs sunlight at the daytime and transfers it to the motor which converts it into electric energy which will be used for the lightning purpose at the night time in the Bus-stop and for street lights. As it is transparent it also ensures safety of the women if the women's, they want to travel at night time.

- 2. Telemedicine in Hospital: In hospital we are providing telemedicine facility in villages. Minor disease can cure easily and immediately. But in case of chronic disease or in case of emergency we cannot migrate the people from village level to urban level, for that we are providing telemedicine facility at the village communicate with the higher authority in the urban area through video conferencing and can take suggestions from them and can solve the problems of patients at certain extent in hospital.
- 3. E-education in school: In the village we are providing e-learning facility. Why our country is a developing country not a developed one? Because we are lacking in the practical knowledge. For that we are providing e-learning facility in the school. By this we can show the virtual videos of the different topics to the students. So that they will able to know how the work is actually done and get the practical knowledge and can compete with the urban students.
- **4.Segregation plant:** In the village, we are providing waste collector bus which collects all the waste from the surrounding and take up to the segregation plant. Where all the waste is segregated in two parts ie. organic waste and inorganic waste. We are also providing plastic bituminious road, the plastic we will get it from segregation plant
- **5.Vermicomposting**: In the village we are providing vermicomposting plant. Organic waste such as vegetable waste, fruit waste, grass etc. are decomposed in this plant. And the manure form by this process can use for farming purpose
- **6.Agricultural Produce Marketing Committee (APMC):** In the village we are providing APMC. In the APMC the yeilded crops can directly sell in the market without any brokership. This leads to increase in production of the crops by which more money will be available with the farmers and also increases there standard of living of the farmers one step towards development of villages.

7. Other facilities which can be provided in the village are as follows:

- 24*7 Safe drinking water
- Sanitation facilities
- Play ground
- Buildings for social purpose
- Rain water harvesting
- Employment sector
- APMC
- Agricultural development
- Solar street lighting

2. RESULT AND DISCUSSION

A smart village knows about its citizens, available resources, applicable services and schemes. It knows what it needs and when it needs. As we discussed earlier, our initiative of creating the smart village the basic principal sustainable development was to focus on improved local self-governance, access to assured basic amenities and responsible individual and community behaviour to build a vibrant and happy society.

And also to collect community efforts and strength of people from various streams and integrate it with information technology to provide benefits to the rural community.

For this, we have provided so many basic things and facilities which were not working properly till now. Such as water supply, electricity supply, proper drainage system, effective medical facilities, efficient education facility, effective health care, efficient and modified transportation & infrastructure and smart & economical farming, etc.

And the results of this are:

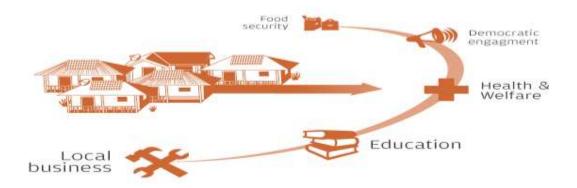
- Smart village connects to the towns and cities through information and communication technologies. Such technologies enhanced education and health services by providing links to the world's knowledge base and opportunities for distance learning, as well as supporting initiatives in m-health (known as telemedicine). Connectivity also opened up participation in governance processes at local, regional and national levels.
- Smart village served as complementary engines of economic growth to smart cities, producing goods and services for local rural markets as well as high-value-added agricultural and rural industry products for both national and international markets.
- Smart village captured many of the benefits of urban living while retaining valued aspects of rural life and ensured balanced development at the national level. This enabled villagers to attain healthy and fulfilling lives, achieve their development potential, earn a viable living and be connected to the wider world, giving them a real choice between the traditional route of migration to a city, or life in a smart village.
- Smart village connected to towns and cities through information technology. Which helped in developing the village and creating a lot if opportunities of employments. And the employment generates.
- As the employment generates in a village ,people don't have to migrate for employment and towards towns or urban area is reduced.
- It also migrates the population flow from urban to rural area
 As the various facilities provided to farmers, helped them to increase their yield of crop as well as their standard of living.
- And by this, the quite difficult question of suicide of farmers, got reduced.
- Contribution in the national economy of the country is increased.

The human development index is a composite statistics of life expentancy, education and percaptia income. A village or the city scores higher HDI when the life span is higher, education level is higher and GDP per capita is higher .by providing the facilities in the villages like education, construction of roads and brick, irrigation system and tele medicine many more by which we can increase humanity index

E-ISSN NO:2349-0721

1. EARLIER RESEARCH

The challenge of smart village: Unfortunately it is a fact that, in the world today, 1.3 billion people remain without access to electricity. In addition, 3 billion are still cooking on dangerous and inefficient stoves. Many of them live in remote rural village communities. Until such communities have access to modern energy services, little progress can be made to develop their economies and improve their lives



The Smart Villages Programme

The Smart Villages Initiative worked in each of six regions across the world to bring together the diverse set of players, providing an open and stimulating environment conducive to generating new insights into how to tackle the challenges of village energy access for development. In each region we then followed-up with complementary activities include briefing meetings for policy makers, innovation competitions to generate new ideas, training courses, policy advice and further workshops focusing on specific regional and global prioty issues. Final events in the regions drew together lessons learned in conjunction with policy makers, donors and development agencies, and considered next steps

The Way Forward

Following the successful conclusion of this first phase of activities, the Smart Villages Initiative intends to take forward their findings, and leverage the unique global base of knowledge and network that we have assembled, to pursue the linked goals of universal energy access and rural development. Working through a newly established non-profit company – Smart Villages Research Group ltd – we intend to focus on:

- Facilitating the establishment, in partnership, of pilot "Smart Villages" around the world to act as examples of the concept and provide a base for demonstrating the sustainable impact of this holistic and sustainable rural development approach.
- Working with research partners around the world to evidence the impact of the holistic "Smart Villages" development model, through baseline studies and long-term impact assessment across multiple development metrics, across multiple SDGs.
- Provide consulting and advisory services on energy access and holistic models of rural development, harnessing the wealth of information and the experience we have assembled through our global network during the course of the past 5 years.

4. CONCLUSION

- 1. It is concluded that the villages in the India are very much backward and in order to bring them at par with the urban areas, we need to make revolution in the villages and make them smarter.
- 2. Also the problem of debt ridden farmers who are committing suicide will be solved to a greater extent with the increase in the income of the people at village level itself.
- 3. This is also necessary to uplift the living standards of the commons in the far flung remote villages of the country to speed up the economy.