

Adarsh Gram- Smart Village

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Abstract— India is an agricultural country and is made up of many small villages. Most of the people in India live in villages and engage in farming. The people living in rural areas need the same facilities and living standards as people of suburban and urban areas. Smart Village is a concept that is modern access to the facilities in the development of health, education, security, good and healthy environment, Good communication system, Transportation facility, productive enterprise. These are technologies that will act as development means. There are N nos. of government schemes which will help to develop the villages. In this paper, we are explaining how villages can be converted into smart villages in various ways. This study will help to understand and implement smart village concepts.

Keywords—Agricultural country, Village, Living standard, Smart Village, government schemes.

I. INTRODUCTION

India is one of the fastest developing nations in the world and our economy is growing at a high rate at the moment. While the growth and development of living quality are not equal between the cities and villages. India is striving hard to minimize the gaps between these two. At the beginning of the 20th century, M. K. Gandhi declared “The soul of India lives in its village.” And “If the facilities available in the cities are not made available to the rural population, the Governments will not have done their duties.” Dr. A.P.J. Abdul Kalam. This paper shows the overall view of the development of rural areas as Smart Village.

The Smart village concept is today’s most powerful development model for the growth of our rural communities. Through the “Smart Village Projects”, India can improve the living standards of our rural communities by improving the education, health, food, security, productive enterprises, clean water, and sanitization which in turn contributes to the speedy growth and development of the country’s future Despite the rapid pace of urbanization in India, 66. 4% of people live in rural areas. Therefore, it is very important to meet the basic needs of the majority of the people and provide them with livelihood opportunities. Implemented by the government to build infrastructure in rural areas, as well as to create new employment opportunities through skill development Due to various schemes, the poverty rate has come down from 55 percent in 2005-06 to 28 percent in 2015-16. Despite such plans, the objective of creating means of employment and livelihood has not been fully achieved.

Almost all the youth from villages have been migrating to cities in search of employment with high packages, education with the use of modern technologies and innovative ideas in order to achieve a good quality of life. There are many scholarships provided for children in villages by the Government so that they can utilize these opportunities for better education facilities but due to illiteracy they fail to achieve it. There are no proper transport services or any hospital nearby in case of an emergency. Instead of migrating from villages to cities, we need to bring the concept of “Smart Villages” i.e. educating the villages with modern technologies and innovative ideas for the productive and good quality of living.

II. LITERATURE REVIEW

According to David Freshwater (2000), sustainable development is generally discussed in terms of environmental considerations, but from a rural community perspective, sustainable development must address how the people of the community generate the income to maintain their rural lifestyle. Dr. Milind Kulkarni (2010) says the majority of the population in India still lives in villages. A lot of work needs to be done in making the villages clean and sustainable to live in. There are different aspects of a clean village such as water supply, sanitation, indoor air quality, solid waste management, and renewable energy, etc. The paper mainly focuses on a clean village and gives recommendations for Smart village. N. Viswanadhamet. al. (2010), conclude that the techniques and technologies needed to build a smart village are available now and some of them are being used in villages in India but these are disparate, fragmented, and piecemeal efforts. The need of the hour is the strategy, integrated planning and above all monitoring and execution of the activities using appropriate governance models PinakRanadeet. al (2015) says smart villages are the need of the hour as development is needed for both rural and urban areas for better livelihood and Information technology will offer effective solutions. A specially designed suitable framework for rural areas on the grounds of Science, Technology, Engineering, Regulations, and Management will play an important role to build next-generation smart villages. RutujaSomwanshi. al. (2016), concludes applying all cultural, social, educational, economic, environmental, services, and techniques the overall problems of Javalgao village are reduced. Living standard and the overall status of the village increases, because of which the village becomes self-dependent and contributes towards the development of the nation. Dr. Pritesh Y Shukla (2016) says a smart village knows about its citizens, available resources, applicable services, and schemes. It knows what it needs and when it needs it. Smart Villages will not only reduce this migration but also irrigate the population flow from urban to rural areas as well.

What is Village?

A village is a clustered human settlement or community, larger than a hamlet but smaller than a town, with a population typically ranging from a few hundred to a few thousand. A rural area is located outside the cities and towns. Agriculture is the chief source of livelihood along with fishing, cottage industries, pottery, etc.

What is Smart Village?

A Smart village is the village which gives all the basic facilities and requirements of people in a smart way. "Smart Village refers to a concept developed in a rural area that provides solutions to problems that have occurred and improves the quality of life."

Need For Smart Villages:

More than 70% of India's population is associated with farming & agriculture, mostly living in villages. Over the past decade, younger generations living in villages have been migrating to urban centers, looking for a higher standard of living, better infrastructure, and increased earning potential. Unfortunately, this trend has negatively impacted rural villages, leaving behind an aging population and an agriculture labor shortage. Reduced agriculture productivity has, in turn, created food shortages and inflation. To address this farmer's pressing need, India has launched a "Smart Village" framework to build sustainable ecosystems outside cities to create an attractive livelihood and help counteract the trend of migration to urban centers. Our Approach is to "Enhance touchpoints, actively Engage all people, & thereby Empowering our village community." Our objective is to build a model framework that other organizations can use to create smart villages throughout India, and in other countries as well. "Smart Village" framework is very scalable and replicable across geographic locations.

III. OBJECTIVE OF SMART VILLAGE

There are some objectives through which we can achieve a smart village. These are the essential parameters for a smart village.

3.1 Health:

Health is a major concern for everyone and it always affects the development of the nation. A healthy nation can perform better. So that providing the below facilities will help to improve. a) Open Defecation Free Village: A survey released by the National Statistical Office (NSO) in November 2019, titled "Drinking water, sanitation, hygiene and housing conditions in India", claimed that about 28.7% of rural households across India still lacked access to any form of latrines. Moreover, 3.5% of those who have access to latrines, don't use it.

A single gram of feces contains millions of viruses, bacteria, and parasitic cysts, and contributed to nearly 100,000 diarrhoeal deaths of children under five years in India. Sick children, through the repeated damage to their stomach lining and subsequent ability to absorb nutrients, therefore become susceptible to malnutrition, stunted growth, and opportunistic infections such as pneumonia. In addition to being a serious health risk, open defecation and the subsequent diarrheal illnesses severely impact a child's ability to receive an education. Poor sanitation also negatively impacts the lives of women and children by crippling national development, which leads to workers living shorter lives, producing and earning less. So Open defecation free village will help to reduce the above problems.

b) 100% Vaccination: Two in five infants nationwide did not receive complete immunization, leaving them susceptible to disease. An intensified effort focussing on lagging districts is crucial to improve the lives of millions of children and, consequently, their ability to learn and earn as well as their peers and to contribute to the economy. Spreading awareness in the communities regarding vaccination which will ensure public health. 'Mission Indradhanush' is health

c) Door To Door Solid Waste Disposal: Door to door solid waste collection will lead to the effective working of waste management which will ensure the health-related issue and inconvenience regarding the waste disposal. Organic composting can be produced by decomposing waste and can be used in farming.

3.2 Energy:

It is most essential to survival for the people which ensures the growth of the community. Many people live in remote rural villages where there is no proper access to energy services Where irregular power supply hampers productivity, therefore little progress can be made in order to make villages smarter one. There are many schemes like Solar Energy Subsidy Scheme, National Biogas, And

Manure Management Program, etc. Reducing the dependency of Natural Resources like water and coal.

a) Biogas Plant: Various people having Animal husbandry the branch of agriculture. The village of Strem in Südburgenland makes use of fallow agricultural land in the region, for energy production. The process of solid-state fermentation is used to convert grass and clover together with whole maize plants into biogas. It reduces the cutting of trees for fuel for cutting.

b) Solar Panels: Solar power, a renewable and clean source of energy, could fuel rural India's growth. With a drastic drop in the capital costs and efficiency improvements, solar energy is now a viable alternative for the power-starved individual households and small businesses of rural India. Street light and water supply can be run through solar energy.

3.3 Education: Around 30-40% in India is illiterate, among them most of the people are from villages due to lack of facilities and amenities provided to them. There are many children engaged in fishery, farming, pottery due to poverty and lack of facilities. By providing.

a) A' Grade Primary School: Ensure the path of future education. Provides the basic knowledge and fundamental, usual calculation of day to day life. Most of the time primary schools are out of the focus so it needs to be improved.

b) Anganwadi: Anganwadi should have a healthy environment providing food and other facilities which will help the children grow with fun and lots of learning activities. It should create an interest in schooling and education.

c) 100% Literate Village: People from villages should be able to read, write and understand the usual day to day life calculations. They should understand various government scheme facilities which are there for them.

d) Qualitative Education: Qualitative Education will improve their intellectual thinking, They should get proper knowledge regarding science and technology, to develop innovative ideas and make villages smarter with proper educational facilities which can prepare and create awareness among them.

it allows the student to think big and apply their ideas in self-development. Along with these moral values and ethics should be added into the student it will definitely ensure the growth of the village.

3.4 Employment; Employment is the main factor which causes each and every youth to migrate from the village. Some youth get jobs but are disqualified due to a lack of technologies and improper communication skills. Hence it's very important for each student and employers to learn the different technologies for their employment. All the villages were self-sufficient and self-employed before the arrival of the British in India. The life of the whole people was running on twelve balusters in the village. This method of grain in return for work was seen in every village. As a result, all the people had jobs and there was no shortage of employment. It would not be wrong to say that the British came to India and from here the self-sufficiency of the village was destroyed and it began to become paralyzed.

a) Modern Farming And Drip Irrigation: Agriculture is the main outcome from villages, drip irrigation which will ensure the effective utilization of water resources for farming and good production of crops will increase the farmers income.

b) Opportunities Of Employment: villages were self sufficient as there were artists long ago. Youth of village can start the business based on primary business. Various products can be produced through groups of women's having various skills. There is a large demand from the market for hand made products.

c) Development Of Dairy Industry: Like the other most popular business in the ruler area is animal husbandry which complements agriculture. Through this dairy industry can be improved. The dairy industry provides livelihood to millions of homes in villages, ensuring supply of quality milk and milk products to people in both urban and rural areas.

IV. GOVERNMENT SCHEMES DEVELOPMENT of RURAL AREA

There are many schemes which provide the facilities to rural people. The only need is that people should be aware of the schemes. These schemes will make them self-sufficient with small help from the government.

4.1. Health:

a) AamAdamiBima Yojana- AamAdamiBima Yojana is a social security scheme for rural landless families. The scheme will provide coverage to the head of the landless family for partial disability or earning members of the family and also provide finite benefits such as educational assistance to the children studying in class 9th to 12th.

b) Mahatma Jyotiba Phule Jan Arogya Yojana- Mahatma Jyotiba Phule Jan Arogya Yojana and Pradhan Mantri Jan Arogya yojana

are being implemented jointly in the state. The main purpose of this scheme is completely free quality health care for the treatment of critical ailments through specialist hospitals and specialist services.

c)Family Welfare Scheme-The department of Family Welfare is responsible for aspects of family welfare like maternal health, reproductive health, pediatrics information, education, and communication. They also help NGOs, international aid groups, and rural health services. d)National Rural Health Mission- The main aim of the National Rural Health Mission is to provide accessible, affordable, and quality health care to the rural population, especially for fenceless groups.

4.2 Energy:

a)Ministry Of New And Renewable Energy

Solar Energy Subsidy Scheme

This scheme is applicable for the institutional, residential and social sector. The central government pays 30% of the benchmarked installation cost for rooftop PV systems.

b)National Biogas And Manure Management program- The main purpose of the National Biogas And Manure Management program is to provide for family type biogas plants mainly in rural and semi-urban areas for household purposes. It is used as a clean cooking fuel and as a source of lighting.

c)PradhanmantriUjjwala Yojana- PradhanmantriUjjwala Yojana was launched by Prime Minister Narendra Modi in 2016. the purpose of this scheme is to distribute LPG connection to women below the poverty line. Under this scheme, 50 million connections are distributed.

4.3 Education:

a) Sarva Shiksha Abhiyan(SSA): Sarva Shiksha Abhiyan(SSA) is an Indian Government programmed aim is to provide primary education to all children between ages 6 to 14. The Sarva Shiksha Abhiyan is free education for children and gives quality education to children.

b)National Program for Education of Girls at Elementary Education(NPEGEL) c)Operation Blackboard: Operation Blackboard scheme was launched by the Government in 1987. The main purpose of this scheme is to provide minimum facilities in a primary school in the country. They provide teaching material, sports toys, books for the library, blackboard, furniture, etc.

d)Scheme Of ICT at School-ICT scheme was launched in 2004 and revised in 2010. It is to teach computer basic skills to students for improving student skills. The main purpose of skill is the establishment of a smart school and strengthen the student in e-content development.

4.4 Employment

a)Integrated Rural Development Program- The main aim of Integrated Rural Development Program is providing assistance to the rural poor people in the form of employment opportunities. So that

improves the standard of life, increases the family income, and also creates self-employment opportunities.

b)Jawahar Rozgar Yojana- The Jawaharlal Rozgar Yojana was restructured and replaced by Jawaharlal Gram Samridhi Yojana. It creates sustainable infrastructure in rural areas as well as providing employment opportunities to the rural unemployed.

c)SampoornaGramin Rozgar Yojana- This scheme has been launched by the government of India to provide food grain and work to the poor. Those people who come under the poverty line will be given facilities under this scheme. Also, the provision will be made to provide good employment to the poor. d)Pradhan Mantri Kaushal Vikas Yojana- Pradhan Mantri Kaushal Vikas Yojana is a skill development inception scheme of the Government of India symmetry and recognition of the skill. In this scheme providing quality training to people to develop a skill for daily earners also increases the working efficiency in employ.

d) MNREGA Yojana-The aim of the scheme is to raise the standard of living of the rural masses and create permanent assets by providing unskilled employment, long-lasting jobs, and providing social infrastructure. The scheme work should be toward a specific set of rural development activities such as water conservation, harvesting, rural connectivity, flood control protection are included.

4.5 Women Empowerment:

a) BetiBachao, BetiPadhao- In these full of technical facilities era some people kill their daughters when they know that it is a crime

to commit feticide. The government of India started the scheme of BetiBachao, BetiPadhao Yojana. It ensures every girl child gets a quality education.

b)Asmita Yojana(NARI)-Asmita Yojana is a scheme launched by the Government of Maharashtra to provide sanitary napkins to women. The Asmita Yojana scheme is run through self-help groups to enable school girls and women to buy sanitary napkins at affordable prices.

c)Balika Samridhhi Yojana- To increase the quality of girl child education the Central Government launched the Balika Samiriddhi Yojana. Under this scheme financial assistance is provided by the government for the education of the daughter from her birth.

V. OUTCOMESof SMART VILLAGE

5.1 Economical Growth: As India is an agricultural country and most people live in villages, improvement in villages will definitely improve the country. Making villages self-sufficient again improves the living standard and economical condition of people. This will increase the nation's GDP.

5.2 90% Tax Collection: Tax collections at the panchayat level are extremely low as they were not having money to survive themselves and not getting facilities as per the expectation of people so that they were unable to pay tax. But, after the conversion of villages into smart villages the snoring will definitely change and they will become capable to pay tax. The literacy of people will also affect the mentality of paying taxes. Which will lead to a 90% tax collection?

5.3 Food Security: Production of agriculture will increase as we are adopting modern techniques for farming and reducing the cost of production. Everyone will be employed and get good pay. Self-employment will also increase which provides food security. Various government schemes are providing food for children. Swastdhanya Dukan (Ration Shop) is another facility through the Department of Food, Civil, Supplies, and Consumer Protection that provides the complaint facility and information regarding rates and availability of grains which again provides food security.

5.4 Good Health: 100% Vaccination, open defecation free village,100% Individual Toilet, door to door solid waste disposal will ensure good health and reduce diseases caused by lack of cleanliness.

5.5 Migration: Smart village will not reduce migration from village to city, it will create reverse migration. People from the city will come back to villages to enjoy the life in villages and this will really be the result of smart village.

VI. CONCLUSION

This will create awareness about Government Schemes for rural areas. The education system will bring a drastic change in the community. Efficient communication systems will increase the exchange of knowledge. Improved sanitation conditions, Safe drinking water facilities, Domestic Solid waste and liquid waste management will ensure good health. The use of renewable energy will increase productivity. Food security through various government schemes and self-improvement. Transparent and Good governance will bring government facilities in an easy way. Education will bring Basic knowledge for survival in the world and for awareness. as well as Social Development, Environmental development, Self-development. The local business will lead to economic development.

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