

“TowardsGlobal Village”

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Abstract - “India Lives in its Villages”-----Mahatma Gandhi Smart Village is the modern energy access as a catalyst for development in Education, Health Clean water, Sanitation better Infrastructure, Security, productive enterprise better environment access.

In this paper we have focused on improved resources use efficient local self-governance access to assure basic amenities and responsible individual and community behavior to build happy society. Making of smart village depends on taking smart decision using smart technology and smart services. Initially the concept of village development is of Mahatma Gandhi. i.e. Swaraj and Suraj Village. A smart village will encompass a sustainable and inclusive development of all seasons of village. So that they can enjoy a high standard of living. The smart village concept is based on local conditions of infrastructure available resources in rural areas and local demand as well as potential of export of good to urban areas. The concept of smart village is also addressing multiple challenges such as unplanned urbanization under development of village migration for economic pursuit's better standard of living....etc.

The concept smart village will address the multiple challenges faced for sustainable development of rural India. 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.

Key Words: Smart village, up gradation, Sustainable Development, Catalyst, Challenges, Strategies, ICT.

1. INTRODUCTION

1.1 Objective-

1-The main Objective of global village is to raise the economic and social level and living standard of rural life.

2- To analyses the challenges of rural life Rural Economy, and suggest possible ways to mitigate these possible issues.

3-Use of internet for development of village i.e. ICT, GIS, IT.etc. which are the unbreakable pillars to support the whole process of village development.

4-Make people aware of imbalance in sex ratio.

5-Mobilize financial resources for the community.

6-Upgradation of skills of rural youth for the self-employment opportunities.

1.2 Present Scenario of Rural India-

In India the number of rural units or village have increased from 6, 38,588 to 6, 40,867. According to 2011 census rural area has population of 68.84% whereas urban area has population 31.16% only.

Present scenario of rural India faced with multiple developmental challenges the critical includes

- 1- **Population-** The increased population which will cause severe pressure on natural resources and the use environment.
- 2- **Pollution-** Pollution creates adverse impact on agriculture production and also pollutes the natural resources of water.
- 3- **Health-** Rural India shows poor health status. Due to lack of clean drinking water, hygiene sanitation and drainage facilities, inadequate health care facilities leading to high child mortality and morbidity loss of labour productivity, economic loss, poor quality of life .The rate of infant mortality in rural India is marginally higher than the cities on account of poorer access to safe drinking water sanitation and health care supports.
- 4- **Infrastructure-** Poor infrastructure for receiving timely information on development, opportunities new technologies, forward and backward linkages, credit facilities and development policies of the Govt.
- 5- **Natural resources-** Depleting natural resources resulting in insecurity of food and employment compels about 40% of rural population to live in poverty.
- 6- **Globalization** – Poor farmers do not have the capacity face the cut throat competition and hence they are bound to perish.

Smart village is a process that can keep the village attaining sustainable development it is also habitat on which human being can live with pleasant environment

The effective and efficient planning of smart village is main consideration for its maximum benefits the aim of designing and planning is based on its energy conservation, efficient transportation, and biodiversity, waste management; water shed management, rain water harvesting structure on conventional resources

1.3 Need for smart village-

Now a day it is most important and urgent need for designing and developing "Global village" Which are independent in providing the services and employment and having good connectivity to the world? Based on various programs under taken by central govt. and state govt. along with further technology initiatives smart village can achieve smart infrastructure smart services delivery smart technology and innovation smart institution along with smart classroom. In vital sector such Agriculture infrastructure, community, social services and rural development as a whole our performance is not good/ appreciable.

1.4 Components parts of smart village---

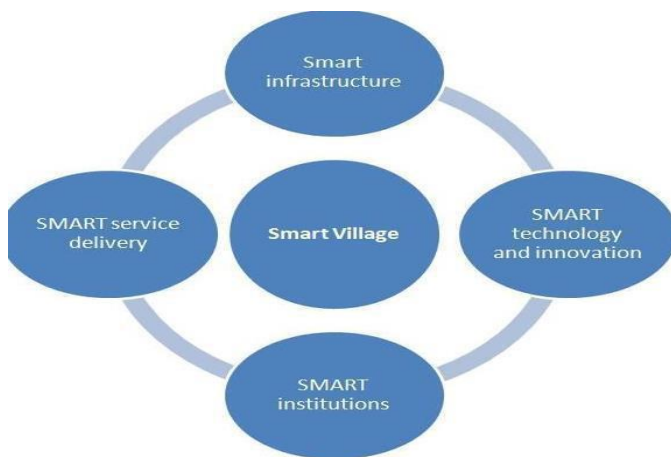


Fig.-1: Components parts of smart village

Advantages of proposed system-

- 1-Economic growth of village
- 2- Sustainable electricity supplies
- 3-sustainable Business
- 4- Smart utility
- 5- Smart environment
- 6- Smart education
- 7-Energy management
- 8- Reuse of Treated water
- 9- Smart Health
- 10-Water management

- 11- Different Govt. Schemes
- 12-Adarsh GaonYojana.
- 13- Gram Swachata Abhiyan
- 14- Jalsandharan
- 15-Water Shed Development Programme.
- 16- Rajiv Gandhi Garmin Vidyutikaran Yojana.

1.5 Services Required for Smart village-

- 1-Grievance Redressed.
- 2- Solar Energy.
- 3- Rain Water Harvesting.
- 4- R.O. Water.
- 5- Modern STP and WTP plant.
- 6- Solid waste and Liqide waste management.
- 7-Smart Security.
- 8-Modern and Efficient Transportation System like Minibus
- 9- Women Empowerment.
- 10- E- governance.
- 11-Latest and Affordable Medical facilities.
- 12- Functional Bank Accounts like cashless facilities and cashless transaction
- 13-Smart Lighting like LED

2. Methodology

The design methodology that we propose for building a smart village consist of following

- 1- Formulate the growth strategy of village
- 2- Assessment of the investment climate of the village
- 3- The Optimum use of naturally as well as Artificially Available resources.
- 4- To Overcome the Conventional Problems or naturally occurring Issues.
 - If the village is tourist location then the growth strategy would be aligned towards construction of restaurant and hotels.
 - Developments of transportation, Electric Vans, Vocational Training to act as a Guide Security, Working as Chefs in restaurants, Kirana shops selling the unique products, made in the village only. 'Pharmacies and Hospital services through mobile vans....etc.

- If the Village is on hilly area or on mountain the Solar Energy and Wind Energy can produce in that village itself i.e. locally produced and locally consumed energy. And are it use for village development itself.
- Job Creation with in the village and not mitigate people from village to city.
- Global village can reduce reliance on fossil fuels and contribute to reduction of Green House Gases like CO₂.
- For farmer E-Learning –etc. facility that will be able to ask the quarries online.
- All the residents of the village can be trained to be engaged in providing above mentioned services.
- Once there is a clear picture on the kind of industries that must come up in the village then finding agencies microfinance institutions or NGO's that can be decided.
- The business development comes to the village e.g. There is a serveral village in India like Jaipur Rugs, Pochampally Saress , Lonavala Chikki.etc are the part of global Value chains.
- Smart village will not only reduce the migration but also irrigate the population flow Urban to rural area.

2.1 Vital Roll of Transforming Agents.

- NGO
- SHG
- PEOPLE
- CORPORATES

Voluntary social services have been an integral part of the socio- cultural and religious ethos of our society from ancient times

The objective has been increased human capacities by promoting non-economic factors such as education health nutrition which in turn would speed up the process of the economic development.

Awareness program for people-

- 1-Government contribution
- 2- Promoting training program

NGO and govt. authorities can arrange trainings to aware the people give training to all age people by using social media like video clips, Facebook, smart phones, Whatsapps –etc.

1-NGO.

NGO act as a Planner and Implementer of developmental plans and perform a variety of services and humanitarians.

The role of NGO is both co-operative and complimentary to the state but the state NGO partnership alone cannot resolve all the socio- economic problems. Hence it has to be in co-ordination with all agents of social change.i.e. The state local self govt. the corporate sectors the academics and civil society groups.

NGO's can play a significant role in strengthening local self govt. facilitating interaction and co- operation with state departments. and also acting as a catalyst to effectively implement various departmental schemes. The role of voluntary agencies in the development of rural areas can be to supplement efforts of govt. for the upliftment of the poor and needy disseminate information about development scheme and program of govt. to rural people.

Make people aware of imbalance in sex ratio.

Mobilize financial resources for the community.

Help in Upgradation of skills of rural youth for the self-

employment opportunities, facilities, the formation of self-help group and micro finance ensure protection of women and children's right and abolish ill of child labours and make available technologies in a simpler form to the rural poor.

NGO services focuses on assessing individual strengths and settling personal goals and

Encourage overall growth and development.

NGO's plays vital role in co- ordination collaboration and bridge the communication between the govt. and pvt. Sector.

NGO creating awareness among the public active to promote education e.g. free education to girls or women i.e. RTE (Right To Education Act)

NGO's have important role in bringing social change and development.

The role of NGO's has very important to protection of environment through social services.

NGO's are taking up this job enthusiastically, sportingly and successfully.

2- PEOPLES ROLE.

1-Inculcating respect for the cultural heritage.

2-Inculcating hygienic behavior and practices

3-Volunteerism – action for promotion of voluntarism like Bharat Nirman.

4- Reducing Risk Behaviour –e.g. Smoking Alcoholism substance abuse.

5-Behavioral change- e.g. Seminar and training programme on personality improvement. And various program Implemented by local authority, Starting of Good Work from himself.

6-Awareness of various govt. schemes like Mahatma Gandhi national rural employment guarantee scheme, drinking water pipe line with the help of Rashtriya Peyajal yojana.

3- SHG.

When individual on his own initiative act in a conglomeration to meet there individual common needs with the primary focus on self-reliance it can called as self-help group.

The motto of self-help group is "Co-operation rather than Competition"

They provide benefits of economies of scale cost effective alternatives for different functional services collective learning's democratic and participatory culture and a firm base and platform for dialogue and co-operation.

SHG developed from a common binding force common need interest and concerned especially for the rural poor it is the common binding force which makes SHGs function more efficiently.

Human beings are using internet, smart phones, smart TVs, Living in smart homes ---etc. those peoples are called as "Smart Age Peoples" In case of SHG's Smart age peoples are also there and proves they are most efficient and hyper active.

ICT/ IT and GIS are the unbreakable pillars to support the whole process of village development smart village concept will have potential to uplift the grass-root level of the country hence adding feather in the overall development of India.

4-PUBLIC PRIVATE PARTNERSHIP [PPP]

It may be difficult to implement the same model of village development for all the villages.

To address these complex problems Public Private Partnership (PPP) may play key role for developing smart village.

So that the targeted work of making Global Village will be completed within stipulated time and the result will show quickly. This will possible only by the partition of Public Private Partnership.

5-CORPORATES- Through CSR REPORT (CORPORATE SOCIAL RESPONSIBILITY)

Different types of industries and factories can come together and work for developing these villages under there CSR clauses.

Also they can Adopt village for development and becomes "Roll Model" or

"Bench Mark" of that "Adopted Village" to the world under such clause.

The development can be done through following ways

- Plantation.
- providing RO water facilities.
- Water Tanks.
- Three wheeler cycles to the physically handicraft people.
- Monthly Free Health checkup Camps may provide in such village.
- Blood Donation Camps
- Provide Free Ambulance Services should be there under CSR clause.
- Nana- Nani Park i.e. Gardens for senior citizens.
- Banks also provide cashless facilities, free debit cards, free credit cards.
- Banks also provide low rate of interest loans for the needy youth powers as

Well as to the Women's (Women Empowerment) like Mahila Bachat gut--- etc.

So that they can establish their own business like Goat Farms, Poultry Farms Sewing Machines Business works. etc.

Corporates should provide funds for poor students Education purpose like sex education to village youth and mitigate the percentage of illiteracy.

Also provide Free Sanitary pads to the Girls in such Village. and provide toilets in slum area.

Visitors may visit to the villages and revenue may get to the local authority such as Grampanchayat in the form of Entry fees, parking fees ---etc.

Also important things is that there should be establish a "Free Training Centre" in such places and also provide trainings to the visitors so that they will give proper message through social media like Facebook, Whatsapps, Internet .etc. to the other peoples.

By taking a full benefits of above mentioned facilities we can built a splendid example of Global Village and the new identity of India will be "The Country of Global Village" in the Universe.

3. CONCLUSIONS

While doing this project work, we have concluded that-

1-Global village planning can have a major impact on national development .These efforts can increase the decision making power of society by allowing them to make intelligent and effective decision at appropriate times.

2-The sustainable development of villages will be takes place.

3-The GDP of India will be raising when number of global villages are increases.

4-The population of metropolitan cities like Pune, Mumbai and Bangalore will mitigate because of self-employment, entrepreneurship in villages.

5-One can Said that, **“The Rome wasn’t built in a day”** like such Phrase This movement takes some time to change the situation but the sustainable Development surely will be there. Hope that the India will become a developed and powerful country in the world.

6-Gender Equality, Women Empowerment, Literacy of people, Utilization Smart Apps, ICT i.e. Information Communication Technology ---etc. will do positive impact on the surrounding and achieve most success in making Global Village within short time.

REFERENCES

- [1] “Challenges of Rural Development and Opportunities for providing Sustainable Livelihood“ by Indira Nair.
- [2] “Smart Village Through Information Technology –Need of Emerging India” By Pinak Ranade, Sunil Londhe and Asima Mishra.
- [3] “Rural Smart village based on Internet of Things using Cloud Data Analytics” By Miss. Rupa Velagaleti and JNVR Swarupakumar.
- [4] “Case Study and Planning of Smart Village” By Aditya Jadhav, Prof. Bobade Shrikant S.
- [5] “Planning and Design of Green Village” by Mr. Prakash Kadave, Mr. Prakash Pathak, Miss. Sadhana Pawar.
- [6] “Study and Development of Village as a Smart Village “by Miss Rutuja Somvanshi, Dr.V.S. Rajmanya, Prof. A. Deshmukh.

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