Infrastructural Development Under Smart Village Program

Ass Prof. Shweta D. Tayade¹, Dhanashri R. Kokate², Pratik S. Shegokar³

¹Assistant Professor, Dept of Civil Engineering ^{2, 3}Dept of Civil Engineering ^{1, 2, 3} Siddhivinayak Technical Campus, Shegaon. Maharashtra, India.

Abstract- A smart village is conscious of regarding its national, out there resources, applicable services, and schemes. Sensible village system is developed in rural sector to support added services for varied attributes within the village and rural developments are designed to support the sensible village mission that aims at exploiting the most advanced communication technologies. Worldwide 1.3 billion people keep whereas not electricity and one or two of.7 billion are still preparation on inefficient stoves. In remote rural village communities, have to be compelled to develop and improve lives. Smart villages (SV) capture many of the benefits of urban living whereas holding aspects of rural life and making sure development at the national level. There will be wise recommendations for having a better infrastructural service for villages. The results from this study might even be replicated by completely different villages of land administrative unit face similar developing with problems.

Keywords- Smart Village, Urbanization, ICT, Sustainability, Rural Development.

I. INTRODUCTION

Smart villages can function complementary engines of economic process to sensible cities manufacturing product and services for native rural markets still as high-value-added agricultural and rural business product for both national and international markets. And they can act as stewards for the setting also as, in some cases, functioning as tourism hubs. Key enablers of those development advantages in good villages' area unit property electricity providers and also the convenience of fresh and economical appliances for preparation. Productive enterprises and facilities with higher energy demands can tend to be situated in hub villages provided by the national grid if sufficiently shut or - for the numerous remoter communities - by native mini-grids driven by renewable energy sources, presumably in hybrid kind with diesel generators in some cases.. The more dispersed communities around the hub villages will typically use Pico power and stand-alone home systems to provide more basic levels.

Imbalance growth between rural and concrete landscapes ends up in the challenge of fast in already crowed Indian urban plenty. One in every of the most consequences of uncontrolled urbanization is lack of livelihoods, sensible commonplace of living and amenities within the villages of India. Good village construct might play crucial role in maintaining the balance between the event of rural and concrete areas and facilitate to scale back migration of rural population in urban areas. Urban density is increasing in population uncontrolled manner, whereas the numbers of cities square measure still inadequate to accommodate the migrating population from villages. This must be reversed and appropriately managed to boost quality of life in Indian cities. The construct of "Smart will address Village" also the multiple challenges like unplanned urbanization, under-development of migration economic villages, for pursuits, higher commonplace of living etc...

II. LITERATURE REVIEW

Shri. Anna Hazare (1975):- In 1975, when Anna permanently came back to settle in the village, he took different initiatives to improve social and economic condition of the village. All his initiatives were experiment primarily based and well supported by villagers of Ralegansiddhi Again 300 from the profit generated through the work done by community participation the villagers were asked to contribute 25% of the money into village fund, so as to utilize it for future community projects.

David Freshwater (2000):- Sustainable development is generally discussed in terms of environment consideration, bit from a rural community perspective. In those instances where employments considered as part of sustainability discussions, it is too often through of in static terms jobs that will last. But the reality of both modern rural and urban life is that economic conditions rapidly change, and so a types of employment evolve as economic conditions change. While market signals alone will, in theory, give the data and therefore the conditions for this kind of dynamic method.

Zhao Zhifeng (2009):- This invention represent the fast urbanization has become already a main characteristic of socioeconomic transitioning china. This paper points out the characteristics and also the issues of villages in Peiping metropolitan region. This paper also explores the role of village.

Norizan Abdul Razak, Jalaluddin Abdul Malik, Murad Saeed (2012): The present study aimed to analyse the Asian country good village project during a rural community that is tagged as weight unit besting in Malaysia. Specifically, the study supposed to handle the main problems baby-faced by the community of farmers, determine the good village indicators and advance a strategic set up for the good village implementation. Data analysis of the major issues faced by the farmers in this community in agriculture is limited involvement of human capital in agricultural activities, the small size of land and restricted data of victimisation technologies to reinforce agricultural process and production. That the study emphasizes the importance of meeting the community needs in Kg besting and offers several useful recommendations. In conclusion, by incorporating the conception of sensible village, it considers potential sensible village as Associate in Nursing innovative suggests that of rising rural individuals life and it introduces a strategic implementation in 3 phases; social management, the developing the village system and economic management.

Yann Glouche, Paul Couderc (2013): During this paper, they propose a sensible bin application supported info selfcontained in tags related to every waste item. The waste halftracked by sensible bins exploitation AN RFID primarily based system while not requiring the support of AN external system. RFID tags are accustomed improve current waste management processes. It improves the standard of selective waste sorting. With associating a physical waste with digital info by the sensible waste approach. As a final, they supply a brand new answer to boost waste assortment potency exploitation the RFID technology. The reportable info concerning the content of every bin is additionally how to cipher statistics of every waste within the employment method. This approach also can facilitate to higher arrange waste assortment and special intervention by operators just in case of abnormal conditions.

Mr Milind R. Hegade, Mr. Sachin R. Kuber, Mr. Pankaj P. Sathe. Mr. Ranjit R. Mote, Mr. Rohan R. Bhosale (2014):-In this paper deals about the giving ideas from smart cities to the smart village. They introduce the golem application to grasp all info on to the farmers as an example enlisting method, notification of state schemes etc., this application centralizes the management system like ration, Heri Sustanta, Trias Aditya, Retno Astrini (2015):-Developing smart cities requires many types of information, including geospatial information. This data is the bottom knowledge from that alternative knowledge are going to be documented upon. To get data on the geospatial data handiness in Indonesian cities, a survey has been allotted nationwide from April- July 2015, as a part of analysis on spatial knowledge infrastructure90 cities/districts participated in the survey. The findings show the majority of the cities/districts have limited availability of large-scale topographic maps and land parcel maps to develop the smart cities.

Dr. Pritesh Y Shukla (2016):- In this paper, they specialize in improved resource- use potency, sceptered native selfgovernance, access to assure basic amenities and to blame for individual behavior to create vibrant and happy society in the village. They mentioned the govt theme Saansad Adarsh grass Yojana that is to be develop village as sensible with applicable technology and net property And they recommended the awareness programs to improve the agriculture, employment, nutrition security in the village. Finally concluded as the overall development of the country can be possible with the development of villages only.

Mr. Nayan Kakadiya, Mr. Purvang Kumbhani, Mr. Bhautik Bhatt (2017):-In this study, the Gujarat government has launched the project entitled with "Vishwakarma yojana" – an approach towards urbanization, which has been undertaken by Gujarat technological university. The rurbanisation is to provide urban elements to the rural areas. Chansad village is allotted for the updating of urban elements in this project. Primary and secondary Survey data were collected based on UDPFI guidelines and according to the GAP analysis for the village and suitable designs. There are some recommendations and suggestion to develop a sustainable village. That concludes, this scheme mainly implemented for preserving the "soul of villages" by providing all the civic and infrastructure facilities available in big town and cities to arrest the migration process

III. RESEARCH METHODOLOGY

Methodology also is a well planning for a research that starts from the beginning until the end of research. We perceive these as location specific factors like infrastructure, primary occupation of majority of people, nature of industries/business and inflow that impacts the investment and growth of the region the choice of villages is limited due to the lack of information about local areas on the internet and the data referring to certain challenges in the area are quite abstract or fragmented. The methods used to arrange a model in this research were done through preliminary interview of previous studies, books and analysis of supporting regulations. There will be 5 pillars of analysis space that may generate to four section of knowledge.

IV. NEED AND IMPORTANCE OF SMART VILLAGE

To certain expansion is unavailable as the economic pursuits and aspirations of the population do change and expand. Village can give future social, economic and environmental welfare activity for village community which can alter and empower increased participation in native governance processes, promote, entrepreneurship and build more resilient communities. This urban growth to bound extent is inescapable, because the economic pursuits and aspiration of the population do amendment and evolve this idea of good village can address the multiple challenges moon-faced for property development of rural Bharat.

The good village are able to do well in infrastructure good in technology and innovation good establishment alongside best mobilization and utilization of obtainable resources, resulting in quicker and a lot of comprehensive growth.

V. DISCUSSION

Besides the quantity of the implementation with technology as the vehicle status or quality of the resources was the important factor that should be considered in building smart village. Village formation should have potential that covers natural resources human resources and economic supporting resources human was the essential part of smart village since they planned the social view in the village through personality, skill, creativity and social relationship with others the aspect of human resources there were some important things that should be given attention like the education which was expected to be the encouragement of smart village should be given attention like the education which was expected to be the encouragement of smart village. Whereas, the focus area in economical services should be developed under the objective of earn village income. The village basic services was the main services provided to the village community such as education and health services.

VI. FUTURE SCOPE OF SMART VILLAGE

- 1) Smart garbage collection / recycling system should be put in place different colour coded dustbins should be promoted.
- 2) The working load may distributed from city towards village and economic condition will be good.
- 3) Important scope towards smart village is that the PM Mr Narendra Modi developed a new plan for smart city and smart village in our country for development in nation so this concept gives good results in future.
- 4) The generally village people migrate from village to city for purpose of job. If village becomes smart so all the job requirements are fulfils and people not migrate from one place to another.
- 5) Also the scope for new bachelors from engineering for employs various production of materials which is very useful in development of nation.

VII. CONCLUSION

The idea of making smart village in as the present day context seems more plausible ass there is a limit of growth of cities which is leading to creation of urban jungles, where the population ratio per kilometre of land is way above the desired norms. Smart village area unit the requirement of the hour as development is required for each rural and concrete Associate in nursing areas for higher live hood and data technology can offers effective solution there are successfully technologies available which have been implemented in urban areas. Technology advancement renewable energy has help us to reach out to the poorest region of the country and bring in development, many villages are adopting smart village model with micro and Nano grid installation, energy security is the pillar for smart villages in electricity, construction of water reservoirs check dams and schools construction, solar panel installation. We have much scope for human in rural India.

VIII. ACKNOWLEDGEMENT

I am highly grateful to thank my guide, Prof. Shweta D. Tayade Madam department of civil engineering STC CAMPUS Shegaon for their constant intellectual support in the form of innovative ideas in valuable guidance their expert suggestions and scholarly feedback had greatly enhanced the effectiveness of this work.

REFERENCES

[1] Anna Hajare, "Ralegan Siddhi Model", Ralegaon Siddhi, Ahmednagar, 2015.

- [2] Zhao Zhifeng, "Research on the Beijing rural village classification and development under urbanization", in the 4th international conference of the international forumon urbanism (IFoU), Beijing, China, 2009, pp. 1387-1394.
- [3] Norizan Abdul Razak, Jalaluddin Abdul Malik, and Murad Saeed. "A Development of Smart Village Implementation Plan for Agriculture: A Pioneer Project in Malaysia". 4 Th International Conference on Computing and Informatics, Icoci 2012, University Utara Malaysian, Malaysia.
- [4] Yann Glouche, Paul Couderc. "A smart waste management with self-describing objects". The Second International Conference on Smart Systems, Devices and Technologies, Smart 2013
- [5] Mr. Milind R. Hegade, Mr. Sachin R. Kuber, Mr. Pankaj P. Sathe. Mr. Ranjit R. Mote, Mr. Rohan R. Bhosale. "Smart Village System". IJSTE- International Journal Of Science Technology And Engineering, Volume 3, Issue 04, October 2014.
- [6] Heri Sustanta, Trias Aditya, Retno Astrini. "Smart City and Geospatial Information Availability, Current Status in Indonesian Cities". Cities 2015 International Conference, Intelligent Planning Towards Smart Cities, Cities 2015, 3-4 November 2015, Surabaya, Indonesia.
- [7] Dr. Pritesh Y Shukla. "The INDIAN SMART VILLAGE-Foundation for Growing India". International Journal of Applied Research 2016.
- [8] Mr. Nayan Kakadiya, Mr. Purvang Kumbhani Mr. Bhautik Bhatt. "Updation of urban elements in rural areas

 a Case study on Chansad Village, Gujarat". International Journal of Advanced Engineering and Research Development, February 2017.