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"DREAM VILLAGE- A CASE STUDY OF BAKROL VILLAGE"

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Abstract: Dream village knows about its citizen's available resources, applicable service & schemes. It knows what needs & when its needs. Human society is developing with rapid momentum and achieved various successes for making its livelihood batter. The current study mainly aimed to develop bakrol village. The provision made in this work is to be provide basic amenities like proper drainage system, water facilities, recreation areas, transportation facilities, educational facilities, primary health care centers, electricity, irrigation facilities, rain water harvesting etc. above all activities and components will be helpful to convert "bakrol village" in to "Dream village". The civilization is witness for various changes related to its development.

The present discuss about rural development in developing world for the uplift man of live hood of the rural masses. The driving motivation behind the concept on a dream village is that the technology should act as a means of development, enabling, improving health and welfare. The "dream village" concept aims to realize the goal through providing policymakers with insightful, bottom up analysis of the challenges of village development. The smart village concept will be based on the local condition, infrastructure, available resources in rural area and local demand as well as potential of expert of good to urban areas.

A dreamt village is one which will be automatically link local procurements and distribution. A dream village will also have power, knowledge, healthcare, technology, entrepreneurship and internet connectivity.

Keywords: Smart village, rural development, Social empowerment, Smart environment, Smart living standards.

I. INTRODUCTION

A rural area is a geographic area that is located outside cities and towns, while rural areas are known as "village" in India. We are decided to study about the bakrol village which is located near Vadodara. In these villages agriculture is the chief source of live hood.

Basic data of bakrol village

| Population 1750 nos. of persons | Residential system (raw houses) | Water sump of Narmda - nigam, |
|---------------------------------|---------------------------------|-------------------------------|
| Gram Panchayat | Primary school | Minor canal |
| Road | Electricity | Well |
| Post office | Lake | Tomb |
| Farms | Play ground | |

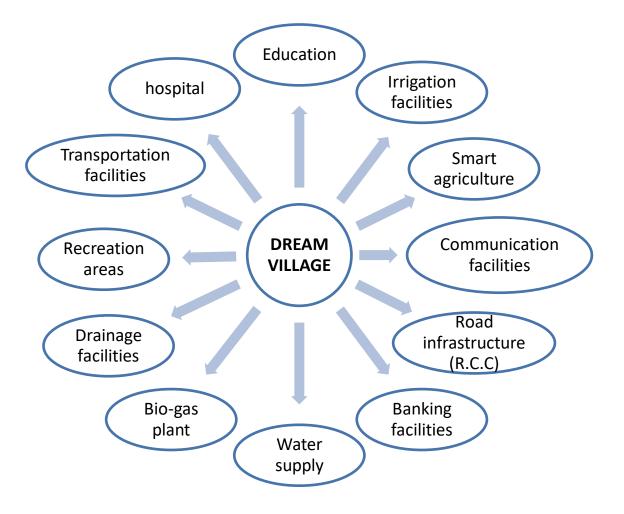


Figure 1.Structure of dream village

This structure of Dream village indicates different type of facilities or amenities should be included in the dream village. Facilities like Water supply, Banking facilities, Proper roads, Transportation facilities etc.

In the development process, there will be many changes in the demand and supply of various needs, as rural population will pass through the process of change. At present, one of the major challenges in India is growth of population and rapid urbanization. The urban growth to certain extent is unavailable, as the economics of population do change and evolve.

A dream village will provide long-term social, economic and environmental welfare activity for village community. A dream village will ensure proper sanitation facilities, good education, batter infrastructure, clean drinking water, heath facilities, environment protection, resources use, efficiency, waste management, renewable energy etc.

II. AIM OF DREAM VILLAGE

The aim of dream village is to provide facilities like,

- Houses with access to toilet, safe drinking water and regular power.
- Maintain its identity, culture and heritage.
- Its works towards revenue generation.
- To provide hospital and medical facilities.
- 100% institutional deliveries.

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- Interact with government, NGO's, social entrepreneurs.
- Functional toilet, potable water, electricity available in schools, health centers.
- To provide of irrigation facilities purpose for canal, bore-well, drip irrigation etc.
- Good facilities for domestic animals like dogs and cattle.
- To provide good transportation facilities for people of village like bus-stop, railway station, etc.
- Rainwater harvesting system.

2.1 NEEDS OF DREAM VILLAGE

Followings are the needs of the dream village.

- To improvement in living standards of people.
- To provide basic facilities for village.
- Overall development of rural areas.
- To provide communication facilities.
- To provide employment opportunities.
- Development f village as tourism place.
- To improvement agricultural standard.
- To provide infrastructure.
- Transfer people of city to dream village. All facilities in village give in minimum cost.

III. PROBLEMS PREVAILING IN VILLAGE

In our case study area there are many problems which are follows as:

- In these village drinking water facilities is not proper only one sump is available which is not capable to provide a drinking water facilities in the village.
- There is also not proper drainage system; there are septic tanks in the houses.
- There is no any kind of transportation facilities in this village.
- Not proper education facilities, only primary school available in the village.
- There is no proper road network
- There is not proper collection of waste.
- There is no primary health center in the village.

3.1 SOME SUGGESTIONS TO DEVELOP OF BAKROL VILLAGE

After the study about the bakrol village, some suggestions for the development of the bakrol village are as shown below.

- Providing proper road network in village to connect other villages
- Providing proper drainage system which connects to the small sewage treatment plant and these treated water as irrigation water
- All housing system provide with roof top solar system
- Providing solar street light system
- Recreation of lake
- Provide community hall

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- Providing sports club
- Providing market area
- Providing primary health centers
- Renovation of surpanch office, school, dwelling units

We have gone through the bakrol village and layout of bakrol village prepared as shown in figure 2 and AutoCAD layout of village is shown in figure 3.

After survey and based on need we designed the new layout of village and model of the future village as shown in figure 4 & 5.

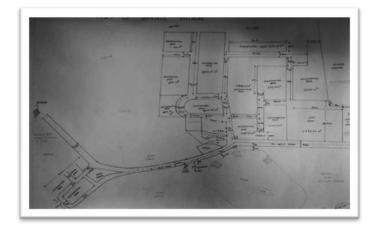


Figure 2. Existing layout of bakrol village

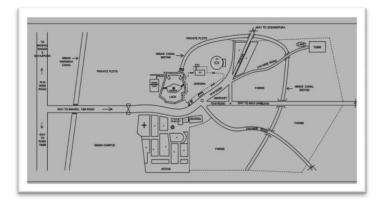


Figure 3. Future development planning of bakrol village



Figure 4. Existing village



Figure 5.Dream village

IV. RESULT

Future detail survey of the village we found various improvement in village amenities.

The comparison of existing village and dream village are as shown in Table 1

| EXISTING VILLAGE | DREAM VILLAGE |
|------------------|-------------------------------------|
| Electricity | Sewage treatment plant |
| Water supply | Water treatment plant |
| Post office | Bio gas plant |
| Road | Supply water for irrigation purpose |
| Primary school | Transportation facilities |
| Dwelling unit | Higher education facilities |
| Gram panchayat | Banking facilities |
| Aaganwadi | Bus stop |
| | Drainage system |
| | Transport system |
| | Recreation facilities |
| | Health center |
| | Rain water harvesting |
| | Solar system |
| | Gruhudhyogh |

Table 1. Comparison of existing village and dream village

V. CONCLUSION

After survey of bakrol village, we found the following conclusion.

- 1. The improvement in existing amenities in village must be upgraded.
- 2. For the security and modernization of the village camera, Wi-Fi, transportation system must be provided.

After completion of our case study we decided that provide some suitable facilities and we planned different building components to develop a bakrol village like, school, community hall, biogas plant, recreation of lake, irrigation facilities etc.

REFERENCES

- PinakRanade, Sunil Londhe, Asima Mishra. "Smart villages through information technology need of emerging India" IPASJ International Journal of Information Technology (IIJIT) A Publisher for Research MotivationVolume 3, Issue 7, July 2015
- [2] Dr. Pritesh Y Shukla."The Indian smart village: Foundation for growing India" International Journal of Applied Research 2016; 2(3): 72-74
- [3] Er.B.R.Gautam, Dr.R.M.Dhoble, Dr.H.V.Hajare. "Defluoridation of Drinking Water to Develop Smart Village: A State of Art" International journal of Research in engineering, science and Technologies (IJRESTs) Deepam publication's ISSN 2395-6453.
- [4] Saurabh Kumar Dixit, SumanBhatnagar, Kaberi Sharma, Vijay Bhatnagar. "Application of Smart Community Indicators in New Egyptian Communities A Case Study: Smart Village, Greater Cairo, Egypt" SJIF IMPACT FACTOR International Journal of Environmental Sciences Vol. 3 No.3. 2014. Pp.143-154.
- [5] Norizan Abdul Razak, Jalaluddin Abdul Malik, MuradSaeed., "A development of smart village implementation plan for agriculture: a pioneer project in Malaysia"Proceedings of the 4th International Conference on Computing and Informatics, ICOCI 2013 (28-30 August, 2013 Sarawak, Malaysia, University Utara Malaysia).