# Self-Sustainable Village Development Plan for Borgaon Village

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Abstract: This project report deals with study and development of village as a Self-sustainable village. We define Self-sustainable village as bundle of services of which are delivered to its residence and businesses in an effective and efficient manner. "Self-sustainable village" is that modern energy access acts as a catalyst for development in education, health, security, productive enterprise, environment that in turns support further improvement in energy access. In this report we focuses on improved resource use efficiency, local self-governance, access to assure basic amenities and responsible individual and community behavior to build happy society. We making Self-sustainable village by taking smart decisions using smart technologies and services.

*Index Terms*:- Introduction, concept, services, requirement, benefits, awareness program, information of Borgaon village.

#### I. INTRODUCTION

In India there are 6,00,000 villages out of them 1,25,000 villages are backward so there is a need for designing and building the village as a smart or Self-sustainable village. With modernization and (growth of cities with more people) people move from one place to another place for different facilities such as education, employment and attraction of people towards the place or city. Village is main judging requirements for development of nation. So, develop the village in such a way what is self-(able to last/helping the planet) in providing the services, employment and well connected to the rest of the world (in other words) self-(able to last/helping the planet) village. The self-(able to last/helping the planet) village corrects the social oversight by providing changes (to help someone)/places to live and sleep for (able to last/helping the planet) family relationships without disturbing the (way of living) of different generations. The vision of self-(able to last/helping the planet) village is that modern energy access can act as helping force for development in education, health, productive business/project, clean water, (keeping things clean and disease-free), (related to surrounding conditions or the health of the Earth) (the ability to keep something around, or keep something going) and (related to demanding or permitting the joining of club, group, etc.) Prof. D.S. Patil
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(system or country where leaders are chosen by votes) which helps to support further improvement in access to energy. At first the idea of development of village is of Mahatma Gandhi (in other words) swaraj and suraj village. But, now days it is newly termed as self-(able to last/helping the planet) village. We know that, India is a developing nation; with the help of self-(able to last/helping the planet) village we can make India as a SS nation. Now days, our government also gives strong focus on Self-(able to last/helping the planet) village. Government tools so many big plans/layouts/dishonest plans on Self-(able to last/helping the planet) village.

#### II. CONCEPT & SCOPE OF THE STUDY

The basic idea of self-sustainable Village means Village which has no need of outside help to making free from doubt their basic needs. Self-sustainable Village is to keep (self, thoughts) in order, under control group efforts and power of people from different small rivers and get mixed together it with knowledge technology to make ready benefits to the country, not town town. Work undertaken is limited to readying of detailed go to person in authority on a selfsustainable Village. The go to person in authority will be got ready for the base of having existence conditions and future needs of Village. That Village has water, waste water, farming, small scale industries and power for a given time parameter which is selected for self-sustainability For Self ongoing power development map needed all knowledge will be self-control and got broken up and suggest the answer to the taken to be hard question.

# III. BENEFITS OF SELF-SUSTAINABILITY

• Locally produced and locally consumed energy:
In Villages if the mountains, with small mountains part are present then use of solar power for a given time& wind power for a given time then power for a given time is produce in that Village it-self& use for development of Village.

## • Creation of job:

Generally Village people move from Village to great town for purpose of mixed bag of goods. If Village becomes well-dressed so all the mixed bag of goods requirements are does& people not move from one place to another.

## • Contribution to global environment:

The system can get changed to other form dependence on fossil fuel & contribute to copies of smaller size of greenhouse gases such as carbon 3 dioxide. Energy using up making the most out of 25-30% means power for a given time amount made less.

- For farmer learning through machines and so on. building that will be able to question their gets stone from the earth on-line.
- New technologies in education, learning through machines, desktop publishing, future events given by birth sign living-stage of interested person of the Village. Transport of Village into comfortable& safe space that give greater value to quality.

#### IV. RESEARCH AND COLLECT DATA

# Village Survey:

To put into effect the end of work-place, select the Borgaon. Village take views of cover the detailed knowledge about small country town with respect to different parameter like group, area, being healthy, farming, Education, power for a given time, local business, shelter, Water, Waste Water, financial, watering system, Weather, transport, by numbers, electronic and making connections and Other buildings. Village take views of gives the knowledge about having existence facilities ready (to be used) in small country town.

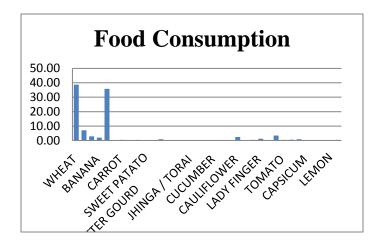
## • House-Hold Survey

first letter of a word House-hold take views of guided for strong decision of society-business position of borgaon Village. House-hold measures-taking gives details about existence-stage and Sex thing in place of natural one of Village. House-hold measures-taking gives detailed knowledge about monthly income and all family details in Village. Also give knowledge about electrics, waste Disposal, water connection, food taking a food and keep safe condition House-hold measures-taking covers the farming system, helping grow pattern, getting together expenses and land distribution.

#### V. CROPPING PATTERN

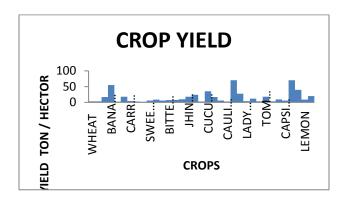
## Food consumption

First find out all food nutrients required to the human body for good health with respect his quantity. Then sort out all food groups and calculate quantity of food in ton/year/person. This calculation plotted in following graphical presentation.



# • Crops Yield:

First find out the crops yield of major crops in ton/hector.

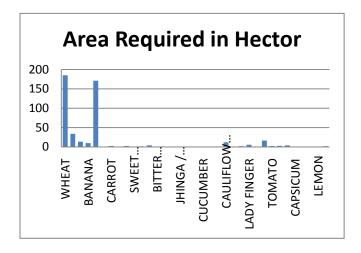


### • Area Required:

Calculate the area require for the achieve self-sustainability in food production. This area calculate by following formula

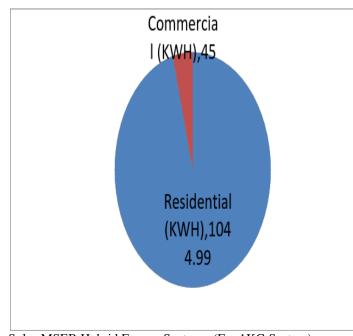
$$Area\ Required = \frac{Total\ Consumptrion\ Ton\ / Year}{Yield\ Ton/Hector}$$

By using this formula calculate the total area. Total area is 477 hector required to self-sustainability.



## V. ENERGY

Energy and economic growth are two important side of development. First find out the daily energy consumption. Then select renewable source of energy. Prepare design and estimate of various energy system like solar- wind hybrid energy system, solar energy system and wind system. Compare that alternative and select feasible alternative. So. It is time to turn renewable energy sources like Sunand wind etc. Genarate renewable energy with low cost with helpof net metering.



Solar-MSEB Hybrid Energy System: (For 1KG System)

PARTICULARS.	Quantity	Price
SOLAR POWER CONDITIONING UNIT , 1KW/12VDC,MOSFET, MICRO CONTROLLER BASED, LED DISPLAY, TOWER	1 No.	Rs.9500.00
Solar PV 1000 Wp Polycrystalline, Make:- Warrie.	250Wp X 4No	Rs.60000
Tubular Battery 150AH, Tower Model, Semi Maintains Type.	2No	Rs.30000
Wiring- Connector, R R/ Finolex Or Equivalent.		Rs.2000
M S Structure. It is at actual, Your Side.		Rs.6500

Total Cost - 101500 RS

# VI. LOCAL BUSSINESS

small scale industries or local business helpful to prevent the mass migration and ensure the job security. Local available material and local requirement is encourage the local business. Local business generates the employment and contributes to economic growth of village. Milk product, organic production and other local business are suggested to villagers.

#### VII. MAGIC PIT

Magic pit is covered porous walled chamber that allows water slowly soak into the ground. Magic pit can offer a cost efficient opportunity for partial treatment of waste-grey or storm water and relatively safe way of discharging it into the environment and therewith recharging groundwater bodies. As waste water percolates through the soil from a magic pit, small particles are filtered out by the soil matrix and organics are digested by micro-organisms. Sub-soil layers are water permeable in order to avoid fast saturation. Magic pit is best suited for soil having good absorptive properties; clay, hard packed or rocky soil is not appropriate. It should be located at safe distance from drinking water source (30m at least). It odorless and not visible because of that it does not cause any problem regarding with health. A magic pit should be last between 3-5 years without maintenance but after that it needs to clean. When the performance of the magic pit breaks down/gets worse, the material inside the magic pit can be dug out and refilled. For future access, a removable lid should be used to seal the pit until it needs to be maintained. For magic pit Govt. give a fund of 211.

## VIII. CONCLUSION

Self-sustainable development map gives of a town comforts to country, not town part. Self-sustainability development map make ready blue print of Village development with respect to water, waste water, power for a given time, small scale industries and farming. It makes certain the Employment living-stage, water and waste water process. self-sustainable development able to help to increasing living-stage and use of renewable power for a given time and make use of again of water.

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