

Integration of Business and Technology Strategy Gramin Saur Urja

Sameer Jain¹

¹National Institute of Construction Management and Research (NICMAR), Pune, India
sameerjain@nicmar.ac.in

Abstract: At Gramin Saur Urja concept we know that with Indian economy growing at 9% and with limited energy resources it becomes imputable for the country to discover alternate sources of energy, preferably renewable in nature. Most of the rural poor population lives in darkness due to erratic power supply. Though the renewable sources are limited and costlier, yet that is so due to high subsidies provided to conventional energy sources, still, power losses due to transmission are even higher. Therefore, it would be a good idea to take to power generation to people's rooftop and also give them provision for self installation and service in terms of formal trainings about the technology involved and the practical settings of the same. The concept is so as to increase the usage of greener technologies in rural areas which would facilitate not only power savings, but also environment conservation. The aim of this concept would be to provide feasible plan of implementation which could be reproduced at a large scale commercially and yet remain cost effective. The objectives of Gramin Saur Urja is to create a market for renewable energy sources in tier 2 and tier 3 cities which are otherwise deprived of proper power supply through conventional means opportunities. The keys to success of Gramin Saur Urja are large scale marketing and production, providing cost effective solutions to the rural clients and generating repeat customers. The local market for this business is new and is wide open for new and expanding sources of renewable energy as power supply in rural and suburban areas is highly erratic. The initial financial analysis of the business shows immense potential and growth opportunity. A computer renewable energy business is not easy to start and operate, requires high initial investments and has unspecified demand. Implementing this plan, in addition with a detailed and comprehensive marketing plan will ensure that Gramin Saur Urja Concept becomes a profitable venture.

Keywords: Renewable, Gramin Saur Urja, Conventional, rural, suburban areas.

1. Introduction

The Gramin Saur Urja Project shall be in the field of establishing a market in rural area for renewable [1] energy [8] sources, preferably solar energy [3][4][6] based. Subsequent aim is to provide employment to youth in these areas by involving them in basic manufacturing works, assembling and installation of these systems in rural areas. Also, rural population themselves would be trained during the project not only to handle the above mentioned intricacies of the project, but also for long term service providing and capacity expansion, as they would serve as local sources. The employees of Gramin Saur Urja Project shall also approach tier 2 and tier 3 cities and select people who can be trained. One batch of trainees will be consisting of 30 people. They will be trained for a month in which they will receive stipend and after the training is over they will be assigned manufacturing and installation tasks for the project itself. This in turn would not only generate employment, but also lead to cost effective solutions.

2. Start up Expenditure

In keeping with the Gramin Saur Urja Project's philosophy of starting with very low debt, the goal is to start the venture as inexpensively as possible. Total start-up cost for Gramin Saur Urja Project is 3, 10,000 INR and monthly expense is expected to be 1, 00,000 INR. Here the table 1 lists the initial requirements.

Table 1: Start-up requirements

Requirements	Amount (INR)
Building Advance (in rural area itself)	25,000
Initial Hardware Requirements (assembly material)	2,50,000
Working tables(10 nos)	15,000
Chairs and furniture and instruments	20,000
Total	3,10,000

Following initials would be considered:

- Initially, assembly parts and would be bought on loan, after the business starts making enough profits they would be repaid.
- Buildings which will be acquired on rent.
- Other infrastructure such as tables, chairs will be bought.

When it comes to rural market, this figure may come down significantly. As per some estimates, the market of renewable energy [5] sources is not yet developed, and the more it grows, the more it is able to offer low cost and more efficient products. In addition to above offerings, focus would be to offer newer innovative products as well as per the daily requirements of rural people. The focus of the project would be its rural customers and not profit or the products themselves. Hence, full support would be provided to rural manufacturers and assemblers to offer new innovative ideas and valuable insights in coming up with highly-effective offerings.

3. Marketing and sales strategy

Mission Statement:

“To become leading renewable energy goods provider in rural market and offer cost-effective innovative solutions for the same, while focusing on local employment generation in backward rural and sub-urban areas”

SWOT Analysis:

Environment (Strengths, Weaknesses, Opportunities and Threat) Analysis:

Opportunity:

There are enough youth in rural and suburban areas that have educational qualifications to work on Gramin Saur Urja Project provided they are given some basic training on skill sets required. The market potential is also high due to erratic power supplies and support from national and international Organizations.

Generating Employment:

Rural and suburban youth these days are mostly unemployed due to their limited educational abilities. If they are provided with opportunities of their skill level, they can strike it big.

Most of such youth today comprise of college dropout, or those who couldn't continue their studies after school due to various reasons. Due to intense competition, such people cannot apply for jobs requiring higher education, and also feel ashamed at doing small jobs. Due to some level of education received at school, such youth can be trained to work on basic product assemblies such as solar panel assembly systems where they only need to know the basics of the processes involved.

Strengths:

Harnessing the power of the rural youth: can generate potential interest
Increasing self employment opportunities.

Hence, considering youth population available for employment and basic educational [2] skills present in them, a basic training course can make them competitive in desired skills. They in turn themselves would be motivated to do these jobs due to associated dignity and respect as compared to ordinary jobs as clerks or watchmen in some firms.

This potential market for renewable energy till now has remained relatively untapped, and has determination and potential due to large rural population concentration which is not getting enough offerings from the conventional energy sources.

Developments [7] in the efficiency of latest available

renewable energy sources means these people don't have to pay too much for basic products and enjoy the benefit of the self harnessed energy i.e. freedom from any kind of dependence on conventional power resources. Moreover, part time jobs with lesser duration can also be supported once infrastructure is laid down and would give extra opportunities to those who are sufficiently educated, but don't have enough work to do throughout day.

Another strength that may be tapped is political support most of the rural markets these days are targeted by political leaders so as to receive ballot support. This opportunity can be tapped by presenting before various parties at local level to generate employment so as to receive support and exposure at local level while providing them with opportunity to offer employment to rural markets.

Weaknesses and Threats:

Predetermined mindsets in these areas: Rural people might not readily adopt the technology, learning and growth opportunities along with generating employment could be some of the reasons to attract youth towards these jobs and gain support of rural societies.

Competition from already established firms working in urban areas: This can be taken care of by establishing first movers' advantage and bonding employees socially and offering highly cost-effective products before other such firms move from urban to these areas.

Skill Development and Training:

Care needs to be taken while imparting training and skill development as accuracy levels required are high. Most of the jobs require concentration than high-level skill sets, hence focus would be on concentration development and accuracy improvement (in processes such as soldering and assembly).

Infrastructure:

Establishing infrastructure and its maintenance would also serve as a challenge that may be addressed by efficient pre-planning and its implementation.

4. Marketing research

A detailed market research needs to be carried out, to determine potential of rural/suburban markets that may be targeted.

Research Objective:

“Make a detailed research of suburbs/rural areas and also determine possible innovative products solutions that may be offered in addition to offering present products and setting up basic infrastructure in these regions.”

These markets (districts) would serve as primary hubs and later on development would be taken up in remote regions as well to expand the sphere of services and generate higher employment opportunities and increase market share. This research would serve as a basis of primary setup and further research would be carried out during expansion stages later on.

5. Research plan

Data Sources:

Both secondary data sources such as World Bank reports and surveys on literacy levels as well as demographics along with primary sources such as fresh researches for this purpose would be used.

Research Approach:

Surveys would be carried out at regional levels and primary focus would be given to detailed survey of earning members and unemployment levels in rural areas. As main decisions are taken by earning members of family, therefore, focus would be on them only.

These areas would serve as establishment hubs and later on surveys would be conducted in remote areas during expansion phases. Panchayats would be considered for their valuable feedbacks and volunteers from local political parties would be involved as well which could later on boast of providing employment to these people.

Sampling Unit: Mainly youth and earning members within age group of 21-55yrs living in these areas would be targeted.

Sample Size: Preliminary research would be based on a sample size of 200 people selected randomly from sample group in each of the districts. If there seems to be a favourable market, a detailed final survey would be taken up with a sample size of 5% of the targeted population based on demographic data available.

Sampling Procedure: Random sampling from the available sample group would be done.

NOTE: Direct approach would be the preferable contact method

Technology Maturity and reliability:

The check the availability of the new technology; make it to deploy as per the requirement, makes the system reliable and safe. Henceforth, enhance the operation to be carried out over a large scale.

Information Collection:

Information collection can be done by tying up with local NGO's dealing with the issues of power availability and openness to new ideas along with unemployment of rural youth. A separate research agency would also be hired to facilitate the process with accuracy and efficiency.

Information Analysis:

A separate data analysis firm would be hired to do a detailed analysis on the available data.

Decision Making:

Final decision would be taken on the basis of following primary factors and a few local and tertiary factors, which are as follows:

- Workforce Availability
- Connectivity and Ease of infrastructure Establishment
- Future Prospects
- Size of Markets and Local support

6. Value proposition

Customer and Employee satisfaction would be the focus as not only profit received from customers is important, but establishing a market and its retention would also be a priority.

The Gramin Saur Urja Project would present itself as a pioneer in renewable energy sources mainly solar heaters (water and cooking) and solar panel based electricity harnessing offerings. Major focus would be on accuracy, precision, timely delivery and highly cost-effective propositions along with a social bent that may be used for customer retention as well in building their social reputation and involving them with a social cause.

Customer Profitability:

Hence, in a scenario where almost all firms are looking for not only profits, but also social attachment, our project would serve a two-way customer satisfaction motive by not only serving the core requirement but also associating them with employment generation which they would be able to boast of, and their involvement in reducing environmental damage and playing their part effectively.

Follow-on products:

Once the market is established and retention is possible, the services could be taken to a higher level by providing higher end products to the present customer base with discount offerings and offer add-ons to present customers at highly cost-effective prices. Though the initial training can be provided by local administrators, when the project looks for expansion of service portfolio, some institutes, such as polytechnic may be used for mentoring these services and

better growth and development of employees would enable low turnover.

Main focus initially would not be on profit, but on brand development and recognition in both rural markets as a project offering both cost-effective energy solutions and generating employment.

Regular feedbacks would be conducted ensure customer and employee satisfaction and regular analysis would be done for any scope of improvement as well. Employees after attaining certain experience with the project would be involved in active decision making and sometimes in referral and recruitment programs as well so as to ensure employee involvement and regular growth.

Customer Portfolio:

Initial customers would range from local rural population to larger firms providing international export services. Along with growth and development at local level followed by national level, international offers would also be considered and the project would consider offering its services globally. The project would not restrict itself to providing the products and services to limited customers, but any company that needs efficient and cost effective products with certain level of innovations. With further development and expansion, customers may range from urban areas and cities to exporting firms, and national firms to core production firms.

7. Conclusion

Promoting the marketing plan in such a way that the company would go for two tier marketing strategy.

One would cater to the business local rural consumers and secondly to business customers (B2B) who would require our products for selling to customers in markets where we are not offering.

Secondly, our focus would also be on those communities and areas where we plan to either implement our operations, or tend to expand them. This would serve the purpose of social awareness and social-marketing for our firm and would create the brand in minds of locals which we want the Gramin Saur Urja Project to project itself as.

REFERENCES

- [1] Global Energy Network Institute (GENI); www.geni.org 2010. Electricity from renewable resources: status, prospects and Impediments.
- [2] The National Academic Press; <http://www.nap.edu>
- [3] Solar Trust of America; <http://solartrustofamerica.com>
- [4] Solar Energy. ESIA
- [5] Chu, S., Majumdar, A.: Opportunities and challenges for a sustainable energy future. *Nature* 488, 294–303 (2012)
- [6] Arunachalam, V.S., Fleischer, E.L.: The global energy landscape and materials innovation. *MRS Bull.* 33, 264–276 (2008)
- [7] Greene, M.L., Espinal, L., Traversa, E., Amis, E.J.: Materials for sustainable development. *MRS Bull.* 37, 303–308 (2012)
- [8] P. Gipe, *Wind Power—Renewable Energy for Home, Farm, and Business* Chelsea Green, White River Junction, VT,

Author Profile



Assistant Professor, School of General Management, National Institute of Construction Management and Research, Pune Campus.