

An initiative towards transformational change in society: a case study on Agarbatti Manufacturing Unit at NarajMarthapur, Odisha

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I. Introduction

India is a country blessed with huge manpower capacity. Population of India as per census 2011 is 1,21,01,93,422. Out of which 16.2 % (166,635,700) of population belongs to Scheduled Castes (SC) and 8.2% (84,326,240) of population belongs to Scheduled Tribes (ST). Indian conglomerates along with Indian government are working hard to support the deprived SC/ ST people who are below poverty line (BPL). Tata Power under the umbrella of Tata focuses on to address the social needs of traditionally disadvantaged groups, as a part of nation building endeavor like many other companies in India. Tata Power has derived a focused approach for the upliftment of these communities through Affirmative Action focus being to bring a transformational change in the society.

Affirmative Action

Affirmative action means “voluntary and mandatory efforts undertaken by federal, state, and local governments; private employers; and schools to combat discrimination and to promote equal opportunity in education and employment for all” (APA, 1996, p. 2). Jane Hodges-Aeberhard (1997) pointed out that Affirmative Action (AA) is an extension of the notion of equality of opportunity and non-discrimination. Affirmative Action enables the person or group discriminated against either to compete on level terms with the favoured group or, sometimes going beyond that, i.e., to achieve equality outright. Affirmative action programmes and policies are designed to provide access and equal opportunity to women and minorities in academics and labour. The objective is to eliminate discrimination against deprived community and to redress the effects of past discrimination (Kravitz et al., 1997, p. vii).

The Tata Affirmative Action Program(TAAP) believes in affirmative action by exercising positive discrimination among the SC/ST communities by employing personnel from historically disadvantaged communities, in engaging them as business partners, without sacrificing merit or quality. Following the guideline of Affirmative Action, Tata Power has prepared its Affirmative Action Policy and have taken up several initiatives since 2007 following 4 Es – Employment, Entrepreneurship, Employability and Education.

II. Background

Tata Power made an effort to positively uplift the lives of communities in the neighbourhood areas of operation. One of the power plants belonging to Tata Power is situated at NarajMarthapur, Cuttack District of Odisha. Total population of NarajMarthapur project is 13074 out of which 3954 (30%) people belong to Scheduled Castes (SC) and Scheduled Tribes (ST) communities. According to the Planning Commission's Tendulkar Committee Report 2009, the poverty headcount ratio of Odisha, at 57.2 percent, is the worst among all Indian states and way above the national average of 37.2 percent (UNDP). It is having 32.6 percent poor people, second highest state in India as per Economic-Survey 2013-14. The state also has a high incidence of poverty as compared to the SCs and STs in the country as a whole. In terms of other human development indicators such as health, the state faces several challenges. Based on the AA Needs Assessment Study of BPL SC/ST HHs, Tata Power worked with these HHs to improve economic status so as to shift from BPL to APL.

Hence, it explored various income generation opportunities based on the existing skill of people, assets available and demands in market. Among various income generation programs, Agarbatti Project was selected for the group.

Why Agarbatti manufacturing Unit?

Because of low education level, low skill and no asset with less exposure to the industry among the target group in the region, Tata Power decided to empower local people through Entrepreneurship initiative at NarajMarthapur. The Affirmative Action committee volunteered one and half year into research and study of the local scenario at NarajMarthapur. The study involved detailed analysis of market situations and possible entrepreneurship opportunities and collaborations. Following factors were considered in analyzing the Entrepreneurial venture:

- General Education and Skill level of local people.
 - Low Education, Low skill Level
- Demand for product
 - The demand for incense sticks is huge not only in India, but also internationally. The incense stick market faces a sudden upsurge in demand during the festive season.

Also other parameters like land and availability of other resources were given importance which will be discussed in detail in later part. Agarbatti industry in India is a labour intensive cottage industry. The incense stick industry in India has promoted social entrepreneurship in the rural and semi urban areas as more people are coming forward to start their enterprises. The Agarbatti category records an impressive growth in revenues well ahead of many other industries. Export earnings have crossed Rs. 400 crore mark while the domestic market is expected to be nearly 2000 crore. Every year more than 1000 billion sticks are produced and the market is growing at a rate of 7% per year. Considering the factors, the committee finalized on initiating an Incense Stick Manufacturing Unit in the surroundings of Tata Power plant.

Initiative for Women Empowerment

One of the mottos of the Affirmative Action committee of Tata Power was to empower women and make them self-reliant by implementing various income generation activities. Affirmative action committee had firm belief that this initiative would certainly improve the standard of living of the community as a whole. By launching this project; Tata Power was able to create opportunities for the women in skill development and micro enterprise.

PROCESS

In the effort to make this initiative feasible, in the year 2013 Tata Power approached government agencies to create awareness and interest among the local SC/ ST women as the people had more faith in government. In this program SC&ST Development, Minorities and Backward Classes Department of government of Odisha was actively involved. Tata power intended to involve all 334 SC/ST households within the NarajMarthapur area. Govt. Officials were invited to the workshops held by Tata Power to motivate the local women. These workshops helped at primary level to generate interest in local people. In Workshops general information about Tata Power's Affirmative action initiative was provided along with the information of Agarbatti unit to be started in their area. The standard operating procedure (SOP) for setting up an Agarbatti Plant is available in annexure -1.

• Training

Tata Power's decision to initiate Incense Stick Manufacturing Unit was empowered because Tata Power was successful in signing a MoU with ITC. In combined efforts of Tata Power and ITC, a seven days' training program was organized for the women who showed interest in working with Initiative.

More than 40 women members across these SC/ST households were identified for the training on the basis of their interest level. Certified trainers from ITC were invited to train these women on Incense stick making. The training included:

- How to handle the machine while making agarbatti
- How to work with pedal type machine, in case of no electricity

- Safety measures while using the machine
- Quick steps in case of any failure in machine

• **Machinery Procurement and Production**

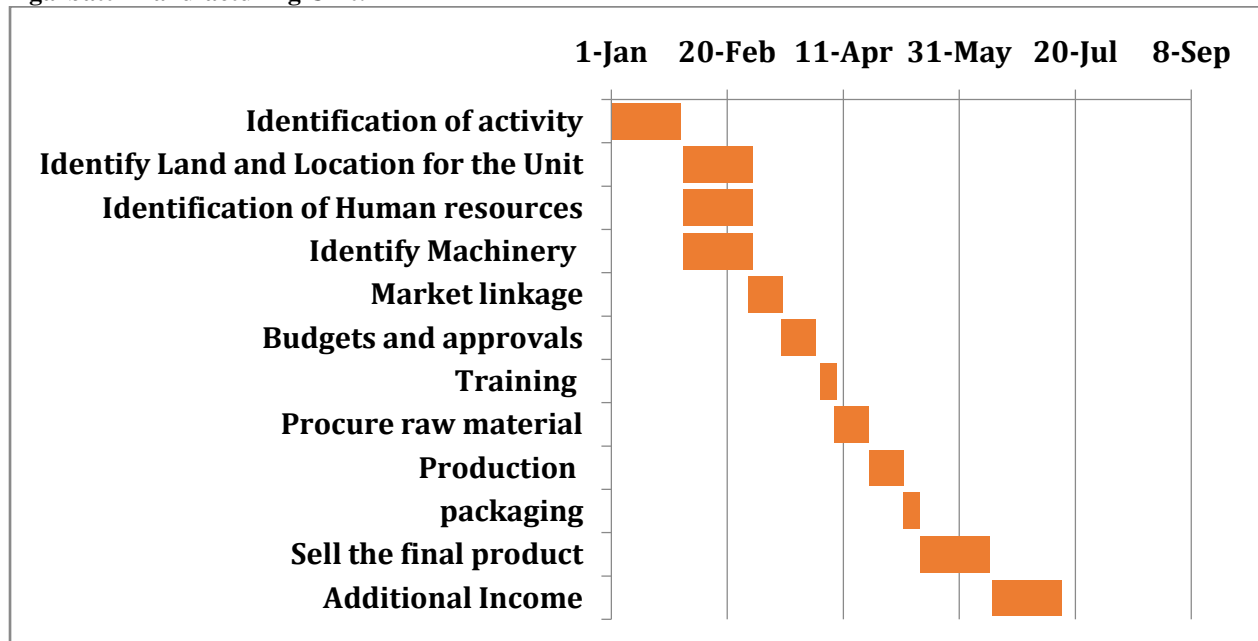
The Affirmative action committee also found appropriate vendors of the machines required for the job. U K Industries located at Bangalore were responsible to provide required double pedal agarbatti preparation machines. Power equipped them with 20 double pedal agarbatti preparation machines. These machines have helped members produce more than 400kg agarbattis and contributed towards an increase in income generation. The project provided an opportunity to local AA women to earn additional income of rupees 3000-4000 per month.

- As per the MoU signed with ITC, the raw material required for making agarbatti such as Charcoal, Bamboo sticks, Gigatu, White chips, Aromatic chemicals etc. were procured from ITC.
- After the training was imparted, actual production of Agarbatti started using pedal type machines. The women worked for 8 hours a day. With the help of one machine 35-40 Kgs of Agarbatti were produced per day.
- The produced final product is den kept for drying for 3 to 4 days.
- After the Agarbatti were manufactured, Quality check was carried out to ensure the size of the product as per requirement. Using the machine Agarbatti of various sizes
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- 8", 9", 10" 11", 12" & 16" were manufactured and checked as per requirement
- The final product is den packed in sets of predetermined numbers as per requirement.
- As per the MoU, ITC will facilitate marketing of raw agarbattis (incense sticks) produced by rural women to vendors supplying Mandaldeep brands to the FMCG giant. ITC's "Mangaldeep" is one of the leading agarbatti brands in India and has market share of 6% and second largest agarbatti producers in the country.

MARKETING

Marketing of the product is prominently done through ITC. Tata Power signed a Mou with ITC to sell these agarbatti into market. This provided an opportunity to cover huge market area. ITC planned to sell these agarbattis under its major brands in the market. The manufactures also have an option to sell the product in local market through local vendors, wholesalers and retailers.

Agarbatti Manufacturing Unit: TIME FRAME



The above chart shows the sequential flow of activities needed to carry out to establish an Agarbatti manufacturing unit as Social entrepreneur venture. The highlighted bars shows the duration required to carry out each activity and their sequence. As seen in the chart

- Suppose the entrepreneur starts from 1st January, first step is to identify the activity; in this case the activity will be to start an Agarbatti manufacturing unit. This activity will take one month of time within which research and analysis of all possible options available to start business in concerned area is done.
- Next three activities which follow are Identification of Land, Human Resources and machinery which need to be carried out simultaneously. These activities will take time of one more month.
- It is considered that it will take 15 days to identify market linkage. In this case the MoU with ITC served as a strong market linkage for Agarbatti manufacturing.
- Budgets and approvals will take next 15 days
- As mentioned above a seven days training program will follow after finalizing budgets.
- Procurement of raw material and production of agarbatti together will take one month.
- It is considered that packaging of final product and selling will take 5 weeks
- Starting from January, at the end of July month, additional income of Rs 3000-4000 will be generated for the workers.

Budget

Tata Power Invested around Rs 15 lakh as Capital Expenditure and Rs 5 lakh as Operational expenditure for the project. The unit produces different kinds of Incense Sticks, which are packed as per demand of the companies like ITC etc. It is estimated that a total of 1500000 Incense Sticks packets will be manufactured and packed. If the minimum selling price for each packet is Rs 2. Then the total income of the unit would be Rs 30, 00,000/-. Thus in consideration with initial investment, the project is expected to reach breakeven point in four years and return the total cost of fixed assets. .

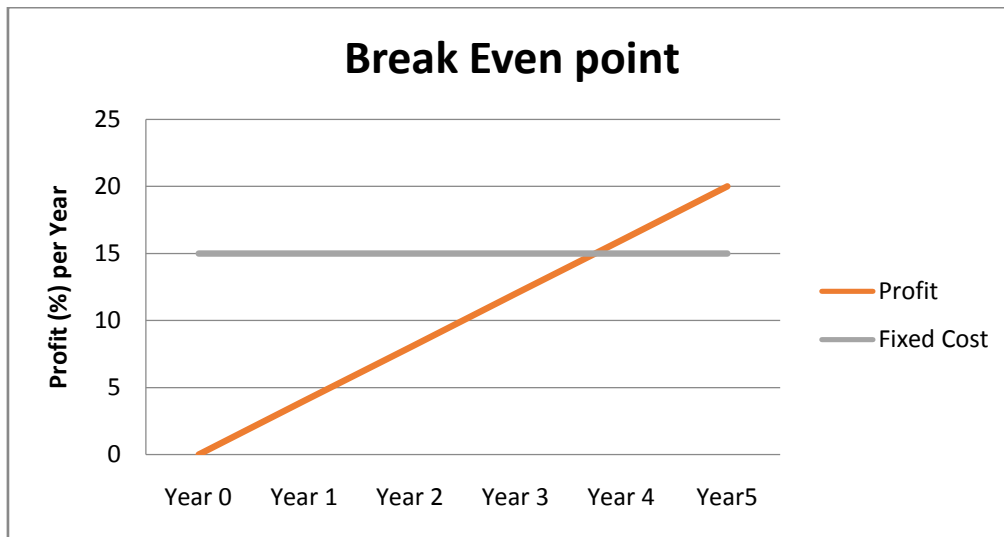
Turnover per Annum:

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Profit/Loss Analysis (In Rs):

Turnover/ Income	30,00,000
Total Cost of Production	26,00,000
Profit per year	4,00,000

Break Even Analysis:



- Fixed cost for the unit: Rs 15,00,000/-
- The annual profit (after the recurring cost of manufacturing): Rs 4,00,000/-
- Profit in four years: Rs 16,00,000

Thus the break even analysis shows that the cost of machines will be repaid within a span of four years after starting the venture.

IMPACT OF THE INITIATIVE

- This program is towards creating social entrepreneurship ventures to move from the traditional form of economy for the deprived communities. The low literacy, low skill and less exposure of SC/ST women groups can be trained for both technical and managerial skills. Such venture empowers them to more confident of running business. It gives a hope that deprived community can work and live with dignity.
- Women supplement to their family income but also to improve their standard of living.
- The most important impact on the women who are involved into this project is that the Household is now above poverty level. This is indicator that the household as a whole is now able to lead a better life.
- The women were able to send their children for school and provide the house with better food, better healthcare. This initiative has brought a positive change in the community.
- As the economic condition of the families is getting better, they are able to concentrate on other factors of life.
- This positive change is evident as it motivated other women in NarajMarthapur to join the incense stick manufacturing unit. Also now other members in the surroundings are inspired to start entrepreneurship ventures.

BENEFITS

- Nearly 50 women were trained during this project out of which **45 are currently working** with the project.
- The project provided approx. **Rs 3500 monthly additional income** for each woman involved.
- The total yearly earnings of the unit will be Rs. 1,89,000.

- As the agarbattis are considered a religious offering to God, the women felt pleasure as they think they are working for God.
- Another benefit to local people is, as the women in the households are involved in the project, they could gain extra knowledge, for example some women were given additional training in basic mathematics to maintain the daily record of manufactured product.
- This made the women understand the importance of education and they were motivated to send their children to school.
- A positive change in the society is, the additional income helped the households to improve the lifestyle, to afford healthy food and good clothes.
- Also the primary objective of the project under AA Action, to make the deprived people above poverty line was achieved. Such model can be replicated in other areas too

SUSTAINABILITY

To ensure that the initiative sustains for longer duration and will be useful for benefit of many other AA people; the Community leaders would be trained to manage the cooperative society for day to day operation, marketing etc. Hand holding support including setting up the unit, market linkage etc is provided by Tata Power for a period of one year. Minimum support will be provided as and when required by the cooperative.

Annexure -1 Standard Operating Procedure (SOP) – step wise activities for Incense stick manufacturing unit with 50 pedal type semi-automatic agarbatti making machines

Steps	Activity	Details	Timeframe	Responsibility
1.	Identification of activity	A. Check feasibility of the Agarbatti manufacturing in NarajMarthapur in terms of demand for the product within the village, within the block, within the district B. Check distance of the manufacturing location from block headquarters (10 km-15 km), distance from district headquarters (20km- 25 km)	1 Month	Tata Power
2.	Identify Land and Location for the Unit	A. Preferably a single building of 1000 Sq. Ft. area is required, out of which 800 Sq. Ft of area required for production activities like Rolling & Packaging. B. 100 Sq. Ft of area is required to store Raw material C. 100 Sq. Ft. of area is required to store finished goods D. Government or community land or existing building will be explored for setting up the unit. Otherwise, the unit can be set up in leased building. E. Check for availability of Electricity in single-phase 220V for 16 hours. F. Telecommunication Connectivity like mobile network, telephone landline and internet availability. G. Check Access to transportation like proper roads for transport H. Company can buy or rent a small goods carrier for transporting raw material and finished goods.	1 Month	Local Community and Tata Power
3.	Identification of Human resources	A. Approach local villagers and identify BPL SC/ ST people (who are at age 18 years and above) especially women.	1 Month	Tata Power
4.	Identify Machinery required for manufacturing incense sticks	Decide among the various types of machines available. 20 Machines will be able to provide employment to approx 50 people A. Pedal type Agarbatti Machines Production capacity is of 15-35kg/8hrs. Price: Rs.20000-22000 B. Automatic Agarbatti making machine , Production capacity is of 65-70kg/8hrs. Price: Rs.35000-40000	1 Month	Tata Power with local community
5.	Budgets and approvals	A. Prepare memo including plan and budget * Total Cost of Incense Stick Manufacturing Unit is given after the SOP B. Seek approval from various management levels	1 Month	Tata Power
6.	Market linkage	A. Identify possible collaborators for 1. Procurement of raw material 2. Operations (training and production) 3. Marketing of final product. Where in company will select collaborator among the wholesalers, retailers or association with a brand.	1 Month	Local community and Tata Power
7.	Training	A. Identify and collaborate with professional trainers from the industry	7-10 days	Tata Power and

	Activities	B. Ensure maximum local BPL SC/ST community. C. Provide basic requirement like electricity and other connectivity. D. Training of manufacturing agarbatti and safety measures while handling the machinery would be given.		Local Community
8.	Procure raw material	A. Procure raw material from identified partner. Raw Material required: Charcoal, Bamboo sticks, Gigatu, White chips, Aromatic chemicals etc. B. Raw material requirement depends upon the composition of Agarbatti. C. Raw material would be procured every 15 days. Stock of raw material required for one month will be maintained.	15-20 days	Tata Power
9.	Start Production and packaging	A. Start production activity on the machine under guidance of skilled supervisor B. Packaging after processing (drying)	Daily	Local Community
10.	Sell the final product	A. Sell the final product to identified brand or wholesaler or retailer, so as to get quick access to wide market B. Sell product in local markets on own	As required	Local Community with Tata Power
11.	Generate Income	A. Pay wages to workers B. Some % of income to repay the cost of machine C. Some % of Income for Village development D. Some % of Income for funds for society		Local Community
12.	Sustainability Actions	A. Create co-operative society		Both Tata Power and Local Community

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