

OSMOSIS OSMOSIS Small Ideas for Big Impact Small Ideas for Big

OSMOSIS

Small Ideas for Big Impact

WE INNOVATE Challenge is a great opportunity for MBA students of NMIMS to propose their innovative and entrepreneurial ideas to address some of the pressing social challenges. The solutions proposed by the student innovators to address a few social issues could be incorporated in a non-profit organization, a social enterprise or other informal and formal operations.

NMIMS takes a broader perspective on propelling the thought process as well the practice of social innovation as focal areas for inquiry, knowledge building and action through its current publication *Osmosis- Small Ideas for Big Impact*

Jasani Center for Social Entrepreneurship & Sustainability Management School of Business Management, NMIMS

SVKM's NMIMS, V.L. Mehta Road, Vile Parle (West), Mumbai – 400 056

Draft Message

Vice Chancellor's Message

Best brains of the world are normally engaged in solving problems of the rich, consequentially the problems of the poor do not attract their attention. It is now an accepted fact that traditional developmental model adopted to address various social agendas have created marginal impact and there is a need to develop innovative development models.

Leading Universities as well as B-Schools across the world today believe in the power of innovation to drive growth. Innovation has created immense capabilities for improving life conditions, in areas such as food production and information technologies, but these coexist with growing poverty rates, widespread hunger and poor health conditions for much of the world's population. Innovation systems are not neutral. The effects of purely market-led science and technology efforts and associated innovations tend to aggravate existing inequalities.

NMIMS firmly believes that this needs to change. The process of innovation and its place in development must be revisited and aligned with social concerns. The University is committed to inspire and promote its students to promote thinking and practice of social innovations. The *We Innovate Challenge* is our first step to stimulate the students to apply their scientific knowledge and logical thinking to address problems of the vulnerable groups. The Challenge acts as a platform for facilitating exchange of ideas among social innovators, social entrepreneurs, social investors and business practitioners to develop new partnerships, evolve ideas for concrete actions and disseminate information.

The current publication 'Osmosis – Small Ideas for Big Impact' documents thirteen innovative ideas which address the issue of quality education, vocational training, livelihood support, farm productivity, assurance of legal rights and access to development schemes. The collection highlights that social innovation is not merely an act of making available 'appropriate' technologies for poor people. But, is a social and systemic process of developing and introducing new products, processes, technologies and organizational practices within society that are effective solutions for social change.

Dr. Rajan Saxena

Vice Chancellor, NMIMS

Draft Message

Dean's Message

I believe that all innovations start with a central idea. But the idea itself is often prompted by an experience or event or new evidence which brings to light a social need or injustice. The experience gathered by our MBA students during the We Care internships designed by the School of Business Management, has been instrumental in activating few students to propose their alternative thinking to address social agendas.

The We Innovate Challenge was organized with the intention of capturing innovative ideas proposed by the students. Through this Challenge the students realized that social innovations are not just a matter of luck, eureka moments or alchemy. Nor is it exclusively the province of brilliant individuals. Social innovations can be simple but they need to be nurtured to accelerate social change.

The present publication 'Osmosis- Small Ideas for Big Impact' is a collection of thirteen ideas conceived by our students to address challenges of access to quality education; vocational training; employability; agricultural productivity; livelihood support; access to legal rights and development schemes.

I am confident that in the near future the students of School of Business Management will take the agenda of scaling up their social innovations to address the most pressing agendas of the Nation.

Dr. Debashis Sanyal

Dean, SBM, NMIMS

Director's Message

The School of Business Management, NMIMS designed We Care: Civic Engagement Internship with the perspective of socially sensitizing its students and inspiring them to foster ideas of developing inclusive business models. The internship indeed has been instrumental in enabling the student community to appreciate that we now have a much more diverse, ethnic and cultural landscape that requires new approaches to address emerging challenges. The experience has enabled students to examine the gap between what the marginalized need and want from society and what is currently available to them.

To some students the civic engagement has propelled them to generate innovative and entrepreneurial ideas which could be put to use to address a few unmet needs of the marginalised.

To promote the spirit of social innovation, the institute organized *We Innovate Challenge* in March 2013 was organized. The event enabled students to share their ideas for responding to social challenges in the area of education, women's empowerment, marginalized farmers, vocational training, livelihood support and homeless.

'Osmosis- Small Ideas for Big Impact' is a humble attempt to document and showcase the proposed solutions put forth by our students to address a few social agendas.

I am aware that what appears to work fine on paper may not function the same way in reality. In this context, in the near future we aspire to incubate these ideas and develop pilot programmes that will evaluate delivery and implementation of these ideas with the support of social entrepreneurs, social enterprises and NGOs.

Dr. Meena Galliara,
Director,
Jasani Center for
Social Entrepreneurship
& Sustainability Management

Acknowledgement

The "We Care" programme designed and executed by Jasani Center for Social Entrepreneurship & Sustainability Management has completed its fourth year. The effort has been backed up with support from Shri Amrish Patel, Chancellor, NMIMS, Dr. Rajan Saxena, Vice-Chancellor, NMIMS, Dr. M.N. Welling, Pro Vice-Chancellor, and Dr. Debashis Sanyal, Dean, School of Business Management. I sincerely acknowledge their support and encouragement.

I specially acknowledge the support provided by Mr. Aashish Nakra and Ms Smriti Sahay, vibrant team of Social Responsibility Forum volunteers in executing We Innovate Challenge.

I specially thank all the student contributors of this publication. Despite their various commitments, some contributors took lot of interest in developing their ideas. To document the innovative ideas conceived by the innovators to its present shape the coordination and editing support rendered by Ms Smriti Sahay our second year MBA student and Mr. Shubhanker Saxena and Ms Surbhi Kaushal our first year MBA students is highly acknowledged. Their unstinted support helped us to accomplish the task.

Dr. Meena Galliara,
Director,
Jasani Center for
Social Entrepreneurship
& Sustainability Management

	Technology Fnabled Remote Learning (2)	Women's B- School (6)	Annapurna Catering Services (11)
	Learn & Earn Programme (15)	5 Eco Fuel- Wood Pellets (19)	6 En-Ablers (23)
Contents	7 Market	8 Sampraday	9 Samavesh
	10	Impact Network for Farmers (32)	Strengthening Value Chain (36)
	Apículture: The Bee Busíness (40)	Solar Powered Boats (44)	Tech Identity (49)
		13 Infothela: Unleashing the Data Power (53)	

Improving the quality of teaching, learning and assessment in financially constrained education systems through **Technology Enabled Remote Learning System.**

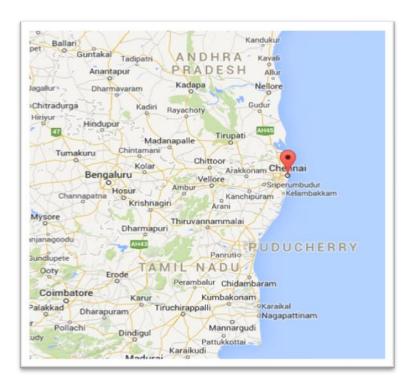
Context	Idea	Impact
Eureka Child Foundation,	Use Pico projectors and tablets	It is estimated that in
Chennai, runs after-school	to render the various lessons to	duration of four years
tuition centres in about 700	improve the quality of	approximately 60,000
villages across Tamil Nadu. Most	education. The technology can	children can be benefited
teachers had very low skill levels	assist in standardizing evaluation	 Teaching modules can be
in English. As a result, students	pattern, storing and retrieving	regularly updated
were faring poorly not only in	information with greater ease.	 Travelling time and cost of
English, but also in other		teachers from different
subjects such as science which		locations will be saved if
required Basic English skills. The		they are trained to use the
student performance at these		technology effectively
centres was measured through a		 There is a huge potential to
"skill chart" in which skill data		save running costs and
regarding various students'		reinvest the savings in other
progress was recorded. There		education initiatives
was a lot of subjectivity involved		
in evaluating students through		
this process.		

Mr. Praveen Srivatsan

Intern Eureka

Foundation, Tamil Nadu

Technology Enabled Remote Learning



Eureka Super Kidz Model

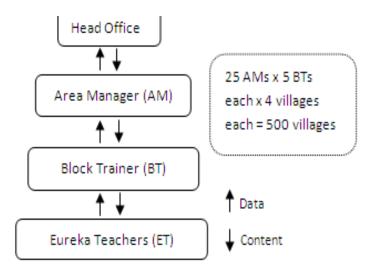
With the support of its parent organization (Aid India), Eureka developed the Super Kidz model in 2010. The model was beginning to show phenomenal improvement in the academic performance of students. Under this model, the organization trained local residents to manage school centres for students from classes I - VIII, in close proximity to the community. Eureka developed innovative and interesting study material which facilitated both teaching and learning. The NGO has currently set up over 700 centres in 500 villages across Tamil Nadu, touching the lives of over 50000 students and 10000 families. They ensure that the quality of education is maintained while generating employment for over 2000 tutors from the local community. The block trainers are allocated four villages, in which they are responsible for training the local teachers at every centre.

Context

Tamil Nadu (TN) boasts of a near perfect enrolment rate in primary schools of about 99 per cent in the year 2013-14. However, the Annual Statistics of Education Report (ASER)of 2013 highlights that in TN, 54 per cent of students in Standard VI cannot read a Standard II text book and about 64 per cent of Standard VIII students cannot do elementary subtraction. Also, the requisite performance in Standard XII for taking the Teacher Eligibility Test has been relaxed in TN, affecting the quality of teachers joining government schools in the state. Some leading NGOs like Sevalaya, Vidyarambam and Eureka Child foundation are actively trying to address these issues and improve the education scenario in TN. Eureka, founded in 2007, aims to improve the quality of education imparted to underprivileged children.



Organizational Structure for Tracking Performance



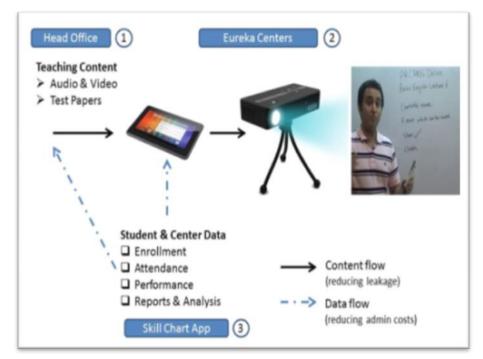
The Idea: Technology Enabled Remote Learning

To address both the aforementioned issues it is proposed that Eureka use pre-recorded audio visual modules, which would cork the leakage that occurs during knowledge transfer of subjects like English. The infrastructure is depicted in the figure alongside. All that every Eureka centre would need is handheld Pico device capable of projecting the content. Further, a tablet could serve the purpose of storing and regularly updating the content to be connected to the Pico device.

The best part is that the same investment can be used to equip a skill chart on the tablet. The students can directly be enrolled on to the application and the teachers can update their progress. The data would sync real time, in a predefined structure with the database at the head-office in Chennai reducing the time and money spent in mundane data entry and travel activity.

Tracking Performance: The Skill Chart tool

To ensure that the programme is achieving its objectives, Eureka has developed a 'skill chart' tool to measure and track the performances of students across all the centres. The skill chart has fields to accommodate the names of the students enrolled in a particular centre as well as the skills they are expected to develop during the course of the year. Particularly, it focuses on basic skills related to English, Tamil, Mathematics and Science. The Eureka teacher constantly evaluates the students and updates the chart as and when the latter gain these skills. Every month, the chart data reaches the head office at Chennai through their channel of area managers and block trainers as shown in the figure. This has led to two major problems: a) massive monthly manhour consumption in data collection. Each block trainer takes two hours to collect data from every village. The Area manager takes two hours to collect data from each block trainer and an additional twenty hours in total for a trip to Chennai. b) Additionally, lack of a strong base in English continues to result in stark leakage of knowledge during transfer through the areas managers, block trainers as well as the Eureka teachers.





Feasibility

Eureka already has the network and team in place to help set up the technological infrastructure at the required scale. The centres spread across 500 villages can be covered in a phased manner over a period of four years with a total investment of INR 2 crore (Cost of investment per centre = (Cost of Pico device) + (Cost of Tablet) => (INR 23000/- + 5000/-), for 700 centres). The final investment made during the end of the fourth year is expected to pay back in two years due to major savings in running cost for the organization. There is also an opportunity to use the technology once a month in government schools to conduct workshops for a minimal fee, generating revenue and further shortening the payback period.

Probable Impact

The benefits of the investment in technology, if implemented, are multi-fold. There is an expected saving of INR 7000/- (Cost savings to arise from digital transfer of skill chart data as well as reduction in manual data entry)per village per year on administrative costs for the organization. Workshops conducted in government schools can fetch further revenue of INR 5000/- (Considering an average of 50 students per school and a minimal charge of INR 100 per student for 12 sessions) per village per year. When synergy strikes, the total positive cash flow (savings + revenue) generated at the end of the fifth year would be INR 2.5 crore. As leakage in knowledge transfer reduces and the effectiveness of teaching material increases, the quality of education imparted to children would improve



Equipping poor entrepreneurial women with technical and management skill sets to manage their own micro enterprises by designing an exclusive **Women's B-School**.

Context	Idea	Impact
Poor women in India are left out	Set up a unique Women's	 Facilitate inclusive
of the educational system. To	business school which can	economic development
manage their households they	address the problem of skill	 Develop confidence among
end up working as causal	shortage among entrepreneurial	women to manage their
workers with minimum and	poor women and also develop	own lives and those who
unstable wages. In the absence	their managerial capacities.	are dependent on them
of vocational training, the		 Develop women
women find it difficult to access		entrepreneurs in the supply
micro credit. Even when women		chain
are provided with financial		
support, they still find it difficult		
to set up and manage their own		
enterprises.		

Mr.Bharanidharan N, Mr.

Namashiwayam & Mr.

Sowmyanarayanan P,

Sowmyanarayanan ACL, Tamil

Interns Cholai: ACL, Tamil

Women's B-School





Context

Mangadu, a small town in the outskirts of Chennai, was no different to other villages which mushroomed around the city feeding on its growth. The migratory population which formed the majority in the area did not have a steady flow of income due to cyclical nature of their employment. Many are illiterates who work hard to give proper education to their children so that they would see a better future. Most of the women have taken up agriculture, basic chemicals, stone mining and beedi rolling as a vocation to augment the income from the male member of the family.

As per a survey conducted by Action for Child labour - Cholai, an NGO, in 5 villages, more than 70 per cent of the population earns less than INR 5000/-per month and are finding it difficult to meet even the basic needs of their children. To add to their woes, the stone quarry in Mangadu which employed many from the surrounding villages, was shut down recently due to violations of environmental regulations.

About Cholai Action for Child Labour (ACL)

'Cholai ACL' was registered as a trust in 1987. It was set up to stop child labour in the hazardous industries, and to ensure that all the children get to enjoy their childhood. Starting with the rehabilitation of children working in leather tanneries of Chennai, the organization moved on to help children working in other fields such as mining, handloom, and brick chambers. Over the years the staff of the organization realized that to make a difference in the lives of the young ones, they need to be educated and provided with vocational training. This would enable them to take care of themselves and not become a burden to the society.





The organization also realized the importance of educating the mothers of these children, and in due course devised couple of programmes to economically empower them.

With the support from the NGO, few women have set up their own micro enterprises. But, these enterprises did not turn out to be as effective as they were originally envisioned.

The survey conducted by the NMIMS interns revealed that the women had flair for various vocations but were let down by their poor management skills. Many young women aspired for technical and business education but had neither the means nor the opportunity to get them. Many lacked access to finance.

Though the women had an aptitude to excel in what they were doing, but were in need of professional help in organizing their business and make it sustainable.

The Idea: Women B- School

To address the need of providing management skills to women in managing their micro enterprises, the idea of 'Women's B- School' (WBS) is proposed.

The WBS would develop technical skills and business acumen among women through class room inputs and hands on experience.

To start with WBS can initiate courses related to candle making, tailoring, jewellery making, incense stick and so on.

Apart from skill based training, the course would also impart knowledge on basic management concepts like procurement of raw material, costing, working capital management, supply chain management, marketing management and, soft skills required to start(in case of new businesses) and run a sustainable business.





A module on soft skills would be incorporated in the course to enable women to increase their confidence while interacting with others in the marketplace.

The trainings session would be conducted within close proximity to the women, without disrupting their normal lives. A separate market research team will continuously upgrade the syllabus with the changing market requirements.

Successful micro-entrepreneurs will be invited to share their knowledge and experiences. On successful completion of the course, the participants would be encouraged to come up with a business model, which would be evaluated. If the model is found to be feasible, WBS will connect the entrepreneur with a micro finance organization.

Arrangements will be made to help the women raise a loan of INR 20,000/- in groups of five, which would serve as a seed capital for their business.

The members of the business relationship club (alumni club) will get to share their best practices, entrepreneurial contacts and also to recruit talents for their business.

Feasibility

It is anticipated that if there are 15 enrollments from each of the 20 villages, a total of 300 students will be admitted to the WBS for duration of 10 weeks.

Professional assistance from employee volunteers and B-school students would be sought for curriculum development.

The staff of Cholai, will be deputed to get micro small and medium enterprise training from the State Industries Training Institute. They in turn can impart their learnings to the women who are enrolled in the school.

Initial funding to set up WBS can be procured from philanthropists and companies looking for effective channels to spend their CSR funds.





The main source of cash inflows would be coming from the enrolment fees, donation from partner organizations and organizations providing micro credit. The amount generated would be used to cover the operational expenses. The school will also have network with banks and micro finance institutions to extend loans to women. Thus, by channelizing funds in the right direction, the school could break even in three years.

For long term sustenance, the school would be charging the members a nominal fee and an annual subscription fee from the alumni. The alumni can form a cell and receive advanced assistance in managing their business.

The market research team would identify all such potential businesses that can be profitably run in these villages with plenty of scope to scale up in the future.

Probable Impact

WBS will be instrumental in economically empowering women and making them self reliant. WBS would facilitate an interaction between the women entrepreneurs and suppliers, and also bring in various industrial projects.

WBS would not only provide economic independence to the women but also enable the entire family come out of poverty. If efficiently handled, WBS could be expanded on a large scale, can be taken to different parts of the country and other developing nations of the world.

All these promises and projections make WBS a great proposition for the entire society.



Increasing employability and entrepreneurship among poor women through leveraging their skills in cooking by setting up a fully women managed enterprise-Annapurna Catering Services.

Context	Idea	Impact
Women in general are the most disadvantaged people in Indian society. They are trapped in a cycle of poverty by a lack of diverse and market responsive education and skill building opportunities. One skill in which they are adept is cooking. There is need to leverage this skill and interest with the catering industry which is expected to grow and also has a non-cyclical demand.	Set up an all-women catering service for corporate offices, which would attract women from the underprivileged communities to come together and have the ownership of the entire project.	 Provide a sustainable mode of income Empowerment of women Delivery of healthy food in the industrial areas

Ms Anjali Rawat &
Mr. Anurag, Interns
Childline, New Delhi
Literacy India, Haryana

Annapurna Catering Services



Context

Empowerment of women involves providing them with economic opportunity, social equality, and personal rights. In India, women are deprived of these basic human rights, often as a matter of tradition. The single most effective way of empowering women is by providing them with a suitable employment opportunity. However, due to societal and family concerns, women from the underprivileged section of the society are still not able to come out of their homes to earn their livelihood. Various government bodies and organizations that have understood the importance of economic empowerment of women are making efforts in this direction.

About Asha Deep Foundation & Literacy India: Delhi NCR

Two NGOs in the Delhi NCR region engaged in the cause of women empowerment are Asha Deep Foundation and Literacy India. Asha Deep since last 30 years is working in 73 slums of Delhi-UP border and Ghaziabad district. Literacy India which is primarily associated with education of children has also started empowering underprivileged children and women.

Both the NGOs are working on improving the employability of women in their areas by imparting skills such as embroidery, handicraft, mehendi making and paper making. Post training, the women have an option to work with the same NGO or in any factory. Unfortunately, the employment rate post training is approximately 50 per cent.

As NGOs are unable to cope up with the market competition, they are unable to generate employment. The major concern is how to develop an appropriate model of employment.





Feasibility

The idea is feasible because local women who have no other skill set other than cooking will be too happy to work with ACS. It is anticipated that on an average one centre of ACS would include 10-15 women with welldefined roles, such as centre head, cooks and cooking and packaging assistants. By having an overall management in their hands, the women would feel empowered and hence, will take pride in their work. To set up a centre, an initial capital cost will be involved and the running cost will be managed on a monthly basis. The return on investment (ROI) would depend on the number and size of the offices, an ACS centre would cater. To set up one ACS centre in Daulatabad Village near Gurgaon, catering to a midsized office (200-250 employees) in the nearby region would include an initial investment of INR 505,000. This is the one time capital cost that needs to be invested initially and will be utilized for taking a building on lease, vehicle and cooking equipment.

The Idea: Annapurna Catering Services (ACS)

Women from the bottom of the pyramid (BoP) are adept in cooking. There is a need to leverage their interest and skill in this area and connect it with the catering industry which is expected to grow and which also has a noncyclical demand. The catering segment in India is mainly dominated by unorganised players, majorly run from small establishments. This industry has been consistently growing at a CAGR of 15-20 per cent. With expansion of Special Economic Zones (SEZ) in and around the main cities, the demand for corporate catering services in on a rise. In the above context, NMIMS interns propose to set up Annapurna Catering Services (ACS) which can provide quality food to the customers and also generate consistent employment for the women.



The entire operations from cooking to packaging will be handled by women at the centre. They will be preparing authentic Indian food and packing the same in boxes. A delivery person at the centre would then distribute this to the offices with a tie-up.

At the offices, the counter will completely be run by women from ACS. The entire operations will be managed by the centre head, who will be a senior women member from the ACS team. For a setup of this scale, the variable cost/month is expected to be approximately INR 153,000 which would be utilized for raw materials, packaging, wages and salaries, fuel and cafeteria rent. This kind of a setup is expected to ensure an average salary of INR 4000-5000 per women employed at the centre. It is expected that the ROI of one centre will be around 10 per cent in the first year.



Probable Impact

Through this initiative, the local community residing in the villages or areas near to the corporate offices or SEZs will get livelihood support within the vicinity. The project would ensure empowerment of women by giving them an overall control, sustained source of income by providing them employment in a business to business catering which is non-cyclical in nature and will provide with easy absorption of women at a large scale due to work related to a well-known skill set (cooking).

Secondly, the employees working in the corporate will have access to safe, hygienic and low cost home-made food by the women.

Retaining girls in the education system and developing their vocational skills through the design of **Learn & Earn Programme**.

Context	Idea	Impact
The girl child's discrimination	Design Learn & Earn programme	Reduces the burden of
begins before birth in the form	to retain girls in the education	funding girl child's
of female foeticide. Though over	system and provide them with	education on economically
the years women have made	skill sets to earn their livelihood	deprived families
great strides in many areas with	in the latter stage of their life.	 Fosters inclusion of girls in
notable progress in reducing		the education system and
Some gender gaps. Yet, the		develops livelihood skills
afflicted world in which they live		Revenue source for NGOs
is characterised by unequal		to manage their
sharing of the burden of		operational expenses
adversities.		
Sprawling inequalities persist in		
their access even to basic		
services like education which		
further cascades them to be		
economically deprived.		

Mr. Prince Jain, Intern Protsahan, New Delhi

Learn & Earn Programme Facilitating Gender Power

4



Context

A girl in India faces challenges from the time when she is in her mother's womb till the very last breath of her life. The challenge is to live a respected and a happy life. India has a skewed gender ratio of 943 girls per 1000 boys. The ratio is as low as 725:1000 for states like Haryana. Girls are most often seen as a burden and not as a member of the family. To address the identified problems, NGOs such as Care India, Swabhiman and Protsahan are making efforts to empower women in India.

About Protsahan

Located in Hastsal village of Delhi, Protsahan is surrounded by well-developed colonies. With the iconic Delhi Metro hardly two km away from the village, the villagers have access to all the facilities of the modern world. The NGO primarily started working towards educating girls. The NGO realised that the majority of them are not able to start their education till they are ten years of age. Subsequently, these girls are reluctant to join school from the preliminary classes as they feel they are misfit for the class. This issue never gets resolved and consequentially girls get marginalized.

Protsahan started with addressing such abnormalities through a bridge education programme varying between six months and two years. Through the bridge education programmes, girls are academically brought at par with school going girls of their age and are integrated in the formal education system. To reach out to more girls in the community and enable them to get educated, both Protsahan and the girls need solid financial support.





The Idea: Learn and Earn Programme

To encourage girls to be educated it is proposed that Protsahan designs 'Learn and Earn Programme'. Through this programme, girls can be given training in designing Madhubani and Warli paintings, desk & wall calendars and other handmade gift items. The girls can be given a small stipend for their contribution for designing the craft products. These products could be subsequently sold in the market. The entire idea can be scaled after procuring advanced orders from local business organizations, Rotary clubs as well as Lion's club and other elite groups.

Feasibility

With skill development appearing on country's priority list, Protsahan can source seed funding for the 'Learn and Earn Programme' from local corporates under their CSR scheme.

The art teachers of Protsahan can be deputed to advance their artistic skills in commercial art centres which are in and around Faridabad. This engagement can be leveraged to train the girls to design marketable gift items.

Local volunteers who have artistic skill sets can also be invited to train the girls.

Advance orders for gift items can be procured by joining local business networks as well as professional networks.





Probable Impact

Through the 'Learn and Earn Programme', girls will not only get basic education but also a skill that would make them economically independent. Secondly, the fund that will be raised by such initiative will be huge in amount if the activity is efficiently executed. These skills are valued highly by the corporates and also the other sectors of the society. In addition to this, the funders will see a consistent return on investment which will make the model sustainable for Protsahan.

The NGO can scale up its operations by having a better demand and supply forecast of the entire range of products. The NGO can also tie up with retail and hyper markets to sell this product and generate revenue for both the parties.

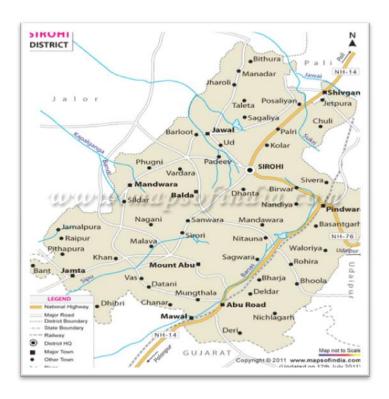
To create livelihood support option for tribals through manufacturing of **Eco Fuel-Wood Pellets.**

Context	Idea	Impact
Around 1,10,100 tribal people	Set up a social enterprise that	Provide an alternate source
reside in the Abu Road and	would facilitate employment	of income to the tribals
Pinswara district of Sirohi belt in	through generating eco fuel	Substitute the use of coal
Rajasthan. These people mostly	through utilization of burnt wood used by tribal hoseholds.	Reduce pollution related
belong to Bhils and Grasiya	wood used by tribal floseficius.	health hazards
tribes. The absence of skills and		
low literacy of 13.7 per cent		
among men and 0.85 per cent		
among women has compelled		
them to work as agricultural		
labourers. Infertile land and		
unpredictable monsoon makes it		
difficult for them to have		
permanent source of income.		
The concern is how to generate		
livelihood in the region with		
available skill sets among tribals.		

Ms Arjali Agrawal, Mr. Jay Parikh &
Mr. Pavan Shetty, Interns
Mr. Pavan Sansthan, Rajasthan
Jan Chetna Sansthan, Rajasthan
Jan Chetna Social Entrepreneurship,
Maharashtra
Maharashtra
SAATH, Gujarat

Eco Fuel- Wood Pellets





Context

Around 1,10,100 tribal people reside in the Abu Road and Pinswara district of Sirohi belt in Rajasthan. These people mostly belong to Bhils and Grasiya tribes. The absence of skills and low literacy of 13.7 per cent among men and 0.85 per cent among women has compelled them to work as agricultural labourers. Infertile land and unpredictable monsoon makes it difficult for them to have permanent source of income. Their daily chores are so demanding that it does not provide them with ample time to seek any other source of income. Organizations like Jan Chetna Sansthan are making efforts to address the issues of providing livelihood support of local tribal communities.

About Jan Chetna Sansthan (JCS)

Jan Chetna Sansthan (JCS) is a registered NGO in Abu Road, Rajasthan. The organization has concentrated its efforts towards capacity building of the local community through provision of livelihood, empowerment, health, and other social interventions.

The NMIMS interns in the course of their field work observed that the tribals prepare their food using *chulas* that uses wood. They generally do not burn the entire wood. Hence, the wood gets wasted in the form of ash. This triggered them to develop an idea which could become a consistent livelihood support activity for the poor.





The Idea: Making Wood Pellets

The idea is to develop a social enterprise which can manufacture wood pellets from the burnt wood. The enterprise can engage JCS to procure burnt wood from tribal households and supply the same to the social enterprise. For this to happen, JCS should provide capacity building training to the tribals who wish to gain employment through this activity.

The enterprise will be solely responsible for the manufacturing and sale of the pellets. The entire process from sourcing to sales will create consistent employment potential for the local tribals.

Feasibility

The idea is feasible because all tribal households in the community use a fuel wood, the burnt wood can be procured from them for converting it into charcoal pellets. The sourcing of wood can be taken up by few women who are beneficiaries of JCS. This can help them to earn income. The business could start with an investment of INR 30 lakhs to cover the Sirohi district. This could typically cover 100 households and to double the capacity would require an additional investment of INR 20 lakhs. At a current selling price of INR 32 per kg of pellets, the business could breakeven within 2-3 years. The market for the product has a huge demand from individual houses, restaurants in the country. Even industries like cement and power demand these products as it helps them to reduce pollution. The product has a strong demand in European countries.

The social enterprise can provide employment in production and distribution of pellets to the locals on a continuous basis.





Probable Impact

Firstly, the entire idea revolves around the concept of generating alternate income option for the tribes of Sirohi. The locals do not have to invest time to learn the skill. They can get consistent employment in the vicinity.

Secondly, the end product is better than coal in respect to its calorific value, smoke content and price. This makes it a possible substitute for coal and thereby reduces pollution related health hazards for users.

Addressing the need to develop emotional intelligence of the youth undergoing vocational training by connecting them with **En-Ablers.**

Context	Idea	Impact
India is on the brink of a demographic revolution with the proportion of working-age population between 15 and 59 years likely to increase from approximately 58 per cent in 2001 to more than 64 per cent by 2021. Demographic dividend can be reaped only if this young population is healthy, educated, and skilled. While vocational training assures functional capacity building, there is a concern in the area of developing emotional intelligence of the trainees to enhance their job worthiness.	Incorporate soft skills module which develops trainee's skill sets in team building, business etiquettes, basic general knowledge & overall personality.	 Increased confidence of trainees at workplace Increased ability to effectively interact with others Creation of cohesive work and social places

Mr. Ashwin Doke &

Mr. Saurabh Deshpande, Interns

Tata Motors, Maharashtra

Tata Motors, Maharashtra

En-Ablers





Context

India is on the brink of a demographic revolution with the proportion of working-age population between 15 and 59 years likely to increase from approximately 58 per cent in 2001 to more than 64 per cent by 2021, adding approximately 63.5 million new entrants to the working age group between 2011 and 2016. Given that India is one of the youngest large nations in the world, human development assumes great economic significance. Demographic dividend can be reaped only if this young population is healthy, educated, and skilled.

India has set a target of skilling 500 million people by 2022. Corporate India is developing innovative mechanisms to develop skill building. Tata Motors is one of the leading companies which has pioneered its initiative in this direction.

Tata Motors: Learn and Earn Programme

Tata Motors in partnership with ITI's and their dealer network has commenced the "Learn and Earn" programme to empower the youth. This programme aims at enabling the student get branded certification for increasing their employability in the automotive sector as a 'Motor Mechanic'. Through this programme theoretical learning is supplemented through 'on-the job-exposure at the service centre. Moreover, it supports the students economically as stipend is given during the internship period. The course curriculum is adjusted in a unique way that makes the students employable the day they complete the course.

In order to enable the students to become 'Job Ready' Tata Motors Ltd. desires to incorporate a life skills training module. The module aims at guiding students to draft resumes and handling job interviews. The company plans to out-source soft skill training sessions to professional companies.





The Idea: Soft Skills Training to Blue Collared Workers

The opportunity available through Tata Motor's requirement inspired NMIMS interns to set up a social enterprise- 'En-Ablers' a social enterprise to deliver the soft skills programme. The target customers of this enterprise will be blue collared employees and students of skill development courses. The soft skill training curriculum will cover following

topics- english speaking; team building; business etiquettes; basic general knowledge & personality development.

The trainers for the soft skills programmes will be a mix of communication experts, professionals in the sector and MBA students with work experience. Based on continuous review by experts the programme will be regularly updated.

To reach out at various locations, the training will be offered at work sites or technical training institutes.

The enterprise in the initial phase will work in and around Mumbai and will eventually will scale up across the State especially in areas which are declared as socio economic zones.

Feasibility

There will be no infrastructure cost incurred in executing the soft skills as the trainers will be reaching out to specific locations where such an intervention is required.

The success of any soft skills programme depends upon the passion and ability of its trainers. Efforts will be made to source such trainers from the same geographic locality. This will help in increasing the rapport between trainers and trainees and reducing the incidental cost.

Efforts will be made to develop networking strategy with organizations who partner with National Skills Development Corporation (NSDC). This will ensure that En-Ablers are able to connect with the right type of market.



The financial feasibility of this programme can be derived from collecting fees from prospective companies who will be recruiting the candidates. In the initial period the start up will require an investment of INR 25,000/-. This will be procured from personal savings of the entrepreneurs. This investment will meet the initial expenses related administration and developing the course material.



Probable Impact

The soft skills programme will help to boost the confidence level of the blue collared workers/students and develop their self-esteem to face the world. The career prospects of trained personnel will be brighter in the job market. This will consequentially impact their economic and social status.

The companies who will recruit the trained personnel will get an employee who will be technically trained and emotionally productive. This will have cascading effects on enabling the companies to have a better customer service, productivity and higher profitability.

Addressing the gap between market demand and vocational training centres through **Market Connect.**

Context	Idea	Impact
There is a wide gap between the	Set up a placement centre to	Economically deprived
present vocational training	organize and enhance the hiring	youth will get fair share in
programmes and the expectations	process through training the	the job market
of the corporates/ small and	students and having tie ups with	Businesses can get better
medium enterprises (SMEs) to hire	various organizations.	trained workforce
the individuals as their employees.		
NSDC projects the demand for		
minimally skilled and semi-skilled		
labour force in Haryana will be		
around 9.51 lakh and 6.67 lakh		
respectively from 2012-2017.		
Though there are a couple of		
vocational training centres, the		
trainees are not able to get jobs.		
Hence, the concern is to address		
the gap between market demand		
and vocational training centres.		

Mr. Vijay Dosapatí &

Mr. Viresh Sharma, Interns Ashray

Mr. Viresh Sharma Pradesh & Prayas

Akrutí, Andhra Pradesh Haryana

Social Welfare Society, Haryana

Market Connect





Context

According to Federation of Indian Chambers of Commerce and Industry (FICCI) report, by 2016-17, informal job sector in India will share 93.46 per cent of the total jobs. In recognition of the need to develop skills of the youth the Government of India (GoI) has adopted skill development as its national priority. Accordingly, the National Skill Development Corporation (NSDC) was set up.

In 2012-2013, NSDC trained 402,506 people from which only 216,741 could be placed. This shows the gap between the present vocational training programmes and the expectations of the corporates/ small and medium enterprises (SMEs) to hire the individuals as their employees.

NSDC projects the demand for minimally skilled and semi-skilled labour force in Haryana will be around 9.51 lakh and 6.67 lakh respectively from 2012-2017. Few NGOs such as Prayas Social Welfare Society, Nari Chetna Sangthan and Kherwadi Social Welfare Association are working relentlessly to provide quality training programmes and generate employment in Haryana.

About Prayas Social Welfare Society

Prayas Social Welfare Society (PSWS), an NGO founded in Faridabad in 1999, provides free education and vocational training to the people from families belonging to economically weaker sections of the local corporations. The residents of these communities comprise of labourers. Their children at times are not even admitted in public schools due to poverty, illiteracy and lack of resources. Those who go to schools dropout half way through.

To address such issues, Prayas provides training to the students on various vocational courses such as beautician, electrician, weaving and knitting, data entry jobs and computer hardware repairing. A new batch is started every 6 months.



Prayas currently provides education and training to more than 6000 students through 59 schools in Haryana, Delhi and Uttar Pradesh.

The concern is whether is this initiative adding any value to the trainees as well as to the society? NMIMS interns observed that the students were not motivated to pursue the course as they were ambiguous about their job prospects. The trainees felt that due to their economically deprived status they were unable to pay bribes to get government jobs or secure reference from the elite to get private sector jobs. The potential employers refrained from engaging the trainees from Prayas as they felt that they lacked soft skills and Prayas had no placement centre in place. Despite trainees being highly adept in their skills and gave their best effort to find jobs, they were demotivated due to high entry barriers in the industry and thus had uncertainties over their future.



The Idea: Fruitful Employment Generation!

To address the placement gap the idea is to generate direct employment opportunities for students by providing a formal recruitment channel at Prayas. This implies that the NGO should have a placement centre to act as an intermediary between the market and the NGO.

The placement division can develop tie ups with various corporates on a regular basis. When the batch is job ready then on campus placement process can take place.

For facilitating smooth placement process, the existing training facilities at Prayas need to be standardised. These include updating the course contents, teaching methodology and the assessment process. Apart from the functional course modules, the training should also focus on developing soft skills and personality of the students. Separate sessions on developing communication skills and people skills need be imparted. Simultaneously, a web service portal for Prayas can be launched wherein companies can post their job requirements and then be contacted by the Prayas team.

In the first phase, vocational courses like stitching and weaving, basic software and data entry, sales force, hospitality, beautician, electrician and home science courses can be conducted. This portal can also be used to satisfy temporary household demands for the same i.e. people can log on to the portal and raise temporary request for an electrician or a carpenter. The students trained in various trades would get their work through this portal in an organized manner.

Feasibility

The above idea is feasible because the revenue generation model will comprise two major points. Firstly, when firms/companies hire permanent professionals, they have to pay the enterprise a fixed amount per recruitment. For example, if ABC Bank wants to recruit 10 Data Entry Operators for their bank, they will have to pay the enterprise 10*5000 = INR 50,000/-. Secondly, the profit sharing model (80:20) can be adopted for jobs done on a day to day basis. In this arrangement, employees will get 80 per cent and the enterprise will get 20 per cent out of the total earnings. For instance, when a household calls for an electrician service, the enterprise will send a representative to their place. If the total worth of the work done is INR 1000/-, the service person will get INR 800/- and the company will get INR 200/-.





The initial investment to set up a placement centre can be outsourced through philanthropic funding.

Thus, the model can be increased exponentially going forward. Initial investment into the project is expected to be around INR 16, 00,000/-.

The project would have the backing of government organizations such as NSDC for training and recruitment requirements.

The target customers would be small scale to large scale firms and companies. In addition to this, web portal would target households who would place their service request on a day to day basis.

Probable Impact

Placement centre at Prayas will assist in trainees getting their fair share of jobs and assured income. On successful implementation of the project, many vocational training students would find meaningful jobs. Trainees will become independent, get a sense of direction and can even start their own venture.

The trainees as well as their families would be able to improve their standard of living.

There are many companies who fail to find individuals with suitable requirements and available at affordable salaries. The placement centre will enable the companies to reduce their recruitment costs as skilled individuals can be employed through this process.



IDEA 8

Addressing issues of farmers and agricultural productivity through **Sampraday-Impact Network.**

Context	Idea	Impact
The suicide levels of farmers in	Create a network of farmers,	 Improve farmers'
Punjab and Haryana have been	suppliers and buyers of the farm	productivity and economic
on the rise. In the context of	yield through setting up a	status
Haryana, it is reported that	cooperative.	Enhance entrepreneurial
around 45 per cent of farmers		skills in farmers
are marginalized and 20 per cent		 Provide reputational
are small farmers. Majority of		dividend for the associated
these farmers are not able to		organizations
access production and market		
related information to increase		
their productivity. Their concerns		
centre around information		
access in the areas of availability		
& utilization of appropriate		
seeds, fertilizers, pesticides and		
agricultural techniques.		



Sampraday- Impact Network for Farmers



Context

Agriculture and allied sectors contribute nearly 14 per cent to India's GDP and employs 50 per cent of the total workforce. In spite of the innovations in technology, the average farmer in India still lags behind. Institutes like Krishi Vigyan Kendras are working diligently to resolve issues of farmers and increase their productivity.

In the recent past it was reported that the suicide levels of farmers in Punjab and Haryana have been on the rise. In the context of Haryana, it is reported that around 45 per cent of farmers are marginalized and 20 per cent are small farmers. Majority of these farmers are not able to access production and market related information to increase their productivity. Their concerns centre around information access in the areas of availability & utilization of appropriate seeds, fertilizers, pesticides and agricultural techniques.

Additionally, due to lack of education and alienation farmers are not able to gain access to various government schemes. Their subjugated status in the marketplace further victimizes them as they are exploited by middlemen, corporates and retail store owners. Consequentially, this impacts their quality of life. To address the issues of farmers in Haryana, NGOs like Kisan Sanchar are playing a pivotal role.

About Kisan Sanchar

Kisan Sanchar was setup as an NGO on 15th March, 2012 to develop agribusiness intelligence among its member farmers. The organization propagates climatic and agriculture based information to its member farmers on daily basis through voice and text (SMS). Currently more than 3.5 lakhs farmers are registered with Kisan Sanchar in 16 states. They also provide agri-counseling services to small and marginalized farmers.





The Idea: Creation of a Large Farmer Network

NMIMS interns placed with the Kisan Sanchar observed that despite the organization making efforts to disseminate agriculture related information, the farmers are unable to put the same in use because of non-availability of agricultural resources. To address this issue, NMIMS interns propose to set up 'Sampraday'-a co-operative which develops a strong network of producers, suppliers and buyers. To reach out to maximum number of farmers, Sampraday will have its branch in each district of Haryana where Kisan Sanchar has extended its reach.

To facilitate farmers' procurement ability, Sampraday will have its own warehouse where it will stock best quality seeds, subsidized fertilizers and pesticides. Agri-inputs from government research organizations such as Haryana Agricultural University, Co-operative Society, Haryana Land Reclamation and Development Corporation Ltd. and others will be sourced on payment of reasonable fee. The collated information will be shared with the farmers on a regular basis.

Feasibility:

It is proposed that Sampraday will have a cooperative model and would require small inventories backed by analytics as its only investment. It will leverage the social equity of Kisan Sanchar and thereby the expenditure on marketing can be diverted to distribution and supply chain management.

The farmers will receive agri-inputs at below market rates. For instance, a termiticide called chlorpyrifos is currently available in the market in the price range of INR 700-800, marketed by a multi-national corporation. The same will be sourced and provided to the farmers in the price range of INR 180-200. The sourcing of raw materials from the government research organizations will reduce the raw material procurement cost.



Page 33

Farmers can increase their productivity due to the use of high quality raw material. This support will enable them to overcome the soil deficiencies in the arable land. Hence, the farmers will be able to take three crops a year.

The initial capital requirement of the proposed enterprise is quite low (estimated at INR 3 crore) and the scalability avenues are huge. For start up funds Sampraday will approach angel investors and large corporations. Membership fees will be charged from the farmers to procure the services of Sampraday. The surplus from Sampraday will be invested in expanding its reach.



Probable Impact

It is anticipated that farmers who avail Sampraday's services over a period of time will improve their farm productivity and entrepreneurial skills. This will positively impact their economic and social status. The propagation of agri-knowledge and research work undertaken by government agencies such as Krishi Vigyaan Kendra and others would be effectively utilized. NGOs like Kisan Sanchar will also gain momentum in attaining its vision of empowering farmers.

Local corporations which will invest their resource support through CSR budgets in Sampraday will gain reputational dividend in the region. In the long run their profitability too will be enhanced as the buying power of the farmers will scale up.

Increased farm productivity in the long run will ensure food security in the country.

IDEA 9

Addressing the need to create backward and forward linkages to address issues of farmers through **Samavesh-Strengthening Value Chain.**

Context	Idea	Impact
Sundergarh district is the second largest district in Odisha having a population of over 20 lakhs. Kissan, Oram and Gond form the major part of the population who practice agriculture as their major occupation. Most of the farmers in Sundergarh district cultivate rice as their main crop. Due to limited irrigation facilities, the productivity of the farmers is severely impacted. Lack of agriculture related information and training on latest agri-techniques act as impediments to their productivity.	Set up an enterprise to synchronize the produce of the farmers with the market demand and latest developments in farming.	 Well trained farmers Enhance farmers' profitability through demand driven cultivation Buyers assured of timely supply of agriculture produce

Mr. Pratyush Panda, Mr. Pratheek

Mr. Pratyush Panda, Mr. Pratheek

Muriki & Mr. Rohan Jain,

Interns VISSTAR, Odisha

Interns VISSTAR, Odisha

Interns VISSTAR, Odisha

Ashray Akruti, Andhra Pradesh

Ashray Akruti, Andhra Pradesh

Centre for Rural Development, Assam

Samavesh- Strengthening Value Chain





Context

Sundergarh district is the second largest district in Odisha having a population of over 20 lakhs. Kissan, Oram and Gond form the major part of the population who practice agriculture as their major occupation. Most of the farmers in Sundergarh district cultivate rice as their main crop. Due to limited irrigation facilities, the productivity of the farmers is severely impacted. Lack of agriculture related information and training on latest agri-techniques act as impediments to their productivity. Consequentially, the revenue earned from agriculture remains low. To ameliorate this situation, government and NGOs like Voluntary Institution for Sustainable Social Training Action & Reconstruction (VISSTAR) are making consistent efforts to improve the situation.

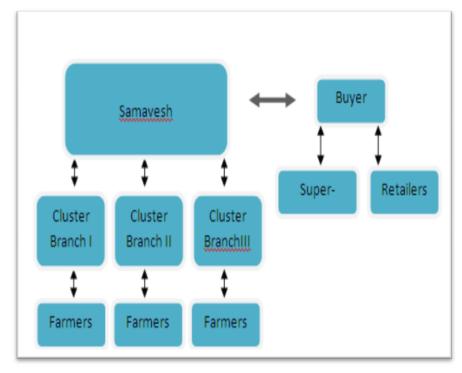
About VISSTAR

VISSTAR, an NGO, registered in 1999, works for the development of the under privileged sections of society. The organization is making significant efforts to improve the standard of living, particularly of the poorest of the poor, by enhancing their sources of livelihood and preventing migration.

NMIMS interns placed in VISSTAR observed that the farmers in Sundergarh do not have access to market information, best practices and efficient farming techniques. Though the farmers are very hard working, they lack information on agricultural production which impacts their production levels and pushes them into the vicious cycle of poverty.



Samavesh- Operating Model



The Idea

To develop capacities of the farmers, NMIMS interns propose to set up a social enterprise 'Samavesh' which would facilitate forward and backward linkages to help the farmers. Samavesh, as an intermediary organization will assist in synchronizing the market demand from the supermarkets and retailers by carrying out market research and would apprise the farmers about the forecasted demand in each cycle.

For better supply chain management, a hub and spoke model will be adopted. Village clusters will be formulated based on geographical proximity of villages. . Grains will be procured from the farmers residing in various clusters and the same will be deposited in the centralized warehouse of Samavesh.

Subsequently, the grains will be transported to the supermarkets, distributors and retailers based on advance orders.

To address the information asymmetry, Samavesh executives will also provide referral services to farmers to procure better quality seeds, latest farm equipment and better fertilizers. Knowledge will be shared on best practices and capacity building activities would be carried out through demonstration farms and training. Executives from agricultural department, banks and microfinance organizations will be invited to share their knowledge about various support schemes with farmers. The proposed operating model of Samavesh is displayed in the figure.

Feasibility

As Samavesh's activities will be demand driven, the farmers will get assured returns on their investment. Seeking partnership with NGOs like VISSTAR will help in the creation of a robust backend system. Professional competencies of the founding members of Samavesh will be leveraged to establish credibility with the buyers and government agencies.

The initial funding for Samavesh will be sourced through angel investment and CSR funds. A token annual membership fee from the farmers will be collected. Farmers will receive payment in a phased and consistent manner every quarter.



Over a period of time farmers will be encouraged to shift to agro-forestry. Plantations of eucalyptus, teakwood, fruit bearing trees and vegetable plantations will enable the farmers to generate 4-5 times the revenue of conventional agriculture. This will generate the required revenue or yield. Based on the results of implementing the idea in Sundergarh, the project will be scaled up in other districts.



Probable Impact

Samavesh will increase farmers' productivity through demand driven cultivation. Farmers would benefit from market information, harvesting techniques and insured increment payments. Consequentially, farmers will receive higher margins and market price for their crops.

The buyers too will receive an assured timely supply of grains. A strong buyer-seller network will be created. This will create a win-win situation for all the stakeholders.

IDEA 10

Addressing the issue of rural poverty by engaging the poor in sustainable livelihoods through engaging them in **Apiculture**.

Context	Idea	Impact
In India growth of agriculture has	Encourage poor farmers	Provide an alternate
slowed down since 1970s. This	to take up activities like	source of employment at
deceleration in agricultural growth	bee keeping to enhance	the doorstep
coupled with other variables like	their source of income.	 Speedy pollination
uncertainty of monsoon has made it		through bees which will
difficult for the rural households to		assist in conserving the
maintain their living standards. In		ecology
search of livelihood rural households		
participate in a wide range of		
activities outside farming.		
Nonfarm activities generate on an		
average about 60 percent of rural		
households' incomes in Darjeeling		
district of West Bengal. While		
majority of households do diversify		
their activities, access to high-return		
nonfarm activities is limited due to		
lack of special skills or access to		
assets.		

Mr. Abhishek Sikdar &
Mr. Arka Chatterjee
Interns WWF,
West Bengal

Apiculture: The Bee Business



Context

In India, growth of agriculture has slowed down since 1970s. This deceleration in agricultural growth coupled with other variables like uncertainty of monsoon has made it difficult for the rural households to maintain their living standards. In search of livelihood rural households participate in a wide range of activities outside farming. These non-farm activities contribute significantly to total household income. Rural non-farm sector acts as a poverty reduction measure and also gives rise to a shift from wage employment to self-employment in rural areas.

Nonfarm activities generate on an average about 60 percent of rural households' incomes in Darjeeling district of West Bengal. While majority of households do diversify their activities, access to high-return nonfarm activities is limited due to lack of special skills or access to assets.

These high-return activities hold great earning potential. Apiculture (Beekeeping) is one such activity and is practiced in Darjeeling in small scale. For the last five years, World Wide Fund for Nature has been assisting the villagers in Darjeeling to scale up this activity.

About World Wide Fund for Nature (WWF)

WWF is an international organization which is, working on issues regarding the conservation, research and restoration of the environment. It has taken on diverse activities in the field of nature protection, ranging from education and capacity building to field projects in biodiversity, enviro-legal action, policy studies and advocacy. WWF has encouraged and trained people in beekeeping in some of the villages in Darjeeling. This has enabled beekeepers to produce and sell pure honey without preservatives to local people and tourists.

NMIMS interns placed with WWF observed that though there is a considerable market demand for honey and other by-products of apiculture, they are sold at a very low price of INR 350/- to INR 500/- per bottle of 750ml. The same products are sold in export market at a higher price which is 10-15 times of the price in the local market.



There is also a great demand for other products apart from honey, such as beeswax and royal jelly which are highly valued for medicinal purposes.

Through primary research conducted in five villages in Darjeeling, the interns found that the farmers were interested in the bee business. They did not have the business capability, infrastructure such as bottling plants and knowledge on marketing the end products



The Idea: Scale up Apiculture

There are approximately 150 households in each village. If each household develops bee keeping business it has a potential to earn a good profit. For instance successful apiculture entrepreneurs shared that in each hive 5.25 litres of honey can be produced in a year and each household that cultivates bees currently has 6-11 hives on average. They produced a maximum of 57.75 litres of honey per household. It has been seen that the yield has increased twofold for beekeepers with 50 apiaries or more.

The operating profit of up to 66 per cent has been achieved when apiculture was practiced on a relatively small scale.

The idea hence proposed is to motivate each household to develop bee keeping business and scale up existing apicultural activities of the farmers who are already involved in the business. To enable the farmers to sustain in this business there is a need to develop bottling plants and appropriate distribution channels for marketing honey and allied products.

Feasibility

Farmers interested in apiculture will be required to invest INR 1000/- to INR 2000/- per apiary box with very little effort to maintain it and produce honey. A network of farmers involved in apiculture can be created. There farmers can be trained in advanced apiculture practices. Alongside, products like bee-wax and royal jelly can also be added to their product portfolio.



For marketing the products the network of WWF can be leveraged upon. For example, Teekampagne, a German organization which imports loose tea from Darjeeling and has the largest mail order tea business. This organization works closely with WWF in Darjeeling. This partnership would give leverage to exporting the honey, beeswax which is sold at INR 780/- per kg and royal jelly which is worth INR 1820/- per kg.



Probable Impact

As an alternate source of employment, the villagers would be greatly benefited.

Honeybees play an important role in conserving the ecology through speedy pollination. Hence, the venture would also help in conservation of the environment.

IDEA 11

Improving the overall quality of life of the fisher folk community and conserving environment through facilitating usage of **Solar Powered Boats.**

Context	Idea	Impact
Over the years, 1.44 million	Facilitate usage of solar powered	The shift to solar powered
people across Kerala have faced	motor boats instead of Kerosene	boats will lead to economic
the wrath of Government	powered boats. This conversion	development due to
limitations on kerosene usage,	can be done by adding solar	reduction of fuel expenses
prominent being the fishermen	panels on the top of the boat for	 Health hazards and
community. Fishermen utilize	receiving solar energy and	pollution related issues will
489 litres of kerosene while the	replacing kerosene powered	be eliminated
Government allots 125 litres of	motors with electric outboard	 Ancillary industry to
kerosene every month for their	motors. Facilitate this shift by	maintain solar powered
fishing boats. The restriction on	assisting farmers to access micro	boats will create skill based
kerosene allotment and	finance.	jobs in the region
dependency on non-subsidized		 Solar boats champion the
forms of kerosene have		cause preserving cleaner
hampered their financial		environment through use
conditions, leading many of		of alternate source of
them into debt traps.		energy

Ms Neha Anna John, Intern FCDP, Kerela

Solar Powered Boats: A Boon to the Fishermen

11



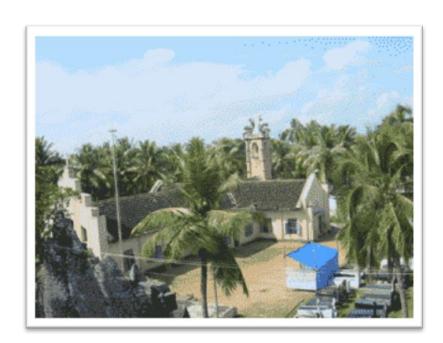
Context

Fishing is a major industry in India especially in its coastal states, employing over 14 million people. Among the states, Kerala, with its extensive coastline of 590 km and 400,000 hectares of inland water resources is one of the leading producers of fish in the country. With 220,000 active fishermen and 1.1 million people living on fisheries as a source of income, this contributes to 3 per cent of the total economy.

Poverty, social unawareness, lack of education and improper health are some of the major concerns of this community. As of March 2005, the overall literacy rate of fishermen was 73 per cent as opposed to the State's literacy rate of 93 per cent. The deplorable lives of the fishermen, hence, is a matter of great concern.

About Fishermen Community Development Programme (FCDP)

To meet such growing concerns of the fishermen community, a number of organizations have emerged across the country. FCDP is one such organization which has been supporting the needs of the people in the coastal regions since 1979. It is a voluntary organization headed by the Salesians of Don Bosco, which works for the welfare of fisher folk. FCDP's objective is to build a fishermen community that is comprehensively developed in all spheres such as education, health, social status and economic growth.





The organization commits itself to providing financial support to the deprived members of the fishermen community. They have a strong micro credit programme, which has been active since 1983. The organization has also been working on providing alternative employment opportunities for women in coastal areas since 1995. Additionally, FCDP caters to the health needs of the fisher folk through health care centres and health awareness campaigns.

Lately, the fishermen across Kerala have been battling the issue of kerosene restrictions allotted in the state. Over the years, the centre has reduced the allotted quota of kerosene from 23,160 kilolitres to 18,756 kilolitres. This has adversely affected the fisher folk as their livelihoods depend on this fuel. Each fisherman is mandated a maximum of 125 litres of kerosene per month, while an average Pillana (fishing boat) requires 30-50 litres per day. To meet the excess demand, they are forced to depend upon black market, where the prices are 3 times the subsidized kerosene rates. Needless to say, the exorbitant prices have led to mounting debt burdens, thereby, leading many of them to commit suicide. Besides this, kerosene boats have other disadvantages. They tend to be noisy, alerting the fishes in the sea and making it difficult to capture them. Kerosene is toxic to humans and aquatic life, releasing poisonous gases and causing lung diseases. Thus, it is imperative that fishermen have an alternative source of energy to power their boats.





The Idea: Solar Powered Boats

In the face of gruelling fuel problems faced by fishermen in Kerala, FCDP can serve as a channel to facilitate the usage of solar powered motor boats instead of kerosene powered boats. This conversion can be done by adding solar panels on the top of the boat for receiving solar energy and replacing kerosene powered motors with The electric outboard motors. advantages are many such as drastic reduction in fuel consumption, ensuring no air or water pollution and being user-friendly for the fishermen.

Feasibility

Today, an average fisherman spends close to 75 per cent of his income on kerosene usage. By converting to solar powered boats, his consumption of fuel will be drastically reduced, thus reducing this expense. FCDP can lead this change by its current micro credit utilizing programme to provide loaning facilities for fishermen to set up solar powered boats. Awareness about the advantages of switching to solar energy needs to be brought about among the fisher folk. Although the conversion of each solar powered boat costs around INR 6 lakhs, the fishermen would be able to break even in 4 years through this implementation, owing to increase in the catch of fish. In order to meet the initial cost of the boats, a seed investment of about INR 50 lakhs will be required in the first phase.



By doling out group loans at 16% interest over a loan period of two years, FCDP can retrieve this amount and pay it back to investors. With each phase of implementation, more number of boats should be converted to ensure the scalability of the project. FCDP can provide skill development training in the setting up and the repair and maintenance of solar panels through its association with Don Bosco Tech training centre. This will ensure provision of an alternative employment opportunity for the trainees.



Probable Impact

Through this initiative, the benefits for the fishermen community are many. Firstly, it will lead to their economic development due to the huge reduction in fuel expenses, thus increasing the number of times they can go out to sea. Since the boats are noiseless, it will not alert the fish, thereby, improving their ability to catch fish and hence, improving their living standards.

Secondly, it will lead to employment for the fishermen through skill development in the maintenance of these boats. This will act as a supplementary source of income for the members of the fishermen community. This initiative also champions environment friendliness by making a move towards a cleaner, better and renewable source of energy.

Health hazards and pollution related to excessive usage of kerosene will be eliminated by switching to solar powered boats.

Lastly, the project will lead to the social welfare of the community by addressing the burning issue of government restrictions on kerosene usage. Hence, this project will act as a boon to the fishermen, catering to the overall development of the community.

IDEA 12

Increasing the access of the invisible urban poor to avail various developmental though development of unique address system to create their **Tech Identity.**

Context	Idea	Impact
Many slum dwellers do not have	Facilitate usage of Geocodes for	Improved access of the
any address which is one of the	standardizing Postal Codes.	urban poor to avail the
basic criteria for accessing	House address can generated	benefit of various
medical, educational, ration or	based on the latitude and	developmental schemes
other benefits. They are unable	longitude coordinates and	 Inclusion of the invisible
to procure loans to start micro	converting the same.	urban poor in the Census
enterprises or fund their higher		data
education. Due to this hurdle of		 Indian Post and other
not having an address they are		courier companies will be
unable to break the cycle of		able to deliver post/parcel
poverty. The dynamic nature of		at the door step of the
slums is a huge challenge before		urban poor
the government which prevents		Corporate sector will be
them from creating a unique		able to tap information
address system.		about the bottom of the
		pyramid customers with
		greater ease

Mr. Dipayan Kothari Er Mr. Kushal Budhia, Interns HKF, West Bengal

Tech Identity



Context

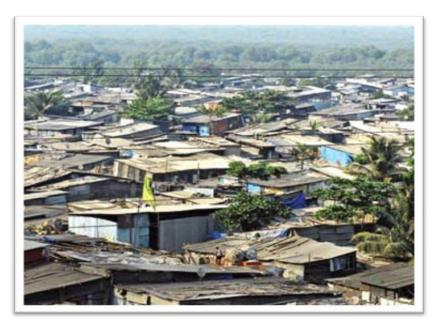
People are migrating to metros/urban agglomerates in search of livelihood and start living in shanties, squatter colonies or in slums. Due to povety, high cost of housing and other issues one finds second or third generation of slum dwelling population living in deplorable conditions. Slum dwellers do not have any address which is one of the basic criteria for accessing medical, educational, ration and other benefits. Their financial security is at stake as they cannot open a bank account due to want of residential address.

It gets worse when they need a loan to start a business or for higher education. Due to this hurdle of not having an address they are unable to break the cycle of poverty. A key consideration in planning action to assist poor and hungry households is to gain an understanding of where they live and the characteristics of those locations by allocating appropriate home address. However, for the authorities, creating a unique address system for those living in slums is not possible using standard, street numbering systems due to the dynamic nature of slums. For companies (bank, utilities, phone companies and others) it is difficult to do business with these people due to a lack of proper identification using an address.

About Hope Kolkata Foundation (HKF)

HKF is located in Gariahat, Kolkata, is an NGO which is involved with rescue, protection, education and other missions primarily involving hard hit children and women of our society.

The NMIMS interns placed with HKF noticed that people were being deprived of their basic needs and felt that perhaps providing them an address should be taken up on a mass scale. The NGO had previously piloted allocations of postal address for one slum but the initiative to take it in a mass scale was an issue.



The Idea: Assigning Geocode to Slums

A potential and very cost effective solution to allocating appropriate address lies in the integration of technology with the issue. To provide an address system to the deprived at low cost Geocodes can be used. A simple technology can convert latitude and longitude coordinates to a series of letters and numbers which then becomes the address shown in the figure alongside.

Feasibility

The uniqueness of this idea lies in the fact that this solution is less costly compared to the traditional addressing system (See box).

Geocodes are politically neutral and works all over the world. Above all it allows informal communities to develop. Specific locations can be identified where there are slums with no address.

Estimation of Cost

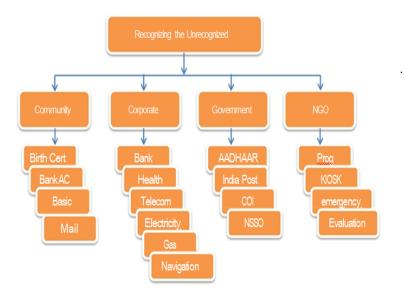
The estimate of cost for giving address to 70,000 households covering about a population of 4 lakh is explained.

The total approximate cost of the project of this scale will be INR 44 lakhs. This can be sub divided into personnel cost of INR 15.7 lakhs, capital cost of INR 3 lakhs, programme cost (sensitizing community members, stakeholder meeting, community surveys, training of programme staff, surveyor cost, data processor cost, cost of sign erection, setting up kiosks, staff travel, staff communication, etc) of INR 20 lakhs and overhead cost of INR 5.4 lakhs.

The government and NGO's can show the value proposition to these institutions and include them in the funding of the idea.



Key Beneficiaries



Probable Impact

There are three major benefits of implementing this idea to the society. Firstly, a database of the residents residing in the slum communities will exist online which will facilitate the NGOs, local authorities, utility suppliers and banks to provide them with better services shown in the figure below. Corporate India will be able to tap its bottom of the pyramid potential customers with greater ease.

Secondly, the slum dwellers will have a unique postal address. It will give these dwellings better chance to access social/economic benefits. They will be able to apply for ration card, Aadhar card, bank account, electricity account, mobile phones, mail services and other utilities. It is also anticipated that the poor communities will be able to access pro poor schemes in the areas of education, health, skill building, livelihood support and others.

Thirdly, Indian Post and other courier companies can directly deliver posts at the door step of the slum residents.

IDEA 13

Addressing the issue of information asymmetry pertaining Bottom of the Pyramid (BoP) markets through the design of **Infothela.**

Context	Idea	Impact
As the demographic changes are	NGOs can be hired on	NGOs can create a source
occurring at a rapid pace,	chargeable basis to generate	of revenue and reduce their
companies are in constant need	periodic consumption reports	donor dependency
to update their data. The	from the BoP market.	 Reports can assist
companies also need specific		corporate as well as
data pertaining to the BoP		government sector in their
markets in terms of product		decision making process
requirements, price affordability,		Better products and
buying behaviour and other		services can be designed
related aspects. This data can		for BoP markets
bridge the communication and		
understanding gap that exists		
between the BoP market and the		
companies.		

Mr. Dushyant Bhatia & Mr. Sunny Singh, Interns Navsarjan, Gujarat

Infothela: Unleashing the Data Power



Context

Surat, which is the second largest city in the state of Gujarat, has flourishing labour-intensive small-scale manufacturing industries of textile, diamond-polishing amongst many others. These attract hordes of migrant labourers from the underdeveloped areas across the country. The poor among them, unable to afford housing, settle down in slums and eke out a meagre living.

According to the latest UNDP report around 1.92 million live in Surat.

To help the people now settled in slums, NGOs like CRY, Navsarjan, Adhikar, Mahila Housing Sewa Trust and many others work in similar or diverse domains for reaching out to them.

About Navsarjan

Navsarjan, in particular, has concentrated much of its efforts to the upliftment of lives of the people living in slums. Navsarjan reaches out to 25 out of 400 slum pockets in Surat. With a view of empowering the slum dwellers, Navsarjan started out by organizing, training and educating them. Eventually, it formed various Mahila Mandals (Women's Associations), Self-help Groups, ragpickers association, association of self-employed, youth groups, street children and working children programmes, pre-school literacy and tuition classes, and so on.

The NMIMS interns placed in Navsarjan observed that even after facing many of the problems mentioned above, the attitude of slum dwellers was resolute. In spite of such living conditions, they were willing to work for better living conditions.





The Idea

From the last decade companies have started paying attention to the 'Bottom of Pyramid' (BoP) and are accordingly shaping up their products and strategies. As the demographic changes are occurring at a rapid pace, companies are in constant need to update their data. The companies also need specific data pertaining to the BoP markets in terms product requirements, price affordability, buying behaviour and other related aspects. This data can bridge the communication understanding gap that exists between the BoP market and the companies.

In the context of the BoP market, NGOs can generate a detailed 'Periodic Consumption Report' of the people living in NGO-served urban slums. This report will include the population details, education details, job details, the social profile which includes the government schemes(RTF, RTE) that they avail, FMCG (soap, shampoo, toothpaste, food, medicines etc) consumption, FMCD (mobile, television etc) consumption and service (banking, microfinance, consultancy, connectivity) consumption. The consumption will be mentioned according to the brands.

These reports can also highlight the common problems confronted by the slum dwellers. This information can provide an opportunity to the concerned companies to develop innovative products.

NGOs would release this data report biannually. Using the data, companies will be able to estimate the market size, its growth rate, identify consumer behaviour and latest trends and use it to their advantage. The uniqueness of the report will be in generating comprehensive, real-time and periodic data of consumption by urban slums.

To generate appropriate report, NGOs require to be trained in a couple of activities like conducting survey, data recording, data capturing, data analysis, data storage and data reporting.





In the initial period, B-School professors and students can help the NGOs in developing their capacities for report generation.

NGOs like Navsarjan usually recruit people from the areas they serve. The trained and equipped employees can get the information required from the respondents. In the initial phase, the analysis can be done on MS Excel which would not require a fancy investment on analytics software and operators. Companies may require specific data for product development. NGOs could partner with the company to gather this specific data. This would not only help companies make better products but also help the reports become more attractive. NGOs can charge appropriate fees for generating various types of reports. This can add to the revenue of the NGOs.

Feasibility

As NGOs are able to establish trust with their constituencies, they will be able to gather information from the people. This coupled with the competency offered from B-schools will make the reports valuable. Collaborations need to be made between NGOs in major cities of India, as a national report will be more useful for the companies than a regional report.





Probable Impact

A lot of stakeholders, including NGOs, slum dwellers, companies and the government will be impacted if NGOs start generating such reports.

It will be a source of revenue for the NGOs. It will also enhance their managerial skills. The corporates and the government will benefit by getting authentic information from the localities. It will aid them to develop their strategies for market interventions for their product and services.