Field Visit to Barefoot College, India – A Case in Social Entrepreneurship

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Abstract :

The Barefoot College is an NGO in India that works towards revitalizing rural communities and making them self-reliant by reducing dependence on urban experts for their development. It is very different from conventional colleges as it does not grant any formal qualifications or degrees but believes solely in imparting practical education to illiterate and semi-literate villagers. This paper explains some of the preliminary findings from a field visit to Barefoot College by elaborating the Barefoot Approach in some of the crucial intervention areas such as women's empowerment and community awareness.

要旨: 裸足大学はインド農村コミュニティを活性化させている NGO である。発展のため に都会への依存を減らすことによってこのようなコミュニティを自立させている。当大学 は通常の大学とは違い、正式な資格や学位を提供することではなく、文字を読めないま た、ある程度読み書きができる農民に実践的な教育を提供することに力を入れている。本 稿では、裸足大学のフィールド調査による予備調査結果を説明する。そのため、当大学の ある活動に焦点を与える。それは、女性の社会進出とコミュニケーションである。

Key words : practical education, social entrepreneurship, barefoot approach

"Never let school interfere with your education" Mark Twain

1. Introduction

India with its 1.2 billion people will soon be the world's most populous country. The country is plagued with a magnitude of development problems, resulting in a poor 135th rank on the 2013 Human Development Index (HDI) suggesting that a significant percentage of the population cannot access basic human needs. India in the last few decades has seen a significant surge in the number of Social Enterprises, understood as enterprises established with the primary goal of solving social and developmental problems. Since the last two decades NGOs have become very prominent in India

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and this coincides with the end of developmentalism as a responsibility of the state (Baviskar (2001). Apart from causes like the wide-spread loss of confidence in the previous ruling governments, spread of social networking and growing influence of the media in spreading awareness of social and developmental problems, an important factor in operation has been the frugally innovative mindset of Indians that extends low cost solutions to people excluded in the development process.

Social enterprises thus aim to bring about social change by creating and managing a social venture using entrepreneurial principles. The founders of such enterprises, social entrepreneurs, develop products and services that "cater directly to basic human needs that remain unsatisfied by current economic or social institutions" (Seelos & Mair, 2005). The best globally known case in social entrepreneurship is the Grameen Bank in Bangladesh founded by Prof Muhammad Yunus.

Barefoot College is one of India's most successful social enterprises. It is an NGO working towards empowering people in some of the poorest regions of the country by providing practical education, gainful employment opportunities and a confidence that could let down any highly qualified professional from the cities. It is a college built for the poor, by the poor – completely owned and managed by the poor for the empowerment of their community.

This case note explains some observations and preliminary findings from a field visit to Barefoot College in August 2015. It focuses on some of the most crucial successes of the college such as construction of the campus by its own people, women's empowerment and community radio.

2. History and Founding

Barefoot College is located in a small village called Tilonia in the northern state of Rajasthan, one of India's largest and poorest states, mostly semi-arid and where people survive on subsistence farming or labor. Established as the Social Work and Research Center (SWRC) in 1972, the college is based on one of the principles of Mahatma Gandhi; Gandhi's idea of a village being a self-reliant community. It was established as a voluntary organization to encourage young professionals from the urban areas to collaborate with villagers for the development of these rural areas. It is the only college in a rural area that is built and managed by the poor (Elkington & Hartigan 2008).

SWRC was founded by a young graduate named Sanjit "Bunker" Roy, born in an elite Indian family who received the best education that prepared him for a bright career. He was spending one of his summers helping out in a famine affected region of India and this experience went on to change his life and that of many others in rural India. With a team of four social work graduates and a few local people Roy started the SWRC that initially had programs like preventive health camps and night schools for children in villages. The SWRC campus was located on 45 acres of government land, rented almost for free, and an abandoned tuberculosis sanatorium. Roy's aim was to bring together the villagers with professionals from urban areas with the objective of enabling them to learn and unlearn from each other. However, the increasing number of urban trained professionals created clashes and problems in the functioning of the center resulting in the urban experts leaving the center.

Over the first few years, Roy observed that the youth from villages in India migrated to cities in search of education, something that Roy called 'paper degrees' but these did not make them employable. After moving out of their villages, these young people could not return back as that would be considered shameful. As a result the family in the village was left with no heir to carry on the family occupation, which meant that the rich stock of knowledge and skills possessed by the older generation, the know-how and techniques relevant to the community were also left with no heir.

It was in this background that Roy conceived the Barefoot Approach which resulted in the 'Barefoot College.' The college would teach the semi-literate villagers skills that their community required and at the same time ensure them that the knowledge and skills that these villagers possessed from generations were not outdated and were very much as relevant today as they were in the past. Through this approach the college successfully demonstrates that an illiterate or semiliterate villager can become a successful dentist, water and solar engineer, teacher, educator, pathologist or accountant thus reducing the need for formally trained experts from urban areas to provide these services to the rural areas. The term 'Barefoot' comes from the Chinese health workers who were villagers trained to assist their own community members in the 1960s (Roy, 2008). The Barefoot Approach thus means that any person without any formal education or qualification can still achieve a significant expertise at a job by undergoing six months of experiential training. Paper degrees thus are a disqualification in this college. People (staff/ teachers/ trainers) are selected based on their attributes - honesty, integrity, creativity, initiative, modesty and hard work. The Barefoot College gives primary importance to and aims to preserve the traditional knowledge that people in rural communities have. It identifies a service or a technology that can help these communities, demystifies the technique, and trains the rural people in using it so that the whole community benefits.

There is no hierarchy in the college. Everybody gets a uniform salary equivalent to US\$ 150 per month, another factor that discourages urban professionals from working here. The college believes that hiring urban professionals damages the confidence and mindset of the poor in such communities.

The focus areas of Barefoot College include Education, Women's Empowerment, Environment, Alternative Energy, Communication and Drinking Water Provision.

3. Field Visit and Data Collection :

This paper is based on primary data collected during a field visit to Barefoot College in August 2015. The aim of the visit was to gather first-hand information on the nature of activities carried out at Barefoot, to understand the context in which the college operates, the experiences and stories of the staff at the college and finally to learn about the impact of the college's activities from its stake-holders. The visit to Barefoot College was a part of a 20 day research trip by the author to interview founders of 13 social enterprises in India.

The visit to Barefoot College involved a guided tour of the college and interviews with the solar engineering trainees and teachers, the dentist, pathologist, the communications head, some local villagers, the accountant, staff at the recycling unit, hand weaving and handicraft section, canteen staff and other visitors over a period of four hours. All interviews were conducted in Hindi (one of India's official languages) and then translated and transcribed into English.

A staff member named Ramniwas, who had held various positions at Barefoot over the last three decades answered all questions enthusiastically and introduced the researcher to the appropriate section heads. Ramniwas had started off at Barefoot as an accountant, but had performed several diverse duties such as a lyricist, puppeteer (due to his skills in writing and music), communications head and community mobilizer. On entering the college premises and all through the visit, everybody at Barefoot; staff, department heads, students including young kids joined their hands together to greet the researcher with a cheerful "Namaste" (Hello!) which conveyed a lot about the culture, education and values and the openness of the college.

4. Findings

In this section, the main findings from the field visit are explained while highlighting some of the major achievements of the Barefoot Approach. The section focuses on three areas :

- a. Construction of the New Barefoot Campus
- b. Women's Empowerment especially in the field of training solar engineers
- c. Communications- Barefoot's Radio Station

4 a. Construction of Barefoot Campus

The new campus was built from 1986 to 1989 by Barefoot architects, masons and workers themselves. The campus including 2,800 square meters of buildings and 35,000 square meters of land was completed at a cost of US\$ 21,000. The campus is made up of several 2-3 storey buildings for each section, with big courtyards outside each of them that were designed by a local villager named Bhanwar with no formal education in architecture. Bhanwar, born to a farmer's household, was working for the Barefoot College doing small jobs such as growing food, taking care of poultry and helping transport people. He was made in-charge of the construction of the building.

Initially, when the funds and land for building the new campus had been approved, an architect from the capital city, Delhi, had been consulted and had given blue prints for the structure. But, when these were shown to the Barefoot stakeholders, mainly the villagers, they immediately disapproved. The architect's blue prints did not reflect the requirements of the college, did not suit the geographical conditions of Tilonia and the availability of resources. "The height, direction of the building, the arrangement and openings of the windows were changed keeping in mind the westward direction of winds blowing in this part of the district, so as to allow natural circulation and ventilation. And it gets really hot here in summers with the sun coming right above our heads, so Bhanwar decided to use clay," stated Ramniwas. This was a major deviation from the blue prints of the architect, thus demonstrating practical wisdom.

Bhanwar met with hundreds of locals including masons, female engineers, mechanics, night school teachers as well as experts who had built such structures in the cities and took their suggestions. "*It was everybody's college and so everybody's opinion had to be considered.*" And so, the team refined and redrew plans and rough sketches on the ground and collectively approved the idea of accommodating traditional building techniques and specific site issues. With no formal architectural degree, these Barefoot architects use a traditional unit of measure called the "*hath*" (18 inches) meaning hand or arm – about the length of a forearm.

The team suggested using local material (stones) from the mountains nearby. "In order to save transportation costs, middle-men fees and avoid corruption we decided to buy our own truck and relied on open quotations for cement etc. The village women themselves came forward to construct the roofs for all the buildings in such a way that they would never ever leak. The women have their own formula that combines ingredients like fenugreek, jaggery, urine etc. in certain proportions- a proven formula that has remained a secret till date." Construction of the college campus included constructing a 40,000 liter underground tank for rain water harvesting. The entire campus is powered by solar energy. The Barefoot team won the Aga Khan award in 2001 for the outstanding construction.

The Barefoot building is thus a symbol of joint work, open sharing of knowledge and information. It demonstrated that semi-literate people are in no way less capable of doing what a paper qualified person can do. It also reinforced the importance of locally relevant practical knowledge and traditional ways of doing things.



Photograph 1 One of the Buildings in the Barefoot campus

4 b. Women's Empowerment

"Barefoot College has reached more than 70 countries today. We have trained more than 15,000 women over the years to become teachers, solar engineers, water engineers, health care workers and learn and master several other jobs," said Guruji (teacher) Bhagwad Nandan who joined Barefoot in 1975 as a teacher and has been in-charge of the College's solar project for the past several years.

One of the primary focuses of Barefoot College since 1986 has been the promotion of solar energy as an alternate fuel. Barefoot College trains semi-literate men and women from several states of India as well as other countries to become solar engineers. Called Barefoot Solar Engineers (BSEs), these men and women learn not only the basics of electrical engineering, but are then also trained in assembling solar lanterns, installing a Solar Photo Voltaic Unit and in its maintenance and repair in a Solar Engineering course started by the college in 2005.

Solar Engineering training at Barefoot College at the time of the research visit was being carried out in 2 batches- the first batch conducted in the new campus comprised of female trainees from different parts of India. These women are all in their mid-forties to sixties- called Solar Grandmothers and were resident trainees at Barefoot College for six months. They had been selected for the training either by their local village council, community group or an NGO tied up with an affiliate of Barefoot in the respective region of India. In the training room, it was difficult to initiate a conversation with the trainees as each of them spoke a different language. However, when asked to name the components of the unit that they were assembling, each of these women could confidently answer the questions. They had mastered the names and functions of all these parts in English which was absolutely astonishing. "Most of these women have been to school until the 4th or 5th grade. At the end of 6 months, they become so confident and perfect at this work that they can install the whole system for a house and once it has been installed, they can identify which one has been installed correctly and which one is not – at the same time rectifying the mistake," said the teacher.



Photograph 2 Solar engineering training Classroom 1



Photograph 3 Solar engineering training Classroom 2

The other batch of solar engineering training was being conducted at the old campus- about two kilometers away with 39 students that comprised of three women from Sri Lanka, six from Myanmar, four from Vietnam, seven from Botswana, two each from Cambodia and Kenya and others from Ecuador, Mexico and Congo – all coming from diverse backgrounds and speaking different languages. The only common factor among them was that they were without any formal education, came from extremely poor families and had suffered a hard life. They were now at Barefoot to learn something new that would enable them to lead independent lives whilst also helping their communities. A woman from Kenya said, "I am so excited about this opportunity and can't wait to finish my training here and help my neighbors in my village." Though these women hardly understood each other's languages, there was a lot of conversation happening in the classroom. six months of intensive training, living away from home and family and bonding with others like them helps in making them confident and independent. "These women are trained in such a manner that they will go back to their country- their village, solar electrify their own house, neighboring houses and train women from their community to become solar engineers, thus setting an example for them," Ramniwas added. This model of Barefoot is being replicated by Barefoot affiliates in several countries of Africa, Latin America and Asia.

Besides the solar engineering training, Barefoot College also trains such rural women to assemble a parabolic solar cooker. In 2003, the Women Barefoot Solar Cooker Engineers Society (WBSCES) in Tilonia, Rajasthan was registered. It is the very first association of illiterate and semiliterate women who independently fabricate, install and maintain 2.5 square metre parabolic solar cookers. The food in the canteen at Barefoot is cooked in solar cookers that are made by their own solar engineers.

A large part of Rajasthan state is a desert and receives plenty of sunlight. Parabolic cookers work best in such places. This cooker runs completely on sunlight and is thus environmentally friendly. It needs an adjustment every morning to track the sun's position.

These women with formal education of only up to the 5th grade can make the most sophisticated Scheffler parabolic cooker, as shown in the photograph below that requires skilled craftsmanship and tremendous precision. However, these women were away at the time of the research visit and could not be interviewed.



Photograph 4 The parabolic Scheffler solar cooker fabricated by women at Barefoot

Apart from solar engineering the researcher interviewed women in several other departments at Barefoot – puppet making and communications, handicrafts, stock keeping, accounts and quality control, water purification and pathology laboratory etc. The Barefoot Dentist, a lady in her mid-50s, was formally educated only up to the 5^{th} grade – another example of the success of the Barefoot Approach. She had been trained by an Italian dental surgeon who resided at Barefoot for six months. The first five weeks were spent in getting used to each other's language and culture, and just learning some English words. Months of tireless persistent efforts by both of them had transformed the life of this village lady. She had never thought that she could do this in her 50s. She now takes care of the basic dental problem of all villagers. Not only that, but she also visits schools and workplaces to educate children and adults about how to take care of their teeth, the importance of brushing, and the demerits of chewing tobacco etc. "I work here 6 days a week from 9 am to 5 pm and get a monthly salary irrespective of how many patients I treat. I don't have to worry about my household responsibilities now because I have a daughter-in-law to help me. But, my husband has started respecting me more since I started working at Barefoot", there was tremendous confidence in her voice as she said this.

She charges 50 Rupees (approx US\$ 0.7) per patient which goes to the College and she draws a monthly salary like everybody else at Barefoot.

The case of the Barefoot accounts staff in the Handicraft section is similar. She had been to school until the 7th grade and she was earlier teaching at one of the night schools. But when the night school closed down, she was shifted to this new job. "*I was extremely nervous in the beginning. But they trained me for six months in how to keep accounts. Now I can do this work on my own. If I don't understand something, the senior accountant is always ready to help me"* she said. At the time of the visit it was observed that she was doing her work on a computer using the accounting software, Tally.

These were some of the motivating stories of empowered women from developing countries in Africa and Latin America and also from some parts of India that public health or education programs had not reached.

4 c. Communication

Since its establishment, the Barefoot College has always used puppets, street shows and folk songs as a medium of communication. But, given the changing communication scenario in the Indian society and the penetration of mobile telephones, the Barefoot College today uses its own community radio as a medium of reaching out to people that they can listen to on their mobile phones.

The Indian government under the UNESCO's International Program for Development of Communication (IPDC) announced an official policy and guidelines for starting Community Radio Stations (CRSs) by giving communities the power of operating these CRSs. Barefoot College, Tilonia applied under this program and was officially allotted an FM Frequency 90.4 for their community radio by the Indian Government's Ministry of Information and Broadcasting in 2009. It reaches out to 50,000 people across the neighboring 30 villages.

Ramniwas was one of the team members that went to Delhi for the interview. They were asked to explain what their CRS would do for women. The district has approximately 70 women groups that meet each month to discuss crimes against women and meet the district collector with their problems. Today there are 5,000 women members in these groups who have fought against age-old customs, and for rights such as minimum wages. These are some of the stories that are shared on their radio. Besides, they talk about their solar engineering programs, inform the villagers about various bank schemes, government policies and also important acts such as the Right to Information, National Government's Employment Guarantee Scheme, procedures and fees in land registration –

all in a simple demystified way, through songs and stories that illiterate or semi-literate villagers can understand.

As soon as the Barefoot team officially got this license from the Ministry, dealers approached them with studio plans priced at exorbitant rates in the range of 500,000 to 1 million Rupees. "But we made our own studio at a mere cost of Rupees 500!" Ramniwas proudly stated. "We had a room ready in the basement. We used egg trays to insulate the sound (as shown in photograph 5). We have no air conditioning system, we use a simple exhaust fan to maintain the temperature in the room. The temperature never goes above 35 degrees and below 10 degrees. This functions as a recording studio and a relay room. All of it was designed 100% by local people."



Photograph 5 The Barefoot Community Radio Station

5. Discussion and Conclusion

The Barefoot College has trained more than 37,000 men and women as Barefoot teachers, midwives, health workers, solar engineers, water drillers, hand pump mechanics, artisans, designers, phone operators, blacksmiths, wasteland developers, carpenters, computer instructors and recycling professionals. The Barefoot health workers spread health awareness among rural men, women and children on issues such as hygiene, food and nutrition, mother and child care, immunization, oral health, family planning and HIV/AIDS. Conducting night schools for kids was one of the earliest activities at Barefoot since the 1970s, as Roy had noticed that kids there were too busy helping out their parents during the daytime. In these schools, children were taught things of practical importance to them such as how to take care of cattle, frequently occurring illnesses, lessons in basic governance and how to lodge a complaint in a police station. Today, Barefoot's education opportunities including day and night schools have graduated over 75,000 students.

The recycling unit of Barefoot, located in the old campus is being managed by an oldely woman formally schooled up to the 5^{th} grade but now an expert in making educational toys for children. The art and handicraft section of Barefoot make garments, embroidered home decorations and furnishings, rugs, handmade paper products and puppets. These products are sold through retail shops and exhibitions held in the metropolitan cities of India, Europe, USA and Canada. Barefoot women staff in its handicraft section decide what kind of products are best suited for which country

market.

To address the water scarcity and purification related challenges, Barefoot College has implemented several measures including rainwater harvesting tanks, dams, solar powered water desalination plants and wells and ponds for groundwater recharge. Besides, it operates a water mapping website called Neer Jaal (www.neerjaal.org) that is fully controlled and managed by rural communities.

Since the solar course was launched in 2005, more than 300 Barefoot engineers have brought power to more than 13,000 homes across India. A further 6,000 households, in more than 120 villages in 24 countries from Afghanistan to Uganda, have been powered on the same model.

In the course of its work, Barefoot succeeded in breaking the caste based barriers in rural communities and mainstreaming the Dalits (lowest in the caste hierarchy/ untouchables). In the canteen at Barefoot College everybody sits on the floor, eats together and washes his or her own dishes after lunch, a significant deviation from the traditional rural Indian set-up. The college has received several awards for its achievements including US\$ 1 million Alcan Prize for Sustainability in 2006, Skoll Award for Social Entrepreneurship, the Stockholm Challenge Award for Information Technology, and the Tyler Prize for Environmental Achievement among many others.

All of the interventions and activities were developed as a response to the needs of the community. The college has been able to achieve these milestones by believing in the abilities of these people, by having faith in their traditional knowledge, by giving them charge of the job at hand. The College follows a system of rotating its staff from one section to the other every 3 years so that they are constantly learning something new and there is continuous skill development. The Barefoot Approach – using the resources at hand to find low cost innovative solutions, empowering existing human resources in the process and through this revitalizing the community has been a significant change maker in India and other less developed countries. It is a social enterprise in the true sense and an eco-system in itself.

**all photographs have been taken by the author

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