Key Info

Social Entrepreneur: Bunker Roy

Year Awarded: 2005

Issue Area Addressed: Economic Opportunity, Education, Environmental Sustainability


Countries Served: Afghanistan, Argentina, Benin, Bhutan, Bolivia, Botswana, Brazil, Burkina Faso, Burundi, Cambodia, Cameroon, Cape Verde Islands, Central African Republic, Chad, Chile, Colombia, Comoros, Congo (Democratic Republic), Cook Islands, Cote d’Ivoire, Cuba, Dominican Republic, Ecuador, Ethiopia, Fiji, Gambia, Ghana, Guatemala, Guinea-Bissau, Haiti, Honduras, India, Indonesia, Iraq, Jordan, Kenya, Kiribati, Lesotho, Liberia, Madagascar, Malawi, Malaysia, Mali, Marshall Islands,
Barefoot College is a non-governmental organization that has been providing basic services and solutions to problems in rural communities for more than 40 years, with the objective of making them self-sufficient and sustainable. These ‘Barefoot solutions’ include the delivery of solar electrification, clean water, education, livelihood development, and activism. With a geographic focus on the least developed countries, Barefoot College believes strongly in empowering women as agents of sustainable change. Since its inception, the long-term objective of the Barefoot College has been to work with marginalized, exploited, and impoverished rural poor, living on less than one dollar a day, and lift them over the poverty line with dignity and self-respect. The dream was to establish a rural college in India that was built by and exclusively for the poor. What the rural, impoverished, and marginalized think important is reflected and internalized in the beliefs of the College. At the Barefoot College, Mahatma Gandhi's spirit of service and thoughts on sustainability are still alive and respected.

**Impact**

- Since 1997, Barefoot College has cumulatively trained nearly 3K Solar Mamas to provide 1.1M individuals in India access to light. It operates in 15 states in India and works in close collaboration with three Government of India Ministries. Barefoot College International operates in 96 countries across Africa, Asia, and Latin America.

- More than 66,000 individuals have trained and worked as barefoot teachers, health workers, solar and water engineers, mechanics, designers, builders, carpenters, computer technicians and instructors, accountants, recycling professionals, business owners, and service workers.
- Barefoot College’s education programs have cumulatively graduated more than 100K students, and its upskilling programs have trained 2,200 artisans and weavers.

- In 2018, Barefoot College helped generate 1.4 GW of renewable energy through its solar hardware.

Path to Scale

Open Source Replication: New Barefoot Colleges are developed and led by individuals trained at the home campus in India.

Social Entrepreneur

As a young post-graduate student from a privileged urban background, Bunker Roy volunteered to spend the summer working with famine affected people in one of India’s poorest states. This experience changed him. He committed himself to fight poverty and inequality. He founded the Social Work and Research Centre (now known as Barefoot College) in 1972 to demystify technology and put it to good use in the hands of poor communities. This radically simple approach to ending poverty, by tapping the wisdom, skills, and resourcefulness of the poor themselves, is less expensive and more successful than approaches that rely on external experts. Barefoot College recruits illiterate villagers and trains them to build and maintain life-changing technologies and systems such as solar electricity, water and sanitation, schools and clinics, artisan businesses, and community engagement.

Bunker informally retired from Barefoot College in 2017. Meagan Fallone joined Barefoot College in 2011 and became CEO Barefoot College International in 2015. She leads the organization's global expansion efforts, guiding field operations in 96 countries and partnerships with governments, corporations and a network of civil society and multilateral organizations. A dedicated entrepreneur, Ms Fallone has led the evolution of Barefoot College into a profitable hybrid social enterprise which today fosters and supports a host of rural innovation, digital and financial technology, solar R&D and rural enterprises by attracting formally educated young people to work side by side with non-formally educated rural innovators. She is a 2017 Schwab Social Entrepreneur and 2018 Hillary Laureate.

Equilibrium Overview
Current Equilibrium

Illiteracy and lack of formal educational qualifications trap bottom-of-the-pyramid communities throughout the world in a cycle of poverty and unsustainable environmental practices because the rural poor (especially women) lack confidence in the transformative power of their own skills and traditional sources of knowledge. In India and throughout the Global South, the poor are undervalued and under-utilized as the 'solution', often live a life of dependency, have no space or encouragement to be creative, and lack opportunities to become productive members of society. Gender inequity, the root cause of rural poverty, adds to the disempowerment of women. National and local governments in developing nations do not have the capacity to provide essential modern-day resources (e.g. universal access to electricity) to the rural poor. Rural development policies often do not invest efficiently in the poorest constituents, failing to impact the structures from which they can themselves improve quality of life. Markets, governments and development agencies tend to discount the potential of the rural poor to transform their own communities given their lack of formal educational, a mindset and dynamic that limits funding towards innovations that focus on long-term poverty alleviation, through direct community empowerment.

New Equilibrium

The rural poor and marginalized, especially women, do see illiteracy, lack of formal education and services as insurmountable barriers, since they can develop skills and rely on their own knowledge and experience to transform their own communities. Rural women have the confidence to challenge patriarchy and discriminating gender roles, becoming role models and building more equitable societies. The education process is used as means for creating self-esteem and to achieve skills that guarantee the sustainable development of rural communities. Development activities and basic service provision is successful and sustainable because it is based in the village as well as managed and owned by those whom it serves. NGOs implement solutions that leverage an initial community investment (e.g. training and delivery of solar equipment) to empower the community and given them responsibility over their economic uplift along with financial sustainability. Accessible market entry for local cooperative products (e.g. quality handicrafts) ensures long-term economic gains for rural women. National and local governments in developing nations support and leverage the power of grassroots, community-led solutions to galvanize their most disadvantaged and non-formally educated citizens (especially rural women) to engage in their own progress.

Innovation

Barefoot College International provides community development solutions to the most fragile rural populations in the world’s least developed countries by tapping the wisdom, skills and resourcefulness of the poor themselves. Barefoot College focuses on the demystification of technology to empower impoverished communities by recruiting illiterate and semi-literate villagers (primarily women) and effectively training them to fabricate and maintain a wide variety of life-changing technologies. Three different entities make up Barefoot College: 1. Barefoot College International: A hybrid social enterprise that is responsible for leading the Barefoot
College globally (all three entities). Barefoot College International works in Enterprise, Technology (renewable energy, digital education and development, R&D) Design and Education. 2. Social Work and Research Centre (SWRC): Water and sanitation, community engagement and the local Barefoot College Campus are managed by the Social Work and Research Centre itself. 3. Hatheli Sansthan: Artisan and Craft enterprises and development are managed fully by Hatheli Sansthan. Both SWRC and Hatheli Sansthan operate solely within India while Barefoot College international operates in 96 countries and 15 states in India. The Barefoot College today works in close collaboration with 3 key Government of India Ministries. Barefoot's core intervention is a solar electrification project which trains disadvantaged rural women (aged 35-60) as solar engineers, or “solar mamas”, that fabricate, install, repair, and maintain solar lighting units for five years in their communities. BC also works with each community to set up workshops for (1) fabrication and sale of additional solar lighting systems and (2) serving as solar-powered, internet-enabled learning centers that disseminate essential content to communities. Individuals are trained in the geographically-closest "Regional Training Center" (operational in India, Sierra Leone, and Tanzania with several more under construction) before returning to their home countries to implement these solutions - see Model for Change section for the global implementation strategy. The “solar mamas” are able to build their self-confidence and potential as sources of positive change, while getting paid salaries by their communities for providing repair and maintenance services of home systems by the community (through a “village fund”), allowing for ongoing financial sustainability of the program following installation. In parallel, Barefoot runs a women empowerment curriculum (“ENRICHE”) covering practical health, environmental living, and financial / digital literacy skills to strengthen the capacity of solar mamas as change agents. This digital curriculum used in ENRICHE seeks to become a pilot for government approaches to enabling the poorest rural women entrepreneurs. Barefoot allocates the bulk of its resources to its solar electrification and livelihood development initiatives (described below), in addition to several other programs: Solar: Harnessing solar energy to provide light / electricity, create employment for the unemployable, boost income for the poor, reduce carbon emission, and provide self-reliant solutions within village communities. This includes the core electrification program (described above), along with several other initiatives - training "solar mamas" to install and maintain solar-powered cookers, training rural youth to fabricate, install and maintain water heaters, solar-powered desalination plants to produce drinking water, solar-powered projectors for Barefoot night schools (“Solar Bridge Schools”), a model for community level production of assembly of LED lights for income-generating purposes.Livelihoods: Providing employment opportunities to reduce migration and motivate disenfranchised villagers to improve their livelihoods. This includes training villagers as health workers with minimal educational backgrounds to provide basic health services, and supporting villagers pursuing an artisanal career in building crafts (e.g. training, materials, access to credit, design advisory) to address under-employment.Water: Providing communities the right to clean water for human consumption, livestock sustenance, and field irrigation. This includes training locals in rainwater harvesting, supporting the construction and maintenance of stone micro-dams, and a water mapping website ("Neer Jaal") to help villagers manage their water resources by generating, storing, and making public that data. Education: Training locals as non-formal educators that provide hands-on lessons to develop literacy and sustainable living practices. All education activities encompass nutrition and medical / dental care. This includes nurseries providing childcare services in Rajasthan, India (“Balwadis”), solar-electrified night schools for primarily disenfranchised village girls (“Solar Digital Bridge Schools”), a primary school in Tilonia offering STEM and arts-related curriculum (“Shiksha Niketan Day School”), a 3-year primary education course for children of migrant workers in Rajasthan (“Residential Bridge School”), and a professional development
initiative to integrate IT and share educational content across schools ("Digital Inclusion Initiative"). Advocacy: Fighting social inequities in the Global South (e.g. caste discrimination, gender bias, illiteracy, government corruption, feudal practices, indigenous community marginalization, refugee & displaced community bias, degradation of livelihoods due to climate change). Digital Connectivity (under development): Barefoot is exploring ways to leverage its power infrastructure to provide internet / digital connectivity services that enhance education and health programming. Barefoot College is differentiated through its focus on recruiting and empowering impoverished and often uneducated constituents (especially women) as agents of sustainable change at the grassroots level. Through Barefoot College, the most disadvantaged rural women (single mothers, middle-aged, divorced, physically challenged and / or illiterate) are given opportunities to receive life-skills and technology training that they can use to transform their communities in an environmentally sustainable way.

**Ambition for Change**

Communities in poor countries around the world implement technologies and practices that enhance economic, social, and environmental well being.