

## BAREFOOT COLLEGE TEACHING WOMAN SOLAR ENGEENERS

One of the most impacting programmes of the [Barefoot College](#) is working with rural people on electrification through solar power. The program involves women from the villages, and teaches them to skills such as install build and repair solar lamps and water pumps. For the solar electrification of villages, Barefoot College also annually trains about 100 grandmothers from India and 80 from other countries of the world.

The Barefoot College, founded by Bunker Roy in 1972, is a non-governmental organization based in Tilonia in Rajasthan's province of India. Barefoot College has been harnessing the sun's energy to help rural communities thrive by applying solutions in four critical areas of village life: solar electrification villages, hot water, solar cookers, and fresh drinking water through solar powered desalination.

By its activities, Barefoot College has proved that women and men without specific qualifications can fabricate, install, use, repair and maintain solar units through a practical training received in the communities. The idea of training women, in particular grandmothers, is explained by their steady presence in the community thus ensuring services on a continuous basis.

The College has adopted the Gandhian ideas that knowledge, skills and wisdom found in villages should be used for its development before getting skills from outside. The Barefoot College has demystified technologies and decentralized their uses by transferring access, control, management and ownership of sophisticated technologies to rural men and women, who can barely read and write. As declared by Bunker Roy, the Director of the Barefoot College *"....what Barefoot College has effectively demonstrated is how the combination of traditional knowledge and demystified modern skills can bring lasting impact and fundamental change when the tools are in the control and ownership of the rural poor."*

Such a remarkable innovative experience has attracted attention of many UN agencies and of the international cooperation. Barefoot College is working to transfer these practices to other interested countries.

In particular, as far back as 2008 the [GEF Small Grants Program \(SGP\)](#) undertook collaboration with the Barefoot College to support *Women Solar Engineer* pilot projects



across Africa's and Asia's countries. Actually, these projects are ongoing in Benin, Bhutan, Burkina Faso, Cameroon, Chad, Ethiopia, Fiji, Ghana, Kenya, Madagascar, Malaysia, Mozambique, Niger, Rwanda, Tanzania, Togo, Uganda and Vanuatu. The GEF SGP provides communities with technical support and funding for the solar panel kits. The Barefoot College offers six-month training to women involved, at their campus in Tilonia (India). With just six-month training in the college, students have shown that they can transcend barriers and emerge as self-sustaining solar engineers, and change-makers.

These activities have great impact on the environment. In rural areas of these countries communities traditionally lack access to conventional power sources and have to rely on kerosene or firewood for basic energy needs, having a negative impact on local environment. It is estimated that one rural family in Africa typically burns 60 litres of kerosene a year, releasing large quantities of CO<sub>2</sub>. Barefoot College estimates that the initiative now saves around 160,000 liters of kerosene a month across South America, Africa and Asia. Solar energy initiatives proposed by the Barefoot College are providing communities with alternative energy solutions, while enhancing local capacities and improving local development.

[Also UN-Women, by collaborating with the Barefoot College](#) and its NGO partners, is supporting a programme to empower marginalized women across the world and help them start to drive their local green economies. The programme, running since 2004, teaches engineering skills to illiterate older women from rural communities, before equipping them with solar lamp kits to assemble and install in their own and nearby villages. This initiative interested countries like Malawi, Uganda, Liberia, Sierra Leone, Tanzania and Sudan.

In 2012, the Barefoot College became the first NGO partner with UNESCO's *Global Partnership for Girls' and Women's Education*. Many other initiatives are ongoing to transfer the Barefoot College innovative methodologies in other interested countries. Information and contacts are available in the Barefoot College website.

### **To know more**

[Barefoot College website](#)

[Article in Barefoot College website](#)

[Article in UN-Women website](#)

[Article in vsinternational.org](#)

[Barefoot College in wikipedia](#)

[Article in UNESCO website](#)

[Bunker Roy in UNESCO website](#)

[Barefoot College in Africa](#)



[Barefoot College in Haiti](#)

[BBC News Fotos](#)

[Bunker Roy conference in youtube](#)

[Article in The Guardian](#)

[Sustainable Energy for All Initiative](#)

[Sustainable Energy for All 2014 Annual Report](#)

