



The Barefoot Solar Mamas *of the world*

Over 800 Solar Mamas in 78 countries have been trained from through 16 ITEC courses in 2016. They have also solar electrified 50,000 houses covering over 500 villages

text | Bunker Roy

The Barefoot College was recognised as a training institute under the Indian Technical Economic Cooperation (ITEC) in 2008. Since then, two batches of 40 women, from remote non-electrified villages, each have come to the Barefoot College from the Least Developed Countries (LDCs) every six months. They had to be illiterate or semi-literate and between 35-50 years. As they came from different countries and spoke different languages and dialects, they became solar

engineers using pictures, signs, visuals and gestures and “learning by doing”.

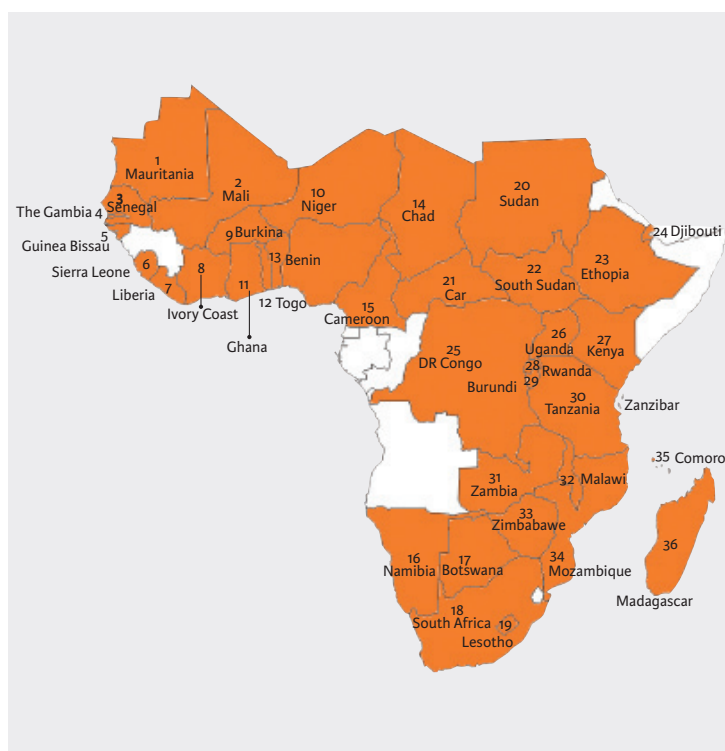
In six months, the Solar Mamas learnt how to fabricate sophisticated charge controllers, invertors, LED solar lanterns, establish a Rural Electronic Workshop (REWs) and install fixed solar systems in individual houses. With the REW in every solar electrified village, the Solar Mamas carried out all repairs and maintenance. The community paid the same every month for solar lights what they paid for kerosene, candles, torch batteries, charging mobiles, wood and diesel. These

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BAREFOOT APPROACH IN 36 AFRICAN COUNTRIES FOR SOLAR DOMESTIC LIGHTING

COUNTRY	TRAINED BSE/ NUMBER OF SOLAR ELECTRIFIED HOUSES
MAURITANIA	2/55
MALI	3/320
SENEGAL	9/350
THE GAMBIA	4/114
GUINEA BISSAU	6/250
SIERRA LEONE	10/1720
LIBERIA	8/100
BURKINA FASO	13/602
NIGER	4/150
IVORY COAST	4/0
TOGO	6/185
GHANA	5/110
BENIN	2/408
CHAD	2/100
CAMEROON	4/263
NAMIBIA	7/0
BOTSWANA	7/0
SOUTH AFRICA	5/0
LESOTHO	4/412
SUDAN	6/100
CENTRAL AFRICAN REPUBLIC	4/0
SOUTH SUDAN	16/237
ETHIOPIA	10/250
DJIBOUTI	5/250
DR CONGO	12/400
UGANDA	10/440
KENYA	16/1205
RWANDA	12/340
BURUNDI	4/100
TANZANIA + ZANZIBAR	31/2000
ZAMBIA	6/200
MALAWI	13/316
ZIMBABWE	7/150
MOZAMBIQUE	3/100
COMOROS	6/100
MADAGASCAR	7/390



are the first technically and financially self-sufficient solar electrified villages in the world.

In 2016, through 16 ITEC courses, over 800 Solar Mamas have been trained from 78 countries. They have solar electrified 50,000 houses covering in over 500 villages. In the six month period, nearly 200 hours are allotted to expose them on vital women health issues, importance of savings and how to open a bank account, start micro enterprises and be rural entrepreneurs, livelihood skills, digital literacy using I pads to communicate with each other through a ENRICHE programme tailormade for illiterate rural women.

The global impact and success of the barefoot Gandhian model resulted in the Ministry of External Affairs (MEA)



approving the establishment of Barefoot Vocational Training Centres (BVTCs) in Senegal, Burkina Faso, Liberia, Madagascar and Zanzibar at a cost of ₹2.48 crore each. The Government of Zanzibar approved \$250,000 to establish a Barefoot Training Centre for women solar engineers. It was operational in August 2015 inaugurated by the President of Zanzibar.

A Regional Barefoot Training Centre to train 48 Solar Mamas and solar electrifying their villages covering eight countries in Central and Latin America was announced by the Minister of State Gen VK

Singh during his visit to Guatemala.

At the conclusion of the Forum for

Indian Pacific Island Countries (FIPIC) in August 2015, PM Modi announced in the presence of head of 14 Pacific Island countries in Jaipur that 70 Solar Mamas will be trained and will solar electrify 2,800 houses across 14 Pacific Island Countries.

During India-Africa Forum Summit in October 2015, first ladies from South Africa, Namibia, Ghana and Mali met the Solar Mamas from Africa. At the conclusion, the Ministry announced the sanction of ₹25 crore to

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**PROFILES OF WOMEN
BAREFOOT SOLAR ENGINEERS
OF BANGLADESH**

Begun Rejia (37 years)

Village: Kazipun, Kazipur,
Sirajganj
Child: 1
Literacy: Illiterate
Language: Bengali
Occupation: Domestic
ITEC Course: XIII (Sep.
2014-March 2015)



**Khatun Mst Monora
(41 years)**

Village: Kazipun, Kazipur,
Sirajganj
Children: 2
Literacy: Illiterate
Language: Bengali
Occupation: Domestic
ITEC Course: XIII (Sep.
2014-March 2015)

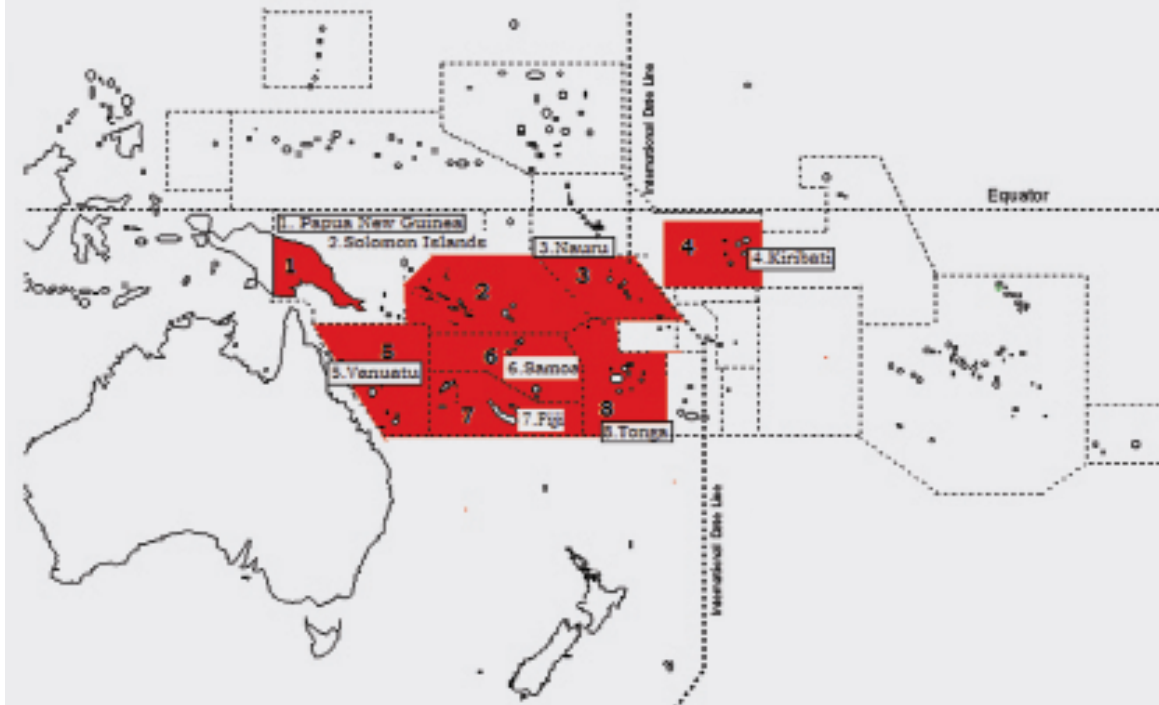


**Khatun Mst Munzuara
(39 years)**

Village: Kazipun, Kazipur,
Sirajganj
Children: 3
Literacy: Illiterate
Language: Bengali
Occupation: Domestic
ITEC Course: XIII (Sep.
2014-March 2015)



**SOLAR ELECTRIFICATION FOR DOMESTIC LIGHTING &
BAREFOOT SOLAR ENGINEERS**



As on March 2015



Begum Shalaha (39 years)

Village: Khagrachari
Children: 3
Literacy: Illiterate
Language: Bengali
Occupation: Domestic
ITEC Course: XV (Sep. 2015-March 2016)



Sultana Razia (34 years)

Village: Khagrachari
Children: 3
Literacy: Literate
Language: Bengali
Occupation: Domestic
ITEC Course: XV (Sep. 2015-March 2016)

Begum Sakhina (37 years)

Village: Khagrachari
Children: 4
Literacy: Literate
Language: Bengali
Occupation: Domestic
ITEC Course: XV (Sep. 2015-March 2016)



Begum Khohinur (50 years)

Village: Khagrachari
Children: 6
Literacy: Literate
Language: Bengali
Occupation: Domestic
ITEC Course: XV (Sep. 2015-March 2016)



solar electrify 7,500 houses spread over 15 African countries.

The Barefoot College has signed MoUs with major UN organisation to spread the barefoot model through the Solar Mamas — UNWOMEN, UNESCO, GEF Small Grants Programme UNDP. The enormous endorsement of the Government of India to the Solar Mamas has yielded international support from philanthropy foundations including Skoll Foundation (USA): Oak Foundation, Enel Green Power(Italy): Erol Foundation(USA): Bank of America, Coca Cola, Apple India and Cartier (France).

The Government of India, through ITEC, trains the Solar Mamas: Funds to solar electrify their villages comes from UN and the private foundations. Where

this has not been possible Government of India has stepped in to fill the vacuum. The process is under way to sign an MoU between Barefoot College International (BCI) and the International Solar Alliance initiated by PM Modi and the President of France to increase the number of non-electrified villages to be solar electrified by the Solar Mamas. They are present in 70 of the 120 countries who are members of the Solar Alliance.

A film commissioned by the Ministry of External Affairs called No Problem on Solar Mamas has won several national and international awards. A film titled Rafea Solar Mama on the first Arab woman from Jordan to be trained as a solar engineer has been seen by over 400 million people through all the major channels and networks from Australia to the US.

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