



50 Years of
The Barefoot College
Tilonia

Volume 2
tilonia
DIARIES



THE SOLAR MAMAS



*If the first idea is not absurd
then there is no hope for it.*

ALBERT EINSTEIN

If one lives in a village, the simple solutions stare you in the face. For years the rural youth have left their villages to look for jobs in the cities. For years millions in remote villages have lived in darkness using kerosene, candles torch batteries and wood to provide light. For years paper qualified engineers have come up with expensive centralised solutions to provide light, forgetting Gandhi and his message that decentralisation is the answer, and that people-centred ideas are the only sustainable solutions for India and the world. For years we have looked down on the poor who cannot read and write, as if they are the problem.

We have written off rural women as a part of the problem, instead of perceiving them as a part of the solution. Billions of dollars are spent on “experts” writing studies, offering alternatives, thrusting models on the poor that don’t work, because they have not been involved in the planning and implementation, and to think it through.

Enter the Solar Mamas.

Who are they?



Called Solar Mamas by the Prime Minister of India, they are middle aged illiterate women – many of them mothers and grandmothers – who live in non-electrified villages but are rooted in them. They have been selected by their communities to be trained in India, in 6 months, to be solar engineers with financial support under ITEC from the Ministry of External Affairs, Government of India.

Why?

In spite of the billions spent by the experts/ engineers, they have failed to provide clean inexpensive non-polluting light to millions across the developing world. And because there is an urgency to tackle the problem of climate change, using solar energy to provide “clean light” with the help of rural women – Gandhi’s Last Man and Woman.





When?

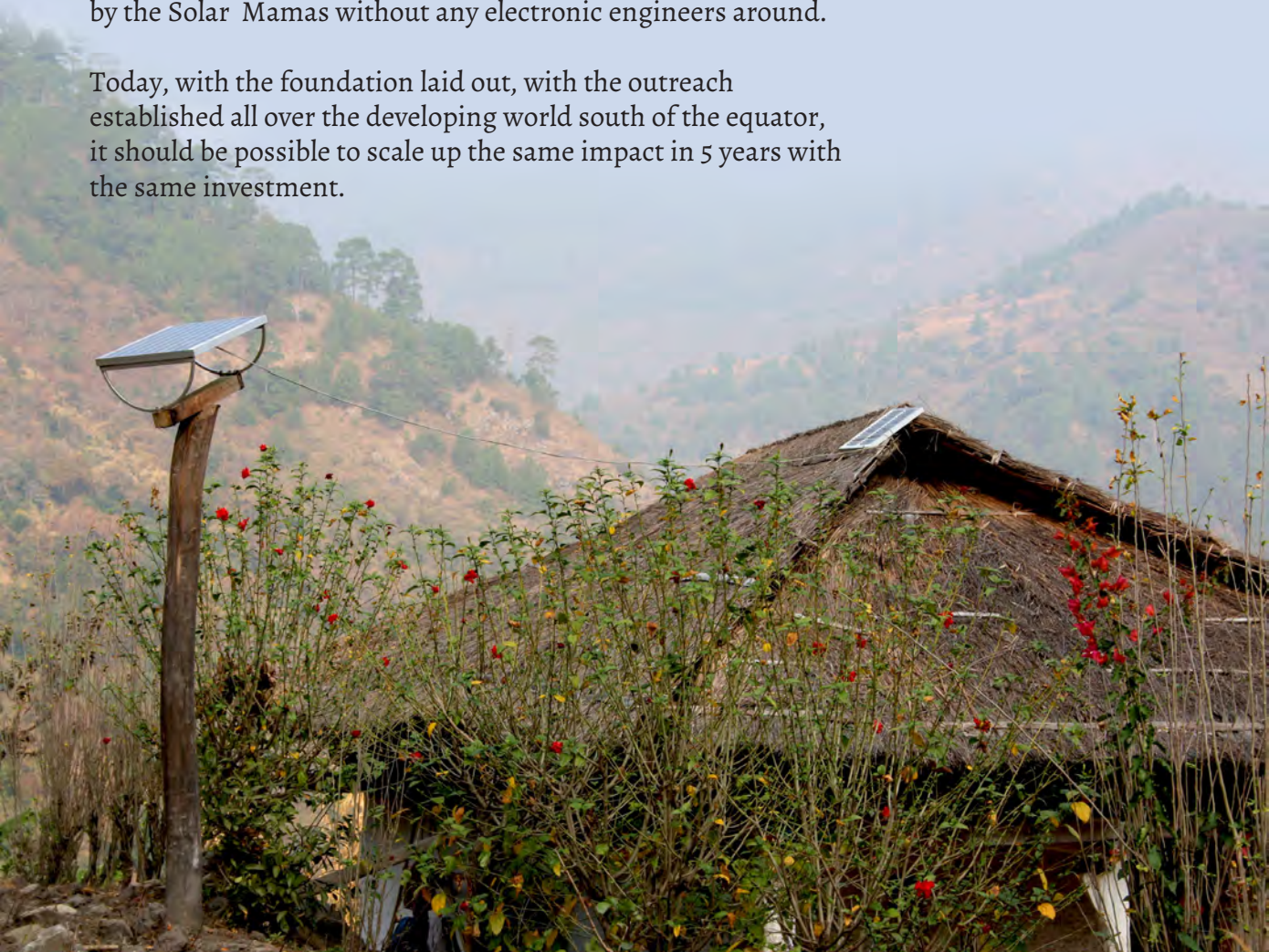
A proven, inexpensive, down-to-earth global model. The first Solar Mama was selected in 2000. Since then over 1700 Solar Mamas have been trained from 96 countries. 1500 villages have been solar electrified and 75,000 houses have benefitted from this programme. A total of 45 million litres of kerosene have been saved from polluting the environment.



Cost

It took 20 years to prove that this Barefoot Model works.
It cost 15 million dollars including travel, training,
transportation, purchase of solar equipment and installation
by the Solar Mamas without any electronic engineers around.

Today, with the foundation laid out, with the outreach
established all over the developing world south of the equator,
it should be possible to scale up the same impact in 5 years with
the same investment.





Donors who have made this possible:

ITEC Ministry of External Affairs Government of India

CAPART Ministry of Rural Development

ADB (Bhutan)

UNDP (Ethiopia)

UNWOMEN (Pacific Islands and Africa)

Norwegian Church Aid (Afghanistan)

European Union (Ladakh)

Government of Zanzibar

Ministry of New and Renewable Energy (MNRE), Government of India





What do the His Holiness the Dalai Lama, the Prince of Wales, President Clinton, Michelle Bachelet (United Nations High Commissioner for Human Rights), The Prime Minister of Chile, The Prime Minister of Fiji, President Macron of France, the President of Zanzibar, and the Prime Minister of India have in common?

They have all met and celebrated the women's achievements.



The Barefoot College Tilonia

Women Barefoot Solar Engineers Trained from 2000 to 2022

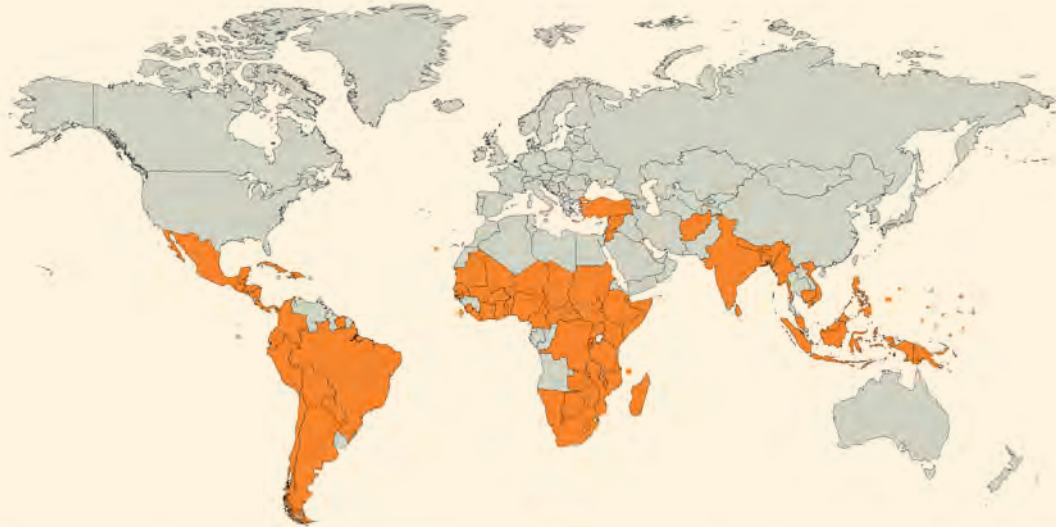
Total No. of Women Trained: 1708

15 Indian States and 96 Countries covered

Villages: 1500+

No of Houses solar electrified: 75,000+

Saving of kerosene in lighting: 30,000 litres per month



1. Mexico (22)
2. Belize (3)
3. Guatemala (18)
4. El Salvador (4)
5. Honduras (4)
6. Nicaragua (4)
7. Panama (7)
8. Cuba (2)
9. Dominican Rep (3)
10. Haiti (4)
11. Suriname (2)
12. Colombia (21)
13. Ecuador (4)
14. Bolivia (4)

(20 Central/Caribbean/South American Countries)

15. Peru (13)
 16. Chile (12)
 17. Brazil (4)
 18. Paraguay (3)
 19. Argentina (4)
 20. Costa Rica (3)
- Total = 148 (BSE)

1. Mauritania (6)
2. Mali (21)
3. Senegal (17)
4. The Gambia (14)
5. Guinea Bissau (6)
6. Sierra Leone (20)
7. Liberia (12)
8. Burkina Faso (13)
9. Niger (4)
10. Ivory Coast (16)
11. Togo (8)
12. Ghana (5)
13. Benin (3)
14. Cameroon (13)

(43 African Countries)

15. Namibia (11)
16. Chad (2)
17. Sudan (15)
18. South Sudan (13)
19. Ethiopia (76)
20. Djibouti (5)
21. Kenya (20)
22. Uganda (27)
23. Rwanda (14)
24. DR Congo (12)
25. Egypt (4)
26. Burundi (4)
27. Tanzania (29)
28. Zanzibar (13)

29. Malawi (21)
 30. Zambia (8)
 31. Zimbabwe (11)
 32. Mozambique (3)
 33. Botswana (54)
 34. South Africa (5)
 35. Lesotho (4)
 36. Comoros (6)
 37. Madagascar (27)
 38. Somalia (3)
 39. Cape Verde (3)
 40. Nigeria(3)
 41. CAR(4)
 42. Djibouti(5)
 43. Eswatini(9)
- Total = 568 (BSE)

1. Palestine (1)
2. Jordan (2)
3. Russia (Siberia) (2)
4. Afghanistan (37)
5. Nepal (6)
6. Bhutan (85)
7. India (624)
8. Sri Lanka (3)
9. Bangladesh (7)
10. Myanmar (38)
11. Vietnam(4)
12. Cambodia (6)
13. Malaysia(4)
14. Philippines (12)

(19 Asian Countries)

15. Indonesia (25)
 16. Timor (4)
 17. Turkey (7)
 18. Syria (6)
 19. Thailand(3)
- Total = 886 (BSE)

1. Papua New Guinea(14)
 2. Solomon Island (6)
 3. Kiribati (5)
 4. Nauru (6)
 5. Vanuatu (4)
 6. Samoa(6)
 7. Fiji (21)
 8. Tonga (6)
 9. Micronesia (8)
 10. Marshall Island (6)
 11. Tuvalu (6)
 12. Cook Island (3)
 13. Palau (5)
 14. East-Timor (4)
- Total = 111 (BSE)

(14 Pacific Islands)

Links

for further information

1. Brazil – barefoot women solar engineer

https://drive.google.com/file/d/1jFw1_E6E_d7bX_P-m7ZA3dwQupSSm6JT/view?usp=sharing

2. No Problem: film produced by the Ministry of External Affairs

<https://drive.google.com/file/d/190Sfl8YeHbwPr9dxme7X4LUPLjCzmLbJ/view?usp=sharing>

3. PM Modi's Speech on the Solar Mamas

https://drive.google.com/file/d/1zXRH7hK-oomxnt2DpOa8Yhl_eVl5qizZ/view?usp=sharing

4. WBSE Africa : Women Solar Warriors of Africa

<https://drive.google.com/file/d/1njm5dYNZlL8qPmZhJEE4UarKuGltspOR/view?usp=sharing>

5. Latin America Infographic

<https://drive.google.com/file/d/1nsGliY2D6k77PA4njJpaLG9HNXMFFueM/view?usp=sharing>

6. Solar Mamas from South East Asia to the Pacific Islands

<https://drive.google.com/file/d/1l1ouUYyvwWmoOIXJP2VeQNXT5FICC9B/view?usp=sharing>

7. Solar Mamas – Madagascar

<https://funny-video-online.com/watch/64g3l4l3s4s4e3i5h3p4p5.html>

8. Why Poverty: Solar Grandmothers

<https://youtu.be/Hj7t5kETTfs>

9. One Woman At A Time

https://drive.google.com/file/d/1v_f8ealjLSdjEcTaoNaqsBUcWTq1__Jm/view?usp=sharing



10. Engineer Saheb –Bihar

<https://drive.google.com/file/d/15kcVKHKgJAgoXVThaglOa3Y9eU8mR168/view?usp=sharing>

11. The Women Solar Warriors of Bhutan

<https://drive.google.com/file/d/1oJ7GN53qkP4ma8jh88jgot8bjESB3KH3/view?usp=sharing>

12. Bring the Sun Home

<https://www.youtube.com/watch?v=DQ9ioryp-4o>

13. Pacific Islands 2015

<https://drive.google.com/file/d/1hmEcrojXFJGEmUZ2lele5M3fGIy7GGxf/view?usp=sharing>

14. The Ordinary Heroes of Afghanistan Part 1

<https://drive.google.com/file/d/14ZuJSeAZVDjWskdAl547hQse1wqrg-pc/view?usp=sharing>

15. The Ordinary Heroes of Afghanistan Part 2

<https://drive.google.com/file/d/1cq-kB6VJXlw1oOqdtLk3AHRFBu-DNFr/view?usp=sharing>



16. The First Women Barefoot Solar Engineers of the World (2007)

<https://youtu.be/8oS2iUFvdTE>

17. Sierra Leone's First Women Barefoot Solar Engineers (2008)

https://youtu.be/v_RT8pngx1A

18. First Women Barefoot Solar Engineer of Andhra Pradesh (2008)

<https://youtu.be/XYvQmioF9LA>

19. The First Rural Women Heroes of Tombouctou (2008)

<https://youtu.be/HHhpyS5U1KY>

20. The First Women Barefoot Solar Engineers of the Gambia
(2008, special thanks to Skoll Foundation, Schwab Foundation, Alcan)

<https://youtu.be/qWvwtCPnNK8>

21. The Women Solar Heroes of Mauritania (English) (2010)

<https://youtu.be/ktkUNvzaEOY>



The Barefoot College
(Social Work & Research Centre)
Tilonia 305816, via Madanganj,
District Ajmer, Rajasthan, India

Phones: 91 1463 288210/288351 Ext 203 and Ext 215
Email: contact@swrctilonia.org • visit@swrctilonia.org

Website: www.barefootcollegetilonia.org

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