Lessons from Practice – Access to Clean and Modern Home Appliances

Energy Clinics and Oorja Store
An initiative for women through women

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Director
Energy Management Centre
First State to have a separate body to look after the Energy Conservation activities in the State Level.

Established in 1996, as an autonomous Centre, Dept. of Power, Govt. of Kerala registered under the Travancore-Cochin Literary, Scientific and Charitable Societies Act of 1955
believes in

NETWORKING

with individuals

and institutions

for speedy and cost effective

solutions
<table>
<thead>
<tr>
<th>Sector</th>
<th>1978-79</th>
<th>2009-2010</th>
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</thead>
<tbody>
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<td>Domestic</td>
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<td>Commercial</td>
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<td>Small &amp; Medium Industry</td>
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</tr>
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<td>Large Industry</td>
<td>63.8</td>
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</tr>
<tr>
<td>Others</td>
<td>10.5</td>
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</tr>
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</table>
finds that in Kerala

85% of households use firewood for cooking. Domestic electricity use is 45% of total. Therefore, domestic energy conservation makes sense.
Decided to focus more in domestic sector

During the peak hours from 1830 hrs to 2330 hrs nearly 1200 MW is needed for meeting the lighting load, of which 75% is from GLS bulbs.
targets

All energy users and producers in particular

women - half the population and

children below 15 - again half
Energy Clinic


- Is a energy conservation awareness workshop for women, run by women volunteers trained by EMC.

- Implementation Stages
  - knowledge transfer- first from EMC staff to women volunteers.
  - second from the volunteers to women in rural communities.
Energy Clinic cont.

- Targets the **Domestic Sector** of Energy Consumption with **46-47 % Share** of the total consumption in the state.

- Every Volunteer who is trained and then selected on the basis of a test is provided with training materials, ID Cards and exhibits.

- A remuneration of INR 250/- Per class of 30 up to a maximum of 2 class per month.
Energy Clinic cont.

- At present around 200 Volunteers
- A Survey is being undertaken to assess their impact

A State Level Clinic Volunteers Meeting in Progress
The Programme has generated tremendous interest in the South Asia through the South Asia Women in Energy Initiative of SARI/E of USAID.

The strengthening activity of the Clinic is ongoing and we plan to have a drive through NGOs, through Media giants etc....

EMC has identified that at least 15% of energy can be saved by Awareness.
Syllabus of the training module

- Why Energy Conservation or Energy Efficiency
- Efficient lighting solutions and practices
- Energy Efficient ventilation i.e.; fans and air conditioners
- Energy Efficient Practices in kitchen
- Star and Labeling Programme of Govt. of India.
Energy Clinic cont.

- An R & D intervention
  - Thaapabharani and Urja 2

Thaapabharani is a thermal Box which can be used for cooking rice, tapioca, pulses etc...
Thapabharani

- EMC in its effort to propagate energy efficiency identified that fuel used for cooking rice can be saved up to 60%.

- Hence the thaapabharani was designed and propagated through women volunteers...
Model 1
had durability issues
Life was slightly more than an year
Prone to insects and roaches
INR 100 - 150

Model 2
More robust
Life was close to 5 years
Priced around INR 250 - 300
Thapabharani to Urja 2

- Taking feedback from women in the rural areas … the design issues of thaapabharani was studied.

- Urja 2 has been designed to be fabricated very easily at the end point.

- EMC provided customized kit and then training to assemble the same. This ensures an efficient model.
Status of Urja 2 at present

- Thaapabharani sales did result in some income to enterprising women volunteers.
- Market driven thermal boxes took over.
- More aesthetically appealing and robust models fabricated in factories.
- Model has been adapted by the government’s Total Energy Security Mission.
Present activities being developed

- Oorja Store
- extend the reach of the clinic to every panchayat of the state.
Oorja Store
An Unique Collection of Energy Efficient Equipments

A joint venture of USAID SARI/E and EMC under the Small Grants Programme of EMC
ഉപയോജനം പ്രബലമാക്കുക

ഏറ്റവും കൂടുതൽ വെള്ളം കൊണ്ടു വന്ന്

എഞ്ചെൻജുറ്റി - എഞ്ചെൻജുറ്റി തൂക്കം മൂല്യം

അപകടാനന്തര സാമ്പത്തിക സേവനം - എഞ്ചെൻജുറ്റി

അപകടത്തിനു പ്രതിഭാസം ഏതെങ്കിലും പ്രക്രിയയിൽ
About Oorja Store

- Aimed to establish a group of dedicated women volunteers who work as retailers for energy efficient product.

- Funded under the USAID – SARI/E Small Grants Programme with Energy Management Centre.
Structure of Oorja Store

- The existing platform of energy clinic volunteers will be utilized for establishment of Oorja store.

- One or two central stores will be established at major locations with clinic volunteers identified by EMC.

- Virtual stores will be established under every other clinic volunteers which will be linked to the centre stores.
Structure of Oorja Store cont.

- On the request of each volunteer the central store shall undertake the supply of the necessary product.

- On the basis of the orders received more stores will be opened.

- Any manufacturer of energy efficient products could display their product in the store.
Role Of Women Volunteers

- To receive orders for energy efficient products from the public for whom they conduct awareness classes.

- Make those products available to customers from the Oorja store.
Role Of EMC

- Technical assessment of products displayed or sold by the Oorja store would be solely undertaken by EMC.

- Manufactures/Suppliers of energy efficient products are identified by EMC only.

- Periodical Review of the performance of Oorja Store done by EMC.
Products Available

- Compact Fluorescent Lamp (CFL)
- T8 - Tubular Fluorescent Lamp (36 watt)
- T5 - Tubular Fluorescent Lamp (28 watt)
- Ceiling Fans (5* labeled)
- Refrigerators (5* labeled)
  - Direct Cool
  - Frost Free
- Air Conditioners (5* labeled)
Products Being Introduced

- LED Lamps.
- Color TV
- Pump set
- Renewable energy products – Solar lanterns, mobile chargers etc...
How we started

- Clinic Volunteers provided feedback on how enquiries were made on the EE Equipment while doing the class

- Survey among ECVs on the EE Equipment required

- Survey was also meant to understand the interest of the clinic volunteers.
First Step

- Shortlist the clinic volunteers based on their interest
- Initial Brainstorming with clinic volunteers
- Generating interest
- Generating commitment from the clinic volunteers
The Kick Start  Oorja Store Takes off

Inaugural function of Oorja Store held at Kottayam

Mr. K. M. Dharesen Unnithan, Director of EMC inaugurating the Oorja Store

Mrs. T. K. Gourikutty, Energy Clinic Volunteer
Financing for the project

- EMC under USAID – SARI/E provided material worth INR 40,000/- for a store.

- In return the project beneficiary provides co funding as a deposit of INR 30,000/-.

- First year EMC has allocated some funds for supporting the rent of the facility.
Financing for the project

- After the first year there will not be any financial support to the project beneficiary.

- From second year the project evaluation or stock verification shall be done only once in six months.

- We expect the beneficiary to be self reliant after an year.
Results Expected

- Ensure market penetration of Energy efficient and Renewable Energy Products
- Reduction of Peak Load Demand
- Women Empowerment
- Sustainability of the Energy Clinic Programme
- Income generation by local women which leads to poverty alleviation
A Year Hence

- Oorja Store has generated a small but consistent revenue to the proprietor’s as well as a few of the enterprising women.

- Second Oorja Store at Malapuram inaugurated.
A Year Hence

- A steady growth in interest from other volunteers.

- Oorja Store has been able to instill the spirit of entrepreneurship among few volunteers.

- Two more oorja stores branches at other parts of the state with investments from the clinic volunteers are in the anvil.
What Worked

- Provide financial sustainability to Energy Clinic Volunteers
  - Create income generation opportunity for women

- Move from knowledge creation to access and adoption
  - Access to products of assured quality and efficiency in remote areas

- Idea emerging elsewhere in the state – Oorja Mart
Issues

- Continued motivation of the clinic volunteers requires regular updation and programmes.

- Lack of funding for efforts towards continuous motivation.

- The online portal for the Oorja Store was not realized again due to lack of funding.

- Difficulties in understanding regional markets and attitudes.
Issues

- Lack of trust and a risk aversion from most of the volunteers
- Sustaining interest generated
- Loan scheme originally planned did not take off
- Conflict with local retail stores
Next Steps for Energy Clinics and Oorja Store

- Annual Meets and semi annual meets for Energy Clinics to include a module on Oorja Store.

- Increased participation by new volunteer campaign

- Oorja Store will undergo a complete business evaluation and consolidation as one year has passed since its inception.
THANK YOU