

# SOCIAL INCLUSION

TO EMPOWER WOMEN THROUGH ACCESS TO  
CLEAN ENERGY





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TO CLEAN ENERGY

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The social inclusion module, as part of the CELAMeD series, shares how bringing women to the forefront in the energy value chain and unleashing their ability to make informed choices, drives greater triple bottom line impact.



## SOCIETY FOR TECHNOLOGY AND ACTION FOR RURAL ADVANCEMENT (TARA)

Established in 1985, Society for Technology and Action for Rural Advancement (TARA) is a social enterprise of the Development Alternatives Group (DAG). Over the years, TARA has built a global presence as an incubator of technologies and delivery systems for sustainable livelihoods.

To create impact at scale, DAG follows an innovation-to-incubation-to-commercialisation approach. Special Purposes Vehicles (SPV) are created to deliver products and services that have been validated in the market. TARA has successfully incubated several for-profit companies, e.g. TARA Machines and Tech Services (for green business technologies), TARALife (for access to basic needs) and TARA Livelihood Academy (for skill development). TARAurja (an Energy Service Company for rural electrification) is currently an incubatee business unit.

## SOME KEY ACHIEVEMENTS OF THE DEVELOPMENT ALTERNATIVES GROUP OVER THE LAST 30 YEARS

Consistently ranked as one of the top think tanks of the world

Nodal Agency for Ministry of Micro, Small and Medium Enterprises

**3 million+**  
sustainable livelihoods created with  
**50+ green technologies,**  
empowering over **12 million households**

**50,000+**  
direct jobs created

**10,000+**  
youth trained for business and livelihood development on an annual basis, through various activities of the organisation

**800 MILLION**  
litres of water conserved

**8 MILLION TONNES**  
of waste utilised

**5 MILLION TONNES**  
of CO<sub>2</sub> saved

**320,000**  
people accessed basic needs

**INR 440 MILLION**  
transactions facilitated

## emPOWERING PEOPLE FOR THE LAST 20 YEARS

TARA has rich experience in demonstrating energy as a catalyst for socio-economic change in communities. Our work, till date, can broadly be divided in three distinct timeframes.

**1996-2005**

Involved in setting up biomass based power generation in collaboration with DESI Power, the flagship project of which was the establishment of a biomass-based gasifier unit at TARAGram, Orchha - a DA Group sustainability resource centre in central India.

**2005-2011**

Completed pilot projects such as the 'Methane to Markets' initiative in which we set up three biogas-based power plants at Gaushalas (cow shelters), and the Rural Entrepreneurship Zone (REZ) project involving two biomass-based plants for productive use with assistance from USAID and the US Department of State and one solar power plant (for lighting of 46 homes) with support from Scatec Solar, a Norwegian company.

**2012-2018**

Coordinated the Rockefeller Foundation supported Smart Power for Environmentally-sound Economic Development (SPEED) project in India. It began with an intense phase of research, analysis and business modelling that led to the creation of TARaurja, a micro-utility business operating in 19 locations, and over 60 other micro-grids set up by partner Energy Service Companies (ESCOs) under the more recent Smart Power for Rural Development (SPRD) programme. TARA undertook intensive demand generation work at over 50 micro-grid sites, with ESCOs, focussing on the provision of support services to micro enterprises.

## SMART POWER FOR RURAL DEVELOPMENT

## FOOTPRINT

The Smart Power for Rural Development (SPRD) programme, funded by The Rockefeller Foundation, seeks to test the potential of business models that deliver electricity through decentralised micro grids in energy deficient regions.

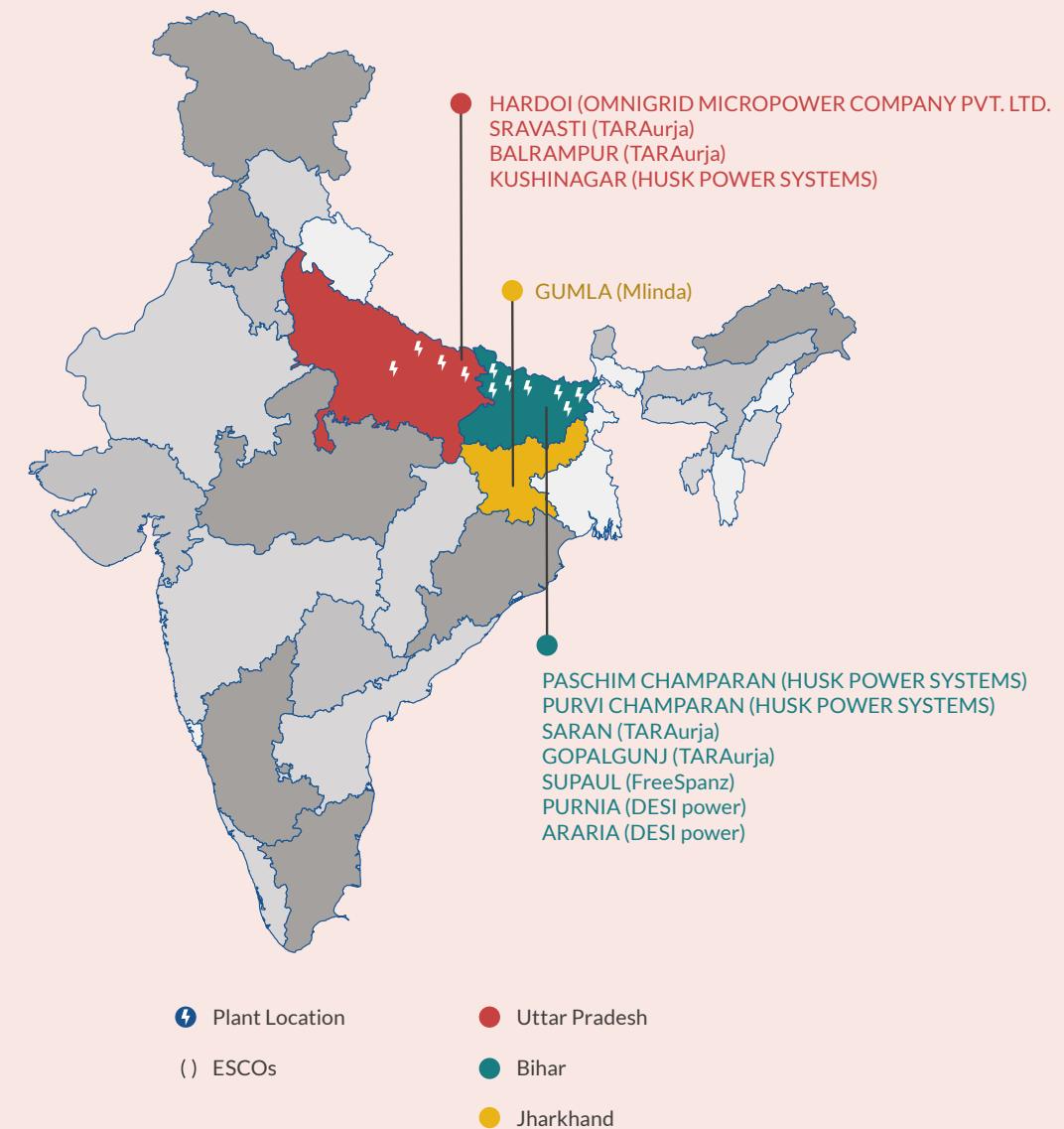
The potential of energy as an accelerator for economic growth model developed by TARA is unique in that it recognises the dual role of people in village communities - that of "producers" as well as "consumers". It prioritises the use of electricity to put money "into people's pocket", cash that can be used to pay for not just lighting but improved nutrition, entertainment, healthcare and other needs.

TARA's current focus on local economic development, social inclusion, basic need fulfilment and agri-resource centres has led to greater incomes, the creation of new jobs, new enterprises run by women and pure water being made available, in addition to thousands of homes being lit up through "Smart Power".

Meaningful and endowing impact on people's lives will need a blend of concurrent initiatives. Through a mix of projects, TARA's approach to "emPowerment" has included components as diverse as the provision of energy efficient LED bulbs with support from the Philips Foundation and the more systemic, foundational work, in partnership with ICRW (International Center for Research on Women), for gender sensitisation among Energy Service Company (ESCO) staff to make their business models more inclusive.

**Today, there are over 10,000 rural households and small businesses across more than 75 villages in Uttar Pradesh and Bihar that are benefiting from reliable access to utility grade electricity under the SPRD programme.**

In the years to come, it is envisaged that supply of electricity through thousands of such micro-grids, coupled with demand creation by load development partners such as TARA, will have a transformative effect on the rural economy.



## CELAMeD PROCESS - AN INTRODUCTION

TARA developed an approach to load development for decentralised renewable energy based micro-grids, called 'CELAMeD' (Community Engagement, Load Acquisition, and Micro enterprise Development).

CELAMeD work is part of the larger Smart Power for Rural Development programme design, in which it is envisaged that Energy Service Companies (ESCOs) will make investments to set up and operate power plants, while partner agencies - those that specialises in rural market development - shall take the lead in load development, this being critical to the viability of an ESCO's business.

Community Engagement (CE) activities begin with an ESCO finalising its target villages. As part of the process, awareness generation around the benefits of renewable energy based electricity is initiated. Tools such as community meetings, focus group discussions, door-to-door interaction, street plays, etc. are used. Load Acquisition (LA) takes place immediately after the power plant goes live, and commences electricity supply. In the first 4 to 6 weeks, the CELAMeD team and the ESCO work in parallel to enrol customers; a large majority of the early adopters being households and shopkeepers, who opt for single or two bulb connections with a socket to charge their cell phones. Soon thereafter, attention shifts to local businesses who wish to shift from diesel as their current source of power or want to expand their enterprises with the addition of new equipment.

In recognition of the transformative role electricity and entrepreneurship, when brought together, play in local value addition, inclusive economic growth and employment, TARA then rolls out a bouquet of catalytic activities that encourage rapid growth in the productive use of energy. Its Micro enterprise Development (MeD) strategy not only enables accelerated load ramp-up for the ESCO, but also helps local businesses to grow, contributing to local economic development.

## WHAT IS THE CELAMeD SERIES?

The 'CELAMeD' series is an attempt to package the Community Engagement, Load Acquisition, and Micro enterprise Development approach undertaken as part of the SPRD programme.

TARA is doing this with support from Rockefeller Foundation as a service for the larger decentralized renewable energy community. This series aims to deliver multiple benefits.

It will enable effective transfer of knowledge and capacity building with ready-made tools, serve to validate the tariff packages that are financially viable for the ESCO and local entrepreneurs, and more importantly, reduce risks associated with delays in load acquisition and other factors related to the uncertainties of working in village markets.

This series includes the following set of modules:

1. Project Development
2. Community Engagement
3. Micro enterprise Development Processes and Support Services
4. Customer Acquisition and Demand Management
5. Social Marketing
6. Social Inclusion
7. Micro enterprise Management

# PRELUDE

Energy has undoubtedly become a significant part of the development agenda, a reality reflected in the many claims made by members of the development community about the importance of energy access in improving the lives of the poor, especially women and girls. Inadequate access to energy holds rural families back from living better lives. Over time, it has been shown to have cross-generational effects, harming holistic development of children. Even with Government's emphasis on rural electrification, the mainstream electrical grid has not been able to reach remote villages. In states like Uttar Pradesh and Bihar, only 30% households are connected to the grid and that too in an erratic and unreliable manner. Farmers & local entrepreneurs are forced to rely on diesel to irrigate fields and run small businesses at a cost that is over three times that of commercial electricity. Moreover, there has been little emphasis on supply to productive loads or adoption of innovative models like community-run sale of energy services.

This discourse includes an implicit assumption that, because of the burdens of energy poverty, energy access itself automatically benefits women and girls. Studies confirm that women's empowerment is crucial for all-round social development, environmental sustainability and ensuring efficiency and sustainability of climate change responses. Incorporating the contributions and concerns of women and men can help inform programmes and increase access to grid and off-grid electricity access. Across developing countries, women are typically the primary household energy managers. Close to their customers, women entrepreneurs have the potential to lower customer acquisition and servicing costs and drive these new decentralised solutions. However, they remain under-represented in the industry. Studies suggest that bringing women to all levels in the energy value chain leads to more effective clean energy initiatives, unleash greater return on investments, and expand emission reduction opportunities<sup>1</sup>.

This module, "Empowering Women through Energy Access" therefore looks at how a gender-sensitive approach to energy access would have a greater impact on women's empowerment; translating to the ability of women to make informed choices. The primary drivers for empowerment are access to resources and options available to women, coupled with the ability to generate income and exercise control over resources.

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Published by Society for Technology and Action for Rural Advancement (TARA), New Delhi, India

## This module contains:

- 1 Women's role in the energy chain
  - 1a. Importance of Inclusion
  - 1b. Women's Active Role in Energy Value Chain
- 2 Purpose and Methodology of Inclusion
- 3 Execution | Inclusion in the chain
- 4 Ensuring Sustainability of Women-Inclusive Energy Chains
  - 4a. Energy governance and decision-making
  - 4b. Capacity development

<sup>1</sup>Women, Energy, and Economic Empowerment, Deloitte University Press

# 1. WOMEN'S ROLE IN THE ENERGY CHAIN

## WHAT YOU WILL LEARN HERE

- + Women's role in the energy value chain
- + Importance of inclusion
- + Active role of women in demand as well as supply side of the chain

Women in rural India have always been "dis-empowered" be it socially or economically. Deprived of the benefits - their basic needs remain unmet and they carry the burden of poverty of choice and opportunities. Moreover, women have lost control over locally available energy resources, which in any case have become scarce over time.

Apart from being exposed to health impacts like chronic diseases from dirty energy use & burns to their children, women are subjected to increased violence because of lack of lighting (ESMAP 2007). Women & girls spend most of their day time in physically draining work, which constrains them from accessing educational and livelihood opportunities & social and political interaction outside.

We believe women have the capability to play higher roles in extending sustainable modern energy as they are the first victims of energy scarcity and the first beneficiaries of electrification. Literature suggests that participation of female labor force has extensive positive effects on women's decision-making ability, particularly in developing country settings. This ability enables them to take informed decisions for themselves as well as for their children. Studies suggest that women are more likely than men to conserve energy, using up to 22 per cent less, including through a greater willingness to alter everyday behaviors<sup>2</sup>.

Moreover, access to energy creates greater employment opportunities for women, by freeing up their time, enhancing their productivity and unleashing new economic potential (UNIDO, 2011). Energy enables the ability to read, study and educate oneself. It provides women with more hours in a day and freedom to work past daylight hours, along with the ability to invest themselves in income-generating productive activities. Income earned by women will close the loop by empowering them to define and make better and informed decisions about their families, thus ensuring a safer and healthier lifestyle.



## IMPORTANCE OF INCLUSION

Women's particular roles in their families and communities, make them potentially more suitable and effective than men for specific roles within the energy sector. In turn, this helps women to benefit from new employment opportunities and higher incomes and creates positive implications for the community at large (Kathleen O'Dell, 2014).

Evidence suggests that integrating women into all levels of the energy value chain will lead to more effective clean energy initiatives, unleash greater return on investments, and expand emission reduction opportunities.

## Demand Energy Chain

- + Women demonstrate more than **twice the business capacity** as men and outperform men as powerful job creators. The **risk of non-payment is likely to be lower** for women entrepreneurs who are more likely to have a better knowledge of their women clients and their ability to make regular lease payments. This increases the attractiveness and profitability of the third party ownership business models for women entrepreneurs.

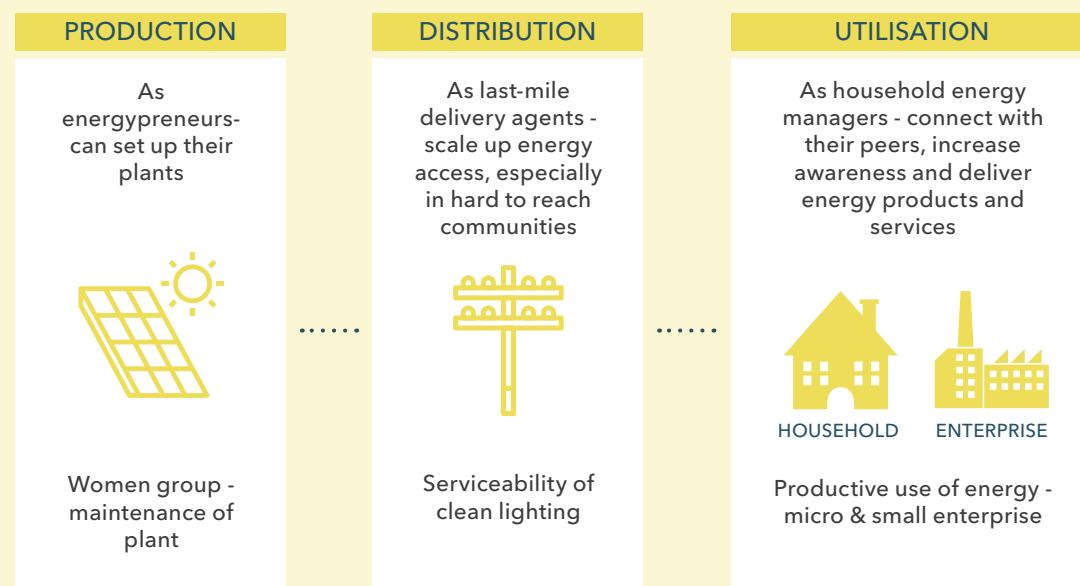
+ Women entrepreneurs are also more likely to benefit from policy instruments and interventions that increase the repayment capacity of women customer through promoting productive uses of sustainable energy solutions.

## Supply Energy Chain

+ Women can play a crucial role in scaling up energy access, especially in hard-to-reach communities. As household energy managers and through their networks, women are in a unique position to connect with their peers, increase awareness and deliver energy products and services.

+ Addressing women's energy needs is a prerequisite for poverty eradication. With selling, maintaining and financing energy products and services, women become active change agents in the energy sector.

## WOMEN'S ACTIVE ROLE IN THE ENERGY VALUE CHAIN



While more attention is being paid to the imperative role of women in the energy sector, there is still a significant lack of recognition of women as more than just passive users of energy.

Therefore, while engaging with women one must ensure that the energy intervention identifies

specific roles for women in the entire chain, to facilitate last-mile disseminations and the serviceability of clean lighting and to engage them in productive use of energy - micro and small enterprises. **Women's active role in the energy chain can hence be broadly classified as being Prosumers on the demand end and managers on the supply end of the chain.**

## DEMAND: WOMEN AS PROSUMERS



As part of the SPRD intervention, women were encouraged to start enterprises. Additionally, to cater to specific needs, differentiated support in the form of training, technical assistance or financing was provided to women. A total of over 50 women were linked to enterprises.

+ As primary users of household energy for cooking and heating, access to energy for rural women is critical. Meeting cooking, heating, and lighting needs places a significant burden on rural women and girls, negatively impacting their health and safety, and limiting education and livelihood opportunities. Improving women's status has an impact on many other development outcomes, including for children, and the clean energy sector stands to benefit from, and should contribute to, these kinds of improvements.

+ Micro, small, and medium businesses are an important source of employment and income generation for women, particularly in agrarian and urbanising economies where paid employment opportunities are insufficiently available. Access to improved energy services can alter women's social, economic and political status - reducing the time and effort involved in household activities, providing better health and educational conditions, enhancing income-generating opportunities, and facilitating their participation in public affairs. The integration of gender issues is thus vital for energy projects in developing and emerging countries.

+ However, women entrepreneurs face significant barriers, such as poor enabling legal and policy frameworks, lack of access to financing, lack of mobility, capacity and technical skills, as well as social and cultural discriminatory practices. Access to a diversified and contextually suitable set of both energy access and enterprise support services can therefore boost women's active role, mainly as entrepreneurs, in and through the sustainable energy value chain.

## SUPPLY: WOMEN AS MANAGERS



As part of the SPRD intervention, women were trained to become full/part-time customer service agents. This not only created a larger customer base, but also lead to empowerment of women.

**+ Grid Managers:** Women can play a crucial role in scaling up energy access, especially in hard-to-reach communities. As energy managers and through their networks, women are in a unique position to connect with their peers, increase awareness and deliver energy products and services.

**+ Customer Service Agents:** Women have unique societal and cultural understandings and can reach new consumer segments, while also being able to better communicate to other women the benefits of using clean energy and its importance.

Therefore, combining the breakthrough potential of clean energy technology with a deliberately woman-centered direct sales and management network can lead to exponential benefits.

## WHEN WOMEN HAVE ACCESS TO ENERGY

### WOMEN AS PROSUMERS



ENTREPRENEURS  
+ INDIVIDUAL  
+ GROUP



### WOMEN AS MANAGERS



+ MANAGERS OF GRID  
+ HOUSEHOLD ENERGY MANAGERS  
+ CONSUMER SERVICE AGENTS

### REDUCED DRUDGERY



- + Reduces the **1200 kms** that women walk every year to collect fuel, wood & water
- + Saves **5 hours** that women spend each day in collecting fuel

### IMPROVED HEALTH & HEALTHCARE



- + Reduces premature deaths, mainly among women & children, due to household air pollution, by around **4.3 million**
- + Reduces risk of pneumonia by **80%** through use of clean fuels for cooking as compared to cooking with biomass

### IMPROVED SOCIAL CONDITION



- + Improved **security & social capital** through better lighting of public spaces, thereby encouraging women to come out of their houses
- + Access to TV also **increases women's autonomy** & likelihood of girls' schooling in rural areas

### ENHANCED PRODUCTIVITY



- + **9% increase** in female employment & **23% increase** in probability of rural women working outside their homes
- + Improved facilities like processing, storage & communication for **micro & small enterprises**

## 2. PURPOSE AND METHODOLOGY OF INCLUSION

### WHAT YOU WILL LEARN HERE

- + Methodologies and tools used for inclusion of women in the energy chain
- + Levels of interaction within the target community for effective inclusion

Men and women differ in the purposes for which they need and use energy, and so do their levels of access to it. Even where infrastructure is physically available, women are often hindered in the actual access to energy, due to lack of finance, appliances, information, training and education. Moreover, institutional structures often benefit men, who, at the household level in many cases, have a stronger decision-making role than women, even over energy products and services that are mostly used by women.

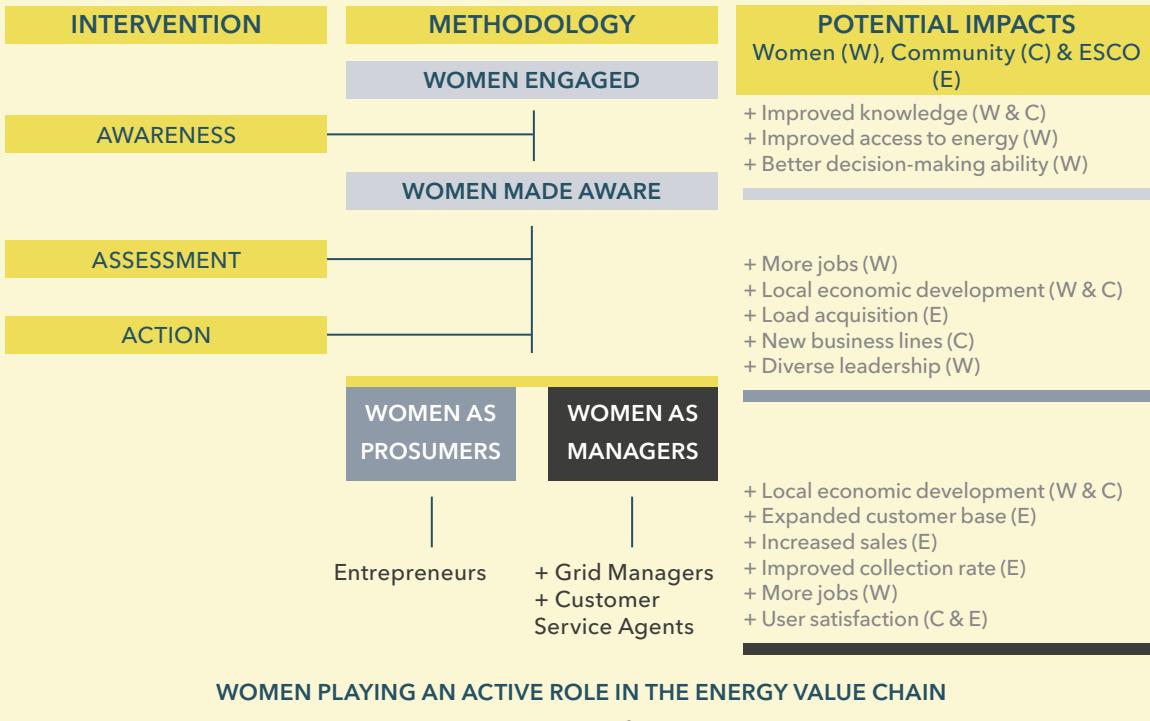
In order to include women in the energy value chain, it is very crucial to understand their contribution in enhancing the effectiveness of the entire chain. Women are part of social networks that differ from those of men and through which they have access to hard-to-reach households. The voice of women ensures more balanced and diverse discussions. It is therefore important to have a greater focus on inclusion and representation of women in the ownership and management of capital assets (energy and enterprise) within their communities to enhance overall development.

As a step towards the same, it is necessary to understand the complexities faced by women, and their perspective towards energy services. These complexities need to be understood at 3 different levels in the environment:

- + Individual level
- + Family and community level
- + Energy Service Companies' (ESCOs) level

### INDIVIDUAL LEVEL

Trying to engage communities at large directly through meetings and discussions without establishing a rapport with the women or trusted intermediaries limits or delays the process of mobilizing women and girls. In order build a rapport and sensitise them on expected changes in their lives after getting access to energy services for both household and productive use, it is important to adopt the following methods:



- + Awareness: Customer mapping to know the consumers better
- + Assessment: To understand their needs, current practices, aspirations, strengths and barriers with regards to energy access and use
- + Action: Provision of enterprise support services, mainly technology, finance, market access and capacity-building basis their needs

### FAMILY AND COMMUNITY LEVEL

Sensitising and bringing awareness among women alone cannot lead to inclusion. In order to have more effective outcomes it is important to involve the community and the family in this process. Making them aware of the initiative and how inclusion of women in the chain would lead to the development of their community as a whole is essential. Methods that could help us accomplish the above include the following:

- + Awareness: Campaigns (Audio, roadshows, street plays, etc.) to generate awareness regarding the initiative within the community
- + Assessment: Focus Group Discussions and community meetings to understand the community's perspective towards inclusion of women in the energy chain
- + Action: Creation of influence centres to create a ripple effect within communities

## ESCO LEVEL

As energy service companies (ESCOs) are one of the major stakeholders in the energy value chain, it is very important to create a win-win energy inclusion strategy, which aims at both business acceleration and women's inclusion.

From an ESCO point of view, it is important to identify who is being left out and why, this will strengthen inclusive energy access and economic development, particularly among women. Moreover, this will build awareness within the ESCO's system about why expanding energy access to those who are traditionally excluded (i.e. the women) is important. Therefore, sensitisation of the ESCO is recommended at both its management level and at the last-mile customer service agent level. Methods to achieve the same include the following:

- + **Awareness:** Sensitisation of the ESCO team
- + **Assessment:** To understand the ESCO's perspective on inclusion of women in the energy chain
- + **Action:** Workshops and training sessions in particular for the last-mile customer service agents on gender sensitisation and effective communication and planning strategies.



## AWARENESS



### AWARENESS CAMPAIGNS

Making the community aware is one of the key prerequisites of executing any intervention programme. It is important for the target consumer segment to understand the planned intervention and its relevance.

**WHEN:** Project Development Phase

#### KEY OBJECTIVES

The specific objectives of an awareness campaign are the following:

- + Sensitise the community about the initiative and gain their approval for execution
- + Make them understand the need and relevance of the planned intervention and the difference it will create in their lives

#### TOOLS USED

Campaigns comprising of roadshows, audio announcements and street plays can be carried out to make the community aware about the initiative and influence the community to take relevant actions.

Street plays, locally known as 'Nukkad Naatak' or 'Tamasha' in rural India, are one of the most effective ways of mobilising communities and creating awareness in addition to being a means of wholesome entertainment.

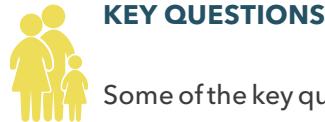
A street play, or 'nukkad natak', was conducted in Mathura Bazaar, UP to spread awareness about TARAurja and TARA MeD services. The message of the event focused on how access to electricity can improve people's quality of life and enhance their incomes.

With the help of a role-play and acting, people from the community were made aware about the services of TARA and TARAurja. The street play helped the community understand the benefits of the availability of reliable electricity in their villages by exhibiting the change brought about in people's lives after getting access to reliable power (like longer study hours for the children, safer streets for women, longer working hours for men, etc.)



## DO IT YOURSELF AWARENESS CAMPAIGNS

### AWARENESS



#### KEY QUESTIONS

Some of the key questions to be discussed and brought forward while conducting an awareness campaign/event, with regards to making the community aware about the available energy access and micro enterprise development services in the communities - in particular women's inclusion in the energy value chain - include the following:

- + What is the role and relevance of including women in the energy value chain?
- + How can women play a more active role in the entire value chain?
- + Why is it a good idea for families and communities to involve women in the decision-making processes?

#### DO's

- + Have a clear objective in mind - in this case, it is sensitisation of the community to ensure women's participation in decision-making processes
- + Measure your expected outputs at the end of the activity:
  - a. Was the community mix good enough to foster change?
  - b. Number of people reached
  - c. Feedback collected from the community

#### DON'Ts

- + Don't ask questions that will make women uncomfortable in front of their families & community, especially men
- + Don't probe biases



### AWARENESS



#### COMMUNITY MEETINGS

Community meetings are a means of collecting information at a community level and having an interactive discussion to understand the perspective of the community towards a specific problem. It is similar to but less formal than a focus group discussion. It usually includes a larger group and participants are often self-selected.

It is important to understand that community meetings are oriented towards solving a common problem. They are not merely for raising awareness, but are to assess different perspectives on common issues and challenges and identify mitigation strategies through a participatory technique.

#### WHEN: Project Development

#### KEY OBJECTIVES

Some of the key objectives of community meetings include the following:

- + To make the communities realize the need and relevance of the intervention
- + To bring out the community's perspective towards a common problem and identify ways to solve the problem

#### TOOLS USED

For the discussions to be directed towards the identified problem and its solution and be for them to be highly interactive, it is important that one is aware and well-versed with the broad topics of discussion, a sample of which is mentioned in the next section. Tools like the 'Know Your Customer' form and the 'Productivity Wheel' can be used on an individual basis as a prerequisite to build a rapport with the community and enhance the credibility value of the discussions conducted.

#### Community meeting at Madhopur with Self-Help Groups

As a first step towards the inclusion of women in the energy value chain, the project team partnered with Jeevika, an initiative aimed at developing entrepreneurship among women, of community meetings in Bihar. A total of over 200 women were engaged as part of these meetings. The team used interactive methods like 'Know Your Customer' and 'Wheel of Productivity' on an individual basis to know the group better. As a result, women were able to realize the importance of access to energy and its use for productive purposes.



## DO IT YOURSELF COMMUNITY MEETINGS

### AWARENESS



### BROAD TOPICS OF DISCUSSION

Community meetings should be focused on bringing out the solution to common problems from within the community rather than dictating the solutions to the community. The community meeting is not an awareness-generating activity.

Some of the broad topics of discussion in community meetings include:

- + Introduction to the programme and the intervention
- + Needs and aspirations of the community as a whole
- + Expectations from the intervention
- + Current issues and challenges prevailing in the community
- + Possible solutions and their impact

#### DO's

- + Use local language while communicating (preferably have a local field member as part of the facilitating team)
- + Include local influencers as this increases one's trustworthiness in the eyes of the community. E.g. Sarpanch, local NGO partner, etc.
- + Mobiliser should dress so that the community can relate to them and will not hesitate while communicating E.g. kurta pyjama for male mobilisers
- + Check the preferable time before hand (especially with women as they might otherwise end up being busy in household chores)

#### DON'Ts

- + Never be late for the meeting - this gives a bad start to the meeting and may hurt the mobiliser's credibility
- + Never go with a know-it-all attitude; be a good listener
- + Never challenge or judge others' thoughts too harshly - he/she may be wrong but resolve the conflict humbly

## ASSESSMENT



### FOCUS GROUP DISCUSSIONS

Group discussions are an important platform where a group of people having similar backgrounds discuss various issues and challenges faced by all of them with focus on a particular aspect.

**WHEN:** Project Development Phase

#### KEY OBJECTIVES

The key objectives of such focus group discussions include the following:

- + Bringing people together on a common platform to discuss the issues & challenges of the group as a whole
- + Understanding their needs and perspectives
- + Making them aware about the planned intervention, their role and the expected outcomes

#### TOOLS USED

For the discussions to be interactive, it is important that the group feels comfortable and is well aware of the purpose of the activity. One-to-one sessions with families (to make them aware of the planned intervention and the role of women in it) paves the way for the women of these families to come forward and become a part of such focus group discussions to share their concerns and challenges.

One of the ways to initiate useful discussions and get relevant information is to have a set of questions and discussion points handy, a sample of which is attached in the following section.



Such discussions are essentially held with a more homogenous group of people, sharing similar challenges and issues.

Besides women, discussions like these can also be conducted with shopkeepers, potential and existing entrepreneurs, farmers, local governance bodies (Panchayat), youth groups, etc. to make them aware of the intervention and discuss common group-level barriers and concerns.

## DO IT YOURSELF

### FOCUS GROUP DISCUSSIONS

#### ASSESSMENT



#### SAMPLE QUESTIONS & DISCUSSION POINTS

##### Opening to get participants talking & feeling comfortable

- + Start with introducing yourself - where are you from, about your organization
- + Tell them about your family and enquire about theirs - this will help them be at ease in front of you

##### Introductory question - start easing into simple question

- + What is your daily routine like?
- + How much time do you devote for various activities?

*(Club this with the wheel of productivity activity mentioned in the Need Assessment section)*

##### Transition question - probe question on productive use of women's time

Ask the spouse & in-laws

- + Mention a few productive activities that women can be involved in
- + Ask the women themselves to write a few activities that they can do during leisure
- + Ask the women themselves why they had never thought about taking up these activities earlier

##### Closing

- + Based upon the mapping carried out tell the family about the benefits of involving women in productive roles
- + Inform them of the available support from various agencies for women as energy managers & women as entrepreneurs

#### DO's

- + Ensure that the location & time of the FGD is clear to all participants & has been communicated well in advance
- + If it is important to do so, do collect demographic data from participants including age, gender, caste, literacy level, etc.

#### DON'Ts

- + Make sure that the setting does not influence the information being collected, e.g. sitting in a circle arrangement rather than in a typical classroom setting may help people talk more freely

## ASSESSMENT



### CUSTOMER MAPPING

The customer is the focus of any demand-driven intervention, since the root of every such intervention is to provide energy access to fulfill the basic needs of people and enhance the quality of their lives. A mapping exercise basically enables us to understand the perspective of the demand side and plan our intervention better.

An ideal time to get this level of information is during Project Development phase; to get to know the community better and enhance the credibility of the intervention within communities.

#### WHEN: Project Development Phase

#### KEY OBJECTIVES

The specific objectives of customer mapping include the following:

- + Understanding the background of the target community, in particular, the women of the community, including literacy level, family income, size of families, etc.
- + Assessing the work situation of the families and the role of women in income-generating activities, including primary occupation, expenditure trends and aspirations, etc.

#### TOOLS USED

A 'Know Your Customer' questionnaire (sample attached in the following section) is one of the best ways to get this level of comprehensive information and know the community better. Door-to-door discussions help us in building a rapport and interacting with the women on a one-to-one basis.

In Uttar Pradesh and Bihar, two of the most power-starved areas, it has been extremely difficult to find women engaging strongly in livelihood opportunities beyond either basic jobs or as a support to their husbands.

## DO IT YOURSELF

### CUSTOMER MAPPING: KNOW YOUR CUSTOMER QUESTIONNAIRE

#### ASSESSMENT



Name (optional):	Husband's Name (optional):	Literacy level/education:
Age:	No. of people in the household:	
Monthly household income (INR):	Less than 3,000 3,000-5,000 5,000-7,000 7,000-9,000 More than 9,000	Key decision-maker in the family: Father    Mother Husband    Myself Made together Other
Source of income:	No. of children:	
<b>WORK SITUATION</b>		
What kind of work do you do?	Household Agriculture Others (specify):	Work outside home Work from home
If you are not making an independent income, do you want to make it?	Yes/No (If Yes go to Q3) If No, why?:	
In which form would you want to work?	Individual Group	Employee Others (specify):
How many hours/weeks would you like to work for?		
Why do you want to have an independent income?		
What do you do in agriculture off-season?		
Where do you spend the maximum share of your monthly income? (Also, rank the options according to priority)	Education of children ( ) Health/medical care ( ) Electricity ( ) Water ( ) Food ( ) Clothes/accessories ( ) Agriculture ( )	Livestock ( ) Toiletries ( ) Cosmetics ( ) Savings ( ) Investment for own business ( ) Others (specify):
Social category	Scheduled tribe Scheduled caste	Other backward class General

## ASSESSMENT



### NEED ASSESSMENT



Need Assessment is the process of identifying and assessing needs or gaps between current conditions and desired conditions. It is necessary to get a community perspective on what their current condition is and what they desire.

#### WHEN: Project Development Phase

#### KEY OBJECTIVES

The specific objectives of a need assessment exercise include the following:

- + Understanding the perspective of women in terms of general usage and purchase behaviour of household commodities
- + Assessing the needs and aspirations of the community, particularly women's, with regards to energy access and use

Other than this, information like this helps in understanding the specified geographies as well as the target community and helps design the initiative better.

#### TOOLS USED

A Need Assessment questionnaire (sample attached in the following section) is one of the best tools to get this level of comprehensive information. The questionnaire consists of questions with regards to usage and purchase behaviour, work situation and the needs and aspirations of women in terms of energy services. Door-to-door discussions are a great way of interacting with the women on a one-to-one basis to get this level of information.

Through initial need assessment studies, TARA found out that women mostly depend on traditional sources of energy and spend hours each day collecting fuel to cook, and, in the winter, keep their homes warm. As a result many suffer poor health due to air pollution, which is caused by traditional cookstoves. Additionally, women have been at a more disadvantaged position because of the burden of their non-economic duties, due to rise in migration among their male family members.



**DO IT YOURSELF**  
NEED ASSESSMENT QUESTIONNAIRE

**ASSESSMENT**



Date: \_\_\_\_\_ Name of Entrepreneur: \_\_\_\_\_

**WORK SITUATION**

1. What kind of work do you do?	+ Housewife + Individual	+ Employee + Others (specify): _____
2. If you are not making an independent income, do you want to make it?	Yes/No If yes, then go to Q.3 If no, why?	
3. In which factor would you want to work?	+ Individual + Group	+ Employee + Others (specify): _____
4. How many hours/ weeks would you like to work for?		
5. Why do you want to have an independent income?		
6. What do you do in agricultural off season?		
7. Where do you spend maximum of your family income? (Also, rank them according to priority)	+ Education of children ( ) + Health/Medical Care ( ) + Electricity ( ) + Water ( ) + Food ( ) + Clothes/ Accessories ( ) + Agriculture ( )	+ Livestock ( ) + Toiletries ( ) + Cosmetics ( ) + Savings ( ) + Investment for own business ( ) + Others (Specify): _____

**WORK SITUATION**

Do you have access to electricity? Yes/No	What is the source of your electricity? + Grid + Local DG set + Inverter + Kerosene or others
For how many hours, do you get electricity per day?	+ Less than 4 hours + 4-6 hours + 6-8 hours + More than 8 hours

What are the usual timings when you have access to electricity?: \_\_\_\_\_

What are some of the uses of electricity to you?  
(working past daylight, access of lighting for children to study etc.)

## DO IT YOURSELF NEED ASSESSMENT QUESTIONNAIRE

### ASSESSMENT



What would you do if you have access to 20 hour reliable electricity?

What is your family's average expenditure on electricity per month?

How much would you like to spend for 20 hours reliable electricity services?

### COOKING

What are the types of fuel that you use?	+ LPG ( ) + Wood ( )	+ Coal ( ) + Other (specify)
On an average how much fuel (of each type) do you consume in a day?	+ LPG ( ) + Wood ( )	+ Coal ( ) + Other (specify)
How much do you pay per KG for the fuel that you purchase?	+ LPG ( ) + Wood ( )	+ Coal ( ) + Other (specify)
How do you purchase the fuel? Upfront payment ( ) Credit ( )	How frequently do you purchase the fuel? Daily ( ) Weekly ( ) Monthly ( ) As per requirement ( ) Others (specify):	
How much time is spent on purchasing the fuel?	Is the fuel easily available? Do you get delivery of fuel? Yes / No	
Do you encounter any issues with the current fuel usage? (Smoke, time taken, purchase, price etc.)		

### GENERAL USAGE AND PURCHASE BEHAVIOUR

1. Electrical goods owned	+ Music Player + TV + Radio + Coolers	+ Refrigerator + Computer + Water filter + Other electrical appliances (specify)
2. Where do you buy from?	+ Small shop in village + Supermarket/ Shop outside a village	+ Department store in a city + Others (specify)
3. Who does the actual buying	+ Father + Mother + Others (specify)	+ Husband + Myself

### ASSESSMENT



### PRODUCTIVITY WHEEL

Productivity Wheel is an interactive game that is used to assess the number of hours spent by women in non-productive activities, which could otherwise be used for a productive purpose.

#### WHEN: Project Development

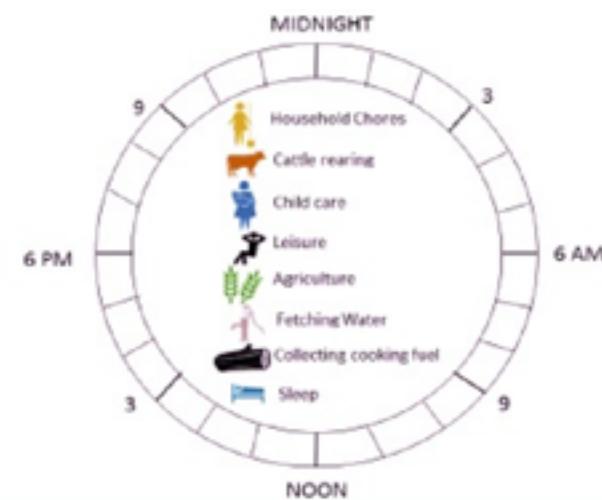
#### KEY OBJECTIVES

The specific objectives of an activity like this include the following:

- + To calculate the time that women spend on leisure which could otherwise be utilised in productive activities
- + To identify and assess differences in the work cycle created, if women were to have access to reliable energy

#### TOOLS USED

An activity wheel depicting a 24-hour clock can be used to map out the time spent by women in activities like household chores, cattle rearing, child care, leisure, sleep, etc.



- + It is usually observed that women spend most of their time in household chores and agriculture.
- + Even as part of Agriculture most of their time goes in irrigating their lands or in harvesting as no machines are available
- + Due to lack of fuel-efficient stoves, a lot of time is also spent on collecting wood for fueling the chulhas i.e. traditional cookstoves.

## ASSESSMENT



### STRENGTH AND BARRIER ASSESSMENT

As part of the process of getting to know the customers and understanding their perspectives, it is important to identify and assess their existing pain points and strengths. While conducting this activity, it is therefore necessary to look into three major aspects:

- + **Desire to change:** The willingness to adopt the change is as important as being aware of one's needs, flaws and strengths
- + **Belief in one's ability to change:** It is important to make the community realise its own ability to adopt the change and see the desired outcome
- + **Ability to take action:** After understanding the need and expressing willingness to be part of the initiative to bring about the desired change, it is important to make them understand how to go ahead and take relevant actions

**WHEN:** Build Phase

#### KEY OBJECTIVES

The specific objective of an activity like this is to assess the strengths and barriers at the level of the individual, with special regards to energy use and access.

#### TOOLS USED

A table (sample attached) can be used to plot the relevant strengths and barriers and their impact on women's ability to access and use energy.

CATEGORY	BARRIER	SEVERITY OF IMPACT OF RISK FOR WOMEN
POWER MARKET RISK	Market Outlook	Gender insensitivity
	Market access, completion and grid expansion	Soft targets for competition from other operators
		Women are softer targets for competition and lack of transparency when seeking to obtain operating licenses
TECHNOLOGY SOURCING RISK	Poor quality of technology	Gender gap in access to information and technical skills
LABOR INPUT RISK	Lack of a competitive, educated labour market	Discriminatory business practices
	Lack of skills and capability	Women's disproportionate responsibility of unpaid domestic work, including childcare
FINANCING RISK	Capital scarcity - underdeveloped domestic financial sector	Lower access to resources and security risk
		Lower levels of collaterals reduce creditworthiness of women
		Lack of rural banks more likely to affect women due to lack of mobility



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## DO IT YOURSELF

### STRENGTH & BARRIER ASSESSMENT

#### ASSESSMENT



#### OBJECTIVES

The objective of this activity is to map out the barriers and strengths of the women with regards to energy access and use

#### RESOURCES REQUIRED

Chart paper, coloured markers and two-way tape

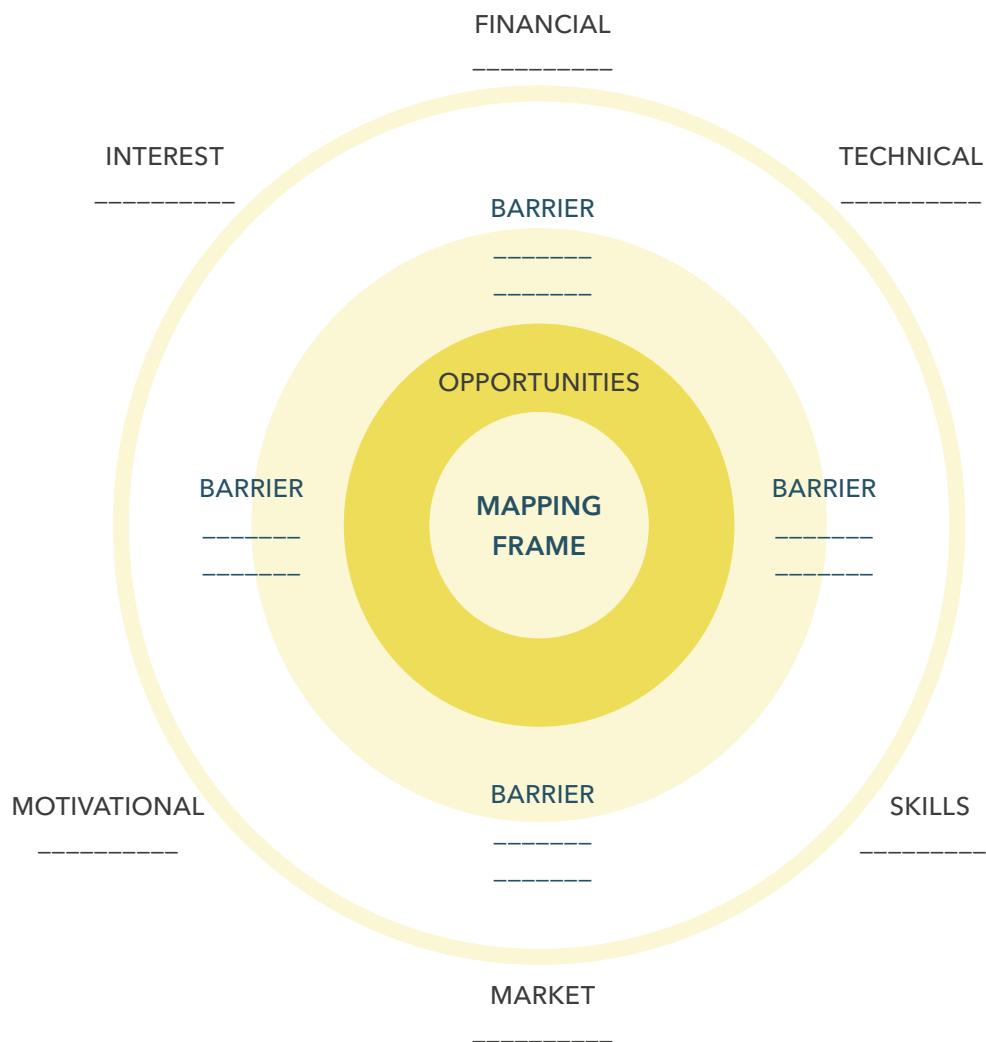
#### HOW TO CONDUCT

Ask every participant to write one opportunity, barrier and strength on a piece of chart paper that has already been put up.

In case the participant has difficulties writing, help them out; ensure each and every participant presents her views.

Once views from each and every participant have been mapped out, plot the opportunities, barriers and strengths based upon the predetermined frame.

## DO IT YOURSELF STRENGTH & BARRIER ASSESSMENT



## ACTION

### SENSITISATION TRAININGS



Sensitisation here refers to the process of inculcating an informed disposition in a person, with the propensity to behave in a gender-sensitive manner, fully aware of issues relating to gender equality and justice.

#### WHEN: Project Development and Operate

#### KEY OBJECTIVES

The key objectives of such an activity include the following:

- + To examine attitudes and beliefs of the trainees, and question the 'status quo'
- + To change and instill empathy in views of the target audience

#### TOOLS USED

Tools like trainings on women's inclusion, entailing the delivery of marketing processes with a gender lens, can be used to sensitise the target audience. A sample agenda of such a training session has been attached in the following section.

### CSA Training with MLINDA

As part of TARA's collaboration with ICRW, TARA undertook the first round of trainings with MLINDA – an Energy Service Company working in the rural areas of India.

A total of 10 CSAs from 4 villages participated in the training.

Focussing on Socially Excluded Groups (SEG) and women, this training covered the following topics: (1) delivery of marketing messages to enable CSAs to reach marginalised groups, (2) promoting the use of energy in a way that maximises benefits for all household members, and (3) eliciting feedback from customers and then relaying that feedback to the ESCOs to enable them to develop better products in the future, which are more tailored to the needs of women and SEGs.

**DO IT YOURSELF**  
SENSITISATION TRAININGS

**ACTION**

**SAMPLE AGENDA**

TIME	TOPIC	ACTIVITY
9:30am-10:30am	Introduction	+ Ice-breaker game + Training: Objectives
10:30am-11:30am	Understanding gender & development	+ What is gender? + Notions of gender and gender norms + Importance of gender in development
11:30am-12:00pm	Gender division of labour	+ Routine plan + Women's triple role + Changing plan
12:00pm-1:00pm	Access to and control of resources	+ Who controls resources? + Who uses and benefits?
1:00pm-2:00pm	LUNCH	
2:00 pm-2:45 pm	Decision-making	+ Decisions at the household, community and workplace levels + Who decides what?
2:45 pm -4:00 pm	Women in the energy value chain	+ What does it mean? + Its importance + Its impact + Role of CSAs
4:00 pm-4:30 pm	Wrap-up	Follow-up actions



**DO's**  
+ Have a thorough understanding of the participants  
+ Do carry out a pre-and-post-survey to assess the change  
+ Set clear expectations

**DON'Ts**  
+ Do not use the same examples and tools with every ESCO - in every geography, every ESCO works differently; adapt your training to their specific needs and then impart it

## DO IT YOURSELF

### ACTIVITY: ANALYSING MINI-GRID ELECTRICITY THROUGH A GENDER LENS

#### ACTION



TIME: 20 minutes

#### ROUND 1

1. Have each participant spend five minutes thinking about his/her mini-grid electricity product and creating two lists. One list should be of benefits women like about the product and do the same for men.
2. Have participants find a partner and share.

#### DEBRIEF:

1. Have participants share with the group the aspects of the product that men like and the aspects of the product that women like.
2. Have participants rank the benefits listed below in order of importance for women; do the same for men.
  - + Price
  - + Quality of lighting
  - + Hours of supply
  - + Billing process
  - + Package (type of appliances that can be connected)
  - + Safety
  - + Time

#### ROUND 2

1. Next, have participants make two more lists: (1) of the aspects that someone from a lower socioeconomic group or socially excluded group (i.e., scheduled castes, scheduled tribes, and other backward classes) might like about the product, and (2) of the aspects that someone from a higher socioeconomic group or privileged communities might like about the product.
2. Have participants find a partner and share.

#### DEBRIEF:

1. Have participants share with the group the aspects of the product that lower socioeconomic and socially-excluded groups like and the aspects of the product that higher socioeconomic and privileged communities like.
2. Have participants rank the benefits listed below in order of importance for women do the same for privileged communities.
  - + Price
  - + Quality of lighting
  - + Hours of supply
  - + Billing process
  - + Package (type of appliances that can be connected)
  - + Safety
  - + Time

#### ACTION



#### TRAINING NEEDS ASSESSMENT

As the name suggests, the training needs assessment helps in determining if the need for training exists, and assesses the gaps to be filled through provision of the relevant training.

**WHEN:** Project Development

#### KEY OBJECTIVES

The key objectives of the training needs assessment include the following:

- + To identify the gap between current and required levels of knowledge, skill and attitude
- + To provide the baseline for the evaluation of a training plan
- + To ensure the appropriate and relevant provision of training

#### TOOLS USED

Tools such as a Training Needs Assessment questionnaire, comprising of questions on the topic on which the trainees are to be assessed, can be used. A sample questionnaire to assess the training needs of people in the context of enterprise development has been attached in the next section. This can be filled up as part of an initial discussion or meeting to inform the trainees about the need and importance of the intervention and their role in it.



**DO IT YOURSELF**  
TRAINING NEEDS ASSESSMENT QUESTIONNAIRE

**ACTION**



**TRAINING EVALUATION FORM**



Date: \_\_\_/\_\_\_/\_\_\_ Reference Number: \_\_\_\_\_

**BACKGROUND INFORMATION**

Name of trainer/s:	Sponsoring project:	Name of trainee:
--------------------	---------------------	------------------

Educational qualification:	Contact number:
----------------------------	-----------------

**PROFESSIONAL EXPERIENCE**

Organisation name:

For how long have you been associated with the organisation?  
What is your profile?

Have you worked with any other organisation in the past? If yes, then describe.  
Yes  
No

Have you ever undergone any business development training in the past?  
If yes, then describe.  
Yes  
No

**ENTERPRISE DEVELOPMENT CONTEXT**

Are businesses & enterprises the same? If not then how are they different?

What do you understand by the term 'entrepreneur'?

What are the various forms of enterprises?

What are the basic skills one needs to run a business?

What are the various means by which a new business may be promoted?

What are some of the biggest factors that cause small businesses to fail?

What special obstacles do women entering business face & how can these obstacles be overcome?

What support would you recommend for entrepreneurs at the following stages?

- + Has the finance & willingness to start an enterprise but doesn't have a business idea
- + Has a business idea but no finance
- + Has access to finance & a viable business idea but lacks mobility

**DO IT YOURSELF**  
TRAINING NEEDS ASSESSMENT QUESTIONNAIRE

ACTION



**ENTERPRISE ECOSYSTEM**

Name a few existing enterprises in your area.

What, according to you, are some of the upcoming enterprise opportunities in your area?

Name the various financial institutions to which entrepreneurs can be linked. Do you know a few in your area? Name them.

What is the name of the ministry promoting enterprise development?

What are some of the schemes available for women & youth entrepreneurs?

Name some of the major stakeholders in entrepreneurship development.

What are the major challenges faced by women & youth entrepreneurs in your area?

### 3. EXECUTION: INCLUSION IN THE CHAIN

**WHAT YOU WILL LEARN HERE**

+ How to facilitate women's inclusion in the energy value chain



ACTION

Energy access has a significant impact on livelihoods. While this is recognised primarily in the realm of household and social use of energy, it can become a very important source of income through energy services.

#### **WOMEN AS ENTREPRENEURS: PROVISION OF ENTERPRISE SUPPORT SERVICES**

Electricity, being an important input for enterprise development, supports women in owning and managing enterprises of their own. This, in turn, leads to the holistic empowerment of young girls and women by developing their entrepreneurial, professional and life skills and making them 'invest in their own selves' for economic empowerment and social development.

To combat the challenges faced by women at the rural level, the ESCO or implementing agency should offer customised enterprise support services to potential women entrepreneurs.

To elaborate, TARA under the SPI-LD Project provided customised enterprise support services across four key drivers of enterprise development. These include:

**+ Technology:** Special provisions were made to cater to the challenges commonly faced by women entrepreneurs, like lack of access to relevant information and mobility challenges. Technology identification, selection and procurement were some of the things that were facilitated by the project team to overcome these challenges and fast-track enterprise development.

**+ Finance:** Special packages and subsidy packages were developed for women entrepreneurs, wherein women were provided a subsidy of up to 40% on technology. Additionally, a financing model was developed wherein women entrepreneurs were allowed to repay the technology cost in the form of instalments, ranging from a period of 6 months to 1 year.

**+ Market:** Forward and backward linkages to create market access were facilitated for all women entrepreneurs. Additionally, guidance on topics like ideal raw material mix, product development, broadcasting and promotional support was provided.

**+ Capacity Building:** International Labour Organisation-based business and financial management trainings were provided to all the identified women entrepreneurs. Furthermore, specific technical and operations training was provided to those setting up enterprises such as paper plate-making and namkeen manufacturing.

## HOW WE DID IT

In order to stimulate the women entrepreneurship ecosystem as part of the SPRD programme, a special pillar was devised for women's inclusion, which would empower women in the community to set up enterprises.

Since energy can be used to demonstrate better and efficient use of local resources through entrepreneurial ventures, enterprises such as namkeen-making and paper-plate making, which require less technical know-how but reap higher profit, were promoted. Energy as a driver was also used to improve efficiencies of existing enterprises conventionally run by women inside their homes and with little means, such as a beauty parlor or tailoring centre.

### PROCESS FOLLOWED (for details, refer to MeD process toolkit):

In order to create an ecosystem of entrepreneurship and develop a sustainable demand for electricity, the Load Development partner is advised to follow a two-pronged implementation approach to stimulate economic development. The approach should be developed & validated with continuous dialogue amongst various stakeholders and the learnings should be fine-tuned to arrive at a standardised formula which can be directly implemented by load development/implementing partners.

### CREATING A STRONG POOL OF ENTREPRENEURS THROUGH:

- + Broadcasting and promotion
- + Training and capacity-building as a driver

### CREATING SUSTAINABLE ENTERPRISES ON GROUND BY:

- + Providing defined support services to entrepreneurs

## JOURNEY OF AN emPOWERED WOMAN

Sandhya has been a resident of Shivpura village in Balrampur district of Uttar Pradesh for 15 years and lives with her husband and four children. In March 2016, she fulfilled her childhood dream of running a tailoring centre and doing what makes her happy - stitching and training young girls. Previously, Sandhya used to enjoy teaching in a government-run school, but she had to discontinue because of her husband's conservative nature. This did not stop her from holding on to her ambitions and her drive to do something on her own. She signed up for a training programme, 'Start and Improve your Business' - part of an initiative by TARA to develop solar energy-enabled microenterprises.

When asked about why she opted for the SIYB training, she says, "After the training programme, I was sure that I would open a tailoring centre at home. I will pursue my dream from my home and my husband will not deny me that. I always wanted to do something on my own and be independent. I want my children to be proud of me; I want them to see me as one of their role models!"

Sandhya invested INR 6,000 in her microenterprise and TARA supported her with technology selection, procurement, and capacity-building services, also providing a subsidy of INR 17,000. Today, she successfully runs her microenterprise with one stitching machine and one piko machine and saves INR 300 per month. She also conducts four-hour-long training sessions for young girls who are willing to learn the skill.

Aware that her centre is slowly becoming famous, she says, "8-9 girls from nearby villages come to my center to learn. Till now, this is just through hearsay, without any promotion or marketing. Once I start marketing, I am sure my center will become even more famous." She charges each girl a fee of INR 200. She knows the fee is lower than market standards, but she wants to focus on building her brand by providing quality training and winning people's trust. She gradually plans to expand her current range of women's clothes to men's and children's wear. Apart from becoming an entrepreneur, Sandhya now has a metered connection with a monthly subscription package of INR 18/unit. Electricity at night is a boon for her children's education.

"My eldest son wants to pursue a career in English language and my youngest daughter wants to open up a tailoring unit herself. She already helps me sometimes in my stitching work... my children are my biggest motivation. I want this tailoring centre to grow so I can fulfill my children's dreams."



## CREATION OF INFLUENCE CENTRES

Access to electricity can contribute to the transformation of a local social institution and can create a ripple effect in the community.

To elaborate, at Shippura village, one of the TARaurja sites in Balrampur cluster in Uttar Pradesh, a local NGO (TARAI) runs a hostel facility, Kasturba Gandhi Vidyalaya, for close to 100 adolescent girls. To cater to the safety issues for girls at night, the school was one of the first customers of TARaurja to take a connection for 13 bulbs, ensuring proper lighting within the hostel premises during nighttime. The school premises was later established as an influence centre where girls could come and learn how to use computers. Thus, the centre served as a focal point in the village, where an energy-enabled positive impact could be showcased to the community.

To illustrate further, another example of a similar energy-enabled influence centre is a skilling centre for girls and women, established in Bhardolia village, Uttar Pradesh.



Om Prakash, the principal of Krashak Bandhu Laghu Madhyamik Vidhyalyay in Bhardolia, set up a tailoring centre-cum-school. The vision he had in mind for this centre was simple. He wanted the village girls to have a common and convenient place where they can come and learn a new skill. Since tailoring is the most sought-after skill by girls, he decided to start the centre providing this skill first. The centre has been operating successfully for close to 8 months now, providing training to over 20 girls from Bhardauliya and nearby colleges.

## TRAINING AND CAPACITY-BUILDING | WOMEN AS MANAGERS

Rapidly falling renewable energy technology costs and new business models mean that decentralised energy solutions hold great promise to accelerate universal sustainable energy access. While more attention is being paid to the imperative role of women in the energy sector, there is still a significant lack of recognition of women as more than passive users of energy.

Women can be powerful agents of change in this transition and with the proper capacity-building; women have the capability to be key representatives, as energy managers, contributors and beneficiaries of renewable energy and efficiency projects. For instance, the current composition of the energy sector, particularly at high-level decision-making positions, remains a homogenous group. Close to their customers, women service agents have enormous potential to lower customer acquisition and servicing costs and drive these decentralised solutions.

Women in the energy change can be involved as managers in two ways:

- + As grid managers
- + As customer service agents

Rena is a 21-year-old woman from Shippura village, Balrampur, Uttar Pradesh. She got to know about the SPI-LD project at one of the village community meetings.

Inquisitive, she approached the local mobiliser PANI (NGO) and attended a few workshops, after which she was chosen as a community mobiliser. Later on, as a result of the zeal and the proactive attitude she exhibited in her work, she was chosen as the Customer Service Agent (CSA) for TARaurja. She has been engaged for more than 5 months with TARaurja now and is among the top performers already. Her innovative approach towards problem-solving and ideas for community engagement is what sets her apart from the rest. She is currently involved in management tasks like revenue collection, load acquisition and getting commercial connections for an entire site.

*She is now viewed as a role model by many young girls in her village.*

## HOW WE DID IT

As part of the SPRD intervention for energy distribution, women were trained as last-mile CSAs.

In order to create a conducive environment for women to become involved in the chain, a phased approach was undertaken. As part of the pre-phase, women were mobilised and trained to become part of the distribution chain, and in the post-phase, the women CSAs within the ESCO were trained to play a more active role in the energy chain.

+ **Pre-phase:** Awareness campaigns were conducted to mobilise the community and assessment drives were carried out to create a pool of potential managers. Thereafter, basic training on effective communication and marketing strategies (6 P's) was provided, after which women were selected as CSAs.

+ **Post-phase:** On a half-yearly basis, training was provided to both women and men CSAs on gender inclusion. The focus was on how the active role of women CSAs in the chain and the need for male CSAs to understand the relevance of inclusion of women, particularly in the load acquisition process.



## DO IT YOURSELF TRAINING NEEDS ASSESSMENT QUESTIONNAIRE

### ACTION

#### SAMPLE AGENDA

TIME	TOPIC	ACTIVITY
9:00am-9:30am	Introduction & Marketing overview	+ Get to know who is there + Present objectives of the training
9:00am-9:30am	Marketing Skills	+ Present & discuss the 6 P's (Product, Person, Price, Place, Process, Promotion)
	Product	+ Overview + Slogan activity
10:30am-10:45am	BREAK	
10:45am-12:00pm	Person	+ Overview + Marketing with a gender lens activity + Marketing to marginalized group activity
12:00pm-12:45pm	Price	+ Overview + Calculating the cost differential activity
12:45pm-1:45pm	LUNCH	
1:45pm-2:15pm	Place	Overview
2:15pm-2:45pm	Process	Overview
2:45pm-3:45pm	Promotion	+ Product promotion role play activity + Overview
3:45pm-4:00pm	BREAK	
4:00pm-5:00pm	Wrap-up & Marketing Plans	+ Review of key marketing concepts + Mapping activity - who is currently left out of mini-grid access? + Creation of marketing plans

**DO's** + Monthly/quarterly meetings should be calendarised for information & learning exchange  
+ A basic training session/orientation workshop should be conducted with new recruits, to orient them  
+ Refresher training to ensure that the CSAs retain their effectiveness is recommended

**DON'Ts** + Do not use the same examples and tools with every ESCO - in every geography, every ESCO works differently; adapt your training to their specific needs and then impart it.

## ACTION

### PROJECT SPEAK: LET'S REVIEW A CASE!



Kismet Jehan, an Anganwadi worker, resident of Kataliya Village in Shrawasti district of Uttar Pradesh, was one of the early movers to capitalise on the SPRD initiative in her village.

Like other women in Kataliya, Kismet would have continued to skip dinner and walk the extra mile, quite literally, to pay INR 5 to get her phone charged. However, she decided to go ahead and secure her house with lighting after evening hours - she was the first to register in the village, with one light bulb, fan and one mobile charging package.

Now she not only moves around freely in the village area after dark, but also utilises the now available electricity in the evening hours to focus on her household chores and indulge in community activities with her friends. Her children no longer have to face any hurdles during long hours of study after sunset, and the marketplace has also started operating in the evening hours.

Kismet Jehan is overwhelmingly satisfied with the service provided to her and has influenced other residents to get the power connection.

Access to solar power has, actually changed her "kismet" - she has launched a brand of namkeen called 'Dhamaka Namkeen' with her sister-in-law. This enterprise will also set an example for other women of the village to be confident and take part in such initiatives for themselves and for their families.

At this juncture, Kismet's enterprise sells besan namkeen at Rs. 75/kg. Kismet Jehan now feels more powerful since she is now able to spend the earned profit from her namkeen microenterprise on clothes, fruits and furniture for the family. She is now looking forward to engaging other women in the village in such entrepreneurial opportunities.

Kismet Jehan's case highlights the layered benefits that access to power and enterprise development, when bundled together as a package, can bring on the plate.





"Getting increased access to electricity has been the most amazing experience for our village, especially for me. After 6 pm, the happiness of being under bright LED light reflects in my cooking and my children's ability to complete their homework. We are thankful to TARA for bringing about this change in our lives and wish to have greater and more prolonged electricity supply in the future."

*Kismet Jehan, Kataliya village*

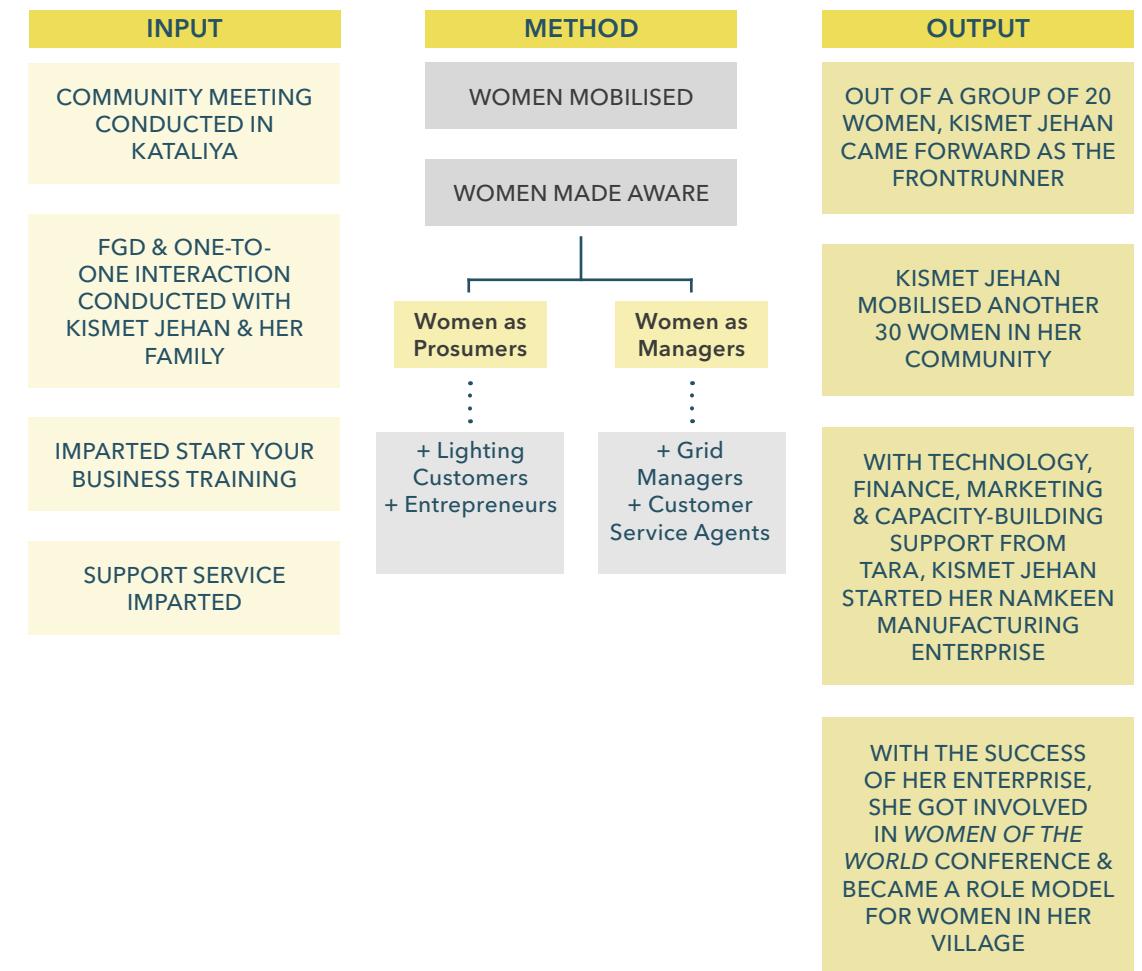


In 2015, Kismet Jahan had the opportunity to share the dias with her idol Madhuri Dixit (Bollywood actress) at the prestigious 'Women in the World' conference.

## ACTION



### PROJECT SPEAK: LET'S REVIEW A CASE!



## 4. ENSURING SUSTAINABILITY OF WOMEN-INCLUSIVE ENERGY CHAINS

### WHAT YOU WILL LEARN HERE

- + How to facilitate women's inclusion in the energy value chain

Women must play an active role in the planning, production supply and management of energy. There can be no energy for all that is sustainable unless we tap into the energy, engagement and expertise of women. However, the potential of women as entrepreneurs and managers is underutilised. The existing gender gaps in access to finance, information, technology, goods and services, and markets translate into additional investment risks.

Therefore, gender-responsive policy frameworks should be developed, which take women's needs into account. This will mean leveraging women's participation and leadership in the design of energy strategies, expanding the training and education of women on sustainable energy and entrepreneurship, and raising awareness in order to mobilise resources to finance sustainable energy programmes.

Suggested below are some action points to be undertaken for designing and implementing sustainable energy programmes and projects for women.

### ENERGY GOVERNANCE AND DECISION-MAKING

- + Ensure that gender issues are mainstreamed in governance and decision-making processes related to policy development, implementation and monitoring, service delivery and financing of sustainable energy.
- + Promote increasing women's participation and leadership in energy governance and energy institutions at the local and national levels.
- + Promote gender equity in planning, designing, producing, supplying, and managing sustainable energy solutions.
- + Ensure that policies, programmes, and projects equitably value women's and men's time and labour burdens and expenditures.
- + Recognise women as independent users of energy solutions and enable them to benefit from energy access, taking into consideration the challenges of land ownership/rights, access to credit, and social constraints.

### CAPACITY DEVELOPMENT

- + Build the capacity of women to work in the clean energy sector as policymakers, designers, managers, and suppliers of sustainable energy solutions.
- + Support linkages and networks for women managers and prosumers for generating self-confidence and increasing visibility at every level.
- + Build the capacity of local women to learn how to install, operate, and maintain sustainable energy solutions in their communities.
- + Support women's role as energy managers and ensure that they are empowered to become energy entrepreneurs. This involves training women on technical aspects of sustainable energy technologies as well as building their entrepreneurial skills and access to capital and markets in the energy sector. Clearly communicating the benefits of sustainable energy for productive uses, and the potential implications for income generation, will also be important to encourage entrepreneurship.

### FINANCING

- + Ensure adequate financing for sustainable energy projects and programmes, as well as for training of women energy managers and entrepreneurs.
- + Funds can be provided from government budgets and state-owned utilities and national electrification programmes for urban and rural areas.
- + Multilateral and bilateral development sources, such as the regional development banks, support energy access projects through instruments such as grants, concessional loans and investment guarantees.
- + Private sector sources including equity and debt financing, among others.
- + Engage with corporate social responsibility programmes for creating public awareness to recognise the importance of women-led energy programs.

In addition to the above, there is a need to establish and implement accountability measures and indicators to ensure gender equity and women's agency in the energy sector.

There is also a need to support generation, collection and use of gender-disaggregated data on energy use, energy sector employment and impacts of energy development, which will serve as a baseline for evaluation purposes, and be instrumental in defining gender-sensitive strategies for unleashing the power of women in energy value chains.





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