

# **Report of Consumer Interface Meetings under the DREC project – West Bengal**

## 1. Introduction

CUTS International with support of Shakti Sustainable Energy Foundation (SSEF) has implemented a project titled “*A Diagnostic Study to Build the Capacity/Awareness among CSOs to Demand for Demand Side Management (DSM) & Renewable Energy (RE) in India – DREC Project*”<sup>1</sup>. Overall objective of the project is to increase long-term capacity/awareness of consumer groups to demand for DSM and RE initiatives especially in the context of climate change, and also to understand, document and communicate their specific needs to the relevant policy makers. The DREC project is being implemented in two states of India - West Bengal and Gujarat.

As a starting point, CUTS had undertaken a baseline consumer survey in the mentioned project states. Survey results in West Bengal (total 513 consumers were covered) revealed that there exist a significant gap in the awareness and use of RE and EE products. The survey also pointed out the lack of awareness among consumers and Civil Society Organisation (CSOs) regarding regulatory issues in the electricity sector.

The survey was useful in determining the training needs of the CSOs. After having identified the training needs, CUTS organised a five day training workshop in Kolkata, with the objective to build capacity of the CSOs, on issues pertaining to Renewable Energy (RE), Energy Efficiency (EE) and overall regulatory structure in the electricity sector. Post the territorial training, each partner CSO organised two consumer interface meetings in their respective territories.

## 2. Objective

- Reach out to larger number of Consumers/Consumer Organisations and generate awareness about climate change, energy efficiency and renewable energy
- Induce practice change towards greater uptake of RE and DSM at the grassroots level
- Equip consumers and CSOs with knowledge and tools to advocate for enabling policy changes

## 3. Methodology

20 CIMs were organised with target stakeholder categories in 4 districts of West Bengal (List of CIMs are given in Annexure 1). Other than organising CIM with households, CSOs and farmers separate CIMs were organised with diesel operators and government schools. The training manual prepared under the DREC project (based on the training needs identified from the baseline survey) and stakeholder specific case studies prepared under the DREC project provided basis for discussion in the CIMs.

Participants for the CIMs were selected so as to ensure participation of respondents who participated in the baseline consumer survey or in the focussed group discussions conducted during the baseline consumer survey.

Representatives from CUTS and local partners (who had participated in the territorial training programme), Regulatory Commissions, Discoms representatives, etc participated in the meetings as resource persons. Representative from CRI pumps<sup>2</sup> were key resource person for the CIM with farmers.

## 4. Proceedings

### 4.1. Brief Overview of the CIMs

The CIMs followed a uniform pattern in all the districts, as discussed below:

CIMs in all the places started with welcome address by partner organisations followed by an introductory speech by CUTS representatives and special address by chief guest at the meetings.

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<sup>1</sup> <http://www.cuts-ccier.org/DREC>

<sup>2</sup> [www.cripumps.in](http://www.cripumps.in)

In general, people's representatives (viz. local MLA, Pradhan of the Gram Panchayat, Sabhapati of the Panchayat Samity and/or Zilla Parishad etc.), government officials and bureaucrats (viz. BDO, social welfare officer in the Block or District, District Inspector of schools etc.) were invited as chief guest for the CIMs.

Past the opening session, CRC representatives provided an overview of the DREC project and eventually explained the following issues –

- Causes and adverse impacts of climate change
- Linkages between Energy Efficiency and Climate Change
- Need for Renewable Energy, Demand Side Management and Energy Efficiency in the context of climate change
- How to identify energy efficient products i.e. (star label, BEE label etc.), what are the benefits of using energy efficient products, etc
- Overview of energy efficient home appliances as available in the market
- Overview of the regulatory regime in the electricity sector and scope of consumers participation in the decision making process

This was followed by a Question-Answer session and filling up of feedback form by the participants.

In the CIM specifically organised for the CSOs, CRC representatives provided them with the tools to undertake evidence based policy advocacy. As part of the CIMs, case study approach was adopted to educate/sensitive the CSOs to use advocacy tools. The participants were divided into groups and were provided with a problem. On the basis of the training manual, the groups were asked to prepare their advocacy strategy and the same was also presented and discussed.

In the CIM for farmers, representatives from CRI pumps explained the various advantages of using energy efficient pump sets. Some of the advantages of EE pump sets are as follows-

- EE pump sets consume less electricity compared to other non-star labelled irrigation pump sets
- EE pump sets are not affected by voltage fluctuation
- An EE pump set with 5 HP capacity is as good as an a non-star labelled irrigation pump set with a capacity greater than 5 HP
- Price of EE pump sets are almost at par with Non EEP sets.

One CIM with commercial units and two with diesel operators were organised in the K-Plot which is a distant island under the Patharpratima block in South 24 Parganas district. The entire K-Plot island is devoid of electricity. There are (informal markets) in the island and the shops get access to electricity from local operators of diesel generator sets. According to the available data from one of the operators, each month he has to utilise around 270 litres of diesel each month for supplying 3 hours of electricity to 70 shops and earns approximately Rs10,000-20,000 per month. An individual shop using 2 light points (Rs9 for each light point) spend Rs500 each month. Given this context, discussion in the CIMs focussed on identifying factors required for motivating them to switch to RE solutions.

- CIM for government schools were organised in the Contai Block. It was chaired by the Additional District Inspector of Schools. Representatives from different government schools in the Block participated in the CIM. Most of the group discussion centred around chalking out appropriate strategies to cut down electricity bill for the schools through judicious use of electricity, energy efficiency and use of Renewable Energy Technology (RET).

## 4.2. Major Learning and Outcome from the CIMs

### 4.2.1. Households

#### *Grid Connected*

- Poor quality of electricity supply and lack of awareness among electricity consumers about the grievance redressal mechanism are two of the major issues facing electricity consumers in both urban and rural areas. For example, consumers in Gosaba complained that though now they are connected to the grid yet they are severely facing the problem of load shedding and voltage fluctuation especially in the evening. One of the groups flagged the need to revive the biomass gasifier plant so that the consumers can get access to reliable supply of electricity during the evening.
- Large number of participants expressed their positive intent to purchase EETs in the future. In this respect some of the participants pointed to the low level of awareness about “**Star Label**” among the vendor and shop owners in their locality.
- The issue of lack of availability of EETs was especially pointed out in areas where grid connectivity very recently established.
- Many of the respondents admitted that they had never considered using solar rooftops instead of inverters and diesel generators owing to initial investment and challenges relating to availability, etc. Absence of availability of finance and general perception about the poor quality of after sales service were considered to be two major roadblocks to facilitate greater uptake of RET.

#### *Off grid*

- One of the key problems facing consumers of solar technologies is access to ass.
- Some of the participants, who were mechanic of solar home lighting accessories pointed out that the biggest problem is with the controllers. They mentioned that some of the companies who were marketing their products were intentionally removing product details from the Integrated Circuits. As a result of this, repairing of solar accessories is taking long time since they had to be sent back to the manufacturers and could not be repaired locally. Most of the participants highlighted the need to differentiate good companies with bad companies and asked if appropriate standards / labels be developed for the purpose.
- Consumers expressed their intent to switch to the conventional grid but at the same time mentioned that they will continue to use solar home lighting system especially as backup power.
- Consumers in the Moushuni Island (which has a local grid based on solar technology) complained that while they used to get electricity supply for at least 5 hours a day, now days they are getting electricity supply only for 2 hours. Discussion with local residents revealed the poor quality of the existing infrastructure and lack of intent among the government departments to address the problem, are the key reasons for dismissal quality of supply.

### 4.2.2. CSO

- Expressed their willingness to work on energy issues in their own capacity and further mentioned that they would like to explore the possibility to integrate such issues in their own work programmes. Some of the suggestions put forwarded by them are as follows –
  - ❖ Few of the CSOs involved in organising sports and cultural programmes mentioned that they would like to print key messages on the tickets for such events, so as to disseminate the information.
  - ❖ CSOs involved in Reproductive Child Health (RCH) and similar programs suggested that they would like have a 5 minute to organise sessions on EE, RE and in the meetings organised under the project. They opined that women should be targeted for disseminating such messages since in many cases they play a very important part in the decision making in their families.
  - ❖ Some of the CSOs expressed their willingness to print and distribute local hand-outs at the puja pandals, during the pujas’.

- CSOs expressed their willingness to participate in the regulatory mechanism in the electricity sector; however they had requested, CUTS CRCs help in further understanding the complexity of rules/regulations.
- CSOs flagged the need for organising more CIMs on policy advocacy, especially in the rural pockets, where most of the clubs and grassroots CSOs are still not aware about how to engage with the policy makers to address local issues.

#### **4.2.3. Farmers**

- Majority of participants admitted that the concept of energy efficient pump sets was new to them and they had greatly benefitted because of the exposure they got by attending the CIMs.
- Participants opined that large scale adoption of EE pump sets depend on availability and efficient network of after sales service.
- Some of the farmers pointed out the need for financial incentives to facilitate replacement of existing pump sets with energy efficient ones.
- Farmers highlighted the problem of voltage fluctuation and told that in many cases they had to use diesel run pump sets owing to the poor quality of electricity supply.
- Awareness about solar pump sets was found to be extremely low and farmers expressed their doubts on whether such pump sets will actually help them or will lead to more hassle once the product becomes defunct.

#### **4.2.4. Schools**

- Headmaster, Contai Boys High School expressed their willingness to install rooftop solar, especially in the context of increasing electricity tariff, provided they get appropriate financial allotment/subsidy from the government.
- Headmaster, Hirapur Dasagram High school shared that presently there is a scheme available from WBREDA under which if in any school more than 20 percent of the students belong to SC/ST category then the school can get a solar project worth Rs2 lakh.
- A number of valuable suggestions came up from the meeting on how to promote energy efficient behaviour among the consumers through a joint teacher-student initiative. Some of the suggestions are as follows –
  - ❖ In the assembly hall after the prayer, teachers or students can speak for at least two minutes on the need for judicious use of electricity and energy efficiency.
  - ❖ Schools can award students based on how effectively the student has been able to reduce electricity consumption at his/her residence.
  - ❖ Majority of the schools requested CUTS to organise similar meetings in their schools.
  - ❖ Schools often organise parents-teachers meeting and key messages on energy efficiency to the parents.
  - ❖ A small group of students could formed, who could use the opportunity to convey to play the role of energy auditors. This group will not only sensitise other students but will also visit classes and will switch off electrical appliances when not in use.

#### **4.2.5. Commercial units getting electricity from diesel operators**

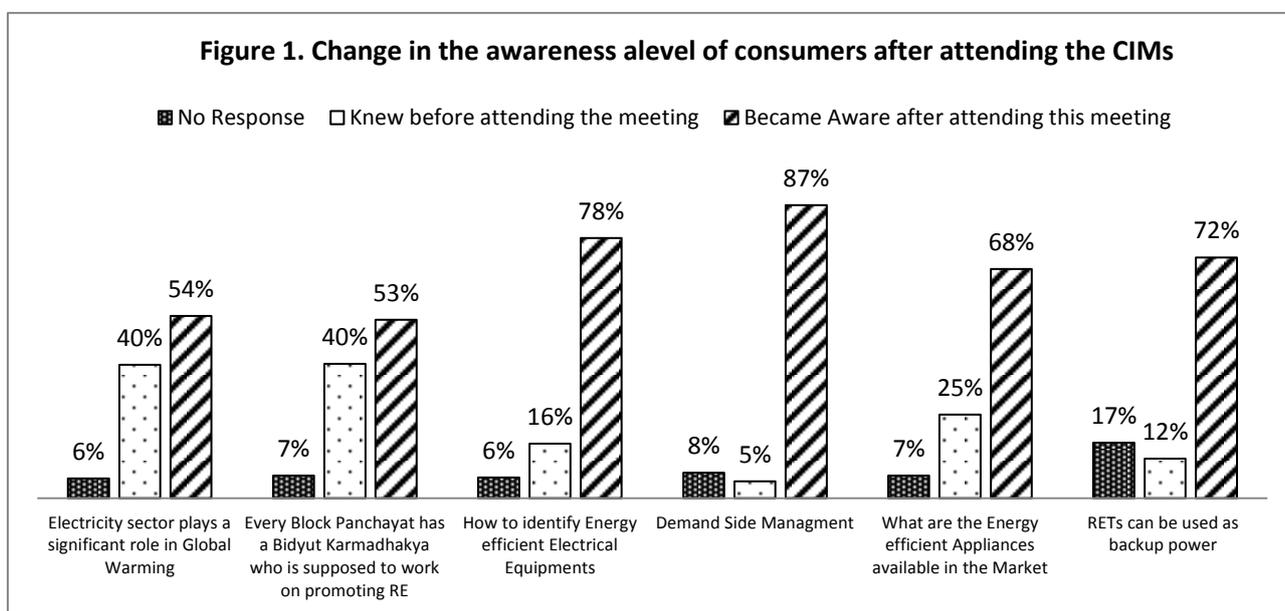
- Majority of shop owners expressed the following concerns on how effectively solar power will be able to replace diesel generator sets
  - ❖ Solar panels are unable to provide steady supply of electricity during the monsoon season. On the other hand the diesel operator is able to supply three hours of electricity throughout the year.
  - ❖ There are a couple of shops who use computers. Doubts were expressed on whether solar technology will be able to support running of computers.
  - ❖ Majority of the shops pointed out that solar is expensive and involves an initial investment. On the contrary, they are better off paying Rs500 each month to diesel operators.

- Given these concerns, the shop owners mentioned told that they could use individual solar panels or take the initiative for setting up a community run electricity generation plant using RE sources provided the following conditions are satisfied –
  - ❖ Access to EMI facility which should not exceed the amount they are presently paying to diesel operators
  - ❖ Repairing and Maintenance cost should be minimal and it should not involve too much time to repair the machines.
  - ❖ Appropriate financial support needs to be provided by the government at least in the initial phases of such projects.

### 4.3. Analysis of the feedback received from the participants in select CIMs

CRC used a questionnaire to undertake assessment of whether and in what ways the participants benefitted from the CIMs. Though a total of 857 consumers participated in the CIMs, a total of 357 participants had submitted their feedback form<sup>3</sup>. Following is a brief analysis of the feedback received from the participants -

- 80% of the respondents mentioned that they were unaware of many of the issues that were discussed in the CIMs, such as importance of tools to undertake advocacy, identification of energy efficient equipment's (Star label and BEE label) and how to understand its benefits in monetary terms, importance of energy savings in the context of climate change, demand side management etc. were some of the issues that the respondents were exposed to after having attended the CIMs.
- 72% of the participants agreed that solar panels they could replace inverter and generators in their household, provided right incentive are provided.
- Majority of the participants told that they had greatly benefitted from the discussion on the grievance redressal mechanism for electricity consumers.
- Participants underlined the need for organising more such meetings in both urban and rural areas so that more consumers could be benefitted.



<sup>3</sup> This variation between the total number of participants and the total number of feedback forms had been due to the following reasons –

- Feedback form was not distributed in the some of the CIMs
- Owing to time constraints some of the participants had not submitted their feedback forms

#### 4.4. Evidences from the Ground

*Gosaba: Feedback from respondents after one month of grid connection*

##### ❖ **Benefits**

- Cut down in electricity tariff which was Rs8 per Kwh. Further the consumers are also getting slab benefit in their electricity bills.
- Residents can now use heavy electrical appliances viz. fridge, air conditioners, colour television, pump sets etc. at any point of time throughout the day.

##### ❖ **Limitations**

- Consumers are facing the problem of load shedding and voltage fluctuation
- Earlier, when the local residents used to get electricity from the biomass gasifier plant, complaints related to electricity supply were addressed quickly since all the personnel involved in the repairing and maintenance work were local residents. In the present situation, complaints take at least couple of days to get redressed.

##### ❖ **Suggestion from the consumers**

- There is a need to revive the existing biomass gasifier plant so that it can at least supply 3-4 hours of electricity supply during the evening when problems such as voltage fluctuation and load shedding increases.
- Existing staff of the gasifier plant should be provided employment.

*Moushuni: Situation of the off-grid electricity plant*

##### ❖ **Issues facing the consumers**

- Local residents are getting only two hours of electricity every day
- Most of the panels installed earlier got defunct and inspite of following up with WBREDA, the defunct panels were not repaired
- Unmetered supply of electricity is leading to its wastage

##### ❖ **Suggestions that came up during the focus group discussion**

- Need to undertake maintenance of the plant and funds should be allowed for the purpose.
- The Panchayat Samity together with the Zilla Parishad, Gram Panchayat and WBREDA should come together and design a plan to ensure long term sustainability of the project.

*Farmers in Nadia, East Midnapore*

- One of the farmers in Nadia shared that he is using both i.e. Chinese pump set and also pump set from a reputed Indian company and the latter is more efficient as it can pump more water compared to the Chinese pump set.
- Many of the pump sets used for the purpose of farming are 15-20 years old and have become inefficient. Farmers are often not eager to replace those with energy efficient ones, since this will mean investment of additional financial resources.

*Households in South 24 Parganas, East Midnapore and Cooch Behar*

- One of the major problems facing household consumers in all the selected districts has been the lack of awareness regarding the grievance redressal mechanism. There is a need to generate awareness on issues such as – steps in getting new connection, charges for getting new connection, time required to get new connection etc. in rural areas which will be electrified under the RGGVY programme.

- Consumers in East Midnapore referred to the problem of power theft and told that the government alongwith electricity distribution company should take stringent measures to stop power theft.
- Participants in all the CIMs pointed out that while it is important to sensitise household consumers on the need for energy efficiency and energy conservation, it is equally important to make such practices mandatory for government and private offices. They further added that significant energy could be saved by ensuring judicious operation of street lights.

## 5. Highlights and Lowlights

### *Highlights*

- CIMs achieved effective participation of consumers, CSOs, government officials and people's representatives, etc
- Session on energy efficiency and grievance redressal mechanism generated a lot of interest, interaction and participation. A few of the participants also shared their respective experiences regarding systemic problems and the subsequent redressal/non-redressal
- Training Manual was very much appreciated by the participants.
- CSOs were very keen take up energy issues in their future activities, provided they are able to generate financial support.

### *Lowlights*

- Not more than 40 percent of the respondents interviewed during the baseline survey participated in the CIMs owing to two reasons – *firstly*, extreme heat; and *secondly*, at times the venue for the CIM was found to be very far from the village where the survey was conducted.
- Participation in the CIMs held in Cooch Behar registered low participation owing to heavy rainfall and subsequent flood.

## 6. Key Practice Changes expected after the CIMs

- CSOs expected to integrate energy issues with their work agenda.
- Consumers expected to purchase star label electrical appliances in the near future.
- Some of the schools who attended the CIMs in Contai will enquire for setting up of rooftop solar panels. Further they are also expected to form small group of students who visit other classes and deliver talks on energy efficiency, renewable energy and need for judicious use of electricity.
- Some of the consumers are expected to register their service related complaints with their electricity service provider and avail the existing grievance redressal mechanism in the electricity sector.

## 7. Needs identified from the CIMs: Way Forward

- Need to target larger number of consumers in the rural pockets and introduce them to the issues such as renewable energy, energy efficiency and climate change.
- Need to improve the quality of electricity supply in the rural areas through popularising use of rooftop solar panels, especially in the evening.
- Need to further build capacity of electricity consumers on the grievance redressal mechanism in the electricity sector.
- Need to provide financial assistance to consumers to motivate them to adopt EET and RETs.
- Need to develop and implement appropriate benefit sharing models to facilitate development of off-grid generation projects in island such as K-Plot to successfully replace diesel generator sets with RETs.
- Need to strengthen the after sales service maintenance of RETs.

**ANNEXURE – I: Detail of the CIMs**

District	Partner Organisation	Venue	Stakeholder Category	Number of Participants	Participation from Peoples Representatives	Participation from Government Officials
South 24 Parganas	<u>Ramkrishna Lok Seva Kendra</u>	Gosaba town	Household	22	-	-
		Kochukhali	CSO	36	-	-
	<u>Debnibas Sindhubala Nari Kalyan Samity</u>	Maharajganj FP School	Household	40	-	-
		Namkhana Gram Panchyat Office	CSO	30	-	-
	<u>Baikunthapur tarun Sangha</u>	K-Plot (Purba Sripatinagar)	Diesel Operators	43	-	-
		Ramganga	Household	43	-	-
	MUKTI	Raidighi	Household	40	<i>Kansha Mohan Kayal, Sabhapati, Mathurapur II Panchayat Samity</i>	
		Raidighi	CSO	25	<i>Kansha Mohan Kayal, Sabhapati, Mathurapur II Panchayat Samity</i>	
East Midnapore	<u>Kajla Jana Kalyan Samity</u>	Contai High School	Schools	100		Archana Panchadhyayi, Additional District Inspector of Schools, Contai
		Patashpur	Farmers	82	<i>Mrinal Das, Pradhan, patashpur Gram Panchayat</i>	
	<u>Alinan Ramkrishna Vivekananda Yuva Sangha</u>	Kakharda Gram Panchayat	CSO	41	<i>Nikumja Bibari Manna, Pradhan, Kakharda Gram Panchayat; &amp; Jyotindra Nath Hazra, Upa Pradha, Kakharda Gram Panchayat</i>	
		Tamluk, Zilla Parishad Office	Households	54	<i>Rafiqul Hassan, Health Karmadhakya, Tamluk Zilla Parishad</i>	

Cooch Behar	<u>Haldibari Welfare Organisation</u>	Simanta Guest House (Haldibari)	Households	58	<i>Praneshwar Moitra</i> , Sabhapati, Haldibari Panchayat Samity	<i>Pankaj Das</i> , Jt.BDO, Haldibari Panchayat Samity
		Simanta Guest House (Haldibari)	CSO	52	<i>Praneshwar Moitra</i> , Sabhapati, Haldibari Panchayat Samity	<i>Pankaj Das</i> , Jt.BDO, Haldibari Panchayat Samity; <i>Tapas Das</i> , Block Medical Officer Health, Haldibari;
	<u>Dakshin Ramchandrapur Vivekananda Seva Kendra</u>	Dhaluabari (BDO office) in Cooch Behar-I Block	Farmers	31	-	<i>Nihar Ranjan Samanta</i> , District Social welfare Officer; <i>Chanchal Chakraborty</i> , Block Welfare Officer
		Dhaluabari (BDO office) in Cooch Behar-I Block	CSO	12	-	<i>Nihar Ranjan Samanta</i> , District Social welfare Officer; <i>Chanchal Chakraborty</i> , Block Welfare Officer
Nadia	<u>Sreema Mahila Samity</u>	Sabuj Pally, Duttaphulia	Farmers	34	-	-
		Ranaghat Municipality Office	Households	43	-	-
	<u>Chapra SEWA</u>	Own office premises	Households	33	<i>Abdus Salam</i> , Bidyut Karmadhakya, Chapra Panchayat Samity	-
		Own office premises	CSO	38	<i>Abdus Salam</i> , Bidyut Karmadhakya, Chapra Panchayat Samity	-
<b>Total number of Participants at the CIMs</b>				<b>857</b>		
<b>According to preliminary estimates approximately 30-40% of the respondents in Baseline Survey were covered under the CIMs</b>						