



A Pilot Project on Capacity Building on Electricity Reforms In Bangladesh, India and Nepal (RESA Project)

Combined Report of the Territorial Training Workshops (Phase I & II)

September 2008

West Bengal

CUTS Calcutta Resource Centre (CUTS CRC)

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I. INTRODUCTION

CUTS with the support of the Norwegian Agency for Development Cooperation (NORAD) is undertaking an initiative (RESA project - <u>http://www.cuts-ccier.org/RESA/index.htm</u>) over two years (2008-2010) in Nepal, Bangladesh, and two states of India, i.e. Rajasthan and West Bengal. The aim of the RESA project is to build capacity of consumer groups/civil society organisations (CSOs) to enable them to take-up action oriented research, share experiences and carryout advocacy with policymakers and regulatory agencies to effect pro-consumer changes in the electricity regulatory/policy processes.

As a starting point, CUTS had undertaken a baseline survey (the survey was conducted in ten districts of West Bengal, covering 700 respondents) to identify major problems facing electricity consumers at the grassroots. The survey had tried to capture their opinion on how the decision-making process could be made more inclusive. The survey revealed that a majority of the consumers are unaware of the various changes taking place in the electricity sector and their implications on the electricity consumers. Further, the survey unfolded the fact that consumers at the grassroots are oblivious about the existence of any such mechanisms of consumer consultation.

After having identified these two root causes for the low degree of consumer participation in the decision-making process, CUTS, with the primary objective to build capacities of the grassroots' CSOs on various issues related to the electricity sector, organised two territorial training programmes (TTs) covering subjects such as how to interpret the information given in the Electricity Bill; how to participate in the decision-making process especially in tariff fixation; roles and functions of the WBERC; and methods of consumer grievance redressal etc.

This report can be considered to depict a snapshot view of the entire training programme – topics covered, summary of each of the sessions, major highlights and lowlights, feedback received from the participants etc.

This report has been divided into seven sections. The first and the second section explain the broad objectives and scope of the TTs and the third provides a brief overview of the participants. The fourth section gives background information about the resource persons who shared their expertise and the fifth depicts the format of the training programme. The last two sections give an overview of all the sessions and also a brief summary of the feedback received from the participants respectively.

II. OBJECTIVE

The overall objective of the TTs was to build the capacity of grassroots' CSOs so that they can effectively take up action oriented research and advocacy on regulatory/policy issues pertaining to the electricity sector in their own territories.

III. SCOPE

The programme was an attempt to enhance awareness and understanding of the CSOs to better comprehend policy issues pertaining to electricity reforms and make efforts at the grassroots to continue engagement with research and advocacy initiatives on this subject. Towards this end, the training programme had covered the following issues:

- Complaint Redressal Mechanism
- Procedure for Getting New Connection Permanent and Temporary Connection
- Quality of Service
- Understanding Electricity Consumption & Bill
- Reduction of Power Theft: Role of Consumers
- Regulatory Decision-making Process
- Tariff Determination Process
- Tariff Regulation: Key Issues
- Competition Issues in Electricity Supply Industry

IV. FORMAT OF THE TRAINING WORKSHOP

The sessions in the training programme by and large consisted of a power point presentation by the resource persons followed by simulation exercises, wherever applicable. Following that floor discussions were conducted to deal with questions and queries that the participants had regarding the subject under consideration.

V. PARTICIPANTS

Both the training programmes were attended by 20 participants (Refer to Annexure I) comprising representatives of second-tier project partners from West Bengal, local civil society groups, social activists, service providers, regulators.

VI. RESOURCE PERSONS AND FACILITATOR

A number of experts and technical persons acted as resource persons in the two rounds of TTs. The resource persons were selected according to the relevance of their skills to the contents of the training. Each session was conducted by a separate resource person although few of them conducted two sessions each. All the resource persons possessed technical as well as practical knowledge and expertise on issues of electricity (see Annexure II and III for details) The Nodal Person acted as the facilitator for both the rounds of the TT.

VII. BRIEF SUMMARY OF THE RESPECTIVE SESSIONS

PHASE I

7.1 Inaugural Session

Keya Ghosh, Adviser, CUTS Calcutta Resource Centre (CUTS CRC) inaugurated the TT by delivering the welcome address. After introductory remarks, she briefed about the major objectives of the training workshop. She stated that the workshop was an attempt to build capacities of the grassroots' CSOs on issues related to the electricity sector so that they could effectively deal with problems related to the sector in their respective areas. She further stated that major areas of the capacity building programme were based on the findings of the baseline consumer survey conducted in ten districts of West Bengal. She requested Udai Mehta to deliver the opening address by elaborating the objectives and scope of the project and the role of partner organisations in ensuring effective consumer participation in the reform process.

7.2 Project Overview: Udai Mehta, CUTS International stated that the basic objective of the project was to build capacity of CSOs and consumer groups so that they could effectively address their problems as electricity consumers. He also clarified the fact that the project is not looking at problems related to the supply-side rather it address systematic issues, i.e. the problems facing the consumers. He pointed out that there is a necessity to increase the availability of electricity in India, Bangladesh and Nepal to scale up their per capita consumption of electricity. Increase in per capita availability of electricity will not be possible without successful implementation of reforms in the mentioned countries, he added.

As pointed by him, reform process involves three stages: Firstly, Unbundling of the integrated utilities; Secondly, Privatisation of the sector; and lastly, establishment of independent Regulatory Commissions. Of the three stages, consumer plays a crucial role in the regulatory process especially in areas such as tariff determination, framing of regulations etc.

Sharing CUTS experience of implementing similar projects in Rajasthan, he mentioned that initially degree of effective consumer participation in the reform process was very low in Rajasthan. But, at present consumers are much more aware about the reforms taking place in the electricity sector and participating effectively in the reform process by submitting written complaints, providing constructive suggestions etc. He emphasised the need for greater degree of awareness among the consumers and CSOs about their rights and responsibilities as consumers of electricity to participate effectively in the reform process.

Towards this end, he continued, the major objective of the TTs was to impart knowledge on various issues of the electricity sector and provide advocacy skills to the consumer groups with the aim to replicate the same at the grassroots level. He said that this will be very helpful in a greater outreach thereby creating a larger set of informed stakeholder at the grassroots. Before inviting the next speaker he clarified that this project is not going to address issues such as individual consumer grievances (except systematic issues); rural electrification and power availability; subsidy; environmental and social.

7.3 Findings of the baseline consumer survey: Mrinmoy Dey, CUTS CRC shared the main findings of the baseline consumer survey conducted in ten districts of West Bengal. He pointed out that the survey was conducted among electricity consumers as well as non-consumers (close to 700 consumers in all were targeted). The non-consumers were surveyed to arrive at the causes for not having access to electricity. The main reasons for not having access to electricity were lack of infrastructure and high cost of electricity supply, as opined by 62 and 27 percent of the respondents, respectively. Out of total electricity consumers interviewed, 14 percent were commercial consumers, 05 percent were industrial, 28 percent were agricultural and the remaining 53 percent were domestic consumers.

The survey results shows that 96 percent consumers reported that they faced the problem of inadequate supply of power in 2007, while 79 percent opined that they did not get required voltage to carry on their work smoothly. Though a majority of the respondents faced different kinds of problems, yet only 27 percent had registered complaints with their respective electricity suppliers. The main reason behind for not registering complaints is having no hope of getting a redressal. It was also found in the survey that not many respondents were aware of the ongoing reform process and a

very negligible percentage of the respondents were aware of Electricity Regulatory Commissions (ERCs).

According to the respondents, two most effective methods of increasing consumer awareness are: arranging grassroots meetings and workshops. 99 percent of the respondents opined that the Government or the electricity regulatory body should consult consumers in the process of framing laws, policies and other regulations. 78 percent of the respondents expressed their views in favour of tariff making process and 69 percent for enforcement of electricity law. 75 percent of the respondents felt that public hearing is the most desirable method of public consultation and 59 were in favour of nominating consumer representatives in advisory committees/bodies. It was very disappointing that none of the 700 respondents participated in any consultation process or public hearings conducted by the Government or the energy/electricity regulatory agency though 88 percent expressed their interest to participate.

7.4 General Introduction to Electricity Sector: Reforms and Regulation - Prof. Sujay Basu

At the start of his presentation, he mentioned, that generation, transmission and distribution are the three steps involved before a consumer gets access to electricity in his premises. He listed different sources of electricity (fossil fuel, biomass, solar etc); explained the concept of alternating current (AC) and direct current (DC) current; difference between a single and a three phase connection etc. After explaining various characteristics of electricity, he mentioned that at present, in India, the process of generation, T&D is guided by the Electricity Act 2003. A very special characteristic of the Electricity Act, 2003, is the mandate to form a Regulatory Commission which has been entrusted with the responsibility to regulate the process of electricity distribution and ensure effective consumer participation in the process of framing regulations.

Till 1991, power generation and distribution was monopoly of the public sector. The key thrust of the governments (States and Central) was to supply low cost electricity to the Indian consumers. But, it became difficult for the governments to provide necessary infrastructure for supplying electricity at low cost. Lack of funds, corruption and inefficiency compounded the problem. As a result, most of the State Electricity Boards (SEBs) ran into irrecoverable loss and huge deficits. In order to bail out from the huge accumulated losses incurred by the SEBs, the Government of India adopted the reform package in the electricity sector, which led to unbundling of the process into generation, T&D and allowing private participation in each of the states. In this context, he emphasised upon the role of consumers and CSOs in ensuring better quality of service delivery from the distribution licencee, quick redressal of consumer grievances and above all making their voices heard at the decision making forum.

7.5 Complaint Redressal Mechanism - P K Chakraborty

P K Chakraborty discussed at length the steps for consumer grievance redressal as mentioned in the Electricity Act 2003 and its supplementary regulations (especially Regulation number 27 issued by the WBERC). He siad that an applicant should first register his complaint with the Grievance Redressal Officers (GROs) appointed by the respective utilities. In case the officer fails to address consumer's complaint within the specified time in the regulation, then only can the consumer approach the Ombudsman with his complaint. He emphasised that the applicant must be very specific about the problems, the kind of relief the applicant is seeking from the distribution licencee, and more importantly, the applicant must sign the complaint herself/himself. He also stressed upon the fact that while applying for grievance redressal to the ombudsman the applicant must enclose a copy of the complaint submitted to the GRO. In case, the consumer had moved any lower court or forum, copy of the interim order passed by the same should also be attached with the application to the ombudsman. He further added that a consumer can register complaints with the GRO on grounds of poor quality of service delivery, i.e. irregularity in receipt of bill, delay in receipt of new connection, faults in metre reading etc. He said that the distribution licencee can also lodge complaints against a consumer in case of theft or unauthorised access to electricity, non-payment of bills etc.

In the end, he mentioned that though there exist a well structured Grievance Redressal Mechanism, yet consumers, especially at the grassroots, are largely unaware of the existence of any such mechanism. In this respect, he highlighted the role of the RESA project in improving the quality of service delivery at the grassroots.

7.6 Procedure for getting new connection - D C Dutta

D C Dutta clarified the procedure for getting *new connection of electricity*, both permanent and temporary. He said that first of all a consumer seeking new connection must submit his/her application in the format specified in Annexure A of Regulation No.24 (Standards of Performance of Distribution Licensees Relating to Consumer Services, Regulations, 2005) to the circle manager. In the districts, it is Superintendent Engineer, Commercial or the Divisional Engineer, Commercial who looks after issues related to new connection. Prospective consumers desiring permanent service connection at LV/MV/HV/EHV shall have to furnish their application along with required enclosures through Annex 'A' duly filled in and signed at the respective offices upon payment of earnest money as applicable against each individual application.

The earnest money depends upon the consumer category. For example, if the applicant is a rural consumer applying for domestic connection, he/she is required to offer a sum of Rs 200 while submitting the application. After receipt of application, the distribution licencee is required to send the applicant a quotation for expenses that the applicant will have to bear in case he/she agrees to take the connection. The quoted charges depend upon the location of the person from the nearest electric pole or sub-station. In case a distribution main does not exist in a particular area, the licencee will carry out a feasibility study and will decide upon whether to extend services to the particular applicant.

On submission of the required amount along with the necessary documents mentioned in Annexure B, the licencee shall install electric metre at the applicant's premises. In case of temporary connection (for festivals and domestic events, including marriage ceremony, etc.) he said that an applicant is required to submit application not less than 14 working days (as laid down in the regulation) before the date on which connection is required. After necessary inspection, the Board may install metre on or before the date on which connection was sought. Such connections, he mentioned, should not be provided for more than 35 days. In case of temporary connection required for commercial plantation and short-term irrigation purposes, the time span for the connection should not exceed 180 and 125 days, respectively.

7.7 Quality of Service - S K Kundu

S K Kundu was the first speaker for the second day of the Territorial Training Programme (Phase I). He spoke on issues related to *Standard of Performance* and monitoring of quality of service as an electricity consumer. At the outset, he mentioned that to understand the quality of service and related issues a consumer must first understand the chain by which electricity is produced, transmitted to the distributing units and supplied to the consumers. He discussed concepts of line loss, power factor, sub-station, transformers etc. He explained that for Power supply to qualify as good quality of supply, it has to maintain a steady voltage, frequency of supply needs to be around 50 Hz. and supply should be uninterrupted.

Further, he said that quality of service suffers in case of heavy line loss, frequency variations/power factor variations, and voltage drop. He further added that a consumer will be adversely affected as poor quality of service manifests itself in sudden interruption in power supply/load shedding; severe voltage fluctuations resulting in high current drawn by Power Motors, electrical gazettes & ultimately burning out of the equipments; additional investment for power/emergency light etc.

Pointing to the human errors affecting quality, he cited the following factors – faulty design of the electrical wirings, wrong site selection for setting up of generating stations, use of non-standard fuel and or accessories, poor day to day maintenance and negligence in preventive maintenance, repeated repairing of same element instead of changing it with new spare part, huge difference in demand and generation of power, power theft, unauthorised & misuse of electricity, and use of non-standard gadgets by users.

To deal with these issues, consumers should understand their roles and responsibilities as electricity consumers and together take necessary steps to prevent power theft or any unauthorised use of electricity; save and conserve energy and further extending support and cooperation towards the utility workforce as and when necessary.

7.8 Understanding electricity consumption & bill - Dilip Samajpati

Dilip Samajpati's session aimed at making the participants understand *how to read an electricity bill*, i.e. what is the necessary information available from an electricity bill and how to interpret the same? The very first point which he stressed was to see the name and address panel to verify whether a consumer has received the right bill or not? In addition to these, the unique consumer number and service connection numbers are the two very important fields that a consumer must know, he said.

He also mentioned that a consumer must carefully see the billing date, the billed amount, power consumption in units and the last date for payment of bills. Among these, he stressed on the need to preserve previous bills to see whether the billed amount is within limits, and if not he can either report it to the grievance redressal officer or investigate the reason why the billed amount exceeded his/her limits. He emphasised that when any representative of the utility visits a consumer's premises for metre reading, the consumer must note down the units consumed as noted down by the metre reader. As a result, the consumer will be able to detect errors in metered units mentioned on the bill. He further added that the consumer must look into the fixed/variable costs (apart from the per unit charges) he/she is paying for availing electricity service. Such costs include metre rent, fuel surcharge, electricity duty etc.

7.9 Reduction of power theft: Role of Consumers - Surajit Banerjee

Surajit Banerjee defined *Power Theft* as mentioned in Article 135 of the Electricity Act, 2003 and also Unauthorised Use of Electricity. He further added that power theft or any unauthorised use of electricity leads to frequent breakdown and blowing of fuses due to unauthorised load, damage to the transformers, increase in repair and maintenance costs of utilities and higher tariff, severe reduction in voltage especially during evening and night affecting the tubes, fans and other common household appliances/gadgets.

He admitted that honest consumers, who pay their bills diligently, are generally the ones who ultimately end up paying for power theft committed by others. He continued by saying that strict actions (viz. immediate disconnection of supply, lodging FIR with the local police station) are taken whenever power theft is detected. Emphasising the role of consumers or consumer groups in preventing power theft, he said, consumers should protest in unison against power theft and be aware of patterns/types of power theft, and avoid all possible illegal usage of power. Consumers should be aware of the penalties associated with power theft and above all they must communicate any instance of power theft identified by them to the utility.

PHASE II

7.10 Regulatory decision making process - C R Bhaumik

C R Bhaumik in course of his session demystified the decision-making process of the regulatory commission in West Bengal and also identified issues and areas where consumers can effectively participate in the decision-making process. He mentioned that the basic requirements of a good decision-making process are transparency, accountability and commitment; and effective public participation and their positive contribution by putting forward constructive suggestions. He said that to maintain transparency in the decision-making process, all Electricity Regulatory Commissions (ERCs) have issued *Conduct of Business Regulation* which lays down the work procedures of the commission.

He further added that regulators are accountable for their decisions and guided by the National Electricity Policy, The National Tariff Policy and the Electricity Act, 2003. He said that the fact that an order or decision of the regulator can be challenged before an appellate authority is itself an evidence of the commission's accountability. He also stressed upon the fact that the regulators are required to hear from the stakeholders before taking any decision. He claimed that such mechanism helps regulators in passing fair decisions and ensuring protection of consumer interests.

To illustrate the process of decision-making by the WBERC, he cited the example of tariff determination whereby the distribution licencee submit tariff petition with all supporting documents to WBERC. The Commission then publishes a gist of the petition in at least three leading *dailies* (Bengali, English and Hindi). Finally, after considering the suggestions received from the general public, the Commission then issues the tariff order within 120 days from the receipt of the petition. The tariff order so published also incorporates a gist of the comments received from the general public. However, he was specific in saying that only written (and not verbal) comments were invited from the public. Before closing his session he provided an overview of the *Conduct of Business Regulation*.

7.11 Tariff determination process - Anupam Ray

Anupam Ray during his session tried to make the participants understand how electricity tariffs are calculated. He illustrated the *Cost Plus* approach to tariff calculation. Before going into the details of tariff calculation he explained various concepts, viz. Aggregate Revenue Requirement (AAR), cross subsidy, gross station heat rate, gross calorific value of fuel (coal), operating and maintenance expenses, wheeling, multiyear tariff etc. Then he explained various controllable and uncontrollable expenses of power generation.

The controllable cost, he defined as those costs for which, a hike may or may not be passed on to the consumers in the form of tariff based on the discretion of the Regulatory Commission. He further added that when such costs' hike is below one percent the utility is expected to absorb the rise, however, when the hike is more than that, say, two-three percent then the utility may apply to Regulatory Commission to allow it to be reflected in the consumer tariff.

The uncontrollable costs, on the other hand, are those costs which, when registering a hike, may be passed on to the consumers in the form of tariff hike. He emphasised that (in case of multi-year tariff calculation) while submitting tariff petitions to the WBERC, the licencee had to consider its power procurement and perspective plans for the coming years. He further added that a licencee needs to submit these plans to the WBERC along with the tariff petitions. While showing the method of tariff calculation, he explained the crucial components of tariff, viz. debt-equity ratio, return on equity, depreciation, interest on loan capital which includes interest on working capital, working capital requirement, O&M expenses, bad and doubtful debts and foreign exchange rate variations.

He stressed upon the fact that a consumer must understand each of these items before submitting his comments to the regulatory commission on tariff fixation. He urged the consumers to mention specific reasons in their comments to the WBERC to counter a probable tariff hike. To make things clear, he also quoted some written comments given by various consumers to the WBERC.

7.12 Energy Conservation: Role of Consumers - Dilip Samajpati

Dilip Samajpati in his session tried to explain what energy conservation means and why we need to conserve energy with specific reference to electricity. He highlighted that energy conservation is essential for economical, environmental and social reasons. He went on to list certain best practices which will help in conservation of energy in the domestic as well as the commercial/industrial front. He mentioned that using energy saving/efficient equipments like CFL lamps, electronic chokes for tube lights, infrared sensors, motion sensors, automatic timers, dimmers and solar cells wherever applicable, to switch on/off lighting circuits can be helpful in this direction.

He opined that the usage of *task lighting* can also be very effective. He further listed some best practices for effective use of electric fans, lights, air conditioner, refrigerators, computers and such equipments of daily use in the households. He pointed out that a major fraction of the energy used at home goes towards heating/cooling purposes. So if consumers use such equipments with caution and responsibility, it will not only help in cutting the bill for them but also contribute effectively in energy conservation. He wrapped up the session by highlighting once more how consumers can help in energy conservation by being responsible and strictly need-based in usage of energy.

7.13 Energy Efficiency & Electrical Equipment Rating - Dilip Samajpati

In his next session entitled, Samajpati explained that Demand Side Management (DSM) is basically a process to manage the variation in demand of electricity/energy at different points in time during the course of a day by planning and monitoring the pattern of electricity usage by the consumers. He said that the most efficient way of applying DSM is to control the use of high consumption electrical equipments (e.g. Air Conditioner, Geyser & other heating appliances, Pumps etc) during the peak demand hours, (generally the evening hours) wherever possible. He said that in this regard, Time of Day (ToD) tariff is one of the effective tools because under this scheme higher price is charged for units consumed during peak hours as compared to

those consumed during non-peak hours, to discourage increased consumption during peak hours.

Then he went on to explain how ToD tariff is metered and applied in case of industries. He also cited some examples where industries have used ToD to their benefit, out of which one particularly interesting example was that of a small iron smelting plant where most of the furnace activities were conducted during the night and early morning slots which have lower tariff slabs and keep the furnace on hold during the time when the tariff applicable is higher. This helps them in saving the electricity bill. He listed the ToD tariff slabs/slots for both commercial and industrial consumers as applicable for CESC consumers.

He briefly introduced the concept of Bureau of Energy Efficiency (BEE) and its mission, which institutionalise energy efficiency services, enable delivery mechanisms in the country and provide leadership to the key players involved in the energy conservation movement. The primary goal of the Bureau is to reduce the energy intensity in the economy of the country. Following that he illustrated how the energy ratings or stars assigned to different household equipments (refrigerator, AC, tube lights) by the Bureau affect their performance and consequently their average respective contribution to the yearly electricity bill.

For each of the equipments considered, he provided information on how much savings in the annual electricity bill is achievable on part of the consumers according to the different start ratings assigned to them. It was observed that even though this energy efficient equipment come at a higher price, but the recurring savings that are generated in the form of much reduced electricity bill makes up for the initial investment and that the consumers stand to gain in the long run. He wrapped up the session with some tips on how to use energy efficiently and how and why consumers need to use electrical equipments with higher star ratings.

7.14 Tariff Regulation: Key Issues - Rajesh Kumar

Rajesh Kumar in his session entitled pointed out that the term tariff regulation is rather new to all of us. He further pointed out that while generating electricity, in addition to the measurable and apparent costs that the licencee incurs; it also results in a social cost. As conscious citizens, we should use electricity optimally and responsibly, he added. He opined that the reform process, as far as consumers are concerned, is yet to make its presence felt.

In his presentation, Rajesh Kumar explained some basic things related to the electricity consumer, such as the unit of electricity (watt), connected loss, maximum and energy demand. He touched on some important concepts like one and two part tariff and difference between them, implications of tariff slabs, difference between progressive and flat rate tariff, etc. He stated that a good tariff structure should promote economic efficiency and be designed in such a manner to recover all reasonable costs. Supplying electricity free of cost is inefficient for our society as well as the utility. He said that though the Government needs to ensure the supply of electricity at affordable rates to the economically weaker sections of the society, supplying it free of cost is not feasible. He explained that cost of supply for the distribution licencee depends on various factors like voltage of supply, consumer density, load factor and the time of demand. He went on to explain how each factor affects the cost of supply.

Coming to the issue of subsidy, he said that the main objective of subsidy is to ensure universal access and reduce economic inequality. He added that inefficient use of the subsidy mechanism has often proved to be a heavy burden on the public exchequer. Generally, the state government pays for the subsidy which is sometimes mitigated by cross subsidising between different categories of consumers or by collecting open access surcharge.

In West Bengal, at times, it has also been financed out of inter-state sale whereby the surplus generation is sold to other states. He opined that for subsidy system to work efficiently Government should properly identify the deserving class and the power so subsidised, be fully metered. He further added that Government needs to introduce target subsidy and link it with energy saving planning/policy. Towards the end of his presentation, he illustrated how an electric metre reads the consumption and how consumers can check whether their metres are functioning properly. He described some simple processes through which the consumer can get an idea about the accuracy of his metre.

7.15 Competition Issues in the Electricity Supply Industry - Mriganka Majumdar

Mjumdar said that the main objective of the Electricity Act 2003 was to provide a framework for an accelerated and more efficient development of the power sector, and encourage competition with proper regulatory intervention. He emphasised that competition is expected to yield efficiency gains, and in turn, result in availability of quality supply of electricity to consumers at competitive rates. He emphasised that electricity sector being capital intensive with long gestation period; private players are not interested to take the financial risk, particularly, in the regulated market scenario.

He mentioned that power sector reforms in India started in the 1990s. The Electricity Reforms Act 1998 paved the way for the formation of Regulatory Commissions at the Central and state levels. Following the reforms, he added, the unbundling of the vertically integrated power sector took place in many states to give place to separate entities for generation, T&D.

The process of unbundling and private participation in the sector led to major changes, viz. thermal generation was made free from licence; clearance for hydro projects became less stringent, ensured greater competition and hence increased efficiency; provided for participation of the general public in the tariff determination process; opening up of avenues for trading electricity across the country; emergence of competitive power markets; and operation of multiple distribution licencees was allowed. He also highlighted the opportunities and advantages that are created if captive power generation plants are installed wherever applicable. He wrapped up his session by pointing out the following factors as barriers to competition in the sector:

- Open access and multiple licencees in T&D sector though encouraging, is fraught with the inherent risk of return on investment.
- Unlike developed countries with sufficient spinning reserve, India is still having huge deficit with less per capita consumption.
- The conditions in India are not very conducive for open competition and may lead to unfair competition.

VIII. SUMMARY OF PARTICIPANTS' FEEDBACK

The training programme was organised in two phases and at the end of each phase a feedback form was circulated among the participants, which was important not only for evaluation of the programme but also for planning similar and related initiatives in the future as well. Participants acknowledged the importance of the event and the rich discussion that took place.

Summary of the Feedback Received from the Participants

Highlights

- Strong presence of some key representatives of the electricity sector, which facilitated discussion of various thought provoking issues
- Participation of a diverse group of stakeholders
- Good quality of presentations, simulation exercises and interactive nature of discussions
- Circulation of the *Territorial Base Paper* and *Territorial Training Manual* in the local vernacular language

Lowlights

- Majority of the participants felt that less time was allotted for floor discussions
- Few of the participants found it difficult to participate since the discussion was in English

Recommendations

- Organise such training programmes at the district, block as well as at the *panchayat* level involving greater participation of the grassroots' stakeholders
- Use folk songs, street plays, leaflets, charts, pictures and other such interactive media/vehicle to disseminate relevant information regarding the electricity sector at the grassroots level.
- Undertake similar programmes for school students
- Involve local media in each and every activity

As shown in Figure 1, 95 percent of the participants agreed that the workshop has been very successful. As opined by them, the major factors contributing to this success had been appropriate selection of topics for training; good trainers; and ample scope for interaction with the trainers as well as amongst the participants themselves during floor discussions and simulation exercises. Figure 2 depicts the feedback of the participants on overall management and quality of the programme. 73 percent of the respondents were satisfied with logistic and other facilities; 62 with the quality of presentation; and 68 with the way of facilitation of each session.





Figure 2: Overall Management and Quality of the Training Programme



S.I. No.	Name of the Participants	Name of the Organisation
1	Rajesh Paul	Islampur Ramkrishnapally Rural Welfare
		Society, Uttar Dinazpur
2	Sukchand Barman	Islampur Ramkrishnapally Rural Welfare
		Society, Uttar Dinazpur
3	Deepak Chakraborty	Chanchal Jana Kalyan Samity, Chanchal, Malda
4	Dipankar Rakshit	Chanchal Jana Kalyan Samity, Chanchal, Malda
5	Rekibul Islam	Palsa Pally Unnayan Samity, Murshidabad
6	Meerza Masud Reza	Palsa Pally Unnayan Samity, Murshidabad
7	Subhankar Saha	Sreema Mahila Samity, Duttapulia, Nadia
8	Shyamal Muhuri	Sreema Mahila Samity, Duttapulia, Nadia
9	Pradip Modok	Purulia Agrogami Mahila O Sishu Mangal Samity, Purulia
10	Durjodhan Nayek	Purulia Agrogami Mahila O Sishu Mangal Samity, Purulia
11	Nitish Banerjee	Kharda Kreta Swartha Surakasha Samity, 24 th Parganas
12	Sailen Bhattacharya	Kharda Kreta Swartha Surakasha Samity, 24 th Parganas
13	Vidyut Ghosh	Birsingha Vidyasagar Society for Social Service, Medinipur
14	Sumita Sammaddar	Birsingha Vidyasagar Society for Social Service, Medinipur
15	Asit Das	The Residents & Consumer Association, Hoogly
16	Aparna Das	The Residents & Consumer Association, Hoogly
17	Asit Adhikary	Agragati, Howrah
18	Nimai Adak	Agragati, Howrah
19	Sreepoly Bhattacharya	Environment Governed Integrated Organisation (EnGIO), Kolkata
20	Sumit Kr Roy	Environment Governed Integrated Organisation (EnGIO), Kolkata

Annexure I: Participants

Sl No.	Name of the resource persons	Designation and Organisation
1	Professor Sujay Basu	Director, Centre of Energy and Environment Management, Kolkata
2	P K Chakraborty	Ombudsman, WBERC
3	D C Dutta	Chief Engineer, West Bengal State Electricity Distribution Company Limited (WBSEDCL)
4	S K Kundu	Retd. Engineer, Public Works Department (PWD)
5	D Samajpati	Senior Manager, Customer Relations, Calcutta Electricity Supply Corporation (CESC)
6	S Banerjee	Deputy Chief Engineer, Loss Control Cell – Operations CESC
7	C R Bhowmik	Adviser, Engineering, WBERC
8	Anupam Ray	Associate Director, KPMG Advisory Services Pvt. Ltd.
9	Rajesh Kumar	Assistant Policy Analyst, CUTS Centre for Competition, Investment & Economic Regulation (CUTS CCIER)
10	Mriganka Majumdar	Executive Director (Commercial), WBSEDCL

Annexure II: Resource Persons and Facilitator

Annexure III: Brief Profile of the Resource Persons

Prof. S Basu, Director, Centre of Energy and Environment Management, Kolkata Professor Sujay Basu, after graduating in Physics from Calcutta University, did his M.Sc.(Tech) in Applied Physics in 1958. After a brief but enriching stint in electric power industry, he joined the Electrical Engineering Department of Jadavpur University, in 1961, and after decades of academic activities finally retired in end 2003. He took a leading part in the creation of the 'School of Energy Studies' – the first interdisciplinary school of the university, and was appointed as first Director.

Prof. Basu played an active role in the introduction of mandatory energy audit in the West Bengal and has been a member/adviser with a number of bodies/chambers like the Consultative Group on Power & Energy, Planning Commission, Government of India, the Apex Committee under the Department of Power, the Research and Development (R&D) Council of the Centre for Wind Energy Technology (CWET) of the Ministry of New and Renewable Energy (MNRE), Indian Chamber of Commerce (ICC), Board of Control for Cricket in India (BCCI) and Confederation of Indian Industry (CII).

Prof Basu acted as Principal Investigator in projects funded by the Department of Science and Technology of the State and Centre, Petroleum Conservation Research Association, Ministry of Non-conventional Energy Sources (renamed Ministry of New and Renewable Energy in 2006), Ministry of Human Resource Development (MHRD) and also Ministry of Power. Currently, he is the Director of the Centre of Energy and Environment Management, Calcutta.

P K Chakraborty, Ombudsman, WBERC

P K Chakraborty, after his retirement from the West Bengal Civil Services as Special Secretary to the Government of West Bengal, is currently wielding the designation of Ombudsman with the WBERC.

D C Dutta, Chief Engineer, WBSEDCL

Dinesh Chandra Dutta graduated as an Electrical Engineer from Jadavpur University, in 1971, and joined the then WBSEB in the year 1974. Presently, he is the Chief Engineer, Customer Relation Management (CRM) cell of WBSEDCL with an additional charge of the Security & Loss Prevention wing. He has had a long standing experience with the commercial wing of WBSEB (presently WBSEDCL). He additionally acquired his Bachelor Degree in Law from Calcutta University in 1982, and the Institute of Cost and Work Accountants of India (ICWA) in 1991.

S K Kundu, Engineer, PWD (Retd.)

S K Kundu completed his Bachelors in Electrical Engineering from Jalpaiguri Engineering College, Jalpaiguri, in 1970. After retiring as the Chief Engineer (Electrical) PWD, West Bengal, he is now working as a consultant with the Green Energy Development Corporation Ltd. under Department of Power and NES, Government of West Bengal. He is a life member of the Institute of Engineers, Calcutta and also a Guest Faculty at the Indian Institute of Social Welfare and Business Management, Kolkata.

D Samajpati, Senior Manager Customer Relations, Calcutta Electric Supply Company (CESC)

Dilip Samjpati, a graduate in Science and Electrical Engineering, joined CESC Limited in 1975. Over the last 30 years of his service with the organisation he has been associated with various facets of the power supply industry. Currently responsible for Customer Relations as the Senior Manager, Customer Relations Department of CESC, Samajpati led several Customer Service initiatives over the last 10 years – the notable one being establishment of a State of the Art Call Centre for 24x7 consumer assistance. He has been an active member of the consumer interface of CESC and regularly takes part in various consumer awareness programmes in the media and other public platforms.

S Banerjee, Deputy Chief Engineer (LCC Operations), CESC

Surajit Banerjee, after completing his Master of Science in Mathematics from IIT Kharagpur in 1977, started his career with the Indian Overseas Bank in 1978. He joined CESC in 1981 as EDP officer. After handling a number of diverse portfolios with CESC like managing the IT & Commercial Departments, as also the Strategic Business Unit, he is presently designated as the Deputy Chief of the Lost Control Cell, at CESC.

C R Bhaumik, Adviser (Engineering), WBERC

Bhaumik obtained his Bachelors in Mechanical Engineer from Jalpaiguri Engineering College in 1966. He subsequently pursued Post Graduate Diploma in Management from Indira Gandhi National Open University (IGNOU). After retiring as Chief Engineer, Central Electricity Authority, Ministry of Power, Government of India, he is presently working as Adviser (Engineering) with the WBERC.

Anupam Ray, Associate Director, KPMG Advisory Services Pvt. Ltd.

Anupam Ray presently the Associate Director for KPMG Advisory Services Pvt. Ltd. completed his Masters in Business Administration from Indian Institute of Social Welfare and Business Management (IISWBM), Calcutta University and MIE (Electronics and Communications) from Institute of Engineers (India). He has more than 11 years of experience in the implementation of power sector reforms and Restructuring in Maharastra, Assam, Madhya Pradesh, Orissa, Uttar Pradesh, Rajasthan, West Bengal, Andhra Pradesh and Meghalaya. At present, he is leading the team assisting Damodor Valley Corporation in respect of issuing of initial public offer. Now he is assisting the Additional Chief Secretary, Power and NES Department, Government of West Bengal in the capacity building programme of the department.

Rajesh Kumar, Assistant Policy Analyst, CUTS C-CIER

Working at CUTS Centre for Competition, Investment & Economic Regulation (CUTS C-CIER) Jaipur, as an Assistant Policy Analyst, Rajesh Kumar's current responsibilities include research on policy and regulatory issues in electricity, telecom & gas sectors and co-ordinating national as well as international projects on electricity as well as capacity building of consumers.

He has experience of teaching PG classes (Economics) for five years at the M D University Rohtak and affiliated colleges. His area of interest is Economic Theory, Regulatory Economics, Econometric Applications and Quantitative Technique in Economics. He is a MA as well as Ph. D. in Economics. Topic of the Ph. D thesis was *Economics of Regulation: A Case Study of Haryana Electricity Regulatory Competition*. He has published six research papers (including co-authored) on the electricity regulation, public participation and technical and financial performance of electricity utilities issues. He has made interventions before the Electricity Regulatory Commissions in Haryana, Punjab and Delhi in the wider public interest and attended about 30 National/Inter-National level conferences/training programmes on Economics as well as Electricity Regulation.

Mriganka Majumdar, Executive Director (Commercial), WBSEDCL

Mriganko Majumdar, after completing his Bachelors in Electrical Engineering from Jadavpur University, Kolkata, started working with the then WBSEB. He has been continuing with his services with WBSEB, now re-named WBSEDCL since then. He is currently the Executive Director, Commercial, WBSEDCL. He takes an active interest in new developments in the power sector and has a vast experience on the issues therein.

Annexure IV – Agenda

FIRST TRAINING PROGRAMME

DAY ONE September 11, 2008

Time

09:00-09:30

09:30-09:45

Sessions
Registration and Tea/Coffee
Session I: Project on Capacity Building on Electricity Reforms in India, Bangladesh and Nepal: Objectives, Scope, Partners and Activities

	and Activities
	Udai S Mehta, CUTS International
09:45-10:00	
	Floor Discussion
10:00-10:40	Session II: General Introduction to Electricity Sector Reforms and
	Regulation
	• Historical evaluation of the electricity supply industry (major structural changes though various legislations) and subsequent corporatisation and private participation
	• Structure of the electricity sector and further unbundling into generation, T&D
	• Energy demand and supply scenario
	Electricity regulatory commission
	Consumer participation – importance and status
	Prof. S Basu, Director, Centre of Energy and Environment Management, Kolkata
	Floor Discussion
10:40-11:20	Session III: Quality of Service: A General Overview
	• General overview on the quality of service
	• Role of consumers in maintaining quality of service
	• Examples of best practices
	Consumer safety
	Prof. S Basu, Director, Centre of Energy and Environment Management, Kolkata
	Floor Discussion
11:20-11:30	Tea Break
11:30-13:15	Session IV: Complaint Redressal Mechanism
	• Existing mechanism for the redressal of consumer complaints (bottom to top level institutions available to consumers for grievance redressal)
	• Filing of complaints and follow up by the consumers
	• Time frame for redressal of complaints
	• Various precautions to be taken while making complaints

	P K Chakraborty, Ombudsman, WBERC
	Simulation Exercise
	Floor Discussion
13:15-14:00	Lunch
14:00-15:30	Session V: Procedure for Getting New Connection – Permanent
	and Temporary Connection
	• Relevant authorities
	• Application formats
	• Earnest money
	Charges applicable for new connection
	Charges applicable for temporary connections
	D C Dutta, Chief Engineer – WBSEDCL
	Simulation Exercise
	Floor Discussion
15:30-15:45	Closing Session

DAY TWO September 12, 2008

Time	Sessions
09:30-10:00	Review of Day I
	Keya Ghosh and Udai S Mehta, CUTS International
10:00-11:50	Session I: Quality of Service: Technical Issues
	• Issues in quality of service – technical such as voltage and frequency, outages etc. and
	• Standards of performance and issues in monitoring and enforcing
	S K Kundu, Engineer, PWD (Retd.)
	Simulation Exercise
	Floor Discussion
11:50-12:00	Tea Break
12:00-13:30	Session II: Understanding Electricity Consumption & Bill
	• How to read the consumption reported by electricity meter?
	• How to check the accuracy of electricity meters?
	• How to read electricity bill and submit bill complaints?
	• Benefits resulted from keeping record for consumption and bills?
	D Samajpati, Senior Manager Customer Relations, CESC
	Simulation Exercise
	Floor Discussion

13:30-14:30	Lunch
14:30-15:30	 Session III: Reduction of Power Theft: Role of Consumers What is power theft, un-authorised use of power? Who pays for theft of power? Disincentives/penalties to discourages power theft How consumers can support the utilities in reducing the theft of power? S Banerjee, Deputy Chief Engineer (LCC Operations), CESC Floor Discussion
15:30-15:45	Closing Session

SECOND TRAINING PROGRAMME

Time	Sessions
10:00-10:30	Recapitulation of Issues Covered in the First Training Programme
	Keya Ghosh & Mrinmoy Dey, CUTS International
10:30-11:30	Session I: Regulatory Decision-making Process
	Features of an effective decision making process
	• Existing decisions-making processes and role of consumers
	• Tools for consumer consultation-inviting comments, holding public hearings, etc.
	• Petitions, appearances before ERC, appeal process, access to records, etc.
	• Introduction to some of the important regulations-conduct of business regulation, standard of performance etc.
	C R Bhaumik, WBERC
	Floor Discussion
11:30-11:40	Теа
11:40-13:15	Session II: Tariff Determination Process
	Tariff determination process
	Role of consumers in tariff determination process
	• Understanding the annual revenue requirement (ARR), assumptions to be examined, and its various component (power
	purchase cost, employee cost, capital cost etc.)
	• How to analyse the electricity data contained in ARR/tariff application?
	Anupam Ray, KPMG
	Simulation Exercise
	Floor Discussion

DAY ONE September 25, 2008

13:15-14:00	Lunch
14:00-15:00	 Session III: Energy Conservation: Role of Consumers Importance of conservation of electricity Saving of electricity at consumption ends Introduction to the use of CFL, energy efficient equipments, etc. D Samajpati, CESC
15:00-16:40	 Session IV: Energy Efficiency and Electrical Equipment Rating Concept of energy efficiency/demand side management (DSM) Incentives/disincentives taken on behalf of the government/regulator Introduction to energy efficiency rating, such as star rating-one to five stars by Bureau of Energy Efficiency (BEE) in India Role of CSOs in promoting DSM D Samajpati, CESC Simulation Exercise Floor Discussion
16:40-17:00	Closing Session

DAY TWO September 26, 2008

Time	Sessions
9:30-9.45	Recapitulation of Issues Covered on First Day
	Prithviraj Nath and Mrinmoy Dey, CUTS International
9:45-11:45	Session I: Tariff Regulation: Key issues
	Allocation of cost among consumers
	• Various factors affecting the cost of supply at consumer ends
	Justification for subsidies
	• Optimal level of subsidy as well a cross-subsidy
	• Who should pay for the subsidies
	Rajesh Kumar, CUTS International
	Simulation Exercise
	Floor Discussion
11:45-12:00	Tea Break
12:00-13:00	Session II: Competition Issues in Electricity Supply Industry
	• What exactly is competition in electricity; relevance in shortage
	situation
	Need to explain the limited competition possibilities

	• Role of trading and power exchanges and benefit to consumers.	
	• Key factors: Trading, captive generation, implications of open	
	access	
	Barriers to competition	
	Mriganka Majumdar, WBSEDCL	
	Floor Discussion	
13:00-14:00	Lunch	
14:00-14:30	Closing Session	
	Keya Ghosh and Rajesh Kumar, CUTS International	