

**REPORT OF THE STATE LEVEL
LAUNCH MEETING**

**Demand Side Management &
Renewable Energy in India:
Capacity Building of CSOs
(DREC Project)**



GUJARAT

AUGUST 06, 2011

INTRODUCTION

Consumer Unity & Trust Society (CUTS) and VIKSAT (Vikram Sarabhai Centre for development Interaction) is implementing a project entitled ‘Demand Side Management (DSM) & Renewable Energy (RE) in India: Capacity Building of CSOs (DREC Project)’ with support from The Climate Works Foundation, US which is represented by Shakti Sustainable Energy Foundation (SSEF) in India. It will be implemented over a period of two years (2011-2012) in two states of India, i.e. West Bengal partnering with CUTS Calcutta Resource Centre & Gujarat.

The project aims to increase long-term capacity/awareness of civil society organizations (CSOs) to demand for DSM and RE initiatives in India and also to understand, document and communicate their specific needs/concerns to the policy makers. In this context, the state level inception meeting was held in Gujarat on August 06, 2011 with the objective of involving stakeholders, consumer groups, policymakers, regulatory commission and media, from within the state. During the meeting, project details were shared with the aim to solicit specific inputs from stakeholders.

INAUGURAL SESSION

WELCOME ADDRESS

The workshop started with the welcome address by **Dilip Surkar**, Director VIKSAT, with an introduction of VIKSAT in which began its operation in 1977 and its evolution through various interventions both at the field and the policy level. Surkar also emphasized on DSM awareness, consumer efficiency and how CFL, LED and star ratings has helped increasing awareness among consumers in electricity management in



Gujarat. Towards the end, he conveyed his best regards and assured full support from VIKSAT to CUTS to ensure successful implementation of the project.

SPECIAL ADDRESS

K. V. Sarabhai, Managing Trustee, Nehru Foundation for Development, Ahmedabad emphasised the importance of education as one of the key tools to educate consumers about the importance of DSM & RE. He laid stress on the need and role of public awareness and education to bring changes in several policy issues. Sarabhai shared his views on the vital role of awareness to ensure successful implementation of DSM programmes in Gujarat and India. He noted that even with the fast pace of growth, several people are struggling for their basic necessities and therefore in order to bring those people in the domain of development we need to change the present pattern of growth.



He elucidated the importance of change in mindset/behaviour among the consumers towards responsible use of energy and he emphasised that the change has to come from within and not from external factors. He pressed upon the importance of self-management and concluded his speech quoting Gandhi, “World has enough for everyone’s need but not greed” he remarked that world has more than everybody needs provided we use it efficiently.

Ketan Shukla, Secretary, Gujarat Electricity Regulatory Commission (GERC), Ahmedabad emphasized the importance of DSM and how NGO’s can play an important role in effective implementation of DSM in Gujarat. He mentioned that proper selection of technology and implementation of DSM programme helps distribution companies to avoid the additional (costly) power purchase during the peak period. As far as consumers are concerned, DSM brings more reliable and cheaper power to the consumers thus providing an opportunity for consumers to reduce their electricity bills and hence become more competitive (specifically for energy intensive commercial and industrial sector consumers).



Shukla further elucidated that the fast economic growth of the State has resulted into increase in the electricity consumption by the industrial and commercial sector. With the current available capacity, many states are not in position to meet its requirement either in energy requirement terms or on peak capacity requirement terms. However, Gujarat is one of the few states in India which provides round-the-clock power supply in most of its towns, and cities, as mentioned by Shukla. It is expected that Gujarat will become power surplus State within one year and with development of additional capacity, the total capacity will reach to about 25,000 MW against demand of 19,900 MW in 2017. Most of the distribution companies have undertaken various EE and DSM steps such as power factor improvement & penalties, time of day tariff, efficient lighting programme, agricultural pump sets efficiency improvement programme in order to reduce the demand supply gap, etc. The Government of Gujarat have formulated a policy namely Jyoti Gram by which 24 hours power supply is provided to the consumers in rural areas.

Shukla further emphasised that for successful implementation of DSM and energy conservation measures, involvement of all stakeholders such as Regulatory Commission, Distribution Utilities, State Government and Consumers are important. He mentioned that it is important to build the capacity and awareness of the consumers for the large scale deployment of the DSM programme in the State. Large scale information campaign may have to be developed and implemented, to ensure that consumers are aware of the initiatives being undertaken by Distribution Companies, Regulatory Commissions, State Designated Agencies and BEE.

Udai S Mehta, Assistant Director, CUTS, Jaipur and Project Coordinator, provided a brief introduction about CUTS and narrated how CUTS began its journey as a consumer organisation and over time flowered into several programmatic centres going beyond traditional consumer protection related issues. Mehta elucidated the famous ‘matchbox scam’ as one of the triggers that led to the establishment of CUTS as a consumer organisation in 1983/84. Matchbox was chosen for this campaign because it is a commodity which is as widely used by all as salt is, though there are several other packaged commodities where shortages existed. CUTS filed a case at the MRTP Commission against a multinational matchbox manufacturer in the year 1985 for perennial shortage of matchsticks in their matchboxes, which changed the whole industry picture. The case got wide publicity and thus

began the journey of CUTS with the goal of consumer protection not knowing that in times to come its agenda will evolve to its current level. CUTS have been assiduously pursuing its vision of, ‘Consumer sovereignty in the framework of social justice and equality within and across borders’.

Gaurav Shukla, Research Assistant, CUTS, Jaipur in his presentation emphasised on the key objective of the project i.e. to focus on capacity building measures for consumer groups so as to better prepare them to carry out need based advocacy and participate in associated policy and regulatory processes. There is a need to raise awareness and build capacity of consumer organisations, on issues pertaining to RE/DSM programmes. This would help in creating demand from the consumer end, which would potentially result in appropriate actions being implemented by policy makers at the top level.

He clarified that the approach that CUTS intends to undertake is to first assess the current scenario through literature review, baseline consumer survey, and identify barriers that constrain greater consumer participation in the RE/DSM space. CUTS will then devise strategies such as state level training workshops, consumer interface meetings, to overcome the identified barriers. In planning and executing these activities CUTS will engage credible consumer groups through National Seminar, Policy Advocacy Meetings, and other similar interventions.

S. K. Nanda, IAS, Principal Secretary, Department of Forest and Environment, Government of Gujarat, provided an overview on the importance of RE and DSM and spoke at length regarding the importance of involvement of CSOs in to ensure effective implementation of RE and DSM programmes in Gujarat.

FIRST SESSION

Panel Discussion on ‘Nature and Scope of CSO intervention in the context of RE and DSM’

Omkar Jani, Principal Scientist, Gujarat Energy Research Management Institute, Gandhinagar delivered a presentation explaining the key points of civil society intervention in regulation of electricity. Jani mentioned that identifying the areas of improvement such as providing correct information, formulating correct strategy and implementation of activities in regard to DSM and RE are very important aspects. He gave examples of both domestic level and city level strategic approaches for improving energy efficiency. At domestic level, he specified the example of all lights in Gujarat Sachivalaya being replaced by energy-efficient tube lights, and payback was achieved in less than a year. At city level, he gave an example of Solar Cities Programme by MNRE which reduced energy consumption by 10% through renewable energy and energy efficiency measures.



In reference to Gandhinagar Solar City project he explained that civil society can play a key role in convincing the primary stakeholders i.e. rooftop owners about utilizing the space for generating solar power in association with the recognized institutions. He also specified that

GEDA (Gujarat Energy Development Agency) is the nodal agency for this project. He said that photovoltaic panels are easy to install and are very efficient. He added the fact that people should be aware of all the laws and regulatory processes, certification processes regarding electricity and DSM awareness will play an important role in this. Jani further added information about California's Solar Rights Law¹ and how similar kind of initiatives from the policy makers is required. In his concluding remarks, Jani laid stress on the fact that power theft can reduce the efficiency of grid to as low as 40 % and this is one area where CSOs can play an effective role in regard to spreading awareness for curbing theft of electricity.

Bhaskar Raval, Chief Electrical Inspector, Government of Gujarat, shared that various awareness programmes have been undertaken by the government for spreading awareness regarding energy efficiency. He stressed on the importance of DSM and noted that importance of energy efficiency was known and practiced by our forefathers. However he shared that it is unfortunate that energy conservation has to be taught. He added that people are conservative only if they are paying from their pocket and added that DSM has become a necessity. Questions like how it can be done, where it is possible, when to start, etc, are matters which need to be debated and discussed. .

He shared a critical point that India has only 1 % of the resources which is being used for conventional energy, but India is blessed with solar, wind and other sources of renewable energy. Besides this Raval added a few points on energy management by giving examples such as , cleaning of the air conditioner grill can easily save up to 5% of electricity consumption, replacing pipes used in irrigation from galvanized to PVC can save up to 22 % of electricity consumption, etc. He concluded by saying that “Each of us can save energy, but it will depend how it can be done”.

Alok Das, Head Business Development, Suzlon Energy, Ahmedabad, gave a short introduction on Suzlon, being a 3rd largest company in the world it has spread across 32 countries in the world. He said that the world should move around from unsustainable trajectory and we all should remember 3E's - environment, energy and ecology. He noted that change should come within ourselves and we should look d to sustainable development. He added that the process of change in India is slow and takes time to come, whereas countries like USA and China has marched ahead with regard to adopting to alternative source of energy. He added that China last year produced 17 Megawatts of electricity from renewable resources. He mentioned that CUTS and VIKSAT are doing an extremely good work in making people aware regarding renewable resources and expressed that he is hopeful that change will come today or tomorrow and people will start demanding for renewable sources of energy.

Remarks by the Chair

R. Gopichandran laid stressed on the fact that more funds are needed for undertaking research in field of renewable energy. He mentioned about a term called “SLAPP” which

¹ The Solar Rights Act (CA Civil Code 714), enacted in 1978, bars restrictions by homeowners associations (HOAs) on the installation of solar-energy systems, but originally did not specifically apply to cities, counties, municipalities or other public entities. The Act was amended in September 2003 to prohibit a public entity from receiving state grant funding or loans for solar-energy programs if the entity prohibits or places unreasonable restrictions on the installation of solar-energy systems. A public entity is required to certify that it is not placing unreasonable restrictions on the procurement of solar-energy systems when applying for state-sponsored grants and loans.

means “Strategic Law Suits Against Public Participation” which necessarily means that the public can file a law suit against us if we do not deliver what we promised for. He suggested that everybody who works in the public domain should be aware about SLAPP and does not deviate from what is being promised to the stakeholder. He suggested that CUTS and Viksat could also think of implementing a project and he termed it as, CARE - Community Action on Renewable Energy.

Floor Discussion

Minal Pathak, Associate Professor, CEPT University shared that when we talk of DSM, we should not focus alone on the consumption of energy by the industries, farmers and household consumers. She stressed on the fact that transportation is a major player in DSM and we need to include sectors or player related to transportation industry in the project.

Indrajit Mukhopadhyay, Pandit Deendayal Petroleum University (PDPU) shared his views on regulatory reforms in the sector and emphasised on the importance of developing strong R&D skills to produce products (solar modules, photovoltaic cells, etc)domestically rather than importing technology and products. He further elucidated how other countries are undertaking extensive research and as a result have gone way ahead of India in terms of technology and product advancement, for e.g. of research on photovoltaic panels by Germany are now being used in African desert to produce energy. With context to solar city model as presented by Omkar Jani, he cautioned that relevant steps should be taken to ensure that repairing and installations should not cause problem in effective implementation of the project.

Bhaskar Raval elaborated his views and commented that Gujarat has enough energy supply and supply to rural areas is reliable, as consumers are getting access to electricity throughout the day. However, he emphasised that since Gujarat is planning to shift to r green energy, major environmental issues would need to be also addressed.

Alok Das shared that there are many projects which are focusing on R&D nowadays. He added that solar thermal energy is coming soon and we have to make sure all communities participate to ensure better acceptance of the energy source by community at large.

SECOND SESSION

Successful Interventions by stakeholders in the Energy Sector in India

Kaushal Shah, Manager, Energy Management Division (EMD), Saket Energy group, Ahmedabad, delivered a presentation starting with introduction about the company and touched upon relevant issues such as energy management, energy audits, and assisting the industries in effectively undertaking energy audits. He mentioned that the company has played a pivotal role in establishing huge energy saving in large number of industries with the help of highly skilled manpower backed up by state-of-the-art microprocessor based instruments.



Shah then spoke about two case studies i.e. Motor Load System in Small Scale Industries and Lighting System in Small Scale Industries, focused on energy efficiency. He summarized the case studies and mentioned that in the motor load system case, based on the measured parameters, the company was recommend replacing the existing motors with high energy efficient motors. As a result of implementation of their recommendations, the relevant company is saving close to Rs. 35 lacs per annum. Thus, the case studies strengthen the argument that companies do benefit if they implement steps to ensure energy efficiency.

Vinod Gadvi, President, Ashapura Bahulaxi Charitable Trust (ABC Trust), Kachchh, delivered a presentation on an innovative initiative of installing wind turbines for generating electricity in Bhadreshwar village in Kachchh district (Kutch), which has immensely benefited the fisherman community as they use to burn kerosene lamps to sort fishes at night.

Gadvi mentioned that Gujarat has become number one state of India in wind power generation, and currently produces 1192 MW power from wind mills set up in coastal areas and the State has a potential to produce 7000 to 8000 MW. Gadvi emphasised that the project area is a coastal area and sufficient wind speed is there for the power generation during major part of the year. He shared with the participants that solar panels are costlier than wind power and maintenance costs are very low.

Gadvi concluded his presentation summarizing the expected outcomes from the project:

- Beneficiaries will save money (close to 20% of their monthly income)
- Children are able to study at night also
- SHG formation of the beneficiaries will inspire the female member for any other income generating activities
- Improve overall living standard

Jaskan Chaudhry, President, Motibhai Chaudhry Charitable Trust, Mehsana provided examples where by changing the mindset and practice of consumers, energy has been saved. In one of the example he elucidated that by making small artificial recharging well near the river bed, the quality of water has been improved and the water table can be recharged. This has resulted into less energy consumption by farmers to run their pump-sets for irrigation. He also shared that solar powered pump sets have been installed in some villages which has reduced the operational and maintenance cost for pumping water.

Floor Discussion

Omkar Jani reacted to the presentation delivered by Gadvi and inquired whether they have received financial support from funding agency or the government and to this, Gadvi responded that they have been granted support only by NABARD and they are in need for further financial support. Most of the experts were of the opinion that such a successful project should not find it difficult to raise funds and if organisations such as CUTS and VIKSAT, could provide them support in raising such funds, given their contacts with relevant Government departments.

Chander Mohan shared his experience of working in the field of solar energy in 80s' where he mostly worked in the interior areas of India to provide energy solutions.. He suggested that it is the responsibilities of the bureaucrats to take the initiative of identifying relevant projects and promoting innovators from rural backgrounds.

Gopichandran added that such proposals and activities in the rural areas should be documented and it should be taken into consideration for giving small grants for promoting similar kind of initiatives. **Udai Mehta** suggested that the DREC project might be able to document such cases while undertaking perception survey in form of a compendium and then release the same during the National Conference.

CONCLUDING REMARKS

Udai S Mehta delivered the concluding speech and thanked all the participants, experts, VIKSAT and SSEF for their support. He summarised some of the suggestions such as documenting best practices from the field in form of case studies can be explored within the ambit of the DREC project. He mentioned that the current project has a specific goal i.e. creating awareness among the civil society organisations and this may not solve every problem that consumers encounter in the energy sector.



KEY ISSUES

The launch workshop provided right opportunity to initiate a discourse on issues pertaining to RE and DSM among civil society organisations, policy makers, researchers, business community, entrepreneurs and academia in Gujarat. Some of the key aspects that arose during the workshop are, as follows:

- Responsible use of energy has to come from within the consumers rather than expecting to be managed by external agents.
- Education plays a critical role in making people aware about issues pertaining to RE and DSM
- People working in the public domain must fulfill what they promise to stakeholders
- There is a strong need for policy framework which puts issues of RE and DSM on fast track as compared to other countries.
- CSOs can play effective role in sensitising consumers about the requirement of RE and DSM and how they can play effective role as a partner in the entire initiative
- It is important to take small steps which are effective and result in greater changes with regards to energy efficiency.

ANNEXURE I
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