

## **Solar for Education**

### **Scoping Visit to Bhilwara and Chittorgarh District**

#### **March 9-10, 2017**

#### **Report**

In April 2016, CUTS International, in collaboration with Friedrich Ebert Stiftung (FES) India, commenced a project called Green Growth and Energy Transformation (Grow-Get) to create an implementable strategy for energy transformation in the state of Rajasthan and West Bengal through fostering dialogue among various stakeholders to identify and align their common interests by creating social coalitions, called Seed Communities. Through deliberations and discussions, the seed communities identified **Solar for Education** was identified as the catalytic project to bring energy transformation in rural areas of Rajasthan.

As part of the initiative, Scoping visit was conducted in Bhilwara and Chittorgarh District of Rajasthan to understand the potential of the idea on the ground and to understand the challenges at the grassroots.

#### **1. Jan Sabha, Triveni Block, Bhilwara-**

Background and Purpose: To understand the need and scope of Solar in the block.

##### Key highlights:

- ✓ MGG arranged a *Jan Sabha* where people from various sectors came and we discussed the need for Solar in Area. This includes farmers, teachers, *Sarpanch* and SHG's workers.
- ✓ Stakeholders mentioned that electricity supply in the block is 5-6 hours in which is 3rd Phase and 18 hours in 1<sup>st</sup> phase. Same was noticed in Kolkata.
- ✓ Stakeholders mentioned that some households are electrified because of the high-price of electricity which is unaffordable for them. SHG workers and Former *Sarpanch* also mentioned that all the *Aaganwaris* are un-electrified in the block.

#### **2. Bank of Baroda Branch, Mandalgarh**

##### Key highlights:

- ✓ The purpose of visiting the bank was to understand the will of manager as well as the mandate of Bank of Baroda Gramin Bank. This bank is a new branch in the block. The Manager of the bank was a progressive manager and was interested in the project.
- ✓ The manager mentioned in his conversation that mandate focus on giving loans on the solar initiative. The bank is already giving money for Solar Pumps. Regarding the project- Solar for Education manager mentioned, giving loans to

public school is a challenge, whereas, he mentioned if demand is generated, giving loans to private school for solar will be the priority for his bank.

### **5. Meeting in Farm Producer's Organisation (FPO) Office**

Purpose: Understanding the functioning of FPO's.

#### Key Highlights:

- ✓ Stakeholders in the meeting agreed that FPO's links the farmers to markets and getaways with mediocre. CEO of "Adhbud Santra" FPO mentioned that FPO's are giving bargaining power to farmers by pushing for a bottom-up approach in Agriculture sector.
- ✓ Stakeholders mentioned that farmers in the Mandalgarh block are using solar because of two reasons, One it takes 7-8 years to get agriculture electricity supply otherwise electricity is expensive and other is that, per day costs of diesel is also not pocket-friendly . Solar Pumps are more effective and efficient for farmers in this case.

### **6. NARABD District Development Manager**

#### Key Highlights :

- ✓ During the conversation, the DDM, NABARD mentioned that for any business model to become successful the repayments of loan is very important. The idea of a Tripartite Arrangement between Government, Bank and NGO was cross vetted.
- ✓ We also discussed potential job opportunities and maintenance of solar systems and other products by the local SHG's women.
- ✓ While discussing about the solar panels on Atal Seva Kendra, it was agreed that non- functioning of Solar enabled Atal Seva Kendras have potentially reduced the acceptability of solar among village households.
- ✓ In order to facilitate subsidies in Solar, NABARD now gives advance loan to banks for solar subsidies based on the demand made by bank in the starting of the financial year. This is about 35% of subsidy which is mandatory for bank to give on loans for solar products.

### **7. Shankar lal Gadri and Yogesh Dadish from Nehru Yuva Kendra**

#### Key Highlights :

- ✓ Shankarla Gadri heads Nehru Yuva Mandal of Bhilwara District. He promotes the idea of solar and assured full support from his side. He said Nehru Yuva can become a platform to spread the word about the project.
- ✓ He also pushed policy advocacy for schemes like Solar Sakhi. Clusters can be created and the project Solar Sakhi can then be implemented. Following up with the same idea Mandalgarh and Nagri was decided as clusters from the two districts.

### **8. Block Development Office, Chittorgarh**

Venue: Panchyat Samiti Office, Chittorgarh

#### Key Highlights:

- ✓ The Block Development Officer mentioned that the administration is also focusing Community participation model for implementing schemes. He gave reference of Nandgiri Yojana.
- ✓ The reason of the failure of solar systems on Atal Seva Kendra mentioned by the BDO was that all the components of the system are sourced by different agencies (panels by one, battery one other , etc). Therefore, the ownership of the systems could not be established. This has also impacted the operations and maintenance of the systems. The solution proposed was that women can be mobilized and involved in the process of maintenance and repair etc.
- ✓ In order to acquire finance for solar installations, relying on MLA funds may not be an a smart option because, MLA 'lad is sanctioned through Panchayati Raj Ministry, and through the same channel money is only sanctioned when tender will be realized by the BDO Office. This is will make the process way longer and less efficient.

### **9. SDM Office, Chittorgarh**

#### Key Highlights:

- ✓ SDM, Suresh Khatik focused more on the demand for hilly and off-grid area. Few areas suggested to start the project are - Phal, Nagri, Khenjar, Semlia.
- ✓ Mr. Khatik was very much interested in the project and asked us to focus on one cluster to make it a proof of concept. Nagri, being a village adopted by the MP under scheme Adarsh Sansad Gram can become an ideal cluster.

### **10. PECO Projector meeting:**

#### Key Highlights:

- ✓ PECO Projector is an initiative by Vedanta Foundation, to implement the Smart classroom concept in government schools of Chittorgarh District. They have selected some 22 schools in the district. These projector are electricity run, but can work on battery for 3-4 hours when charged fully. This feature addresses problem of irregular supply in the government schools.
- ✓ The host school was in Nimbada village which alone has raised INR 20 lakhs for toilets, computers, pathways, and water cooler from community participation. The same school was awarded by PM, as Swachh Vidyalaya in the year 2016.

### 11. Sarpanch Panchayat Samiti, Village Bassi :

#### Key Highlights:

- ✓ A sabha was organized in panchayat samiti office of Bassi panchayat, where all the relevant stakeholders were present. The conversation about Rajasthan as a solar rich state was initiated and potential to use solar as a source of energy in the un-electrified area and areas where there is irregular power supply.
- ✓ Nagri was highlighted as a potential cluster for installing solar solutions and it is also the aadarsh sanad gram of Member of Parliament CP Joshi.
- ✓ All the stakeholders discussed about electricity need in schools. Most of the children attends Private schools ( Secondary) with only few kids going to Public Schools. They also raised their concern on un-electrified *anganwaris*.
- ✓ Lack of energy access in Nagri and Bassi Panchayat is impacting the economic activities of the area like agriculture, cooking and stitching activities of SHG's.

### 12. District collector, Chittorgarh

#### Key Highlights:

- ✓ The District Magistrate (DM) was very welcoming to the idea of Solar as he himself has started work on "one Million solar" project (which has now crossed 7 million) through district administration office in Dungarpur. He explained model of 3 phases in 3 phases -
- ✓ Microfinance of the project consisted of 50 % funds from MNRE + 30% CSR+20 % Individual money or community Participation.
- ✓ 5 solar shops were started to address the maintenance needs through Mudra Yojna. KWatts Solutions is providing training to women.
- ✓ While speaking on dead example of Atal Seva Kendra, the DM suggested it can be revised through foot soldiers, and MNRE spread awareness, repair and maintain the systems. Promotion and parallel working of Surya Mitra (PAL to read about it) scheme of MNRE can revive the systems.

- ✓ DM in Chittorgarh has started a model of development which is women centric and DM calls it – “Pink Revolution: In this revolution he has partnered with few NGO’s. Under this initiative, following actions have been taken:
  - In Education Sector, it facilitated Enrollment of Girl Child, Partnership with Udaan to educate girls
  - In the Health Sector, facilitated Mother and Child care in partnership with Sarthi NGO and Earth Foundation
  - In Livelihood Sector, Rajiveeka also includes solar, Sanitary production for menstrual hygiene and community radio service is started in Chittorgarh.

### **13. Khet Khalihan, Chittorgarh**

#### Key Highlights :

- ✓ The founder, Nishant Bhagwati , mentioned that demand, production and promotion of solar is increasing, yet the consumption is constant from last 10 years. According to him solar is the need of rural population and is as important as water, because maximum population is engaged in agriculture.
- ✓ In order to electrify school with basic facilities of 5 rooms, 5 tube-lights, 5 fans, 5 computer, one RO and water cooler, the capital cost may be around INR 1.4 lacks.