Solar Water Pumps with Water Metering

A Case Study

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Introduction

AWARE with support of Action Aid is working in 17 villages of Chachro Taluka under a Local Rights Program (LRP-38) for 2010-2017, and use to analyze social problems of particular area of Tharparkar. Participatory Review & Reflection (PRRP) sessions are conducted in all villages of LRP to assess problems as well as its accountability of LRP. Reviewing of PRRP sessions one thing was common and that was water availability and access to water problem, which is cause of many social problems of Tharparkar, by looking these aspects AWARE team decided to set a model in particular area of Tharparkar as all relevant departments could follow it. To do so, a concept of Solar Water Pump came out, which consists of solar water pump with water metering and live fence. AWARE Team implemented said project in 2013 with support of Action Aid in two villages (Village Jan Mohammad Samoo UC Tardos and village Mureed Khaskheli UC Saranghiar) of Taluka Chachro, District Tharparkar.

Process of implementation:

Initially before launching of scheme a meeting was conducted with CO of village which already existing in village Jan Mohammad Samon. Objectives, importance, and responsibilities of CO and Villagers were shared before launching of this scheme. So It was decided that;

- Each house hold will have to install a meter which will measure amount of water, and user will be charged at the rate of 20 paisa per liter
- In case of stolen, caring, maintaining of solar pump, pipe damaging or in case of other situation which causes damage to solar pump than community will be responsible of it and to avoid such mishaps an operator will be selected and trained and he shall be responsible for issuing bills, collecting user charges and taking care of scheme

User Charges Collection:

As discussed above each family have given a water meter, in which each meter costs 20 paisa per liter, now it depend upon family how much water they use. Community Organization will open an account for deposit of bills, that will be pole of village, amount would be used for maintenance of solar pump if needed.

Looking after, role of operator:

Community Organization (CO) of village will select a single individual to operator solar pump, who will be given key of system, and will be responsible for each and every thing available at green model school and he will be responsible for maintenance and informing of any kind of problems regards with solar pump to community, and community will decided further to deal with problem.

Role of community:

Community through its CO will participate, share views/opinions to improve condition of village and sustain the initiatives. As discussed above that each house hold will pay 20 paisa per liter and liters are count by water meter reading of each house hold separately. If any case of maintenance found than community will bear it by using poll/amount collected in CO account. And this is highly announced that

this scheme is for every individual of village and nobody can insist/assume/try to overtake and use for wasted interests.

Benefits of scheme:

Dragging out underground water is really a big issue in Tharparkar, a single house hold has to spend three to five hours of three individuals to fetch water for human consumption and watering animals. Solar pump has proved better in terms of facilitating villagers to be free from raring animals which they use for dragging out water, time and energy. Villagers also found using spare time in other constructive work and earning to support their families.

Children didn't go school due to such problems of water fetching; now they have opportunity to go to school regularly. Health & hygiene of children and women was another important aspect that is covered by this scheme because previously limited access and uneasy practice of water fetching was an obstacle in getting daily bath and maintaining health and hygiene.

Women use to fetch water from well towards their homes, it is very difficult to deal with it, usually women spend more than 5 hours daily, which is main cause of lack of nutrition, because they spend more time and they need more energy, but in real life they don't have enough energy to face this challenge.

Time and energy saving:

Three individuals had to spend around 5 hours daily in fetching water, specially children and women. Before fetching water, children have to search animals which are surroundings of village, it also took time to come with animals. After this initiative of Solar Water Pump children and women are free, children can do their school home works and women can work on handicraft or something else which supplements income of family; directly or indirectly.

Burdon reduced of animals:

If a single family has three donkeys or one camel than they are able to fetch water form well, rather they will have many difficulties to fetch water. After this initiative many families are free from animals, they can use animals fertilizing process of land.

WASH Condition of Children & Women:

Due to lack of water, Thari people don't consume more water for taking bath and wash. Usually they are found taking care to save water, because it's very difficult to manage water, even they don't care personal hygiene which cause many other health problems, but now villagers are able care their personal hygiene as well as women and children can use water for their daily activities.