

# Association for Water, Applied Education & Renewable Energy (AWARE)

[www.aware.org.pk](http://www.aware.org.pk)

## AWARE Experiences in Solar Energy

### 1. Introduction:

AWARE has good experiences of promotion of renewable energy; solar wind and biogas in District Tharparkar and Umerkot. Solar projects are implemented for schools, support to women artisans of Thar for increasing their working hours, telecommunication and as source of livelihood. The focus remained to add value in education facilities/schools by running fans, light for children learning resource centers and LED lights installation in homes of students and batteries charging done at school; this was also found an innovative way of retaining enrollment of children in Thar and economic empowerment of Thari women. The art and work of Thari embroidery is unique and this has high potential of marketing and make financial benefit to women of Thar.

### Rationale:

In Thar 98% Govt primary schools have no facility of electricity and in the same vein no drinking water and WASH facility is available. In the result low enrollment and attendance was reported especially in girl's schools of Thar. There is thin network of grid connected electricity so it is very difficult to provide electricity and water facility to every school in Thar. Missing facilities cause absenteeism of students.

Telecommunication network started in even far flung areas of Thar Desert in beginning of 2000 but charging cell phone was an issue.

Every Thari women has skill of stitch and patch work but normally they do for personal use. There was need to support women artisans in increasing their working hours by providing light in night time.

### Methodology:

AWARE had started solar PV systems promotion since 2004 and that system was donated by a private company. Later on this was realized that solar PV could be related to livelihood, create enabling environment in schools, support women artisans and provide lamps batteries to school children to retain the enrollment. AWARE took efforts to promote the traditional skills for as per market needs.

In schools, school management committee (SMC) is responsible for maintenance and taking care of solar system. For that purpose SMC representatives have been trained to maintain and replace fuse etc if required.

For women artisans stand alone systems are provided and for that recommendation is given by the women cluster of that particular village. Once the solar PV is installed the hands on training is given to artisan woman and she is responsible to take care of.

Disabled persons are provided solar systems that are plug-in systems by which they earn at their own instead of being burden on other family members. They charge batteries of cell phones and charge Rs.10-15.

Resources mobilized from Government of Pakistan, private companies, donor organization and philanthropists.

**Major Objectives:**

- To add value in schools and create enabling environment
- To support Thari women artisans for increasing their working hours
- To uplift Thari women by changing their role and providing options to earn
- To support disabled (differently abled) persons to be self employed and save them to be burden on society

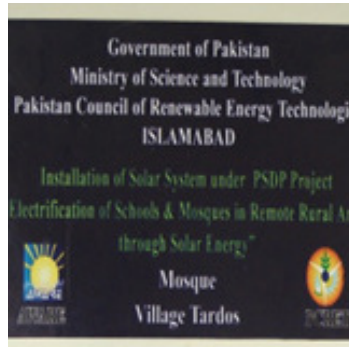
**Achievements:**

- 07 schools are electrified through solar PV systems
- 38 students provided batteries/lamps system
- 50 women artisans are provided solar PV system
- 07 disabled persons have been provided PV systems to earn

## Snap of different projects



Students reading in CLRC after sunset  
@ village Manjhi Rind



Sign Board



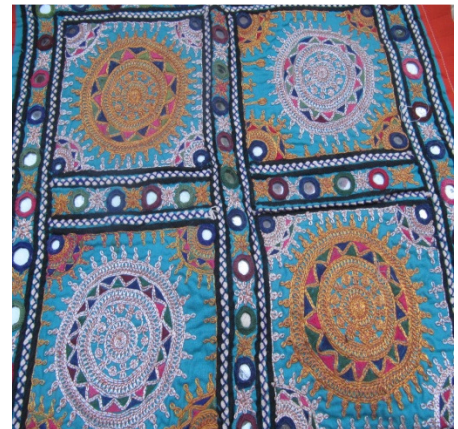
Student reading at home



Solar PV panels



Woman busy in embroidery  
work



A piece of Thari embroidery work



Woman busy in patch work



Beneficiary with  
telecommunication stand alone  
system



Another woman busy in pact  
work – rilli a tradional quilt of  
Sind