

“

T'S like a chain reaction," says Gargi Banerji, sitting in the Gurgaon office of Pragya, a development organisation that works in the five Himalayan states. She is talking about an unusual project they took up and the positive chain of events it has brought about.

The project: Setting up an 18 odd metres high solar wind hybrid system windmill of 2.1 KW.

The location: Lossar, a tiny village at approximately 4250 m above sea level, considered the gateway to Spiti Valley, on the way to Kunzum Pass. Also, the highest a windmill has probably ever climbed!

The setting up of the windmill changed a lot of things



Photographs courtesy Pragya

Catching The Sun

Why did a remote village like Lossar, with just about 60 households, need a windmill? The answer lies in the lack of power supply to the area, making life extremely difficult for the people living there. Deforestation was the natural fall-out as people depended on fuel wood for their heating and lighting needs. The situation becomes worse in the freezing winter months, with each household consuming about 35 kg of wood on a daily basis. Also badly affected were the indigenous arts and crafts of the area.

Many weavers in the village had to sit idle as there was no power to run their looms.

When typical solutions like solar and hydro energy proved futile (In winter, the turbines in

Lossar, a remote village, situated high in the Lahaul and Spiti district, gets a windmill that will be an integral part of its ecological development.

By Reshmi Chakraborty

MILL IN THE MOUNTAINS

hydro projects would become snowbound), engineers from the Pragya team decided to combine solar and wind power. One of the big advantages of solar wind hybrid systems is that solar and wind power productions are harnessed together, enhancing the reliability of the system. While the sun shines bright during the day in cold desert regions, the wind speeds are also extremely high. Many a time, the sun may play hide 'n' seek but usually, there is always plenty of wind. The windmill is still a pilot project, but it has already started making small but significant differences in the lives of the villagers at Lossar.

Winds Of Change

So how did one source of renewable energy bring about change in a remote, high altitude village? For one, it bonded the community together. The Pragya team worked with Vineet Rawal, an expert on installation of wind and solar systems from Mumbai. They surveyed the area and finally settled on Lossar, not just for its location but also for the larger number of weavers in the village. "Ninety per cent of the work was done by the locals," says Bhaskar Reddy, an agricultural engineer with Pragya, who recalls how the entire neighbourhood turned up to help with the work despite it being the harvest season. Local methods of insulation were followed during the process of installation and the community centre was offered to the team by the villagers to set up space for the windmill's controls (the batteries that would be recharged in sunlight) as well as a small weaving centre for the village women. The local reaction ranges from enthusiastic to amazement. "People made us feel welcome from day one and were very receptive," says Bhaskar and the other team members, Mala and Kalyani. Not without reason. The setting up of the windmill changed a lot of things. New looms were installed at the weaving centre, a cause of much excitement among the women. They are now registering to set up a cooperative. Yet Pragya has opened another facility, a rural library, for the villagers, with the help of the district administration. The Public Health



The locals were very receptive to the idea of setting up the windmill

Visiting Cold Deserts? Be A Responsible Tourist

- Do not buy antique pieces from local villagers, however attractively priced it may be.
- Encourage local art and craft museums.
- Conserve energy by switching off lights and fans in your hotel room when not required and by limiting your use of hot water.

Centre would also benefit from the energy source in case of emergencies. Some of the locals have also been trained to monitor the windmill.

Back in Delhi, the team is upbeat about the project but feel the real test will be in the winters to see how well the windmill work in temperatures that go below the sub zero degrees. What thrills them most is the change in the way of life in Lossar village brought about by the windmill. "It has helped to cater to the energy requirement in a high altitude and neglected area like Lossar. It has also brought the community closer and made them aware of alternative energy resources," says the team. The members hope to spread such sources of renewable energy throughout Spiti and other cold desert regions now. More than anything, they hope for a day when the pilot project can grow big enough to provide energy to each house in the village.