



Jamyang Foundation



## Water

The Himalayan mountain region is the source of much of India's water, providing electric power and for irrigation systems and domestic use throughout much of the Indian subcontinent. Unfortunately the flow of water to the people who live in the Himalayan region itself is far from smooth. The snows that cover the Himalayan peaks in winter melt and flow into streams and rivers that run swiftly to lower altitudes, where they provide needed water to millions of people, but there is a lack of infrastructure to ensure an adequate supply of water to the inhabitants of the Himalayas themselves. Although the Himalayan region provides watershed for much of India, the local people mostly live in poverty, due to subzero temperatures, poor soil, a very short growing season, and the extreme difficulty of accessing markets.

From 1999 to 2002, there was little snow during the winter. The lack of snow resulted in a lack of water for irrigation in the ensuing months and, thus, a serious drought in the region. A lack of water for crops results in great hardship to the economically marginal people living in Himalayan areas such as Spiti, Kinnaur, Lahaul, Ladakh, and Zangskar. In a few places, the Indian government has helped construct irrigation ditches that conduct water from the river to downstream agricultural lands. However, the few stretches of irrigation channels are inadequate, leaving thousands of people without water for their fields.

The Sutlej River runs through the region of Spiti, home to 20,000 ethnically Tibetan people. When the winter snows melt, the river swells and swirls with an abundance of pure, icy water that is ideal for irrigating the fields planted in barley, high-altitude wheat, and peas. In the absence of pumps, however, there is no way to lift the water from the river bed up to the agricultural lands. During the four years from 1999 to 2002, the people's crops died in the fields for lack of adequate irrigation water. Just a few hundred feet away, they could see an abundance of water flowing from the mountains of Spiti to the lowlands of India, but they had no way to pump the water up to save their crops.

Dorje Tsering, a 47-year-old former monk, is seriously concerned about the welfare of the people in his native Spiti. Since 1989, he has been involved in several innovative projects in education and economic development in the region. In 1992, he raised funds to construct Yangchen Choling, a monastery and cultural center that provides traditional learning to people in the village of Pangmo.

In 1995, he raised funds to construct Sherab Choling Institute, a second monastery and cultural center in the village of Morang. In 1996, he raised funds to construct a center for the manufacture of traditional handicrafts to employ local women. In 1997, he expanded this center to include a dispensary and dairy that employ additional local women and provide badly needed medical services and nutrition to people in the village of Hull.

Dorje expressed frustration at the lack of government assistance to the people in Spiti during the extended drought. The lack of adequate water resources is a source of great anxiety all over India, and especially in subsistence agricultural areas like Spiti. The construction of a water pump to lift water from the river to irrigate the fields in Spiti would require only a minimal financial investment, but due to the remoteness of the region, cultural and language differences, as well as political corruption, requests to government officials remained unanswered. The only way to correct the problem is for the local people themselves to install a water pump to lift the water to their fields. The people could then form a “water user’s association” to administer the distribution of water to local villages in an equitable way. The estimated cost of a pump to bring water from the river to the villages around Pangmo, Morang, and Hull is \$6,500.

Local water management makes sense both economically and socially. When people own and manage their own water resources, they have the incentive to make strides in both economic and community development. Easier access to local water resources will enable the people of Spiti to better manage their fragile mountain ecosystem, and contribute greatly to local economic and community development.