



Climate Change and Water Shortages in Himalayan Villages: Help Fund 6 Artificial Glaciers in Ladakh - £10,000 each



Water Crisis in the Himalayas

In Ladakh, the annual average rainfall is 10cm (4 inches) and often there is no rainfall at all. This causes a major water crisis across the country. Ladakh's population is 250,000 but this is increased by a further 250,000 tourists a year, visiting between the months of April and September, which puts enormous pressure on the water supply of the small frontier town of Leh, the capitol. But water shortages in remote high-altitude villages are even more acute.



Because of climate change, water runoff from the mountain glaciers is receding and this means any water supply to remote villages becomes further and further away from the village itself. This causes a major challenge to the villagers who are unable to transport the water from the glacier and streams to their villages for domestic use, their animals or to water the crops. In most areas this is critical as, because of the severe weather pattern, they can only grow one crop each year.

The Solution: Artificial Glaciers



Due to the ingenuity of a local engineer, a simple solution to the problem has been discovered. Artificial Glaciers can be created in the winter by diverting water melted by the sun during the day, down from the glaciers and high mountain snow fields in pipes, to an area close to the village in small stepped frozen lakes or to gullies between rocks. A sprinkler is used to shoot the water into the air. It freezes as it falls and turns to ice. During the winter it grows into an Artificial Glacier holding up to 500 tons of water (see main photo above).

In the early spring months, as the ice melts, the water is piped close to the village and is used for domestic purposes, for animals and for agriculture. The Artificial Glacier allows water to be available earlier in the year, allowing two crops to grow and surplus produce to be sold at Leh market to provide extra income.



We Need Your Help

There are many villages in Ladakh which need our help. Some, due to the lack of water, have been abandoned. Should water supplies be restored through an Artificial Glacier then the villagers could return to their homes. In June 2019, Lotus Flower Trust management met with Ursi Village representatives, in desperate need of water, to discuss how to help them. In 2019 LFT funded an Artificial Glacier here - an award for this work was received from the Indian Government. Its success triggered the funding of a further three glaciers to be installed at Lamayuru, Youlchung and Zomal villages. The Trust has subsequently

been asked to fund Artificial Glaciers in the villages of **Kukshow, Kulum, Nyraks, Phyang, Takmachik and Umla**, all costing around **£10,000**. We are looking for funders to support these villages.

Currently there is little support being offered locally, nationally, or internationally for Artificial Glaciers. Lotus Flower Trust is one of the first international charities to be supporting this excellent work which will sustain so many lives and prevent mass population migration.

Expenditure Example:

1000 meters of piping	£5,000
Insulation materials to heat pipes	£1,500
2 x 1000 litre water tank	£500
Sprinkler gun	£200
Transportation	£800
Safety equipment	£400
Total	£8,400

LFT Costs:

UK Administration 10%	£800
Indian Project Management 10%	£800
Total	£1,600

Grand Total **£10,000**
(Costs are all approximate)



Zomal villagers installing pipes for their Artificial Glacier

Can you help us change more lives forever?

