Mono delivers water to the top of the world

Background

In the mountains around Nepal there are numerous mountain top villages without easy access to water. Typically the only water source is a fresh water spring part way down a steep mountain side.

Carrying heavy loads of water up and down treacherous paths, is a task that usually carried out by women and children, requiring them to make the return trip to the spring to fetch water at least four times a day. This task can take up to 3 hours a day as it is impractical to carry more that 10 litres at a time due to the terrain. In wet conditions this task takes much longer as the tracks become slippery, making them more dangerous and difficult to negotiate.

Pump Installation

The Nepalese Government in conjunction with the European Union (EU) established a program to deliver water into the remote villages nestled in the Himalayan mountain range.

When considering a solar system that would suit the Himalayan environment various factors had to be taken into consideration, such as the lack of power, the terrain and distance that the pumping system would need to cover.

The systems had to be installed with the array a long way from the pump and storage tank making the automatic tank filling feature a necessity to avoid having to run long control cables.

Electricity is not available in these mountain top villages, therefore, in order to solve the problem Mono Pumps were approached to come up with a solar solution that had the capacity to pump over 150 m.

The Mono Sun-Sub pump, with a 1200 Watt solar array, was selected for this application. The Sun-Sub will lift the water 150 m up the mountain side in a single step and deliver in excess of 20,000 litres of water a day.

The high head capabilities of the Mono Sun-Sub pump is ideally suited for remote mountainous locations such as the Himalayas. The Sun-Sub was selected for it's high lift capabilities, ease of maintenance and auto tank filing features.

For more information please contact Mono Pumps at global.solar@nov.com or visit www.monopumps.com



A 10 year old boy struggles up the mountain before the pump was installed.



Pumping water above the clouds.



Solar Pumps installed near the top of the world.

