

## How the irrigation system works

Water is drawn down from the mountain river in channels that local people dig themselves. The water supply is plentiful, but until now it could not be accessed.

Small pipes take water from the channels into the fields, some laid along the contours as 'carriers', others running down the slope as 'sprinkler pipes'.

Sprinkler jets benefit from changes in pressure within the pipes: the lower down the slope they are, the higher the pressure and the farther their range becomes.

Concrete linings make sure that the channels carry the water cleanly and safely, and are designed to be very long-lasting.

Many of the channels follow the lines of the ancient waterways used by the Incas, once renowned for their knowledge of water technology.

Sprinklers are positioned and angled to achieve the best coverage for each field, and even for each individual crop.

<i>June</i>	<i>July</i>	<i>August</i>	<i>September</i>
Soil starts to look dry now, and any vegetation begins to wilt.	Any remaining crops will be struggling badly by now, and stored food will be used.	Weather cold and dry now. There will be no grass so milk yields will drop.	Fields bleached by cold and drought. First signs of weather changing in the air.
Local people will be working with Practical Action to start digging the main channels, near the river, that will be the source of the irrigation water.	By the end of the month, we'll be halfway through the building work, and it will be time to line the channels with sand and concrete, and start laying the side pipes that lead to families' fields.	Simple sprinkler systems will need to be installed now, and local people trained to keep the whole system running, and deal with any problems for themselves.	Work must be completed now, before the mist and rain set in again, making the mountainside too difficult and dangerous to work on.

[http://practicalaction.org/?id=peru\\_irrigation](http://practicalaction.org/?id=peru_irrigation)