

# Climate change in Nepal

## Teacher notes

**Climate change in Nepal**

Temperature and rainfall are increasing faster in Nepal than anywhere else in the world.

Higher temperatures are melting the glaciers. This increases the risk of flooding and landslides which has a massive impact on people's lives.




Recent landslides in Nepal

Over 400 million people will be affected in this region

Lakes in the Himalayas collect water from melting glaciers. Over 40 of these lakes are almost overflowing and may burst in less than 10 years

Melting glaciers in the Himalayas are causing lakes in the region to fill to dangerous levels, creating an increased threat of disastrous floods, droughts, land erosion and biodiversity loss. A report in Nature Magazine revealed that, as a result of global warming, the incidence of glacial

lakes bursting their banks has increased ten-fold in the past two decades. Temperature in the region have increased by more than 10C recently, and are set to rise by a further 1.2 0C by 2050. Bhutan government officials have reported that 24 glacial lakes have reached "potentially dangerous" status, and authorities in Nepal report a similar number of lakes at danger level.

Villagers expect a small flood every 10 years or so, but the floods are becoming more regular and more common. A heavy downpour in 2006 washed away houses, fields, terraces and the old irrigation systems

**Villagers have noticed changes**



Wild pigs in the forest now have their young earlier in the year



The days are hotter and some trees now flower twice a year



Some types of rice and cucumber will no longer grow where they used to

Find out how Practical Action is working in Nepal to help communities cope with climate change

"It is getting more and more difficult to predict the weather - especially when it will rain. We used to have a little rain each month but now when it rains it is much heavier and lasts for longer. This means that the crop yields are getting less" says Tekmadur Majsi.

**Practical Action in Nepal**

People in Nepal are learning how to grow new crops using terraces and trying to reduce deforestation which can lead to landslides.



Farmers need rain to grow rice, which is the main crop in Nepal. If it rains too much, the rice seedlings get washed away.

The village in Nepal are prone to floods and landslides - harvesting can help.

Daxendrol Kaidigardi, a farmer in the Chitwan valley used to grow rice. He was taught how to grow fruit and now grows bananas, which survive in the new climate

**Gravity ropeways in Nepal**

Ropeways or pulley systems are built by communities in remote areas to get goods to and from market quickly.



Villagers can put their produce in the basket and hoist goods up steep slopes and past landslides which have destroyed the paths.



The goods that arrive at market are fresher and not bruised so farmers get more money for their produce.

Quote from Dharma

"It takes two hours to get down the mountain trail to the main road, and during the monsoon, accidents are frequent (due to landslides). Now we have the gravity ropeway, the time saved means I can earn three times as much from selling my vegetables. With that extra money I can afford to buy farm animals, too."

These are examples of effective technology which help people to feed themselves and their families and therefore achieve a higher level of food security.