



Guatemala

Nicaragua

Niger

Mozambique

Bangladesh

Maldives

Guatemala



Climate impacts: hurricanes

- Hurricane Stan hit several Central American countries, including Guatemala, in 2005, causing severe floods and landslides.
- Many people were killed across the region, mostly in Guatemala where 1500 lost their lives in the disaster.

Adaptation methods

- Planting certain types of trees and grasses can help prevent landslides by creating 'living barriers'.
- Reforestation programmes can also help stop soil erosion and provide fruits to eat

Nicaragua



Climate impacts: hurricanes

- Hurricane Mitch hit Central America in 1998.
- Almost 1 million people in Nicaragua lost their homes
- Communities have received training in first aid, emergency evacuation, search and rescue and fire fighting. Community groups have learned how to plan and implement early warning systems
- Community emergency shelters have been built on higher ground

Adaptation methods

- Communities have received training in first aid, emergency evacuation, search and rescue and fire fighting. Community groups have learned how to plan and implement early warning systems
- Community emergency shelters have been built on higher ground

Niger



Climate impacts: drought

- Over three quarters of Niger is desert. The weather is very hot and there are powerful dust storms.
- In 2005 the **drought** was much worse than normal and 3.6 million people struggled to find enough food to live. That's more than the whole population of Wales.
- It is predicted that droughts in the region will be more regular and more severe as a result of climate change.

Adaptation methods

- Communities were supported to adapt to and prepare for changes in the climate by growing a wider range of crops
- Farmers learned techniques such as digging 'half moons' in the soil to help it absorb more water
- Community food banks were built to help families store surplus crops to support them through bad seasons

Mozambique



Climate impacts: soil, drought and floods

- In 2000 Mozambique was hit by 5 weeks of heavy rains which caused the Limpopo river to burst its banks, and flooded many regions.
- One of the worst-affected places was Chamanculo, a shanty town near the capital Maputo. The name Chamanculo means 'huge bath' because the ground there absorbs hardly any water.
- The people of Chamanculo had to leave their homes and move to a new place on higher ground to protect themselves from future floods.

Adaptation methods

- Planting trees can help to improve dry, desert-like soil
- Farmer training groups were set up to teach people which trees to plant, and how to care for them. Trees like orange and mango can survive well in dry soil.
- Certain types of plants can also act as living barriers to stop fertile soil and crops being washed away in heavy rains.

Bangladesh



Climate impacts: floods

- The regular monsoon rainy season is important for keeping the soils fertile and growing crops like rice.
- In 2004 and 2007 the flooding was much more severe than usual, affecting almost 5million people.
- As a low-lying country, Bangladesh is at risk from the increased floods predicted by scientists.

Adaptation methods

- Building homes, schools or evacuations shelters on higher ground, or on stilts, can help protect people from floods and landslides
- Community evacuation points can be identified, and evacuation plans developed, so everyone knows where to go in an emergency, and how to get there

Maldives



- Photos: Greenpeace/BBC

Climate impacts: sea level rise

- The Maldives are 2000 low lying islands in the Indian Ocean. It is predicted that sea-level rise could cause them to disappear within this century.
- More than 300,000 people could become climate refugees if their entire country is made uninhabitable.
- Sea level rise is eroding island shorelines, and salt water is contaminating fresh water sources and poisoning trees and crops.

Adaptation methods

- Protective sea-walls can help protect communities from erosion or storms
- Sea walls can be made from concrete, sand bags, or even by reclaiming and building up sand from the beach.
- Rain-water capture systems can help store fresh water above ground away from salt contamination.