PLANET TEACHER

Disasters

Natural disasters – such as earthquakes, floods, hurricanes and drought – can cause havoc wherever they happen in the world. But the stark reality is that it's developing countries that experience the most disasters, are least prepared for them, suffer the most from them and take a long time to recover afterwards. Disasters can wipe out years of development and growth and use up vital resources.

Increasingly, people are realising that these natural disasters are not so natural after all. Deforestation, increased urbanisation and global warming all make these disasters much worse.

The activities in this Planet Teacher topic explore the effects of two disasters – an earthquake in El Salvador and a flood in Mozambique – and how poor communities recover from, and can be better prepared for, such events.

Although these two disasters happened a little while ago, they are typical of situations that keep recurring and so are valuable situations to explore.



Helicopters rescuing people caught in floods in Mozambique

Introductory activities

- How would pupils feel if their homes were destroyed by a fire and they lost all their favourite clothes, toys and books? Tell pupils that thousands of children lost their homes and much-loved possessions when an earthquake hit El Salvador in central America in January 2001.
- Read the pages about the El Salvador earthquake and Ludwin's story on the Global Gang website. Show pupils where El Salvador is, using a map or globe. You could explain more about the country using the background information (see page five).
- Explain that El Salvador is a poor country and so it takes people a long time to recover from a disaster like an earthquake. Ask pupils what other natural disasters they have heard of. You could refer to any relevant recent news stories. These events have been called natural

- disasters because of a belief that they just happen it's the way the world is. But recently people have realised that some of the things that we do to the world probably make some of these disasters worse, and make them happen more often.
- Give a brief explanation of global warming. You can find one in the children's pages on this topic.
- Ask the children if they know any ways in which we can care for the earth to reduce things like global warming. You could talk about the '3 Rs' – reduce, reuse and recycle. You could try the 'How green are you?' quiz on the Global Gang website.



LESSON PLANS



ACTIVITY 1 Geography, Literacy

Aim:

 to help pupils think about priorities when responding to disasters

What to do

- Remind pupils about Ludwin's story and the earthquake in El Salvador. Ask pupils for a list of things that the earthquake has damaged and write these up. They can use information from the story and their own imagination. Help them think about what damage might have been caused, making sure you include the six areas on the activity sheet – hospitals, schools, roads, houses, clean water supply and place of worship.
- Ask pupils to think about Ludwin just after the earthquake. His house has been destroyed and all his family managed to save was their mattresses. He needs lots of things, but what is most important? Talk about the immediate need for shelter, food and water. After a disaster, agencies like Christian Aid work hard to meet these needs. Other needs might include medicines, blankets and equipment for the rescue teams.
- After the earthquake, Ludwin's village needs to be rebuilt. Talk about the six areas on the activity sheet

 why are each of these needed in a village? You could also ask if there are any other areas that it would be important to rebuild quickly.

- Pupils fill in the 'why are they needed?' column on the activity sheet from the conversation you have just had. Then they can discuss in pairs the order in which they think the work should be done. They can either number the areas from one to six, or more simply they can choose which would be their top three priorities and which would be their bottom three. Ask them to be ready to talk about why they have made those choices.
- Pupils give feedback, explaining their choices.
 Collate the results and see what the most popular options are. Point out that some activities can continue even if buildings are still in ruins. Some children in El Salvador went to school in a tent so they could continue lessons while their school was being rebuilt. A priest could hold services in a tent or another building if the church has been destroyed.
- Point out that in an emergency lots of help is needed from the government, from organisations like Christian Aid and from people overseas. Tell pupils that people from neighbouring Honduras sent help to El Salvador. In practice, different agencies might work on different areas of reconstruction once people's immediate needs have been met. Ask pupils to reflect on the exercise – did they find it easy or difficult and why? They can write their thoughts on the activity sheet.

ACTIVITY 2 Literacy

Aim:

 to write kennings about an earthquake (or another cause of a disaster)

What to do

 Introduce pupils to a kenning – a form of poetry from Old English where something is described without using its name. For example, what do they think is described by these kennings?

Water hater,

Mouse baiter,

Paw licker,

Whisker flicker.

Day sleeper,

Night-time creeper.

It's a cat! A poem made from kennings is a list of expressions about one subject. Each expression usually has two words each. They can rhyme pairs of lines as above, or in an A B A B pattern, or have no rhymes at all.

- For practice, ask pupils to write a poem made from four kennings about themselves, or about their best friend. The fifth line could be their name. Ask some pupils to read theirs out.
- Then pupils can then write a poem of kennings about an earthquake. To start them off, you could ask for a list of objects affected by an earthquake, and appropriate verbs like shake, rumble and

continued over

ACTIVITY 2 continued Literacy

break. Write these up on the board for inspiration. The final line of the poem could be 'earthquake'.

 As an extension activity, get pupils to write more kennings about the way people in El Salvador have responded to the earthquake, again starting with a list of appropriate nouns and verbs. The final line of this poem could be 'El Salvador'.

 Pupils could write their poems out neatly and decorate them to put up on a wall display alongside a map of El Salvador.

ACTIVITY 3 Geography, Art/Literacy

Aims:

- to help pupils learn about weather forecasting
- to create a flyer warning that a flood is coming

What to do

- Ask who knows what the weather is going to be like today and tomorrow. How do they know? Before modern weather forecasting methods were invented, people tried to work out what the weather was going to be like by observing things around them. Does anyone know any traditional methods of telling what the weather will be like? Answers might include:
 - -'Red sky at night, shepherd's delight; Red sky in the morning, shepherd's warning.'
 - Pine cones if open, it means dry weather is on the way; if closed, expect rain.
 - Clouds certain shapes of clouds mean rain is coming.
- You could video a weather forecast the night before or bring in a newspaper forecast. Were the forecasters right? Explain that weather forecasters collect lots of information from around the world. They measure the rainfall, wind speed, temperature,

- air pressure and humidity. From all this information, they are able to predict what the weather is going to be like and are usually fairly accurate. Pupils could find out more about weather forecasting from books and the internet.
- Show pupils where Mozambique is and read about the flooding there on the Global Gang site. Having accurate weather forecasts in places that are prone to floods is important and can save lives.
- Pupils should imagine that, like the primary school teachers in Mozambique who are flood monitors, they have to get an important message to their friends. How would they do it? Encourage them to be creative and make a list, for example phone calls, emails, calling round to see their friends, setting up a chain to pass the message on. What are the pros and cons? How many are available to people in Mozambique? How will having radios, bicycles and motorbikes help?
- Pupils then design a flyer that will warn people that a flood is coming. You could brainstorm together the information that would need to be on it.

ACTIVITY 4 Music/Literacy

Aim:

 to communicate the effects of a flood through an abstract musical piece

What to do

- Talk about how a flood might happen pouring rain day after day; rivers overflowing and bursting their banks providing a sudden strong rush of water; wind and mudslides; people trying to escape; and buildings filling with water and collapsing.
- Brainstorm watery and windy words and word patterns such as pitter patter, whoosh, shhhhhhhh, etc. What about the sound of buildings being pushed over by water, or people sploshing through

the water, or climbing to escape? These can be interwoven with other sounds into a shape poem.

- Explore sounds that can be made without instruments, such as claps and stamping.
- Use percussion and homemade instruments to experiment further with useful sounds and rhythms.
- Help pupils to create the shape of their piece, remembering that a flood will build slowly with rainfall, and perhaps have a sudden rush of water when a river bursts its banks. Floodwaters take a long time to go down so although the rain stops, the devastation is still there. How could they represent that in the piece?

ACTIVITY SHEET PLEASE PHOTOCOPY FOR PUPILS TO USE IN PAIRS



Names:	and	
Where do you start? An earthquake can destroy a whole village. Everything needs to be rebuilt, but where do you start?		
	Why are they needed?	Our order
Hospital		
School		
Roads		
Houses		
Clean water supply		
Place of worship		

Was it easy or difficult to decide? Why?

BACKGROUND INFORMATION



Disasters, development and global warming

Reducing the risk of disasters and lessening their impact is a vital part of development work. Disasters wipe out years of development and use up resources that could have been used for growth and social welfare. Across the world, disasters are getting worse and more frequent. We refer to them as 'natural' because it has seemed as if they just happen, but people are realising that deforestation, increased urbanisation and global warming mean that these disasters are 'unnatural' – caused or exacerbated by human factors.

Part of Christian Aid's work is to help people who are affected by disasters. Out of the last 14 disasters that Christian Aid has helped with, 12 have been the result of extreme weather. Cyclones are getting stronger; floods are getting deeper; droughts are lasting longer. It's the poorest countries that suffer the most. Out of every 100 people in the world who die as a result of a natural disaster, 96 of them lived in poor countries.

About El Salvador

Population: 6.5 million
Major language: Spanish
Capital: San Salvador
Currency: US Dollar

El Salvador is a tiny country in central America next to the sea. Its neighbours are Guatemala and Honduras. It is the most densely populated state on the mainland of the Americas and has had to cope with many problems in recent years. The civil war from 1980 to 1992 was caused by the huge inequality between the small, wealthy elite who ran the country and the vast majority of the population living in poverty. Since the peace agreement of 1992, El Salvador has also had to cope with Hurricane Mitch in 1998, earthquakes in 2001, and droughts in 2001, 2002 and 2003, followed by heavy rains. Most recently, in October 2003, renewed flooding in the San Salvador region meant that hundreds of homes were damaged or destroyed and thousands of people had to be evacuated from their homes.

Cutbacks have had to be made in education and health, and so the social and economic problems that led to war are largely unsolved. El Salvador has among the highest rates of crime and violence in the Americas.

Christian Aid in El Salvador

Christian Aid supports six partners in El Salvador who focus on women's rights, disaster preparedness, strengthening local organisations, rehabilitation after the earthquakes and helping those affected by drought. During the earthquakes, Christian Aid's partners were able to provide food, medicines, household items, clothing and materials for temporary shelters. Since then they have been working on longer-term solutions, such as housing and disaster preparation.

About Mozambique

Population: 18.8 million

• Major languages: officially Portuguese; also 33

local languages including Makua-Lomwe, Tsonga, Shona

and Swahili

• Capital: Maputo

• Currency: 1 metical = 100 centavos

Mozambique is on the south east coast of Africa, bordered by the sea to the east, Tanzania, Malawi and Zambia to the north and west, and Zimbabwe and South Africa to the south west. It is a country with many rivers and has Africa's largest hydroelectric dam. It has a hot, humid climate and lots of fertile land. Crops include maize, sugar cane, rice, tea and citrus fruits, and prawns are harvested from the sea. About 80 per cent of Mozambicans are farmers: most of them are women.

It was a Portuguese colony for just under 100 years and finally gained independence in 1975. The new government started to rebuild health and education services, but also had to deal with rebels backed by South Africa and Zimbabwe (then known as Rhodesia). This escalated into war, which lasted until 1992 and left the economy, education, transport and health systems in ruins. Since 1992, it has enjoyed a period of stability and growth. However, there were severe floods in 2000 and 2001 and then periods of drought in 2002. In 2003, Mozambique faced food shortages.

Christian Aid in Mozambique

Christian Aid supports six partners in Mozambique, concentrating on supporting community development, sustainable agriculture and income-generating activities. During the floods, Christian Aid distributed emergency aid as well as helping communities to rebuild their lives. The Christian Council of Mozambique took part in a food-for-work programme, providing food for people who helped to build dams and a school. They also helped people's spiritual needs.

Website: www.christianaid.org.uk Children's website: www.globalgang.org.uk