

READING PRACTICE

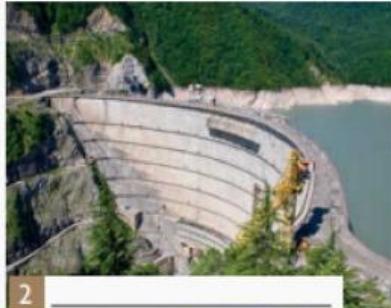
READING 1

PREPARING TO READ

UNDERSTANDING KEY VOCABULARY

1 Label the photographs with the words from the box.

dam tsunami levee flood barrier sandbagging hurricane



2 Skim read an interview with a disaster-mitigation expert. Decide which title below is the best and why.

- 1 Controlling the flow
- 2 The best way to protect people from flooding
- 3 What to do about risk
- 4 Protecting your house against flooding

READING FOR MAIN IDEAS

The world has always had to face water-based natural disasters, such as tsunami and hurricanes. In an illuminating interview, Water Management Monthly talks to Dan Smith, who works in 'disaster mitigation' for a government ministry.

'Dan, could you tell us what disaster mitigation means?'

'Disaster mitigation means attempting to minimize the impact of natural disasters both before and after they happen. My department and I work in **two specific areas** in order to try and do this: risk reduction and risk analysis. They are both equally crucial in disaster mitigation.'

is mitigation planning, which means helping local communities plan for when disaster strikes. Thirdly, we make sure that the country's dams all work properly and are safe. Although many people criticize dams because of their environmental impact, there are many benefits to them too, such as hydroelectricity, irrigation, water storage, water sports and, of course, flood control. In terms of a cost-benefit analysis, we are definitely ahead.'

'Do you think countries are better prepared now for natural disasters than they were in the past?'

'Definitely. We are constantly developing new flood-prevention solutions. An example of **one**

'What do you mean by risk reduction?'

'Risk reduction means many things. It is not just referring to big engineering projects like dams. Often, small community projects can be the most effective means of risk reduction. The main way floods can be prevented is by the construction and maintenance of earth wall defences, or levees. These block the progress of rising water. However, even the best levees can't protect against the destructive power of a tsunami. In this case, early-warning systems are lifesavers. They can let people know as early as possible if there is likely to be flooding.'

'What types of risk analysis do you do?'

'Firstly, risk analysis concerns flood mapping, where we identify the parts of the country which are at most risk from flooding. Secondly, there

such measure can be found in the UK, with the Thames Barrier. This is an enormous engineering project designed to prevent London from flooding.'

'Aren't programmes like that very expensive?'

'What lower-cost alternatives are there?'

'Flood prevention does not have to be expensive. Sandbags, for example, can be a highly effective way of stopping flood water.'

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'Is there any more which can be done, or are we as prepared as we can be?'

'There's always more which could be done. But remember that the government can only be responsible for flood prevention up to a certain point. People have to become aware of the dangers of flooding themselves. This is crucial. Expensive early-warning systems are a waste of money if people take no notice of them.'

WHILE READING

READING FOR DETAIL

3 Read the interview again. Are the statements below true (T), false (F) or the article does not say (DNS)?

- 1 Dan Smith works for an international organization. _____
- 2 Risk reduction and risk analysis are as important as each other in disaster mitigation. _____
- 3 Large-scale projects are always effective in terms of risk reduction. _____
- 4 Well-built defences are always successful, even against very powerful floods. _____
- 5 The purpose of flood mapping is to predict which areas are most likely to flood. _____
- 6 Planning for natural disasters has improved in recent years. _____
- 7 The Thames Barrier cost £20 million to build. _____
- 8 Low-technology solutions can protect against flooding too. _____

Good academic writing flows easily and is not too repetitive. The writer needs to show links between ideas, but tries to avoid repeating the same words. Using pronouns and synonyms in the place of nouns and noun phrases can help. To read well in English, you need to be able to identify what these pronouns and synonyms refer to.

4 Find the words below in the interview. Write the nouns or noun phrases that they refer to.

1 two specific areas _____

2 It _____

3 These
4 this case
5 we
6 one such measure
7 that
8 them

READING BETWEEN THE LINES

MAKING INFERENCES FROM THE TEXT

5 Work with a partner. Which of the opinions below do you think Dan Smith would agree with?

- 1 It's the government's responsibility to protect us from natural disasters.
- 2 Surely it's more important to spend time and money on ways to stop water causing flooding, rather than finding out which areas are likely to flood. We already know that.
- 3 Dams are more trouble than they're worth.
- 4 The Thames Barrier was a waste of money – sandbags are just as good.
- 5 People in flood-risk areas need to be educated about the risks and about how they can help themselves.

DISCUSSION

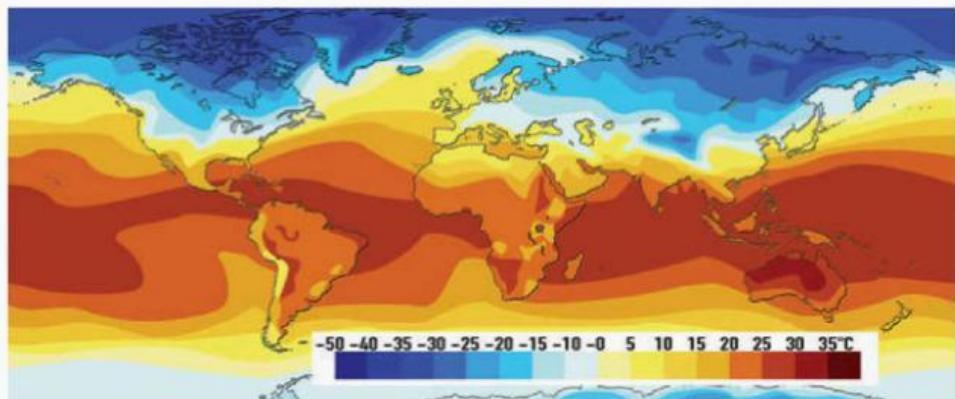
6 Work with a partner. Discuss the questions below.

- 1 How would life in your country be different if you had higher or lower rainfall?
- 2 Does your country ever have problems with flooding? If so, how do people protect themselves?
- 3 Which countries have particularly serious problems with flooding? Can you think of reasons why?

READING 2

PREPARING TO READ

1 Drought is a major problem in many parts of the world. Look at the map below and identify areas where you think drought may be common.



USING YOUR KNOWLEDGE TO PREDICT CONTENT

2 Work with a partner. Discuss the questions below.

- 1 What are the effects of drought?
- 2 How can people suffering from drought be helped in the short term?
- 3 What are some long-term solutions to a shortage of water?
- 4 Why do developing countries struggle with droughts?

WHILE READING

3 Match purposes (a–f) to paragraphs (1–6) in the report on the next page.

a sets out a number of suggestions	_____
b considers economic factors in decision-making	_____
c introduces the main purpose of the text	_____
d discusses a range of long-term strategies	_____
e discusses a range of short-term strategies	_____
f briefs the reader on the effects of drought in Kenya	_____

READING FOR
MAIN IDEAS

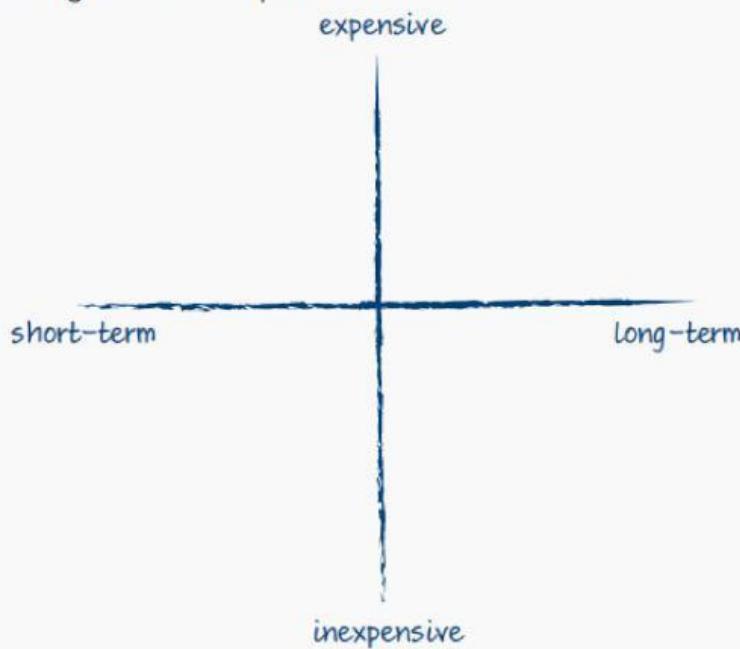
Combating drought in rural Africa: a report

- 1 In order to mitigate the problems which drought can bring, there are several short- and long-term strategies which can be adopted. A range of policies designed to combat these problems exist at local, national and international levels. As well as looking at these issues in general, this report will make specific recommendations in the case of Kenya, where drought has been a major problem in recent years.
- 2 Droughts frequently put millions of people at risk of food insecurity in central Kenya. The area is so dry that it cannot support agricultural crops. There are few permanent rivers and the seasonal waterways, which are the result of flood waters in the rainy months, disrupt transport across the region. The population of this area mainly live off their cattle. Droughts can quickly kill off their herd, leaving little or no income, and because the area is so vast, infrastructure is under-developed, meaning that access to the population is difficult.
- 4 Since drought tends to reoccur in the same central areas of Kenya, long-term solutions are also necessary. Drought monitoring does not have to be expensive, and it should be possible to gather relevant data fairly cheaply, which can then be used for appropriate planning at the local and national levels. This usually involves developing irrigation systems for farming communities, or building canals and dams to benefit villages and cities. On a micro-scale, the construction of wells can help provide more water at medium cost and in reasonable timeframes. On a wider scale, desalination plants, which remove salt from sea water, also make drinking water available, but at a higher cost. Additionally, harvesting rainwater involves collecting and storing any rain that does fall. The majority of these strategies are undoubtedly expensive and may only be affordable for richer countries, which have the technology and expertise to predict and plan for drought more effectively.

3 When drought is predicted in central Kenya, it is important to prepare for it and be ready to respond to it as quickly as possible in order to minimize casualties. Preventive measures which may be adopted before a drought include recycling water. This is highly cost-effective. Recycled water, from the washing of clothes for example, can be given to animals and used to irrigate land. Once drought strikes, the most important short-term response is to transport bottles of drinking water into the drought area, although this is quite expensive. Since drought also often kills animals and crops, it is vital to bring food to prevent people from starving.

4 Read the report again. Place the strategies for dealing with drought (1–6) in the appropriate places in the diagram below.

- 1 constructing dams
- 2 rainwater harvesting
- 3 building wells
- 4 bringing in drinking water
- 5 water recycling
- 6 constructing desalination plants



5 Poorer countries, on the other hand, are generally unable to afford long-term solutions, and may have to rely on international support and charity in the short-term. Lack of education and under-developed infrastructure may also hamper some of these projects.

6 As a result of this report, the three following recommendations for Kenya are made. First, provide training in recycling and harvesting water throughout the country at a local level. Second, implement a well-construction programme, so as to maximize the amount of water available nationally. Thirdly, lobby the international community to provide funding for a desalination plant on the coast, to ensure that Kenya can always meet its water needs.

READING FOR DETAIL

READING BETWEEN THE LINES

5 Choose the best answers.

- 1 What is the main purpose of this report?
 - a to evaluate which solutions for drought are best globally
 - b to describe a country which suffers from drought
 - c to present a range of general drought solutions and focus on a specific case study
- 2 Why are the people of central Kenya most at risk of drought?
 - a because transport is disrupted
 - b their way of life means they need to use a lot of water
 - c the area experiences low annual rainfall
- 3 Which of the points below do you think the report agrees with most?
 - a High-technology solutions are always better than low-technology solutions.
 - b Partnership between different organizations is important in preventing drought.
 - c Every country should follow the recommendations given to Kenya in this report.

MAKING INFERENCES
FROM THE TEXT

Activate!
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DISCUSSION

6 Work with a partner. Discuss the questions below.

- 1 Has your country ever experienced drought?
- 2 Which strategies mentioned in the text does your country use?
- 3 In the future, do you think that droughts across the world will be more or less severe?
- 4 Who should take responsibility for drought mitigation: governments, international organizations, or both?