



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

GEOGRAPHY

0460/01

Paper 1

October/November 2007

1 hour 45 minutes

Additional Materials: Answer Booklet/Paper

READ THESE INSTRUCTIONS FIRST

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.

Write your Centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen.

You may use a soft pencil for any diagrams, graphs or rough working.

Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **three** questions.

Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.

The Insert contains Photographs A and B for Question 1, Figs 3A, 3B and 3C for Question 2 and Fig. 8 for Question 5.

At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [] at the end of each question or part question.



This document consists of **15** printed pages and **1** blank page and **1** Insert.



1 (a) Study Fig. 1, information about the number of immigrants to Australia, an MEDC.

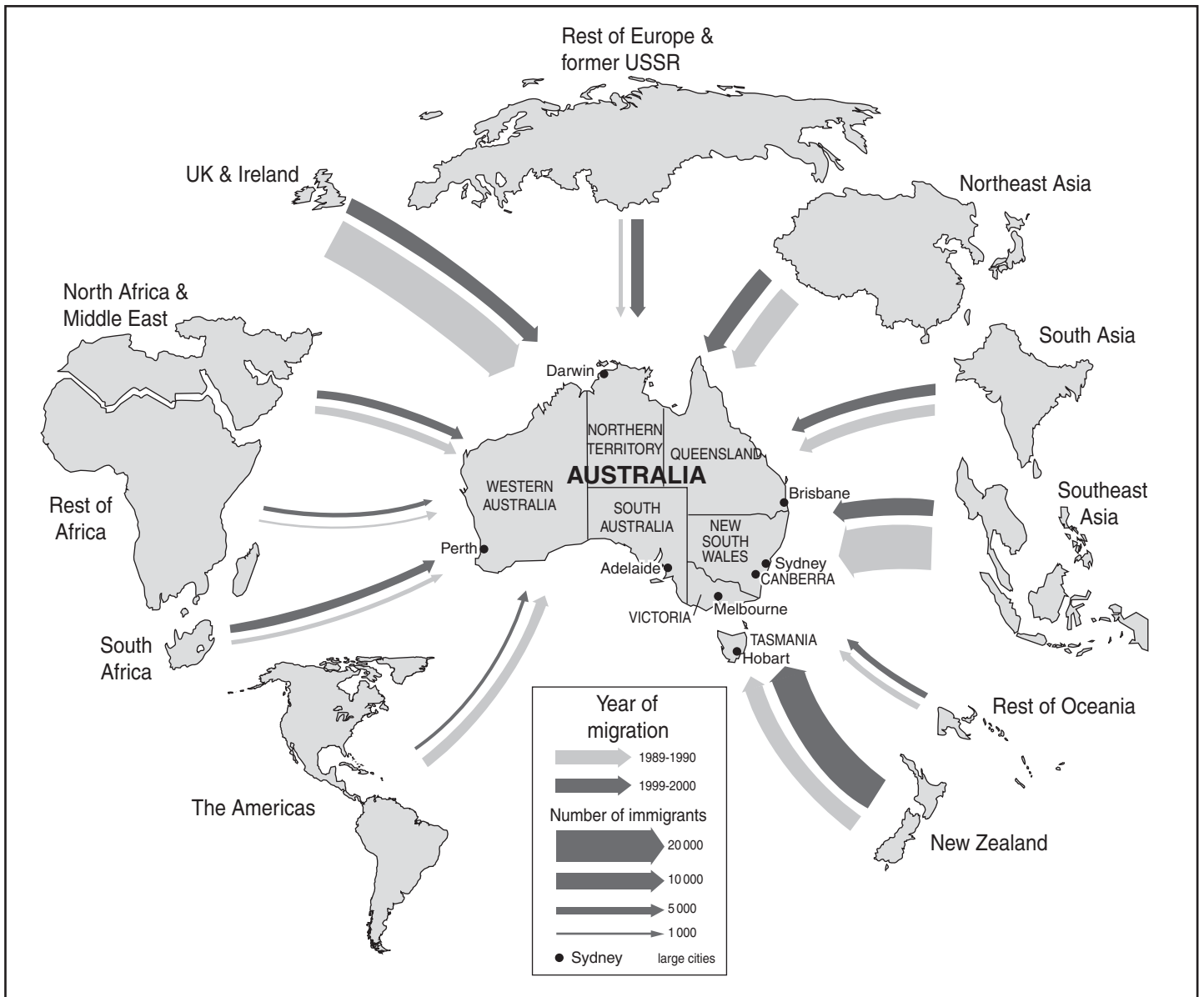


Fig. 1

- (i) What is meant by an *immigrant*? [1]
- (ii) Compare the number of immigrants in 1989-1990 with those in 1999-2000 and identify a place of origin:
A which shows an increase in migration,
B which shows the largest decrease in migration. [2]
- (iii) Choose any area shown on Fig. 1. Write down the name of the area which you have chosen and suggest **three** reasons why people migrate from there to an MEDC such as Australia. [3]
- (iv) Many migrants from other countries move to cities in Australia, such as Sydney and Melbourne. Describe the effects of international migration on cities such as these. [4]

(b) Study Photographs A and B (Insert), which show parts of an area of sparse population density in an LEDC.

(i) Use evidence from the photographs to explain why the area shown is sparsely populated. [3]

(ii) Explain why towns may grow up in areas which are otherwise sparsely populated. [5]

(c) The size of the population in an area may change as a result of natural increase.

For an area which you have studied, explain why the rate of natural population growth is high. [7]

- 2 (a) Study Fig. 2, which shows census statistics about three areas of housing in the city of Worcester, UK.

Housing characteristics	Barbourne	St. Peter's	Brickfields
% owner occupied	70	91	45
% rented from council or other social rented housing	10	3	47
% privately rented	20	6	8
% of households which are overcrowded (average greater than 1 person per room)	1.1	0.21	2.31

Fig. 2

- (i) What is meant by *owner occupied housing*? [1]
- (ii) Use Fig. 2 to identify the areas which have:
- A** the largest percentage of rented housing,
- B** the houses with the most space per person. [2]

- (b) Study Figs 3A, 3B and 3C (Insert), which show street maps and photographs of these three housing areas in Worcester.
- (i) Identify **two** ways in which St. Peter's is typical of a suburban area in an MEDC. [2]
 - (ii) Brickfields is an outer city estate of low cost housing.
Suggest **two** advantages and **two** disadvantages of living in an area such as this. [4]
 - (iii) Barbourne is an inner city area. Use evidence from Fig. 3A **only** to describe the street layout and housing characteristics of this area. [4]
 - (iv) There are plans for the redevelopment of the Barbourne area.
Suggest reasons why some people are likely to want the existing houses to be improved, rather than the area to be redeveloped. [5]
- (c) The area surrounding towns and cities is known as the rural-urban fringe.
What problems are likely to occur in the rural-urban fringe as a result of the growth of towns and cities? You should refer to an example which you have studied. [7]

3 (a) Study Fig. 4, which shows an area of coastline.

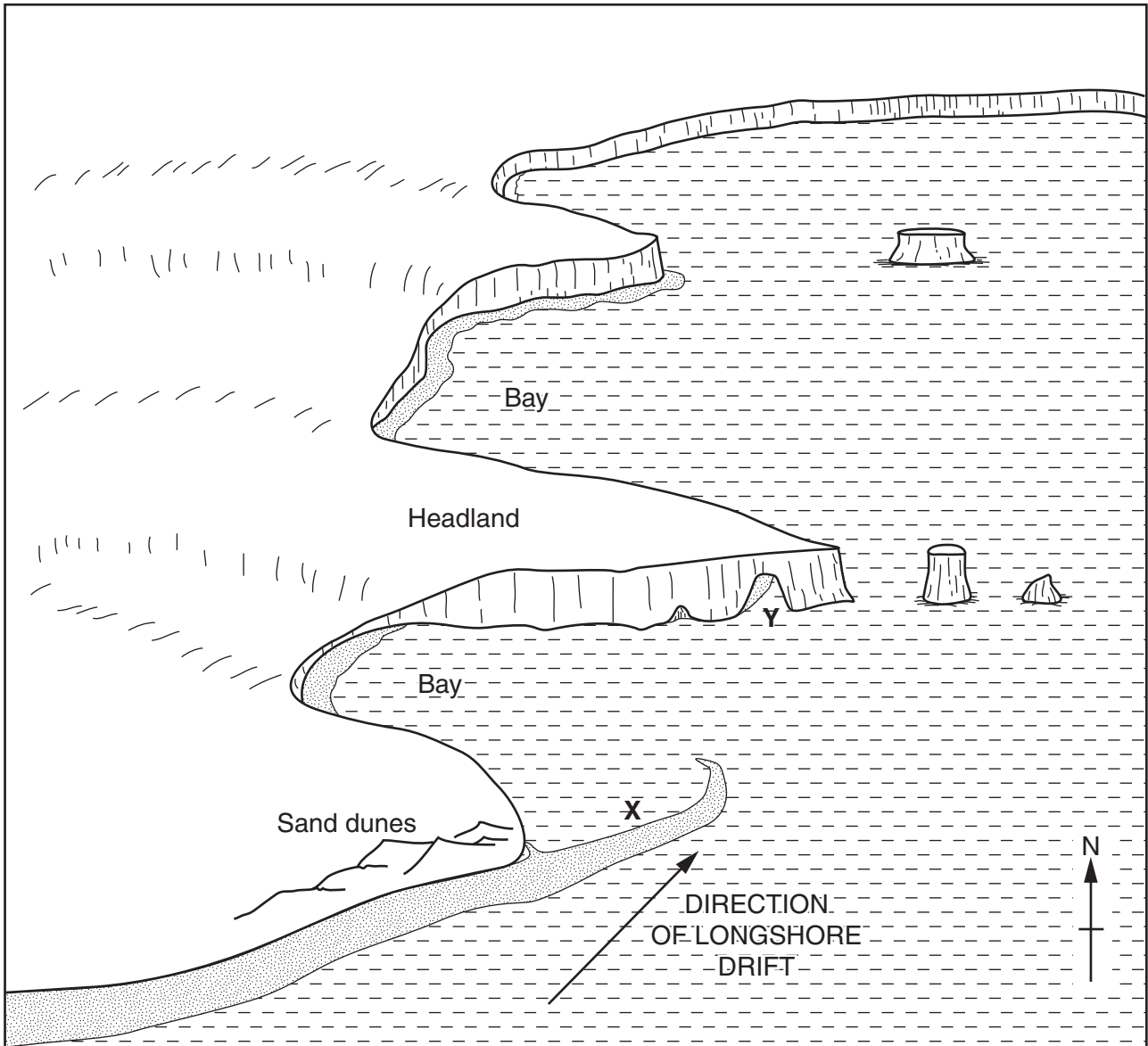


Fig. 4

- (i) In which direction is longshore drift taking place? [1]
- (ii) Identify the landforms labelled X and Y. [2]
- (iii) Suggest reasons why there are bays and headlands along this stretch of coast. [3]
- (iv) Explain how wind action forms and shapes coastal sand dunes. [4]

(b) Study Figs 5A and 5B, a map and field sketch of Slapton Sands and Start Bay in the UK.

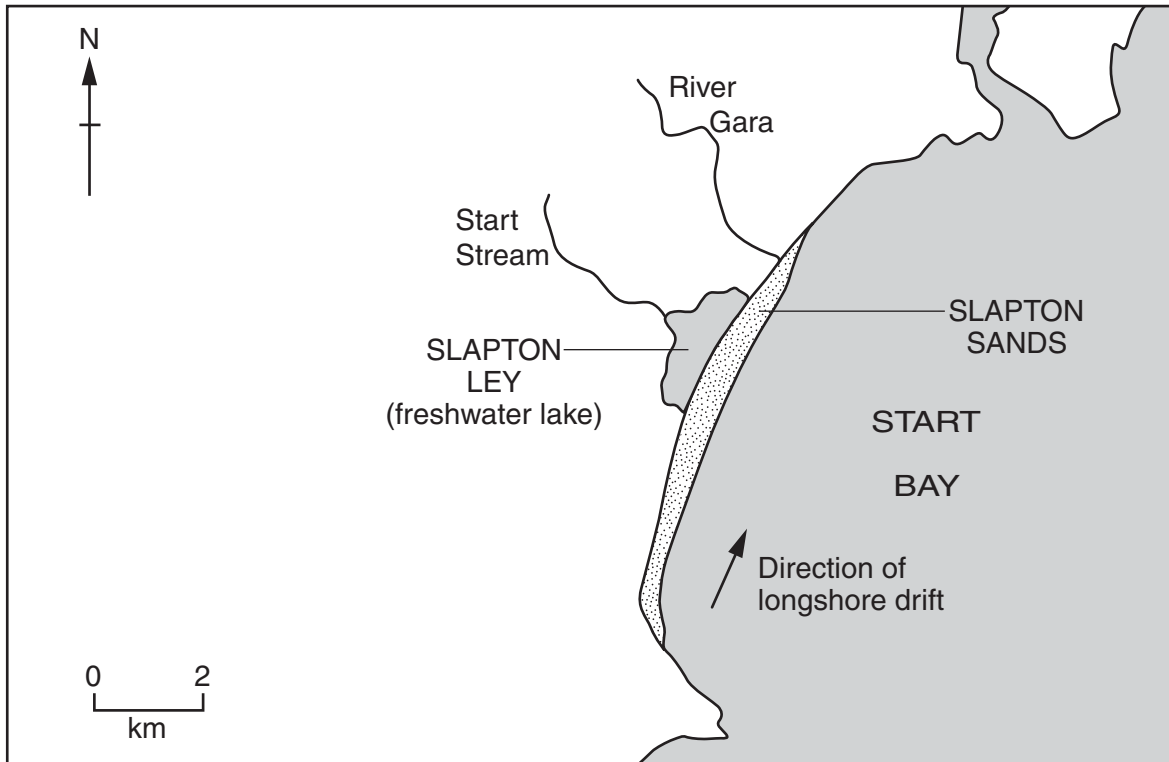


Fig. 5A

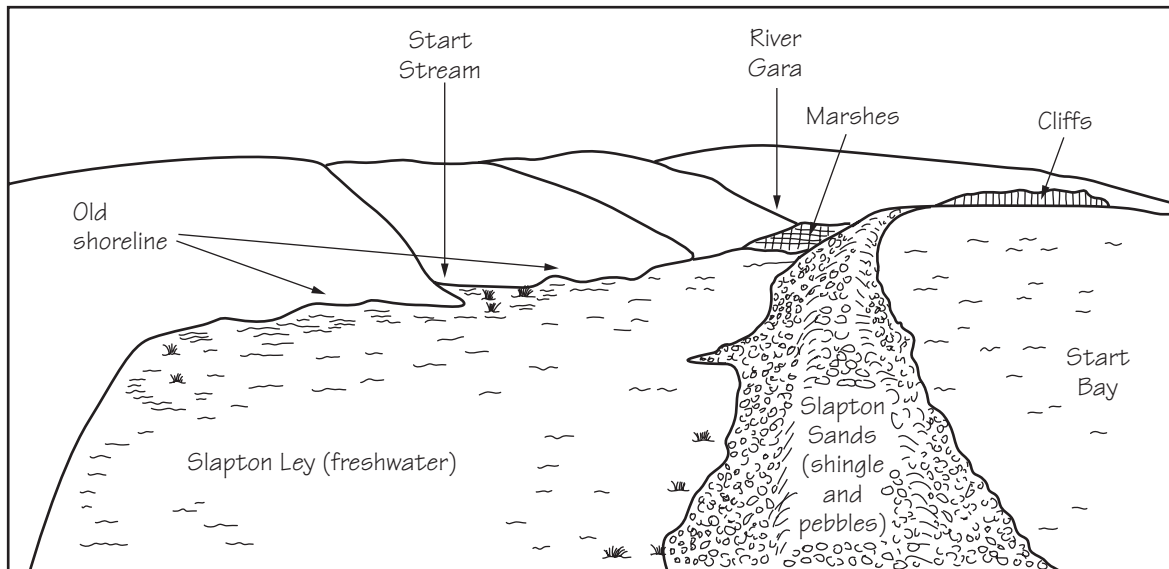


Fig. 5B

- (i) Using **only evidence from Figs 5A and 5B**, describe the main features of Slapton Sands. [3]
- (ii) Explain how coastal deposition has shaped this stretch of coastline. [5]
- (c) Describe the ways in which coastal areas can provide opportunities for the people who live there. You should give examples from an area you have studied. [7]

- 4 (a) Study Fig. 6, which shows the short-term impacts of Hurricane Katrina on the Gulf Coast of the USA, an MEDC.

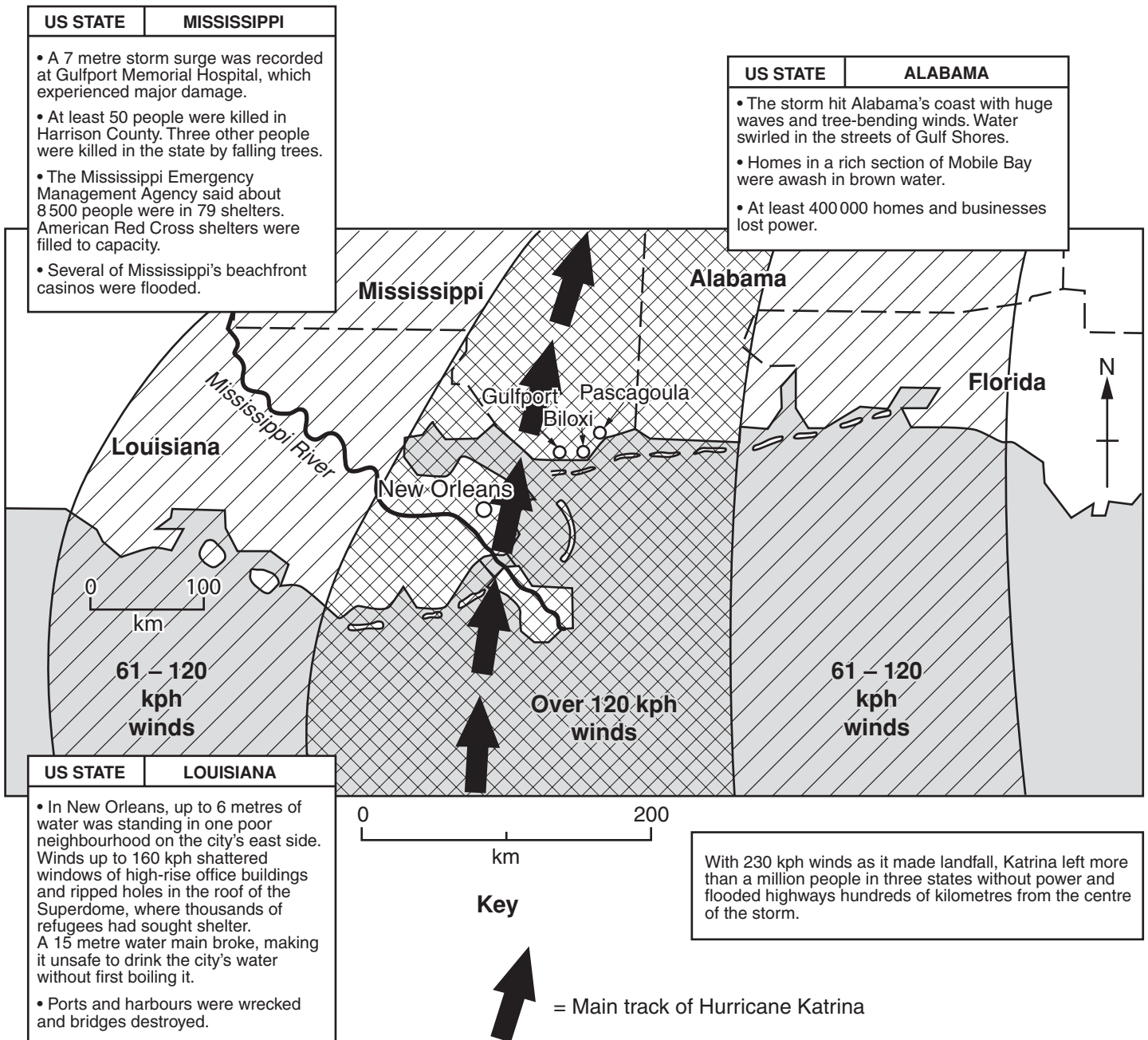


Fig. 6

- (i) Identify the state where the main track of Hurricane Katrina reached land. [1]
- (ii) Identify **two** states where the wind speeds hit the coast at speeds of over 120 kilometres per hour. [2]
- (iii) Describe **three** different ways in which the hurricane affected the transport infrastructure. [3]
- (iv) Suggest reasons why the people who lived in New Orleans had to leave the city. [4]

(b) Study Figs 7A and 7B.

Fig. 7A is a newspaper article about the impacts of Hurricane Katrina on energy supplies.

Fig. 7B shows information about the oil and gas industry on the Gulf Coast.

FUEL FEARS: Storm threatens oil production – petrol prices could rise further

By David R. Baker

Oil prices rose on Monday, as Hurricane Katrina tore through a stretch of Gulf Coast thick with pipelines and refineries, raising fears that already high petrol prices could rise further.

For the first time, the price of crude oil was higher than \$70 per barrel, as the storm raced through one of the country's most important oil producing areas.

By the time Katrina made landfall early Monday, companies such as Chevron evacuated their offshore platforms. Two drilling rigs used by Royal Dutch/Shell Group were drifting on the open sea, while the fate of others remained unknown.

Fig. 7A

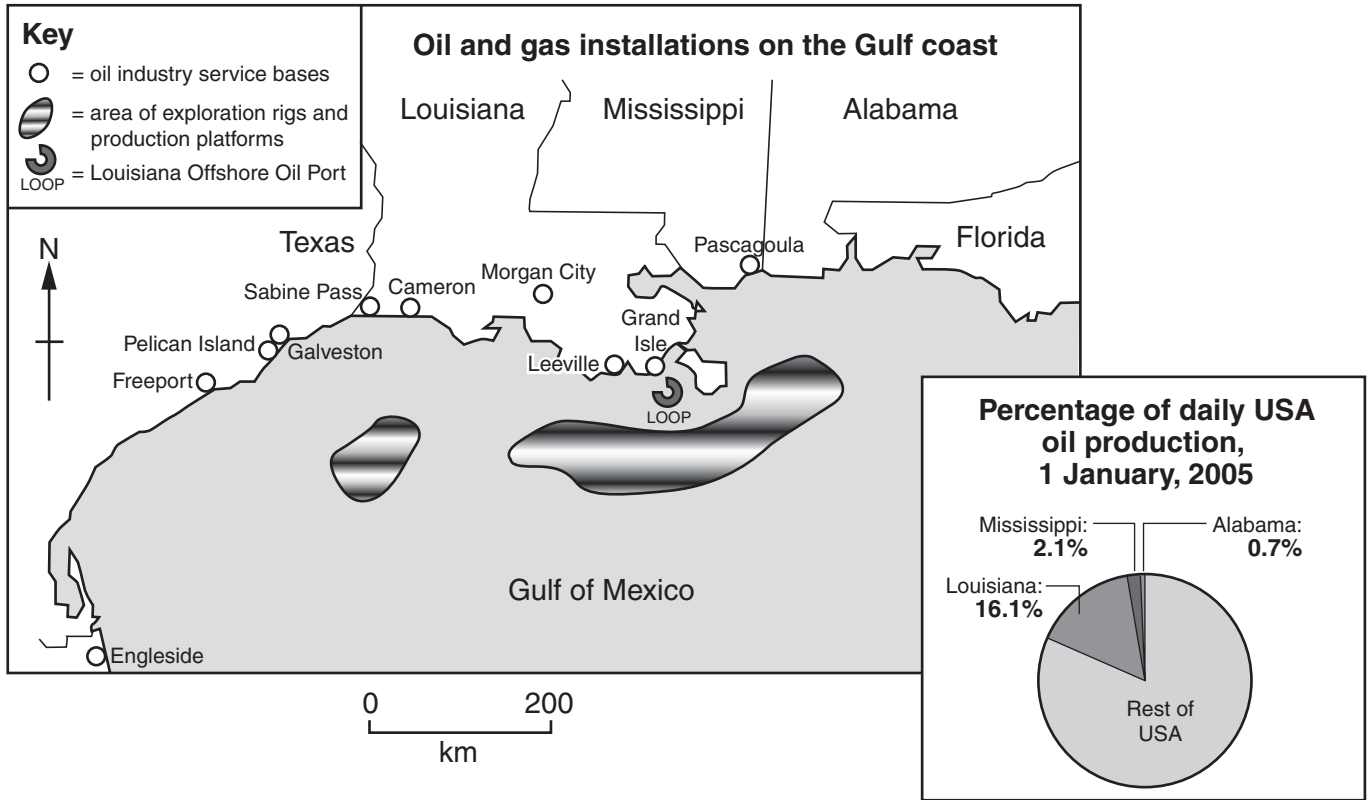


Fig. 7B

- (i) Explain why people were worried about the long-term impacts of Hurricane Katrina on energy supplies in the USA. [3]
 - (ii) Explain why MEDCs, such as the USA, normally recover more quickly from natural disasters than LEDCs. [5]
- (c) In many parts of the world the natural environment presents hazards to people.

Choose an example of one of the following:

- a volcanic eruption,
- an earthquake,
- a drought.

For a named area, describe the causes of the example which you have chosen and its impacts on the people living there. [7]

- 5 (a) Study Fig. 8 (Insert), a map showing information about food consumption in different parts of the world.
- (i) Name a continent where most countries have an average daily consumption of more than 3000 calories per person. [1]
- (ii) Countries with a low average calorie intake may suffer food shortages. Describe the distribution of countries which have an average daily consumption of less than 2500 calories per person. [2]
- (iii) Explain how food shortages can be caused by:
- A the natural environment, [3]
- B economic and political factors. [4]

- (b) Study Fig. 9, which shows information about a recent aid programme in Burundi, an LEDC in Central Africa.

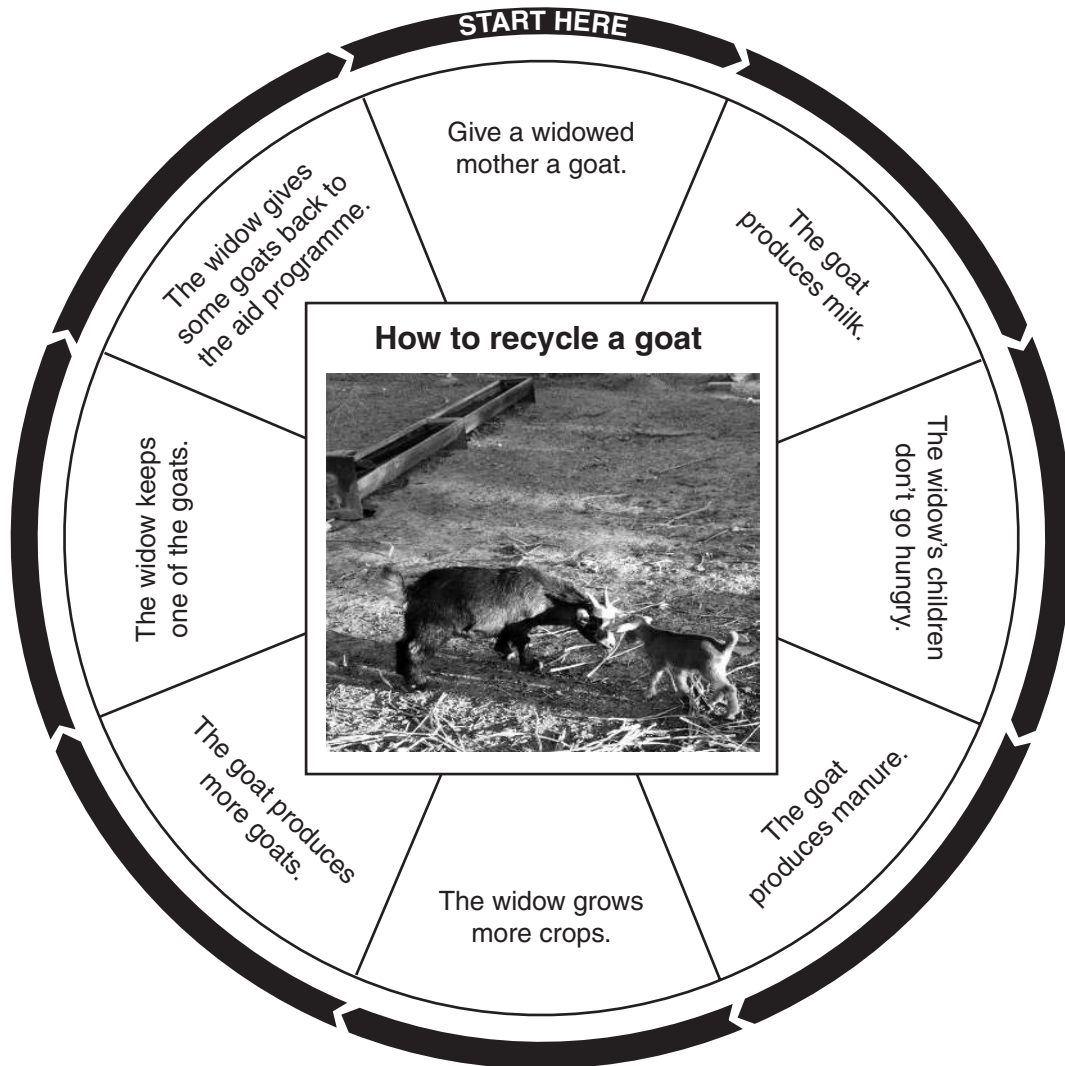


Fig. 9

- (i) State **three** outputs from the system. [3]
- (ii) Explain how the aid programme is likely to improve the quality of life of the people who live in Burundi. [5]
- (c) All farming systems have inputs, processes and outputs.

Name an example which you have studied of **either** small-scale subsistence farming **or** large-scale commercial farming.

Give the name of an area where your chosen farming type takes place. Describe the inputs, processes and outputs of this farming system. [7]

- 6 (a) Study Figs 10A, 10B and 10C, which show information about the Lesotho Highlands Water Project.

Lesotho is an LEDC in the mountains of southern Africa. It aims to build a series of dams. These will collect and store water to sell to South Africa, its richer neighbour. Water will also be used at the dams to generate hydro-electric power (HEP).

Fig. 10A

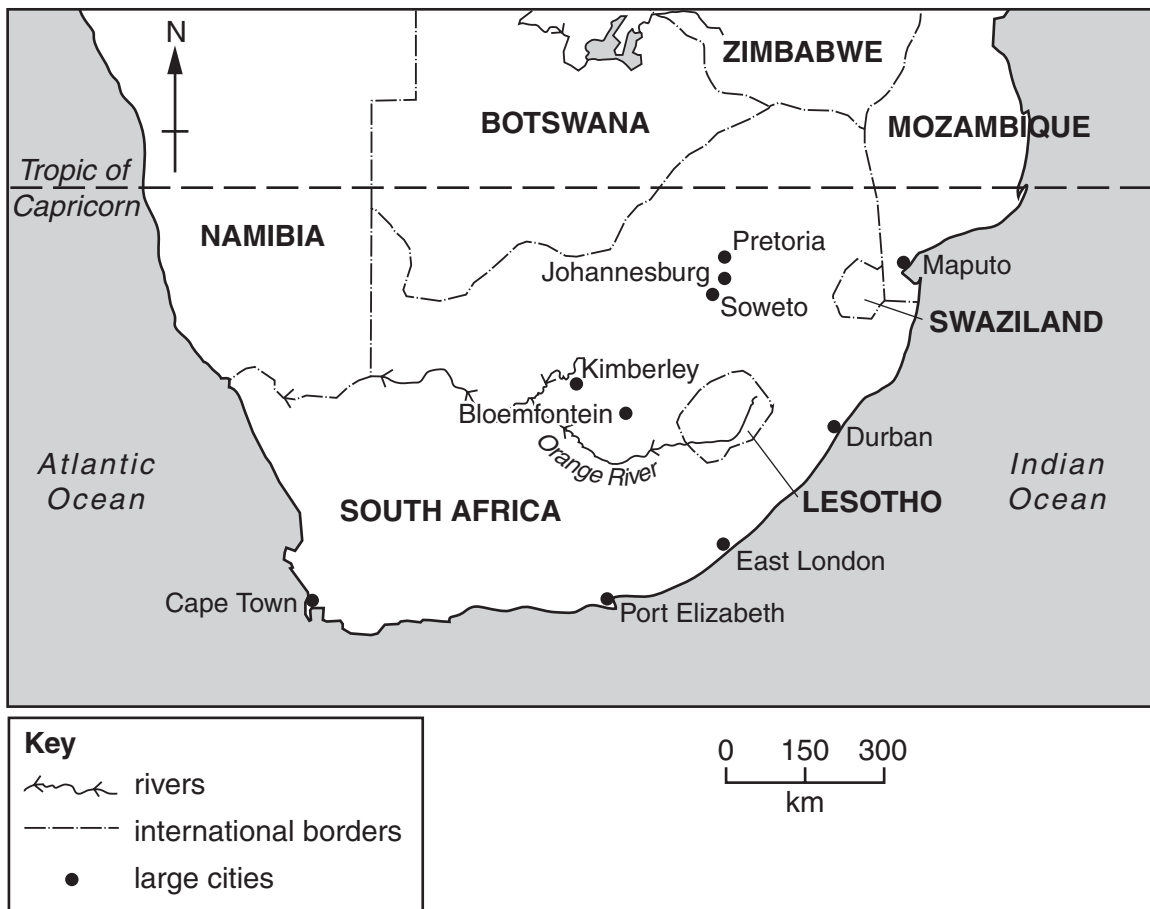


Fig. 10B

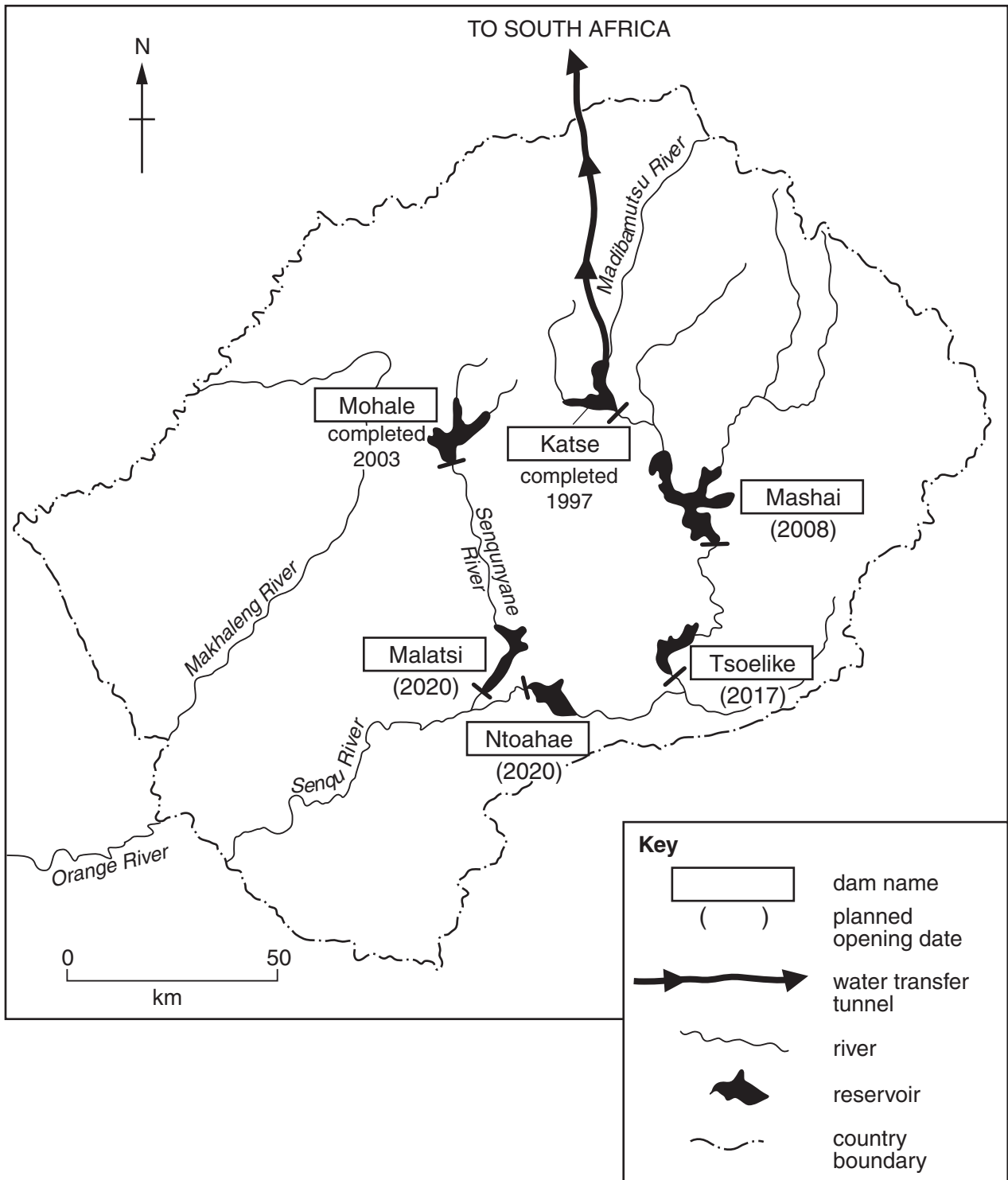


Fig. 10C

- (i) Identify a dam in Lesotho which has already been built. [1]
- (ii) The building of the Malatsi Dam by 2020 is expected to complete the Project. Briefly describe the planned location of this dam. [2]
- (iii) Suggest reasons for the increasing demand for water in South Africa. [3]
- (iv) Suggest reasons why Lesotho has enough water to be able to sell to South Africa. [4]

- (b) Study Fig. 11, which shows the opinions of selected people about the Lesotho Highlands Water Project.

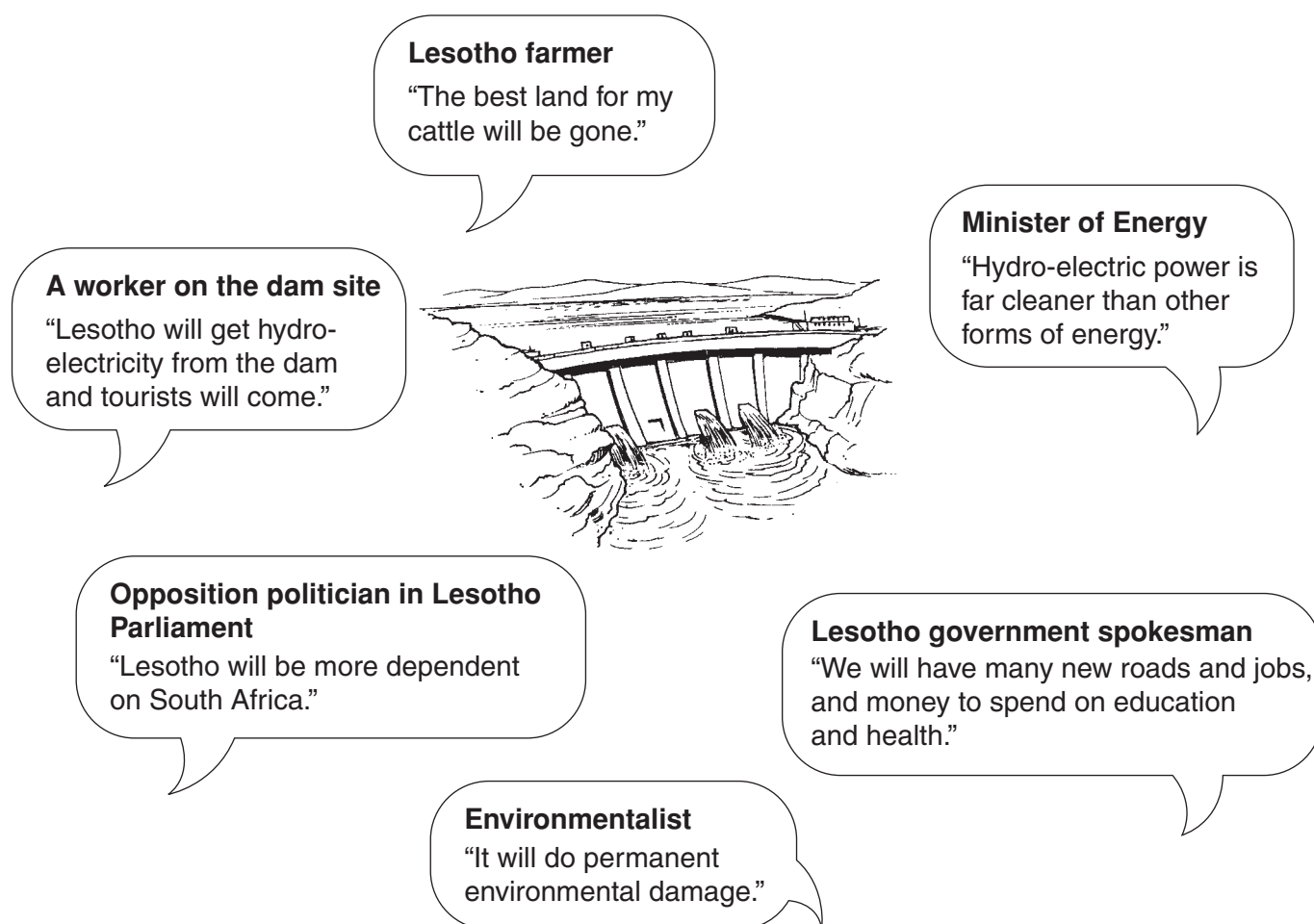


Fig. 11

- (i) Describe the advantages of using hydro-electric power (HEP), rather than other sources of energy. [3]
- (ii) Explain the positive and negative effects which the Highlands Water Project will have on Lesotho. [5]
- (c) Water and air may be polluted by human activities.

Name an example of a place which you have studied where **either** the air **or** the water is polluted. Describe the causes of this pollution and its effects on people and the environment. [7]

Copyright Acknowledgements:

Question 1(b) Photograph A	S. Sibley © UCLES.
Question 1(b) Photograph B	S. Sibley © UCLES.
Question 2(b)	Figs 3A, 3B & 3C; S. Sibley © UCLES.
Question 4	Fig. 7A © David R. Barker; ‘Fuel Fears: Storm threatens oil production - petrol prices could rise further’; <i>San Francisco Chronicle</i> , 30 August 2005.
Question 5	Fig. 9 © Christian Aid.

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