

GCSE GEOGRAPHY

Paper 2 Challenges in the human environment

Specimen 2015

Time allowed: 1 hour 30 minutes

Materials

For this paper you must have:

- a pencil
- a ruler.

Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the bottom of this page.
- Answer **all** questions in Section A and Section B.
- Answer Question 3 and **one** other question in Section C.
- You must answer the questions on the spaces provided. Do **not** write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The total number of marks available for this paper is 88.
- Spelling, punctuation, grammar and specialist terminology will be assessed in Question 01.8.

Advice

For the multiple-choice questions, completely fill in the circle alongside the appropriate answer(s).

CORRECT METHOD  WRONG METHODS    

If you want to change your answer you must cross out your original answer as shown. 

If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown. 

Please write clearly, in block capitals, to allow character computer recognition.

Centre number

Candidate number

Surname

Forename(s)

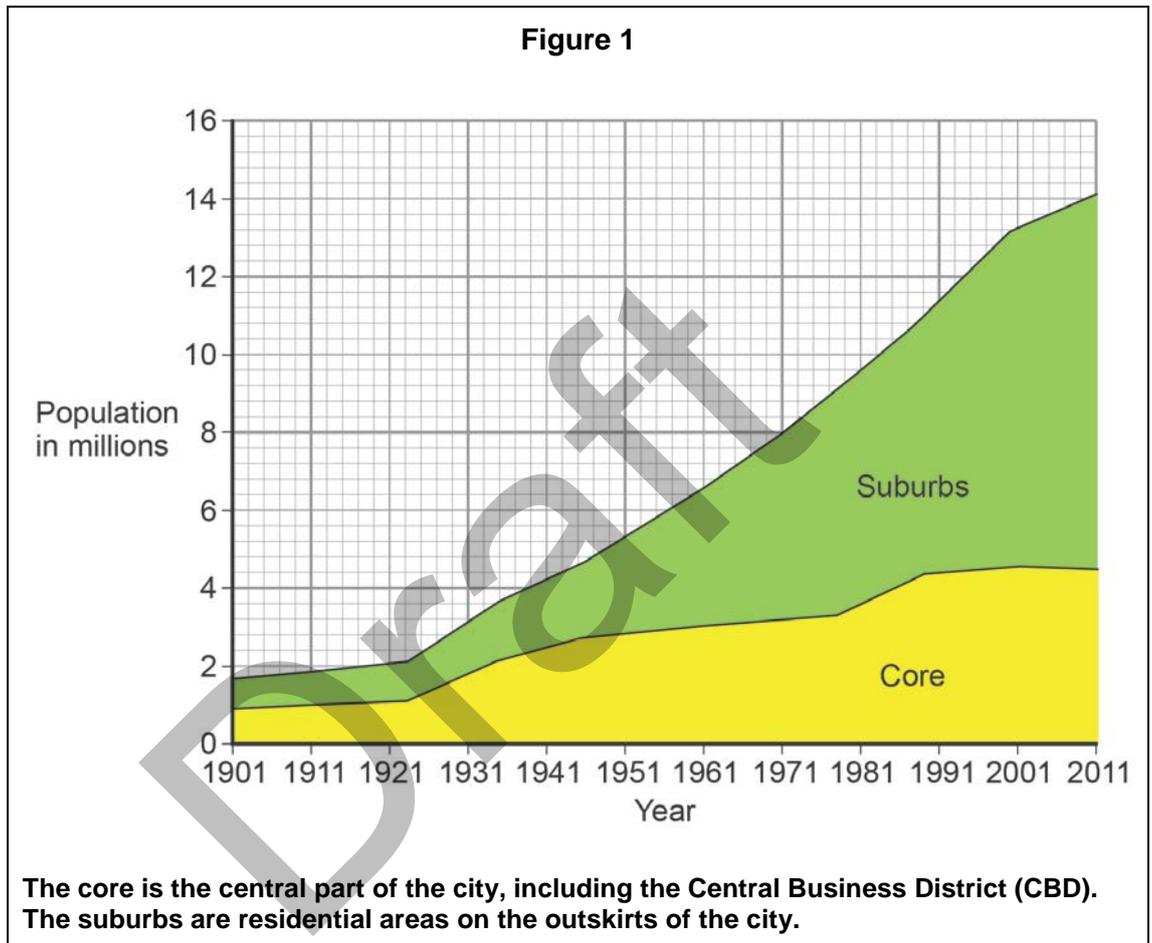
Candidate signature _____

Section A Urban issues and challenges

Answer **all** questions in this section.

Question 1 Urban issues and challenges

Study **Figure 1**, a graph showing the population of Kolkata from 1901 to 2011. Kolkata is a city in India.



0 1 . **1** Using **Figure 1**, which **two** of the following statements are true? Shade **two** circles only.

- A** The population of the core grew fastest between 1991 and 2011.
- B** The population of the suburbs grew more rapidly than the core between 1931 and 2011.
- C** The population of the suburbs was approximately 2 million in 1931.
- D** The total population of Kolkata, including its suburbs, was just over 14 million in 2011.
- E** The total population of Kolkata, including its suburbs, was over 10 times greater in 2011 than in 1901.

[2 marks]

0 1 . **2** Suggest how the following factors have led to population growth in Kolkata.

[2 marks]

1 Natural increase:

2 Migration:

Question 1 continues on the next page.

Study **Figure 2**, a photograph showing part of a squatter settlement on the edge of Kolkata.

Figure 2



0 1 . **3** Suggest **two** problems of living in this part of Kolkata.

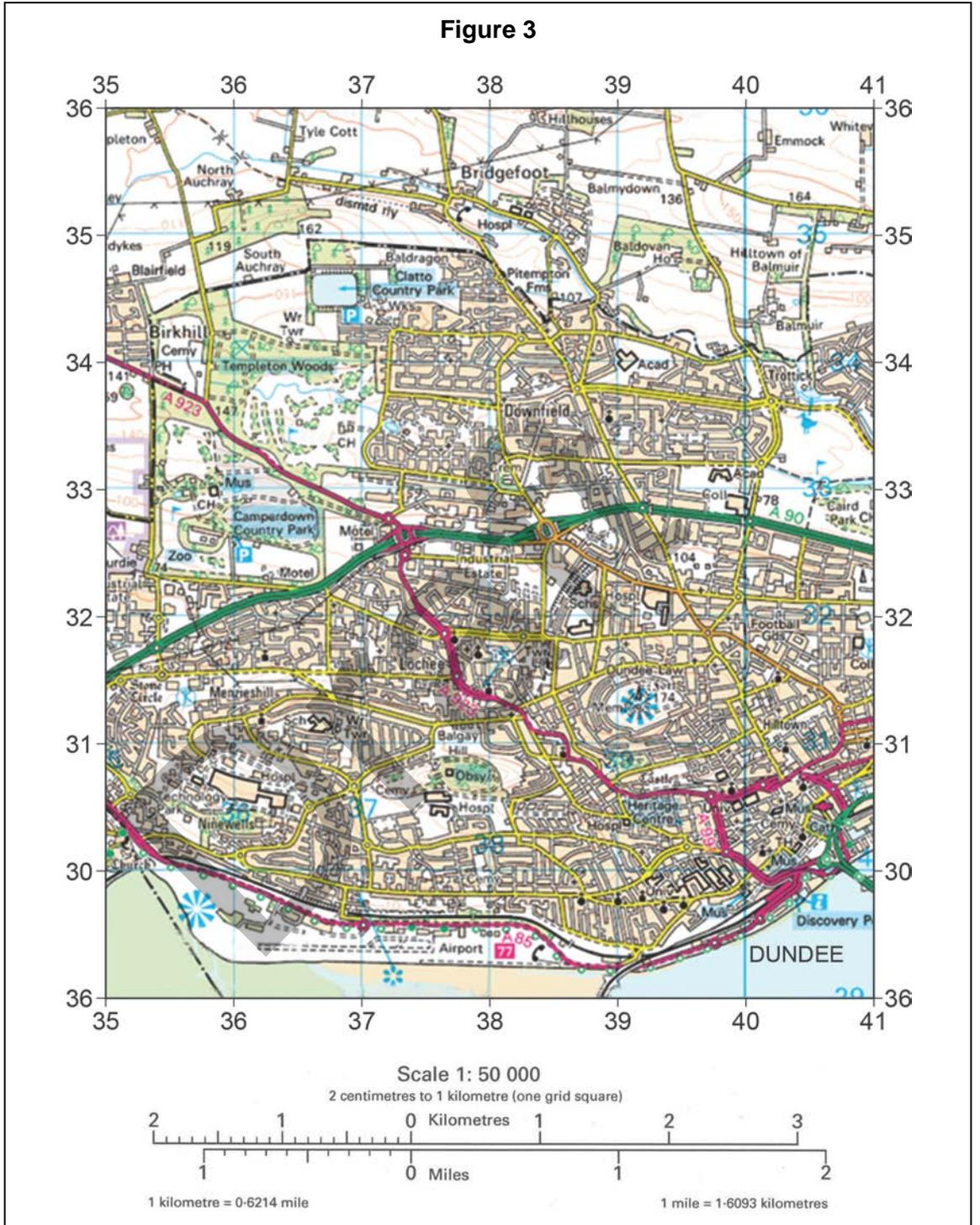
Use evidence from **Figure 2**.

[2 marks]

Problem 1:

Problem 2:

Study **Figure 3**, a 1:50 000 map of Dundee, a city in Scotland.



0 1 . 7 Identify **two** problems caused by traffic congestion.

[2 marks]

Problem 1:

Problem 2:

Study **Figure 4**, photographs showing four methods of reducing traffic problems in urban areas.

Figure 4



Section B The changing economic world

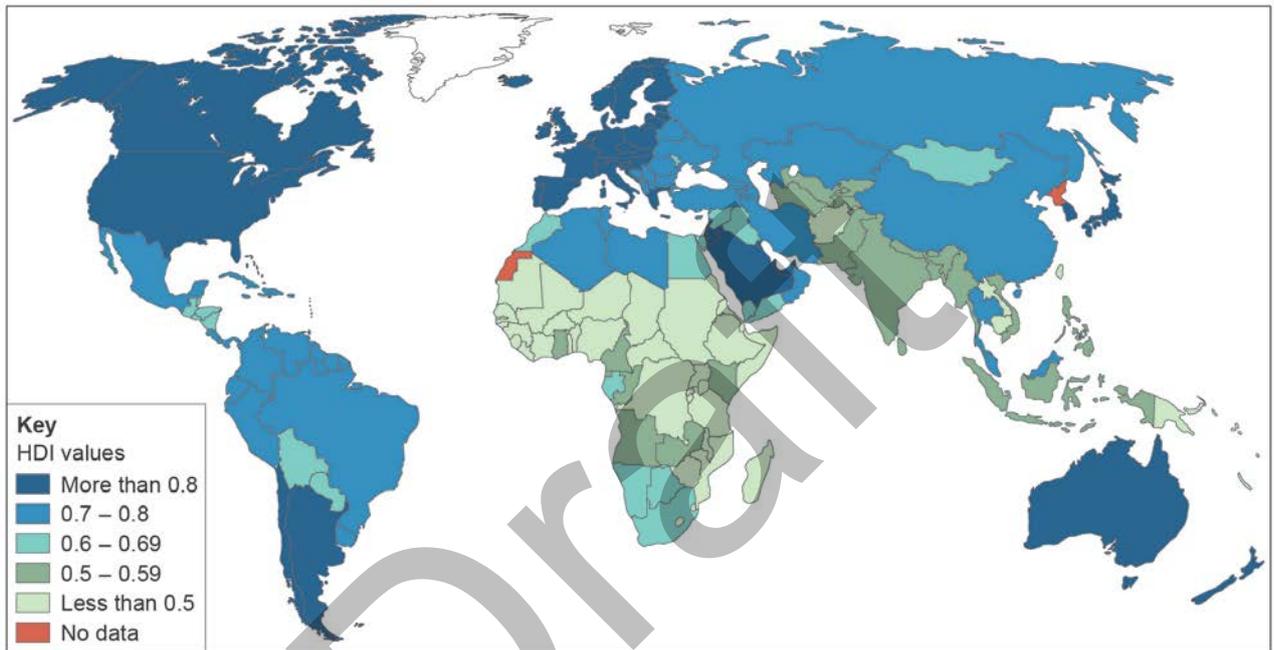
Answer **all** questions in this section.

Question 2 The changing economic world

Study **Figure 5**, a world map showing the global distribution of Human Development Index (HDI) values.

HDI combines data on life expectancy, educational levels and income, with values ranging from 0 (worst) to 1 (best).

Figure 5



0 2 . 1 Using **Figure 5**, compare HDI values in Africa and South America. **[2 marks]**

0 2 . 2 Outline **one** disadvantage of using a single measure of development such as income. **[2 marks]**

Study **Figure 6**, a table showing two indicators of development for some countries.

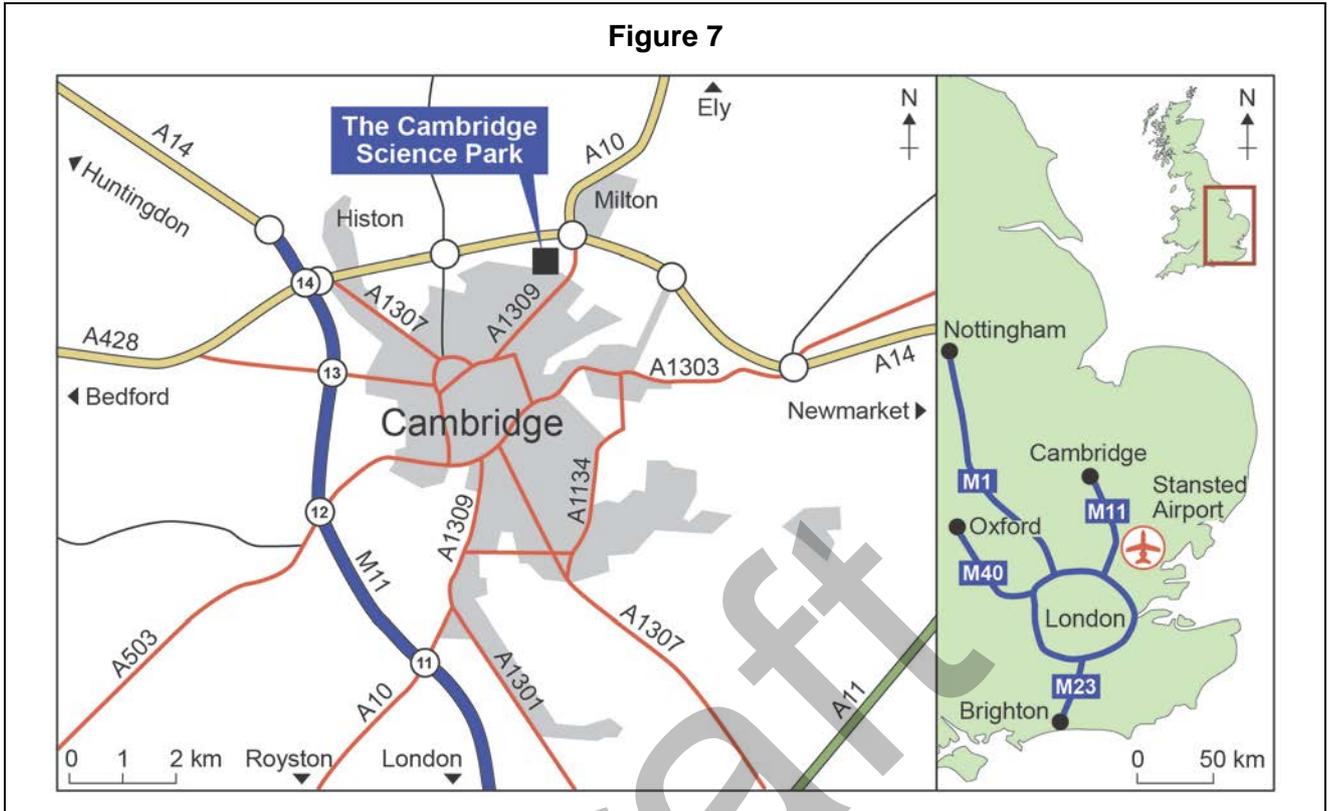
Figure 6

Country	Indicator of development	
	Life expectancy (years)	Adult literacy rate (%)
Nigeria	52	61
Russian Federation	70	99
China	75	95
India	66	63
Afghanistan	61	28
Sierra Leone	45	43
Italy	83	99
Egypt	71	74

- 0 2** . **3** Using **Figure 6**, explain why these two indicators are useful measures of development. **[4 marks]**

Question 2 continues on the next page

Study **Figure 7**, maps showing the location of the Cambridge Science Park in the UK.



0 2 . 4 Using **Figure 7**, measure the direct distance between the Cambridge Science Park and junction 14 of the M11. **[1 mark]**

_____ km

0 2 . 5 Using **Figure 7**, explain the advantages of this location for the Cambridge Science Park. **[4 marks]**

0 2 . 6 Give **two** reasons why there has been a growth in the number of science parks in the UK.

[2 marks]

Reason 1:

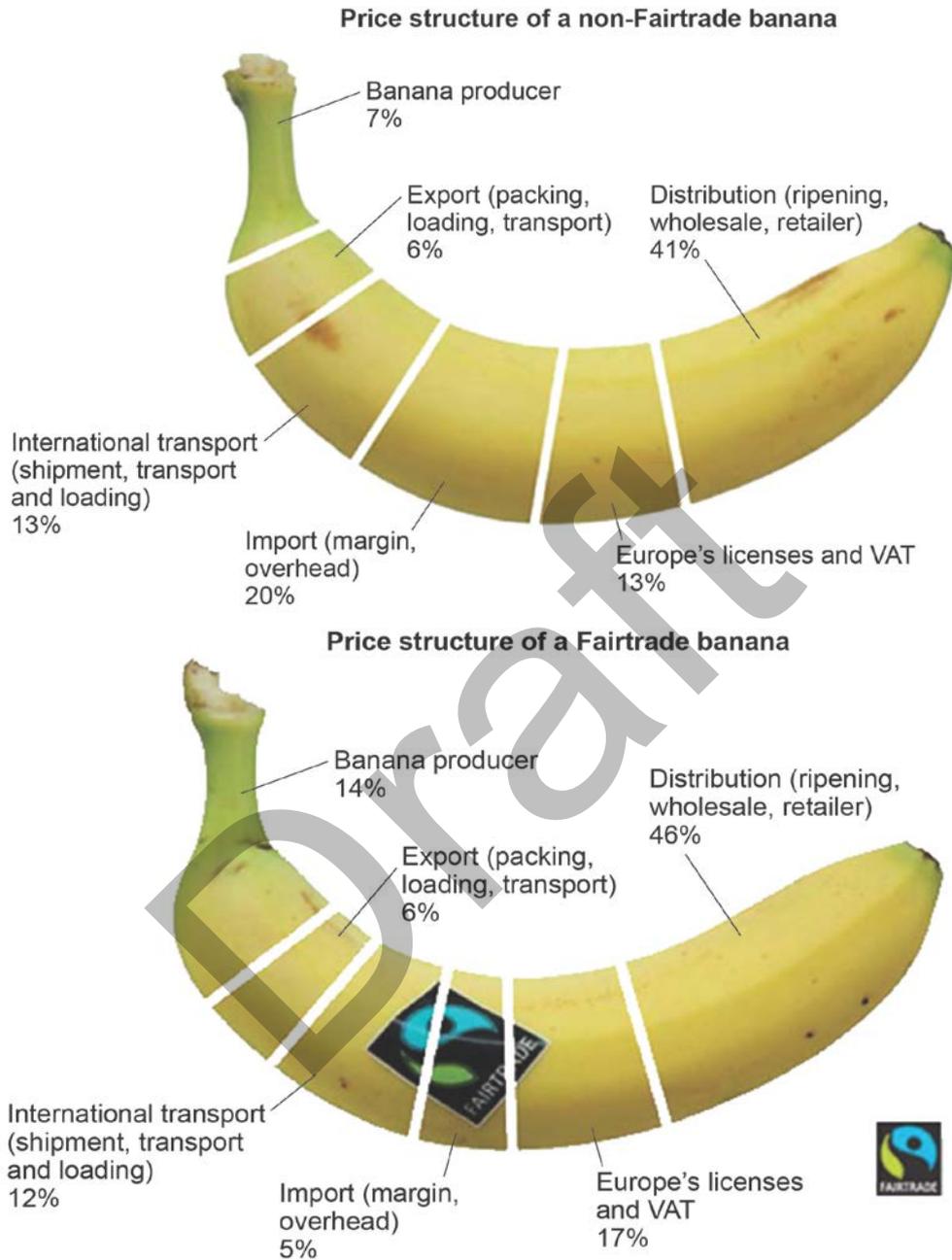
Reason 2:

Question 2 continues on the next page

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Study **Figure 8**, information about Fairtrade bananas.

Figure 8



Retail sales value of Fairtrade bananas in the UK					
Year	2000	2003	2006	2009	2012
Retail sales value (£ millions)	8.1	24.3	65.6	215.5	242.5

0 2 . **7** Using **Figure 8**:

[2 marks]

- compare the percentage of the price received by the Fairtrade banana producer with that of a non-Fairtrade banana producer

- calculate the increase in retail sales value of Fairtrade bananas between 2000 and 2012.

0 2 . **8** Outline **one** way that Fairtrade helps to deal with the problems of unequal development.

[2 marks]

0 2 . **9** Suggest **one** reason why Fairtrade schemes are not always successful.

[2 marks]

Question 2 continues on the next page

Turn over for Section C

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ANSWER IN THE SPACES PROVIDED**

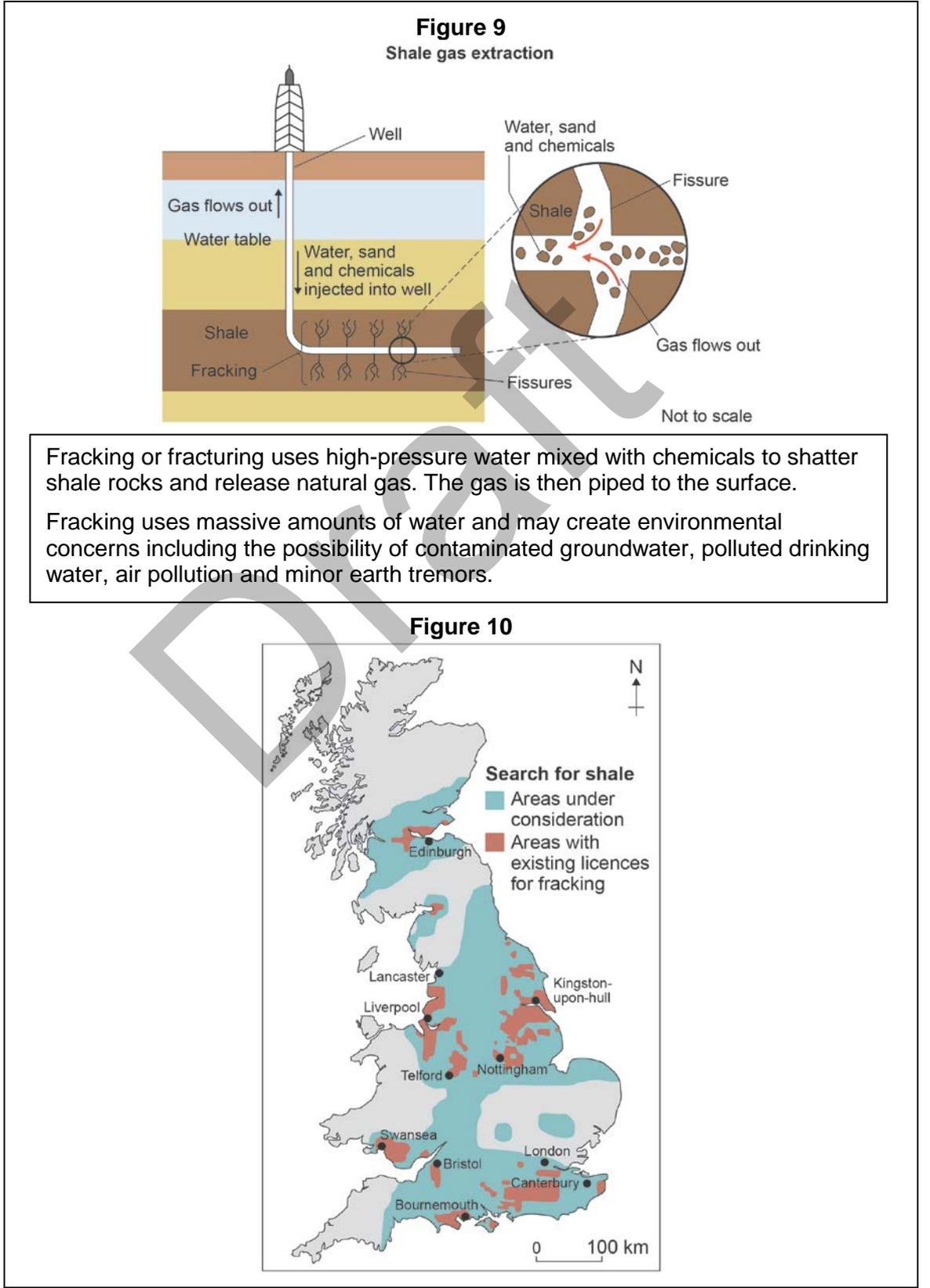
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Section C The challenge of resource management

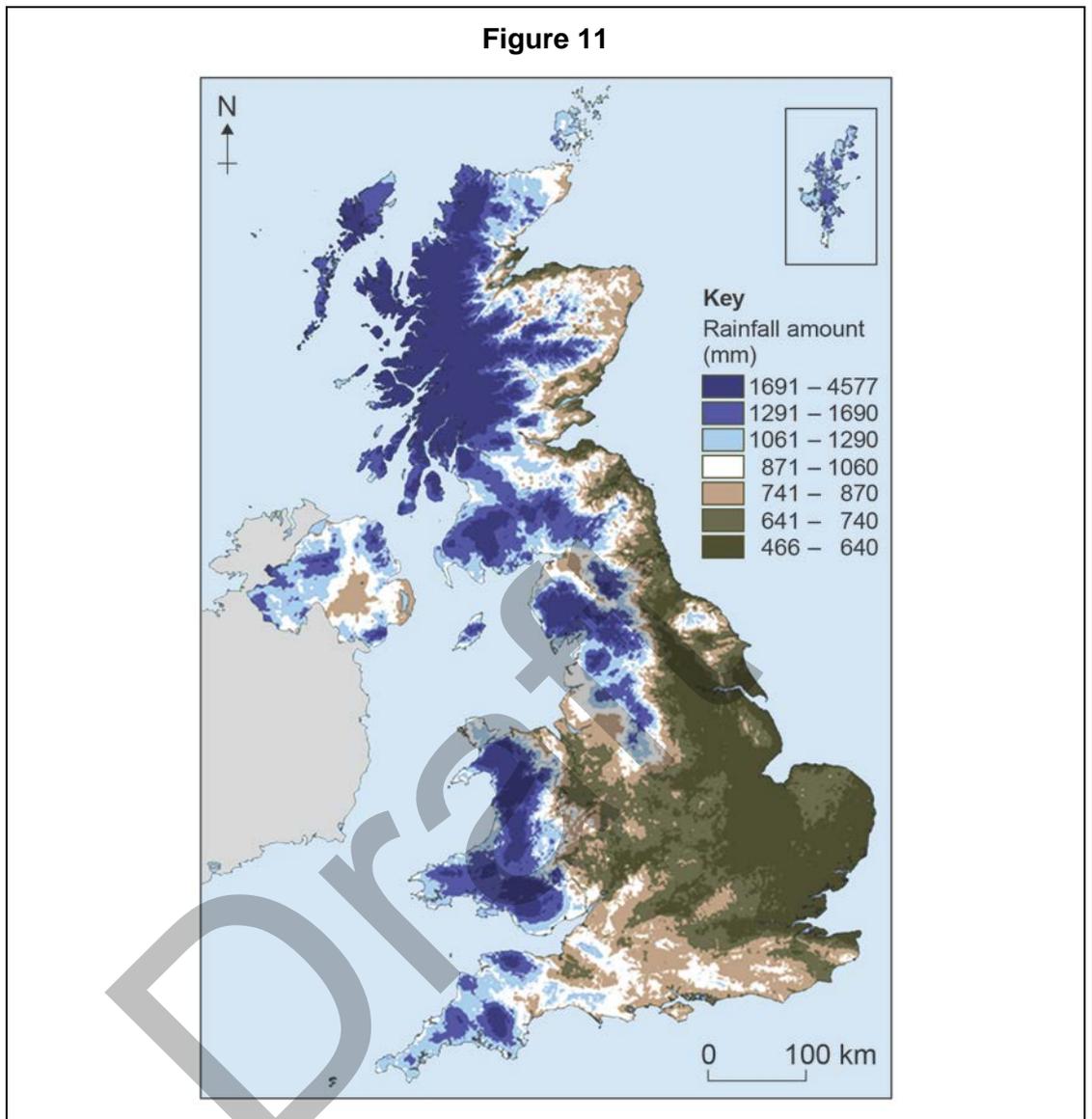
Answer Question 3 and **either** Question 4 **or** Question 5 **or** Question 6.

Question 3 The challenge of resource management

Study **Figures 9** and **10**, information about fracking for gas in the UK.



Study **Figure 11**, a map showing average annual rainfall in the UK.

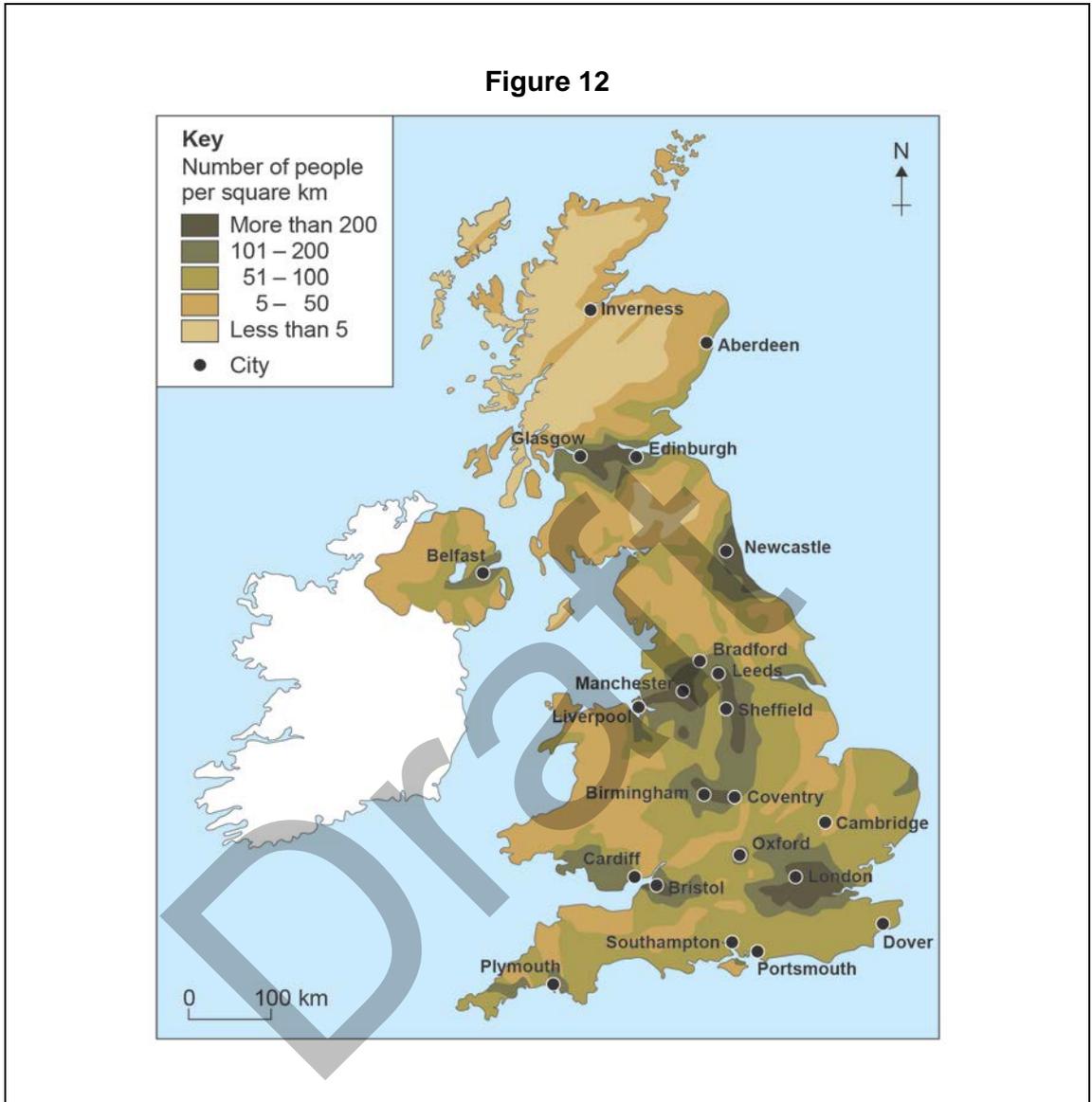


0 3 . 4 Using **Figure 11**, which **two** of the following statements are true? Shade **two** circles only.

- A** Annual rainfall is high (over 1060 mm) across the whole of Wales and south west England.
- B** Annual rainfall tends to increase from north west to south east across the UK.
- C** Large parts of eastern England have annual rainfall below 640 mm.
- D** The driest part of the UK is along the south coast of England.
- E** The largest area with high annual rainfall (over 1290 mm) is in north and west Scotland.

[2 marks]

Study **Figure 12**, a map showing population density in the UK.



0 3 . 5 Using **Figures 11** and **12**, explain why water is transferred from one part of the UK to another.

[3 marks]

Answer **either** Question 4 **or** Question 5 **or** Question 6.

Shade the circle below to indicate which optional question you will answer.

Question **0 4**

Question **0 5**

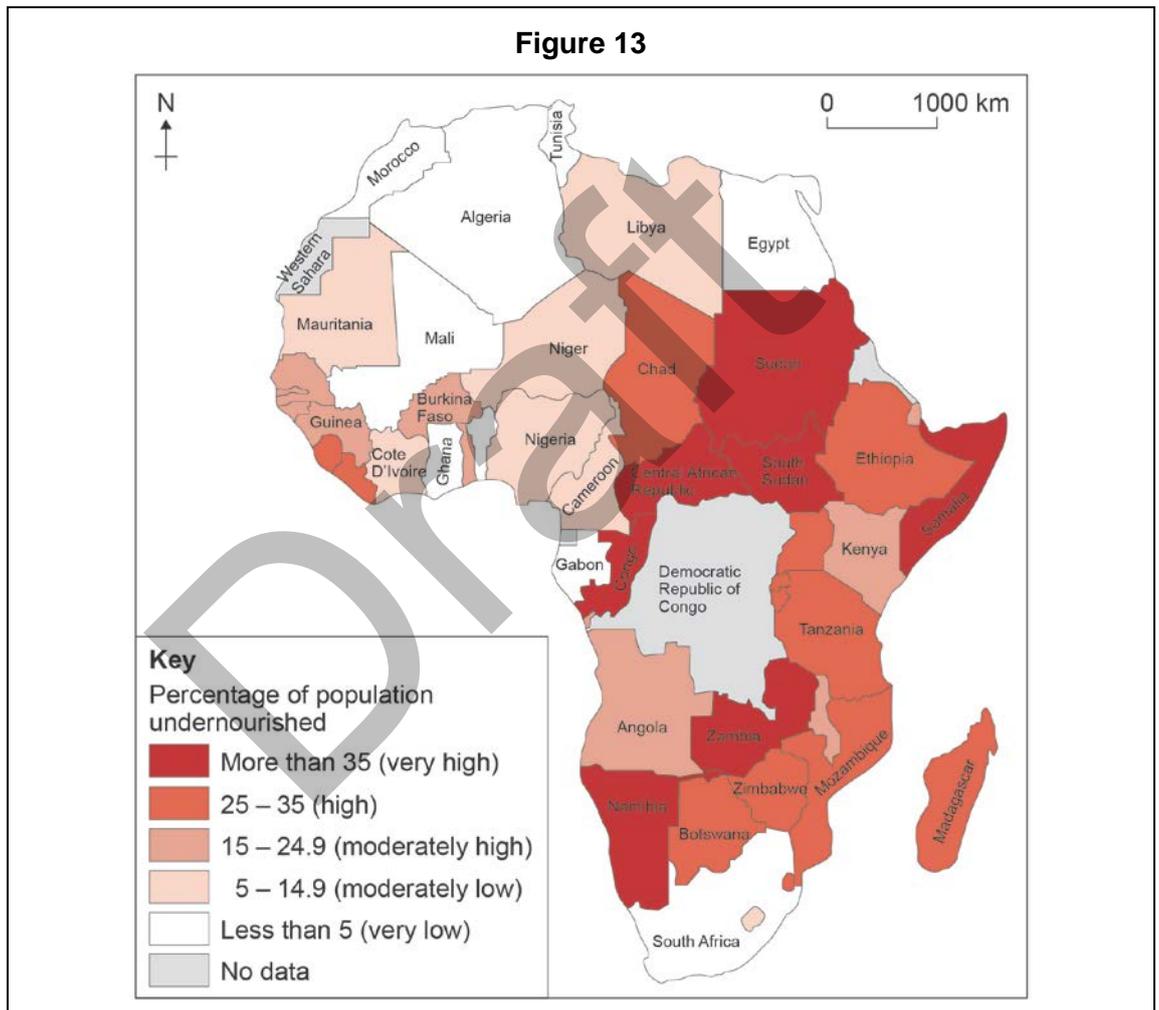
Question **0 6**

CORRECT METHOD

WRONG METHODS

Question 4 Food resources

Study **Figure 13**, a map showing the percentage of population that was undernourished in Africa in 2014.



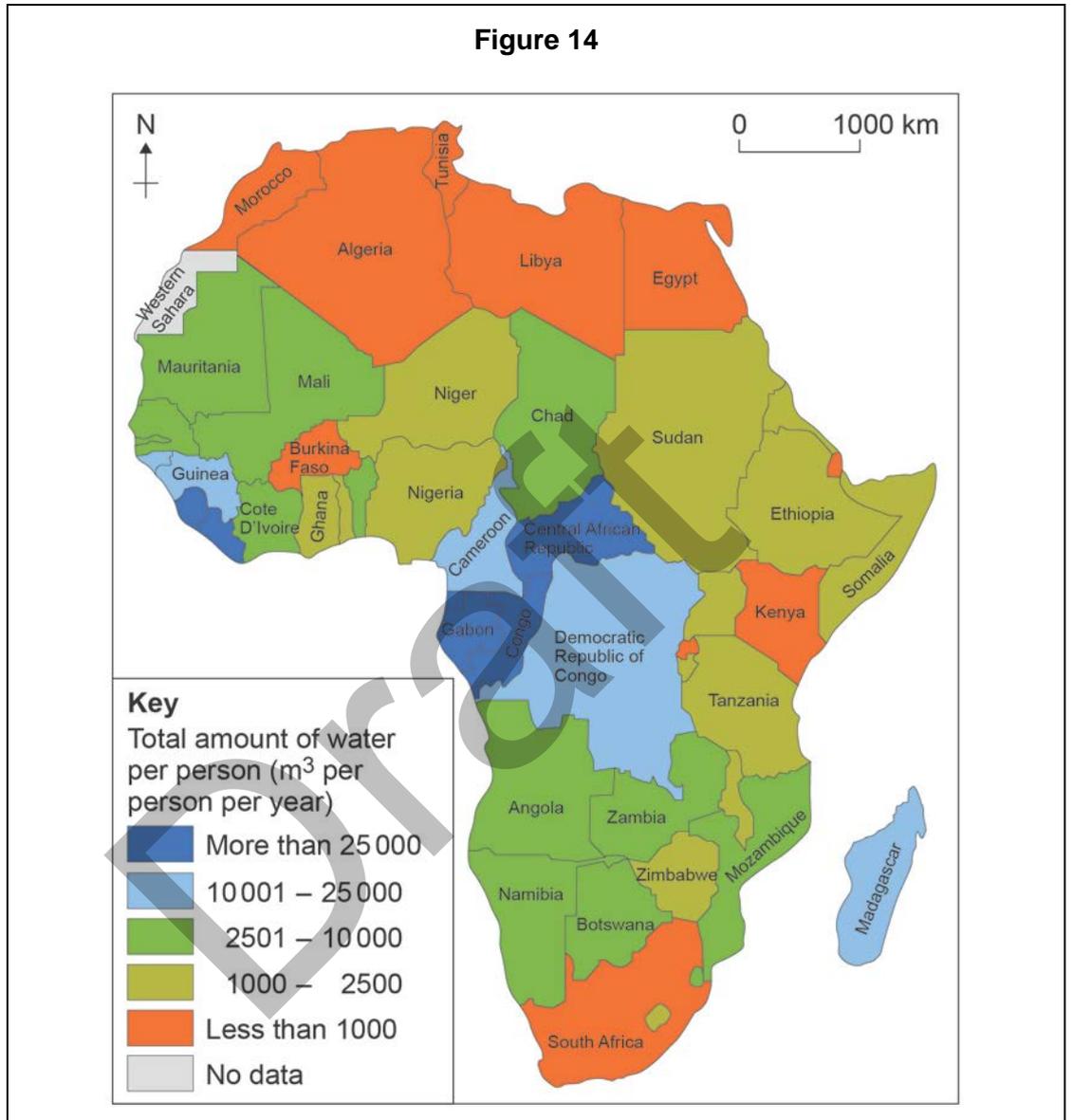
0 4 . **1** What percentage of the population in Chad was undernourished in 2014? Shade **one** circle only.

- A** 5–14.9%
- B** 15–24.9%
- C** 25–35%
- D** More than 35%

[1 mark]

Question 5 Water resources

Study **Figure 14**, a map showing the total amount of water available per person in Africa in 2010.



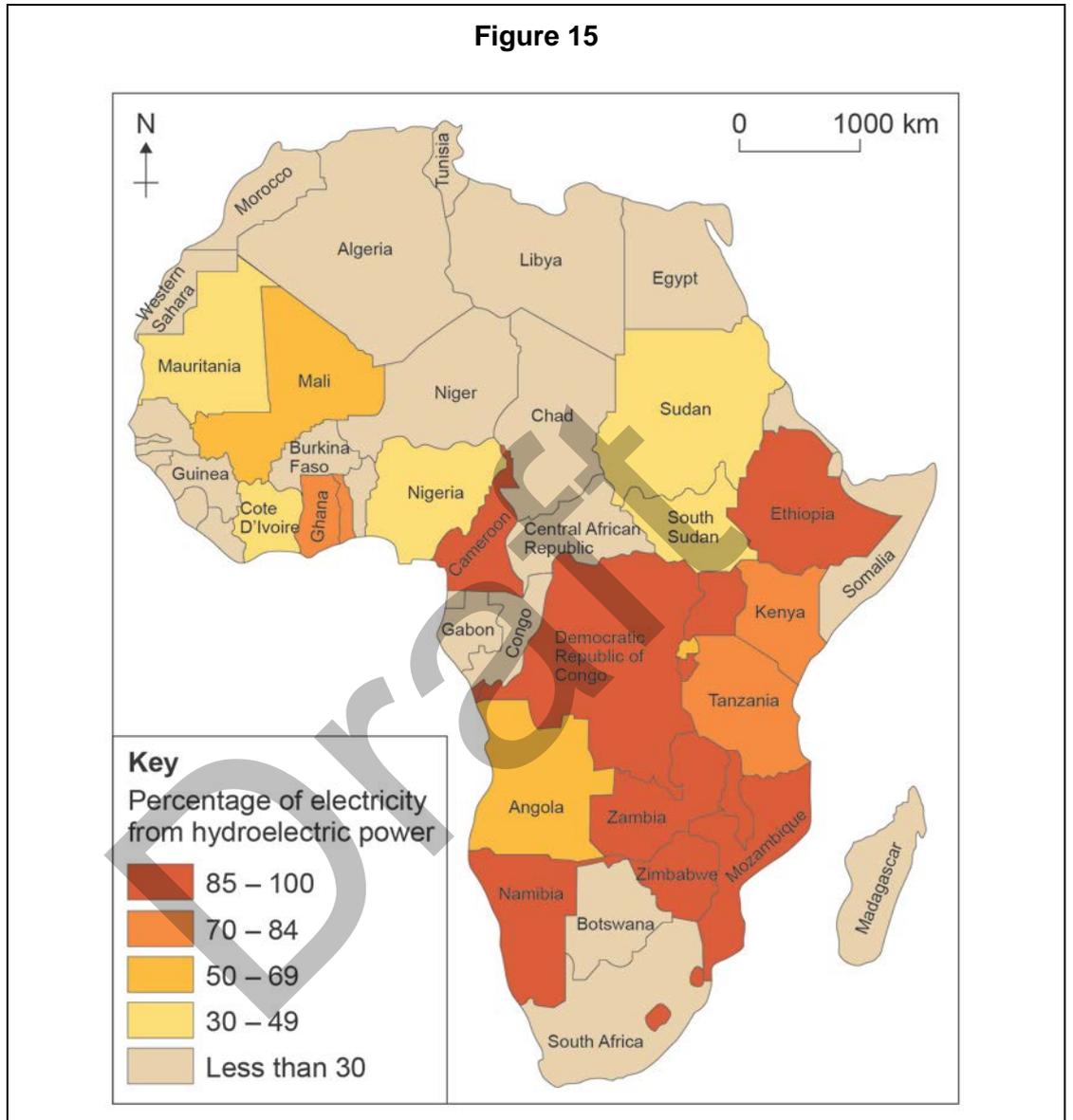
0 5 . **1** What was the total amount of water per person in Ethiopia in 2010? Shade **one** circle only.

- A** Less than 1000 cubic metres per person per year
- B** 1000–2500 cubic metres per person per year
- C** 2501–10 000 cubic metres per person per year
- D** 10 001–25 000 cubic metres per person per year

[1 mark]

Question 6 Energy resources

Study **Figure 15**, a map showing the percentage of electricity from hydroelectric power in Africa.



0 6 . 1 What is the percentage of electricity from hydroelectric power in Mauritania? Shade **one** circle only.

A 30–49%

B 50–69%

C 70–84%

D 85–100%

[1 mark]

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ANSWER IN THE SPACES PROVIDED**

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