

445/01

GEOGRAPHY UNIT GG5
SUSTAINABLE DEVELOPMENT

A.M. FRIDAY, 18 June 2004

(3 hours **to include** ½ hour reading time)

THIS QUESTION PAPER MUST NOT BE HANDED TO CANDIDATES UNTIL THE COMPLETION OF HALF AN HOUR READING TIME USING THE RESOURCE FOLDER.

ADDITIONAL MATERIALS

In addition to this examination paper, you will need:

- a Resource Folder;
- a 12 page answer book;
- WJEC Resource Atlas (Second Edition).

INSTRUCTIONS TO CANDIDATES

Any notes on rough paper will not be accepted as part of the answer.

INFORMATION FOR CANDIDATES

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

You are reminded of the necessity for good English and orderly presentation in your answers.

This paper assesses your ability to draw on your understanding of the connections between different aspects of the subject represented in the whole geography specification.

You will gain marks by linking data contained within the atlas and using this to enhance your answers.

No certificate will be awarded to a candidate detected in any unfair practice during the examination.

Answer all questions.

SECTION A

1. Describe different approaches to tackling **one** of the following urban problems in LEDCs:
housing;
transport;
waste disposal.
- [20]
(approximately 30 minutes)

SECTION B

The Resource Folder provided gives data relating to current sustainability issues.

You may use the WJEC Resource Atlas (Second Edition) throughout the paper to supplement the resources provided in the Resource Folder.

2. Use **Resource 1** to describe the level of progress made at the World Summit on Sustainable Development.
- [10]
(approximately 15 minutes)
3. **Resource 1** makes reference to '*habitats and wildlife*'. Use **your own knowledge** to explain how the intensification of agriculture has a negative effect on the physical environment.
- [10]
(approximately 15 minutes)
4. Use **Resource 2** and **your own knowledge** of **one area** to describe the relationship between the supply of and the demand for water.
- [10]
(approximately 15 minutes)

5. Select from all the material provided, referring in particular to Resource 3.

Topic: Sustainable water use in the Murray-Darling Basin [MDB], Australia

Over the past 100 years there has been a massive construction programme of dams for regulating river flow and water storage in the Murray-Darling Basin. But now the Murray-Darling Basin is under threat.

'We haven't had a drop of water leave the whole Murray-Darling Basin [MDB] to the sea since last November, twelve months ago. We've got an area as big as France and Spain combined, and there's not been one drop of run-off leave the whole system.'

Don Blackmore, MDB Commission Chief Executive, interviewed on ABC
[Australian Broadcasting Corporation] 4 December 2002.

- (a) (i) Use the information in **Resource 3a** to describe factors that may have accounted for the lack of river flow through the mouth of the Murray river in 2002.

[10]

(approximately 15 minutes)

'Adelaide, one of Australia's biggest cities, is facing a big problem: its total water supply, which is piped from the Murray river more than 100miles to the east, will be undrinkable in 20 years.'

The Economist 12 July 2003

- (ii) Use the information in **Resource 3b** to explain why Adelaide has a problem with the quality of drinking water extracted from the Murray River.

[5]

(approximately 8 minutes)

- (b) Identify the main **conflicts** that have arisen through the increased demand for water in this drainage basin. Use the information in **Resource 3c**.

[10]

(approximately 15 minutes)

- (c) The use of water in the Murray-Darling Basin is no longer sustainable. Use **Resources 3a, 3b and 3c** to evaluate the importance of the different factors contributing to this problem.

[10]

(approximately 15 minutes)

- (d) **Resource 3d** shows current methods of addressing the problems of sustainable water use. Assess their merits and limitations. Use **all Resource 3** to help your answer.

[15]

(approximately 22 minutes)