8.2 Impacts of Water Insecurity and Conflict Over Shared Rivers: 30-minute Pack

AQA 8035 · Calculators not allowed · about 30 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 Use the case of the Nile basin and any other examples you know to answer this question.

'Economic interdependence and diplomacy make violent conflict over shared rivers unlikely.' Evaluate the extent to which you agree with this statement.

(Total for Question 1 is 8 marks)

2 Describe how contaminated river water can lead to increased rates of diarrhoeal illness in a riverside town.

(Total for Question 2 is 2 marks)

3 Give TWO consequences of water insecurity for agriculture in a rural river basin.

(Total for Question 3 is 2 marks)

© Revision Library | revisionlibrary.co.uk

4 State one economic cost to industry caused by poor river water quality in an industrial town.

(Total for Question 4 is 1 mark)

5 Give THREE ways local governments can be economically affected by chronic water insecurity in a river basin.

(Total for Question 5 is 3 marks)

6 State one public health intervention that reduces waterborne disease risk when a river becomes contaminated.

(Total for Question 6 is 1 mark)

7 Explain ONE way that chronic water insecurity can affect school attendance in a riverside community.

(Total for Question 7 is 2 marks)

© Revision Library | revisionlibrary.co.uk

8 Describe ONE environmental consequence for river ecosystems when upstream water extraction increases greatly.

(Total for Question 8 is 2 marks)

---

9 The next two questions focus on the Nile basin dispute involving Egypt, Ethiopia and Sudan and the Grand Ethiopian Renaissance Dam (GERD). Use named country facts in your answers.
Describe THREE political concerns Egypt has about the GERD upstream in Ethiopia.

(Total for Question 9 is 6 marks)

© Revision Library | revisionlibrary.co.uk

Mark scheme · 8.2 Impacts of Water Insecurity and Conflict Over Shared Rivers: 30-minute Pack

Question 1

Level 4 A thorough, well-balanced evaluation that uses accurate named examples (e.g. the Nile basin and GERD, other transboundary rivers), weighs evidence that economic interdependence and diplomacy reduce incentives for violence against counter-evidence such as power asymmetry, historical grievances and failed diplomacy, and reaches a justified, clear conclusion on the extent to which violent conflict is unlikely. **7-8**

Level 3 A clear evaluation that considers both sides with relevant examples; the argument is reasoned and a conclusion is given, though some points may be less developed or supported. **5-6**

Level 2 Some relevant points about how economic links and diplomacy can prevent conflict are made, or some counter-arguments are given, but the analysis is limited and the conclusion is generalised. **3-4**

Level 1 One or two simple, relevant points are made with little development or no clear conclusion. **1-2**

Level 0 No relevant content. **0**

Indicative content:

- Arguments agreeing with the statement: economic interdependence creates mutual costs to conflict, for example shared water infrastructure and cross-border trade make states prefer negotiation; dams like GERD offer potential for regional electricity trade which creates incentives for cooperation.
- Diplomacy and institutions can provide mechanisms for dispute resolution, e.g. negotiations, technical committees and mediation reduce the risk of unilateral violent action.
- Arguments challenging the statement: where vital resources are scarce, states may accept high costs to secure supplies, especially if one state is highly dependent; downstream states like Egypt may feel existentially threatened and resort to coercive measures if diplomacy fails.
- Power asymmetry matters: a militarily stronger state can impose outcomes or threaten force, while weaker states may take risky actions to secure their needs.
- History and national identity can inflame disputes, with leaders using nationalist rhetoric and domestic politics making compromise difficult.
- Case-study detail: in the Nile basin, prolonged negotiation over GERD illustrates both diplomacy and ongoing tension; agreements on filling and drought management remain contentious, showing diplomacy reduces but does not remove the risk.
- A balanced conclusion weighs that economic interdependence and diplomacy lower the probability of violent conflict, but do not make it impossible where dependency, mistrust, weak institutions or acute scarcity persist.

Question 2

contaminated water contains pathogens from sewage or animal waste, oe **B1**

people drinking or using that water become infected, increasing diarrhoeal illness rates, oe **B1**

Answer: Contaminated river water can contain pathogens from sewage or animal waste, and when people drink or use that water they become infected, increasing rates of diarrhoeal illness.

Question 3

reduced crop yields due to insufficient irrigation or poor water quality **B1**

loss of livestock or reduced productivity from lack of clean drinking water for animals **B1**

Answer: Reduced crop yields from insufficient irrigation or poor water quality; and loss of livestock or reduced productivity because animals lack clean drinking water.

Question 4

increased treatment costs or production shutdowns due to water contamination **B1**

Answer: Increased treatment costs or production shutdowns due to water contamination.

Question 5

increased public spending on emergency water supplies or treatment works, oe **B1**

loss of business rates or reduced economic activity if industry or agriculture decline, oe **B1**

reduced tax revenue and higher welfare costs as households become poorer, oe **B1**

Answer: Increased public spending on emergency water supplies or treatment works; loss of business rates or reduced economic activity if industry or agriculture decline; and reduced tax revenue with higher welfare costs as households become poorer.

Question 6

chlorination or other treatment of drinking water supplies **B1**

Answer: Chlorination or other treatment of drinking water supplies.

Question 7

one valid way, e.g. children are kept home to collect water from distant or safe sources, or children fall ill from contaminated water, oe **B1**

linked effect on attendance, e.g. time for schooling is reduced because of water collection, or illness causes absenteeism, oe **B1**

Answer: Children may be kept home to collect water from distant or safe sources, reducing time for schooling; alternatively, illness from contaminated water can cause pupils to miss school.

© Revision Library | revisionlibrary.co.uk

Question 8

reduced habitat area and lower flows harming fish and invertebrate populations, oe	**B1**
linked detail, e.g. wetlands and riparian vegetation can dry out, reducing biodiversity, oe	**B1**

Answer: Reduced habitat area and lower flows harming fish and invertebrate populations; wetlands and riparian vegetation can dry out, reducing biodiversity.

Question 9

concern 1, e.g. reduced Nile flow affecting Egypt's water supply for population and irrigation, oe	**B1**
linked detail, e.g. Egypt relies on the Nile for over 90% of its freshwater needs historically, oe	**B1**
concern 2, e.g. control over timing and volume of releases from GERD affecting downstream agriculture and power generation in Sudan and Egypt, oe	**B1**
linked detail, e.g. sudden releases or prolonged filling periods could damage crops or reservoirs downstream, oe	**B1**
concern 3, e.g. long-term changes to sediment flow and river ecology that could harm agriculture and fisheries in Egypt, oe	**B1**
linked detail, e.g. sediment trapped by a large dam reduces nutrient-rich silt reaching downstream floodplain soils, oe	**B1**

Answer: Egypt is concerned that GERD could reduce Nile flow affecting its water supply for people and irrigation (Egypt historically relies on the Nile for the vast majority of its freshwater); it is also concerned that control over timing and volume of releases could harm downstream agriculture and power generation in Sudan and Egypt, and that the dam could trap sediment, changing river ecology and reducing nutrient-rich silt reaching downstream soils.

© Revision Library | revisionlibrary.co.uk