

AQA, OCR, Edexcel

GCSE Science

GCSE Biology

Food Security Answers

Name:

M M E

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Total Marks:

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Q1: Define what is meant by the term food security.

A= having enough food to feed a population

(1 mark)

Q2: Discuss the graph shown in figure 1, focusing on food security.

A= 1 mark for each of the following points:

- Export increases – less food available locally
- Decrease in food security for local population

(2 marks)

Q3: Describe 3 ways in which food security can be put at risk from a population.

A= 1 mark for any 3 of the following points and explanation.

- Increase in birth rate – more people to feed
- Changing diets in developed countries – take food from local populations
- Pests/ Pathogens – Reduces supply
- Environmental change – poor crop conditions /crop failure
- Cost – Ability to purchase less food
- Conflict – Can destroy crops/ increase costs

(3 marks)

Q4: Food security is a global risk. Discuss ways in which sustainable solutions can be used to reduce food insecurity.

A= Accept any 3 of the following:

- Maintain soil quality – increase crop yield
- Produce food more efficiently
- Manage stock resources – e.g. fish
- Water management

(3 marks)

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Q5: Global warming is widely recognised as a large factor in environmental changes, which affect food security. Give 3 examples of environmental changes, which can affect food security.

A= Accept any 3 of the following:

- Flooding
- Drought
- Extremes of temperature

(3 marks)

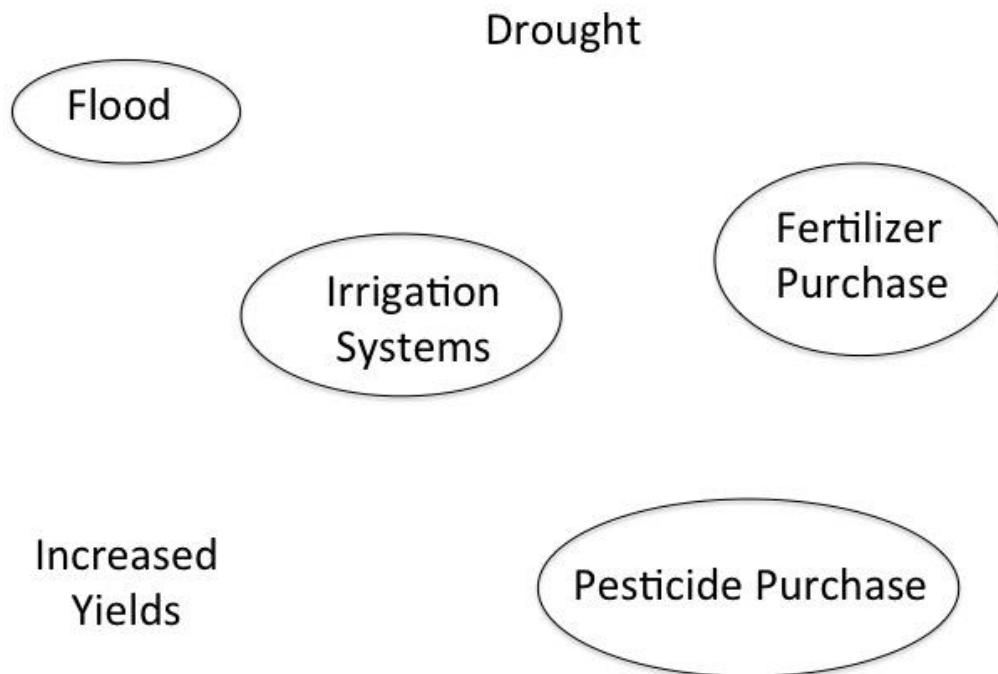
Q6: Give an example of a pathogen spreading to the UK due to climate change.

A= Blue tongue

Also accept any other acceptable disease such as Lyme disease.

(1 mark)

Q7: Circle 4 factors of agricultural costs, which can negatively affect food security.



(4 marks)