5 Agricultural regions and the environment – Part 2

Name: _____ Class: _____ Date: _____

Vocabulary

Write each word three times.

English	**Write it 3 times** (English)		
Bid-rent			
Desertification			
Salinisation			
Soil erosion			
Eutrophication			
Food security			
Fair trade			

Recall

Part 1 gave you the agricultural revolutions, the classifications and von Thünen's rings.

This sheet covers where food actually comes from at world scale, and what farming does to the land.

New ideas

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1 Climate sets the possibilities

Agriculture is bounded by climate and soil. Wet rice needs heavy seasonal rainfall and flat, floodable land; wheat needs a temperate belt with a dry harvest season; pastoral nomadism occupies land too dry to crop at all.

This is possibilism, not determinism: climate limits what is possible, and the choice among the possibilities is economic and cultural.

2 Agricultural regions

The standard world classification (after Whittlesey) distinguishes subsistence regions – shifting cultivation in the humid tropics, pastoral nomadism in the dry lands, intensive subsistence wet-rice in East and South Asia – from commercial regions: mixed crop and livestock, dairying, grain farming, ranching, Mediterranean, and plantation.

Two rules make the map readable. Subsistence dominates where incomes are low and holdings small; commercial farming dominates where a market, transport and capital exist.

3 The bid-rent idea applied to land

Bid-rent says land value falls with distance from the market, so the use that can pay most occupies the closest land. It explains von Thünen's rings, and the same logic reappears in Unit 6 explaining land use inside a city – recognising that it is the same idea in two units is worth a mark.

4 Environmental consequences

Desertification : productive dryland degrades to desert through overgrazing, over-cultivation and deforestation.

Salinisation : irrigation in a dry climate leaves dissolved salts behind as water evaporates, until the soil will not support crops.

Soil erosion follows the removal of vegetation cover. **Deforestation** for cropland and pasture removes carbon storage and habitat.

Eutrophication : fertiliser runs off into water, algae bloom, decay consumes the oxygen, and fish die.

5 Food security and the global system

Food security is reliable access to sufficient, safe and nutritious food. It fails through poverty and distribution far more often than through absolute shortage – the world produces enough calories.

Fair trade guarantees producers a minimum price. **Food miles** measure transport distance, though local food is not automatically lower-carbon. **Urban agriculture** and **community-supported agriculture** shorten the chain between grower and eater.

Global supply chains mean a temperate country eats tropical fruit year-round, at the cost of dependence on distant producers and vulnerability to disruption.

Practice

Try these in order. The methods are all above.

5.6 Explain why pastoral nomadism occupies dry regions rather than humid ones. [2]

5.7 Explain how irrigation can lead to salinisation. [3]

5.8 Describe the process of eutrophication. [3]

5.9 Explain why food insecurity can exist in a country that produces enough food. [2]

5.10 State how the bid-rent idea connects agricultural land use with urban land use. [2]