

Teacher materials

Food and water: Producing food

Scenario description

Players take on the role of decision-makers in a rural farming community where they must weigh up environmental sustainability, food security and economic development. They must analyse data and respond to environmental and agricultural issues, as well as make decisions about water pollution, crops and infrastructure. Players are encouraged to think critically and evaluate trade-offs between increased profits and the protection of natural resources.

Approximate location: East Africa



Learning objectives

- To identify the challenges of food distribution in low-income countries (LICs), including issues related to infrastructure and transportation.
- To make decisions about strategies to address and combat food insecurity in LICs.
- To examine the political, economic and human costs associated with food insecurity in LICs.

Key geographical terminology	Key decisions	Think, work and apply like a geographer
<ul style="list-style-type: none"> Agriculture: Using the land to produce food – e.g. growing crops or rearing animals. Export: To sell goods to other countries and send them out of the country to them. The goods are known as exports. Fertiliser: Nutrients added to the land to make crops grow better. Pollution: Something in the environment that shouldn't naturally be there – e.g. chemical spills in rivers and lakes. 	<ul style="list-style-type: none"> How should we respond to water pollution? What economic activities should we prioritise: food for local people or growing products for export? Which crops are best suited to specific rainfall and soil conditions? Should we use chemical or natural fertilisers? How do we balance the need for farmland with the protection of wildlife? 	<p>Encourage students to explore the links between gameplay and real-world job roles, such as:</p> <ul style="list-style-type: none"> agricultural scientist farmer hydrologist environmental consultant conservation officer

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Questions to explore	<ul style="list-style-type: none"> What are the causes and effects of water pollution in farming communities? How can farming practices affect local ecosystems and water sources? What factors influence crop choices? What are the advantages and disadvantages of chemical and natural fertiliser use in low-income countries? How do decisions about land use affect biodiversity and food security? How do infrastructure investments improve rural livelihoods? Who benefits from export-focused agriculture vs. local food production? What are the effects of deforestation?
Emotional and ethical considerations	<ul style="list-style-type: none"> Ethical decision-making: Is it fair to prioritise exports if local people go hungry? Should we protect endangered species at the expense of farming expansion? Should big companies or small farmers benefit more from shared community resources?
Links to other BBC resources* <small>*Some video content may only be available in the UK.</small>	<ul style="list-style-type: none"> BBC Bitesize – Food resources: https://www.bbc.co.uk/bitesize/topics/zjsc87h/articles/zrrx2v4 BBC Bitesize – Sustainable food resources: https://www.bbc.co.uk/bitesize/topics/zjsc87h/articles/z88nhcw BBC Bitesize for Teachers – Africa: Achieving sustainability: https://www.bbc.co.uk/teach/class-clips-video/articles/zk3fjr BBC Bitesize for Teachers – Deforestation and the growth of soya in Paraguay: https://www.bbc.co.uk/teach/class-clips-video/articles/zn73nrd BBC Bitesize for Teachers – Conservation in Madagascar: https://www.bbc.co.uk/teach/class-clips-video/articles/zh44d6f BBC Bitesize for Teachers – Agriculture - issues with intensive arable farming: https://www.bbc.co.uk/teach/class-clips-video/articles/zkc38xs BBC Bitesize Careers – How to become a farmer: Aimee's story: https://www.bbc.co.uk/bitesize/articles/zf2mgwx BBC Bitesize – UN Sustainable Development Goal 2: No hunger: https://www.bbc.co.uk/bitesize/guides/zfj84xs/revision/1
Play Planet Planners on Roblox	The URL for the game is: https://www.roblox.com/games/80099528313812 . This link will take you to the Roblox platform.