

# Teacher materials

## Weather and climate: Low-income country (LIC) climate change

### Scenario description

Players take on the role of decision-makers responding to the impacts of climate change in a fictional coastal town. They must analyse data, make decisions and allocate resources to both mitigate and adapt to climate change. Players must think critically about resource management, lowering carbon emissions and supporting those displaced by climate-related droughts and flooding.

**Approximate location:** Bay of Bengal



### Learning objectives

- To identify the factors contributing to climate change in low-income countries (LICs).
- To make decisions about adapting to climate change in LICs.
- To examine strategies for mitigating climate change in LICs.

### Key geographical terminology

- **Adaptation:** Taking steps to change or adjust something. For example, learning to live with the effects of climate change.
- **Climate change:** When atmospheric conditions, such as temperature and rainfall, change over time. Currently, our climate is becoming warmer over time, and this is called **global warming**.
- **Mitigation:** Taking steps to reduce the severity of something. For example, climate change mitigation involves limiting or preventing greenhouse gas emissions.

### Key decisions

- How should carbon emissions be reduced?
- How should we fund the implementation of renewable technologies?
- Should carbon be captured and stored?
- How can we support those displaced by climate-related natural hazards?

### Think, work and apply like a geographer

- Encourage students to explore the links between gameplay and real-world job roles, such as:
- renewable energy engineer
  - meteorologists, climate change scientists and policy makers
  - GIS and data science



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<b>Questions to explore</b>	<ul style="list-style-type: none"> <li>What sort of activities increase or decrease carbon emissions?</li> <li>What are the short-term and long-term impacts of droughts and flooding?</li> <li>How can communities adapt to and mitigate the effects of climate change?</li> <li>Which is more effective, mitigation or adaptation?</li> <li>Should economic factors influence disaster response strategies?</li> <li>How should we support those displaced by the effects of climate change?</li> <li>How do different parts of the world experience and manage climate crises?</li> <li>Who is responsible for contributing to climate change? Who is most affected by climate change?</li> </ul>
<b>Emotional and ethical considerations</b>	<ul style="list-style-type: none"> <li><b>Eco-anxiety:</b> Acknowledge climate change concerns but focus on solutions and resilience.</li> <li><b>Ethical decision-making:</b> How should we support those displaced by the effects of climate change? How do we balance economic and environmental concerns?</li> </ul>
<b>Links to other BBC resources*</b> <small>*Some video content may only be available in the UK.</small>	<ul style="list-style-type: none"> <li>BBC Bitesize – Climate change: <a href="https://www.bbc.co.uk/bitesize/topics/zx38q6f/articles/z773ydm">https://www.bbc.co.uk/bitesize/topics/zx38q6f/articles/z773ydm</a></li> <li>BBC Bitesize – Rivers and flooding case study: Bangladesh: <a href="https://www.bbc.co.uk/bitesize/guides/zqycwmn/revision/4">https://www.bbc.co.uk/bitesize/guides/zqycwmn/revision/4</a></li> <li>BBC Bitesize for teachers – Climate refugees in Dhaka, Bangladesh: <a href="https://www.bbc.co.uk/teach/class-clips-video/articles/zkdvs7">https://www.bbc.co.uk/teach/class-clips-video/articles/zkdvs7</a></li> <li>BBC Bitesize for teachers – Rising sea levels in Bangladesh: <a href="https://www.bbc.co.uk/teach/class-clips-video/articles/z3dvsk7">https://www.bbc.co.uk/teach/class-clips-video/articles/z3dvsk7</a></li> <li>BBC Bitesize – The regenerators – What is global warming?: <a href="https://www.bbc.co.uk/bitesize/articles/zcdw7yc#z4wj2v4">https://www.bbc.co.uk/bitesize/articles/zcdw7yc#z4wj2v4</a></li> <li>BBC Bitesize – The regenerators – What is a carbon footprint?: <a href="https://www.bbc.co.uk/bitesize/articles/zp27xbk">https://www.bbc.co.uk/bitesize/articles/zp27xbk</a></li> <li>BBC Bitesize – The regenerators – What are greenhouse gases?: <a href="https://www.bbc.co.uk/bitesize/articles/z39kwnb">https://www.bbc.co.uk/bitesize/articles/z39kwnb</a></li> </ul>
<b>Play Planet Planners on Roblox</b>	The URL for the game is: <a href="https://www.roblox.com/games/80099528313812">https://www.roblox.com/games/80099528313812</a> . This link will take you to the Roblox platform.

