

Welcome to GCSE Geography



Where will it take us today?

1	G	3c
		3b
		3a
2	F	4c
		4b
		4a
3	E	5c
		5b
		5a
4	D	5c
		6b
		6a
5	C	7c
		7b
		7a
6	B	8c
		8b
		8a
7	A	EP
		EP
		EP
8	A*	EP
		EP
		EP
9		EP

Topic 8: 8.2c L4 Resource Reliance

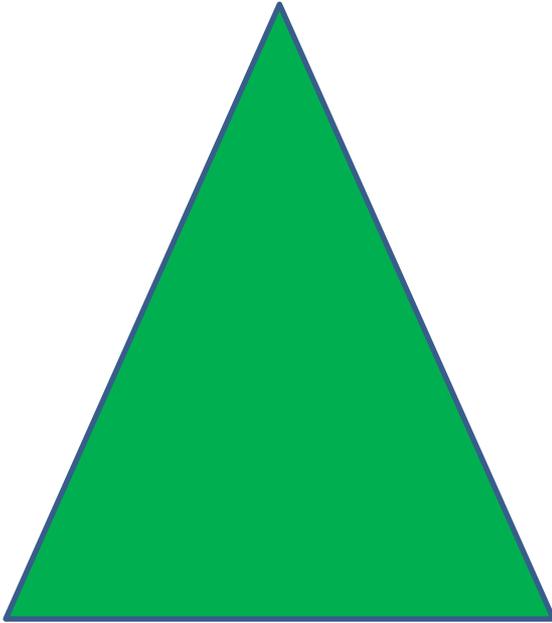
2
mins

‘Can we feed nine billion people?’ We will reflect upon the sustainability of strategies to increase food security.

Today’s theme: Is small scale ‘bottom up’ the way forward to achieving food security?

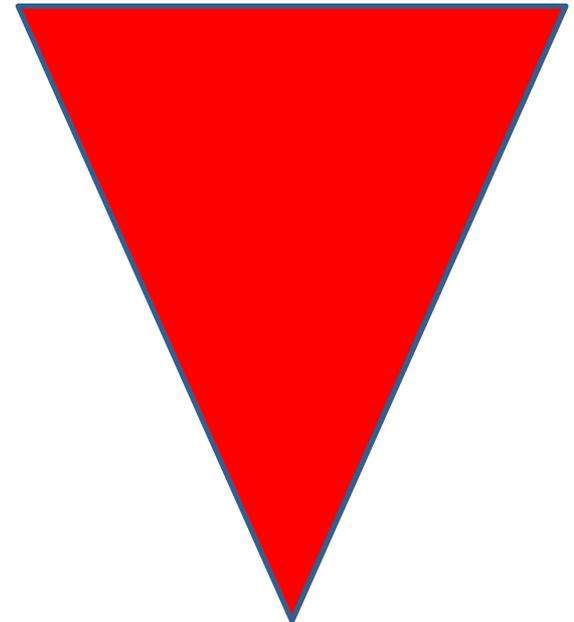


Bottom Up vs Top Down decisions



Decisions made at local (grass roots) level by the people who are going to be most affected by the change or idea. If you get 'buy in' from them, the change or idea will more likely succeed.

Decisions made by 'experts' at national or government level. The locals are then told what will happen. The decision is done to them. If they don't like it, they might not want the scheme to succeed



Tip ...Look beyond the obvious

5 mins

Geo-lingo: top down; bottom up; large scale; small scale; permaculture; urban gardens



What do these all have in common?



Learning is successful when I ...

Know:

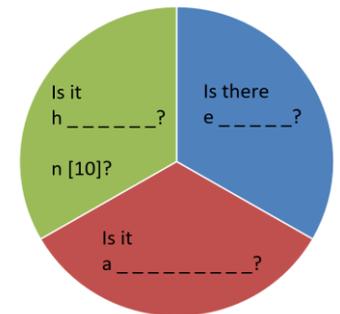
- what urban gardens and permaculture are [1-2]
- how important these are to world food supplies [3-4]

Understand:

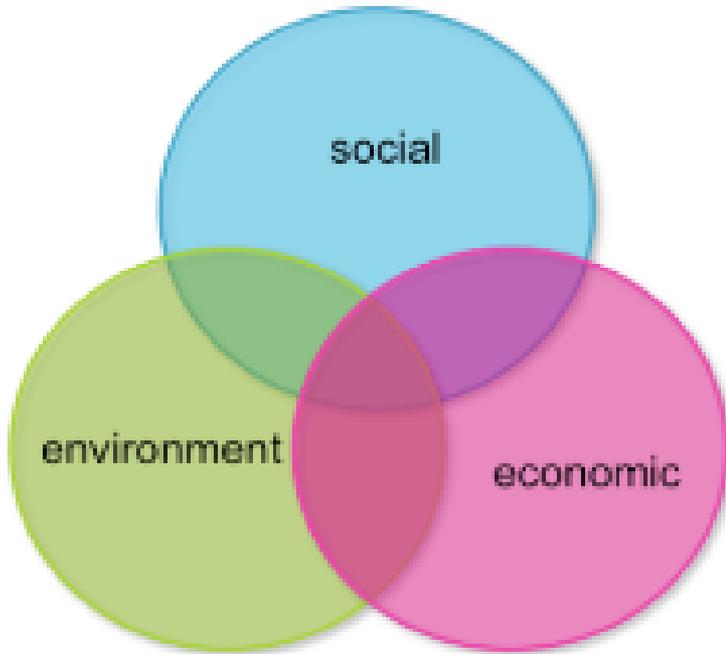
- the advantages and disadvantages of urban gardens and permaculture [3-5]
- how they contribute to food security [5-7]



- What ??% of the World's food is grown in urban areas?
- Why is this especially useful in urban areas in LIDCs?
- 'I thought cities were already over-crowded ... where do you fit these in?'
- How do urban gardens contribute to food security?



Urban Gardens: How sustainable?



Add the labels to the diagram to help inform your decision about how sustainable urban gardens are

1. The food grown here is healthy & nutritious
2. Growing food doesn't cost very much
3. Urban gardens create safe places for children to play and learn in
4. Diseases can spread in urban livestock
5. Urban gardens create a community space
6. Extra food can be sold for a profit
7. Urban waste can be used as fertiliser
8. Urban gardens remove CO₂ from the atmosphere
9. Waste (grey) water is used to water crops
10. Rubbish tips can be converted into green spaces
11. Rooftop farms insulate buildings and lower heating costs

BONUS: Any of your own ideas to add?

- Which two words does permaculture consist of?
- Which biome type does perma-culture mimic?
- What is 'stacking' and why is this especially useful in an urban area?
- Why aren't pesticides needed?
- Why aren't fertilisers needed either?
- How does permaculture contribute to food security? [Tip: remember to structure your answer socially, economically and environmentally]

5 mins

Permaculture

<https://www.permaculture.org.uk/land>

come get
it #1!



Where's our closest permaculture location?

come get
it #2!



You have been asked to speak at a meeting about food security. Write a two minute speech, arguing one of the following points

Large scale technological approaches are the best solution to feeding 9 billion people by 2050

Small scale bottom up approaches are the best solution to feeding 9 billion people by 2050

A mixture of large and small scale approaches are the best solution to feeding 9 billion people by 2050

Learning is successful now I ...

Know:

- what urban gardens and permaculture are [1-2]
- how important these are to world food supplies [3-4]

Understand:

- the advantages and disadvantages of urban gardens and permaculture [3-5]
- how they contribute to food security [5-7]



Reflection

Have you ever seen a rooftop garden locally? If yes, where?

Would you be willing to develop a rooftop garden if we had one?

Where is our nearest foodbank? What happens there?



Homework

Using an example, explain how ethical consumerism can improve food security. [6 marks]

Explain how environmentally sustainable one method of improving food production is [4 marks]

Using an example, evaluate the sustainability of a technological attempt to achieve food security [6 marks]