Lesson Four: Researching the Looting of the Earth

About this lesson
In this lesson students will develop key skills such as research, team work and presentation by working in groups to have an in-depth look at a particular type of resource depletion, by completing their own research and by presenting their findings to the whole class. At the end of the lesson (which can be extended over several sessions to allow more time for research) students will be experts in their area of resource depletion.

Learning Objectives
- Have an in depth understanding of one type of resource depletion
- Able to collect information and present it to others; and form an opinion on the topic

Resources Required
- Handout 4.1: Global Resources
- Handout 4.2: Research Sheet Looting the Earth

Key Concepts
- Resource Depletion
- Sustainability

Lesson plan

5 minutes
Explain that in this lesson students will be conducting their own research (in pairs or small groups) into another type of resource depletion (not overfishing). Ask them to think back to the first lesson and what other types of resource depletion they looked at. Use resource sheet 4.1 to jog their memory and quiz them.

50 minutes
Ask each pair/group to pick a type of resource depletion to focus on. They can then choose for themselves if they want to keep a broad look at the problem or focus in on a particular country or product (e.g. focus on the logging of Redwood trees in California or gold mining in Papua New Guinea). Have each pair/group create a 5 minute presentation on their type of research depletion. They can use handout 4.2 to help them focus their research and they can choose the form their presentation will take (PowerPoint, poster, role play).

5 minutes
Which fish are under threat and being overfished? Show students the image in handout 2.3 and discuss why they think these fish are being overfished? What is the problem with overfishing?

Alternative Activity
Alternatively, the structure of the presentations could also be in the form of a mini Earth Summit, where groups present their findings and argue their case for what needs to be done. At the end of the summit the group should come up with a set of goals/recommendations. These websites have resources and useful tips on how to set up a Model UN Summit: www.unesco.org.uk/un_matters and www.un.org/cyberschoolbus/modelun/over.html.
Handout 1.1 Global Resources

What is resource depletion?

Resource depletion is a term used to describe natural resources being used so fast that they are no longer available in the same quantities.

What is the tragedy of the commons?

The 'tragedy of the commons' is a term coined by Garrett Hardin in 1968 to describe the misuse of common resources for personal gain. He described how if a resource is shared and commonly owned (like fish, land, water), responsibility for looking after the resource is shared and no one takes responsibility for looking after the resource. The resource is used beyond its sustainable limit. No one takes responsibility for looking after the resource, and the resource will be over-exploited and people want to get as much of it as they can before it runs out.

What are the causes behind resource depletion?

- Population growth
- Technological and industrial advance
- Overuse of land for growing crops and grazing animals, leading to soil depletion
- Overreliance on and unnecessary use of resources
- Greed and the drive to claim commons (e.g. as shown in Looting the Pacific)
- Overuse of land for growing crops and grazing animals, leading to soil depletion and erosion

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Image: London Permaculture

www.flckr.com/photos/naturewise/
Types of Resource Depletion:

**Over-mining:**
Extracting minerals from mines at such a rate that the mines are left empty. Most of the minerals that are mined would be considered non-renewable resources as they take millions of years to form. Oil, for instance, takes millions of years to be formed and is a finite resource. Impact: Prices shoot up (like the price for petrol) and eventually alternatives will need to be found.

**Soil Degradation:** Agricultural run-off from farms and road drainage, industrial use, and wasteful water usage. This means that the quality of the crops goes down and it can also lead to soil loss. Over-mining is an important source of income and food, however due to growing population pressures and wasteful usage, the soil monoursals a rapid pace which is leading to mirror creation that we might see on non-renewable resources. "Soil Degradation: Agricultural is an important source of income and food, however due to growing population pressures and wasteful usage, the soil monoursals a rapid pace which is leading to mirror creation that we might see on non-renewable resources."

**Deforestation:**
The cutting down and removal of all or most of the trees in a forested area, without replanting them. Forests still cover about 30% of the world’s land area, but the size of tropical forests is shrinking at a rate that the rainforests cannot supply the oxygen we need to breathe. Impact: Deforestation can erode soils, contribute to desertification and pollution of waterways, and decrease biodiversity. Forests also contribute to the destruction of habitats and the pollution of waterways, and people are lost each and every year.

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**Water:**
70% of the earth is covered by water. However, only a third of this water is fresh and drinkable and can also lead to soil loss. Over-mining is an important source of income and food, however due to growing population pressures and wasteful usage, the soil monoursals a rapid pace which is leading to mirror creation that we might see on non-renewable resources."

**Hunting Animals:**
Hunting animals for their meat or certain parts of their body (fur, tusks) has been happening for hundreds of years, however the rate of hunting in the last 100 years has already led to the extinction of many species. Many more species are at risk of extinction. Impact: Extinction of many species can be devastating to the human population.

**Looting The Earth:**
People let without access to clean fresh drinking water for personal, agricultural, and industrial use. Population pressures and wasteful usage: Agriculture 70% for industrial purposes and 10% for personal use. Water is our most important resource due to the fact that 67% is salt water and 33% is fresh water which is distributed as follows: 70% of the earth's water is covered by water. However, out of this 70%, we can only consume around 3% as the remaining 67% is salt water. Water is our most important resource due to the fact that 67% is salt water and 33% is fresh water which is distributed as follows: 70% of the earth's water is covered by water. However, out of this 70%, we can only consume around 3% as the remaining 67% is salt water.
Handout 4.1 – Researching Resources

In the activity you will conduct your own research (can also be in pairs/small groups) on one of the types of resource depletion listed in handout 4.1 and you will create a presentation (max. 5 minutes) to the rest of your class. You can choose a product or focus on a particular country or product of resource depletion listed in handout 4.1. You will need to research for at least 30 minutes before the presentation.

Your presentation should include:

1. Know how much information you need – you are only presenting for 5 minutes, not half an hour.
2. If you are using the internet, use smart search terms. If you are not getting results, try different key words.
3. Use these, if you print out large volumes, you will never read all of it.
4. Keep your research focused and do not print everything. If you read an article, make clear notes and keep your information sources re-readable.
5. Make sure you refer to at least three different information sources.
6. Write down your information sources in such a way that both others and yourself can find them again.
7. Start by looking in encyclopedias for key words and stick to these.
8. Be sure that you understand the question you are researching and what you are trying to find out.

Top Tips for Researching Resources

1. Reference list – what information sources have you used?
2. What will be the impacts and consequences of the resource being depleted?
3. What resources are being made to halt or reverse the depletion of your resource?
4. Make sure to look at different stakeholders, such as the government, the companies, environmental/human rights organizations, and the consumer.
5. Note down your information sources in such a way that both others and yourself can find them again.
6. If your tutor recommends a certain journal, website, or book – use it.
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