

What is a resource?

A resource is something that is useful to people - water, air, soil, minerals etc..

Non-renewable resources - resources that will run out once they are all used e.g.. fossil fuels.

Renewable resources - one that is naturally replaced after use so that it never runs out (unless we use too much of them e.g.. fish)

Fossil fuels and fuelwood

Coal, oil and gas are non-renewable fossil fuel resources, created from the remains of plants and animals that lived millions of years ago. The fossil fuels that the world burns in 1 year took about 1 million years to create, and reserves are limited. MEDCs, with ¼ of the world's population use over 70% of fossil fuels. Fuelwood is important in LEDCs. It is renewable but more is burnt than is grown.

Recycling

- Cuts waste disposal costs
- Saves energy
- Conserves resources
- Creates jobs
- Keeps streets clean
- Raises public awareness about resources

Effects of mining in South Wales

Coal mining damages the environment and the people working and living there, and coal pollutes the atmosphere. On the other hand, mining the coal provides jobs, brings income into the area, and supplies an energy source that people depend on. Many of the mines in South Wales have now been closed, leaving people without work.

Resource Depletion

Renewable resources

Renewable resources are those that replenish themselves through natural processes. Forests, fish stocks, water and fertile soil will all remain sustainable as long as the rate at which they are used does not exceed the rate they replenish themselves.

Renewable energy

- Hydro-electric power (HEP) e.g.. Aswan Dam
- Wind power e.g.. in windy parts of Wales and Cornwall
- Solar power
- Geothermal energy - in volcanic countries e.g.. Japan and New Zealand
- Tidal power
- Wave power

The Amazon rainforest, Brazil

Tropical rainforests cover 7% of the earth's land surface. In Brazil 58% of the land is covered by forest. Indigenous people have lived a sustainable lifestyle for generations but the Indian traditional way of life is fast disappearing. How is the use of the Amazon changing?

- Timber - forests cleared for hardwoods such as mahogany.
- Road building - The Trans-Amazonian Highway.
- Mineral extraction - such as iron ore, copper and gold.
- Hydro-electric power.

Traditional Amazonian way of life

- **Gathering and hunting** - fruits, nuts, leaves, seeds and roots.
- **Trading**
- **Farming** - 'shifting cultivation' - clear a small area of forest, plant crops there, then move to another area when the soil loses its fertility. This type of farming is sustainable.

Fishing

Impact of development

- **Environmental disaster:** as trees are felled, the forest's balanced is disturbed. Animals flee and plant species destroyed.
- **Resources lost:** new roads give easy access to increasing numbers of people looking to profit from the forest.
- **Disease:** outsiders bring disease, against which Indians have no natural protection.
- **Pollution-** Mercury is used to separate gold from the river mud, but also gets into the water, into fish, and into people's diet. Babies may be born brain damaged.

What is left after development?

- **Lost rights:** Indians are often powerless to reclaim their land from the occupiers.
- **Disappearing cultures:** traditional way of life is destroyed.
- **Dying land:** land cleared for cattle ranching gives a few years of pasture, then ranchers move on. Little can be grown on dry, exhausted soil.