

20.2-HABITAT DESTRUCTION

Reasons for habitat destruction:

- Increased area for food-crop growth
- Extraction of natural resources
- Marine and freshwater pollution

Note: Altering food-webs and food chains can have negative impacts on habitats

Undesirable effects of deforestation on the environment:

- Extinction
- Reducing biodiversity
- Loss of soil
- Flooding
- Increase of carbon dioxide in the atmosphere

Reasons for large scale deforestation.

There has been large-scale deforestation to provide the following:

- Timber as building materials
- Paper for newsprint and other forms of paper and cardboard
- Land for farms, cattle ranches and plantation of oil palms, sugar cane and soya beans
- Land for roads, towns and factories
- Firewood and charcoal as fuels

Undesirable effects of deforestation on the environment::

- Soils in tropical rainforests are very thin and when the vegetation is removed the soil is easily washed away. This causes soil erosion, formation of gullies and loss of plant nutrients.
- Local weather patterns change, with more frequent and severe storms.
- Flooding happens more frequently as water runs off the land much quicker and is not absorbed by plants and transpired into the atmosphere. Forests act as 'stores' of water, their leaves slow down the rate of evaporation from the soil and decrease the rate at which water reaches the soil.
- Destruction of the rainforests means the loss of many habitats and extinction of species.
- Carbon dioxide is added to the atmosphere because vegetation is burnt.

Do rainforests play an important role in maintaining the correct carbon dioxide balance.

Rainforests have no effect on maintaining the correct balance of carbon dioxide and oxygen in our atmosphere. They produce about as much carbon dioxide as they use in photosynthesis, and there is such a huge reserve of oxygen in the atmosphere that the quantity produced by all plants on the Earth makes little difference to the overall oxygen concentration of the atmosphere. There is no evidence that the rainforests are the 'lungs' of the Earth. There are, however, plenty of other reasons to stop cutting them down.

Carbon sinks

Carbon sinks are areas that store carbon in long-lived plant materials, and where there is little decomposition so dead vegetation forms peat that 'locks up' carbon for a long time.

The following resources get affected due to the increasing pressure of the world's population.

Ans. The pressure of an increasing world population has significant effects on the resources of the planet. Some of these resources are:

- Fossil fuels – oil, coal and natural gas
- Food resources, e.g. staple foods such as wheat, rice and maize
- Land and agriculture
- Land for housing, transport, industry and human leisure activities
- Land and bodies of water for disposal of waste.