Human impact: Amazon case study

Worksheet answers

The impact of western civilisation upon indigenous people of the Amazon has been significant, resulting in many changes to traditional lifestyles.

1. Use the information from the video to complete the following table:

CULTURAL CHARACTERISTIC	'TRADITIONAL' the culture that existed before western influence	'MODERN' the culture that currently exists
lifestyle	hunter-gatherer society	modern societies — industrial, city lifestyle, technological
uses for the rainforest	source of food and protection	timber, land for agriculture, oil, transport
hunting techniques	hunter-gatherer, blowpipe, poisons, bow and arrow	firearms, trapping, poaching, illegal trade of native animals
transport	foot, simple boats	mechanical vehicles, motorised boats, some traditional methods retained
gender roles	men: hunters women: gathering as well as other roles (string-making mentioned in video)	less defined
disease control	traditional methods using native plants and animals in medicines	drugs from western society now dealing with different diseases such as malaria
human impact on the environment	originally low impact with a sustainable approach	high impact, especially forest clearing and mining





- 2. Humans have a significant impact on the Amazon rainforest. Discuss how they have affect the following:
 - forest density
 - use of animals
 - food supplies
 - energy and mineral reserves

Forest density: this has declined as deforestation and mining reduces the number of trees. Use of land for a variety of reasons has caused a significant reduction in forest density.

Use of animals: animals are now hunted for a variety of reasons including selling on the 'black market'. Animals are also farmed which has an impact on the land.

Food supplies: the change from traditional use of native animals for food to farmed animals has resulted in clearing of the forest and reduction of habitat.

Energy and mineral reserves: with traditional methods the use of energy and the demand for minerals was low. This has changed with the need for firewood and easy access to mineral deposits. This has resulted in clearing of land.

- 3. Describe how the following have been affected by human activities in the Amazon rainforest:
 - air quality
 - soil quality
 - river water quality

Air quality: traditional methods were low impact, with fires from low population levels having little effect. Larger populations, producing large amounts of air pollutants, have resulted in a decline in air quality. Particulate matter and smog are now impacting on air quality.

Soil quality: traditional methods were low impact. Trees hold the top-soil together and prevent run-off into rivers and tributaries. Clearing has resulted in erosion and river silting. The nutrient-rich top-soil is being removed quickly. Removal and destabilisation of the soil also occurs through mining activity.

River water quality: rivers are mountain-fed with good bio-filtering methods leading to high quality with low levels of pollutants and silts. With removal of trees and destabilisation of the top-soils, rivers are becoming increasingly silted. Use of the river for various activities such as sewage and mining is resulting in increased levels of pollutants.



