

ECOSYSTEM DESTRUCTION

- At present Amazonia has in the 1500 fish species, 2000 bird species and 30,000 insect species. 60% of all world species in rainforests
- Habitats are destroyed, impacting on flora/fauna; endangering species leading to extinctions.
- Biodiversity and biomass are reduced. Medicine sources are lost and yet to be discovered medicines lost.

INDIGENOUS PEOPLES

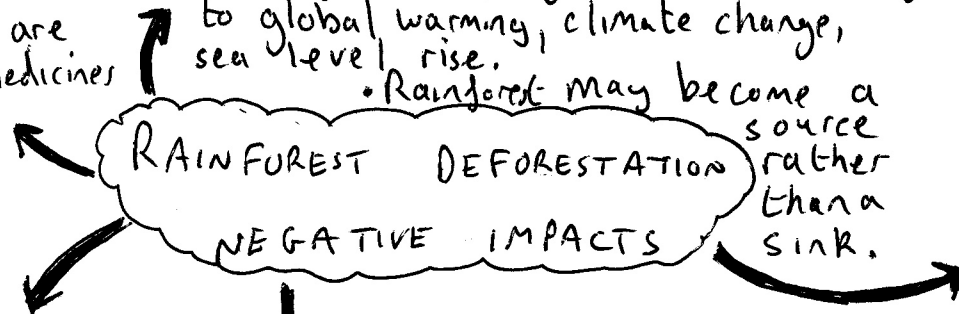
- Local tribes have lived in harmony with the forest, are seen as 'protectors'/'guardians' of the forest.
- Contact brings disease and loss of livelihood and culture; local food sources lost.
- < 1/2 million native peoples left.
- Roads bring development, and also illegal activities eg logging.
- Conflict with tribes (eg Koniso) brings battles, murders, forced removals.
- Even reserves and National Parks are under threat. Some say 'Genocide'.
- WAMPA nation created and declaration of rights of indigenous peoples.

CLIMATE CHANGE

- Less photosynthesis, less CO₂ use.
- Less carbon storage, no longer acts as a carbon sink.
- 1/3 of all global carbon stores in rainforest. 85% in plants/trees.
- Trees burnt, releasing CO₂
- CO₂, greenhouse gas increases leading to global warming, climate change, sea level rise.
- Rainforest may become a source rather than a sink.

WATER CYCLE

- Less interception, less interception loss.
- Less evapotranspiration
- More overland flow leading to an increase in floods and soil erosion/degradation/less productive soils.
- As 75% of water is recycled in the rainforest system at present; rainfall will decrease causing droughts and desertification.
- Increased albedo (reflection of sunlight) also gives less convection/less rainfall.



NUTRIENT CYCLE

- Productivity of rainforest was 2200 g/m²/yr. This is lost.
- Less leaf fall, less organic matter in litter
- Less decomposition; recycling of nutrients was rapid now slow
- Most of nutrients were stored in the biomass.
- Loss of biomass = Loss of nutrients
- Lower productivity
- Less fertile soil • More leaching

