

Unbalanced Carbon Cycle

The impact of Climate Change of Coral reefs and associated tourism

Importance

- Coral reef structures **buffer shorelines** against waves, storms, floods - helping to prevent loss of life, property damage and erosion.
- They provide **tourism opportunities** – e.g. snorkelling along the Great Barrier Reef.
- Their destruction would affect LICs and NICs – **For example several million people live in US coastal areas.**

Tourism and climate change

- Sea level rise will affect coastal **tourism infrastructure.**
- Climate change will lead to **changes in biodiversity** (migration of species away, **coral bleaching**), affecting **eco-tourism.**
- Increased stormy weather will **discourage people** from going on holiday.

Deforestation in Madagascar

- In 1950, there was 11.6 million Hectares of rainforest.
- In 1985, there was 3.8 million Hectares of rainforest.

Deforestation has a major impact on terrestrial carbon stores.

The rivers **Sofia and Betsiboka** have turned red due to soil erosion. More than **400 tonnes per hectare per year** of loose soil are being washed into these rivers.

Conversion of grasslands to farmland in the USA

The grasslands are being converted to meet the **US Environmental Protection Agency's** renewable fuel standard policy

- Increasing the use of **ethanol in petrol.**
- Boosting the **economies** of rural US states.
- Reducing **international dependence.**
- Reducing **CO₂ emissions.**

Over **5.5 million hectares** have disappeared, impacting wildlife hugely.

