THE LIVING WORLD
Rainforests

read

quiz

The Big Picture

ecosystems — *rainforests**

The Living World

cold environments ------ or ------- *hot deserts*

Value

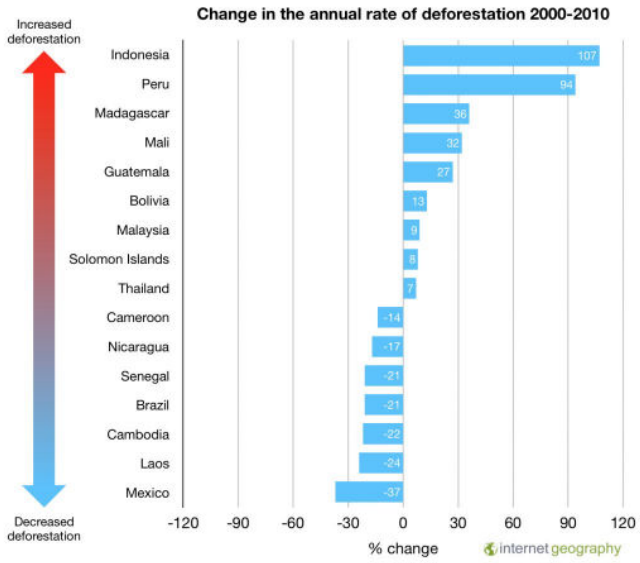
Services

- Carbon sink
- Water and nutrient cycling
- Protection against soil erosion
- Wildlife habitats
- Biodiversity
- Employment opportunities

Goods

- Native food crops (fruit and nuts)
- Wild meat and fish
- Building materials (timber)
- Energy from hydro electric power
- Water
- Medicines

Deforestation Rates



Causes of Deforestation

Logging – Hard wood (mahogany & teak) valued for furniture. Small trees pulped/charcoal.

Road building – Increased accessibility encourages development e.g. Trans-Amazonian.

Mineral extraction – Minerals (gold, bauxite, and copper) mined extensively.

Energy development – High rainfall creates ideal conditions for HEP.

Settlement and population growth – Settlements developed to service developments.

Impacts of Deforestation

Economic Development

- Commercial farming and mining generate employment and tax income
- Education, health care and social conditions are improved from tax revenue.
- Raw materials used by processing industries increasing the value of exported products.
- Cheap, renewable energy = development.
- Long-term economic losses due to forests being destroyed and rivers polluted.
- Loss of biodiversity affects tourism.

Soil Erosion

- Exposed land increases soil vulnerability to soil erosion reducing fertility.

Climate Change

- Local environment becomes hotter and drier.
- Reduction in carbon sink due to deforestation.
- Burning trees releases carbon dioxide.

Sustainable Management

Strategies

- International hardwood agreements
- Ecotourism
- debt reduction
- conservation and education
- Selective logging and replanting