

2. Equatorial zone

Distribution

5° on both sides of equator in South America, Africa and South East Asia. *photocopy*

Climate

Hot, wet, humid all year round, no seasons, rainfall mostly in the afternoons => heavy convectional thunderstorms. ITCZ.

- *Temperature*: 25°-35°C
- *Precipitation*: 2000-3000 mm, convectional rainfall mainly.
- *Humidity*: 80-90%

Soils

Ferralitic soils = rocks are chemically weathered <=> humid, hot conditions <=> aluminium and iron oxides remain in the soil => red colour, deep (30 m of thickness), with small humus cover, poor soil fertility

Hydrology

- *Rivers and basins*: South America = Amazon river, Africa = Zaire (Congo) river, Niger river, Asia = Irrawadi, Mekong and rivers of island equatorial rainforests.
- *Ocean currents*: warm Guinea (Africa), warm South Equatorial (South America), warm Equatorial Counter Current.

Fauna and Flora

Vast, greatest *biodiversity* on Earth = “Green hell” = *equatorial rainforest*, 400 animal species per hectare (200 species of trees/ha <=> in temperate climate 25 tree species at best), 60 m high trees. Visual appearance (view) of rainforest is uniform (constant) all year long because of no seasons.

- *Fauna*: Zaire (Congo) basin = gorillas, chimpanzees, parrots, Amazon basin = anacondas, tamanduas, leaf monkeys, piranhas, Asia = panthers. Lot of insect species everywhere.
- *Flora*: lianes (climbers), orchids, mushrooms (funguses), shade-loving plants,

Rainforests = “lungs of the Earth” => efficient recycling of air (production of O₂ instead of CO₂). Negative effects of deforestation (soil erosion, acidification, decreasing of soil fertility). *photocopy*

Population and settlements

Concentrated to *river estuaries* (Belém, Macapá) or to *fertile lowlands* (Lagos, Libreville, Muqdisho, Singapore, Medan) or to gulfs and lakes (Gulf of Guinea, Lake Victoria). Equatorial rainforests are less populated. Indian, Bantu, Indonesian languages. Small literacy rate (Africa 60%, South America 80%, Asia 70%). Short life expectancy (Africa = 35-45 yrs., South America = 50-60 yrs., Asia = 50 yrs.)

Agriculture and Industry

Most countries belong to LDCs. Some of them created special trading blocs (groups of states with no trade barriers, with no tariffs). Especially in African countries agriculture is underdeveloped <=> poor soil fertility (e.g. pastoral agriculture – sheep, cattle), cocoa, coffee, bit of mechanisation, beaten tracks (bad road conditions). Low-tech or mid-tech industry.

Social problems

Problems of large cities in Latin America (slums, favelas = shacks in city suburbs) with overpopulation (extreme urbanization) => *negative effects*: crime, prostitution, drugs, corruption, noise, diseases (AIDS, yellow fever), malnutrition, (civil, political) conflicts.

Keywords:

acidification, estuary, LDCs, deforestation, slums, favelas, overpopulation, underdeveloped industry, low-tech, mid-tech, parrot, ocean currents, biodiversity, malnutrition, equatorial rainforest