

## Chapter – 6: Human Environment Interactions – The Tropical and Subtropical Regions

- Renuka was excited – her Uncle Shrikant returned after 4 months
- Mr. Shrikant – wildlife photographer – travelled a lot
- Renuka’s interest – started at early age – liked pictures of far away lands and people living there
- Uncle showed some pictures – lots of different people
- Renuka was thinking – they look so different
- Uncle explained – they may look different – BUT – they need same basic things – food, clothing, shelter – their children – behave like everybody else

## Life in the Amazon Basin

- Amazon basin – tropical region – between  $10^0$  N and  $10^0$  S – very close to equator
- This region – referred to as **equatorial** region
- River amazon – flows through here – flows from mountains in the west to Atlantic Ocean in the east
- Region – river flows into another water body – **mouth**
- Lots of other rivers – join Amazon river – form Amazon basin
- River basin – drains – portions of Brazil, Peru, Bolivia, Ecuador, Columbia, Venezuela



# Climate

- Amazon basin – stretches on the equator – hot and wet climate – throughout the year
- Day and night – equally hot and humid – skin feels sticky
- Rains everyday – without warning
- Days – high temperature – very high humidity – nights – temperatures goes down – humidity remains high

## Rainforests

- Rains heavily – thick forests
- Forests – so thick – leaves and branches – create a roof – no sunlight reaches the ground
- Ground – dark and humid – orchids, bromeliads – grow as plant parasites
- Rich in fauna (animals) – toucans, humming birds, macaw – eating habits – different from Indian birds
- Animals – monkeys, sloth, tapirs (eats ant)

- Various species – reptiles, snakes – found here
- Lots of insect species – also live here
- Many fish species – also found in the river – including piranha (flesh eating fish)

## People of the Rainforests

- Grow food – small areas – after clearing forests
- Men – hunt and catch fish – women – take care of crops
- Main crops – tapioca, pineapple, sweet potato
- Cropping technique – slash and burn
  - Clear the land – cutting trees
  - Burn the remaining parts – provides nutrients to soil
  - This land – cultivated for some time – loses its nutrient content
  - Left undisturbed for some years – after some years – regains its nutrient content
- Hunting, fishing – uncertain – women feed vegetables to their families
- Main diet – manioc (cassava) – grows under the ground like potato
- They also eat – queen ants and egg sacs (collection of eggs)
- Financial crops – coffee, maize, cocoa – also grown here
- Rainforests – provides wood for houses
- Some houses – thatched (grass roof) – other houses – like an apartment – Maloca – slanting roof
- Life of people – slowly changing
- Older days – main part of forest – can only be reached through river
- 1970 – Trans Amazon highway – all parts of rainforest accessible
- Aircrafts, helicopters – also used to reach places
- Original population – pushed out from their area – forced to settle in new areas
- Developmental activities – gradual (slow and sure) destruction of rainforests
- Large areas – disappearing annually
- Top soil – washed away by rain – dense forest – turned into barren landscape

## Life in the Ganga-Brahmaputra Basin



- Ganga, Brahmaputra – along with supporting rivers (tributaries) – form the basin
- Lies in the sub-tropical region – 10° N to 30° N latitudes
- Tributaries of Ganga – Ghaghra, Son, Chambal, Gandak, Kosi – AND – tributaries of Brahmaputra – drains this region

- Plains of Ganga, Brahmaputra – mountains – foothills of Himalayas – Sundarbans delta – all main features of basin
- Area – dominated by monsoon climate
- Rains – between mid-June to mid-September
- Hot summers – cool winters
- Basin area – varying topography – imp. role – distribution of population
- Mountain areas – steep slopes – inhospitable terrain – low population
- Plain area – most suitable for living and agriculture – high population
- Main crop – paddy – requires lots of water – grown where rainfall is high
- Other crops – wheat, maize, sorghum, gram, millets
- Financial crops – sugarcane, jute
- Some areas – banana plantations
- West Bengal, Assam – tea plantations
- Bihar, Assam – silk farms – silk produced from silkworms
- Hills and mountains – gentle slopes – terrace farming
- Vegetation cover – vary with the landforms
- Deciduous trees – along with teak, sal, peepal
- Thick bamboo forests – also found in this area
- Delta area – covered with mangrove forests
- Uttarakhand, Sikkim, Arunachal Pradesh – coniferous trees – pine, deodar, fir
- Variety of wildlife – common animals – elephants, tigers, deer, monkeys
- One-horned rhinoceros – found in Brahmaputra plain
- Delta area – Bengal tiger, crocodile
- Fresh water rivers, lakes, Bay of Bengal sea – variety of aquatic life – rohu, catla, hilsa
- Main diet – fish and rice
- Several big towns and cities
- Along river Ganga – Allahabad, Kanpur, Varanasi, Lucknow, Patna, Kolkata – population over 10 lakhs
- Wastewater from towns – discharged into rivers – pollutes the rivers
- All 4 ways of transport – well developed here
  - Plain areas – roadways, railways
  - Along the rivers – waterways – popular transport medium
    - Kolkata – imp. port – river Hooghly
  - Lots of airports – also available
- Tourism – another imp. activity
  - Taj Mahal – banks of river Yamuna – Agra
  - Allahabad – confluence (joining) of Ganga and Yamuna
  - Buddhist stupas – Uttar Pradesh, Bihar
  - Imambara – Lucknow
  - Kaziranga, Manas – wildlife sanctuaries – Assam
  - Unique tribal culture – Arunachal Pradesh