

GEOGRAPHY

Chapter 8: Human Environment Interactions- the tropical and the subtropical Regions



Human Environment Interactions-the tropical and the subtropical Regions

Life in the Amazon Basin

A basin is a portion of land which is drained by a river and its tributaries. The Amazon Basin is drained by the River Amazon- the second longest river in the world. The river basin drain parts of Brazil, Peru, Ecuador, Bolivia, Columbia and a small portion of Venezuela into the Atlantic Ocean.



The Amazon River Basin

Climate

- The Amazon Basin is also called the **equatorial region** as it lies very close to the Equator. It is located between 10°N and 10°S.
- Since the Amazon Basin lies in the equatorial regions, it has a hot and wet climate throughout the year. Both the days and nights are equally hot and humid here.
- Rainfall occurs almost every day.
- The day temperatures are very high while the nights are cooler but with high humidity.

Rainforests

- Since heavy rainfall occurs daily, the region has a thick forest cover. At some places, the forests are so dense that sunlight is unable to reach the ground. Hence, the ground

remains dark and damp.

- The Amazon rainforests are known for their wide variety of fauna. Toucans, colourful parrots, and humming birds are largely found in these forests.
- Animals such as monkeys, tapirs and sloths are also commonly found in the rainforests.
- Various species of reptiles and snakes are also found in this region including anacondas and boa constrictors, which are two species of snakes.
- Many varieties of small insects are also found in these forests. The Amazon Basin is a home of several species of fishes. Piranha- the flesh eating fish is also found in this region.



In amazon rainforest, many species of animals, birds and insects are found.

People

- People in this region grow their food in small areas after clearing a patch of forests usually using slash and burn cultivation.
- In this kind of cultivation, farmers first cut down the trees and burn them. The ashes of the burnt trees release nutrients into the soil making it fertile. Crops are then planted into the cleared area. After a few years of cultivation, the land loses its fertility and hence the farmers abandon the land and clear another patch of land for cultivation.
- The staple food of the people is manioc, also known as cassava which grows underground like potato.
- People also eat queen ants and egg sacs.
- Cash crops which are grown here are coffee, maize and cocoa.
- People live in houses called 'maloca' which have a slanting roof.
- The lives of people in the Amazon Basin is changing fast. The construction of the Amazon Highway has made all parts of the basin accessible.
- The commercial use of wood has forced the people to settle in new areas of the forest

where they continue to practice slash and burn cultivation.

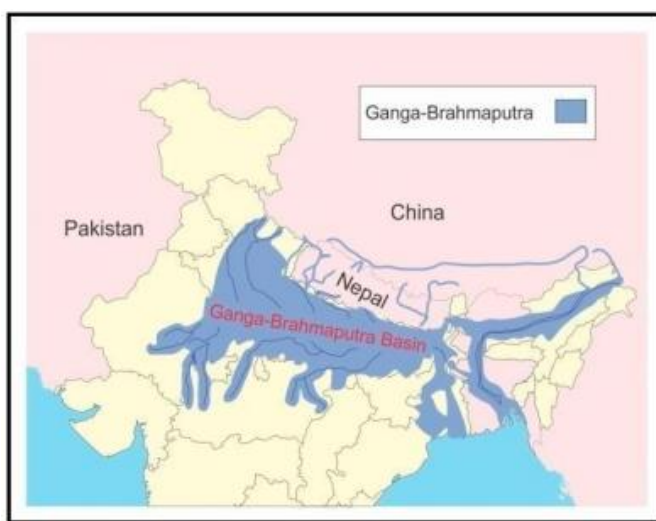
- Heavy deforestation has been taking place in the rainforests due to the rising demand of commercial wood. Deforestation has also resulted in soil erosion as the top layer of soil gets washed away due to indiscriminate cutting off of trees.



People in the Amazon Basin live in houses called 'maloca' which have a slanting roof

Life in the Ganga-Brahmaputra Basin

The Ganga Brahmaputra Basin lies in the subtropical region located between 10°N to 30°S. The basin is drained by the tributaries of the River Ganga and River Brahmaputra. They drain the north and northeastern part of India which includes the Northern Indian Plains, foothills of the Himalayan regions and the Sunderban Delta.



Map of India showing the Ganga-Brahmaputra Basin

Climate

- The Ganga-Brahmaputra region has the monsoon type of climate. Rainfall occurs from the mid of June to the mid of September.
- The summers here are hot while the winters are cold.

Topography and Vegetation

- The topography or the relief features of this region vary greatly.
- While the Northern Indian Plains have fertile lands, the mountainous areas have a hostile terrain. Therefore, the density of population in the plain region is very high while it is extremely low in the mountainous regions.
- In the Ganga-Brahmaputra Basin, tropical deciduous forests grow. Teak, sal and peepal are the main species of trees found here.
- Sunderbans in the Brahmaputra Basin forms the largest delta in the world. The Sunderbans have the mangrove forests. sundari is the common species of trees found here.
- In the Himalayan regions, i.e., in parts of Uttarakhand, Sikkim and Arunachal Pradesh, coniferous trees grow. Some commonly found species of trees here are deodar, pine and fir.



The sundari trees are commonly found in the Sunderbans.

People and their Occupation

- The plain region of the Ganga-Brahmaputra Basin is densely populated because of the fertile soil and flat land.
- The chief occupation of the people is cultivation.
- Rice or paddy is the main crop which is grown in this region. Wheat, sorghum, maize,

gram and millets are the other crops which are grown here.

- Sugarcane and jute are the two cash crops grown in the region. Tea is grown in Assam and West Bengal. Silk is cultivated by the rearing of silk worms in Bihar and Assam.
- In the hilly regions, terrace farming is practised.
- Tourism is another important occupation of the people in the region. The Taj Mahal attracts thousands of tourists from across India and abroad.
- Allahabad located on the confluence of rivers Ganga and Yamuna is visited by many pilgrims from all over the country.
- Buddhist Stupas in Bihar and Uttar Pradesh and historical buildings in Lucknow are also visited by many tourists.
- The Kaziranga and Manas wild life sanctuary in Assam is a popular tourist attraction.



The Taj Mahal is visited by many people from across the country and abroad

Wild Life

- The Ganga-Brahmaputra Basin has a rich wildlife. The one horned rhinoceros is found in the Brahmaputra Plains.
- Elephants, deer and monkeys are commonly found in this region.
- The Royal Tiger of Bengal is found in the Sunderban Delta.
- Crocodiles and alligators are some common reptiles which are found in the delta region.
- Rohu, hilsa and catla are the common varieties of fishes that are found in the region.
- In fresh waters of river Ganga and Brahmaputra, a local species of dolphin called Susu or the blind dolphin are commonly found. However, an increase in the industrial effluents is resulting in a decrease in the number of dolphins.



The Royal Tiger of Bengal



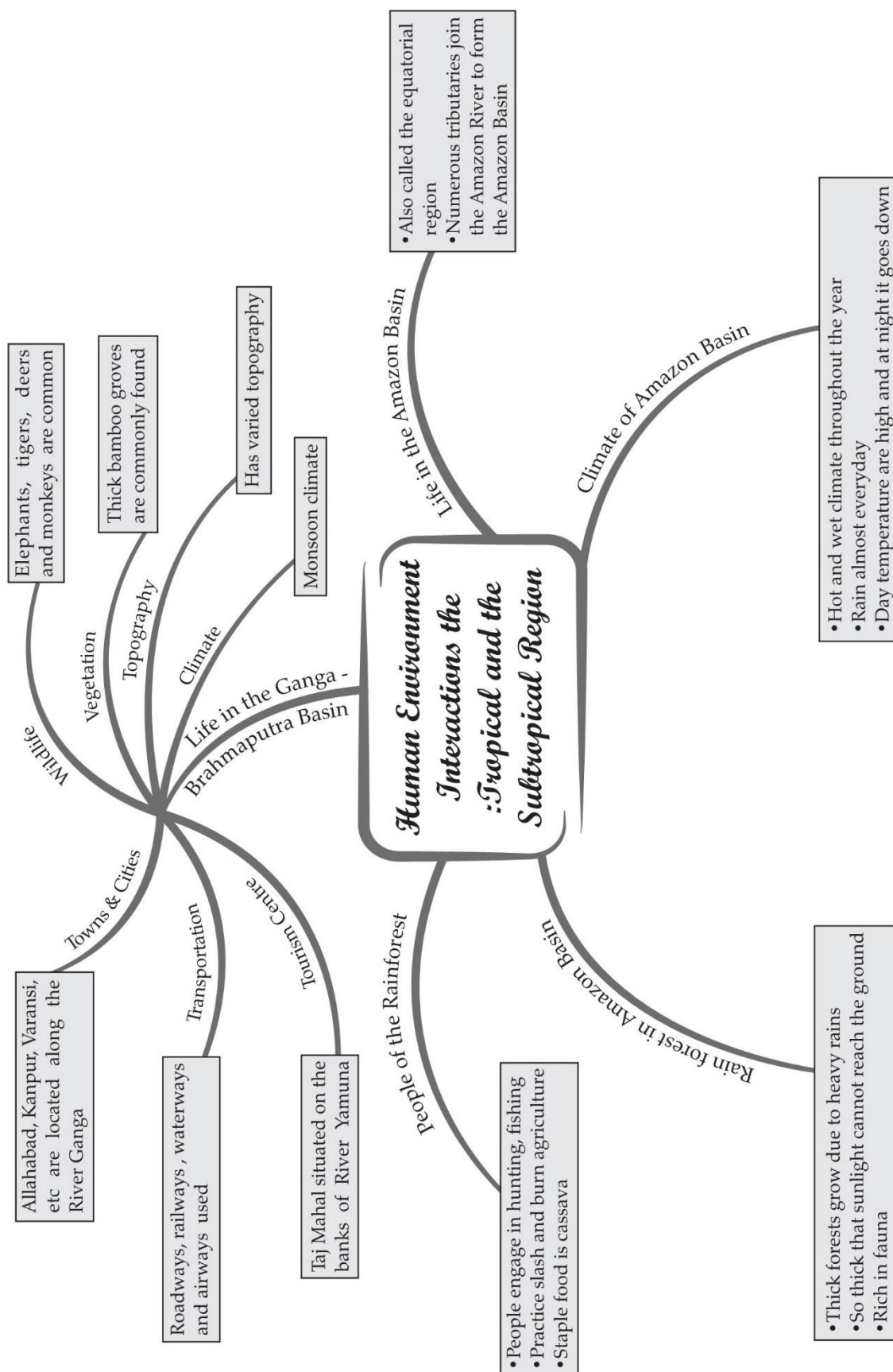
One horned rhinoceros

Cities and Transport

- Many known cities are situated in the Ganga-Brahmaputra Basin. The cities of Allahabad, Varanasi, Lucknow, Kolkata and Patna have a population of more than one million people. These cities are located along the River Ganga.
- The discharge of liquid wastes from the industries located in these cities has polluted the water of the River Ganga.
- All the cities and towns of the Ganga-Brahmaputra Basin are well connected to each other by all the four means of transport.
- While roads and railways have connected the cities located in the plains, water transport has developed along the river systems. Kolkata is an important port located on the River Hooghly.

MIND MAP : LEARNING MADE SIMPLE

CHAPTER-12



Important Questions

➤ Multiple Choice Questions :

Question 1. Which of the following city is not located along the river Ganga?

- (a) Allahabad
- (b) Kolkatas
- (c) Bengaluru

Question 2. Which of the following is an important port on the river Hooghly?

- (a) Surat
- (b) Coimbatore
- (c) Kolkata

Question 3. Distinct tribal culture is found in the state:

- (a) Arunachal Pradesh
- (b) Assam
- (c) Manipur

Question 4. Slash and bum is:

- (a) A way of rearing fish
- (b) A way of cultivating land
- (c) A way of rearing animals

Question 5. Coffee, maize and coca are:

- (a) Cash crop
- (b) Non-cash crops
- (c) None

Question 6. Which of the following is not a cash crop?

- (a) Maize
- (b) Cocoa
- (c) Rice

Question 7. Paddy is grown in the region where the amount of:

- (a) Rainfall is high
- (b) Rainfall is low
- (c) Rainfall is very low

Question 8. Silk is produced in parts of:

- (a) Bihar and Punjab
- (b) Bihar and Assam
- (c) Delhi and Haryana

Question 9. The delta area is covered with the:

- (a) Mangrove forests
- (b) Deciduous forests
- (c) Plantations

Question 10. In parts of Uttarakhand, Sikkim and Arunachal Pradesh the climate is:

- (a) Hot and humid
- (b) Cool
- (c) Hot and wet

Question 11. Catla are the variety of what?

- (a) Snake
- (b) Fish
- (c) Sloth
- (d) None of these

Question 12. What are the main occupation of the people living in the Ganga-Brahmaputra basin?

- (a) Hunting
- (b) Shop-keeping
- (c) Agriculture
- (d) None of these

Question 13. How is the climate of Amazon Basin?

- (a) Hot and dry
- (b) Cold and dry
- (c) Hot and wet
- (d) None of these

Question 14. Kolkata is located on which river?

- (a) Orange
- (b) Hooghly
- (c) Bhagirathi

(d) Yamuna

Question 15. What are the staple food of Amazon Manioc are called?

(a) Coco

(b) Cassava

(c) Coriander

(d) Potato

➤ **Fill in the blanks :**

1. The amazon basin lies in the _____ region.
2. Large apartments like houses with steeply slanting roofs are called _____.
3. Catla is a variety of _____.
4. _____ is the largest river basin in the worl(d)
5. _____ is an important port on the river of Hooghly.

➤ **Write true (T) or false (F) :**

1. The plains have a dense network of roads.
2. The river Amazon flows through equatorial region.
3. Silk is produced through the cultivation of tape worms.
4. Piranha is a kind fish found in the river.
5. Amazon Basin is characterized by hot and wet climate.

➤ **Very Short Questions :**

1. What type of vegetation grows in the Amazon forest?
2. Name the animals Found in the Amazon forest.
3. What do men and women of the rainforest do?
4. What do the people of the rainforest grow?
5. Name the cash crops that people of the rainforest grow.
6. What is the population density of West Bengal and Bihar?
7. What is susu? What does its presence indicate?
8. How and why are terraces built?
9. By what names is the river Brahmaputra known in different places.
10. What leads to the pollution of the rivers?

➤ **Short Questions :**

1. Write a short note on the climate of the Amazon Basin.
2. What do you know about the location of the Ganga-Brahmaputra Basin? Mention the climate of this Basin.
3. The Ganga-Brahmaputra Basin has varied topography. How does it affect the distribution of population there?
4. What is the main activity of the people of the Ganga-Brahmaputra Basin? Give an account of it.
5. How can you say that the life of the people of the Amazon basin is changing?

➤ **Long Questions :**

1. How is the rainforest of the Amazon basin rich in fauna?
2. What do you know about the people of the rainforest?
3. How is tourism an important activity in the Ganga-Brahmaputra basin?
4. What is slash and burn practice?
5. What do you know about the wildlife of the Ganga-Brahmaputra basin?

ANSWER KEY –

➤ **Multiple Choice Answer :**

1. (c) Bengaluru
2. (c) Kolkata
3. (a) Arunachal Pradesh
4. (b) A way of cultivating land
5. (a) Cash crop
6. (c) Rice
7. (a) Rainfall is high
8. (b) Bihar and Assam
9. (a) Mangrove forests
10. (b) Cool
11. (b) Fish
12. (c) Agriculture
13. (c) Hot and wet
14. (b) Hooghly
15. (b) Cassava

➤ **Fill in the blanks :**

1. equatorial
2. malocas
3. fish
4. Amazon basin
5. Kolkata

➤ **Write true (T) or false (F) :**

1. True
2. True
3. False
4. True
5. True

➤ **Very Short Answer :**

1. Only shade tolerant vegetation grow here.
2. Monkeys, sloth and ant-eating tapirs.
3. Men hunt and fish along the rivers and women take care of the crops.
4. They grow tapioca, pineapple and sweet potato.
5. Coffee, maize and cocoa.
6. The populations density of west Bengal is 904 and that of Bihar is 880.
7. In the fresh water of River Ganga and River Brahmaputra, a variety of dolphin is found which is locally known as susu. Its presence indicates the health of the river.
8. Terraces are built on steep slopes to create flat surfaces on which crops are grown.
9. Meghna, Padma, Dehang, Debang, Yamuna, etc.
10. The wastewater from these towns and industries is discharged into the rivers. This leads to the pollution of the rivers.

➤ **Short Answer :**

1. The climate of the Amazon Basin is characterised by hot and wet climate throughout the year. Both day and nights are almost equally hot and humid. It rains almost everyday. The day temperatures are high with very high humidity. At night the temperature goes down but the humidity remains high.
2. The Ganga-Brahmaputra Basin lies in the sub-tropical region that is situated between 10°N to 30°N latitudes. The tributaries of river Ganga such as the Ghaghra, the son, the

Chambal, the Gandak, the Kosi and the tributaries of Brahmaputra drain it.

The area of the Ganga-Brahmaputra Basin is dominated by monsoon climate. The monsoon brings rains from mid-June to mid-September. The summers are hot and the winters are cool.

3. The basin area has varied topography. As a result, the distribution of population is not even everywhere in the area. The mountain areas with steep slopes have inhospitable terrain. Therefore less number of people live in the mountain area of the Ganga-Brahmaputra basin. The plain area provides the most suitable land for human habitation. Therefore, the density of population of the plains is very high.
4. The main activity of the people of the Ganga-Brahmaputra Basin is agriculture. Paddy is the main crop here. Other crops grown here are wheat, maize, sorghum gram and millets. Cash crops like sugarcane and jute are also grown. Banana plantations are seen in some areas in the plain. In the West Bengal and Assam tea is grown in plantations. Silk is produced through the cultivation of silk worms in parts of Bihar and Assam. In the mountains and hills, where the slopes are gentle crops are grown on terraces.
5. Time is moving ahead very fast. This has resulted in the change of the life style of the people everywhere. The life of the people of the Amazon basin is also changing, though not at fast speed. In the old days it was difficult to reach the heart of the forest. In 1970 the Trans Amazon highway made all parts of the rain forest accessible. Aircrafts and helicopters are also used for reaching various places. The indigenous populations was pushed out from the area and forced to settle in new areas.

➤ Long Answer :

1. The rainforest of the Amazon basin is very rich in fauna. A variety of birds such as toucans, humming birds, bird of paradise with their brilliantly coloured. Plumage and oversized bills for eating are found here.

These birds also make loud sounds in the forests. Animals like monkeys, sloth and ant-eating tapirs are found here. Various species of reptiles and snakes also thrive in these jungles. A number of crocodiles, snakes and pythons are also found here. Anaconda and boa constrictor are some of the species. The basin is also the home to thousands of species of insects. Several species of fishes including the flesh-eating Piranha fish is also found in the river.

2. The people of the Amazon basin practise slash and burn agriculture. They grow most of their food in small areas after clearing some trees in the forest. Men hunt and fish along the rivers and women take care of the crops. They mainly grow tapioca, pineapple and sweet potato. As hunting and fishing are uncertain it is the women who support the family. They feed them the vegetables that they grow. Their staple food is manioc, also known as cassava that grows under the ground like potato. They also eat queen ants and egg sacs. Cash crops like coffee, maize and cocoa are also grown.

People get wood for their houses from the rainforests. They build thatched houses shaped like beehives. There are also malocas there which are large apartment -like houses with a steeply slanting roof.

The Amazon basin is developing day by day. In 1970 the trans Amazon highway made all parts of the rainforest accessible. With the change of time the people's life style is also changing gradually.

3. The Ganga-Brahmaputra plain has several big towns and cities, such as Allahabad, Kanpur, Varanasi, Lucknow, Patna and Kolkata. All these places are important from tourism point of view. Taj Mahal on the bank of river Yamuna in Agra is a famous tourist place. Allahabad is situated on the confluence of the river Ganga and Yamuna. Several people visit this place everyday to have a holy dip in it. Buddhist stupas in Uttar Pradesh and Bihar, Lucknow with its Imambara, Assam with Kaziranga and Manas with wildlife sanctuaries are some other places in the basin where people from different parts of the country and abroad go with great enthusiasm.
4. Slash and Burn is a way of cultivating land where farmers clear a piece of land by slashing or cutting down trees and bushes. These are then burnt, which releases the nutrients into the soil. Now crops are grown in this cleared field for a few years. After repeatedly using the patch of land, the soil loses its nutrients. So it is abandoned. Then they clear another plot of land to plant. In the meantime young trees grow in the old field. In this way soil fertility is restored. People can then return to it and start cultivating it again.
5. The Ganga-Brahmaputra Basin is rich in wildlife. A variety of animals are found here. Elephants, tigers, deer and monkeys are common. The one-horned rhinoceros is found in the Brahmaputra plain. In the delta region, Bengal tiger, crocodiles and alligator are found. Aquatic life abounds in the fresh river waters, the lakes and the Bay of Bengal Sea. Popular varieties of fish such as catla, rohu and hilsa can be found here.