

## NATURAL REGIONS OF THE WORLD

18BGE63C

**UNIT – I:** Equatorial Regions – Amazon type and Equator type: Situation, Extent, Climate, Natural vegetation, Flora and fauna, Natural resources, Human life and economic development.

### **Meaning of Natural Regions**

Different types of climatic conditions prevail in different parts of the world. Some countries have a hot climate, some possess a temperate climate, while some have an extremely cold climate. Generally, lands near the equator are hot and humid; those in the middle latitudes have a temperate climate, while those near the poles are cold and arid. Thus Indonesia has hot and humid climate, Britain enjoys a mild climate, and Scandinavian countries (Norway and Sweden) have cold climate. Moreover, in case of large countries, different regions have different climatic conditions. Thus, the northern coast of Australia is hot and humid, the western plateau is hot and dry, and the southern coast gets winter rains. Since climate is the most important factor influencing vegetation, soil, animals and even mode of human life, different countries with varied climatic conditions have different types of vegetation, soil, animal life and human occupations, etc. However, on comparison we find that certain areas in different parts of the world have almost identical climate, vegetation, animal life and human occupations. This has made it possible to divide the world into a number of regions on the basis of climate: the areas grouped in each region having similarities of climate, vegetation, animal life, human occupations and products.

According to Professor **Herbertson**, "*Natural region is an area of earth's surface which is essentially homogeneous with respect to the conditions that affect human life.*" Within each region climate, vegetation and general mode of living are similar.

The division of the earth's surface into a small number of climatic regions has a great practical importance. It facilitates the study of geography and makes it singularly easy and interesting. Instead of studying numerous political units we can study a few regions. Also, the study becomes more logical in which cause and effect become clearly visible. An understanding of natural regions helps in the appreciation of the differences in the stage of industrial and commercial development reached by various lands. Similarly, it helps in appreciating the natural pattern of trade between different regions.

However, the following *limitations* should be noted before undertaking a Study of natural regions.

1. First, the physical conditions are never fully identical in two widely separated areas, and as such places belonging to a particular natural region need not have all the conditions in common.
2. Secondly, the natural regions are not watertight compartments. There is no sharp line which divides one region from another. The change from one natural region to another is often very gradual and not abrupt.
3. Thirdly, classification of natural regions on the basis of climate is at best an approximation, and the places belonging to a particular region have more resemblances than differences.
4. Fourthly, the inclusion of an area in one natural region or another is sometimes debatable. For example, Sri Lanka has predominantly an equatorial type of climate but because it gets rainfall from the monsoons, it may be included in the monsoon region.
5. Fifthly, natural regions do not conform to political boundaries.

## **Major Natural Regions**

There is no unanimity of opinion in regard to the division of earth into natural regions. Some geographers group many areas into one broad region, while others subdivide each region into many small types. However, the most popular division of earth into major natural regions is as follows :

### ***1. Equatorial Regions***

- (a) Equatorial Lowland Region or the Amazon Type.
- (b) Equatorial Highland Region or the Ecuador Type.

### ***2. Tropical Regions***

- (a) Tropical Monsoon Region or the Monsoon Type.
- (b) Tropical Grassland Region or the Sudan Type.
- (c) Tropical Desert Region or the Sahara Type.
- (d) Tropical Rain Forest Region or the Caribbean Type.

### ***3. Warm Temperate Regions***

- (a) Warm Temperate West Marginal Region or Mediterranean Type.
- (b) Warm Temperate East Marginal Region or China Type.

(c) Temperate Desert Region.

#### ***4. Cool Temperate Regions***

(a) Cool Temperate Oceanic Region or West European Type.

(b) Cool Temperate East Marginal Region or St. Lawrence Type.

(c) Cool Temperate Grassland Region or Prairie Type.

#### ***5. Cool Temperate and Polar Regions***

(a) Coniferous Forests Region or Taiga Type.

(b) Cold Deserts or Tundra Type.

- The Equatorial regions lie within  $5^\circ$  latitudes on both sides of the equator,
- The tropical regions lie between  $5^\circ$  and  $30^\circ$  latitudes;
- The Warm Temperate regions lie between  $30^\circ$  and  $45^\circ$  latitudes;
- The Cool Temperate regions lie between  $45^\circ$  and  $60^\circ$  latitudes;
- The Cold Temperate lands lie between  $60^\circ$  and  $70^\circ$  latitudes; and
- The Polar lands lie beyond  $70^\circ$  latitudes.

# EQUATORIAL REGIONS

## (A) EQUATORIAL LOWLAND REGION OR AMAZON TYPE OR RAINY TROPICS

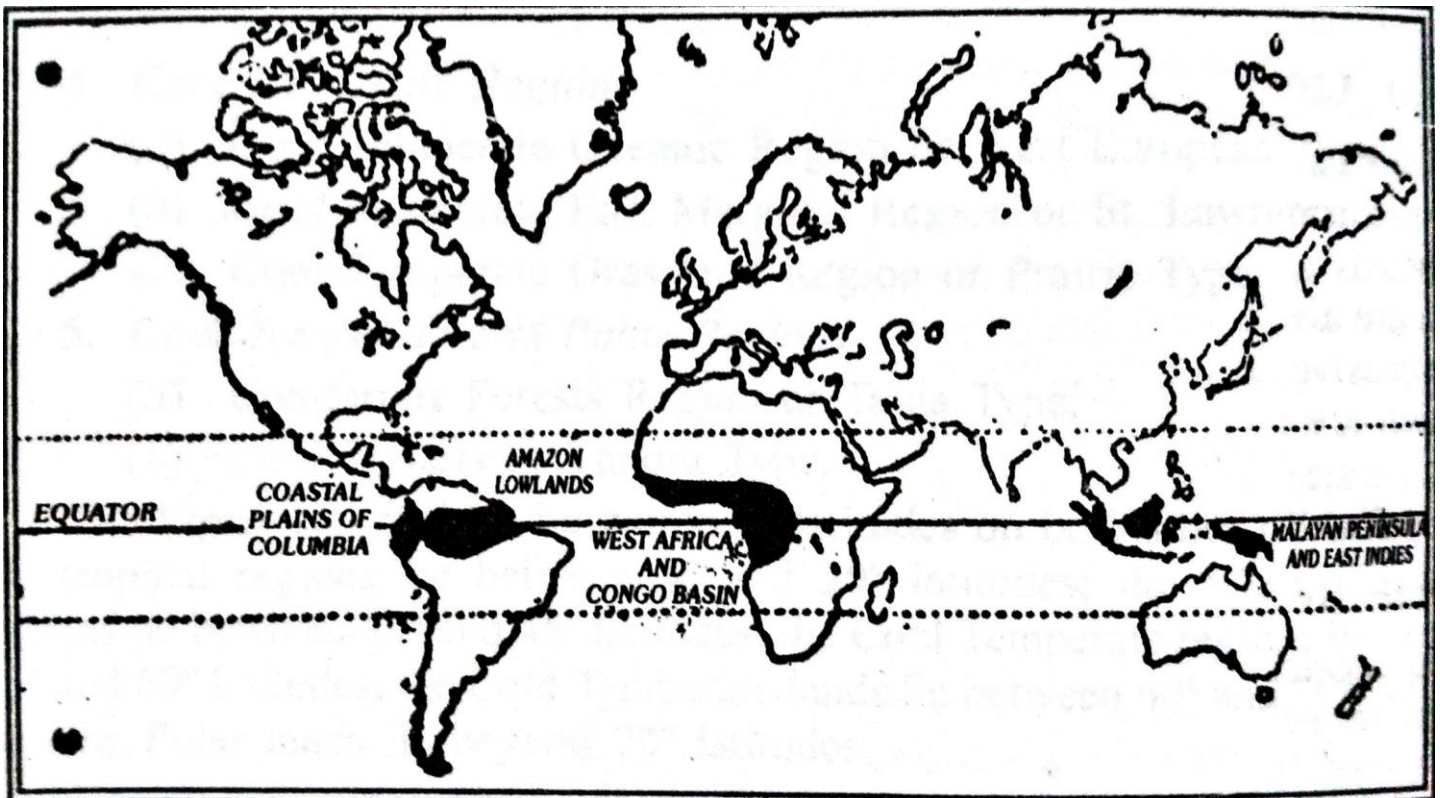
### Situation and Extent

This region lies between the latitudes 5° North and 5° South of the equator and is so called because of its nearness to the equator. It occupies an area of about 950 km. in width encircling most of the land surface of the earth along the equator. At certain points this belt stretches up to 10° latitudes.

This region includes :

- (i) *The Amazon Valley in South America ;*
- (ii) *The Congo Basin and Ghana in Africa ; and*
- (iii) *The Malayan Peninsula and Indonesian Islands in Asia.*

In South America, although the equatorial region lies mainly in Brazil, it also extends westwards to parts of Bolivia, Peru, Ecuador, Colombia and Venezuela. On the north-east, it also extends along the Coast of the Guiana.



## Climate

Because of nearness to the equator, the climate of this region is hot and wet. High temperatures prevail throughout the year and the *annual average temperature is 27°C (80°F)*. There is very slight difference between the summer and winter temperatures-nearly 5°F. In fact there is no winter season. However, the difference between day and night temperatures may be as much as 20°F.

The rainfall is heavy and occurs almost daily. The *annual average rainfall is about 200 cm.* (80 inches) and is heavier in March-April and September- October-during the equinoxes, when the sun is overhead. Amazon basin in South America is the most characteristic of this type of climate, and hence the name '*Amazon type of climate*'. In Malaysia and Indonesia, however, nearness to the sea and height above sea-level make the climate slightly milder.

Hurricanes (i.e., tropical cyclones with winds of 117 km. per hour or greater but rarely exceeding 240 km. per hour and usually accompanied by rain, thunder and lighting) are common in coastal areas and islands near the poleward margins of the equatorial lowland regions, but they do not occur in areas towards the equator.

## Natural Vegetation

- Excessive heat and humidity give rise to a luxuriant growth of trees.
- Trees grow close together and often there are creepers and parasitic plants.
- Trees are extremely tall, sometimes 60 metres high, and have a cluster of leaves on their tops.
- Trees of one single specie are rarely found growing close together, and even eighty to hundred different kinds of trees can be found on a single acre.
- This makes commercial exploitation of any one kind of trees difficult.
- Forests are very thick and restrict sunlight from reaching the ground and as such the land remains grassless, and consequently ground animals are few. Even at noon, it is semi-dark inside the forests and thus equatorial regions are sometimes described as regions of twilight.
- The trees growing in this region belong to various species such as ebony, mahogany, rosewood, dyewood, brazil-wood, greenheart, etc.
- Their timber is hard, heavy and difficult to cut or to burn.

- There are also many trees giving products of commercial importance such as oilpalm, rubber, cinchona, etc.

### **Animal Life**

- Animals, like trees, must have light and air and so most of the animals of the equatorial forests are adapted to climbing. Monkeys, apes, tree-frogs and tree-lizards are most common.
- Creeping animals like snakes, squirrels and lizards are also found. Rivers are full of crocodiles and alligators.
- Intense heat and excessive humidity give birth to mosquitoes and a number of insects, some of which are very poisonous, e.g., *tsetse fly* of Central Africa can kill animals and cause sleeping sickness to man.
- Elephants, tigers, leopards and rhinoceroses are also found. There is, however, a great scarcity of domestic animals.

### **Natural Resources**

- Equatorial regions are usually deficient in mineral resources, but some parts contain valuable minerals.
- Tin is found in Malaysia and Indonesia, bauxite and manganese in Ghana and copper in Katanga. Due to thick vegetation, agriculture is restricted to the outskirts of these forests or near the coast. Oilpalms, bamboos, rubber trees, rice, coconuts, plantains, bananas and spices are grown.
- Considerable agricultural development has taken place in Malaysia and Indonesia. Important commercial products are spices, guttapercha, palm, cilnuts, coffee, coconuts, sago, bananas, resins, lac, myrobalans and chicle (chewing gum). The countries within this region normally export timber, Tubber, coffee, bananas, copra, nuts, pineapple and sugar.

### **Human Life and Economic Development**

Hostile climate, poor soil, rapid growth of weeds and the difficulty of communication have retarded the economic development in this region.

The hot and moist climate is detrimental to human health. The moisture and warmth favour the rapid growth of bacteria and disease carrying insects. Poor health, lack of energy and a resulting loss of initiative are usually due to an insufficient amount of proteins and vitamins and to debilitating diseases. This

lack of energy is usually attributed to climate; actually the lethargy is caused by malnutrition and disease, often brought about by low standards of living.

People are weak and short statured. The *American Indians* of the Amazon Basin and the *Pygmies* of the Congo basin are hardly 120 cm. (4 ft) in height, very dark in complexion, hardly wear any clothes, build no houses and are afraid of strangers. People are hunters and fishermen. Poor soil and rapid growth of weeds restricts agriculture to only a few areas.

Difficulty of communications is a great hurdle in the way of exploitation of this region. Thus most parts of this region are sparsely populated. Over extensive areas of Amazon Basin the density of population is under two persons per square kilometre. Similar conditions prevail over much of the Congo basin. Throughout the major portion of the Equatorial Lowland Region or Rainy Tropics, man has yet failed to become the conqueror; and the native vegetation still dominates.

However, it should be noted that population tends to be denser in river valleys where alluvial soils and possibilities of transport are attractive. The coastal parts of Brazil and Guinea, especially Nigeria, illustrate these conditions.

South-east Asian part of this region is, however, an exception. Indonesia and Malaysia, because of their location and enterprise of the westerners, have made industrial and commercial progress. The lands have been cleared and plantation-agriculture on commercial scale is carried on. Rubber, pepper, coffee, sugarcane, cinchona, tobacco, coconuts and sago are produced in Malaysia, while Indonesia produces rubber, pepper, coffee, spices, sugarcane and rice. These areas also produce valuable minerals, and several industries for the processing of these minerals and agricultural produce have been established. In some areas of South-East Asia, on account of domination of man and his works, a very high density of population is found. The island of Java in Indonesia with an area of about 80,000 square kilometres has a population of 60 million, making it one of the most densely-populated lands in the world.

On the whole, the Equatorial Lowland regions have not made much progress in economic, social and political spheres due to the following reasons :

- (1) Hostile hot and humid climate which saps the energy of the people and makes them weak and lethargic.
- (2) Isolation and lack of contact with the developed areas of the world.
- (3) Many diseases like malaria, yellow fever, etc.. which discourage people from Europe and N.

America to settle down here and assist in the exploitation of resources of these regions,

- (4) Lack of transport facilities and difficulty of communication.
- (5) Rapid growth of weeds which makes the clearance of thick forests a big problem.
- (6) Soil erosion due to heavy showers which make the soil poor and infertile for growth of crops.
- (7) Large species of trees growing together making commercial exploitation of forests difficult.
- (8) Lack of ground grasses checks the growth of animal rearing industry.
- (9) Sparse population.

However, it may be noted that these areas, although underdeveloped at present, have better future because they are rich in mineral and energy resources, particularly water power resources. In recent years, these areas gained political independence and are trying hard to bring about their economic progress on a planned basis. This augurs well for the future.

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### **(B) EQUATORIAL HIGHLAND REGION OR ECUADOR TYPE**

- In the equatorial region, the climatic conditions are modified to some extent at higher elevations and, therefore, the highlands along the equator are treated separately from the rest of the equatorial region.
- Ecuador is the most characteristic area of this climate, and hence the name 'Ecuador Type'. In this region, because of high elevation, the climate is mild, cool and pleasant. Rainfall occurs throughout the year, but the total is not as much as in the lowland region.
- There are no thick forests and thus agriculture is practised in areas where man has settled.
- Wheat, barley, maize and vegetables are chiefly grown. Animal-rearing is also an important occupation. As the land is mountainous, cattle, goats and llamas are chiefly reared.
- Valuable minerals are also found, but their commercial exploitation has not so far been possible because of sparse population, and backward means of transportation and communications.



### SUMMARY

<i>Region</i>	<i>Location North and South of the Equator</i>	<i>Areas or Countries</i>	<i>Climate</i>	<i>Natural Vegetation</i>	<i>Animal Life</i>	<i>Human Occupation</i>	<i>Economic Development</i>
1	2	3	4	5	6	7	8
Equatorial Lowland or Amazon Type or Rainy Tropics	0° to 5°	Amazon Basin ; Congo Basin and Ghana ; Malaysia and Indonesia	Hot and wet throughout the year	Dense evergreen hard wood forests with tall trees having creepers on them	Tree climbing animals, creeping animals and strong animals. Scarcity of domestic animals	Hunting, fishing collecting fruit, migratory, subsistence farming and plantation farming in developed areas	Backward areas due to hostile climate, dense forests, leached soil, lack of communications. South-East Asia an exception.
Equatorial Highland	0° to 5° at higher elevations	Ecuador and other highlands along the equator.	Mild, cool and pleasant. Rainfall throughout the year.	Evergreen forests, but not thick	Cattle, goats and llamas	Agriculture, animal rearing.	Backward due to lack of transportation and sparse population.

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