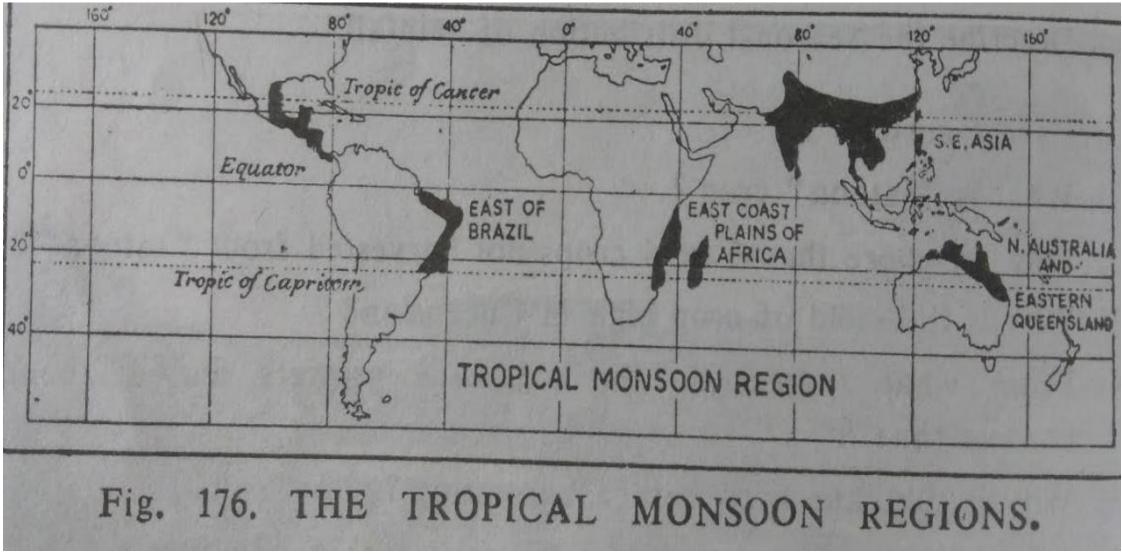
Course: B.A Geography Paper code: GEOG CC-409 **Paper Name: Environmental Geography** Semester: IV **Topic: Human Adaptation in Monsoon Lands Faculty: Neha Singh** Email: nehasingh22091988@gmail.com



Source: Charles Farro, 2001

LOCATION

The regions lie roughly between 10 $^{\circ}$ and 25 $^{\circ}$ North and South and in the case of India and Pakistan it extends up to 30 $^{\circ}$ N.

India, Pakistan, Sri Lanka, Burma Southern China, Thailand, former Indo-China (Cambodia, Laos, Viet Nam) and the islands of Hainan, Formosa and the western Philippines.

Other regions are south-eastern U.S.A, East Africa, Malagasy and North Australia.

CLIMATE

- As the name suggests this region experiences "the reversal of seasonal winds".
- India and its adjoining countries experiences four seasons:
- The Summer/Hot season (March-June)-the average temperature in summer vary from 25 °C to 32 °C, but the maximum temperature ranges between 38 °C to 48 °C during May and June.
- The Rainy season (June-September)- it starts with onset of the southwest monsoon in June and continues till the middle of September.
- The Cool season (September-November)- the season starts with the beginning of the withdrawal of southwest monsoon in the middle of September and continues up to October. It is also called retreating monsoon.
- The Winter Season (November-March) clear sky, pleasant weather, low temperature and humidity.
- On an average the mean annual rainfall is around 1500mm, but there are much variations in temporal and spatial distribution of rainfall.

FLORA

- The natural vegetation varies according to the rainfall. In areas of heavy rainfall there are dense forests like in Myanmar, on the Eastern Himalayas, in Cambodia and Viet Nam.
- The number of plant species is less in the tropical deciduous forest biome than the evergreen forest biome. The desiduous trees fall their leaves just before the hot summers.
- There are four strata in the vertical structure in the tropical deciduous forests. The uppermost and next to it constitutes of trees, the third stratum is formed by shrubs and the lowest stratum comprises of herbaceous plants.
- The height of, most of the tree ranges between 12 mt to 30mt.
- Teak, sal, rosewood and deodar trees are commercially important and abundantly found in this biome.
- Dense growth of bamboo is found in areas of good rainfall.
- Lianas and epiphytes are good in number but far less than equatorial biome.

FAUNA

- It is a significant ecological principle that more is the development of stratification of the vertical structure of the vegetation community of a biome and greater the number of plant species, the more will be the number of animal species, their total population and species diversity.
- In the case of monsoon biome the diversification of animal species is less.
- This biome represents the largest number of domesticated mammals because of development of agriculture.
- In the Australian part marsupials such as kangaroo are found.
- Leopards, monkey, elephant, lion, rhinoceros, snakes, bears are found in this biome.

HUMAN ACTIVITIES

- GRAZING
- Rearing and domesticating animals (cattle, sheep, goats) is important occupation in many parts of the Monsoon lands. The north Australian region carries on grazing on commercial scale.
- AGRICULTURE
- Intensive subsistence agriculture is best developed in and practically confined to the monsoon lands of Asia. The high density of population on the extensive plain areas has necessitated greater intensity in the tillage of land, and maximum feasible yield from a given land is produced to feed the farmer and his family.
- Subsistence agriculture is carried out mainly in India, Pakistan, Bangladesh, Sri Lanka, Myanmar, Thailand, Laos, Cambodia and Malaysia. Two types of tillage is done in these regions i.e, with paddy and without paddy (millets and wheat).
- Monsoon forests are not difficult to clear, high temperature and good rainfall enable the people to grow variety of crops. Rice is the staple food of teeming millions while in slightly drier parts, wheat, maize, bajra, jowar, barley, pulses, oilseeds and groundnuts are grown.

- FISHING
- Fisheries is one of the most important human activity in monsoon lands. Countries with perennial rivers and monsoon fed rivers have innumerable option for pisciculture. The countries lying in between the Mekong and Irrawaddy rivers and connecting river Tonle sap (Cambodia), have rich fresh water resources for development of pisciculture. In India, there are innumerable perennial and rain fed rivers such as, Ganga, Brahmaputra, Son, Godavari, Tapi, Krishna, etc which has the world's richest fishery resources.
- In fact, fishing is one of the important occupations in coastal and deltaic regions.
- Rice-cum-fish culture (rizi-pisciculture)is practiced in rice belts of monsoon land, where rice is the sole enterprise and fishes are taken to initiate additional income. In Malayasia, Krian and Sekincan-Tanjung are the regions where it is practiced. Similarly it is practiced in different parts of India, Philippines, Vietnam, Bangladesh, China and Indonesia.

MANUFACTURING

- India is leading country in manufacturing activities in this region, with these five industrial complexes namely, Hoogly Industrial region; Mumbai-Pune region; Madurai-Coimbatore- Bengaluru region; Ahmedabad-Vadodra region; and Chhotanagpur region.
- Sri Lanka manufactures, tea, apparel and textile, refined oils and rubber for export purpose.
- Cottage industries based upon agricultural and forest products supports the economy in Laos, Cambodia and Vietnam.
- Shanghai has Iron and steel industry, cotton textiles, ship building, oil refineries, flourmills, and also manufactures engineering and metal works.
- Canton has several industries such as iron and steel, hosiery, silk, matches, porcelain, metal goods, etc.

• MINING

- There are some important mining areas in this region. India has rich reserves of iron, coal, mica, manganese and limestone. Pakistan has coal and natural gas. The Philippines have deposits of chromite, gold, silver and iron. Thailand has tin, tungsten, manganese and lead. Myanmar has petroleum, tin, tungsten, lead, zinc, copper and gem minerals. The countries of Indo-China (Viet Nam, Cambodia, Laos) produce tin, zinc, lead, iron, and phosphate.
- TOURISM
- It is one the fastest growing industry in south and south-east Asia, with innumerable tourist sites such as, Kullu Manali, Gangtok, Udaipur, Jaipur, Goa, Puducherry, Kanyakumari, Rameshwaram(India), Hong Kong, Manilla, Bangkok, Colombo, Nuwara Eliya, Kandy (Sri Lanka), Halong, Hanoi, Ho Chi Minh (Vietnam), Phnom Penh, Angkor Wat (Cambodia), Luang Prabang, Vang Vieng (Laos), etc.