GENERAL STUDIES

INDIAN GEOGRAPHY

For

UPSC/KPSC-CIVIL SERVICES EXAMINATIONS

BY

GRACE IAS

#42,Prema Arcade, 1st Main Road,(Subbanna Garden Main Road),3rd Stage,Vinayaka Layout,Vijayanagara,Bengaluru-560040

Ph:7899678279 Mail:info.graceias@gmail.com

1st Edition-2022

MRP: Rs. 325/-

Published by

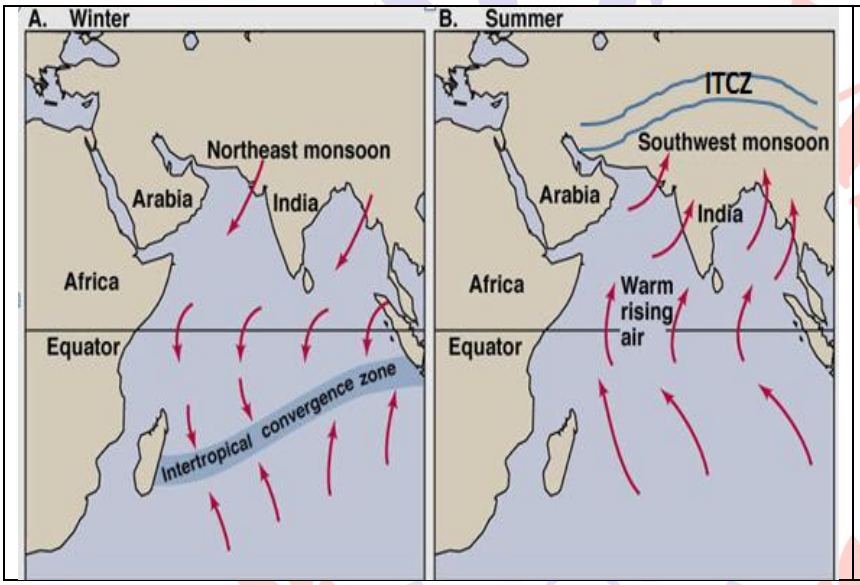
GRACE IAS

#42,Prema Arcade, 1st Main Road,(Subbanna Garden Main Road),3rd Stage,Vinayaka Layout,Vijayanagara,Bengaluru-560040

Ph:7899678279 Mail:info.graceias@gmail.com

❖ Monsoon and Seasons in India

- **India Monsoon: unique features**



- Unique weather phenomenon
- "Mausam"= Seasonal reversal of winds

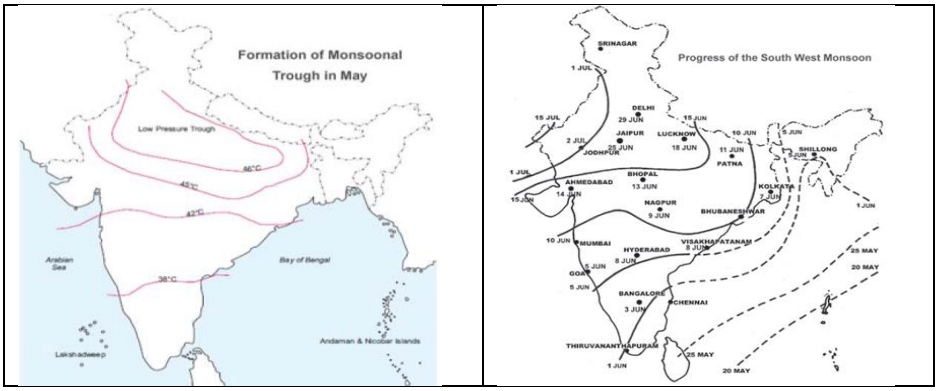
✓ The word monsoon is derived from the Arabic word 'Mausim' which means season.

✓ Monsoon refers to the ***seasonal reversal in the wind direction*** during a year.

✓ During summer, the interior parts of North Indian Plains covering Rajasthan, Punjab, Haryana, and Western Uttar Pradesh are intensely hot.

✓ The daily maximum temperature in some of these parts is as high as 45° to 47° C.

❖ Summer Monsoon



- ✓ The average maximum temperature is above 33°C in the month of May at Delhi, Jodhpur and Jaisalmer.
- ✓ Such high temperature heats up the air of that region.
- ✓ Hot air rises and due to this a low pressure area is created under it.
- ✓ This low pressure is also known as **mansoonal trough**.
- ✓ It lies between western Rajasthan to Odisha.
- ✓ On the other hand temperature over Indian Ocean is relatively low.
- ✓ So a relatively high pressure region is created over the sea.
- ✓ The pressure difference between Indian Ocean and North Central Indian Plains causes the air from high pressure region of the sea move towards the low pressure region of North India.
- ✓ This implies that the general movement of air is in June is from equatorial region of Indian Ocean to the Indian subcontinent in the South-West to North-East direction.
- ✓ This direction is exactly opposite to that of the trade winds (North – East to South-West) prevailing during winter in India.
- ✓ This complete reversal of wind direction from North-East to South West and vice-versa is known as monsoons.
- ✓ The winds contain a lot of moisture.

- ✓ When these moisture laden winds move over the Indian subcontinent they cause wide spread rain throughout India and from June to September.

- ✓ Thus, most of the total rainfall in India is confined to these four months only.

❖ **Winter Mansoon**

- ✓ During the winter season, **North-East trade winds** prevail over India.

- ✓ They blow from land to sea and that is why that for most part of the country, it is a dry season.

- ✓ A part of North-East trade winds blow over Bay of Bengal.

- ✓ They gather moisture which causes rainfall in the Coromandal coast while the rest of the country remains dry.

- ✓ Strictly speaking these winds are planetary winds known as **Northeast Trades**.

- ✓ In India they are essentially land bearing winds.

- ✓ The above simple story is based upon a mechanism proposed by **Halley and is also known as Thermal Concept**.

- ✓ However, it fails to answer the following questions:

  Why the low pressure areas on land are not stationary and why they suddenly change their location?

  Why there is no antimonsoon circulation in the upper troposphere, which must be there if the monsoon winds are thermally induced?

- ✓ Low Pressure are in northern India is in April and May, but rains start in the end of June or beginning of July.

- ✓ Monsoon rains are an amalgamation of convectional, orographic and cyclonic rainfall , the thermal concept is unsatisfactory to explain in details.

- ✓ Another gentleman **Fohn** tried to link the Monsoon with the ITCZ or Intertropical Convergence Zone, which is called **Dynamic Concept**.