

Government of Tamil Nadu Department of Employment and Training

Course: TNPSC Combined Civil Services Examination - IV(Group IV / VAO)

Subject : Geography

Topic : WATER RESOURCES AND RIVERS IN INDIA

© Copyright

The Department of Employment and Training has prepared the TNPSC Combined Civil Services Examination - IV (Group-IV / VAO) study material in the form of e-Content for the benefit of Competitive Exam aspirants and it is being uploaded in this Virtual Learning Portal. This e-Content study material is the sole property of the Department of Employment and Training. No one (either an individual or an institution) is allowed to make copy or reproduce the matter in any form. The trespassers will be prosecuted under the Indian Copyright Act.

It is a cost-free service provided to the job seekers who are preparing for Competitive Exams.

Commissioner,

Department of Employment and Training.

WATER RESOURCES AND RIVERS IN INDIA

India

- India has a maritime boundary of 6100 km along the mainland,
- > Total coastlines including Is- lands is **7516** km.
- Three-fourth of the earth is surface is covered with water. But only a small proportion of it accounts for fresh water that can be put to use.
- > 96.5% of the total volume of water in the world is estimated to exist in oceans.
- ➤ Only <u>2.5% exist as fresh water</u>. Nearly 76% of this fresh water is confined in ice sheets and glaciers in Antarctica, Greenland and the mountainous regions of the world.
- A little less than 30% is stored as ground water in the world's aquifers.
- India receives nearly 4% of the global precipitation. India ranks 133 in the world in terms of water availability per person, per annum.

The Coastal plains

Eastern Coastal plain

- Extends from Ganga in the north to Kanyakumari in the south about 1100km.
- Tamil Nadu plains extend from north of <u>Chennai to Kanyakumari</u> in the south <u>coromandel coast</u> is part of this plain.
- Deltaic plains of Cauvery is called as Granary of South India.

Geography GK

Tamil Nadu Coastline Districts:

★ There are 13 districts that share the coastline namely Thiruvallur, Chennai, Kanchipuram, Villupuram, Cuddalore, Thiruvarur, Nagapattinam, Thanjavur, Pudukottai, Ramanathapuram, Thoothukudi, Tirunelveli and Kanyakumari.

Western coastal plain

It is about 1500km from Surat to Cape Comorin.

Subdivided into

- i. Kachch plains
- ii. Kathiawar plains
- iii. Gujarat plains
- iv. Konkan coast
- v. Karnataka or kanara coast
- vi. Malabar coast

Geography GK

Tamil Nadu Coastal Stretch

★ The coastal stretch extends for 1,076 km (669 mi) from Pazhaverkadu of Thiruvallur district to Ezhudesam of Kanniyakumari district. Kanniyakumari, forms the southernmost tip of the Indian subcontinent where Indian Ocean, Bay of Bengal and Arabian Sea meet.

Islands

Group of islands is called archipelago.

Two famous islands of India are

1. Andaman and Nicobar Group

- Located at Bay of Bengal.
- ➤ Ten degree channel separates South Andaman and Little Andaman group.

2. Lakshadweep group

- Located in Arabian Sea
- Eight degree channel separates Lakshadweep from Maldives

Geography GK

➤ Pamban Island forms part of Ramanathapuram district separating Gulf of Mannar and Palk strait with the Ram Setu connecting it with Sri Lanka.

Rivers Of India

The Drainage System

Water drains in two directions , 90% drains into Bay of Bengal and the rest drains into Arabian sea.

- ➤ Antecedent- Himalayan Rivers which existed before upheaval of Himalayas. Eg. Indus, Ganga, Tista, Brahmaputra etc
- Consequent Follows direction of slope. Eg Peninsular Rivers
- > **Subsequent** Carve out their own path over a weak layer of rock. Meet other rivers at right angles. Eg. Central Highland Rivers.



Himalayan Rivers

1. Indus River System

- Indus is also known as Sindhu.
- Originates from a glacier near Mansarovar lake.
- In Tibet know as Singi khamban or Lion's mouth.
 - ★ Indus water treaty was signed between India and Pakistan in 1960 .India can use only 20% of water.

2. Ganga River System

- Origin Gangotri glacier in Uttarkhand.
- Starts as Bhagirathi , meets Alaknanda at Devprayag

3. Mahanandi river (Darjeeling Hills) is other major tributary

- In WB it bifurcates a tributary 'Bhagirati and Hugli' fall southwards in WB itself.
- The mainstream 'Padma' goes into Bangladesh and meets Brahmaputra to form river Meghna.

4. Brahmaputra River System

- > It is one of the largest river of the world.
- Origin Chemayungdung glacier, Kailash Range, East of Mansarovar Lake
- Called Dihang in AP joined by Dibang and Lohit
- The combined stream of ganga and Brahmaputra forms the biggest delta in the world Sunderbans.

TRIUMPY

The Peninsular River System

1. East flowing rivers

- > They form delta
- > They fall in bay of Bengal
 - a. Mahanadi
 - b. Godavari
 - c. Krishna
 - d. Cauvery

2. West flowing rivers

- > They do not form delta
- > They fall in Arabian sea
 - a. Sabarmati
 - b. Mahi
 - c. Narmada
 - d. Luni