

INDIAN RIVER SYSTEM



Major River System – The Indus River System

The Indus arises from the northern slopes of the Kailash range in Tibet near Lake Manasarovar.

- ❖ It has a large number of tributaries in both India and Pakistan and has a total length of about 2897 km from the source to the point near Karachi where it falls into the Arabian Sea out of which approx 700km lies in India.
- ❖ It enters the Indian Territory in Jammu and Kashmir by forming a picturesque gorge.
- ❖ In the Kashmir region, it joins with many tributaries – the Zaskar, the Shyok, the Nubra and the Hunza.
- ❖ It flows between the Ladakh Range and the Zaskar Range at Leh.
- ❖ It crosses the Himalayas through a 5181 m deep gorge near Attock, which is lying north of Nanga Parbat.

The major tributaries of the Indus River in India are Jhelum, Ravi, Chenab, Beas, and Sutlej.

Major River System – The Brahmaputra River System

The Brahmaputra originates from Mansarovar Lake, which is also a source of the Indus and Sutlej.

- ❖ It is 3848kms long, a little longer than the Indus River.
- ❖ Most of its course lies outside India.
- ❖ It flows parallel to the Himalayas in the eastward direction. When it reaches Namcha Barwa, it takes a U-turn around it and enters India in the state of Arunachal Pradesh.
- ❖ Here it is known as the Dihang River. In India, it flows through the states of Arunachal Pradesh and Assam and is connected by several tributaries.
- ❖ The Brahmaputra has a braided channel throughout most of its length in Assam.

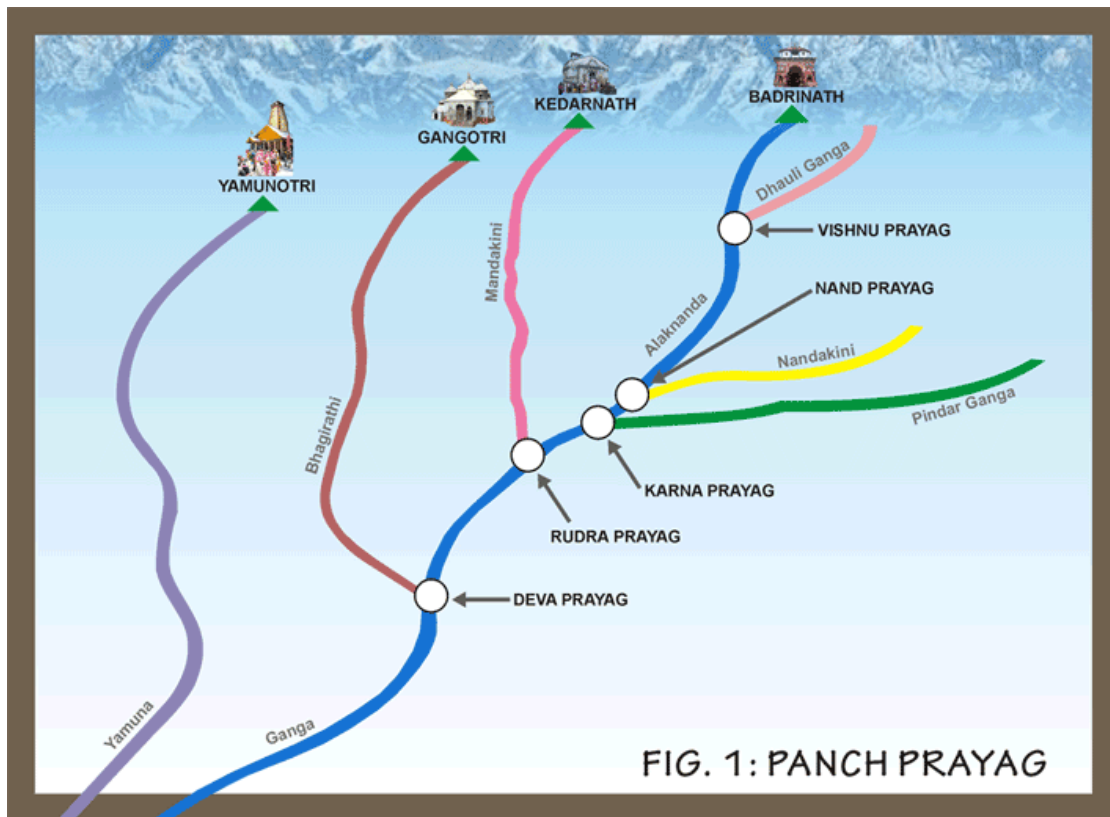
The river is known as the Tsangpo in Tibet. It receives less volume of water and has less silt in the Tibet region. But in India, the river passes through a region of heavy precipitation, and as such, the river carries large amounts of water during rainfall and a significant amount of silt. It is considered one of the largest rivers in India in terms of Volume. It is known for creating the calamity in Assam and Bangladesh.

Major River System – Ganga River System

- ❖ The Ganga originates as the Bhagirathi from the Gangotri glacier.
- ❖ Before it reaches Devprayag in the Garhwal Division, the Mandakini, Pindar, the Dhauliganga and the Bishenganga rivers merge into the Alaknanda and the Bheling drain into the Bhagirathi.
- ❖ The Pindar River rises from East Trishul and Nanda Devi unite with the Alaknanda at Karan Prayag. The Mandakini meets at Rudraprayag.
- ❖ The water from both Bhagirathi and the Alaknanda flows in the name of the Ganga at Devprayag.

The concept of Panch Prayag

1. Vishnuprayag: where the river Alaknanda meets river Dhauti Ganga
2. Nandprayag: where river Alaknanda meets river Nandakini
3. Karnaprayag: where river Alaknanda meets river Pinder
4. Rudraprayag: where river Alaknanda meets river Mandakini
5. Devprayag: where river Alaknanda meets river Bhagirathi -GANGA



The principal tributaries of the Ganga are Yamuna, Damodar, Sapta Kosi, Ram Ganga, Gomati, Ghaghara, and Son. The river after travelling a distance of 2525 km from its source meets the Bay of Bengal.

Yamuna River System

- ❖ The Yamuna River is the largest tributary of the Ganga River.
- ❖ It originates from the Yamunotri glacier, at the Bandarpooch peak in Uttarakhand.
- ❖ The main tributaries joining the river include the Sin, Hindon, Betwa Ken, and Chambal.
- ❖ The Tons is the largest tributary of the Yamuna.
- ❖ The catchment of the river extends to the states of Delhi, Himachal Pradesh, Uttar Pradesh, Haryana, Rajasthan, and Madhya Pradesh.

The Narmada River System

- ❖ The Narmada is a river located in central India.
- ❖ It rises to the summit of the Amarkantak Hill in Madhya Pradesh state.
- ❖ It outlines the traditional frontier between North India and South India.
- ❖ It is one of the major rivers of peninsular India. Only the Narmada, the Tapi, and the Mahi rivers run from east to west.
- ❖ The river flows through the states of Madhya Pradesh, Gujarat, and Maharashtra.
- ❖ It drains into the Arabian Sea in the Bharuch district of Gujarat.

The Tapi River System

- ❖ It is a central Indian river. It is one of the most important rivers of peninsular India with the run from east to west.
- ❖ It originates in the Eastern Satpura Range of southern Madhya Pradesh state.
- ❖ It flows in a westward direction, draining some important historic places like Madhya Pradesh's Nimar region, East Vidarbha region and Maharashtra's Khandesh in the northwest corner of the Deccan Plateau and South Gujarat before draining into the Gulf of Cambay of the Arabian Sea.
- ❖ The River Basin of Tapi River lies mostly in eastern and northern districts Maharashtra state.
- ❖ The river also covers some districts of Madhya Pradesh and Gujarat as well.
- ❖ The principal tributaries of Tapi River are Waghur River, Aner River, Girna River, Purna River, Panzara River and Bori River.

The Godavari River System

- ❖ The Godavari River is the second-longest course in India with brownish water.
- ❖ The river is often referred to as the Dakshin (South) Ganga or Vriddh (Old) Ganga.

- ❖ It is a seasonal river, dried during the summers, and widens during the monsoons.
- ❖ This river originates from Trimbakeshwar, near Nasik in Maharashtra.
- ❖ It flows southeast across south-central India through the states of Madhya Pradesh, Telangana, Andhra Pradesh, and Orissa, and drains into the Bay of Bengal.
- ❖ The river forms a fertile delta at Rajahmundry.
- ❖ The banks of this river have many pilgrimage sites, Nasik(MH), Bhadrachalam(TS), and Trimbak. Some of its tributaries include Pranahita (Combination of Penuganga and Warda), Indravati River, Bindusara, Sabari, and Manjira.
- ❖ Asia's largest rail-cum-road bridge which links Kovvur and Rajahmundry is located on the river Godavari.

The Krishna River System

- ❖ Krishna is one of the longest rivers of India, which originates from Mahabaleshwar in Maharashtra.
- ❖ It flows through Sangli and drains the sea in the Bay of Bengal.
- ❖ The river flows through the states of Maharashtra, Karnataka, Telangana and Andhra Pradesh.
- ❖ Tungabhadra River is the main tributary which itself is formed by the Tunga and Bhadra rivers that originate in the Western Ghats.
- ❖ Dudhganga Rivers, Koyna, Bhima, Mallaprabha, Dindi, Ghataprabha, Warna, Yerla, and Musi are some of the other tributaries.

The Cauvery River System

- ❖ The Cauvery is also known as Dakshin Ganga.
- ❖ It originates from Talakaveri located in the Western Ghats.
- ❖ It is a famous pilgrimage and tourist place in the Kodagu district of Karnataka.
- ❖ The headwaters of the river are in the Western Ghats range of Karnataka state, and from Karnataka through Tamil Nadu.
- ❖ The river drains into the Bay of Bengal. The river supports irrigation for agriculture and is considered as a means of support of the ancient kingdoms and modern cities of South India.
- ❖ The river has many tributaries called Arkavathy, Shimsha, Hemavati, Kapila, Shimsha, Honnuhole, Amaravati, Lakshmana Kabini, Lokapavani, Bhavani, Noyal, and Tirtha.

The Mahanadi River System

- ❖ The Mahanadi originates from the Satpura Range of central India and it is a river in eastern India.
- ❖ It flows east to the Bay of Bengal. The river drains of the state of Maharashtra, Chhattisgarh, Jharkhand, and Orissa.
- ❖ The largest dam, the Hirakud Dam is built on the river.

Complete List of Rivers | Their Lengths, Origins, and Tributaries

S.No	Rivers	Origin	Length (km)	End
1.	Ganga	Gangotri Glacier (Bhagirathi), Uttarakhand	2,525	Bay of Bengal
2.	Yamuna	Yamunotri Glacier, Uttarakhand	1,376	Merges with Ganga at Allahabad (Triveni Sangam - Kumbh Mela spot)

3.	Brahmaputra	Himalayan Glacier in Tibet, but enters India in Arunachal Pradesh	1,800	Merges with Ganga and ends in Bay of Bengal
4.	Chambal	Tributary of Yamuna river, starting at Madhya Pradesh	960	Joins Yamuna river in UP
5.	Son	Tributary of Ganga, starting at Amarkantak, Madhya Pradesh	784	Joins Ganga just above Patna - also considered part of Vindhya river system
6.	Gandak	Nepal; Ganges tributary at Indo-Nepal	630	Joins Ganga near Patna

		border (Triveni Sangam)		
7.	Kosi	Starts from Bihar near Indo-Nepal border	720	Joins Ganga near Katihar district of Bihar
8.	Betwa	Tributary of Yamuna, rises at Vindhya region, MP	590	Joins Yamuna at Hamirpur in UP
9.	Gomti	Tributary of Ganga, starting at Gomati Taal, UP	900	Joins Ganga in Varanasi district
10.	Ghaghara	Himalayan Glacier in Tibet, tributary of Ganga	1080	Joins Ganga in Bihar
11.	Hugli (Hooghly)	Tributary of Ganga near West Bengal	260	Merges with Ganga at Bay of Bengal
12.	Damodar	Tributary of Hugli near Chandwara, Jharkhand	592	Merges with Hugli in West Bengal

13.	Mahananda	Paglajhora falls, Darjeeling, West Bengal	360	Merge in Ganga
14.	Alaknanda	Satopanth & Bhagirathi-Kharak glacier	190	Merge in Ganga, Devprayag, Uttarakhand
15.	Bhagirathi	Gaumukh, Uttarakhand	205	Merge in Ganga, Devprayag, Uttarakhand
16.	Indus	Originates in Tibetan plateau, Enters India in J&K	3180	Merges into Arabian sea near Sindh
17.	Chenab	Upper Himalayas in the Spiti district of Himachal Pradesh	960	Merges with Indus
18.	Jhelum	Tributary of Chenab river, Punjab	725	Merges with Chenab at Jhang (Pakistan)
19.	Ravi	Starts from Bara Bhangal, Kangra	720	Joins Chenab in Pakistan

		district, Himachal Pradesh		
20.	Sutlej	Tributary of Indus river, originates at Rakshastal, Tibet	1500	Meets Beas river in Pakistan and ends at Arabian sea
21.	Beas	Rises at Himalayas in central Himachal Pradesh	470	Joins Sutlej river in Punjab, India
22.	Parbati	Mantalai Glacier near Pin Prabati Pass	-	Mixes with Beas River at Bhuntar, near Kullu of Himachal Pradesh
23.	Suru	Panzella Glacier, Pensi La Pass, Kargil	185	Indus, Nurla, Skardu, Pakistan
24.	Dras	Machoi Glacier, Zoji La, ear Sonamarg, Jammu & Kashmir	86	Suru River at Kharul, Kargil

25.	Zaskar	Doda River (First Branch), Kargyag and Tsarap River (Second Branch)	-	Indus River near Nimmu in Ladakh
26.	Tsarap	Pankpo La, Sarchu	182	Zaskar River, Padum, Kargil
27.	Doda	Drang-Drung Glacier, Pensi La	79	Zaskar River, Padum, Kargil
28.	Kaveri	Talakaveri in Western Ghats in Karnataka	765	Ends in Bay of Bengal
29.	Krishna	Originates in the Western Ghats near Mahabaleshwar in Maharashtra	1400	Ends in Bay of Bengal near Andhra Pradesh
30.	Godavari	Starts in Maharashtra and passes through 7 Indian states	1465	Empties in Bay of Bengal
31.	Tungabhadra	Tributary of Krishna river starting at Karnataka	531	Joins Krishna river along the border of Telangana and Andhra Pradesh

32.	Tapti	Rises in Eastern Satpura Ranges, Madhya Pradesh	724	Empties into Gulf of Khambhat, Gujarat
33.	Mahi	Rises in Madhya Pradesh	580	Flows into Arabian sea from Gujarat
34.	Narmada	Starts from Amarkantak, Madhya Pradesh	1315	Drains into Arabian sea via Gulf of Cambay
35.	Indravati	Dandakaranya range, Kalahandi district, Odisha	535	Godavari near border of Maharashtra, Chhattisgarh and Telangana
36.	Pranhita	Confluence of Wardha and Wainganga, near Sirpur Kaghaznagar	113	Godavari, near Kaleshwaram, Telangana
37.	Wardha	Satpura range, Multai, Betul district of Madhya Pradesh	528	Pranhita River
38.	Kolab (Sabari)	Sinkaran hills, Koraput, Odisha	200	Godavari

39.	Manjira	Balaghat hills	724	Godavari, near Kandakurthi, Karnataka
40.	Wainganga	Satpura range, Mundara, Seoni district, Madhya Pradesh	579	Pranhita River
41.	Painganga	Ajanta range, Aurangabad, Maharashtra	676	Wardha river, Chandrapur district, Maharashtra
42.	Vedavathi	Confluence of Veda and Avathi	-	Tungabhadra river, near Siruguppa
43.	Bhima	Bhimashankar	861	Krishna river, near raichur
44.	Indrayani	Lonavala, Maharashtra		Bhima river
45.	Pavana	Sahyadri range, Lonavala Maharashtra	58	Mula river
46.	Ghataprabha	Western ghats, Sindhudurg, Maharashtra	283	Krishna river, Almatti

47.	Venna	Mahabaleshwar, Maharashtra	130	Krishna river, Satara, Maharashtra
48.	Koyna	Mahabaleshwar, Maharashtra	130	Krishna river, near Karad, Satara
49.	Amravati	Anamalai hills, Pambar, Chinnar rivers	282	Kaveri river at Karur, Tamil Nadu
50.	Bhavani	Silent valley National Park, Kerala	135	Kaveri river at Kongu Nadu region of Tamil Nadu
51.	Hemavati	Western Ghats, Chikmagalur, Karnataka	245	Kaveri river near Krishna Raja Sagara, Karnataka
52.	Mahanadi	Dhamtari, Dandakaranya, Chhattisgarh	858	Bay of Bengal, near False Point, Kendrapara, Odisha

53.	Subarnarekha	Chota Nagpur plateau, near Ranchi, Jharkhand	395	Kirtania Port, near Talsari, Bay of Bengal
54.	Kangsabati	Chota Nagpur plateau, Purulia district, West Bengal	465	Bay of Bengal near Haldia
55.	Penner (Penna)	Nandi Hills, Chikkaballapur district, Karnataka	597	Bay of Bengal, near Nellore, Andhra Pradesh
56.	Palar	Nandi hills, Kolar district Karnataka	348	Bay of Bengal, near Vayalur, Tamil Nadu
57.	Vaigai	Varusanadu Hills, Tamil Nadu	258	Palk Strait, Tamil Nadu
58.	Vellar	Shevaroy Hills	150	Bay of Bengal, near Parangipettai, Tamil Nadu
59.	Ponnaiyar	Nandidurg, Chikkaballapur	400	Bay of Bengal

60.	Noyyal	Velliangiri Hills, Western Ghats, Tamil Nadu	180	Kaveri river
61.	Gomai	Satpura Range	-	Tapti river, near Prakasha, Nandurbar, Maharashtra
62.	Panzara	Near Pimpalner, Dhule, Maharashtra	-	Tapti river
63.	Purna	Satpura Range, Betul, Madhya Pradesh	-	Tapti river, near Changdev, Maharashtra
64.	Kolar	Vindhya Range, near Sehore district, Madhya Pradesh	101	Narmada, near Raisen district of Madhya Pradesh
65.	Tawa	Satpura Range, Betul, Madhya Pradesh	172	Narmada near Hoshangabad district
66.	Sabarmati	Dhebar lake, Aravalli range, near Udaipur, Rajasthan	371	Gulf of Khambhat

67.	Zuari	Hemad-Barshem in western ghats	34	Arabian sea
68.	Ulhas	Near Rajmachi hills, Sahyadri range	122	Vasai creek, Mumbai
69.	Mithi	Vihar lake and Powai lake	15	Arabian sea, Mahim creek, Mumbai
70.	Mandovi	Bhimgad, Karnataka	77	Arabian sea
71.	Kali	Kushavali, Karnataka	184	Arabian sea
72.	Netravati	Kudremukh, Chikmagalur, Karnataka	-	Arabian sea, near Mangalore, Karnataka
73.	Sharavati	Western Ghats, Tirthahalli, Karnataka	128	Arabian sea, near Honnavar, Uttar Kannada district, Karnataka
74.	Periyar	Sivagiri hills, Sundaramala, Tamil Nadu	244	Lakshadweep sea, Kerala

75.	Bharathappu zha	Anamalai Hills, Tamil Nadu	209	Lakshadweep sea, Ponnani, Kerala
76.	Pamba	Pulachimalai Hills, Western Ghats	176	Vembanad Lake
77.	Chaliyar	Elambaleri Hills, Western Ghats, Wayanad, Kerala	169	Lakshadweep sea, Kerala