

RIVER SYSTEM OF MANIPUR

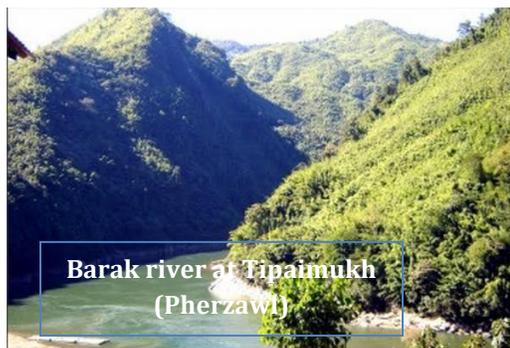
There are three main river system of Manipur

- a) **The Barak system**
- b) **The Manipur system**
- c) **The Chindwin system**



THE BARAK SYSTEM

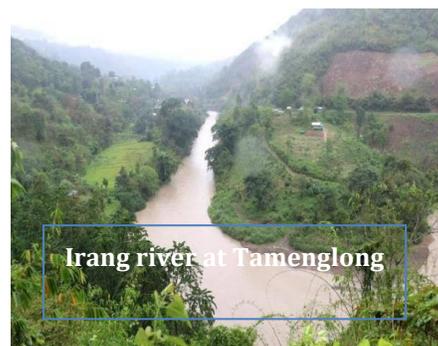
- The Barak river and its tributaries – Irang , Makru, Tuivai And Jiri – flow through the northern and western hills of the state, and have a total catchment area of 9,042 sq. km. this forms approximately 40.5 percent of the state.
- From its source at Liyai Khullen in Manipur’s Senapati district at an elevation of 2331 meter and its flows downward , the river receives a lot of streams and it flows west between Manipur and Nagaland, then southwest to Assam where it leaves India and enters Bangladesh.
- The Barak river is the biggest river and longest river of the state. It rises in the southern spures of Japho and flows in a south westerly direction. At Tipaimuk (Pherzawl district), it joins the Tuivai river and take a sharp bend towards north, to join the Jiri river.
- The Makru and Jiri river are right bank tributaries of Barak river. These rivers rlses from the hills in the south of the Barail ranges and flows more or less in parallel course.
- The Irang is the most important tributary of the Barak river. It rises from the northern part of the western hills and seperates the Tamenglong and Churachandpur districts. The Leimatak river falls into the Irang river.



Barak river at Tipaimukh (Pherzawl)



Barak river at Senapati



Irang river at Tamenglong

MANIPUR RIVER SYSTEM

- Manipur valley is transverse by the major rivers viz. Imphal, Iril, Thoubal, Sekmai, Wangjing, Khuga, Chakpi, Nambul etc which falls directly into or indirectly connects with Imphal river which later known as Manipur river.
- The total area of Manipur river system is 6332 sq. km and cover 28 percent of the state's total area.
- Annual rainfall varies from 895mm to 2135mm in the valley and up to 3148 mm in the hilly area. Minimum temperature varies from 1°C to 10°C and maximum temperature 27°C to 35°C.
- Forest types found in the area are tropical moist deciduous and subtropical pine forests.
- Catchments area of Manipur valley can be divided into 9 basins:

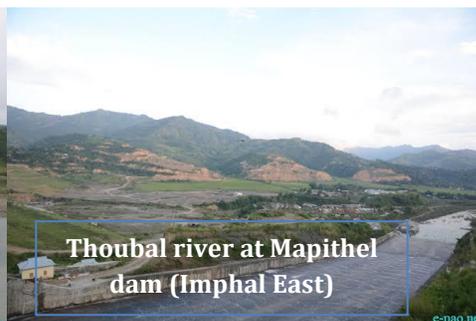
Sl	Name of the River Basin	Catchment areas
1	Imphal River Basin	560 sq. km.
2	Thoubal River Basin	920 sq. km.
3	Iril River Basin	1260 sq. km.
4	Sekmai River Basin	426 sq. km.
5	Khuga River Basin	458 sq. km.
6	Wangjing River Basin	305 sq. km.
7	Chakpi River Basin	660 sq. km.
8	Rivers systems which falls on Loktak lake	980 sq. km.
9	Others river falls into the Manipur river	763 sq. km.
	Total	6332 sq. km.



Imphal river (Imphal City)



Manipur river at Serou (Kakching Distt)



Thoubal river at Mapithel dam (Imphal East)



Chindwin river (Myanmar)

Image courtesy: e-pao.net

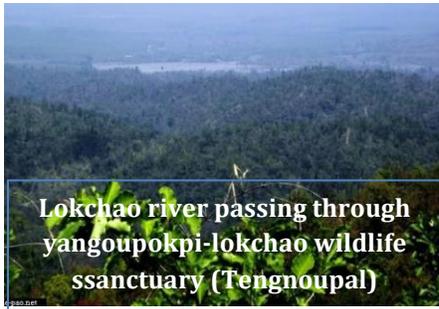


Khuga river

(Image courtesy: Hemam Romesh)

CHINDWIN SYSTEM (THE YU RIVER SYSTEM)

- Consists of a number and small streams draining the eastern slopes of Manipur's eastern hills and has a total catchment area of 6,953 sq km and cover 31.1 percent of the state's total area.
- The streams in this system are Akonglok, Chamu and Chingai, and Yu and its tributaries, Maklong, Tuyangai, Taretlok, Lokchao, Limilok and Tuiyang.
- The Chingai and Chatrickhong are the two rivers which drain parts of Ukhrul district and they flow out in the east to join the Chindwin.
- The Maklang drains the Kamjong district and Lokchao drains Tengnoupal district and flows out to join Yu River of Myanmar. The Yu River finally joins Chindwin.



CONSERVATION OF RIVERS

- *There are many vulnerable points along the riverbanks of the Major Rivers of Manipur valley. Erosion, sliding and slumping of the banks are common. Proper maintenance of these river banks are necessary, enforcement of river banks through plantation of trees will help to some extents.*
- *Construction of check dams may regulate the flow of water in the rivers and its will check siltation/ sedimentation in the river courses*
- *Plantation of trees on catchment area is important to reduce soil loss and retention of moisture*
- *Terrace cultivation in hill slope is recommended.*
- *Increasing the period of jhoom cultivation should be encouraged.*
- *Fishing using chemicals in the river need to be stopped*
- *Overfishing need to be checked to maintain fish diversity. Fishing should be regulated during spawning season.*
- *In Catchment area, untreated effluents from factories and sewage should not be discharged in rivers*
- *Stop plastics and dumping waste into the river.*
- *Immersion of idols during religious ceremonies should be controlled and idols should be made from eco-friendly materials.*
- *Waste disposal near water bodies should be discouraged.*