

The Course of The Ganges River



The Ganges River, also called Ganga, is a river located in northern India that flows toward the border with Bangladesh (map). It is the longest river in India and flows for around 1,569 miles (2,525 km) from the Himalayan Mountains to the Bay of Bengal. The river has the second greatest water discharge in the world, and its basin is the most heavily populated in the world with over 400 million people living in the basin.

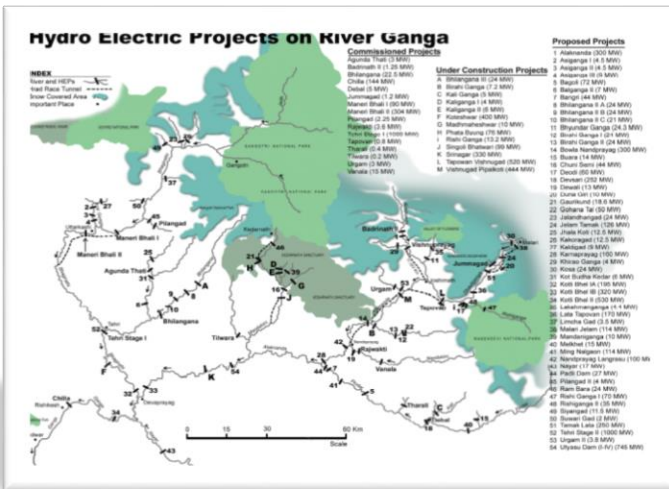
The Ganges River is extremely important to the people of India as most of the people living on its banks use it for daily needs such as bathing and fishing. It is also significant to Hindus as they consider it their most sacred river.

The headwaters of the Ganges River begin high in the Himalayan Mountains where the Bhagirathi River flows out of the Gangotri Glacier in India's Uttarakhand state. The glacier sits at an elevation of 12,769 feet (3,892 m).. As the Ganges flows out of the Himalayas, it creates a narrow, rugged canyon.

The Ganges River emerges from the Himalayas at the town of Rishikesh where it begins to flow onto the Indo-Gangetic Plain. This area, also called the North Indian River Plain, is a very large, relatively flat, fertile plain that makes up most of the northern and eastern parts of India as well as parts of Pakistan, Nepal, and Bangladesh. The Ganges River is also diverted toward the Ganges Canal for irrigation in the Uttar Pradesh state.

As the Ganges River then flows farther downstream, it changes its direction several times and is joined by many other tributary rivers. Once the Ganges River flows out of India and into Bangladesh, its main branch is known as the Padma River. This river again joins several others before entering the Bay of Bengal. The river then creates the world's largest delta, Ganges Delta. This region is a highly fertile sediment-laden area that covers 23,000 square miles (59,000 sq km).

The Power of the Ganges River



The Ganges River basin has been inhabited by humans since ancient times. In modern times the Ganges River has become a source of life for the nearly 400 million people living in its basin. They rely on the river for their daily needs such as drinking water and food and for irrigation and manufacturing. Today the Ganges River basin is the most populated river basin in the world. It has a population density of about 1,000 people per square mile (390 per sq km).

The Ganges River is home to many people due to its abundance of water and fertile soils. Most of the people who live on or near the Ganges River in Northern/Central India have agriculture based lifestyles. These people depend on the water and floods that come annually to produce crops and fish, as well as the nutrients that the flooding brings each year to the fields.

More than half of the 400 million people who call the Ganges River Basin home, use it for agricultural needs. To help provide water to all of these people, many new irrigation and canal systems have been built along the river. Today, sprinklers and irrigation improvements have been considerable, mainly due to the result of government and farmers to find water-saving techniques for agriculture. The Government has offered subsidies to adopt drip systems. Drip-irrigated crops are mainly orchards (grapes, bananas, pomegranates and mangoes) but do make up a large percentage of the crops in the area.

Hydroelectricity along the Ganges is also becoming more important and improved. It is estimated that by 2035 India alone will triple the amount of hydroelectric power that is being generated by the Ganges River alone, in hopes of keeping up with the growing population and the increase use of electricity. Some of the smaller nations, like Nepal and Bhutan are also looking into ways to use the power of the Ganges to support their growing populations.

The Significance of the Ganges River



The Ganges River is considered Hindu's most sacred river, and it is worshiped as the goddess Ganga Ma or "Mother Ganges." According to the Myth of the Ganges, the goddess Ganga descended from heaven to dwell in the waters of the Ganges River to protect, purify and bring to heaven those who touch it. Devout Hindus visit the river daily to offer flowers and food to Ganga. They also drink the water and bathe in the river to cleanse and purify their sins. Also, Hindus believe that upon death the waters of the Ganges River are needed to reach the World of the Ancestors, Pitriloka. In some cases, corpses are also thrown into the river. The city of Varanasi is the holiest of cities along the Ganges River and many Hindus travel there to place ashes of their dead in the river.

Tens of millions of pilgrims attend Kumbh Melas at these sites roughly every three years, praying the holy waters will emancipate them from the cycle of rebirth. The festival in Prayagraj, where the Ganges and the Yamuna meet, has become the largest. Hindus believe every soul passes through different lives (better or worse depending on your karma in the previous life) but the highest point is breaking out of the cycle, transcending it and achieving salvation/emancipation from the earthly life with its suffering and desires.

In addition, the Kumbh Mela is also a vast market, meeting place and center of learning, where people can attend spiritual lectures or take blessing from some of the country's most-revered gurus, and Hindu saints are ordained.

Ecologically the Ganges River remains important to the Indian people as well as different species of plants and animals such as the Ganges River dolphin, a very rare species of freshwater dolphin that is native only to that area.

Pollution of the Ganges River



The Ganges is one of the most polluted rivers in the world. Pollution of the Ganges is caused by both human and industrial waste due to India's rapid growth as well as religious events. India currently has a population of over one billion people, and 400 million of them live in the Ganges River basin. As a result, much of their waste, including raw sewage is dumped into the river. In addition, many Hindus bring their dead to the river for cremation along its banks and afterward their ashes are spread in the river. Sometimes, people even dump the bodies into the river as a religious act. Also, many people bathe and use the river to clean their laundry. Fecal bacteria levels near Varanasi are at least 3,000 times higher than the what is established by the World Health Organization as safe.

Industrial practices in India also have little regulation and as the population grows these industries do as well. There are many tanneries, chemical plants, textile mills, distilleries and slaughterhouses along the river and many of them dump their untreated and often toxic waste into the river. The water of the Ganges has been tested to contain high levels of things like chromium sulfate, arsenic, cadmium, mercury and sulfuric acid.

In addition to human and industrial waste, some religious activities also increase the pollution of the Ganges. For example, Hindus believe that they must take offerings of food and other items to Ganga and as a result, these items are thrown into the river on a regular basis and more so during religious events. Human remains are also often placed into the river.

In the late 1980s India's prime minister, Rajiv Gandhi began the Ganga Action Plan (GAP) to clean up the Ganges River. The plan shut down many highly polluting industrial plants along the river, and allotted funding for the construction of wastewater treatment facilities but its efforts have fallen short as the plants are not large enough to handle the waste coming from such a large population. Many of the polluting industrial plants are also continuing to dump their hazardous waste into the river.