

The Magnificent Ganges Delta

Sunderban Delta or the Ganges Delta as it is known all over the world, is a river delta located in Southern Asia, mainly in the regions of Bangladesh and West Bengal in India. Being the largest delta in the world, it empties in the Bay of Bengal and is extremely fertile, thus nicknamed The Green Delta. Also known as Ganges-Brahmaputra Delta, it widens from Hooghly River in the west to Meghna River on the east. Approximately some 350 kilometers across the Bay of Bengal, Haldia and Kolkata in India along with Dhaka and Mongla in Bangladesh are the main seaports on the Ganges delta.

In fact, the Ganges Delta forms from the converging rivers of Hooghly (a distributary of Ganges), Padma (a distributary of Ganges), Meghna (a river in Bangladesh) and Jamuna (Lower Brahmaputra).

Composition and shape of the delta

The Ganges delta has the shape of a triangle and is known to be an 'arcuate' delta which refers to arc-shape, covering a total area of 105,000 square kilometers. Rivers from Tibet, Bhutan and Nepal also drain into it from the northern side. About two-third of the delta falls in Bangladesh and it consists mostly of red and yellow laterite soils and alluvial soils. The soil is also rich in nutrients and minerals, which is perfect for agriculture.

Ganges delta consists of a jumble of swamps, waterways, flood plain sediments and lakes. It is divided in two parts: the western part which is less active and the eastern part which is more active.

Habitats

Some 143 million people live on the delta even if there is high risk of floods due to heavy rain and run off from melting snows at the Himalayas cyclones as well. In Bangladesh, huge portion of human population lives and survives on the Ganges delta. It is in fact the most populous basin on earth with 200 people per square kilometer.

Ecology

The terrestrial eco-regions is divided into three parts - the Lower Gangetic plains, the Sunderban freshwater swamp forests and the Sunderban mangroves eco-region. The Lower Gangetic plains have mostly been cleared for agriculture with very little area remaining with tall grass known as canebrakes. The Sunderban freshwater swamps are located very close to the Bay of Bengal and consist of fresh water during monsoon season and brackish water in dry season. Even forests too, are mostly converted to agriculture with only 130 square kilometers been protected. On the other hand, the Sunderbans mangroves, the largest mangroves forest in the world is mainly dominated by the unique species of mangrove, *Heritiera fomes* which are known as sundari in local areas.

Various types of animals and plants species can be found in the Ganges region. Animal species include Clouded Leopard (*Neofelis nebulosa*), crocodiles, Indian Python (*Python molurus*), Indian Elephant (*Elephas maximus indicus*) and the enormous Bengal tigers (*Panthera tigris tigris*) which have become an endangered species with only 1020

remaining. Wide varieties of birds are also common like the doel (*Copsychus saularis*), the shalik (*Acridotheres tristis*), the Swamp Francolin (*Francolinus gularis*), woodpeckers and eagles. Two unique species of dolphins are also found; the Ganges River Dolphin (*Platanista gangetica gangetica*) and the Irrawaddy Dolphin (*Orcaella brevirostris*).

Among the plant species, garjan, sundari, mangrove, bamboo and mangrove date palm are abundant in the delta.

Future life in the delta

A huge portion of the Bangladeshi population lives on agriculture on the delta and so is fishing which is equally an important activity in the delta region. But with the rising level of water caused by the subsidence of nearby regions and due to climate change to some extent, the future of the people living is at stake. With an increase of some half meter, around 6 million people will lose their homes in Bangladesh.