

## Value of River water

# How to kill Teesta

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The proposed treaty between India and Bangladesh on sharing of waters of the Teesta has been put on hold because of opposition of the present West Bengal government. Kolkata is agreeable to give only 25 percent water to Bangladesh while the latter wants 50 percent. The Union Government is inclined to accept Bangladesh's demand.

Both countries agree that entire water of the Teesta should be extracted for irrigation or other purposes. Dispute is how much extraction will be done by India and how much by Bangladesh. Both believe that flow of water to the sea is a waste. There is need to reconsider this, however. River carries sediments along with water. The sea has a natural tendency to erode the coasts. This tendency of the sea is counteracted by supply of sediments from the rivers. Sediments get diverted along with water. This leads to accelerated coastal erosion as is happening at Ganga Sagar Islands on mouth of the Hooghly after construction of the Tehri Dam.

Fishermen are harmed by diversion of waters because fishes do not grow in scant waters. They are also deprived of food in the debris that flows with the sediments. Diversion of water leads to absence of floods, less spread of flood waters, less recharge of ground water, depletion of ground water, less irrigation and less food production. Less recharge of ground water also leads to ingress of salt sea water and arsenic contamination in some areas, particularly in the Gangetic plains. Water of wells in the coastal areas becomes brackish and unfit for agriculture as is happening in coastal Gujarat.

The Government of India has additionally embarked on making cascade of hydropower dams on the Teesta. The Teesta will emerge from a tunnel only to enter another. The water will flow in the river bed only after it enters the plains. However, no water will be extracted. These 'Run-of-River' dams have huge environmental impacts as well. Water is released from these dams only in the mornings and evenings when the demand for electricity is high. Little water, if at all, flows in the river during rest of the day. Navigation cannot take place. Fish die. Water cannot absorb oxygen because it flows in tunnels in the hill areas. It also cannot absorb beneficent metals like copper and chromium because there is no friction with stones. Pilgrims taking bath in the river do not get freshness and liveliness of free flowing river water. Local people in the hill areas do not get sand and fish because the river bed becomes dry. Aquifers in hill areas are pierced during tunneling. The water is drained out. Springs go dry, less moisture is available to the trees, there is decline in forests, less carbon is absorbed and this leads to global warming. Houses on the hills develop cracks due to blasting in making of the tunnels. Huge amount of water is held back in the reservoirs at the inlet of the tunnels. Weight of this water is estimated to lead to earthquakes in one out of 500 dams. Government of India is unwilling to factor in these negative impacts of these dams. It will be established that these dams are harmful for the economy and the people if a true study of these environmental impacts is undertaken.

The canals and dams are actually instruments for transferring natural resources from the poor to the rich. Water-guzzling crops like menthe and sugar cane are grown on the canal-irrigated

lands. The perfumes and sweets that are made from these produce are mostly consumed by the rich. Electricity generated is used for running air-conditioners of the rich. On the other hand, the poor lose from fishing, sand, navigation, forests, etc. It is difficult to implement such an anti-people policy in a democratic framework. But the Government is bent upon providing benefits to the rich. Therefore, the Government commissions fake studies to confuse the people and to persuade them into acquiescing to allow construction of the dams and barrages that are basically harmful for them.

One such fake study has been got done by the Ministry of Environment and Forests. The Ministry gave Rs one crore to a centrally-funded premier Technological Institute. Of this nearly one-half was taken by professors of the Institute as consultancy charges-in addition to their salaries. A heavy amount was given to a former Secretary of the Ministry ostensibly as consultancy charges. This former Secretary acted as middleman between the Institute and the Ministry in getting the study allotted. The Institute gave a report saying that no harm will be done to the environment, people, culture and religion from construction of cascade of hydropower dams on the Ganga. The Institute made many dishonest claims and statement in arriving at this conclusion.

The Institute suggested that tunnels must be made in a way that aquifers are not pierced. But geologists have told this writer that no technology is known for mapping these aquifers and making such 'safe' tunnels. The Institute said that there is only a small impact on the dissolved oxygen in water due to these dams. The data given by the Institute indeed lead to such a conclusion. Problem is that the same data also indicate that there is a huge impact on total dissolved solids, nitrates, temperature, conductivity and phosphorus content of the river water. But the Institute refused to look at these impacts. The Institute has falsely quoted the World Commission on Dams to say that 10 percent of the water may be released for environmental purposes while, actually, the Commission has deprecated this practice. The Institute has said that the energy required to produce electricity is lowest in hydropower among other sources such as thermal and nuclear. This is called 'energy payback ratio'. This is like saying that the energy required to earn money from thievery is less than other sources of income. One may compare hydroelectricity to theft because resources of the poor people are taken away from them as if by theft. The Institute has taken figures of methane emissions from reservoirs from cold countries and applied these figures mindlessly to a warm country like India. The Institute has quoted a noted environmentalist in support of dams while actually he opposes them. The Institute quoted the agreement made by Hindus with the British Government of India to allow diversion of Ganga into canal at Haridwar. The Institute had no hesitation in applying this precedent to free India. The Institute recommended construction of dams on such false basis. The Government is now commissioning similar fake studies for rivers in the northeast.

People of India and Bangladesh should know that their governments are trying to fool them into supporting the killing of rivers by commissioning such false and mischievous studies. People should rally and force the governments to get true and credible studies done. First they should jointly determine how much water may be extracted from the river. Only thereafter the distribution of this water between Banaladesh and India may be discussed. It is good that the government of West Bengal has put spanners in the works for the present.