# World Bank takes wrong tack on controlling Bangladesh floods

## by Ramtanu Maitra

As the fast-flowing eastern rivers of Bangladesh have begun to overflow with the first monsoon rains in the area, the much-touted Flood Action Plan (FAP), a \$15 billion hightechnology flood prevention scheme coordinated by the World Bank, has come under severe attack from the European parliamentarians, many European non-governmental organizations (NGOs), academics, and local NGOs. The International Flood Action Campaign Committee, which is spearheading the attack from its Brussels headquarters, says that the project does not adequately take into account the environmental aspects of the program, and warns that it will probably cause the resettlement of thousands of area residents. The committee is also demanding full environmental impact studies before the work goes ahead.

The Flood Action Plan was formulated at the behest of Bangladesh's foreign aid donors, following an unusually excessive flooding in 1987. It is a brainchild of Danièle Mitterrand, wife of the French President François Mitterrand, and got under way when President Mitterrand appointed a team of 30 engineers to find a permanent solution to recurring flood damage in Bangladesh. Simultaneously, Japan, the United Nations Development Program (UNDP), and the United States also engaged their own experts to devise measures for flood prevention and flood control schemes. These various efforts eventually became coordinated under the umbrella of the World Bank, and through pressures from the Group of Seven industrialized countries, the FAP was born.

## A flawed project

Putting aside its trimmings, the FAP envisaged that in order to provide adequate drainage and control flooding, the major water-carriers of Bangladesh—the Brahmaputra and Meghna rivers in the east and northeast, and the Ganga and Padma rivers flowing in from the west—must be harnessed simply by constructing high embankments. Proposed by the French, these embankments would average 4.5 meters in height, rising to a maximum of 7.4 meters, and would have a total length of 3,350-4,000 kilometers. Although the French are credited with this flawed concept, the World Bank has made it clear in its report that the overriding objective of the FAP is to control the major rivers in this way. The FAP came under criticism from its very inception. Experts pointed out that because of the huge amount of water flow involved, the building of embankments will defeat the very purpose of flood prevention, and that even though some immediate relief may be obtained, in fact such dikes will create even more devastating floods in the future.

Flood control and flood prevention is not new in Bangladesh. When the British East India Company came to this part of India, they found miles and miles of dikes of modest nature along the riverbanks. These dikes were built in the 17th and 18th century, not to stop flooding, but to reduce the damage caused by severe floods. The dikes provided adequate latitude to these mighty rivers to overflow wherever the population density was low and the land was available for the water to spread.

The FAP, however, ignoring all these basic requirements, promotes a concept which, besides being highly costineffective, would endanger a larger population. Experts point out that when rivers, which carry large amount of silt and sand, are constricted by embankments, silt and sand deposits on the riverbed increase, causing a hydrodynamic effect which cannot be ignored. In the case of the Brahmaputra, Meghna, Padma, and Ganga—all major rivers carrying large amounts of silty clay from the Himalaya Mountains and huge delta through which they flow—the riverbed deposit of silty clay will increase once they are straitjacketed through embankments. Over the years, this will raise the riverbed, and eventually the river will overflow, making breaches in the expensive embankments and then washing them away.

#### **Delta population endangered**

The second factor which the FAP has chosen to ignore, as pointed out by experts in Bangladesh, is that the surface velocity of flowing water will increase significantly when these larger rivers are controlled through embankments. The resulting faster flow of the massive amount of monsoon water from almost all of the southern face of the Himalayas over a length of more than 1,000 kilometers, and the water carried by the Brahmaputra from the northern face of the Himalyas and the Tibetan plateau, would inundate the delta areas of these rivers along the Bay of Bengal, where a large section of the Bangladesh population resides.

In response to these criticisms, the World Bank claims that the FAP has not been finalized, and that it is still in the planning stages. The World Bank also assures the critics that the future design of the program should surface early next year, following the completion of some of the 26 assessment projects.

Over the first five years of the FAP (1990-95) \$150 million has been earmarked for studies in small experimental projects. Andrew Steer, deputy director of the bank's environment department, told the media that "donors will move on to the next stage of the FAP only after a thorough public review of all the environmental and other studies undertaken under the first stage." But there are indications that the FAP has already run into trouble with the donor countries: Out of the proposed \$15 billion, not more than \$1 billion has been pledged so far.

#### **Environmentalists' game**

The FAP may be a flawed project, but there is no question that Bangladesh's mighty rivers can be channelled judiciously for the betterment of the land and its people. If no watercontrol projects are undertaken, we will see bigger and bigger floods in the years to come, causing more and more damage, including loss of human lives and cattle. Water spreading, flood channels, modest diking, dredging of silts in some rivers or parts of rivers, etc., would help to reduce flood damage significantly and enrich the soil with rich silts. All these, however, require a more comprehensive understanding of the river flow, lay of the land, and general land-water interrelations.

But instead of finding a solution to the devastating floods, the environmentalists are attacking those aspects of the FAP which are in any way associated with projects which might actually help to control flooding. For example, the Brusselsbased mother environmental organization, the International Flood Action Campaign Committee, is opposing the project not on its merits, but because it would displace thousands, with landless families being forced to resettle due to the construction of embankments. It also attacked the plan, embedded in the FAP, to promote the spread of high-yield varieties of rice. The committee argues that the previous plan to do so (i.e., the "Green Revolution"), although it increased Bangladesh's food production and provided food to the poor, has resulted in major environmental dangers. These environmentalists also claim that if the FAP goes through, it would inflict serious damage on the diversity of the region's flora and fauna. Already, the World Bank has responded to the pressure tactics adopted by the NGOs and environmentalists, and, instead of pursuing a comprehensive plan for better management of river waters, has started negotiating with the protesters for a series of local projects which will not be effective in controlling the floods, but which would dislocate fewer people.

# **Currency Rates**

