## The vanishing forest biodiversity of Bangladesh

Bangladesh is one of the states signatories of the Convention on Biological Diversity. Nevertheless, the three types of forests existing in the country --the evergreen and semi-evergreen rainforests in the eastern region and at the Chittagong Hill Tracts region, the moist and dry deciduous forests, known as "sal" forests, situated in the central plains and the northeast region, and the tidal mangrove forests along the coast-- are under threat, and little is being done to save them. In the meantime, annual deforestation rate has reached 3.3%.

The Chittagong Hill Tracts comprise 14,000 square kilometers, which represent about 10% of the country area. Some of the major species in these forests grow to gigantic heights and diametres. The tallest part of the canopy is generally formed by deciduous and semideciduous trees while the understorey is of evergreen type. Bamboo formations and savannah are also present. Several important species of mammals inhabit the area: elephants, bisons, deers, leopards, and the symbolic Royal Bengal tiger. Birds like the imperial pigeon, the green pigeon, and the white winged wood duck are also present.

Commercial tree plantations, illegal logging, dam megaprojects, and forced displacement are responsible for the accelerated destruction of those precious ecosystems, which means the destruction of their biodiversity. Rubber, teak and eucalyptus monocultures for export have provoked negative ecological effects by the substitution of part of the forest, as well as conflicts between local communities belonging to the 13 ethnic groups that inhabit the region, and the Forest Department. Unluckily this type of situations are frequent throughout Asia. The same authorities that promote plantations have proved unable to control illegal logging by gangs. Regarding megaprojects, the Kaptai Dam is a good/bad example of how external funding in the name if development can devastate an area and have multiplier effects on the environment, the economy and the life of nearby communities. The dam, constructed in 1964 with the help of USAID, submerged 250 square kilometres of agricultural lands and forests belonging to the hill people, mainly the Chakma, and provoked the forced relocation of about 100,000 persons, who lost their homes and livelihoods. The displaced people were forced to clear new forest areas in order to carry out their subsistence agricultural practices.

Traditionally "sal" forests used to cover vast areas in the centre and east of Bangladesh. In addition to the "sal" trees (Shorea robusta) which constitue 70 to 75% of the forest composition, this type of forest includes several valuable tree and herbaceous species like the sungrass. Biological diversity in the "sal" forests is unique. Nevertheless, the Asian Development Bank has actively promoted the destruction of the "sal" forests by considering them of low productivity, thus financing projects for tree monoculture plantations using eucalyptus and rubber among other species. Nowadays the only big patch of "sal" forest standing is that of Modhupur. Most of the forest land has been denuded, degraded, and occupied by forestry companies or displaced people.

Sundarban, the largest mangrove in the world, is located in the southwest region of the country, on the border between India and Bangladesh. It is fed by a hydrological network of fresh water belonging to the Ganges watershed, and the salty water of the Gulf of Bengal. It comprises an area of more

than 10,300 square kilometres with a complex and rich habitat where many species of fauna and flora coexist: mammals, several hundred species of birds --some of them migratory-- as well as crocodiles, other reptiles, amphibians and invertebrates. In addition, it is one of the last reserves of the royal bengal tiger. The UNESCO has declared it a World Heritage Site. The Sundarban is the source of livelihoods --fish, honey, timber, fuelwood-- for local populations. A recent survey has estimated that between 500,000 and 600,000 people --including commercial and industrial enterprises-- depend directly on the products obtained from these mangroves.

In this case, the main direct cause of destruction is gas and oil prospection and exploitation by multinational companies, among which Shell, whose activities are being favoured by the government itself under the name of development. The so-called Sundarbans Bio Diversity Project, designed to restore the original ecosystem and funded by the Asian Development Bank (ADB), the Global Environment Facility (GEF) and the Nordic Development Fund, is being strongly criticised by IEDS (Friends of the Earth – Bangladesh) because of the infrastructures for ecotourism built in the heart of the mangrove and the non transparent way in which the whole project is being implemented, disregarding the viewpoints and interests of local communities.

Even though to the official and the development agencies viewpoint population pressure is the only cause for forest destruction in Bangladesh, reality shows that unsustainable "development" and infrastructure projects, coupled with a poor performance of the authorities regarding forest conservation constitute the most important causes of deforestation and forest degradation in that country.