

Detrimental deforestation

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DESTRUCION of forest by clear-cutting is the clearing of forested areas as part of a commercial forestry enterprise or for other economic purposes. Deforestation involves the deliberate removal of forest to create new agricultural or urban land, to provide wood for building and manufacturing industries, for the exploitation of minerals and fossil fuels, to create reservoirs for water supplies and hydroelectric energy, to build highways, for fuel, or as a result of defolians used to help to locate enemies during wars. Deforestation is deeply involved with the process of land degradation. It degrades the soil more rapidly and intensively than any other activity in nature degradation. In an estimation it is found that 40 per cent of soil degradation in Asia and 14 per cent in South America is the result of deforestation, including both careless logging practices and land clearing for agriculture.

The United Nations Food and Agriculture Organisation has released preliminary results from a global forest study that considered tropical deforestation from land clearing between 1981 and 1990. It found that the world is losing its tropical forests at the alarming rate of almost 42 million acres per year, an increase of 50 per cent from an estimate made a decade earlier. This means that nearly 1.3 acres of tropical forest disappear every second. The largest areas of forest loss occurred in Latin America, followed by Africa. However, when deforestation is measured as a percentage of the remaining forest, the most losses occurred in Asia, where 1.2 per cent of the forest was destroyed per year during the 1980s. At the current rate tropical forest will be gone within 115 years.

The Bangladesh forest with its exuberant majesty and biodiversity depleted and shrank to 6 per cent from 20 per cent of land area within a time span of 50 years after 1947. This happened due to policy weakness, over-exploitation and law and order failures. It is fact that, there is lack of legislation to provide protection to the national forest but poor implementation mechanism

of the existing rules perhaps cause a greater damage in this regard. Since the beginning of the British rule, the Indian subcontinent including Bangladesh appeared to hold inexhaustible forest resources base. Rennel's map (1886) indicated that the Sundarbans, sal forest of the Bhawal-Madhupur tracts covered an area several times larger than it is at present. The hill forests of Chittagong, CHT, Sylhet, Mymensingh and Comilla were also densely populated by more

than 2000 flowering plant species including 300 tree species. Nearly 30 tree species in hill forest, 20 species in plain land forest and 30 species in the littoral forests used to be commercially exploited. In addition, the homesteads were covered with valuable fruit, fodder, timber, fuel wood, bamboo and many multipurpose tree species.



Local people (wood cutters) taking away their wood-cut from the forest of Eidgaon (Cox's Bazar) to be sold in the local market for about Taka 30/- only each bundle.

The demand for forest products

urban and growth of population put extra stress on forests that consequently depleted Bangladesh forests to the present level.

Environmental Biology and Biodiversity Laboratory (EBBL), University of Dhaka has recently made a study on the traditional and cultural involvement of local people and the causes of deforestation in some forest areas of Chittagong and

Cox's-Bazar districts. The local people (because they are poor and illiterate) are culturally habituated to go inside the forest every morning and have some wood or undergrowth plants (throughout the day) cut for selling in the market nearby in the same evening for a few taka only. Most interesting at the sometime alarming is that, out of 351 such individuals interviewed 137 were found with age limit below 12 years only (from 6 years - 12 years). When age was considered,

potentials. The policy makers being inspired by the Rio Conference did ultimately realise the need for a sectarian study for farming a 20-year Forestry Master Plan to combat the environmental and ecological degradation in Bangladesh. The Forestry Master Plan was published accordingly in 1993. The National Forest Policy, 1994 subsequently enacted by MOEF envisages (i) raising forest-cover to 20 percent by 2015; (ii) ensuring coordinated participation of FD, NGOs and private individuals in forestry related activities; (iii) strengthening capability of FD, Bangladesh Forest Research Institute (BFRI), Forest Industries Development Corporation (BFIDC), Forestry Training Academy University; (iv) entrepreneurship development to deal with research, development and utilisation of forest resources; (v) reorganisation of FD, BFRI, BFIDC and other forestry sector organisations.

The estimated resources requirement for the proposed activities was Tk. 8,000 million. ADB came forward to organise collection of fund from various donor agencies. The Forestry Sector Project (FSP) was launched in 1997 with ADB support of Tk. 4,000 million as the first project for implementing the FMP recommendations. As per ADB evaluation FSP though launched since mid 1997 is a sick project and failed to reach the physical and financial targets. The forest offences in British-India were dealt under the Indian Penal Code until the forest in several states was declared as State Forest for management, exploration and conservation purpose. The customary rights of people as well as the public interest in forestry sector recognised by the government are facilitating to conservation and management of state forests. Hence, it was soon realised that to deal with vivid nature of forest-offences that take place within the state forests special laws required to be enacted. The Forest Act, 1865 was, therefore, enacted in India to prevent crimes, protecting resources e.g., trees, wildlife, ecology, watershed, landscape, etc. and to expand and manage the state forests. Hence the Act was subsequently revised in 1878. Finally, the Forest Act, 1927 was enacted to provide full-scale legal coverage for protection and development of Reserve Forest and other types of state managed forests.

This Act was valid in Bangladesh to deal with Forest-offences until enactment of the Forest Act, 1994 with the subsequent amendment in 2000. Other laws, ordinances and rules of general nature that have a strong bearing in relation to forest administration, management and conservation include (i) Bangladesh Wildlife (Preservation) Act 1973, (Amendment) 1974 and 1998; (ii) Bangladesh Environment Conservation Act 1995; (iii) Environmental Conservation Rule, 1997, (iv) Hill Cutting Ordinance, 1986; (v) Brick Burning Act, 1989; (vi) Cattle Trespass Act, 1871 etc.

From the above discussion it becomes apparent that there had been defined policies for forestry practice in Bangladesh since 1865. But only few of these are satisfactory to the needs of time and the legislation enacted for pursuing the policies are rather punitive in nature than encouraging to private sector involvement in forestry activities. Moreover, the prevailing law and order in Bangladesh makes FD unable to implement the existing legislation and in providing protection to the national forests. For example, as per several of FD field staff and timber merchants of Cox's Bazar, Rangamati and Khagrachhari who preferred to remain anonymous, it costs nearly Tk. 70,000 in the form of extortion for moving a seven tonne truck from these stations to Dhaka. The parties involved in extorting money are 27 where FD's share is less than 20 percent. It, therefore, becomes clear that none of the single agencies including FD can totally stop pilferage of forest resources in Bangladesh. The FD officials at all levels are in favour of enactment of more harsh forest rules with provisions of severe punitive measures and non-bailable confinement. But promulgation or enactment of Acts alone may not be of much help under the existing morally and socio-economically degraded condition.

Bangladesh has got enormous possibility to protect forests and to increase afforestation with adopting some scientific and socio-cultural practices. Vast forest area of Chittagong, Cox's Bazar and Chittagong Hill Tracts could be brought under the programme of ecotourism management. With the implementation of the ecotourism programme, the local people's involvement could be made usual and fruitful. Poverty alleviation of the local and or tribal people (where necessary and applicable) could be easily adopted. In many countries ecotourism is helping the local population in this way. Example could be taken from the countries of Africa. If ecotourism management could be made functional with cooperation of local people, then the forests will automatically attain the participatory forest status. In the participatory forest status, the local people will be very much interested to protect the forests for their own interests when they will understand that the forests are essential not only for environmental soundness but also for their economic support.

Consequently, a Forest Product Laboratory was set in Chittagong and Paper Mill at Chandraghona during the mid-fifties for increased extraction and utilisation of forest products at commercial scales. The Forest Policy, 1995 was revised in 1962, but the policy discrimination regarding Bangladesh forest continued even after adoption of this policy. However the need for strengthening of Forest Department and initiation of research on Forest Management Research in Bangladesh were felt necessary under the revised Forest Policy, 1962. This policy also failed to support all round growth perspectives of forest and failed to recognise the need oriented forestry research, development and utilisation. Hence, degradation of forest in Bangladesh continued.

The Forest Policy for the independent Bangladesh framed in 1997 remained dormant for a long time as an office document without any effective implementation effort due to lack of sincere intention of GOB and capability of Forest Department. Under the changed socio-economic condition and deteriorating law and order that followed after 1972, there happened to be rapid exhaustion of the forest resources in Bangladesh. In addition price hike of the fossil fuel in the international market, closure of the Suez Canal and economic isolation of Bangladesh from the world community accelerated rapid exhaustion of resources including the forest resources. The Forest Policy, 1962 was found inadequate in view of UNCED (Rio Conference, 1992) that viewed forest as multi functional, multi dimensional and renewable biological resources production unit with multiple use

Beneficial Nature

Kenyan experience

DR MAHFUZUL HAQUE

WHEN the Emirata's long haul flight from Dubai touched down the Jommo Kenyatta airport in Nairobi, an unmistakable air around me told me that I am in no where else but in the heart of Africa. The same drum beats, high pitched music, dark black people with curly hair, ran-sacked customs and immigration offices, dusty counters, notices alerting the visitors not to bribe the officials are all reminders of the fact that I was in Africa. While driving a taxi cab from the airport to downtown Nairobi, the usual sight of dry grass land, acacia thorns, suburban shanties, workers' ghettos, dusty high rise buildings from nowhere, were all reminiscent of the sprawling town of Nairobi in East Africa.

It was early November and the Jacaranda trees were in full bloom throwing a purple hue in the sky over the Kenyatta Avenue in downtown Nairobi. I could see from my little hotel window a slice of Nairobi under transition from winter to summer days. Temperature in Kenya hovers between 240C during the day and 100C at night all the year round. There is no ceiling fan around in Nairobi. Unlike a traditional hot and humid African country (like the west African countries of Nigeria, Congo, Zaire) Kenya with an average height between 5000 and 7000 feet above sea level, enjoys two main seasons: the short rains usually fall between October and December and the long rains from March to June. Nairobi and central highlands are depressingly cold, gray and remain overcast on most days between June and August.

We were luckier. November was beautifully sunny and pleasant. In fact the high tourist season starts from December and continues up to end of March. Tourists mainly visit Kenya for watching game reserves. There are around 210 gazetted forest reserves within the country. Kenya received as many as 800,000 tourists in 2002. Tourism is a major foreign currency earner of the country. A good number of tour operators work round the year with offices overseas.

For me, it was perhaps my fourth visit to that enchanting country. The last one was a decade ago. It is often said that a person living in Africa for sometime is always haunted by that dark continent, although, it is no more a dark continent these days. Memories of Africa, its songs and dances, its relentless fight against colonialism, struggle for independence all go to the blood of a person living there for a considerable part of his life. First few years of my service career were spent in the Southern Africa, where days are sunny and cool, night skies are clearer but different. Stars are not familiar because of their location in their southern hemisphere. Seasons are different too. When it is summer in Bangladesh, it is winter there and vice-versa. Commonalities in Africa (mainly in central and southern) are the same coloured people, dark black skin, curly hair, plated hair for women, similar colourful traditional dresses, patriarchal society with the tradition of chieftainship, similar songs and dances, drum beats, fascination for beer, poor in saving culture and so on and so forth. Because of their alcoholism and utter ignorance, the Indians (mainly from south India) made inroad in the eastern and southern Africa as railway workers, porters, tea garden labourers and small traders. In Kenya, the small trading business is controlled by the Sahs and Patels living in huge garden houses with splashing swimming pool and tennis court.

Between the hectic environment meetings on a weekend, we went on a safari tour of Lake Nakura National Park, 150 km north of Nairobi, a two-hour drive. The park is at the bottom of the great Rift Valley, popularly known as a feeding ground of around 1.8 million Flamingo birds. The park is under the management of Kenya Wildlife Services and is one of the Ramsar sites covering 188 sq. km.

The lake within is a shallow water body of maxi-

mum six feet in depth, is saline and provides home to flamingo birds. They feed on algae. In fact these birds fly from nearby Lake Natron in Tanzania, known for their breeding ground. Flamingo lays an egg every two years. Besides, these birds, there are around 450 species of aquatic birds and 55 species of mammals including Rhinos. Between the acacia thorn (locally known as "yellow fever" trees) Rothschild giraffes, impalas, topi gazels, baboons and leopards roam around this national park. Former President Jommo Kenyatta banned hunting animals way back in 1970. It gave a real boost to Kenya's national parks and game reserves.

On Mombassa-Kampala highway to lake Nakuru, we came across a high land, known as the "top of the Earth" on which the Equator passes through. A sprawling tourist bazaar with observation sites, curios and souvenirs around the area. A familiar tourist spot indeed to take photographs at an altitude of 9,136 feet above sea level. During the journey we ran parallel to Kenyan Railway, starting from the Indian Ocean coast town of Mombassa to the shores of lake Victoria across almost 1000 km. The long stretch of railway line also known as "Lunatic Line" was a tedious journey climbing from the sea-level through desert, grass plain, mountain and forest crossing the Equator before heading down again to the humid areas of lake Victoria. The British Raj thought that the key to penetrating the interior was a railway to the great lake Victoria, a thousand kilometers across some of the most hostile terrain in the world. I had the privilege of travelling the line more than a decade back during my over-night journey by train from Nairobi to Mombassa and back. I was slipping all along and missed the spectacular sights of burnt out desert, infinite stretch of thorn, savannah scrub and walls of the great Rift Valley and so on. What a great misfortune!

The great Rift Valley of Kenya is perhaps the single most dramatic feature on the Earth. Entering the country in the north from Ethiopia through the jade waters of lake Turkana it slices right through the middle of Kenya like a broad knife-cut to enter Tanzania in the south at lake Natron. The valley floor rises from little more than 650 feet above sea level at lake Turkana to reach its highest point at lake Naivasha at 6200 feet before descending abruptly to enter Tanzania. The Rift has thirty active and semi-active volcanoes and countless boiling springs. The Rift stretches all the way down to Malawi and Zimbabwe in the south. Today, the Kenya and Tanzanian sections of the Rift are the world's last treasury of cultures, flora and fauna, both terrestrial and avian, that have continued unchanged for centuries.

On over way back, we visited the Naivasha flower firm using "bio-fumigation" method to contain pests and insects instead of traditional ozone layer depleting chemical of Methyl Bromide. Kenya is the second largest exporter of cut-flower in the continent next to Zimbabwe. Flowers are mainly coronation and lily. A learning experience indeed.

It was sad that we could not visit Maasai Mara National Park, about 150 km. south of Nairobi. The sprawling 150,000 sq. km. park, overlooking Mount Kenya, Kilimanjaro and Mount Meru in Tanzania, is the home of may carnivores, herbivores and avian. The tribes live there are the Maasai people, a famously proud and independent pastoral tribe, migrated from the Nile some 500 years ago. The annual migration of animals, numbering around 2.5 million (when the migration at its peak), takes place here, when the animals follow the rains for new sweet grass in July or early August. They come all the way from Tanzania's Serengeti reserve to Maasai Mara in Kenya. We did miss the sight this time. May be we will be luckier next time, who knows.

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