

Vanishing CHT forests: Some management suggestions

Extensive canopy opening in the CHT forest followed by clear-felling not only encouraged secondary pioneers (undesirable species) to occupy the forest floor but ultimately its ecosystem has become severely degraded with accelerated soil erosion and siltation in its rivers and streams.

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OUT of 1.54 million hectares of government managed forests in the country about 0.35 million hectares are hill reserves in the Chittagong Hill Tracts (CHT). The CHT forest once represented high percentage of forest cover associated with richness of flora and fauna. The country's precious biologically diverse tropical evergreen and semi-evergreen forest of CHT has suffered most from non-sustainable management and illegal timber trade.

On the other hand, another 0.40 million hectares of Un-classed State Forest (USF) exist in CHT under the control of Deputy Commissioner, and this mainly represents habitation of tribal community, where shifting cultivation is regularly practiced. Vast areas of this USF land are already been denuded due mainly to extraction of timber and firewood through royalty permit. However, according to Forest Transit Rules 1973, tribal communities can cut trees and collect firewood from USF for their home consumption only. But theft of wood for commercial purpose is still a threat for the USF.

Depletion of resources and biodiversity

Although trees and plants are the major components in hill forest ecosystem and represent varieties of economic, social and environmental values, but, unfortunately, CHT forest was being traditionally managed for timber production and this tendency has turned the species-rich forest into a species-poor secondary ones.

Apart from the timber production for variety of uses, CHT forest was also associated with many species of bamboos and their extraction was mainly restricted to sustained supply to the Karnaphuli Paper Mills. Along with bamboo, large number of medicinal plants and other minor forest species of economic value also accounted for more than 50% of the

country's need, but their present contribution has alarmingly dwindled and many forest based industries are facing great uncertainty due to serious shortage of raw materials.

With regard to the species diversity, the old management plan of CHT recorded 204 species of plants, 76 species of mammals and 332 species of birds. However, at present, most of the important tree and plant species including fruits and fodder bearing ones are in a very low abundance and threatened. Conservation status of wildlife is also alarming and many animal and bird species meanwhile have possibly been extinct as discovered by visit of wildlife experts.

Shifting cultivation and denudation

Due to excessive practice of shifting cultivation in the USF land, forest cover and fertility of the soil had drastically reduced and this practice nowadays has moved progressively to the vast areas of national forest reserve. Thus it poses threat of additional burden for the management. For example, in Bagaihat and Kassalong forest of the north hill tracts, illegal settlement and encroachment deserve special concern. Improper supervision of the field staff and their security in such areas are a prime factor for failure to stop the denudation and encroachment. In fact, instead of having vast areas of USF land, controlled by district civil administration, encroachment upon and Jhum cultivation in the dense reserve forest can not be allowed in keeping with watershed and ecosystem function of the hills.

Faulty management

Whatever the reasons put forward for deforestation and biodiversity loss in the CHT, the "clear-felling" introduced in the hills, in which all mature trees in a single operation are removed, is primarily responsible for eroding biodiversity to a large extent. By contrast, in the 'selective'

management system practiced elsewhere, in which only a few large commercial trees are felled with care, and tree species diversity and structure of the residual stands remain intact, and wild animals and birds are also not threatened.

Extensive canopy opening in the CHT forest followed by clear-felling not only encouraged secondary pioneers (undesirable species) to occupy the forest floor but ultimately its ecosystem has become severely degraded with accelerated soil erosion and siltation in its rivers and streams. It is widely admitted that the clear-felling management system in the hills have no ecological basis and the damage is unrecoverable as tropical ecosystem is complex and fragile.

Deforestation

The tropical deforestation rate is 0.7 per cent per annum and this figure almost coincides with the deforestation rate of the CHT. Based on this estimate, a total of about 41,000 hectares of denuded reserve forest of the Rangamati circle alone had been planted mostly with teaks in last 23 years. On the contrary, field observations and records found very poor condition of these plantations due mainly to encroachment, shifting cultivation and illegal felling.

Alien species also do not have any significant role in protecting environment including habitat for wildlife. Microclimates of even-aged teak forest and visibility inside are altogether different from naturally regenerated uneven-aged forest. Moreover, no plants and undergrowth of original composition can grow along with alien species. Species richness and diversity of natural forest makes the ecosystem stable and maintains surrounding congenial environment for various living forms.

Timber trafficking and depletion of natural forest

The historical problem of timber trafficking from the natural forests as well as from old plantations nowadays is the biggest challenge for the management. Local tribes, settlers and unscrupulous timber traders are all involved in this illegal business. This practice has never stopped and the forest will remain totally unprotected unless this is strictly handled.

Forest Department with their poor staff position and logistic support often fail to confront the thieves. But there are

also strong allegations, published in print media, about their connivance (assisting) in illegal trafficking. Besides, many agencies are also alleged to have involved in getting monetary benefit from illegal timber trafficking as reflected in the disclosure of TIB. TIB report also found that the control of such illegal timber business depends on the attitude and leadership of the local administration. The current moratorium on natural forest cutting with a view to conserve biodiversity cannot be effective without strict handling of timber theft and strong commitment of the top management.

Addressing the challenges

In the face of detrimental effects of shifting cultivation, encroachment, illegal timber trafficking, deforestation and faulty management practice in the forests of Chittagong Hill Tracts, the following have been suggested to ensure long-term maintenance of forest cover, species composition and diversity:

- In order to make the shifting cultivation environmentally friendly in the USF land, site-specific agro forestry models will have to be developed as acceptable to the indigenous communities.

- For denuded reserve forest, participatory forestry and agro forestry with indigenous tree species including food and fodder trees and plants could be best possible option than plantation of teak or alien species.

- In many degraded forest areas including USF land there are profuse natural regeneration of original composition, which only needs proper protection from biotic interference to grow as natural forests.

- The undisturbed patches of natural forest should be protected as nature reserves or repositories of biodiversity under the existing protected area management programmes.

- Social forestry and forest conservation programmes in the hills must be based on participatory project design with due consideration of biological, ecological

factors and socioeconomic condition of the community.

- Coordination with the relevant agencies and projects also deserves special attention in order to share experiences with regard to community development.

- Strict handling of dishonest timber traders through effective implementation of existing laws.

- Revision of Forest Transit Rules 1973 in order to stop illegal extraction of timber from the natural forest under the legal coverage of 'Jhote permit' system.

- An effective, operational and restructured wildlife circle with sincere and dedicated personnel is a must with proper logistics and funding support.

- To arrest further biodiversity loss and for sustainable management of CHT resources, there is an urgent need for biodiversity survey with acceptable statistical precision.

The writer is an environmental activist.



Legal implications of Copenhagen Accord

The heads of state/government level nature of the negotiation process for the Accord, its actual final status vis-à-vis COP15 and its work, and especially the subsequent "association" process for it triggered by the Danish Presidency's invitation, all create a situation in which the Accord becomes an instrument that creates certain international law obligations for the countries that associate themselves with it.

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THE Copenhagen Accord [the Accord], an unconventional upshot of Copenhagen Climate Deal, is whether a Political Declaration or an International Legal Instrument requires further legal analysis to judge. From the Climate Justice point of view, substantive contents and the procedural process of the Accord need to be assessed in line with due expectation of global community and UN Process. Nevertheless, this article would examine the legal implication of the Accord only from the procedural aspects of the 1992 UN Framework Conventional on Climate Change, rather than substantial contents.

Due expectation is that the developed countries, which attributed the cause, should take responsibility to react to consequences and to prevent further injury for climatic order, under the auspices of equity, justice and climate debt. There is enough space to put forward this legal claim in accordance with the treaties governing climate regime.

The international community has negotiated two major international treaties

in less than a decade; the 1992 UN Framework Convention on Climate Change [UNFCCC or the Convention] and the 1997 Kyoto Protocol [KP or the Protocol]. Both have been significantly elaborated through additional legal instruments and decision adopted by the Conference of the Parties [COPs] on the basis of developments in science and politics.

However, new-comers to the climate issue, and even those familiar with international climate regime, now find it difficult to follow the trail of documents and their significance for the interpretation and implementation of the two treaties negotiated to date. As such, a brief analysis of rules of procedure developed under the Convention would shed some light on understanding the arguments of legal appraisal of the Accord. Conference of the Parties [COP] is the highest authoritative governing body of the Convention.

Since 1995, a year after the Convention came into force Parties of the Convention are meeting annually to monitor its implementation and further advancement to combat climate change. The Parties of the Convention agreed at COP-1

held in Berlin, in March/April 1995, for legally binding commitments for industrialized countries since Convention's voluntary commitments would not lead to stabilization of the GHG emissions.

This decision is known as the 'Berlin Mandate', which initiated further negotiation for binding commitments of developed countries. As a result The Kyoto Protocol was adopted at COP 3 in Kyoto, Japan, on 11 December, 1997. The Kyoto Protocol, a legally binding instrument was adopted to supplement and strengthen the Convention by creating binding targets on GHG emissions for developed countries under a set time period of 2008-2012 known as first commitment period.

However, COP does not have the authority to form further new legal commitments since additional commitments would require a new legal intervention such as an amendment to the UNFCCC or a new protocol. Eventually, the Parties of the Convention adopted the Bali Action Plan, in 2007 to launch comprehensive process to enable the full, effective and sustained implementation of the Convention through long term cooperative action, now, up to and beyond 2012 in order to reach an agreement. An Ad Hoc Working Group on Long-term Cooperative Action (AWG-LCA) was established under the Convention to work on the said plan and to adopt a decision in Copenhagen 2009.

Therefore, in accordance with the mandates of the negotiations expected outcomes of the Copenhagen deal were an amendment or amendments of the Convention and the Protocol or new Protocol leads to adopt new policy direction in the climate regime. Instead of any agreed outcomes from negotiations COP

15 mandates with unanimous decision to complete their work at the next COP 16, to be held in Mexico City in November 2010.

Previous COPs typically ended with a series of "decisions that are accepted by unanimous consensus of the delegates since majority vote does not apply to the climate convention." If any Party present formally objected to a decision, it could block its adoption, which set a high hurdle for what could be accomplished. However, the COP-15 ended on 19 December by taking note of the 'Copenhagen Accord' [the Accord], which was supported by a large majority, but opposed by a small number. Hence this feature intervenes with the arguments from the aspects of international law making procedure.

The 'Copenhagen Accord' arising from an exclusive meeting of 26 political leaders was not adopted by the COP 15, but only 'taken note of'. The Danish Presidency of COP15 had put forward the text of the Copenhagen Accord on the board for adoption as a COP decision. However, many Parties that were not part of the group that negotiated the Copenhagen Accord objected with respect to both the procedural aspects and the substantive contents of the Accord. Hence the significance and the interpretation of "takes note of" are vital to understand the legal standing of the Accord.

The Decision 55/488 of UN General Assembly, adopted on 7 September 2001, restated "that the terms 'take note of' and 'notes' are neutral terms that constitute neither approval nor disapproval". Since then this decision and interpretation have been accepted by the General Assembly on many occasions. Therefore, in accordance with the practice of the

United Nations, the Accord is not an official outcome of COP15, rather an external document whose existence is only "noted" by the COP.

However, the Danish Prime Minister and the UN Secretary General initiated immediately a campaign to get Parties to associate themselves with the Accord. The 31 January, 2010 was the deadline to meet the requirement set forth in Appendix I and II of the Accord respectively for developed and developing countries. Then again, in late December 2009, the Danish Presidency circulated a note verbale to UN Member States' missions in New York inviting UNFCCC Parties "to inform the UNFCCC Secretariat in a written form at their earliest convenience of their willingness to be associated with the Copenhagen Accord."

The Copenhagen Accord has been initiated by developed countries as a politically binding agreement among those countries that are part of it. Then it's their business to develop rules of procedure to shape how these countries act in terms of addressing climate change. But the heads of state/government level nature of the negotiation process for the Accord, its actual final status vis-à-vis COP15 and its work, and especially the subsequent "association" process for it triggered by the Danish Presidency's invitation, all create a situation in which the Accord becomes an instrument that creates certain international law obligations for the countries that associate themselves with it.

The period for associating with the Copenhagen Accord is open-ended. This would imply that through this open-ended "association" process, the Danish Presidency and other developed countries that have invested in the Accord

could seek to add more Parties to the Copenhagen Accord. They can thereby present it later on in the context of the negotiations for the outcome of COP16 as an official instrument that binds, at least at the political level, those countries that have so associated themselves with the Copenhagen Accord. They would then seek to promote it as the basis for the COP16 outcome.

Whether as a politically binding agreement or as an instrument to which if the Parties of UNFCCC declare unilaterally to be associated with, the Accord could well bring changes to climate regime.

The analysis provided above, on the legal implication of the Accord, leads to urge developing countries to consider the entire substantial contents prior to agree to associate with the Accord. Particularly the emission reduction figures submitted already or to be submitted by Annex I Parties to fill in Appendix I would justify the decision taken by the developing countries. About 56 countries had met the deadline of 31 January, 2010 officially written in Appendix I and II of the Accord, to meet the requirement set forth in the Accord. As such Bangladesh granted "blank cheque" to the proponents of the Accord by accepting the document before some of its most important components is revealed.

Bangladesh is one of the champions to demonstrate due respect to the Accord. But this early acceptance also raises concern over the diplomatic policy of the State that put forward the question whether this acceptance reflects the voice of the most affected people of the country.

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Environmental impact assessment: Japanese experience

In the environmental impact assessment process so many measures were identified to keep the local environment most attractive. One of the significant measures was to consider the local aesthetic values and community facilities. This eventually created site attraction.

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COUPLE of months ago, I got the opportunity of visiting Japan's largest coal-fired Hekinan Thermal Power Plant. It is situated on the Mikawa bay located in Aichi prefecture (state) near Hekinan city, 40 km south of Nagoya, the city of Toyota. The station was installed by the Chubu Electric Power Co. which supplies electricity to an area of 37.78 x 104 km².

Hekinan has 5 units and total power generation capacity of 4100 MW, making this the largest coal-fired power station in Japan and one of the largest in the world.

Within the 30-km radius of the power station, approximately 2 million people

aesthetic values and community facilities. This eventually created site attraction. Now the place is not only important for the large scale power plant but also for tourism and fishing facilities. The facilities that the company attributed for the community are called "Hekinan Tantiopia" meaning Electricity Greenery Environment. The aesthetic values and community facilities that were taken into consideration are: the traditional yacht sailing, fishing facilities, creation of electric power museum, healing garden and eco-park.

On the Mikawa Bay sailing yacht is historically very popular. So the design of the power station is made in such a way that it looks like a sailing yacht. Use of aesthetic funnels and the standardization of colors and design of the buildings were matching a yacht.

The plant site was also important for the people who love fishing. So to compensate the sentiment of the community, company has made a "fishing park" near the northern water outlet of the power station.

The Healing Garden, situated to the south of the Electric Power Museum, has "healing and communication" as its



Hekinan power plant looks like sailing yacht.

theme. The garden features a large central lawn, flowerbeds, a bird lake, a chrysanthemum garden, a water garden and a herb garden.

South-east of the Healing Garden site has been made most appealing to the visitors by creating an Eco-Park with "eco-

logical afforestation" method, approximately 25% of the area of the power station planted with trees which has created a green belt. Visitors can observe so many wild birds and insects in the park.

Hekinan power plant is a unique example which can serve as a model for the

successful conservation of environment as well as a good lesson EIA involving people -- how to accommodate local aesthetic values and community facilities.

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