

IBAS IN NORTHEAST INDIA: THREATS TO HABITATS AND OPPORTUNITIES FOR CONSERVATION

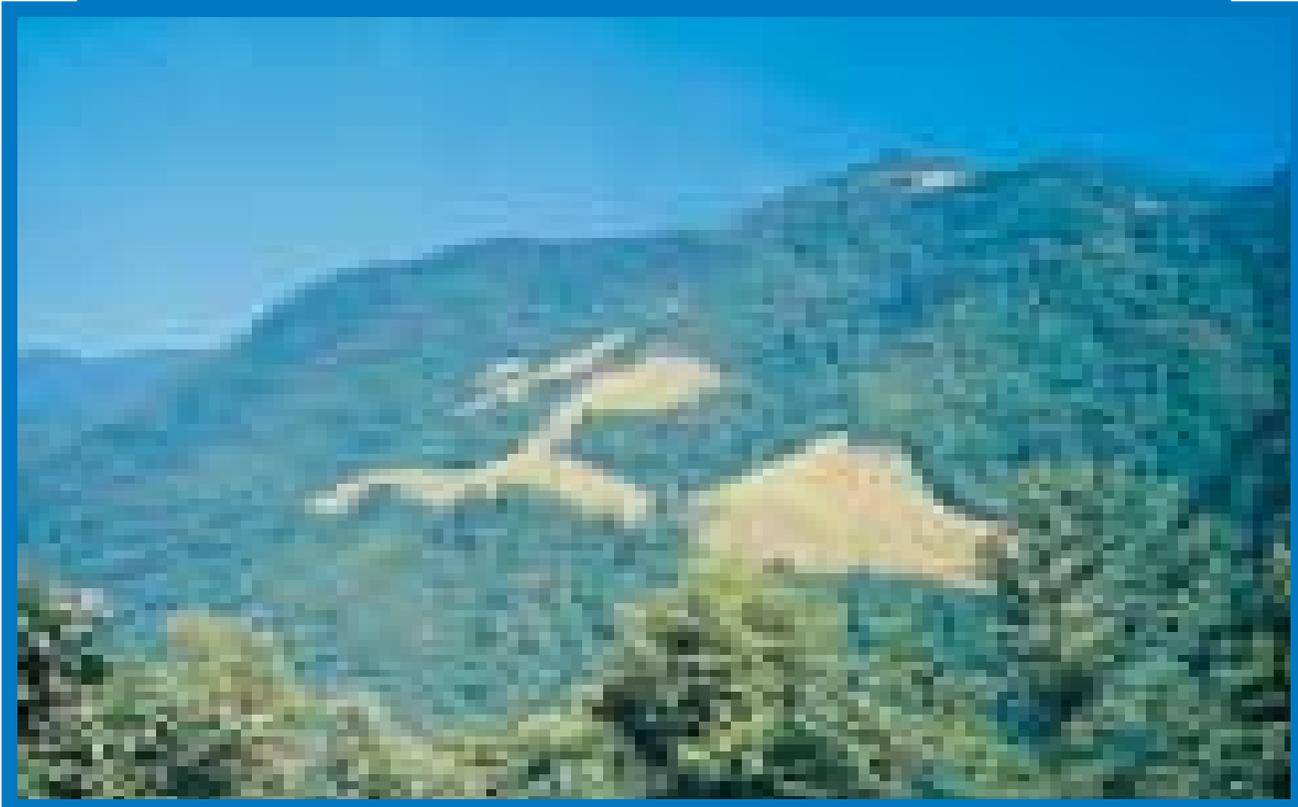


Photo: Anwaruddin Choudhury

The Government of India has special schemes to minimize the damage from shifting cultivation or *jhuming* in the Northeast.

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Northeast India, consisting of the eight states of Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim, is known for its biological and cultural diversity. Various biodiversity conservation prioritisation initiatives have highlighted the importance of the area. It forms a part of the Indo-Myanmar biodiversity hotspot and has two of the Endemic Bird Areas of the world identified by BirdLife International. It has been an important focus area for the Important Bird Area (IBA) programme in India. Though the region remains largely unexplored, conservative estimates suggest that it has about 836 of the 1225-odd bird species reported from the Indian subcontinent, several of these being globally threatened and restricted range (endemic) species.

The region is also home to over a hundred tribal communities and a large percentage of the population is dependent on traditional, natural resource-based livelihoods. Its strategic location at the confluence of south, southeast and east Asia made it an important gateway between the peoples of the region historically. British annexation was the beginning of defined territorial boundaries, as it became the frontier of the British Raj. The partition of the country in 1947 intensified the Northeast's isolation. The creation of East Pakistan (now Bangladesh) not only disrupted road and river communications with undivided Bengal and beyond, but also left the Northeast hemmed in by a long chain of international borders. Today the 2,62,000 sq. km region is linked to the Indian mainland through a slender 21 km. corridor through North Bengal. While this enforced isolation may have, for decades protected the region's biodiversity from the destructive large-scale development seen elsewhere in India, it has also been one of the reasons for the Northeast's economic and political neglect. Northeast India is marked by socio-political complexities, which include struggles for political autonomy and resulting armed conflicts. The Constitution of India has attempted to deal with the Northeast's unique nature by having a system of administration that differs from the rest of the country. The 'sixth schedule' and other constitutional provisions relevant to the Northeast offer different degrees of autonomy and self-management (including natural resource management) to indigenous communities. Despite this, there seems to be little opportunity for the local people to participate in the planning of large development projects/processes. Faced with a multitude of challenges, the region is currently charting a course for speedy 'development'.

Loss of habitat, emerging threats

Across most of the Northeast, extensive conversion of natural habitat has been a real threat in recent times. While factors such as a rapidly changing demography and changes in traditional natural resource management practices have been areas of concern, large-scale development projects are a major emerging threat to biodiversity in the region. These include expansion of traditional sectors such as commercial plantations and oil and coal mining, as well as an increased focus on sectors such as large hydel power projects and communication infrastructure. As per the current development plans for the Northeast, a number of these development projects (dams, mines, industries, etc.) are proposed to come up in and around biodiversity-rich areas, including protected areas (PAs) and wildlife corridors. Many of the areas being affected are also those used by local communities for their livelihoods and survival. For example, the Central Electricity Authority (CEA) has given a 'high ranking' (indicating high viability) to 149 large dams proposed to come up in the Northeast, in some of the most biodiversity-rich areas. At least two dozen large dams in the Northeast are currently in an advanced stage of planning and clearance, and a few are under construction.

It has been observed that environmental and social concerns have not been/ are not being appropriately addressed in the planning and decision-making of many of these projects. Moreover, communication with citizens (local people in particular) about the impacts of projects and their involvement in the whole clearance process is minimal. For example, the environmental impact assessment report of the Lower Subansiri hydroelectric project proposed to come up on the Assam-Arunachal Pradesh border, amongst other things, has very poor information on the downstream impacts of the project. It makes absolutely no mention of the dependence of the local communities living downstream of the proposed dam on livelihoods such as wet rice cultivation and fishing in the *beels* (wetlands). These *beels* are connected to the river by feeder channels and damming of the river will impact the natural regulation of water, thus impacting the ecology and livelihoods.

Keeping the above context in mind, Kalpavriksh undertook a six-month project with the support of the Bombay Natural History Society's Important Bird Area Programme. The output of this work was a report titled, 'Important Bird Areas and Development Projects in Northeast India.'

The study looked at the following aspects:

- 1) Identification of existing and proposed threats from developmental projects/ activities/processes to IBAs in North East India (Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura).
- 2) Identification of opportunities for conservation for Northeast IBAs.
- 3) Identification of provisions (constitutional, legislative, administrative and policy) at the national, state and local levels which provide the space for citizens participation and intervention in the planning and environmental decision-making of development projects. Sharing skills with local groups on the same.

1) Identification of existing and proposed threats from developmental projects/ activities/processes to IBAs in Northeast India (Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura)

As per the focus of our study we primarily looked at threats from development projects (e.g. dams, communication infrastructure etc.), commercial activities (e.g. plantations, mining etc.) and the impacts associated with the processes of emerging industrialization, and urbanization associated with 'development'. This information is largely based on extensive interviews and meetings we held with a wide range of people in the eight Northeastern states, many of them were involved with the IBA process in the region. These included NGOs, activists, researchers/ academics, research institutions/universities, state and central government departments.

Listing of a particular development project/activity/process as a 'threat' does not imply that the particular project/activity/process should not be allowed at all. Rather, the listed threats are indicators that the particular project/activity/process is a threat in its current form, as per existing information. The exact intervention necessary to deal with or mitigate the threat in each scenario will have to be worked out on a case-to-case basis. In some cases it will require certain projects/activities/processes to be stopped/prevented altogether, while in others, proper planning and management interventions could result in removing/ reducing the threat.

Some of the **threats** identified are:

- ☐ **Dams:** A large number of IBAs in the Northeast are impacted/likely to be impacted by large dams due to a range of issues: submergence, downstream impacts, pressures on forests due to labour involved in construction etc. A few examples are: D'Ering Memorial sanctuary, Talle Valley Sanctuary, Pakke Sanctuary in Arunachal Pradesh; Ripu Chirang, Subansiri, Chandubi *Beel* in Assam; Kailam Sanctuary and Loktak Lake in Manipur; Dzukou valley in Nagaland.
- ☐ **Communication infrastructure (roads and railways):** The fragile environment of this region falling in the Eastern Himalayas is particularly sensitive to the impacts of road-building activity. While roads for communication may be necessary, the environmental impact analysis, planning and management required for this purpose is either missing or extremely inadequate. Since the Northeast forms a 'frontier' of the Indian state, sharing boundaries with five countries, a lot of road-building along the boundaries has been taken up in the name of 'defence'. Examples of NE IBAs impacted by communication infrastructure include: Kyongnosla Alpine Sanctuary, Lachung, Lemu and Dombang Valley in Sikkim; Dzukou Valley in Nagaland; Amchang Hills, Gibbon Sanctuary, Sonai-Rupai Sanctuary in Assam; Eagle Nest and Sessa sanctuaries, Mehao Sanctuary, Nacho-Limeking-Takshing-Majha in Arunachal Pradesh.
- ☐ **Urban areas:** Direct pressures from urban areas in the form of encroachments, pollution, tree felling etc. have impacted some of the NE IBAs. Examples include: Itanagar Sanctuary in Arunachal Pradesh, Deepar Beel in Assam, Shillong Peak in Meghalaya.
- ☐ **Timber Logging:** While logging without the preparation of working plans has been restricted by directives of the Supreme Court in the Northeastern region, illegal logging/deforestation has taken place in and around some IBAs. Examples include: Intanki NP in Nagaland, Chakrashila Sanctuary and Nameri NP in Assam.
- ☐ **Mining and oil/gas drilling:** Mining and oil drilling has impacted many areas in Meghalaya, Assam, Tripura and eastern Arunachal Pradesh. Examples of IBAs affected by mining and oil/gas drilling include: Upper Dihing (West) Complex, Upper Dihing (East) Complex, Tirap-Burhidihing in Assam; Trishna Sanctuary in Tripura; Balphakram Complex, Siju Sanctuary, Nokrek Ridge NP, Saipung RF in Meghalaya.
- ☐ **Commercial plantations:** Commercial plantations such as tea and rubber have replaced a lot of natural habitat in the Northeast and

continue to affect natural habitats due to direct and ancillary impacts (e.g. pesticide and insecticide use). Examples of IBAs impacted include: Gibbon Sanctuary, Dum Duma Dangori and Kumsong RFs in Assam.

- q **Insecticide/pesticide use in agriculture:** The impacts of pesticide and insecticide use are mainly seen in the Assam and Manipur valleys. The use of these in the hill areas and states is still marginal. IBAs impacted by these include: Urapad *Beel*, surrounds of Nameri NP in Assam, Loktak Lake in Manipur.
- q **Land-use for defence purposes:** While defence infrastructure has been considered to be of top priority in this frontier region of the country, it has left its impacts on the fragile environment in the border areas. This includes army bases, roads, firing ranges etc. North Sikkim is a good example of ecological impacts associated with land-use for defence purposes, as also parts of Arunachal Pradesh. Some examples of IBAs impacted by such activities include Lhonak Valley, Tso Lhamo Plateau and Lashar Valley, Pangolakha Sanctuary in Sikkim; Gibbon Sanctuary in Assam.
- q **Poaching and wildlife trade:** Poaching and associated wildlife trade has impacted some of the NE IBAs. For example, Pabitora Sanctuary, Orang NP and Kaziranga NP in Assam; Ngengpui Sanctuary in Mizoram; Khangchendzonga NP in Sikkim.
- q **Commercial extraction of forest produce:** An example of this is the large-scale extraction of bamboo from the southern Assam IBA, North Cachar Hills, for use in a paper mill.
- q **Tourism:** While tourism as an industry is still in its nascent stages in most parts of the Northeast, and community based ecotourism has great potential in the area, some parts of the region, such as Sikkim and western Arunachal Pradesh have started feeling the pressures of unregulated tourism. IBAs such as Khangchendzonga NP in Sikkim have begun to experience such pressures.
- q **Other industrial/infrastructure projects:** These include examples like the power lines impacting the Bherjan-Borajan Padumoni Sanctuary and the potential threat by the Numaligarh refinery to Kaziranga NP in Assam.

2) Identification of opportunities for conservation of IBAs in Northeast

By 'opportunities for conservation' we mean various factors which could facilitate better conservation of the area. This could include sustainable natural resource management practices of local communities, local NGOs which are proactive in conservation, specific laws/schemes of the government which help conservation directly or indirectly, etc.

The opportunities for conservation identified are:

q Community-based conservation

This category covers IBAs which are:

- 1 Community-Conserved Areas (actively conserved by communities). For example, Shiroy Hills, parts of Loktak in Manipur; Khonoma and Satoi-Ghosu in Nagaland. In Nagaland in particular, there has been a tremendous motivation in several villages to take up conservation of forests and wildlife and several initiatives have sprung up around the state. These include initiatives to conserve habitats as well as those restricting/regulating traditional hunting practices.
- 1 Areas where the community is supportive of conservation: For example, Chakrashila, Kuarbari Dalani, Tamaranga *Beel* in Assam; Dzukou valley in Nagaland-Manipur.
- 1 Areas either conserved due to religious/sacred values of local communities or those that have some religious/sacred values attached to them. Examples include Mawphlang, parts of Balphakram Complex, Shillong Peak in Meghalaya; Khangchendzonga NP in Sikkim; Mouling NP in Arunachal Pradesh.

q Active NGOs, local groups and individuals

Many groups and individuals have been proactively working for the conservation of wildlife in general and on specific IBAs in particular in the Northeast region. These include:

- 1 Grassroots and local groups
Examples are Green Manas and Dibru Saikhowa Wildlife Conservation Society in Assam; Khangchendzonga Conservation Committee in Sikkim.
- 1 Regional and state-level groups
These include organisations specifically working on wildlife issues (e.g. Aaranyak and Nature's Beckon in Assam, Peoples Group in Nagaland, Eastern Ribhoi Forest and Wildlife Protection Organisation in Meghalaya) as well as large mass-based groups working in the state which have identified wildlife conservation as an area of focus, e.g. the Young Mizo Association in Mizoram.

Local groups have also evolved innovative mechanisms to promote conservation. For example, the Panidihing Bird Festival in Assam and the *Nemgeha Humhaltu Khawmpui* (State-level Conference of Wildlife Preservers in Mizoram). In Assam, a Manas Biosphere Reserve Conservation Forum (MBRCF) has been formed constituting several NGOs, researchers and activists to evolve a long-term perspective and actionplan on the conservation of the Biosphere Reserve.

1 National-level groups

Some national-level groups are also active in the region. For example, the Wildlife Trust of India has been involved in providing support to strengthen the ground level protection in many protected areas of the Northeast (which are also IBAs) by giving insurance cover and some equipment support for the field-level forest staff.



Photo: IBA/IBCN



q **Traditional and modern institutions enabling conservation**

Examples include traditional systems of natural resource management like the *Dzumsa* in North Sikkim as well as modern institutions like the Mara Autonomous District Council in Mizoram which is supportive of conservation.

q **Legal and administrative protection**

Several IBAs in the Northeast already have some sort of legal protection. Many of them in all the eight states are declared sanctuaries or national parks under the Wildlife (Protection) Act (WLPA), 1972, while others such as the Barail RF in Assam and Saipung RF in Meghalaya are proposed sanctuaries. While protected areas under the WLPA is the more conventional form of protection provided to many areas, there are also other forms of legal protection which could aid conservation directly or indirectly. For example, the Numaligarh ‘No Development Zone’ declared under the Environment (Protection) Act, offers an opportunity for sustainable land-use planning around the Kaziranga NP. Across the Northeast, special land transfer regulations prevent the transfer of land from tribals to non-tribals. This has to some extent prevented the rapid change in land-use seen in other parts of the country, where traditional land-use has been replaced by unsustainable commercial/industrial activity. While this is seen as a disadvantage by those seeking to ‘develop’ the Northeast, it could provide an opportunity to develop a local economy which is sensitive to the local environment, as well as the social and cultural characteristics of the region.

Some of the IBAs in the Northeast also fall under administrative categories such as Tiger Reserves, Biosphere Reserves and Elephant Reserves. e.g. Manas Tiger Reserve and Biosphere Reserve in Assam, Namdapha Tiger Reserve in Arunachal Pradesh, Dampa Tiger Reserve in Mizoram and the Chirang-Ripu Elephant Reserve in Assam. These administrative categories do not offer additional legal protection to the NPs, sanctuaries, RFs or other categories within their boundaries. However, they facilitate resource allocation to these areas and provide a space for initiating integrated land-use planning over a larger landscape.

There are also IBAs in the Northeast which have been accorded protection under International Conventions such as the World Heritage Sites and Ramsar Sites. Examples are: Manas NP and Kaziranga NP in Assam have got World Heritage Sites status, while Loktak Lake in Manipur and Deepar Beel in Assam are Ramsar sites.

q **Community-based ecotourism**

Community-based ecotourism is an area which is being seen as an opportunity to facilitate conservation in states across the Northeast. This is being currently focused on in Sikkim and Nagaland. Examples of IBAs where this is being experimented with some degree of success is Khangchendzonga NP in Sikkim and Khonoma in Nagaland. While this does hold tremendous potential for the people of the region, it has already been stated in the ‘threats’ section that if the right checks and balances are not put in place from the beginning of the initiative, this could well emerge to be a threat to many of the IBAs where this is being proposed.

q **Supportive government policies/schemes**

There are certain government policies which have enabled/will enable conservation of specific IBAs in the Northeast. For example, the Northeast Council has a scheme called the ‘Community Biodiversity Conservation Project (CBCP)’ which provides support for conservation and livelihoods in certain biodiversity-rich areas. One of the chosen sites for the CBCP is situated around the Sonai-Rupai Sanctuary, an IBA in Assam. Another project of the Northeast Council, Community Ecotourism Project (CEP), is being implemented in Khonoma, an IBA in Nagaland. An interesting example of an enabling policy is the decision of the Government of Sikkim to go 100% organic in agriculture in the state. Certain parts in southern Sikkim have already put this into practice. This could prove to be extremely useful to the birdlife in the region in the long term, considering the harmful impacts that pesticides and insecticides have had in other parts of the country over the years.

q **Research/applied research projects**

Several research/applied research projects on conservation are ongoing in the Northeast region. Many of these studies/interventions are not restricted to natural history research alone but also have concrete components to facilitate conservation and livelihoods of local communities. Examples include the work of the Pigmy Hog Conservation Program (PHCP) in the Manas National Park, the work of the Nature Conservation Foundation in and around the Namdapha NP, the work of the Primate Research Centre in Gibbon Wildlife Sanctuary and the Bombay Natural History Society’s Alpine Grassland Ecology Project in Sikkim.

3) **Identification of provisions (constitutional, legislative, administrative and policy) at the national, state and local levels which provide space for citizens, participation and intervention in the planning and environmental decision-making of development projects.**

This exercise formed a key part of our project, building on work done by us in the past on this issue. The primary intention of this was to disseminate information and enable groups to make effective use of these identified ‘spaces’ for peoples’ participation in their advocacy with the local/ state/ central government, networking, campaigning and legal action. This could help to ensure that projects planned in the region are more sensitive to environmental, biodiversity and social concerns.

Towards this end we held one capacity-building workshop on ‘**Environmental decision-making for development projects: Spaces for peoples’ participation.**’ This workshop was organised by Kalpavriksh in collaboration with the Centre for Environment Education’s (CEE) TALEEM programme and the Centre for Environmental Studies, North Eastern Hill University (NEHU) from August 8-10, 2003, in Shillong, Meghalaya. The workshop was attended by over 30 participants from Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and North Bengal, most of them are members of active environmental/wildlife groups.

The interactions and discussions over the three days of the workshop were extremely interesting, particularly the discussion on the ‘spaces’ available in the local framework in the Northeastern region (states and local institutions) for peoples participation in the decision-making of development projects. But given the complex administrative set up in the Northeast and the wide range of institutions at local levels, putting together a comprehensive picture was not possible in the available time-frame. This is an area that needs to be explored further as it will play a crucial role in deciding how biodiversity-rich areas in the Northeast are ‘developed’ and how much of a role local communities can play in these decision-making processes.