



Organized by

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Modhupur and Lawachhara

Stolen Forest Threatened Heritage



MODHUPUR SAL FOREST

Madhupur *sal* forest, also known as Modhupur Garh, used to be a stretch of unique natural forest. According to the government documents it is the third largest forest of Bangladesh [the first being the Sundarbans and the second the Chittagong Hill Tracts (CHT)].

If we look back, we see many unique characteristics of the *sal* forest that is also known as the forest of the fallen leaves. Its one unique feature is that it regenerates with little care. The patches of the *sal* forest that still survive are the ideal habitat for hundreds of native species. Although *sal* is the dominant species in this forest, there are countless other species of plants including medicinal plants, fruit trees, uncultivated vegetables, herbs, creepers, and thousands of other life forms. Not long ago, the *sal* forest used to be a safe sanctuary for wildlife such as the tiger, bear, monkey, langur, and birds.

The *sal* itself is very hard and very good material for house construction. It is also a much desired support for piling and other construction activities. *Sal* grows slow, but it is very valuable to the local people. The dead leaves decomposing on the forest floor provide nutrients to the soil. A good portion of the dead leaves are burnt every year by the Forest Department. The ash, mixed with rain water, provides nutrients to the *sal* and other species. It also helps the saplings of other species grow.

A grown-up *sal* tree produces thousands of seeds every rainy season. The matured seeds automatically drop on the ground from the top of the tree. If planted, a seed becomes a *sal* tree in some years. In the past the Forest Department would regularly plant these seeds to replenish the forest. The rains also make vibrant many other small trees and plants that grow in the *sal* forest. The forest becomes most picturesque during this time. The other unique feature is that after a *sal* tree is cut a few coppices shoot out from its stumps. Selected ones regenerate the *sal* forest with a little extra care.

In addition to the commercially valuable *sal* tree, this forest has many other important trees. Some of these are koroi (*Albizia procera*), chambal (*Artocarpus chaplasi*), jogini chakra (*Gmelina arborea*), kaikha (*Adia cordifolia*), sidah (*Lagerstroemia parviflora*), sazna (*Zathoxylum burdruanga*), amlaki (*Phyllanthus emblica*), pales (*Butea frondosa*), sonalu (*Cassia fistula*), ajuli (*Dillenia pentagyna*), and gadila (*Careya arborea*). Medicinal plants found in the *sal* forest especially in Modhupur are myriad in variety although in some other places patches



of *sal* forests do not have equally important plant diversity. In some places the dominance of *sal* is so immense that a patch may match with monoculture. This is particularly true where the old growth has been too exhausted.

The undergrowth in the *sal* forest also provides economically and environmentally valuable commodities such as sungrass, which is commonly used for making roofs in the village houses. The *sal* and other produce of the *sal* forests are in great demand not only to the people in or around the forest but also to the people of other neighboring districts such as Dhaka and Mymensingh. The *sal* firewood including the stumps is seen piled in the brick kilns and the industrial areas, though the supply is very limited nowadays.

What also makes the Modhupur forest well-known to the outsiders are the Garos. Of more than 100,000 Tibeto-Burman Garo people of Bangladesh, approximately 20,000, live in the Modhupur forest. The first people of the Modhupur forests, this uniquely matrilineal society has lived peacefully in the Modhupur forest for many centuries. The Garos consider themselves part of the Modhupur forests, remnants of which are also found in the districts of Tangail, Mymensingh, Rajshahi, Dinajpur, Rangpur and Dhaka.

But today most part of the Modhupur *sal* forest has been ruined. With the disappearance of the natural forest, most of the wild animal life in the *sal* forest has also vanished. Leopards, bears, deer and many other animals that were abundant in the *sal* forest patches have totally disappeared. Flocks of monkeys are rarely seen. Commonly seen in the past—pheasants, peacocks, pythons, and a variety of birds have no place in the rubber and other plantations of exotic species. With the *sal* tree and other local species gone, a wholesale destruction of the understory vegetation and medicinal plants has taken place; tubers and other foods that the forest communities could easily access to are gone; and severe degradation of the soil has also occurred.





Above: Two *Rhesus Macaques* at play at Lohoria Beat office premises in the Modhupur *sal* forest.

Photo: Philip Gain

Page 1: A Garo woman standing in the middle of her banana plantation cut in a raid in August 2007. The Forest Department aided by joint forces, initiated a war against banana in Modhupur in 2007. However, the Garo woman complains this is recorded land that she inherits from her mother.

Photo: Philip Gain

Page 2: Towering *sal* in Modhupur, very little of which survives today. *Photo: Philip Gain*

Left (page 3): Banana plantation of John Marak of century old Sainamari Garo village. His banana plantation was cut during the first wave of raid against banana in Modhupur. John Marak, a former BDR *Jawan*, invested all his money in banana cultivation around his home. The Garos of Sainamari complain that the Forest Department's war against banana in their village was a serious injustice done to them. *Photo: Philip Gain.*

This appalling state of the Modhupur forest is rooted in a large part in the plantation of rubber and the so-called "social forestry" which in essence is monoculture plantation with exotic species. Beginning in 1986 rubber monoculture has replaced nearly 8,000 acres of *sal* forest. Then the idea of the so-called man-made forest sugarcoated as "social forestry" came with the loans from the concessional window of the Asian Development Bank (ADB). In Modhupur, monoculture plantation of primarily exotic acacia and eucalyptus took place under two ADB funded projects—Thana Afforestation and Nursery Development Project (TANDP) and Forestry Sector Project (FSP). TANDP with two major components—woodlot and agroforestry—started in 1989 and ended in 1995. When monoculture started with the ADB loan, the local people were appalled to see that the native *sal* coppices were indiscriminately cut to prepare grounds for the man-made forests.

Ten years later people found most of the plantation stolen or officially harvested. The land became vacant, perfect ground for invasion of banana and papaya plantation. Pineapple was already there. Outsiders invaded the forestland for large-scale banana and papaya plantation. They lured the Garos even to convert their home gardens into banana gardens. This process started largely due to ADB's investment strategies in the forestry sector.

After the first rotation of plantation, the government awaited another loan from ADB for the Forestry Sector Project (FSP). The project that was supposed to start in 1997 was much delayed. In the meantime, ADB made Bangladesh Government to amend the Forest Act of 1927 in favor of "social forestry" that is essentially plantation. The delay caused the forestland to remain vacant for a longer period. The banana, papaya and pineapple cultivators took control of the forestland and spoiled it thoroughly in a short period. The allegation that the corrupt FD officials turned out to be accomplices for extra cash is not unfounded.

For the last few years, the Modhupur *Salbon* (*sal forest*) has gained an infamous image as Modhupur *Kalabon* (banana forest). According to a top FD source, the *sal* patches in the Modhupur survive only on 6,000 acres today (2007). The DFO of Tangail [in 2004] disclosed that out of 46,000 acres in Tangail part of the Modhupur *sal* forest 25,000 acres had gone into illegal possession and the FD controlled only 9,000 acres by 2004.

How come such massive-scale grabbing of the forestland occurred? Why did the FD stay passive? These questions need to be seriously addressed in understanding what has gone wrong in Modhupur.

Assisted by the joint forces, the FD attempted to recover 3,600 acres of forestland from the hands of the banana cultivators [in 2007]. That raised fresh concerns and controversy when the Garos alleged that the FD targeted primarily the Garo villages in its war against banana. There are many evidences how the forestland given out for plantation has been abused by the banana and papaya cultivators. There are indeed many papaya gardens illegally established on the forestland. In the war against banana, papaya plantation also illegally established on the forestland, remained unattended.



Despite this horrendous reality, there are some efforts to protect what remains. A look over the protected parts of the Modhupur National Park from the two towers recently built in Dokholoa and Lohoria also gives us a ray of hope. The monsoon greenery of the native vegetation is absolute. This is what we want gradually expanded in other parts within the forest boundaries. For that, there are some suggestions to ponder over.

Thorough inventories: Inventories as regards exactly how much of the Modhupur *sal* forest is left today and how much of the forestland has been illegally occupied can provide handles for right direction in saving the native patches and expanding them. It is not just the banana, an inventory of papaya and pineapple gardens also need to be done. A complete list of the marauders on the forestland should be made public. Then the crusade against the marauders on the forestland will become transparent and effective with public support behind. Different stakeholders, environmentalists, and experts should participate in inventory exercise without fear.

Caution about choice of exotic species: One harsh reality about forests is man can plant trees, but cannot create a native forest. In the Modhupur *sal* forest area, native vegetation had been cleared for planting exotic trees such as rubber, acacia and eucalyptus. External resources especially from ADB played an important role in it. While eucalyptus plantation was stopped after the first rotation of plantation, acacia continued in the second rotation that started around 2002. The invasive acacia remains to be a dominant species in plantation to date. For the sake of creating some forests, which is difficult indeed, local species—*sal* and others—must be preferred. In plantation efforts, seeds of local species must be fully utilized during every monsoon. The forestry professionals including those in the Forest Department say, 'complex' or 'mixed' plantation must be preferred to 'simple' or monoculture plantation.

Protection of Adivasis: The Garos and the Koch are the original inhabitants of the Modhupur forest. Their traditional rights over highland need to be recognized. What the authority says overtly about their protection and that of the forest, must be realized concretely. The Adivasi communities find it difficult to survive without state protection. If they are protected, the forests are better managed.



Protected areas according to IUCN guidelines

1. Bhawal National Park–5,022 ha (1982)
2. Modhupur National Park–8,436 ha (1982)
3. Himchhari National Park–1,729 ha (1980)
4. Ramsagar National Park–27.74 ha (2001)
5. Nijhum Dweep National Park–1,63 1.17 ha (2001)
6. Chunati Wildlife Sanctuary–7,764 ha (1986)
7. Pablakhali Wildlife Sanctuary–42,087 ha (1983)
8. Rema-Kalenga Wildlife Sanctuary–1,095 ha (1981)
9. Sundarbans East Wildlife Sanctuary–31,227 ha (1996)
10. Sundarbans South Wildlife Sanctuary–36,970 ha (1996)
11. Sundarbans West Wildlife Sanctuary–71,502 ha (1996)
12. Char Kukri Mukri Wildlife Sanctuary–40 ha (1981)
13. Kaptai National Park–5,464 ha (1997)
14. Teknaf Game Reserve–11,615 ha (1983)
15. Lawachhara National Park–1,250 ha (1996)
16. Hazarikhil Wildlife Sanctuary–2,903 ha (1967 proposed)
17. Hail Haor Wildlife Sanctuary–1,427 ha (1983 proposed)

Source: Forest Department of Bangladesh

Page 5: What used to be *sal* forest not long ago at Charaljani Beat in Modhupur forest has been turned into a papaya plantation. A politically influential person manages this papaya plantation.

Photo: Philip Gain

Page 6: Banana plantation at Atashbari village in Modhupur *sal* forest, cut during the raid against banana in August. *Photo: Philip Gain*

Cover: (top row from left) Spectacled Langur on–on the verge of disappearing from Bangladesh.

Photo: Ronald Halder. Wild flower of Lawachhara forest. *Photo: Ronald Halder.* Rhesus Macaque at Lohoria Beat premises in Modhupur National Park. *Photo: Philip Gain.* Modhupur *sal* forest–the *sal* has vanished, exotic acacia has taken its place; people are still out there to dig out the last stumps of *sal*.

Photo: Philip Gain.

Back cover (top) Modhupur National Park seen from the tower at Lohoria Beat.

Photo: Philip Gain. (bottom) Illegally cut *sal* coppices being carried away. *Photo: Philip Gain.*

Bottom left: Hoolock gibbon–female. Hoolock gibbon feed on fruits, leaves and insects. They contribute immensely to the forest regeneration by dispersing seeds. Female is identifiable by its light colored coat. *Photo: Ronald Halder*

Bottom right: Woodlot plantation of exotics replaces *sal* in Modhupur. *Photo: Philip Gain*



LAWACHHARA NATIONAL PARK

Lawachhara National Park, a 1,250 ha forest patch, is best known for being one of the last habitats of the endangered ape—the Hoolock Gibbon. This rare primate is seen only in four countries in the world—Bangladesh, China, India and Myanmar. According to a source the Lawachhara National Park had the largest concentration of Hoolock Gibbon in Bangladesh—fifty nine—in 2006. At that time in the whole country the population of this ape was 200, a decline from about 3,000 in the 1980s. The park also offers shelter to so many colorful birds! The multi-age tree species at multi-stages and myriad other native plant species are flourishing in this forest.

Established in 1996, it is one of 17 doubly protected areas—national parks, wildlife sanctuaries, game reserves, eco-parks, safari parks, etc. That double protection does not ensure the safety of a protected area was best illustrated in the early 2005 when Unocal, a multinational oil giant, installed a gas pipeline under a contract with Petrobangla right through the heart of the park.

Environmentalists and nature lovers strongly opposed the move in the fear that a gas pipeline through the Lawachhara National Park would further endanger the forest and its wildlife. The gas pipeline was set up in violation of the Bangladesh Wildlife (Preservation) Order of 1973. This Order prohibits "any type of hunting, killing or capturing of wild animals or making disturbances within the park as well as within one mile radius area from the outer boundary of the park." Environmentalists argue that according to the Environment Conservation Act, 1995 and the Environment Conservation Rules, 1997 no commercial activity, such as setting a gas pipeline, can be carried out through the Lawachhara National Park.

Many in the Forest Department, the official custodian of the park, did not want the gas pipeline set through the park. To them the pipeline is a big concern; it may cause disaster like the Magurchhara fire accident of 1997 that caused enormous damage to the forest and the residents of the Magurchhara Punji (village).

"Nishorgo, a project to protect the Lawachhara National Park, is funded by the US Government through USAID. The same government supports setting up of the pipeline through the park at high risk. This is a contradiction that we despise," said an annoyed forest official requesting anonymity. His question, "Will the US Government allow Unocal to set up such a gas pipeline through a reserved area in the USA?"

Although Unocal claimed that no machines would be used at the time of setting up of the pipes and that everything would be done manually, in reality five generators were seen running to produce electricity for welding activities at the time of setting of the pipeline. The generators caused immense noise.

Unocal's contention was that the pipeline would cause no harm to the forest because they would stay buried under the ground. This did not satisfy a Nature lover who frequently visits the park. His worries: "Fire accidents can occur, which will not take much time to burn the whole forest."

There are already gas wells and pipelines around the park. The explosions and fires that have been witnessed in Magurchhara and Tengratila are signals that the pipeline for the transport of gas through the park is a standing threat to the forest.

Seismic survey signals end of Lawachhara: The latest threat to Lawachhara National Park came with a seismic survey of US oil and gas company Chevron. The survey that began



Left above: Hoolock gibbon—male. One of the most prominent animals in Lawachhara forest on the verge of disappearing from Bangladesh. *Photo: Ronald Halder*



Left middle: The moment of explosion for seismic survey of Chevron at Lawachhara National Park. *Photo: Philip Gain*

Left bottom: The explosion team leaves after the explosion. *Photo: Philip Gain*



Right (page 10): Chevron seismic survey team drilling at a stream in the Lawachhara National Park before pushing in explosive. This is how the Chevron laborers set explosives throughout the doubly protected area. *Photo: Philip Gain*

Following page: Lawachhara National Park at a winter morning. *Photo: Philip Gain*

in January 2008 is scheduled to be completed in June. The survey is intended to determine the stock of gas and possibly oil in the area, where the company is already extracting the mineral. In Bangladesh Chevron's daily production in 2007 averaged 496 million cubic feet of natural gas and 3,000 barrels of condensate.

While the seismic survey is a requirement for exploration of gas and oil, the Bangladesh Wildlife (Preservation) (Amendment) Act 1974 does not allow it in the reserved forests and protected areas. When the survey began, some environmental groups and local communities wanted to resist Chevron. However, no resistance was effective, thanks to the caretaker government and the emergency rule that relaxed the Act protecting the forests and the wildlife.

The Lawachhara National Park is located in the tea plantation zone in the Northwest of the forest poor Bangladesh. However, what is tea zone today used to be forest 160 years ago. The British companies during colonial rule cleared jungle and established tea plantation. In the tea plantation region, this tiny patch of forest containing the last species that once were found in abundance in the region deserves protection.

The seismic survey itself is a threat to the forest; the bigger threat will come if new reserves of gas and oil are detected. The fear is in that case, the whole forest will vanish. The survey has also been disturbing for the two Khasi punjis on two edges of the park—Magurchhara Khasi Punji and Lawachhara Khasi Punji.

The Chevron authority nullifies the fear of environmentalists who protested the survey inside the park and claims that the survey including the explosion does not affect the forest and wildlife at all. The company asserted that no tree needed to be cut for drilling required for setting explosives 70 feet under the ground.

In several places in the forest we have witnessed how a team of some 20 members got engaged in drilling and setting explosives. They used generator making significant noise and drilled in the jungle and streams. There are birds and other wildlife that use the streams and the forest floors for food and breeding. A team spent 30 minutes to one hour for drilling and setting explosive at one location. Explosives had been set at an interval of 40 meters.





In the whole survey area (block-14), explosives had been set in some 10,000 locations. The Lawchhara National Park, being 16% of the survey area was allocated some 1,500 explosives meaning each ha got at least one. Some of us were present during some explosions. The sound under ground is "boom" for a second and vibration all around enough to threaten the wildlife; but some would say this is very insignificant and causes no harm to the forest and wildlife.

The Chevron survey is a clear violation of Bangladesh Wildlife (Preservation) (Amendment) Act 1974 that provides some protection to the forest and wildlife. This Act prohibits "firing any gun or doing any other act which may disturb any wild animal or doing any act which interfere with the breeding places of any wild animal" [section 23 (3)] and "clearing or breaking up any land for cultivation, mining or for any other purpose" [section 23 (3)] among other things.

The Chevron survey clearly violates these sections in the wildlife act. The explosives were exploded right in the middle of the breeding season of birds and other animals. Ronald Halder, a well-known ornithologist of Bangladesh says, "Additional movement of many people for the survey and the explosions has seriously disturbed the breeding of birds and other animals. Terrified by explosions many animals have gone out of the forest and many birds have abandoned their nests."

This time Chevron has violated the wildlife act by securing immunity. The government through a gazette notification [in the order of the president) "permitted Chevron Bangladesh Ltd. to carry out Seismic Survey by relaxing section 23 (3) of Bangladesh Wildlife (Preservation) (Amendment) Act 1974 in the public interest."

The Bangladesh Government is revising the Bangladesh Wildlife (Preservation) (Amendment) Act 1974 at a time when it has relaxed the law to allow Chevron to carry out the survey. Nishorgo Support Project (funded by USAID and ADB and implemented by Washington-based International Resource Group), Wildlife Trust of Bangladesh (WTB) and Bangladesh Environmental lawyers Association (BELA) are assisting the government. It is to be seen what loopholes remain in the amended or new wildlife act formulated by these organizations. No matter what environmental laws and environmental courts we have, they are of little use in Bangladesh. Companies that pollute—local or international—can violate the laws and still do their businesses. Worse, they can buy some well-known environmental organizations (international and local) to their side.

Even though Chevron evaded the environment law, it showed some obligations towards environment, which many said to be an eye-wash. It announced both Initial Environmental Examination (IEE) and the Environmental Impact Assessment (EIA) done by SMEC International, an Australian company. However, the company and the government have not shared these important documents with the local communities, the press and environmental groups who sought them.

The seismic survey has shaken the whole Lawachhara National Park. This has an effect. According to newspaper reports some rare wildlife species came out of the forest and got caught in villages. "These animals have come out of the forests due to the unusual vibration," said a wildlife photographer who frequents the forest.

A zoologist of IUCN who accompanied the blasting team was quoted in a Daily Star report (4 May 2008) in response to a leading question if he had noticed any disturbance to wildlife, saying, "No, nothing at all."

According to many this is ridiculous! There are thousands of creatures under the soil and hidden in the forests that no one sees. How can one say for sure that no disturbance has occurred to such wildlife due to blasting? The movement of survey teams for weeks before blasting sent Hoolock Gibbon, monkeys, birds and other noticeable wildlife away from the blasting sites.

The monitoring team led by IUCN includes Chevron among other individuals and organizations. In addition, there is a 12-member biodiversity monitoring team also led by IUCN. A top official confirmed that the monitoring cost is covered by Chevron.

Prof. Anu Muhammad, an analyst and critic on oil, gas and mineral issues has given an interpretation: "The multinational companies want to take full control of energy resources of Bangladesh. They spend a good sum to have some influential environmental organizations and some influential journalists on their side. They don't do research for monitoring and reporting. The companies use them to solicit legality."

Right above: A fine specimen of a male pig tailed macaque. The male is characterized by its elaborate mane.

Photo: Ronald Halder

Right bottom: Blue throated Barbets are one of the most important modes of seed dispersal in a natural forest, as they feed on ripe fruits and berries. *Photo: Ronald Halder*

Right (page 14): Imperial Green Pigeon. A rare inhabitant of this magnificent forest. The number of these birds have declined drastically over the years in this forest.

Photo: Ronald Halder



According to the monitoring team led by IUCN the seismic survey has caused no harm to the forest. "This kind of monitoring is meaningless. Those monitoring and giving positive certificate to the company should back off and the seismic survey in the protected area should be suspended right away," said Farhad Mazhar an environmentalist and writer.

It is difficult to clearly assess the impact of the survey on forests and wildlife. Dr. Noazesh Ahmed, an agricultural scientist says, "The trees that send roots deep into the ground are affected. Microbes are destroyed. If the vibration comes within 20 feet below the surface of the ground, both plants and wildlife are damaged."

The botanists suggest that the impact of the survey on plant species need to be assessed. Many environmentalists say it is obvious that those monitoring the impacts of the survey with Chevron resources will not do it objectively. Monitoring needs to be performed independently. There is doubt that all facts relating to impacts of the survey can be known with controlled monitoring and without full disclosure of information particularly the IEE and EIA reports.

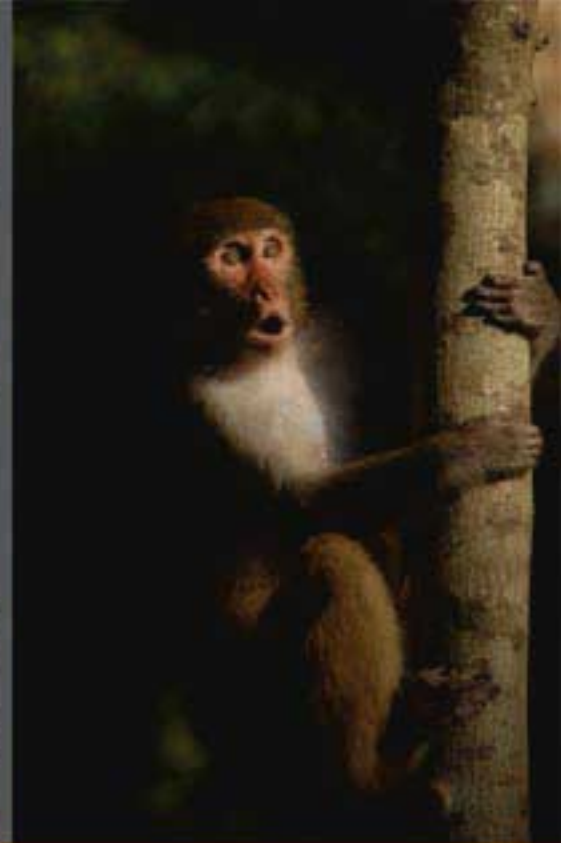
The survey also left the Khasis of two Khasi punjis (Magurchhara Khasi Punji and Lawachhara Khasi Punji) at the two ends of the park and people of some villages in deep concern.

"Chevron set explosives in many places in our *pan jum* (betel leaf grove) but did not consult us at all," complained Phila Potmi, the *myntri* (*punji head*) of Lawachhara Khasi Punji. His one acre *pan jum* (betel leaf cultivation) was damaged by fire on 27 April 2008.

Potmi talked about other disturbances to 22 Khasi families in his *punji* caused by the tourists. "Tourists and picnic parties cause serious disturbances to us. In recent times, the number of tourists and the picnic parties has increased manifold. They invade our *punji* and damage plants, fruit and lemon gardens. They also disturb our women."

Text by Philip Gain





Modhupur and Lawachhara

Stolen Forest Threatened Heritage

Photography Exhibition by
Ronald Halder, Philip Gain and Sirajul Hossain

Drik Gallery

21 to 27 June 2008

3:00 PM to 8:00 PM