

# Biodiversity of Ratargul Swamp Forest, Sylhet

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## Foreword

In Bangladesh, as elsewhere in the third world, the process of ecosystem destruction and the resultant environmental damage have been escalating alarmingly in the recent years. The destruction of natural ecosystems goes hand in hand with drastic reduction of biodiversity, which in the long term hampers the quality of life as well as economic development. As an obligation under the CBD and for better management of the biodiversity resources, Bangladesh is now preparing its "National Biodiversity Strategy and Action Plan". A 'bottom-up' approach has been strictly resorted to during the preparation of the plan. People from different part of the country volunteered opinions their neighbouring ecosystems about with their corresponding biodiversity. Since the plan will be based on people's perceptions of opinion ground truthing is considered a must for verify the feedback received. Thus, it has been decided that ecosystem survey within few representative ecosystem need to be conducted. Since the study is expected to focus on the complex issue of ecosystem status, the study team members were selected from different fields of specialization who possessed sufficient experience of working in the natural ecosystems. The study was confined within the following disturbed but ecologically important natural ecosystems of Bangladesh.

Shatchari, Habiganj:

A site of importance since the area still carries the remnants some important indigenous flora and fauna.

Jaflong, Sylhet:

This ecosystem of fresh water streams is settled stone bed which is being destroyed due to large-scale stone quarrying. A seriously degraded site.

Ratargul, Sylhet:

It is a fresh water wetland ecosystem. This site may be the largest "Patipata" growing habitat that also had groves of "Hijal" and "Koroch" trees. Over extraction and mismanagement have affected the ecosystem most adversely. The area has been suffering increasing exposure to visitors lately.

Tilagarh, Sylhet:

This is a small forest patch located suburbs Sylhet divisional head quarters.

Rajeshpur, Comilla:

This is the southern most habitat of natural Sal in the Indian sub-continent. Most of the natural Sal forest has disappeared. Only remnants are visible now.

Dulahazara Safari Park, Cox's Bazar:

The area has recently been delineated and declared as a Protected Area by the Forest Department in an attempt towards the conservation of its habitat and the resident wild animals. This site is also known as the natural home of *Dipterocarpus* spp. in Bangladesh.

These are considered as one of the richest ecosystem category as regards biodiversity in Bangladesh. Most of such diversities are not known to the outsiders and not at all well documented. Moreover, with the increasing population and the passage of time, biodiversities are depleting at a rapid rate. Most of these valuable national resources have already vanished from their sites of origin and many more are in various stages of extinction.

It is expected that the findings of this study will help readers understand the dynamics of the diverse natural ecosystems in general and the trends of the biodiversity there. Moreover, the findings of the study will also provide ample food for thought for the planners while they've formulating biodiversity conservation and/or resource management plans and development policies. The findings of this study will also serve as a baseline for the scientists, development workers and students affording insights about the ecosystem.

Dhaka  
May, 2004

Ainun Nishat  
Country Representative  
IUCN Bangladesh Country Office

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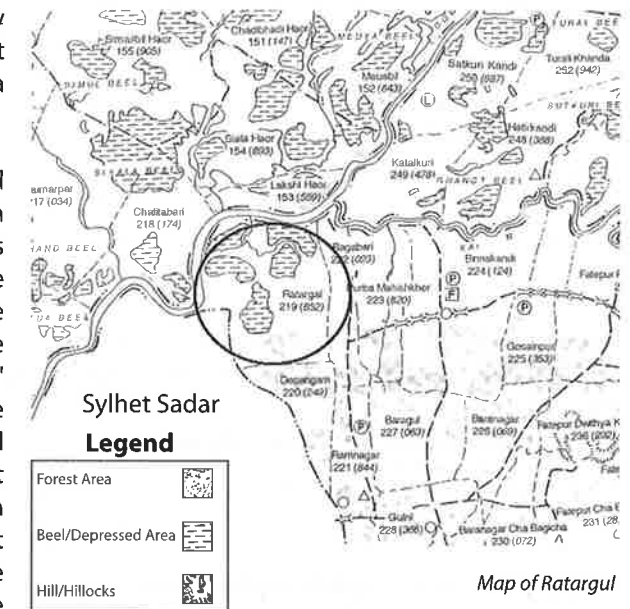
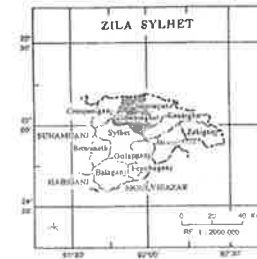
## 1. Background

Ratargul is a wetland forest chunk under the Sylhet Forest Division. It is located at about 45 Km on the North-West of Sylhet town on the bank of river Goyain. In the past the only approach to this area was by boat. Administrative location of the site is under upazilla Goainghat and district Sylhet. The administrative beat office is situated at latitude 25° 00.025' N and longitude 91° 58.180' E.

This area is on the north of Surma River. The Goyain River ultimately drains into the Surma River. The area gets flooded from the Goyain river water. These areas are important sites for the collection of "Patipata" that used to grow naturally in the past. These "Patipata" locally known as "murta" are used for weaving mats, some of them are of very high quality known as "Shital Patii". Each such mat measuring 7 feet by 6 feet fetches a price of about taka 4,000.00.

Ratargul area was declared as Reserved Forest under the Assam Forest Act in 1932. An area of 292.60 acres was declared as Reserved Forest vide notification number 1774-R dated June 9th 1932. In the past these areas were allocated to "Pollarding Working Circle" under Sylhet Forest Division. The branches of the natural Hijal trees used to be cut and extracted as per the set rules of such pollarding by the locals on permits issued by the Forest Department. The locals, especially the fishermen, used to collect these branches for use as *Kthas*<sup>1</sup>. The fishermen had the preference of collecting Hijal branches over the Koroj for use as 'khtas' since the later get decayed quickly.

### INDEX TO ADJOINING THANAS



<sup>1</sup> Kathas are tree branches kept under water in the wetland sites to attract fishes for harboring so that these fishes may be caught easily by nets.

Till about sixties, the management and control imposed by the Forest Department (FD) could go ahead with some sort of sustainability. The effective control of the FD got weak under the sudden and exorbitant pressure of population growth, as new settlers were encouraged to set new habitations around these areas, coupled with the unrest that started to grow against the administration of the then Government of Pakistan. Such semi lawlessness, the ultimate freedom fighting and the emergence of Bangladesh created a situation, under the cover which these areas suffered serious pilferage of its natural resources.

In early eighties the area was almost depleted with hardly some grassy vegetation, a few bushes of "Patiipata" and a very few of the Koroj trees scattered here and there. During early eighties local land grabbers were seen attempting unauthorized cultivation of these government lands as well.

In 1985, the local Forest Department in an attempt to regain control over these sites, raised an experimental plantation of "Patiipata" over a small area of about 3 acres and built the Ratargul (local) forest beat office quarters, that got destroyed during the war of liberation. Based on the success of this plantation, Murta (patiipata) afforestation programs were drawn and since then gradually most of these areas have been planted with 'patiipata'. Under such interventions and reasonable protection accorded from the government end though the FD has induced a positive impact on these deteriorated ecosystems. Now, these sites have got adored with the look of some sort of two storied forests. The top story consists of the Koroj, while the under story is almost pure 'patiipata', with few others natural species that have started to come in with the enhancement of the ecosystem functions. The 'patiipata' are being sold at present, to earn good revenues for the government.

## **2. Methodology**

The study have been broadly divided into three parts viz. collection of secondary information, collection of primary information and finally data interpretation and report writing.

### **Step 1. Collection of secondary information**

Available information, the maps and relevant information about the selected study sites were collected as far as possible.

### **Step 2. Collection of primary information**

#### *Floral diversity*

We visited the ecosystem. During these visits the flora found in the ecosystem were observed and noted. This technique is chosen after consideration of feasibility of working in the natural forest, economy and availability of time as described by Ray (1993). Their relative abundances were estimated while walking through the ecosystem. The heights of the top canopy were noted. The forest management and related forestry aspects were noted. Trees were identified and any specialized character or peculiarities of the vegetation were noted. For proper

identification of the species specimens have been collected and these materials are pressed so that herbarium sheets may be prepared and the species are properly identified later. The soil, water regime, aspects, GPS and related things were observed and noted. The trees were identified following Heining (1925), Brandis (1906) and Prain (1903). Taxonomic literatures were consulted for correct nomenclature of the taxa

#### *Faunal diversity*

Data collection was based on the direct animal observation in the field. However, where the animal is not immediately available or it was difficult to locate or trace, observations were made on foot print, trailing, tracks, burrows, nest animal holes, carves on the tree trunks or fruits made by the animals etc. For obtaining a better idea of the existing nocturnal faunal population with respect to species and abundance, some observations were taken during early parts of the night. Some observations were taken during the early hours of the morning and during the sunset times (evening hours) especially to note the bird species and their abundance. Some affords were made to see the snakes if any. Flying birds were also taken into account. Besides, local people were interviewed to ascertain the existence and to assess the states the animals. In addition, other techniques like photo flashing, spot lighting, sound tracking, etc were used where necessary. Uses of binoculars were made when necessary. Animals were identified up to species level. Standard field books, field manuals, notebooks were used for the identification process. The species, which were not possible to identify in the field, brought with proper labeling for its subsequent identification.

#### *Ecosystem in general*

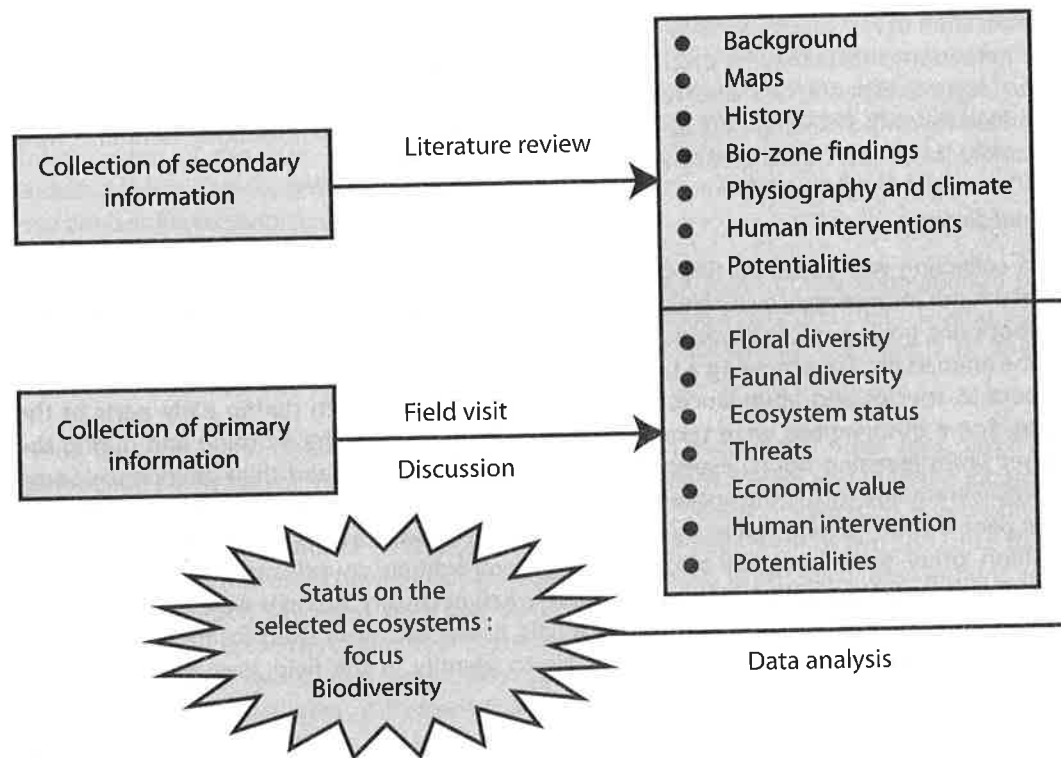
Detailed discussions were held with the local forest staff, officials, neighboring community and experienced persons for obtaining information about the ecosystem especially to identify the threats and potentials. With the help and assistance of the local forest staff and officials a few of the local old, well conversant and knowledgeable personnel living in and around the ecosystem were invited for discussion.

#### *Land use pattern*

The existing land use pattern of the ecosystem was noted. The sites, adjoining the ecosystem under study, were briefly visited to observe the existing land use pattern of these areas in general. Discussions were held with the local people to obtain some information and tips about the past land use pattern and past condition of the given ecosystem.

### **Step 3. Data analysis and report writing**

We accomplished the report writing on return from the field trip. For the purpose of convenience and better presentation, the findings from the sites visited have been clustered as texts, tables, maps and pictures. The following is the diagrammatic presentation of the activities accomplished.



Ecosystem survey activities outline

### 3. Physiography and climate

The topography of the site is undulating in general. The flood plains are agricultural farmlands in general. The site is low land and is oriented along the bank of the river. The estimated elevation is about 35 feet above the mean sea level.

This area has irregular relief with 3 to 6 meter local differences in elevation. Low hillocks are found to occur in a scattered manner in this region. The soils of this region are gray, heavy, silty clay loam with clays that predominates. The soil under the vegetation is mostly clayey loam to clayey in texture. In general it was observed that the soil is finer grained i.e. more clayey as the locations are further from the river. The depression sites carry more clayey soil. These depressions are managed for fish production. The soils of this site quickly become dry and hard at the end of the rainy season and during dry period often develop cracks especially where the vegetative tree cover is missing. The riverbanks are sandy to sandy-loam type. The soils of the agricultural fields are loamy in general and are reported to be quite fertile.

This area is subjected to regular flooding. The adjoining Goyain River spates and floods the banks. This forest situated right along the bank is the first to receive the flood with the onset of

rainfall. The floodwater starts to enter these areas by about May and remain flooded till about early October. But the inundation level changes with the intensity of rain. If the raining especially in the upper catchments gets to a halt for couple of weeks the area become free of flood inundation. The water regime thus fluctuates but the sites remain highly wet all through the monsoon months (from May to October). During the month of March and first fortnight of April it experiences the driest condition and at some of the locations the topsoil cracks during this dry spell.

The climate is tropical in general, but since the site is at the north eastern parts of Sylhet, it usually receives heavy rainfall. The nearest weather station to this site is Sylhet. The climatic data of Sylhet station will give an idea of the climatic condition of the site. Total annual average rainfall is 4162 mm. July being the wettest have an average of about 1250 mm of rain, while December is the driest with no rainfall. May and October are the hottest months having an average maximum temperature around 32°C, while January is the coldest when the minimum temperature drops to about 12°C. During December the relative humidity is about 74% while during July-August it is over 90%.

### 4. Biozone

According to Nishat et. al. (2002) this area is under the Bio-ecological Zone - 4d<sup>2</sup>. With broad zone "Surma-Kushiyara Flood Plain" by the authors of the book. According to FAO (1988), this area belongs to 'Region 20: Eastern Surma Kusiyaara Flood plain'.

### 5. Existing Ecosystem

The existing ecosystem of the area consists of a few different types of habitats such as river, lowland with vegetation and depressions.

#### The river

This includes the river Goyain that is flowing adjoining the site. During monsoon the river flows full to the brim and floods the banks. The water flow reduces to minimum during dry period.

<sup>2</sup>According to the 'Bio-Ecological Zone of Bangladesh' published by IUCN, the floral and faunal composition in these sites is expected to be as under.

#### Flora:

Trees : *Artocarpus heterophyllus* (Kanthal), *Mangifera indica* (Aam), *Toona ciliata* (Toon), *Aphanamixis polystachya* (Pitraj),  
Shrubs and herbs : *Grewia microcos* (Assar), *Pandanus foetidus* (Keya kanta), *Holarrhena antidysenterica* (Kurci), *Calotropis procera* (Choto akanda), *Clinogyne dichotoma* (Murta/Patipata), *Calamus guruba* (Jali bet),  
Aquatic plants : *Vetiveria zizanioides* (Binna ghash), *Nymphaea nouchali* (Shada Shapla), *Hydrilla verticillata* (Jhanji), *Euryale ferox* (Makhna),

#### Fauna:

Mammals : *Prionailurus viverrinus* (Fishing cat), *Trachypithecus pileatus* (Capped langur), *Macaca mulatta* (Rhesus macaque), *Viverra zibetha* (Large Indian civet),  
Birds : *Francolinus gularis* (Swamp francolin), *Sarkidiornis melanotos* (Comb duck), *Phalacrocorax carbo* (Great cormorant), *Dendrocygna bicolor* (Fulvous whistling- duck), *Ephippiorhynchus asiticus* (Black-necked stork),  
Reptiles : *Dendrelaphis pictus* (Painted bronzeback tree snake), *Kachuga sylhetensis* (Assam roofed turtle), *Boiga cyanea* (Green cat snake), *Kachuga tecta* (Indian roofed turtle), *Kagucho tentoria* (Median roofed turtle),  
Amphibians : *Polypedates maculatus* (Maculated tree frog), *Euphylyctis cyanonphlyctis* (Skipper frog),

During February to early April, one can easily walk across this river at many points. The banks are sandy to sandy-loam and harbor variety of annuals. Some of the locations in the riverbed, where the water become stagnant, harbor aquatic flora and fauna on a seasonally basis.

#### The lowland with vegetation

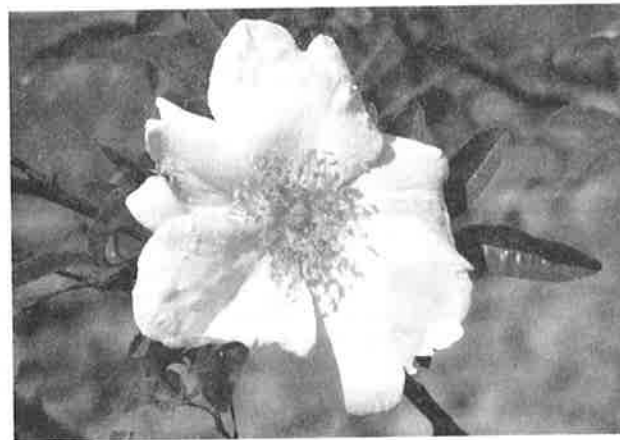
This consists of the spots that that we visited having vegetative cover. In the past this area had hijal trees with a few koroj and patiiyata underneath. The condition deteriorated so much that by eighties there were no tree. Only a small quantum of patiiyata was there. Since 1985 the interventions of FD has generated two storied cover of which the top story is koroj and the under story is patiiyata. The hijal being slow growing will take longer time to inhabit the site. It appears that the ball of ecological enhancement has been set to roll. Many of the species such as wild rose ban toolshi hijal etc. have started to appear naturally. Wild orchids and beehives were cited during the mission visit. All these indicate that this ecosystem of the site is gradually marching forward. Under the present day state of general degradation and deterioration of ecosystems, this is definitely a commendable success story, from environmental viewpoint, of the FD interventions.

#### The depressions

There are some small depressions. They retain water till about the end of the dry period and get completely dried at the beginning of monsoon. Thus these spots remain dry only for about a month or so. These spots are devoid of any trees or perennial flora. Some aquatic floras are seen growing at these spots. These sites attract a large number of migratory birds with the on set of winter periods. Fish is the important resource for this ecosystem. The lands are under the control of FD and are managed for harvesting fish resources. The FD lease out these spots for harvesting fish and earn lucrative revenue for the government. Though the acreages of spots vary, none of these spots are more than 5 acre. These are typically distinguished as separate ecosystem as depressions in the larger context of the site in question.

### 6. Flora

This site at present possesses a typical fresh water wetland forest, which is gradually improving with time. This forest has two stories. The top story consists of trees, mostly Koroj, while other tree species found in this stratum, are *Barringtonia acutangula*, *Ficus religiosa* and *Syzygium fruticosum*. The second story consists of patiiyata (Murta). This forest may be categorized as "Wet Evergreen Forest". The canopy height is about 15 m and canopy coverage is about



White Bengal rose: one of the available wild flowers at Ratargul



*Pongamia pinnata* at over story and patiiyata as under story

and *Schoenoplectus juncooides* are found. An aggressive weed, *Mikania scandens* grow vigorously at the edge of the forest. Dhokalmi (*Ipomoea fistulosa*) is very common near the roadside. In wet season *Eichhornia crassipes*, *Hygrophyla salicifolia* and *Nymphaea nouchali* are very common. Rattan (*Calamus guruba*) has also been planted which is now common in this forest. Wild rose (*Rosa involucreta*), an important indigenous plant is found growing in this forest. This forest also harbors a number of medicinal plants including *Asparagus racemosus*, *Centella asiatica*, *Crataeva nurvala*, *Hemidesmus indicus*, *Ipomoea fistulosa* and *Mimosa pudica*. The Forest Department Government of Bangladesh is managing this forest. At present the patiiyata (Murta) is harvested at two-year cycle. This earns good revenue for the government. The FD is also doing some planting of patiiyata on sites that have poor vegetative cover. The trees mostly koroj, are coppice from the old stumps and some of them are natural regenerated. A number of other species have started to regenerate naturally at this site due to the protection being given by the FD. Since these sites are fertile and receive fresh water regularly, these are highly potential for agriculture. Under such situation, there is a serious threat of encroachment of these sites.

A total of 73 species have been recorded from this swamp forest during our visit. The list of flora found in this forest is given in Table 1.

### 7. Fauna

Total 9 amphibians containing 1 Bufonid, 2 Microhylid, 4 Ranid and 2 Rhacophorid have been recorded in this wetland forest. Of these *Microhylla ornate*, *Microhylla rubra* and *Rana alticola* are locally vulnerable. 20 reptiles have been recorded represented Bataguridae, Gekkonidae, Agamidae, Scincidae, Varanidae, Typhlopidae, Colubridae, Elapidae. 4 species of snakes (*Bungarus caeruleus*, *Bungarus fasciatus*, *Naja kaouthia*, *Naja naja*) represented the family Elapidae.

175 species of birds and 26 mammalian species were observed. 40 Families under 12 orders (Galliformes, Anseriformes, Piciformes, Upupiformes, Coraciiformes, Cuculiformes, Psittaciformes, Apodiformes, Strigiformes, Columbiformes, Ciconiiformes, Passeriformes) represented the Class

Aves. 46 (26.436%) birds are migratory and the rest 128 (73.564%) species are resident. *Athene brama*, *Ketupa flavipes*, *Ketupa zeylonensis*, *Caprimulgus affinis* and *Caprimulgus asiaticus* were observed under the family Strigidae. *Pellorneum palustre*, *Aquila clanga*, *Ketupa flavipes* and *Francolinus gularis* treated as globally vulnerable. *Gyps bengalensis*, *Ichthyophaga ichthyaetus*, *Falco chicquera*, *Anastomus ascitans* and *Alcippe rufogularis* have included as lower risk under IUCN Global Category.

Of the mammalian fauna Common Palm Civet (*Paradoxurus hermaphroditus*), Large Indian Civet (*Viverra zibetha*) and Small Indian Civet (*Viverricula indica*) are treated as locally vulnerable, endangered and vulnerable respectively.

The names of the Amphibians, Reptiles, Birds and Mammals of the area are given in Table 2, 3, 4 and 5 respectively.

### 8. NTFPs

The major harvests from this forest, at present, are patiiyata and fish, which are Non Timber Forest Product (NTFP). The local people also collect having from the forest.

### 9. Economic values

This site has got restored to this present state through interventions of the FD. In the past this site used to be worked for harvesting patiiyata. The harvest was fully dependent on natural growth. Due to serious depletion, FD started to replant patiiyata since eighties. The patiiyata plantations have successfully grown to yield the harvest. At present patiiyata is harvested as per the management prescription. They yield good revenue for the government. The harvesting of trees is not done till date. In a couple of decades it is presumed that harvest of trees will also be possible. The depressions within this forest area harbor fish populations through the natural process. Most of these depressions get completely dried up during March or so. These depressions are subjected to fish collection and by this process the government earns good revenue. Thus this forest though not that big in size earns good revenue for the government regularly. From the green accounting viewpoint, this forest contributes enormous value because of its following performances.

- Checks riverbank erosion.
- Slows down the on rush of floodwater into the adjoining agricultural fields.
- Traps the water borne sediments, especially the sand component and there by saves the adjoining agricultural fields from sand deposition.
- Provides a microclimatic situation that goes in favor of the adjoining agricultural activities.
- Acts as a natural bree ental aspects of the area in question. etc.

Thus it has high economic values, both as tangible and intangible.

### 10. Existing Management of the Ecosystem

This area is Reserved and is administered by the FD. The total area under the Ratargul beat is 2691 acres. Its mouza-wise breakup is as under.

Mauabeel	172.2 Acres
Chadibadi Haor	445.8 Acres
Guramarakandi	373.7 Acres
Sheala Haor	124.1 Acres
Shamailbeel Haor	1023.2 Acres
Chalitabari	359.1 Acres
Sekerpakerkhal	192.8 Acres

Small patches of some of these areas are still under the illegal occupations of some the local influential people.

### 11. Human Interventions

This is a small chunk of forestland with habitation all around. Local people collect branches of Hizal and Koroj mainly for fish culture and fuel. People try to encroach upon these lands for cultivation purposes. In the past, the local hindu fishing communities used to follow some ethnic norms of respect towards these sites as natural fish harbors. But with time this cohesion gradually got disintegrated and at present, no ethnic or religious interactions could be seen at these sites.

### 12. Existing trends

At present this area is under the control and administration of FD. The prevailing trend in the area is to implement the existing prescriptions of forest management. The harvest of patiiyata and collection of revenue through fish collection from the depressions within the forest area are the major management attributes for the presence. The general trend of the ecosystem is good and it is seen improving. The area however, has a high risk of getting encroached by the locals and illegal collection of trees and branches by the open water fishing communities.

### 13. Land Use Pattern

The land use within the ecosystem is forest. The patiiyata is harvested at two-year cycle. The depressions within the forest area are subjected to fish catching every year. The areas with thin or poor vegetative cover are planted mostly with patiiyata. The tree growth comes up naturally. Also, many other local and indigenous species have started to reappear. Some of them are local medicinal plants as well. All these are being retained especially for the improvement of the ecosystem as a whole. The protection enforced by the FD seems to be effective and that is how the ecological process of succession has been set to roll. This is a good singe. Some of the natural honeybees have already started to inhabit this forest ecosystem.

Rural communities inhabit the adjoining areas of this wetland forest. The adjoining areas are mostly agricultural fields and homesteads. Rice is the major crop in these agricultural fields.

Mostly only one crop is grown in a year in these agricultural fields. The homesteads have mixed species of fruit trees and a few tree species. Most of these homesteads have bamboo growth.

#### **14. Community Livelihood**

The communities living around the forest are mostly agricultural. Some of them are involved in fishing. A few are involved in small business. They belong to the low-income group. Daily labor wages are low and ranges from taka 100 to 50. It climbs up during the season of paddy harvest and drops down to its minimum during the off-season, when the agricultural activities get to the minimum. Some of the local laborers get employment in the harvest of patiiyata and in the collection of fish from the depressions within the forest area.

#### **15. Threats to Ecosystem**

The threats that had once destroyed this ecosystem still exist. Though the protection that is in force by the FD is somewhat effective, this site receives low priority to the FD administration at Divisional level, stationed at Sylhet. These sites are the first affected ones, of the acute shortage of manpower within the Forest Department. These sites fail to fetch the required importance since they earn only a small amount of direct revenue for the government. During our visit, we have found only one FD staff that is entrusted with all the field activities of these sites, including protection. This is little too much. The major threats are

- Encroachment of sites for agriculture.
- Illegal collection of woody branches for open water fishing purposes.
- Illegal collection of wood mostly for use as fuel wood.
- Illegal catching of fishes.
- Illegal collection of medicinal plants and honey etc.

#### **16. Potentials of Ecosystem**

The Ratargul wetland forest is a typical wetland ecosystem having high potentials of biodiversity values and other intangibles. Once degraded severely these sites have started to regain its floral and faunal composition under the management enforced by the FD. It has the high potentials of yielding trees and its branches for open water fishing activities, the patiiyata and canes for cottage industries, the indigenous medicinal plants towards herbal medicines, the fishes towards the supply of protein for the poor and above all as the source of rural job opportunities towards the poverty alleviation. An ecosystem management approach is necessary for the sustainable use of these potentials of these sites.

#### **17. Recommendations**

The approach of attaching importance on the basis of financial gain alone needs to be changed. The potentials of these wetland sites need to be recognized not only by the government but also by the common people. These are typical wetland ecosystem which are rare and very limited. These sites deserve priority conservation. Government of Bangladesh may be urged to declare such wetland sites as protected areas for sustainable management. The government may put to practice, an ecosystem management approach for these sites,

preferably with community participations, involving the NGOs as well.

Most of our fresh water wetlands have got destroyed. The existing Ratargul forest sites are rare fresh water wetlands. These sites have improved a lot during the last couple of decades, under the FD interventions. These sites may be declared as protected areas and subjected to an ecosystem management approach involving the communities through the NGOs for its sustainability.

**Table 1. List of plant species of Ratargul Forest, Sylhet**

Sl. No	Species	Family	Habit	Occurrence
1.	<i>Ageratum conyzoides</i>	Asteraceae	Herb	Common
2.	<i>Ammania baccifera</i>	Lythraceae	Herb	Common
3.	<i>Anisomeles indica</i>	Lamiaceae	Herb	Not very common
4.	<i>Argemone mexicana</i>	Asteraceae	Herb	Not very common
5.	<i>Asparagus recemosus</i>	Liliaceae	Herb	Not very common
6.	<i>Axonopus compressus</i>	Poaceae	Herb	Common
7.	<i>Barringtonia acutangula</i>	Lythraceae	Tree	Common
8.	<i>Borreria hispida</i>	Rubiaceae	Herb	Common
9.	<i>Calamus guruba</i>	Arecaceae	Climber	Planted
10.	<i>Cassia tora</i>	Mimosaceae	Herb	Not very common
11.	<i>Centella asiatica</i>	Umbelliferae	Herb	Common
12.	<i>Cissampelos praiera</i>	Menispermaceae	Climber	Not common
13.	<i>Clinogyne dichotoma</i>	Marantaceae	Shrub	Planted
14.	<i>Coldenia procumbens</i>	Boraginaceae	Herb	Not very common
15.	<i>Colocasia esculenta</i>	Araceae	Herb	Common
16.	<i>Cordia dichotoma</i>	Boraginaceae	Tree	Not very common
17.	<i>Crataeva nurvala</i>	Capparidaceae	Tree	Common
18.	<i>Cyperus tenuispica</i>	Cyperaceae	Herb	Common
19.	<i>Cyrtococcus patens</i>	Poaceae	Herb	Common
20.	<i>Dioscorea pentaphylla</i>	Dioscoreaceae	Climber	Common
21.	<i>Diospyros peregrina</i>	Ebenaceae	Tree	Not very common
22.	<i>Diospyros phillippersis</i>	Ebenaceae	Tree	Not very common
23.	<i>Drynaria quercifolia</i>	Dryneriaceae	Epiphyte	Common
24.	<i>Eichhornia crassipes</i>	Pontederiaceae	Herb	Common
25.	<i>Eleocharis acutangula</i>	Cyperaceae	Herb	Common
26.	<i>Eleusine indica</i>	Poaceae	Herb	Common
27.	<i>Erianthus ravennae</i>	Poaceae	Herb	Common
28.	<i>Eupatorium odoratum</i>	Asteraceae	Shrub	Common
29.	<i>Ficus hispida</i>	Moraceae	Tree	Common
30.	<i>Ficus religiosa</i>	Moraceae	Tree	Not very common
31.	<i>Fimbristylis schoenoides</i>	Cyperaceae	Herb	Common
32.	<i>Garcinia cowa</i>	Guttiferae	Tree	Not common
33.	<i>Glinus lotoides</i>	Molluginaceae	Herb	Common
34.	<i>G. oppositifolius</i>	Molluginaceae	Herb	Common
35.	<i>Glochidion multiloculare</i>	Euphorbiaceae	Shrub	Not very common
36.	<i>Glycosmis pentaphylla</i>	Rutaceae	Tree	Common
37.	<i>Grangea madaraspatana</i>	Asteraceae	Herb	Common
38.	<i>Heliotropium indicum</i>	Boraginaceae	Herb	Common
39.	<i>Hemidesmus indicus</i>	Asclepiadaceae	Climber	Common

Table continued...

Sl. No	Species	Family	Habit	Occurrence
40.	<i>Hygrophyla salicifolia</i>	Acanthaceae	Herb	Common
41.	<i>Ipomoea fistulosa</i>	Convolvulaceae	Herb	Common
42.	<i>Lagerstroemia speciosa</i>	Lythraceae	Tree	Planted
43.	<i>Lygodium flexuosum</i>	Schizaeaceae	Climber	Not very common
44.	<i>Melastoma malabathricum</i>	Melastomaceae	Shrub	Common
45.	<i>Merremia umbellata</i>	Convolvulaceae	Climber	Not common
46.	<i>Microsolen cochinchinensis</i>	Loranthaceae	Parasite	Common
47.	<i>Mikania scandens</i>	Asteraceae	Climber	Common
48.	<i>Mimosa pudica</i>	Mimosaceae	Herb	Common
49.	<i>Nelsonia canescens</i>	Acanthaceae	Herb	Common
50.	<i>Nicotiana plumbaginifolia</i>	Solanaceae	Herb	Not very common
51.	<i>Nymphaea nouchali</i>	Nymphaeaceae	Herb	Not very common
52.	<i>Phragmites karka</i>	Poaceae	Herb	Common
53.	<i>Polygonum hydropiper</i>	Polygonaceae	Herb	Common
54.	<i>Polygonum plebejum</i>	Polygonaceae	Herb	Common
55.	<i>Pongamia pinnata</i>	Fabaceae	Tree	Planted
56.	<i>Pteris vittata</i>	Pteridaceae	Herb	Common
57.	<i>Rosa involucrata</i>	Rosaceae	Shrub	Common
58.	<i>Saccharum spontaneum</i>	Poaceae	Herb	Common
59.	<i>Salix tetrasperma</i>	Salicaceae	Tree	Not common
60.	<i>Schoenoplectus juncooides</i>	Cyperaceae	Herb	Not very common
61.	<i>Scleria levis</i>	Cyperaceae	Herb	Not very common
62.	<i>Scoparia dulcis</i>	Scrophulariaceae	Herb	Common
63.	<i>Sida cordifolia</i>	Malvaceae	Herb	Common
64.	<i>Smilax macrophylla</i>	Smilacaceae	Climber	Common
65.	<i>Spilanthes acmella</i>	Asteraceae	Herb	Not common
66.	<i>Sporobolus diander</i>	Poaceae	Herb	Common
67.	<i>Stebulus asper</i>	Rutaceae	Tree	Not very common
68.	<i>Syzygium fruticosum</i>	Myrtaceae	Tree	Not very common
69.	<i>Trewia nudiflora</i>	Euphorbiaceae	Tree	Not very common
70.	<i>Vernonia cinerea</i>	Asteraceae	Herb	Very common
71.	<i>Vetiveria zizanioides</i>	Poaceae	Herb	Common
72.	<i>Zizyphus mauritiana</i>	Rhamnaceae	Tree	Planted
73.	<i>Zizyphus oenoplia</i>	Rhamnaceae	Shrub	Common

Table 2. Amphibians of Ratargul study area

SL. No.	Order	Family	Scientific Name	English Name	Local Name	IUCN Bangladesh Category	IUCN Global Category	CITES Schedule
1.	Anura	Bufo	<i>Bufo melanostictu</i>	Common Toad	Kuno Bang	NO	-	-
2.	Microhylidae	Microhyla	<i>Microhyla ornata</i>	Cheena Bang	VU	-	-	-
3.			<i>Microhyla rubra</i>	Red Microhylid	Lal Cheena Bang	VU	-	-
4.		Ranidae	<i>Euphyictis cyanophlyctis</i>	Skipper Frog	Kotkoti Bang	NO	-	-
5.			<i>Hoplobatrachus tigerinus</i>	Bull Frog	Kola Bang	NO	II	II
6.			<i>Limnonectes limnocharis</i>	Crickit Frog	Jhi-jhi Bang	NO	-	-
7.		Rhacophoridae	<i>Rana alticola</i>	Boulenger's Frog	Pana Bang	VU	-	-
8.			<i>Polypedates leucomystax</i>	Tree Frog Dorakata	Gecho Bang	NO	-	-
9.			<i>Polypedates maculatus</i>	Maculated Tree Frog	Gecho Bang	NO	-	-

Table 3. Reptiles of Ratargul study area

SL. No.	Order	Family	Scientific Name	English Name	Local Name	IUCN Bangladesh Category	IUCN Global Category	CITES Schedule
1.	Testudines	Bataguridae	<i>Geoclamys hamiltonii</i>	Black pond turtle	Kalo Kasim	EN	LR	-
2.			<i>Hardella thurjii</i>	Brahminy River Turtle	Kali Kaitta	EN	LR	-
3.			<i>Kachuga tecta</i>	Indian Roofed Turtle	Kori Kaitta	NO	-	-
4.			<i>Gekko gekko</i>	Wall Lizard	Tokkhak	VU	-	-
5.			<i>Hemidactylus brookii</i>	House Lizard	Tiktiki	NO	-	-
6.		Agamidae	<i>Calotes jerdoni</i>	Garden Lizard	Sabuj Rokto-chosha	DD	-	-
7.			<i>Calotes versicolor</i>	Common Garden	Lizard Rokto-chosha	NO	-	-
8.			<i>Mabuya carinata</i>	Common Skink	Anjon	NO	-	-
9.			<i>Varanus bengalensis</i>	Bengal Monitor	Gui Shap	VU	-	I
10.			<i>Varanus flavescens</i>	Yellow Monitor	Shona Gui	EN	-	I
11.	Serpentes	Typhlopidae	<i>Ramphotyphlops braminus</i>	Common Worm Snake	Dumukha Shap	NO	-	
12.			<i>Typhlops porrectus</i>	Slender Worm Snake	Dumukha Shap	DD	-	
13.		Colubridae	<i>Ahaetulla nasutus</i>	Common Vine Snake	Laodoga Shap	VU	-	
14.			<i>Altreitium schistosum</i>	Olive Keelback	Maitta Shap	NO	-	
15.	Elapidae	<i>Coluber mucosus</i>	Rat Snake	Daraj	VU	-	II	
16.		<i>Xenochrophis piscator</i>	Checked Keelback	Dhora Shap	NO	-	-	
17.		<i>Bungarus caeruleus</i>	Common Krait	Kal Keotey	EN	-	-	
18.		<i>Bungarus fasciatus</i>	Banded Krait	Shankini Shap	EN	-	-	
19.		<i>Naja kaouthia</i>	Monocellate Cobra	Gokhra Shap	VU	-	-	
20.			<i>Naja naja</i>	Binocellate Cobra	Khoia Gokhra	EN	II	

Table 4. Birds of Ratargul study area

SL. No.	Order	Family	Scientific Name	English Name	Local Name	IUCN Bangladesh Category	IUCN Global Category	CITES Schedule
1.	Galliformes	Phasianidae	<i>Fringillus gularis</i>	Swamp Francolin	Kea/Jolar Titir	R	CR	VU
2.	Anseriformes	Dendrocygnidae	<i>Dendrocygna bicolor</i>	Fulvous Whistling-duck	Baro Shorali	R	NO	-
3.			<i>Dendrocygna javanica</i>	Lesser Whistling-duck	Sharali/Gecho-Hans	R	NO	-
4.	Piciformes	Picidae	<i>Ceuleus brachyurus</i>	Rufous Woodpecker	Lalchey Kaththokra	R	NO	-
5.			<i>Dendrocopos macei</i>	Fulvous-brested Woodpecker	Pakra Kaththokra	R	NO	-
6.			<i>Dendrocopos mahretensis</i>	Yellow-fronted Pied Woodpecker	Pakra Kaththokra	R	DD	-
7.			<i>Jynx torquilla</i>	Eurasian Wryneck	Metho Kaththokra	M	-	-
8.			<i>Dinopium benghalense</i>	Black-rumped Flameback	Kaththokra	R	NO	-
9.			<i>Megalaima asiatica</i>	Blue-throated Barbet	Basanta Bauri	R	NO	-
10.		Megalaimidae	<i>Megalaima lineata</i>	Lineated Barbet	Gurkhod/Beghbou	R	NO	-
11.	Upupiformes	Upupidae	<i>Upupa epops</i>	Common Hoopoe	Hudhud/Solaiman Pakhir	R	NO	-
12.	Coraciiformes	Coraciidae	<i>Coracias benghalensis</i>	Indian Roller	Niikantha	R	NO	-
13.		Alcedinidae	<i>Alcedo atthis</i>	Common Kingfisher	Choto Maachranga	R	NO	-
14.			<i>Halcyon smyrnensis</i>	Whitethroated Kingfisher	Maachranga	R	NO	-
15.		Cerylidae	<i>Ceryle rudis</i>	Pied Kingfisher	Pakra Maachranga	R	NO	-
16.		Meropidae	<i>Merops orientalis</i>	Green Beeeater	Suichora/Banspati	R	NO	-
17.	Cuculiformes	Cuculidae	<i>Cacomantis merulinus</i>	Plaintive cuckoo	Chatak/Sorgom	R	NO	-
18.			<i>Cacomantis sonneratii</i>	Banded Bay Cuckoo	-	R	DD	-
19.		Centropodidae	<i>Centropus sinensis</i>	Greater Coucal	Kanakua/Couca	R	NO	-
20.			<i>Clamator jacobinus</i>	Pied Cuckoo	Papiya	R	NO	-
21.			<i>Cuculus micropterus</i>	Indian Cuckoo	Bou-Katha-Kao Pakhi	R	NO	-
22.			<i>Eudynamis scolopacea</i>	Asian Cuckoo	Kokil/Kukil	R	NO	-
23.			<i>Hierococyx varius</i>	Common Hawk Cuckoo	Chokhgelo Pakhi	R	NO	-

Table continued...

SL. No.	Order	Family	Scientific Name	English Name	Local Name	IUCN Bangladesh Category	IUCN Global Category	CITES Schedule
24.			<i>Phaenicophaeus tristis</i>	Green-billed Malkoha	Sabuj Kokil	R	NO	-
25.	Psittaciformes	Psittacidae	<i>Psittacula krameri</i>	Roseringed Parakeet	Tia	R	NO	-
26.	Apodiformes	Apodidae	<i>Cypsiurus balasiensis</i>	Asian Palm Swift	Nakkati	R	NO	-
27.	Strigiformes	Tytonidae	<i>Tyto alba</i>	Barn Owl	Laxmi Pencha	R	NO	-
28.		Strigidae	<i>Athene brama</i>	Spotted Owlet	Khuruley Pencha	R	NO	-
29.			<i>Ketupa flavipes</i>	Tawny Fish Owl	Pencha	R	EN	VU
30.			<i>Ketupa zeylonensis</i>	Brown Fish Owl	Bhutum Pencha	R	VU	-
31.			<i>Caprimulgus affinis</i>	Savanna Nightjar	-	R	DD	-
32.			<i>Caprimulgus asiaticus</i>	Indian Nightjar	Choto Ratchara	R	NO	-
33.		Caprimulgidae	<i>Caprimulgus macrurus</i>	Large-tailed Nightjar	Ratchara	R	NO	-
34.	Columbiformes	Columbidae	<i>Columba livia</i>	Rock Pigeon	Jalali Kabutor	R	NO	-
35.			<i>Streptopelia chinensis</i>	Spotted Dove	Tila Ghughu	R	NO	-
36.			<i>Streptopelia decaocta</i>	Eurasian Collared Dove	Raj Ghughu/Dhobal Ghughu	R	NO	-
37.			<i>Streptopelia tranquebarica</i>	Red Collared Dove	Lal Ghughu/Jongla Ghughu	R	NO	-
38.			<i>Treron apicauda</i>	Pin-tailed Green Pigeon	Horial/Horikol	R	CR	-
39.			<i>Treron binnia</i>	Orange-breasted Green Pigeon	Horial/Horikol	R	NO	-
40.			<i>Treron phoenicoptera</i>	Yellow-footed Green Pigeon	Horial/Botkol	R	NO	-
41.			<i>Treron pompadora</i>	Pompador Green Pigeon	Choto Horial	R	NO	-
42.			<i>Amaurornis phoenicurus</i>	White-breasted Waterhen	Dahuk	R	NO	-
43.		Rallidae	<i>Gallinix cinerea</i>	Watercock	Kura	R	NO	-
44.			<i>Gallinula chloropus</i>	Common Moorhen	Jol Moorgi	R	NO	-
45.			<i>Gallinallus striatus</i>	Slaty-breasted Rail	-	R	NO	-
46.			<i>Porzana bicolor</i>	Black-tailed Crane	Dora Crane	R	DD	-
47.			<i>Porzana fusca</i>	Ruddy-breasted Crane	Ranga Crane	R	DD	-

Table continued...

SL. No.	Order	Family	Scientific Name	English Name	Local Name	IUCN Bangladesh Category	IUCN Global Category	CITES Schedule
48.			<i>Porzana porzana</i>	Spotted Crane	Chitra Crane	M	-	-
49.			<i>Porzana pusilla</i>	Baillon's Crane	-	M	-	-
50.			<i>Rallus aquaticus</i>	Water Rail	Jalchhari Rail	M	-	-
51.	Ciconiiformes	Rostratulidae	<i>Rostratula bengalensis</i>	Greater Painted-snipe	Rongilla Chaga	R	NO	-
52.		Jacaniidae	<i>Metopidius indicus</i>	Bronze-winged Jacana	Jolpipi/Pipi	R	NO	-
53.		Charadriidae	<i>Himantopus himantopus</i>	Black-winged Stilt	Lal-pa Dhenga	R	NO	-
54.			<i>Vanellus indicus</i>	Red-wattled Lapwing	Lal-lotika	R	NO	-
55.		Accipitridae	<i>Accipiter badius</i>	Shikra	Turki Baj	R	NO	-
56.			<i>Elanus caeruleus</i>	Black-shouldered Kite	-	R	NO	-
57.			<i>Gyps bengalensis</i>	White-rumped Vulture	-	R	NO	LR
58.			<i>Haliaeetus indus</i>	Brahminy Kite	Shankho Chil/Lal Chil	R	NO	-
59.			<i>Ichthyophaga ichthyaetus</i>	Grey-headed Fish Eagle	Maachmoral/Ukosh	R	NO	LR
60.			<i>Milvus migrans</i>	Black Kite	Bhubon Chil	R	NO	-
61.			<i>Pernis ptilorhynchus</i>	Oriental Honey-buzzard	-	R	DD	-
62.			<i>Spilornis cheela</i>	Crested Serpent Eagle	Tila Baj/ Shapkheko Baj	R	NO	-
63.			<i>Spizaetus cirrhatius</i>	Changeable Hawk Eafle	-	R	NO	-
64.			<i>Accipiter gentilis</i>	Northern Goshawk	Baro Baj	M	-	-
65.			<i>Aquila clanga</i>	Greater Spotted Eagle	Chitra Eagle	M	-	VU
66.			<i>Aquila pomarina</i>	Lesser Spotted Eagle	-	M	-	-
67.			<i>Aquila pomarina</i>	Lesser Spotted Eagle	-	M	-	-
68.			<i>Circus aeruginosus</i>	Marsh Harrier	-	M	-	-
69.			<i>Circus macrourus</i>	Pale Harrier	-	M	-	-
70.			<i>Circus melanoleucos</i>	Pied Harrier	-	M	-	-
71.			<i>Pandion haliaetus</i>	Osprey	Mecho Baaj	M	-	-

Table continued...

SL. No.	Order	Family	Scientific Name	English Name	Local Name	IUCN Bangladesh Category	IUCN Global Category	CITES Schedule
72.		Falconidae	<i>Falco chicquera</i>	Red-necked Falcon	Turmuti	R	DD	LR
73.			<i>Falco peregrinus</i>	Peregrine Falcon	-	M	-	-
74.			<i>Falco tinnunculus</i>	Common Kestrel	-	M	-	-
75.		Podicipedidae	<i>Tachybaptus ruficollis</i>	Little Grebe	Duburi/Dubalu	R	NO	-
76.		Phalacrocoracidae	<i>Phalacrocorax niger</i>	Little Cormorant	Paan-kowri	R	NO	-
77.		Ardeidae	<i>Ardeola grayii Indian</i>	Pond Heron	Kani Bok/Kana Bok	R	NO	-
78.			<i>Botaurus stellaris</i>	Great Bittern	-	M	-	-
79.			<i>Bubulcus ibis</i>	Cattle Egret	Go-bok	R	NO	-
80.			<i>Casmerodius albus</i>	Great Egret	Jathua/Sada Bok	R	NO	-
81.			<i>Dupetor flavicollis</i>	Black Bittern	Kalo Bok	R	DD	-
82.			<i>Egretta garzetta</i>	Little Egret	Choto Bok	R	NO	-
83.			<i>Ixobrychus connamomeus</i>	Cinnamon Bittern	Lal Bok	R	NO	-
84.			<i>Ixobrychus minutus</i>	Little Bittern	Khudey Bok	R	DD	-
85.			<i>Ixobrychus sinensis</i>	Yellow Bittern	Holdey Bok	R	NO	-
86.			<i>Mesophoyx intermedia</i>	Intermediate Egret	Maijia Bok	R	NO	-
87.			<i>Nycticorax nycticorax</i>	Black-crowned Night Heron	Waak/Nishi Bok	R	NO	-
88.		Ciconiidae	<i>Anastomus oscitans</i>	Asian Openbill	Shamuk-bhanga/ Shamuk-khol	R	NO	LR
89.		Scolopacidae	<i>Actitis hypoleucos</i>	Common Sandpiper	-	M	-	-
90.			<i>Gallinago gallinago</i>	Fantail Snipe	Kada-khochha	M	-	-
91.			<i>Gallinago stenura</i>	Pintail Snipe	Kada-khochha	M	-	-
92.			<i>Limnocryptes minimus</i>	Jack Snipe	Choto Chaga	M	-	-
93.			<i>Tringa tetanus</i>	Common Redshank	Lal-paPi-oo	M	-	-
94.	Passeriformes	Laniidae	<i>Lanius schach</i>	Long-tailed Shrike	Bagha Tiki	R	NO	-
95.			<i>Lanius cristatus</i>	Brown Shrike	Badami Koshai Pakhi	M	-	-
96.			<i>Lanius tephronotus</i>	Greatbacked Shrike	Koshai Pakhi	M	-	-

Table continued...

SL. No.	Order	Family	Scientific Name	English Name	Local Name	IUCN Bangladesh Category	IUCN Global Category	CITES Schedule
97.		Corvidae	<i>Corvus macrorhynchos</i>	Jungle Crow	Danr Kak	R	NO	-
98.			<i>Corvus splendens</i>	House Crow	Pati Kak/Kaua	R	NO	-
99.			<i>Dendrocitta vagabunda</i>	Rufus Treepie	Hanrichacha/Kutum	R	NO	-
100.			<i>Aegithina tiphia</i>	Common Iora	Towfik/Fatikjal	R	NO	-
101.			<i>Oriolus xanthonus</i>	Black-headed Oriole	Holdey Pakhi	R	NO	-
102.			<i>Dicrurus aeneus</i>	Bronzed Drongo	Choto Fingey	R	NO	-
103.			<i>Dicrurus macrocerus</i>	Black Drongo	Fingey	R	NO	-
104.			<i>Artamus fuscus</i>	Ashy Woodswallow	Latora	R	NO	-
105.			<i>Pericrocotus cinnamomeus</i>	Small Minivet	Sat Sali	R	NO	-
106.			<i>Tephrodornis pondicerianus</i>	Common Woodshrike	-	R	NO	-
107.			<i>Tephrodornis gularis</i>	Large Woodshrike	-	R	NO	-
108.			<i>Hypothymis azurea</i>	Black-napped Monarch	-	R	NO	-
109.			<i>Rhipidura albicollis</i>	White-throated Fantail	Lejnachani	R	NO	-
110.			<i>Rhipidura aureola</i>	White-browed Fantail	Lejnachani	R	DD	-
111.			<i>Rhipidura hypoxantha</i>	Yellow-bellied Fantail	-	R	DD	-
112.		Muscicapidae	<i>Culicicapa ceylonensis</i>	Grey-headed Canary Flycatcher	Futfuti	R	NO	-
113.			<i>Cyornis tickelliae</i>	Tickell's Blue Flycatcher	-	M	-	-
114.			<i>Eumyias thalassina</i>	Verditer Flycatcher	-	M	-	-
115.			<i>Ficedula parva</i>	Red-throated Flycatcher	Lalbook Chotok	M	-	-
116.			<i>Luscinia svecica</i>	Bluethroat	-	M	-	-
117.			<i>Monticola solitarius</i>	Block Rock Thrush	-	M	-	-
118.			<i>Saxicola torquata</i>	Common Stonechat	-	M	-	-
119.			<i>Turdus unicolor</i>	Tickell's Thrush	-	M	-	-
120.			<i>Zoothera citrina</i>	Orange-headed Thrush	-	M	-	-
121.		Sturnidae	<i>Acridotheres fuscus</i>	Jungle Myna	Jhuti Shalik	R	NO	-

Table continued...

SL. No.	Order	Family	Scientific Name	English Name	Local Name	IUCN Bangladesh Category	IUCN Global Category	CITES Schedule
122.			<i>Acridotheres tristis</i>	Common Myna	Bhat Shalik	R	NO	-
123.			<i>Sturnus contra</i>	Asian Pied Starling	Gobrey Shalik/Gu ShalikR	R	NO	-
124.			<i>Sturnus malabaricus</i>	Chestnut-tailed Starling	Kath Shalik	R	NO	-
125.	Hirundinidae		<i>Hirundo daurica</i>	Red-rumped Swallow	Ababil	M	-	-
126.			<i>Hirundo rustica</i>	Barn Swallow	Ababil	M	-	-
127.			<i>Hirundo striolata</i>	Striated Swallow	-	M	-	-
128.	Paridae		<i>Parus major</i>	Great Tit	-	M	-	-
129.			<i>Hirundo smithii</i>	Wire-tailed Swallow	-	R	NO	-
130.			<i>Roparia paludicola</i>	Plain Martin	-	R	DD	-
131.			<i>Riparia riparia Sand</i>	Martin Nakkati	-	R	DD	-
132.	Pycnonotidae		<i>Pycnonotus cafer</i>	Red-vented	Bulbul Bulbuli	M	-	DD
133.			<i>Pycnonotus jocosus</i>	Red-whiskered Bulbul	Bulbul Bulbuli	R	NO	-
134.			<i>Cisticola juncidis</i>	Zitting Cisticola	Sipahi Bulbuli	R	NO	-
135.			<i>Prinia inornata</i>	Plain Prinia	-	R	NO	-
136.			<i>Prinia socialis</i>	Ashy Prinia	-	R	DD	-
137.			<i>Prinia sylvatica</i>	Jungle Prinia	-	R	DD	-
138.	Zosteropidae		<i>Zosterops palpebrosus</i>	Oriental White-eye	Shet-ankhi	R	NO	-
139.	Sylviidae		<i>Alcippe nipalensis</i>	Nepal Fulvetta	-	R	NO	-
140.			<i>Alcippe poiocephala</i>	Brown-cheeked Fulvetta	-	R	NO	-
141.			<i>Alcippe rufogularis</i>	Rufous-throated Fulvetta	-	R	DD	LR
142.			<i>Chaetornis striatus</i>	Bristled Grassbird	-	R	DD	-
143.			<i>Graminicola bengalensis</i>	Rufous-rumped Grassbird	-	R	DD	-
144.			<i>Malacocincla abbotti</i>	Abbot's Babbler	-	R	NO	-
145.			<i>Megaurus palustris</i>	Striated Grassbird	-	R	DD	-
146.			<i>Orthotomus sutorius</i>	Common Tailorbird	Tuntuni/Tuni	R	NO	-
147.			<i>Pellorneum palustre</i>	Marsh Babbler	-	R	DD	VU

Table continued...

SL. No.	Order	Family	Scientific Name	English Name	Local Name	IUCN Bangladesh Category	IUCN Global Category	CITES Schedule
148.			<i>Pellorneum tickelli</i>	Buff-breasted Babbler	-	R	NO	-
149.			<i>Turdoides caudatus</i>	Common Babbler	-	R	DD	-
150.			<i>Turdoides earlei</i>	Striated Babbler	-	R	NO	-
151.			<i>Acrocephalus dumetorum</i>	Blyth's Reed Warbler	-	M	-	-
152.			<i>Bradypterus luteoventris</i>	Brown Bush Warbler	-	M	-	-
153.			<i>Bradypterus thoracicus</i>	Spotted Bush Warbler	-	M	-	-
154.			<i>Phylloscopus affinis</i>	Tickell's Leaf Warbler	-	M	-	-
155.	Alaudidae		<i>Alauda gulgula</i>	Oriental Skylark	Bharat Pakhi	R	NO	-
156.			<i>Eremopteris grisea</i>	Ashy-crowned Sparrow Lark	Balu Chata/Dhul Chata	R	NO	-
157.			<i>Mirafra assamica</i>	Rufous-winged Bushlark	Bharat Pakhi	R	NO	-
158.			<i>Mirafra erythroptera</i>	Indian Bushlark	-	R	DD	-
159.	Nectariniidae		<i>Nectarinia asiatica</i>	Purple Sunbird	Niituni/Madhuchushki	R	NO	-
160.			<i>Nectarinia zeylonica</i>	Purple-rumped Sunbird	Moutushi	R	NO	-
161.			<i>Dicaeum erythrorhynchos</i>	Pale-billed Flowerpecker	Fuljhuri	R	NO	-
162.	Passeridae		<i>Amandava amandava</i>	Red Avadavat	Lal Munia	R	NO	-
163.			<i>Lonchura malabarica</i>	Indian Silverbill	-	R	NO	-
164.			<i>Lonchura punctulata</i>	Scaly-breasted Munia	Tila Munia	R	NO	-
165.			<i>Passer domesticus</i>	House Sparrow	Charui	R	NO	-
166.			<i>Ploceus philippinus</i>	Baya Weaver	Babui/Baoi	R	NO	-
167.			<i>Anthus campestris</i>	Tawny Pipit	-	M	-	-
168.			<i>Anthus cervinus</i>	Red-throated Pipit	-	M	-	-
169.			<i>Anthus godlewskii</i>	Blyth's Pipit	-	M	-	-
170.			<i>Anthus hodgsonii</i>	Olive-backed Pipit	-	M	-	-
171.			<i>Anthus roseatus</i>	Rosy Pipit	-	M	-	-
172.			<i>Anthus rufulus</i>	Paddyfield Pipit	-	M	-	-
173.			<i>Motacilla alba</i>	White Wagtail	-	M	-	-
174.			<i>Motacilla cinerea</i>	Grey Wagtail	Khonjan	M	-	-
175.			<i>Motacilla flava</i>	Yellow Wagtail	Halud Khonjan	M	-	-

Table 5. Mammals of Ratarjul study area

SL. No.	Order	Family	Scientific Name	English Name	Local Name	IUCN Bangladesh Category	IUCN Global Category	CITES Schedule
1.	Insectivora		<i>Suncus murinus</i>	Grey Musk Shrew	Chika	NO	-	-
2.	Chiroptera	Pteropodidae	<i>Pteropus giganteus</i>	Flying Fox	Badur	NO	-	-
3.			<i>Rousettus leschenaulti</i>	Fulvous Fruit Bat	Kola Badur	DD	-	-
4.		Emballonuridae	<i>Taphozous longimanus</i>	Sheath-tailed Bat	-	DD	-	-
5.			<i>Taphozous melanopogon</i>	Bearded Sheath-tailed Bat	-	DD	-	-
6.		Megadermatidae	<i>Megaderma lyra</i>	False Vampire	Daini Badur	NO	-	-
7.		Vespertilionidae	<i>Hesperoptenus tickelli</i>	Tickell's Bat	-	DD	-	-
8.			<i>Pipistrellus coromandra</i>	Indian Pipistrelle	-	NO	-	-
9.	Primates	Cercopithecidae	<i>Macaca mulatta</i>	Rhesus Macaque	Banor	VU	LR	-
10.	Carnivora	Canidae	<i>Canis aureus</i>	Jackal	Pati Shial	VU	-	-
11.		Felidae	<i>Felis chaus</i>	Jungle Cat	Ban Biral	EN	-	II
12.			<i>Prionailurus viverrinus</i>	Fishing Cat	Mecho Biral	EN	LR	II
13.		Herpestidae	<i>Herpestes auripunctatus</i>	Small Indian Mongoose	Benji	NO	-	-
14.			<i>Herpestes edwardsi</i>	Common Mongoose	Bara Benji	VU	-	-
15.		Mustelidae	<i>Lutra lutra</i>	Common Otter	Ud	CR	-	I
16.		Viverridae	<i>Paradoxurus hermaphroditus</i>	Common Palm Civet	Gandho Gokul	VU	-	-
17.			<i>Viverra zibetha</i>	Large Indian	Civet Bagdash	EN	-	-
18.			<i>Viverricula indica</i>	Small Indian	Civet Khatash	VU	-	-
19.	Rodentia	Sciuridae	<i>Callosciurus pygerythrus</i>	Irawaddy Squirrel	Badami Kathbirali	NO	VU	-
20.		Muridae	<i>Bandicota bengalensis</i>	Indian Mole Rat	Indur	NO	-	-
21.			<i>Bandicota indica</i>	Bandicoot Rat	Bara Indur	NO	-	-
22.			<i>Millardia meltda</i>	Metad Rat	-	DD	-	-
23.			<i>Mus booduga</i>	Indian Field Mouse	Metho Indur	NO	-	-
24.			<i>Mus musculus</i>	House Mouse	Nengti Indur	NO	-	-
25.			<i>Rattus rattus</i>	Common House Rat	Indur	NO	-	-
26.		Hystriidae	<i>Hystrix indica</i>	Indian Crested Porcupine	Shojaru	EN	-	-

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