

# ASSAM

*Land of Red River & Blue Hills*



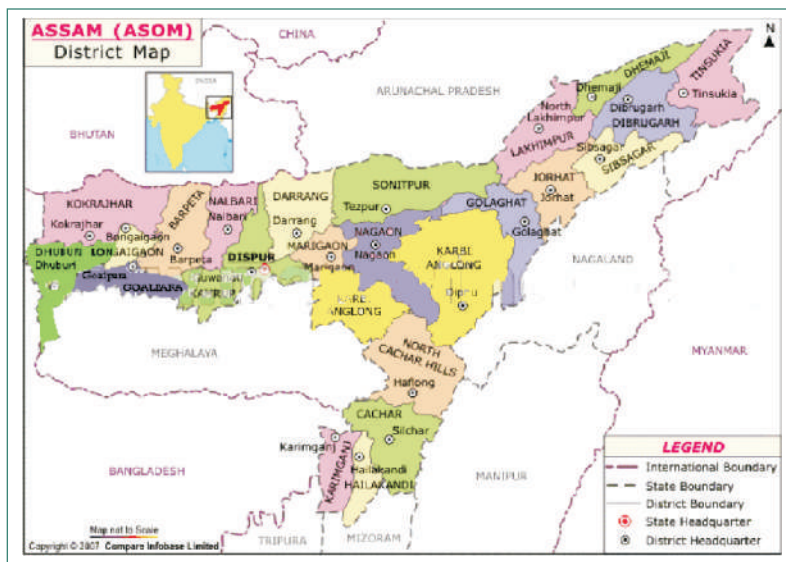
**Assam State Biodiversity Board**

[www.asbb.gov.in](http://www.asbb.gov.in)

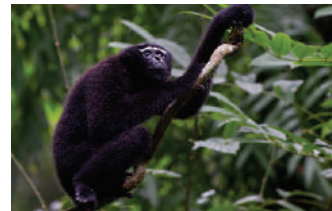
## INTRODUCTION

Assam is one among the eight northeastern states of India. Situated between 20° N and 28° N latitude and 90° E and 96° E longitude, the state is surrounded by Arunachal Pradesh, Nagaland, Mizoram and Meghalaya. It has also common international boundary of 500 km with Bhutan and 200 km with Bangladesh. The land is particularly famous for its natural beauty. The landscape includes tea gardens, the river Brahmaputra, many historical monuments and temples. The State of Assam is a constituent unit of the Eastern Himalayan Biodiversity Region; one of the two biodiversity “Hot Spots” in the country. The climatic condition and variety of physical features in Assam have resulted in a diversity of ecological habitats such as forests, grasslands, wetlands, which harbour and sustain a range of floral and faunal species.

## LOCATION MAP



Greater Adjutant Stork  
(*Leptoptilos dubius*)



Hoolock Gibbon  
(*Hoolock hoolock*)



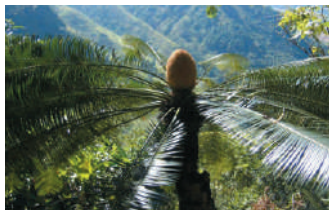
Pygmy hog  
(*Porcula salvania*)



River Dolphin  
(*Platanista gangetica*)



Phul Champa  
(*Magnolia champaca*)



Nagfan  
(*Cycas pectinata*)



Orchid  
(*Arundina graminifolia*)



Honaru  
(*Cassia fistula*)

## BIODIVERSITY IN ASSAM

### FLORAL DIVERSITY

**Angiosperms:** 3017 species

**Gymnosperms:** 23 species

**Medicinal Plants:** 952 species

**Orchids:** 193+ species

**Bamboos:** 42 species

**Cane:** 14 species

**Ferns:** 315 species

**Aquatic Plants:** 100+ species

### FAUNAL DIVERSITY

**Mammals:** 164+ species

**Primates:** 10 species

**Birds:** 800+ species (280 migratory)

**Reptiles:** 116 species (approx)

**Amphibians:** 60+ species

**Fishes:** 197 species

**Molluscs :** 39 species

**Butterflies:** 1500 species (approx.)

**Moths:** 387 species

Source: Assam Forest Department (2011-12)

## FORESTS & PROTECTED AREAS OF ASSAM

Assam has 37.3% of its geographic area under forests and tree cover. The Protected Area Network in Assam include the following:

### **National Park: 5**

(Kaziranga, Manas, Nameri, Dibru-Saikhowa and Orang Rajiv Gandhi)

### **Tiger Reserve: 3**

(Kaziranga, Manas and Nameri)

### **Elephant Reserve: 5**

(Sonitpur, Chirang-Ripu, Dihing Patkai, Kaziranga-Karbi Anglong and Dhansiri-Lumding)

### **Biosphere Reserve: 2**

(Manas and Dibru-Saikhowa)

### **World Natural Heritage Sites: 2**

(Kaziranga and Manas )

### **Wildlife Sanctuaries: 20**

(Garampani, Laokhowa, Bornadi, Chakrasila, Burachapori, Panidihing Hollongapar Gibbon, Pobitora, Sonai-Rupai, Bherjan-Borajan-Padumoni, East Karbi-Anglong, Nambor, Marat-Longri, Nambor-Doigurung, Amchang, Dihing-Patkai, Borail, Deepar-Beel, Bordoibum (Proposed) and North Karbi-Anglong (Proposed).

## STATE SYMBOLS OF ASSAM



### STATE ANIMAL

Indian one-horned Rhino  
*Rhinoceros unicornis*  
Gor (Assamese)



### STATE TREE

Hollong  
*Dipterocarpus macrocarpus*  
Hollong (Assamese)



### STATE BIRD

White-wing Wood Duck  
*Cairina scutulata*  
Deo Hah (Assamese)



### STATE FLOWER

Fox-tail Orchid  
*Rhynchosyilis retusa*  
Kopou Phul (Assamese)



## AGRICULTURE

In Assam, agriculture makes an important contribution to the income and employment of local people. Rice is the main agricultural crop and staple food. Other important crops produced in the state are wheat, maize, pulses, sugarcane and jute besides a large variety of fruits, vegetables and spices.





## Rice Diversity

North Eastern India is regarded as the cradle for evolution of many cultivated crops including rice. Assam has over 20 cultivated rice varieties and over 40 wild associates. Agriculture classes of indigenous rice in Assam:

- *Ahu* or Autumn Rice: *Dumai*, *Chengri*, *Murali*, *Ahu* etc.
- *Sali* or Winter Rice: *Sali*, *Lahi*, *Joha*, *Ijong*, *Komol* etc.
- *Boro* or Summer Rice: *Boro Dhan*

### Joha Rice:

Assam has a unique class of rice called joha rice. This class includes several varieties of aromatic rice like *Kola joha*, *Kunkuni joha* etc. Joha rice grains are fine and have high palatability and consumer demand. These are suitable for Polao and Biryani.

### Komol Chaul:

This is also a unique class of rice of Assam. This is suitable for instant use as snacks and not used as staple food. The uniqueness of this class of rice is that it does not require cooking. Soaking of the rice in lukewarm water for few minutes makes it ready to serve with milk or curd. To taste sugar/ jaggery or salt may be added.

## HORTICULTURE

Assam is traditionally rich in horticultural production due to its diverse and unique agro-climatic condition, conducive for growing a range of horticultural crops like fruits, vegetables, flowers, spices, nuts, medicinal and aromatic plants. Major horticultural crops of Assam include banana, mango, lemon, orange, litchi, pineapple, papaya, guava, jack-fruit, chilli, turmeric, ginger, black pepper, coriander, areca nut, coconut etc.

### Banana:

Banana (*Musa* sp.) is an important fruit crop of Assam. Its year round availability, affordability, varietal range, taste, nutritive and medicinal value makes it the favourite fruit among all classes of people. Assam has about 13 varieties of bananas, each unique in taste and high nutrient content. Prominent among them are jahaji kol (*Musa chinensis*), cheni-champa kol (*Musa champa*), malbhog kol (*Musa assamica*), manohar kol (*Musa sapientum*), kach kol (*Musa paradisiaca*), bhim kol (*Musa gigantea*), athia kol (*Musa balbisiana*), senduri kol (*Musa velutina*) etc.



Kach Kol (*Musa paradisiaca*)



Bhim kol (*Musa gigantea*)



Cheni champa Kol (*Musa acuminata*)



Senduri Kol (*Musa Velutina*)

### Local fruits of Assam:

Assam with its diverse topography, climate and agro-ecological conditions supports a variety of local indigenous fruit plants rarely known in other parts of the country. Due to their rich nutritional value, these fruits are in high demand and fetch good prices compared to hybrid varieties. These fruits have multipurpose uses and play a significant role in sustenance and the wellbeing of rural people by providing nutrition, household income and employment. Many of them have medicinal properties and are used in traditional medicinal practices like Ayurveda and Unani.



Bor Thekera (*Garcinia cowa*)



Kordoi (*Averrhoa carambola*)



Karja tenga (*Carissa carandus*)



Leteku (*Baccaurea ramiflora*)



Tea Bud



Close up of Tea Plant

### TEA PLANTATIONS IN ASSAM

Assam is the biggest producer of quality tea in India, contributing about 55 per cent to country's total tea production. Tea industry has contributed substantially to the economy of the state. About 17 percent of the workers of Assam are engaged in the tea industry. Tea plants used to grow naturally in the Upper Brahmaputra Valley. Presently it grows both in the Brahmaputra and Barak plains. Tinsukia, Dibrugarh, Sibsagar, Jorhat, Golaghat, Nagaon and Sonitpur districts are rich in tea gardens.

### Major Spices cultivated in Assam:

Cultivation of Spices in Assam is gaining momentum in recent years owing to its commercial potentiality. The major varieties of spices cultivated in Assam include chilli, ginger, black pepper, garlic and turmeric. Chilli (*Capsicum annuum*) is an important commercial and export-oriented crop in India. A large number of chilli cultivars are available in Assam. A great variation is usually seen in respect of their sizes, shape, colour, fruiting habit and also in capsaicin content. *Surajmukhi jalakia*, *Krishna jalakia*, *Dhan Jalakia*, *Kon jalakia*, *Bhut jalakia* etc are some popular local chilli cultivars of Assam. The *Bhut Jolokia* has been included in the Guinness Book of World Records in 2007 as the hottest chilli in the world.



Bhut Jolokia  
(*Capsicum annuum* var. *nagahari*)



## BAMBOOS IN ASSAM

Bamboo has played an important part in the lives of the people of Assam. It has tremendous economic value besides being an integral part of the social and cultural traditions of the state. It grows in natural forests, and is cultivated in homesteads, groves and on private plantations. It is utilised for housing, fencing, agricultural implements, handicrafts, fuel and food. More than 42 naturally growing species of bamboo under 15 genera are recorded from Assam. Some of bamboo varieties found in Assam includes *Bambusa balcooa* (Bholuka Bah), *Bambusa cacharensis* (Bethuwa Bah), *Bambusa gigantea* (Koriya Bah), *Bambusa tulda* (Jati Bah), *Bambusa vulgaris* (Kolsi Bah), *Dendrocalamus giganteus* (Bor Kako Bah), *Dendrocalamus hamiltonii* (Kako Bah), *Melocanna baccifera* (Muli Bah), *Oxytenanthera parviflora* (Pahari Jati Bah), *Schizostachyum dwlooa* (Dulu Bah) etc. *Bambusa cacharensis* is restricted to Barak Valley. *Oxytenanthera parviflora* is restricted to N.C. Hills. *Bambusa vulgaris* is the introduced species cultivated throughout Assam as ornamental plant.



## SERICULTURE IN ASSAM:

Assam is well known for its Sericulture industry and bulk of the country's Eri and Muga silk are produced in Assam. Rearing of Eri, Muga and Mulberry silk worm are playing an important role in the livelihoods of a large section of rural population of the State. It is practiced in more than 9000 villages and provides employment to around 1.91 lakh families. Further, the Muga silk variety, also known as the "Golden Silk" is endemic to Assam and contributes about 99 percent of the world's production. The state has already received the right of "Geographical Indication" for Muga thread.



Muga Cocoons

## **ASSAM STATE BIODIVERSITY BOARD**

The Government of Assam constituted the “Assam State Biodiversity Board” on 29<sup>th</sup> September 2010 to promote biodiversity conservation in the state, sustainable use of its components and equitable sharing of benefits arising out of the use of biological resources and traditional knowledge associated with these resources. The Assam Biodiversity Rules were notified in 2010. The head quarter of the Board is located at Guwahati.

### **OUR VISION**

Bountiful, secured and economically rewarding biological diversity.

### **OUR MISSION**

Ownership rights to people for conservation and wise-use of local biological resources and equitable sharing of benefits on commercial utilisation.

---

### **ACKNOWLEDGEMENT**

The Assam State Biodiversity Board sincerely acknowledges the contributions made by various Forest Officials, Researchers, Students and other friends for providing us the information and the photographs personally and through public domain.

World Natural Heritage Sites of Assam -



Kaziranga



Manas

### **Assam State Biodiversity Board**

Paryatan Bhawan, 1<sup>st</sup> Floor A. K. Azad Road, Rehabari, Guwahati-781008

Phone: 0361-2733917, Fax: 0361-2733780

Email: [assambioboard@gmail.com](mailto:assambioboard@gmail.com)

Website: [www.asbb.gov.in](http://www.asbb.gov.in)