Class - VII

ENVIRONMENT SCIENCE

Tea plant (Scientific name: Camellia sinensis)

Common name: Tea, tea bush, cha, chai
Leaves: Bright green and shiny
Flowers: Scented, occurring singly or in clusters of two to four.
Fruits: Brownish-green, containing one to four spherical or flattened seeds.
Origin: Native to East, South and Southeast Asia, but it is today cultivated across the world in tropical and subtropical regions.

Origins: Early trade history

The story of tea starts in China in 2737 BC. China is considered to be the source of the indigenous tea plant and the birthplace of the first tea gardens.

According to the legend, the Chinese and renowned herbalist ShenNung, was sitting under a tree while his servant boiled drinking water, when few leaves from the tree blew into it. The emperor was then attracted by the pleasant fragrance rising from the steaming infusion. The tree was a *Camelliasinensis,* and the brew that was accidentally created was the tea beverage.

Tea has achieved popularity in other parts of the world only since the middle of the 17th century. Commercial cultivation of tea gradually expanded to India, Indonesia, and Sri Lanka until the middle of the 19th century.

Tea is a perennial crop. Recently planted tea bushes need at least three years to attain maturity and start yielding green leaves for manufacture. The economic life of the plant is about 40 years, but sometimes the shrubs are kept in production 60 -70, or even 100 years. The life of the tea bush is more than 100 years as its economic age. However, it depends upon the type of tea plant, climatic conditions and the care received from the growers during the lifetime.

The tea plant has to grow in a broad range of conditions.

Tea can grow from subtropical climates to tropical climates, but generally requires a fair amount of humidity and rainfall during the growing season.

- Altitude is one of the key influencers of climate. With a higher elevation and temperatures become more variable, rainfall generally becomes higher. Tea soils must be acidic.
- The seasonality of precipitation is important in affecting the quality of tea, and tea leaves harvested at different times will produce a finished product with different characteristics.

Growing and harvesting of tea

The growth cycle is from 240 to 365 days, fruits takes from 270 to 360 days to mature and seeds are normally produced after 3 years.

The young plants that have been carefully nurtured in nurseries for up to a year are re-planted in especially prepared fields following the natural reliefs of the land, or sometimes, on specially prepared terraces to help irrigation and to prevent erosion. The plants are planted 3 to 5 feet (1 to 1.5 meters) apart. It takes approximately two to threeyears, depending on the elevation and climatic conditions, before these plants are ready to produce tea.

Pruning

When the young plant develops to a height of about half a meter above ground level, it is cut back to within a few inches off the ground to develop it into a flat-topped bush.

Plucking or Picking

Plucking consists of harvesting fresh young shoots from the mature tea bushes. Tea shoots are picked, which generally named as “plucking”. A tea shoot at the correct maturity for the manufacture of high quality made tea, comprises of an unfurled bud with two or three soft leaves.

Tea Processing

As soon as the newly picked leaves reach the factory, processing begins. Tea processing is the method in which the leaves from the tea plant are transformed into the dried leaves for brewing tea. The categories of tea are distinguished by the processing they undergo. Tea processing involves different manners and degree of oxidation of the leaves, ending the oxidation, forming the tea and drying it.

Tea processing for all tea types consists of very similar traditional methods with only minor variations. The main different steps are the following:

The whitering: Tea leaves begin to wilt soon after plucking, with a gradual beginning of enzymatic oxidation. This process is called withering, and is used to eliminate excess water from the leaves and allow slight oxidation. Cold or warm air is blown through the leaf for 12 to 18 hours.
Maceration: Tea leaves are bruised or torn in order to promote and accelerate oxidation.
Fermentation: Macerated leaf is held in a climate- controlled room (warm, humid) for up to few hours.
Fixation: This step is done to stop the tea leaf oxidation at a desired level. This process is accomplished by moderately heating tea leaves, therefore deactivating their oxidative enzymes and removing undesirable scents in the leaves, without damaging the flavour of the tea.
Rolling or Shaping: Damp tea leaves are rolled to be formed into wrinkled strips, by hand or using a rolling machine, which causes the tea to wrap around itself. This rolling action gives the leaves a curled appearance and further improves the taste of the tea.
Drying: Fermented leaf is dried in a current of hot air, which stops the fermentation and reduces the moisture content.
Curing or Aging: Secondary fermentation, or baking, is done to reach the drinking potential. Flavored teas are manufactured in this stage by spraying the tea with aromas and flavors or by storing them with flavorings.
Grading: The dry leaves are size graded and separated, large from small and broken from unbroken leaves. This classification gives grades to tea leaves.

Cut-tear-curl (CTC)

The processing has three stages (crush or cut, tear, curl). The tea leaves may be either hand plucked or harvested by machinery. The leaves are then processed through the CTC machine, have a palletized appearance and are always broken sizes. The method is less costly to produce and made a less bulky tea that would brew more quickly and with an even, robust flavor.

Tea grading-At the end of the manufacturing process, tea consists of a mixture of different sized pieces of leaf. The harvesting and manufacturing of tea has a great impact on the finished size of the leaf, thus the tea grade. In order to ensure an even brew, these particles must be sorted into different grades (or sizes). These grades are not standardized worldwide and may vary according to origin.

Most black teas are graded and sold according to leaf or particle size.

Nutritional properties The major interest in tea and health come from the high level of antioxidant tea polyphenols in green tea and black tea.
Tea includes polyphenols, alkaloids, amino acids, carbohydrates, proteins, chlorophyll, volatile organic compounds, fluorides, aluminium, minerals and trace elements.

Environmental impacts

Tea cultivation has multiple environmental effects. There is significant biodiversity loss when high biodiversity areas such as forests are transformed to tea plantations. Large areas of biodiversity replaced by monoculture, logging for firewood to process tea and habitat conversion have cause extensive deforestation. Land clearance has harmful environmental impacts and provides ideal conditions for a number of pests. Thus, the hazardous application of harmful pesticides is negatively affecting the local and wider environment. It reduces soil biodiversity and generates water pollution, harming aquatic life, animals and people who depend on the biodiversity.

WETLANDS OF ASSAM

Wetlands are areas of land where water covers the soil – all year or just at certain times of the year. They include:

- swamps
- marshes
- lakes
- lagoons
- mangroves
- coral reefs
- Bogs and fens
- peatlands

Importance of wetlands

Wetlands are a critical part of our natural environment. They reduce the impacts of floods, absorb pollutants and improve water quality. They provide habitat for animals and plants and many contain a wide diversity of life, supporting plants and animals that are found nowhere else. Many wetlands are areas of great natural beauty. Wetlands are a vital link between land and water.

Wetlands of Assam

Natural wetlands occur where surface water collects or where groundwater discharges to the surface. Due to the water filtration processes which occur at wetlands, they are sometimes referred to as the 'kidneys' of a catchment area.

Wetlands that contain water all year round are called **permanent wetlands** and those that fill seasonally are called **temporal wetlands**. Others, called **ephemeral wetlands**, only contain water after heavy rains or during floods, perhaps once every few years.

Wetland environments have a variety of important functions in natural and urban areas including: Wildlife support, Water retention, Improving water quality, Flood control, Erosion control, Groundwater aquifer recharge, Natural fire breaks, Education, Eco–tourism, Recreation

Cultural significance

The valley of the river Brahmaputra with its innumerable fresh water lakes (locally called beel), or ox-bow lakes (era suti), marshy tracts and seasonally flooded plains and hundreds of riverine sandbars and islands was, till recently, an ideal wetland eco-system which contained specialised wetland animals like the fresh water dolphin, the great Indian one-horned rhino and reptiles like the crocodile, the winter monitor lizard and few species of turtles. All these creatures are highly endangered at present.

The various types of wetlands found in Assam are as follows:

Lakes / Ponds :

In Assam, there are 690 lakes and ponds as recorded. These lakes /ponds cover an area of 15494.00 ha or hectare, which constitutes 0.20 percent of the total geographical area of the state and 15.30 percent of the total area under wetlands.

District- wise 3513 numbers of wetlands are identified in Assam by Assam Remote Sensing Application Centre, Assam

Ox-bow Lakes / Cut-off Meanders:

An oxbow lake is a U-shaped lake that forms when a wide meander of a river is cut off, creating a body of water. In Assam, a total of 1125 number of waterlogged areas are observed which are distributed unevenly covering an area of 23431.50 ha which constitutes 0.30 percent of the total geographical area of the state and 23.15 percent of the total area under wetlands. These water-logged areas play significant role in the region's economy as they are present in large numbers in the rural areas containing good amount of fishes and other aquatic fauna and providing habitat to a variety of migratory as well as domestic birds. Besides they have remarkable potential for supplying irrigation water to the nearby agricultural fields during the dry periods.

Swampy/Marshy areas :

These swampy/marshy areas constitute another major group of wetlands in Assam. These are identifiable on satellite imagery by their reddish tone indicating the presence of vegetation, associated with dark blue tone inferring to the presence of water and their occurrence in the low lying areas. Due to the presence of varied quantities of minerals in the water, these swampy/marshy areas are either moderately or highly turbid. In most cases, there is no feeder channel to control the inflow or outflow of water. In Assam, as many as 712 swampy/marshy areas have been identified from satellite data which cover an area of 43433.50 ha constituting 0.55 percent of the total geographical area of the state and 42.91 percent of the total area under wetlands.

Reservoirs :

Reservoirs are artificial impoundments of water for irrigation, flood control, municipal water supplies, hydro-electric power generation and so forth. There are as many as 10 reservoirs covering an area of 2662.5 ha which constitutes 0.03 percent of the total geographical area of the state and 2.63 percent of the total area under wetlands.

Tanks:

In Assam, a total of 115 numbers of tanks are identified from satellite data. An analysis of aquatic vegetation in these tanks indicates that most of them are free from vegetation. Highest number of tanks are observed in Sibsagar district (20 number) followed by Kamrup (18 number) and Sonitpur (16 number). But area wise, the highest area under this category is observed in Sibsagar district (267.00 ha) followed by Sonitpur (83.50 ha) and Kamrup (80.00 ha) districts. Some of the important wetlands under this category are GaurisagarPukhuri, SibsagarPukhuri and JoysagarPukhuri in Sibsagar district. Besides providing water to the people of the nearby areas, these tanks can also be used for rearing fishes and raising plantation crops like coconut, arecanut, cashewnut etc. along the sides of the ponds. Ornamental gardens can also be developed on the banks of the ponds.

It is therefore felt to be an imperative need to conserve these wetlands and protect their unique biodiversity. If properly managed, the wetlands are going to be a source of immense wealth for this state leading also to enrichment of the quality of its environment

DeeporBeel

DiporBil, also spelt DeeporBeel (Bil or Beel means "lake" in the local Assamese language), is located to the south-west of Guwahati city, in Kamrup district of Assam, India. It is a permanent freshwater lake, in a former channel of the Brahmaputra River, to the south of the main river. It is also called a wetland under the Ramsar Convention which has listed the lake in November 2002, as a Ramsar Site for undertaking conservation measures on the basis of its biological and environmental importance.A Ramsar site is a wetland site designated to be of international importance under the RamsarConvention.TheRamsar Convention, is an intergovernmental environmental treaty established in 1971 by UNESCO, which came into force in 1975. It provides for national action and international cooperation regarding the conservation of wetlands, and wise sustainable use of their resources.

It is considered as one of the largest Beels in the Brahmaputra valley of Lower Assam.This enormous wetland system provides an important breeding and feeding grounds for millions of water fowl, consisting of more than 70 migratory species.

The DiporBil is reported to provide, directly or indirectly, its natural resources for the livelihood of fourteen indigenous villages (1,200 families) located in its precincts. Freshwater fish is a vital protein and source of income for these communities; the health of these people is stated to be directly dependent on the health of this wetland ecosystem.

Migratory birds in Deepor Beel

Garbage causing shrinkage of Wetlands

Wetlands are one of the most threatened habitats of the world due to several anthropogenic pressures. Rapidly expanding human population, large scale changes in land use/ land cover, development projects and improper use of watersheds have all caused a substantial decline of wetland resources of the country. Significant losses have resulted from its conversion threats from industrial, agricultural and various urban developments. These have led to hydrological perturbations, pollution and their effects. Unsustainable levels of grazing and fishing activities have also resulted in degradation of wetlands.

GEOGRAPHY

PHYSIOGRAPHY OF ASSAM

Brief Introduction to Formation of Landforms

Assam, located in tropical latitudes (24ºN to 28ºN) and eastern longitude (89º5'E - 96º1'E), is the most populous state in the North-east India. It is surrounded on three sides by hills and mountains. The river Brahmaputra and Barak flows in the north and south respectively.

Assam is diverse in physical features and the major physiographical components are the senile plateau of Karbi-Anglong, representing a part of peninsular India, North Cachar hills which display the most youthful and highly differentiated relief features and the Brahmaputra and Barak plains present aggradational surfaces.

Landmasses from Archaean to Tertiary origin bear the evidences of the evolutionary history of the earth in Assam and North-East India. The Karbi plateau is a part of Old-Gondwana land of more than 600 million years, the folded hills of North-Cachar belongs to tertiary period and the alluviums are of Quaternary Period. The North-Eastern region of India including Assam is situated in the merging zone of two Tectonic plates, namely the Indo-Australian and Euro-Asian plates. So the entire region is seismically very active.

Physiographical Divisions of Assam

On the basis of physical setup, Assam can be divided into three physiographical units:

1) The Brahmaputra valley or Assam valley

2) The Barak plain or Surma Valley

3) The hilly areas of Karbi-Anglong and North-Cachar Hill Districts

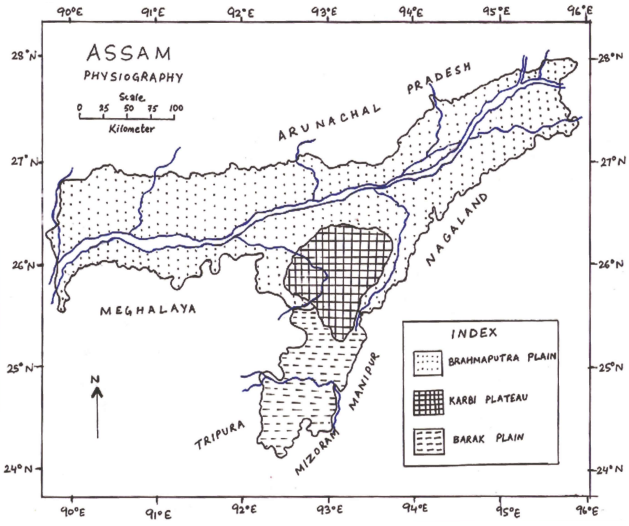

Fig1.1: Physiographic Divisions of Assam.

The Brahmaputra Valley

The most prominent physical feature in Assam is the Brahmaputra valley. This plain is surrounded by Bhutan and the Arunachal Himalayas in the north, Patkai Bum and Arunachal Hills in the east and Naga Hills, Karbi Plateau in the south. It is open to and joined with the Ganga plain in the west. It, is therefore, often referred to as the easternmost part of the Indus-Ganga-Brahmaputra plain. Geomorphic studies conclude that the Brahmaputra, the life-line of Assam is an antecedent river, older than the Himalayas.

From the north-east to the west it is about 720 Km long and from the north to the south it is on the average 90 Km wide, it is a narrow valley. It is the largest plain of North-east India covering an area of 54,315 Sq.Km. The **almond shaped** valley is built mostly by aggradational work of the River Brahmaputra and its tributaries. Most of the prominent towns and cities of Assam are situated in this valley, example Guwahati, Dibrugarh, Tezpur etc.

The River divides the valley into two parts: the North bank plain and the South bank plain. An interesting feature of the plain is the presence of isolated **Hillocks** on the either bank of the Brahmaputra, in the east presence of such hillocks starts from Negheriting. Then there are Biswanath (North Bank), Kamakhya (South Bank), Bhumuragiri (North Bank), Chatrachal (South Bank), Mayang (South Bank), etc. upto Guwahati. The valley in its east-west direction has four distinct physiographic units, viz. The northern foothills, the north and south bank plains, the flood plains and the char lands, and the southern foothills

The Barak or Surma Valley

The Barak plain is created by the aggradational and degradational activities of the Barak river system. The area of this plain is about 6,962 Sq.Km., the Barak plain is located in the southern part of Assam encircled on the north by the North-Cachar hills, on the east by the Manipur hills and on the south by the Mizoram hills.

The plain is **horse-shoe shaped** with 85 Km of the east-west extension and 70 Km north-south extension near Bangladesh border. The Barak plain is piedmont in nature and presents a mosaic of isolated low hillocks locally known as 'tillas'. The river Barak flows through the middle part of the plain sluggishly in meandering course forming series of swamps and Ox-bow lakes.

The hilly areas of Karbi-Anglong and North-Cachar hill Districts

The two valleys of Assam are separated by long range of hills. The Karbi Hills and the North Cachar Hills are located in the south of the Brahmaputra valley.

Karbi plateau is **pear shaped** and has an area of 7000 Sq.Km. The plateau is almost separated from Meghalaya by the erosional activities of the river Kopili and its tributaries. The topography of the plateau is senile and the height of the central part is about 1300m-

1400m. This part is composed of metamorphosed crystalline rocks. The eastern part is made up of sedimentary rocks like limestone, sandstones, shale etc. The highest peak is Dambukso (1363m).The Karbi plateau covers the whole Karbi Anglong districts of Assam.

To the south of Karbi plateau lie the young folded ranges of North-Cachar hills representing the Himalayas in Assam. These young folded hills cover the whole North Cachar(Dima-Hasao) districts of Assam. The average altitude of this region is about 1600m and the Mahadeo peak (1953m) is the highest point of the North-Cachar Hills. The hill has been dissected by the river Kopili and Dhansiri. The Karbi-Anglong plateau supports numbers of coal reserves, hot spring and Water-falls.

Role of Physiography in determining the life of people

Assam is primarily an agriculture state, which accounts for the livelihood of about four-fifths of the state's population. More than 70 percent of the workforce is engaged in agriculture and allied activities. Rice is the primary food crop; cash crops like jute, tea, cotton, oilseeds, sugarcane, potato, etc., are also grown in the state. Also grown on a small scale are horticulture crops like orange, banana, pineapple, areca nut, coconut, guava, mango, jackfruit, etc. Coal, petroleum and natural gas, limestone and minor minerals are produced in the state.

Coal occurs in Dibrugarh, Tinsukia, North Cachar Hills, Sibsagar, and Lakhimpur districts. Brahmaputra valley is a region of immense human significance with high population density, rich agricultural fields and a good network of roadways and railways.

The unique geo-environmental setting of the region vis-à-vis the eastern Himalayas, the highly potent monsoon regime, weak geological formation, active seismicity, accelerated erosion, rapid channel aggradations, massive deforestation, intense land use pressure and high population growth especially in the floodplain belt, and ad hoc type temporary flood control measures are some of the dominant factors that cause and/or intensify floods in the Brahmaputra and the Barak basins. The scenario is further exacerbated by a myriad of social, environmental and economic factors that make populations increasingly vulnerable.

Sources:

1. Geography of Assam by A.K.Bhagabati, A.K.Bora and B.K.Kar
2. Assam Year Book 2014: Editor- Shantanu Kaushik Baruah.
3. Geography of North-East India by Dr. N.Taher and P.Ahmed
4. Assam- A Systematic Geography by N.N.Bhattacharyya
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6. Atlas of Assam

DRAINAGE OF ASSAM

Assam is a land of rivers. The entire state is drained by dense networks of two river systems, viz the ***Brahmaputra*** and the ***Barak systems***. Both the river systems are international in their extension and go out to Bangladesh. In general, the Brahmaputra system is very much extensive while the Barak system is relatively small, and it is also in their extensions over the state of Assam.

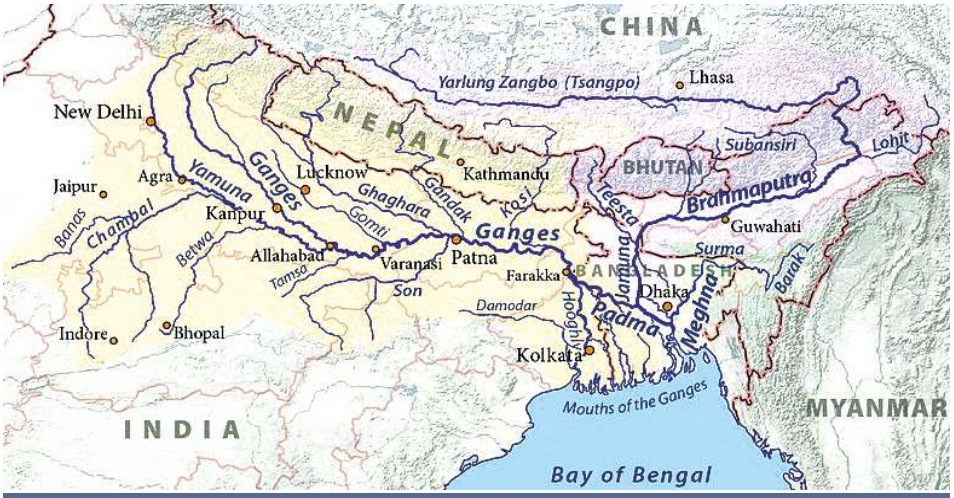

Fig2.1: Picture showing the Ganga-Brahmaputra Basin

Brahmaputra Basin

The Brahmaputra is one of the largest rivers in the world. It is 2880 km long from its source to its mouth. Out of total, 1700 km falls in Tibet, 920 Km in India (Arunachal and Assam), and remaining 260 km in Bangladesh.

The river is known as the Tsangpo in Tibet (China), Siang or Dihang in Arunachal Pradesh, The Brahmaputra in Assam and the Jamuna in Bangladesh. The river originates from **Chemayungdung** Glacier in Kailash range in Tibet. The Brahmaputra river of Assam forms a complex river system characterised by the most dynamic and unique water and sediment transport patterns. It is the fourth largest river in the world in terms of average water discharge at the mouth. The river carries 82% of its annual flow at Pandu (Guwahati) during the rainy season(May- Oct).

The river with such a high volume of water discharge and sediment load represents the most dynamic fluvial regime and that's why Brahmaputra is a highly **braided** stream especially in its middle course. In Assam therefore, there are many riverine islands locally called as 'Chaparis' and 'Chars'. Beside s there is Majuli, the large3st riverine island in the world having an area of 800sq.Km.

Fed by more than 100 tributaries flowing down the surrounding hills, the river sweeps gracefully through the entire length of Brahmaputra valley. Some of the tributaries are Subansiri, Jia bharali, Dhansiri, Pagladia, Manas etc (North bank) and Burhi Dihing, Disang, Dikhow, Kopili, Krishnai etc (South Bank). After flowing through Assam, it turns southwest beyond Meghalaya and then south, joining the easternmost branch of the Ganga- the Padma- and empties together with Ganga into the Bay of Bengal forming the largest Delta called Sundarban delta.

The Barak Basin

Like the Brahmaputra, the Barak is also an important river of Assam. The Barak system is the Second largest river system in the Northeast India as well as in Assam. The river with a total length of 900 Km from source to mouth drain in area of 52000 Sq.Km. Originating at the border of Manipur and Nagaland, the river flows westward for some distance forming the boundary between the two states. River bifurcates near Karimganj into the north branch of Surma and south branch of Kushiyara and ultimately entering Bangladesh and the margin with the Brahmaputra taking on the name Meghna.

In Assam, the Barak has a total length of 225 km and it drains the southern part of the state which includes the districts of Cachar, Karimganj and Hailakandi and southern portion of North Cachar Hill.

Through the Cachar plain the river flows sluggishly for a distance 125 km and exhibits highly meandering pattern and forming a series of Ox-bow Lake, Cut offs and swamps.

Some of the tributaries if the Barak are Jiri, Siri, Jatinga, Larang etc(North Bank) and Sonai, Ghagra, Singla, Longlai etc(south Bank)

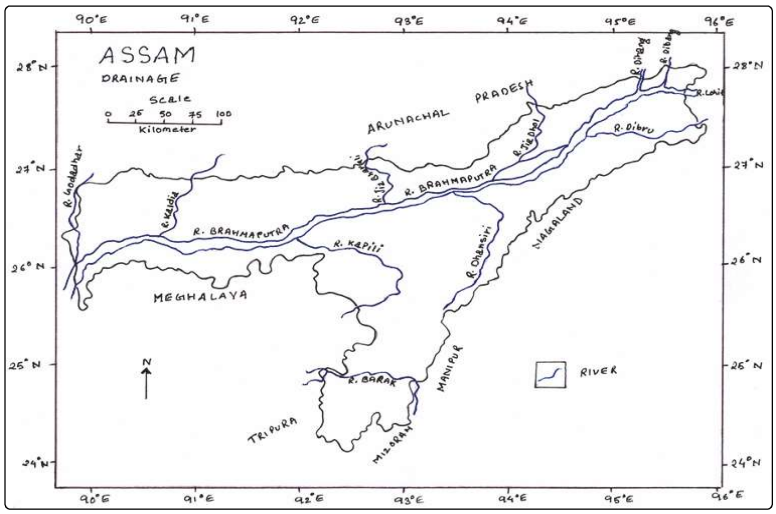

Fig 2.2: Drainage Map of Assam

Flood and their impact on the economy

The Brahmaputra and Barak basins, particularly the portions in Assam, have earned notoriety for the hazards of annual flood and erosion that create mayhem every year, bringing misery to the people and shattering the fragile agro-economic base of the region. The valleys of the Brahmaputra and the Barak, which together account for 24.9 % of the surface area of North-East region and 80.8 % of Assam, are two worst flood ravaged regions of India receiving, on the average, 3-4 waves of flood every year. These floods cause extensive damage to agriculture, environment, human life and property, thereby affecting severely the economy of the state. With over 40 % of its land surface (3.2 million ha) susceptible to flood damage, which is 9.4 % of the country's total flood prone area, the Brahmaputra valley in Assam represents one of the most acutely hazard prone regions in the country. Floods in the Northeast region are caused by a combination of natural and human made factors.

The floods also have some beneficial effects such as fertile silt deposition on agricultural fields, recharge of soil moisture, increase in fish population and washing effect on dirty environment.

Fig 2.3: Pictures showing effects of floods in Assam

During the last few decades there were heavy floods in Assam almost every alternate year, especially in 1990, 1991, 1998, 2012, 2013 and 2014.

In 2014 hazardous flood occurred in the district of Goalpara. Nearly 3.7 lakh people were affected.

Flood hazard occur regularly in about 14 districts of Brahmaputra valley and 2 districts of Barak valley.

Local rainwater harvesting technique

The water resources potential of the region is the largest in the entire country. Given its heavy rainfall, it also has abundant groundwater resources. But only a small part of the region has been studied to estimate the groundwater potential. The maximum scope for development of groundwater exists in Assam, Tripura and Arunachal Pradesh. The available surface water resources have hardly been tapped because of the rugged nature of the terrain. Hence, cultivation in the region is largely rainfed and jhum cultivation (shifting cultivation) has been widely adopted.

Nonetheless, there are documented instances of some indigenous rainwater harvesting systems used for cultivation, of which some are ingenious. Settled agriculture is practised in the form of irrigated terrace cultivation in parts of Nagaland and a few villages of Meghalaya. Channels are dug to irrigate these fields. The other chief indigenous source of irrigation is the bamboo irrigation system found in parts of Meghalaya, and in some villages in the Mokokchung district of Nagaland. In Assam A few people have taken to rainwater harvesting in their homes but such projects have not been taken up at a larger scale.

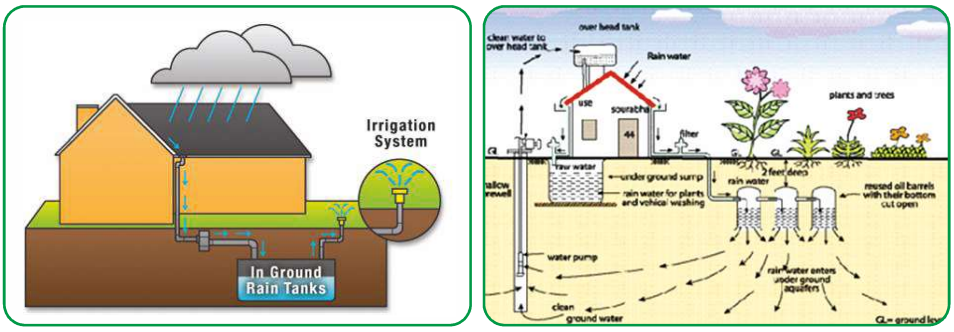

Fig2.4: Pictures showing rainwater harvesting techniques

Sources:

1. Geography of Assam by A.K.Bhagabati, A.K.Bora and B.K.Kar
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HISTORY

TURKISH INVASION IN ASSAM

The settlement of Muslims in Assam can be traced to as far back as the eighth century CE. Early Muslim settlers of Assam consisted of "Turks" who came to Assam through China from Turkistan and of Arab traders, sailors, saints and travellers who visited Burma and the Gangetic valley of Bengal. The people of Muslimghopa near Mangaldoi in Assam claim till this day that they are descendants of the Turkish soldiers who entered Assam and settled in Darrang

By the early 13th century, the Turkish invaders had established their hold over North India and were gradually advancing towards the East. Muhammad Bakhtiyar Khalji was the first Turkish Muslim invader in Assam. After defeating the last Sena king of Bengal, he marched towards the Brahmaputra Valley to subjugate the ruler of Kamarupa, Kameswar. However, Muhammad Bakhtiyar was defeated and fled with a few of his horsemen.

In 1227 A.D., the governor of Bengal, Ghiyasuddin Bakhtyar invaded Kamrupa once again. Though Bakhtyar reached up to Sadiya, he had to unfortunately go back as the Delhi Sultan Iltutmish declared him as ambitious and sent his son Nasiruddin to teach Ghiyasuddin a lesson. The able Nasiruddin marched in to Bengal and seized its capital.

In 1257A.D. Ikhtiyar uddin Yuzbak Tughril Khan invaded Kamarupa again and defeated its ruler. However his success was short lived as the muslim invaders could not cope up with heavy monsoon. The king of Kamarupa took advantage of the situation and drove them out of the Brahmaputra valley.

During 1204-1679 AD, Muslim rulers and governors of Bengal sent as many as 19 military expeditions to Assam. During this period, thousands of Muslim soldiers, paiks (forced labours) and military officers settled down in different parts of Assam. Muslim saints and preachers also came to the area and spread over different places for preaching Islam and delivering religious instructions to the new converts and early Muslim settlers. Many Muslim traders also visited Assam and settled down in various towns.

ADVENT OF THE AHOM

Early in the thirteenth century, the Ahoms, one of the offshoots of the great Tai or Shan race entered into Assam from Myanmar under the leadership of Sukapha. The Shans occupied the northern and eastern hill tracts of upper Burma and western Yunnan.

According to legend maintained by the Ahom priest Deodhais, Lengdon (Indra) sent his grandsons- Khunlung and Khunlai to establish a kingdom on earth. They were presented with an idol called Somdeo, Hengdan or a magic sword, two drums for invoking divine aid and four cocks for telling the omens. They built a town in Mung-rin-mung-ram means 'a deserted and uninhabited country'. But Khunlai ousted his elder brother who founded a new kingdom in Mung-khu-mung-jao means a 'country of great extent.' At a later time Mungrimungram was divided into two, The part known as Maulung was occupied by the successor of Khunlung. Sukapha, the founder of the Ahom kingdom in Assam was a descendant of this lineage.

Sukapha had a dispute with his brother and so left Maulung along with the Somdeo and eight nobles, 9000 people, two elephants and 300 horses. After thirteen years of wandering in the Patkai area, in AD 1228 he arrived in Khamjang. Some Nagas who attempted to resist his advance were defeated and frightful atrocities were committed against them to get their submission. In AD 1254 Sukapha finally established his capital at Charaideo in Upper Assam. A number of Maidams or tombs of the Ahom royalty and aristocracy are located in Charaideo.

Sukapha adopted a conciliatory policy towards the neighbouring Moran and Borahi tribes after defeating them and also encouraged inter- marriages. He appointed two great officers known as Bar Gohain and Burha Gohain who exercise powers second only to the king himself.He made friends with his brother rulers in his ancestral home and sent gifts of gold and silver to them.

This extraordinarily enterprising and brave figure of Assam history died in AD 1268. His descendants ruled over the land for long six hundred years. It is noteworthy that the Ahoms called Assam as Mung-dung-chun-kham means 'country full of golden gardens'.

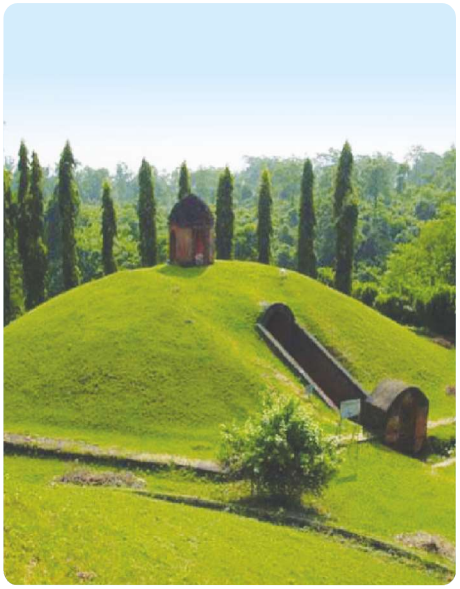


Fig. Maidam

CHRONOLOGY OF RULES OF THE AHOM DYNASTY

1228-1268 A.D. → Sukapha (Founder of Ahom Dynasty)
1268-1281 A.D. → Suteupha
1281-1293 A.D. → Subinpha
1293-1332 A.D. → Sukhangpha(had four sons Sukhrangpha, Sutupha, Tyaokhamti, Chao Pulai)
1332-1364 A.D. → Sukhrangpha
1364-1376 A.D. → Sutupha
1376-1380 A.D. → Kingdom ruled by the Borgohain and the Buragohain
1380-1389 A.D. → Tyaokhamti
1389-1397 A.D. → Kingdom was again managed by nobles
1397-1407 A.D. → Sudandpha(known as Bamuni Raja)
1407-1422 A.D. → Sujanpha
1422-1439 A.D. → Suphakpha
1439-1488 A.D. → Susenpha
1488-1493 A.D. → Suhenpha
1493-1497 A.D. → Supimpha

1497-1539 A.D. → Suhungmung(known as Dihingia Raja)

1539-1552 A.D. → Suklenmung(known as Garhgaya Raja)

1552-1603 A.D. → Sukhampha(known as Khora Raja)

1603-1641 A.D. → Susengpha(known as Pratap Singha)

1641-1644 A.D. → Surampha(known as Bhaga Raja)

1644-1648 A.D. → Sutyinpha(known as Nariya Raja)

1648-1663 A.D. → Jayadwaja Singha(Sutumala)

1663-1669 A.D. → Chakradhwaja Singha(Supungmung)

1669-1673 A.D. → Udyaditya Singha(Sunyatpha)

1673-1675 A.D. → Ramdhwaja Singha(Suklampha)

1675 A.D. → Suhung (ruled for 21 days)

1675 A.D. → Gobar .(ruled for 1 month)

1675-1677 A.D. → Sujinpha

1677-1679 A.D. → Sudaipha

1679-1681 A.D. → Ratnadhwaja(known as Lora Raja or Sulikpha)

1681-1696 A.D. → Gadadhar Singha(Supaatpha)

1696-1714 A.D. → Rudra Singha (Sukrungpha

1714-1744 A.D. → Siba Singha(Sutampha)

1744-1751 A.D. → Pramatta Singha(Suhenpha)

1751-1769 A.D. → Rajeswar Singha(Surumpha)

1769-1780 A.D. → Lakshmi Singha(Sunyeopha)

1780-1795 A.D. → Gaurinath Singha

1795-1810 A.D. → Kamleshwar Singha(Suklinpha)

1810-1818 A.D. → Chandrakanta Singha(Sudipha)

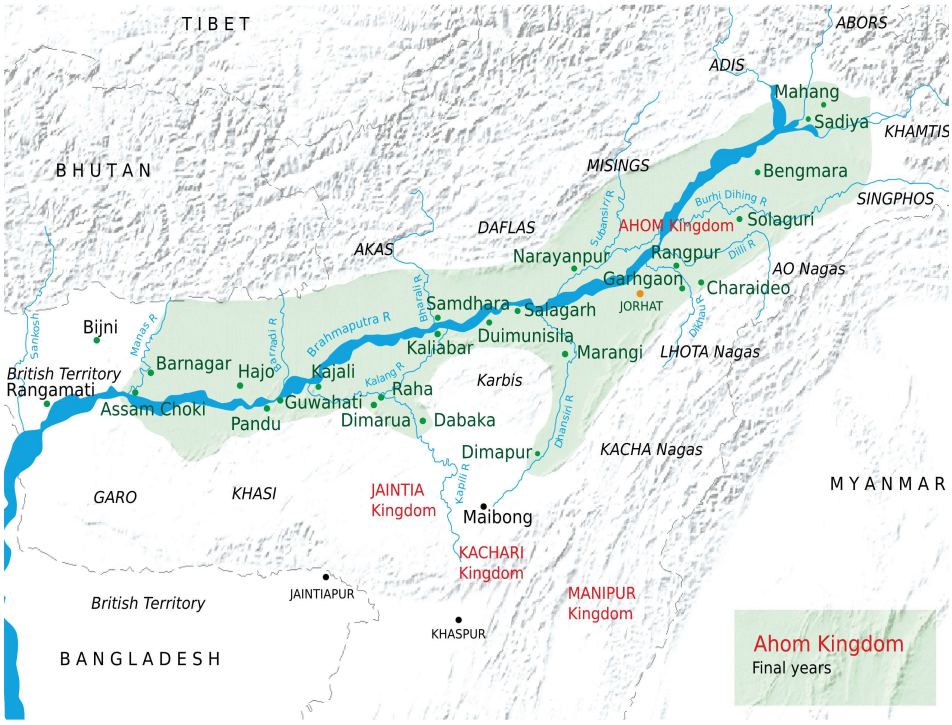
1818-1819 A.D. → Purandar Singha

1819-1824 A.D. → Assam was under the Burmese

1824 A.D. → The British East India Company defeated the Burmese and Assam came under their control

1832-1838A.D. → Upper Assam was ruled by Purandar Singha

EXPANSION OF THE AHOM KINGDOM



Annexation of the Chutiya Kingdom

The Chutiyas are one of the diverse tribes of Assam. They are Mongoloid people who migrated into Assam from China and Tibet and their language belonged to the Bodo group. They are mainly found in Lakhimpur and its adjacent areas. The founder of the Chutiya kingdom was a chief named Birpal who claimed his descent from the mythical Bhismak Raja of Vidarbha (Sadiya). His son, Gauri Narayan, built his capital at Ratnapur and assumed the name Ratnadhwaj Pal. They worshipped a deity called Kesai Khati, means “the eater of raw flesh” which later on was renamed as Tamreshwari.

In the fourteenth century the hostility between the Ahoms and the Chutiyas became inevitable as the Ahom expansion to the north was obstructed by the Chutiyas who in turn were alarmed by their rising power. The Chutiya king invited the Ahom ruler to a boat race on the safrai river and treacherously murdered him.

In 1523 the Ahoms occupies Mukrang and Namdang. After several battles, the Chutiyas were finally defeated. Both the king and his son were killed and the queen committed suicide to save her honour. The whole Chutiya kingdom was annexed in 1523. A new office of state known as Sadiya Khowa Gohain was created to administer the territory. After this victory Ahom king Suhungmung performed the Rikkhvan ceremony.

Rikkhvan*(Rik- revive, khvan- life) ceremony was performed by the Ahom kings for obtaining long life. It was generally performed at the installation of a new king, in times of danger or after a victory.*

Ahom- Kachari Conflicts : The Kacharis, who are believed to be aborigines of the Brahmaputra valley, extended in the thirteenth century in the south from the river Dikhu to the kallang. Their kingdom also included the valley of Dhansiri and present day North Cachar.

The expansionist design of the Ahoms in the west brought them into conflict with the powerful Kacharis. In the first clash in 1490 the Kacharis defeated the Ahoms who pursued for peace. But when the Ahoms were getting powerful, they tried to push the Dimasa Kacharis back to the Dhansiri River.

Hostilities continued and in 1531, in present day Golaghat, the Kacharis were defeated and the Ahoms advanced up to Dimapur, the capital of the Dimasa Kachari. Khunkhara. The Kachari king fled away and a relative of his named Detsung was set up on the throne.

In 1536 the Ahoms attacked the Kachari capital once again and sacked the city. After this invasion the Kacharis abandoned Dimapur and retreated south to establish their new capital at Maibang.

During the time of Rudra Singha (1696-1714), the more confident Kachari king Tamradhwaj boldly proclaimed independence. However, unable to face Rudra Singha's army Tamradhwaj fled to Khaspur in the plain Kachar. The Ahoms rescued Tamradhwaj when he was imprisoned by the Jayantiyas, but reinstalled on promise to pay tribute to the Ahoms.


Fig. Ruins of Kachari capital in Dimapur

The British annexed the plains of Cachar in 1832 and North Cachar in 1854. They named two present districts in Assam- Cachar and North Cachar Hills (which became Dima Hasao District in April 2010)

BIR CHILARAI (SHUKLADHWAJ)

Chilarai, a man of great courage, valour and ambition was the younger brother of Raja Nara Narayan, the Koch king of the 16th century. His life is the story of a series of fighting.

The Koch royal dynasty was established by Biswa Singh, a man of humble origin, in 1515 AD. On Biswa Singha's death the eldest son Malladev or Naranarayan ascended the throne. Shukladhwaj was appointed as army commander who assisted his brother in extending the kingdom.

A brave warrior and an exceptional general, Shukladhwaj, came to be known as 'Chilarai' as he was swift like the bird 'chila' or the kite in capturing his enemies. Chilarai, who married Srimanta Sankardeva's niece Kamalapriya was instrumental in giving the Vaishnava Saint Sankardeva protection and shelter.

Chilaray's valour ensured Koch supremacy over the Kachari kingdom (present Dimapur). In June 1563 the Koches under the command of Chilaray managed to occupy Garhgaon, the capital of Ahom and forced the Ahom king to acknowledge the Koch suzerainty. He even made the Jayantiya king and the king of Manipur to submit and pay tribute to the Koch.

According to Daranga Vamshavali, Chilarai invaded the kingdom of Bengal assisting emperor Akbar. During the second expedition against Bengal, Chilarai died of Chicken-pox on the bank of the Ganges. The birth anniversary of the great hero is celebrated every year as Bir Chilarai Divas. From the year 2005, the government of Assam has been conferring Bir Chilarai Award, the highest honour for bravery to individuals.

AHOM - MUGHAL CONFLICT

The Ahom- Mughal conflicts refer to the period between the first Mughal attack on the Ahom kingdom in 1615 and the final battle in 1682. The aggressive policy of the Mughals to establish political supremacy, territorial expansion, boundary dispute and trade rivalries was the main factors behind the conflict.

According to the treaty of Asurar Ali in 1639, the Ahom king for the first time acknowledged the Mughal overlordship and the Mughals acknowledged the independence of the Ahom king. However taking advantage of the dissension among the Mughals after Shah Jahan's death, Ahom king Jayadhwaj Singha violated the terms of the treaty and captured Guwahati and became the master of the entire Brahmaputra valley. When Aurangzeb finally settled on the throne, he sent the newly appointed governor of Bengal, Mir Jumla, specially instructing him to punish the Ahom ruler.

In AD 1661 Mir Jumla started his march with a strong army and occupied Garhgaon, the Ahom capital. Overwhelmed with this victory he struck coins in the name of the Mughal emperor. However during rainy season the Mughals faced great hardship. Mir Jumla fell seriously ill. Ultimately a treaty was concluded at Ghiladharighat in 1663. Besides many other humiliating terms, according to the treaty Ahoms had to pay rupees three lakhs and ninety elephants annually to the Mughals.

Battle of Saraighat:

Jayadhwaj Singha's successor Chakradhwaj Singha was against any payment to the Mughals. He said to his nobles, “Death is preferable to a life of subordination to foreigners….My ancestors were never subservient to any other people, and I myself cannot remain under the vassalage of the Mughals.” He was able to recover Guwahati in 1667. Aurangzeb appointed Raja Man Singh to the command of the Imperial army and sent to Assam. Due to miscommunication and ill preparation, the Ahoms suffered a disastrous defeat at the land battle of Alaboi where 10,000 Ahom soldiers died. However, finally in the great naval battle of Saraighat, the Ahoms inflicted a crushing defeat on the Mughals and recovered Assam's prestige and independence. The Mughal ambition to conquer Assam came to an end. The river Manas became the western boundary of the Ahom kingdom till the British occupation of Assam in 1824.

Lachit Borphukan, the Hero of Saraighat Battle : Lachit Borphukan, was the son of Momai Tamuli Borborua, the Ahom commander in the first campaign against the Mughals under Swargadeo Pratap Singha. Lachit was selected by the king to lead the army in the campaign against the Mughals as he was a man of unusual grit, stamina and depth of judgment. He captured Guwahati and Pandu in 1667 A.D. Many prisoners of war, cannons and a huge booty were also captured.


Lachit Barphukan


Fig. Ramnants of Momai Kota Garh

During the preparations for the battle he ordered an earthen wall for fortification to be constructed within a night and entrusted the responsibility to supervise to his maternal uncle. Late in night when Lachit came for inspection, he found the labourers sleeping leaving the work incomplete. Furious Lachit beheaded his uncle on the spot for negligence of duty saying, "My uncle is not greater than my country." Frightened workers completed the work within the night and the ruin of this fortification is still known as "Momai Kota Garh" or "the fortification where the uncle was beheaded."

After a disastrous defeat at the land battle of Alaboi, Lachit inspired his soldiers by Saying, "If you (soldiers) want to flee, flee. Let the Mughals take me away. You report to the king that his general fought well obeying his orders." Though he was extremely sick, he fought gallantly in the final naval battle of Saraighat in 1671 and led Assam to a great victory. Thus Mughal expansionist design in Assam was curbed totally and prestige and independence was restored.

Shortly after this victory, Lachit Borphukan died of illness. 24th November each year is celebrated as Lachit Divas to commemorate his heroism, bravery and patriotism.

PROMINENT AHOM KINGS

Gadadhar Singha (1681-1696)

Supaatpha or Gadadhar Singha established the rule of the Tungkhungia clan of the Ahom kings that ruled the Ahom kingdom till its climactic end. He was the son of Gobar Roja, who had become the king for a mere 20 days.

The circumstances under which Gadapani ascended to the throne are an interesting story. His predecessor Lora Raja was an incapable, incompetent and cruel ruler. To secure his position he maimed or killed several descendants of the royal family. However his most formidable rival Gadapani saved himself by concealing himself in several places. His wife Joymati endured torture until the end and sacrifices her life without disclosing her exiled husband's whereabouts. With the assistance of the dissatisfied nobles he organised an army and captured the throne in 1681. Lara raja was banished to Namrup where he afterwards put to death.

Gadadhar Singha was able to stabilize the kingdom after the decade long turmoil. This period saw the ruthless power grab of Debera Borbarua and Laluksola Borphukan's treacherous surrender of Guwahati to the Mughals. Gadadhar Singha recovered Guwahati by defeating the Mughals in the battle of Itakhuli, which was the last Ahom- Mughal war. He established a strong rule of 'blood and iron'.

Gadadhar was a patron of Sakta Hinduism and opposed to neo- Vaisnavism. He is known for his public works such as construction of Dhodar Ali* and many other roads, tanks and bridges.

Dhodar Ali: *The road is so called because king Gadadhar singha mobilised some dhods (in Assamese means lazy) and opium addicts to build it. These people were said to pretend to be lazy in order to skip royal responsibilities. It is a 212-km long road starting from Kamargaon Golaghat to Joypur in Dibrugarh.*

Rudra Singha (1691- 1714)

Sukhrungphaa or Swargadeo Rudra Singh is considered as the greatest of the Ahom rulers under whom the kingdom reached its zenith of power and glory. Rudra Singha, known as Lai before he became the king, was the son of the previous Ahom king Gadadhar Singha and Joymati. He had undergone sufferings and privations during his father Gadadhar's exile. Rudra Singha subjugated the Kachari and the Jaintia kingdoms. He is best known for building a coalition of Hindu rulers of eastern India to drive the Mughals from Bengal and raising a vast composite army to materialise his plan. However he died in 1714 before contemplating his campaign.

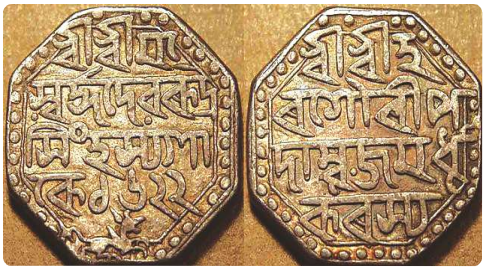
He followed a liberal religious policy unlike his father and rehabilitated the Vaisnava Gosains in Majuli. He introduced Mughal style of dresses in the Ahom court. He was the first Ahom king to have the Bihu celebrated in the courtyard of the palace and gave royal patronage to Bihu.

Rudra Singha was a great patron of art, architecture and learning. He established his capital at Rangpur. He brought an architect from Koch Bihar named Ghanashyam for constructing the palace and other buildings in the new capital city, Rangpur. In honour of the memory of his mother Joymoti Konwari, he dug the Joysagar Tank, India's largest man-made tank covering an area of 318 acres (1.29 km^2) and Joydoul on its bank. He also constructed the Rongnath Doul, Fakua Doul, the Namdang and Dimou stone bridge, Dubori ali, Meteka ali and the Kharikatia Ali. Although illiterate he patronised learned persons in his court

Fig. Joy doul and Joysagar tank

Fig. Fakua Doul

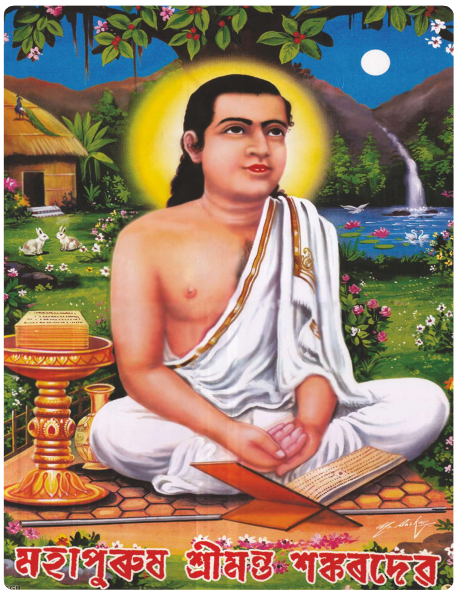
As he grew older, Rudra Singha became an orthodox Hindu. It is said by some that when he died his body was cremated in Mani Karnesvar hill, instead of being buried at *maidam* at Charaideo and that the Rudresvar temple erected by one of his son Pramatta Singha in honour of his memory stands in the spot where his body was cremated. However according to Ahom Buranjis his remains were buried like his forefathers. It is noteworthy that he instructed his five sons to become king one after another.



Silver coins of Sukhrungphaa: The legends read: obverse: sri srimat swarga deva rudra simhasya sake 1622 and reverse: sri sri hara gauri padambuja madhu karasya. The date of 1622 is in the Saka era (1700 CE) and the legend reveals that the king was a devotee of Siva.

BHAKTI MOVEMENT IN ASSAM

MAHAPURUSHA SRIMANTA SHANKARDEVA



Srimanta Shankardeva, venerated as Mahapurusha was born in 1449 at Bardowa, Nagaon. He was a descendant of the Siromani Bhuiya, Chandibar. He lost his parents during his childhood and so brought up by his paternal grandmother Khersuti.

Shankar was endowed by nature with a strong physique and sharp intellect. He started his formal education at the age of twelve under scholar Mahendra Kandali. Soon he composed a poem *Karatala Kamala* before learning the vowels. After completion of education Shankara settled to domestic life. One day he set out on a pilgrimage for twelve years. He visited India's holy places and came in contact with many saints including Kabir, the bhakti saint. During this journey his religious ideas were crystallized.

On his return Shankara began to preach his ideas to the people which are known as Eka Sarana Nam Dharma (Devotion to one God). He did not favour renunciation of the world. His creed was based on the Gita and the Bhagavata. He worshipped one Supreme God Vishnu and rendered unqualified allegiance to him. He was opposed to elaborate rites and rituals. Hymns and prayers with intense faith and devotion were the only ceremonials advocated by him. His Neo-Vaishnavism was open to all classes, all ethnic groups in the entire Brahmaputra Valley.

Fig. Dakhinpat Satra,Majuli

Fig. Vrindavani Vastra

It is said that at the request of Chilarai and Naranarayan, Srimanta Shankar Dev engaged the weavers of Tantikuchi, near barpeta, to weave the Vrindavani Vastra, a 60mx30m long tapestry panel inscribing the stories of Shri Krishna in Vrindavan in pictorial form. It was a splendid wonder created by the skilled weavers of Assam. Part of this Vastra is preserved in the Victoria and Albert Museum in London.

Shrimanta Shankar Dev was a saint-scholar, poet, playwright, social-religious reformer. The assembly of devotes initiated by him evolved into Satras (monasteries) over time which continued to be important socio-religious institutions in Assam. His masterpiece is the Kirtana Ghosha- a bhakti kavya (Devotional poems). Other compositions are Bargeets (devotional songs), Harichandra Upakhyana, Bhakti Pradipa, Gunamala, Some of his plays are Rukmini- Haran, Keli-gopal, Kurukshetra Yatra, Sri Ram Vijaya and Parijat-Haran, Ram-Vijay.

Soon after his second pilgrimage this great personality died in 1568. He led an eventful life dedicated to enlightening humanity. He reformed the Assamese society from the clutches of rigid and corrupted form of Saktaism that dominated in the name of religion in this region.

Hazrat Ajan Pir

He was a Sufi poet, preacher and saint of the 17th century. He came from Baghdad to spread universal peace and humanity amongst all. He was a disciple of Khwaja Nizamuddin Auliya of Baghdad. He reformed and stabilised Islam in the Brahmaputra valley. Originally he spoke Arabic, but soon mastered the languages of the land he adopted. He composed hundreds of Zikir and Zari, two forms of devotional songs similar to borgeets of Srimanta Sankardeva. Azan Fakir was a preacher with mastery over the 'Quran, the Hadith and Islamic philosophy.

Fig: HajaratAjanPirDargaah HoraguriChapori,Sivasagar

Some scholars said that he got his nickname Azan as he introduced Azan in the Brahmaputra Valley. He married an Ahom *woman of high social stature and settled at* Gorgaon*, near modern* Sibsagar *town.*

A GLIMPSE INTO AHOM ADMINISTRATION

The long six hundred years of rule of the Ahoms must have been possible because of their sound administrative organisation.

King: The Ahoms had a monarchical form of government and the king was the head of the administration. The fundamental duty of the king was the protection of the people, to give them security of life, property and belief.

Royal House hold: The sons, wives and other near relations of the monarch were given estates generally known as 'mels'. Each mel was managed by a Phukan or a Barua. E.g. Charingia mel, the Tipamia mel, Saru mel, Maju mel, Parbatia mel, Na mel etc.

Council of Ministers: The king was assisted by the council of the five ministers- Bar Gohain, BurhaGohain, BorpatroGohain, Bar Barua and Bor Phukan. The Burha Gohain usually acted as the Prime minister and first three ministers were allotted territories with independent right. Bar barua was the head of the executive and the judiciary with jurisdiction from Sadia to Kaliabor. The Bar phukan was the Viceroy of the whole tract from west of Kaliabor with Guwahati as headquaters.

Paik System: The common population of the Ahom kingdom between the ages of 15-50 were liable to render service to the state as labourers in times of peace and as soldiers in times of war. They were known as Paiks.

Khel System: The paiks were further arranged by khels which were provided with a regular gradation of officers- twenty paiks commanded by a Bora, one hundred by a Saikia, one thousand by a Hazarika, three thousand by a Rajkhowa and six thousand by a Phukan. Each paik was allotted two puras of land (nearly three acres) of rent free rice land. But, he had to pay a pool tax or house tax.

Military System: The Ahom army consisted of mainly infantry and elephants. They constructed highly indigenious and impregnable fortresses, trenches which even evoked admiration of the hostile Mughals**.** The efficient navy and superb guerrilla fighting, diplomacy, use of gun powder and cannon helped them to thwart their rivals with success.

Ahom kings were addressed as 'Swargadeo' meaning 'God of Heaven' which is equivalent to Ahom Chaopha. According to Shan traditions pha, i.e. heaven is associated with the patriarchal ancestor of the Ahoms who is said to have been of Lengdon or Indra.

TIMELINE OF THE HISTORY OF ASSAM

Year AD	Ancient Assam
350	Pushya Varman establishes the Varman dynasty in Kamarupa
636	Xuanzang visits the court of Bhaskarvarman in Kamarupa.
650	Bhaskarvarman dies. End of Varman dynasty
655	Salasthamba establishes Mlechchha dynasty in Kamarupa
c900	Brahmapala establishes Pala dynasty in Kamarupa
c1100	Jayapala, the last Pala king removed by Ramapala of Pala empire
Year AD	**Medieval Assam**
1185	Prithu establishes the Khen dynasty and the Kamata kingdom
1187	Birpal establishes Sutiya kingdom at Swarnagiri
1228	Sukaphaa enters Assam
1224	Ratnadhwajpal, the second Sutiya king annexes the Kingdoms of Bhadrasena and Nyayapal
1235	Gaurinarayan establishes his capital at Sadiya
1252	Sukaphaa establishes capital at Charaideo
1449	Srimanta Sankardev is born
1490	First Ahom-Kachari battle. Ahoms defeated under Konkhra and pursued for peace.
1498	Alauddin Hussain Shah of Gaur removes the last Khen ruler of Kamata kingdom
1515	Viswa Singha establishes Koch political power and Koch dynasty
1520	Ahoms defeated under the Sutiya king Dhirnarayan
1523	Sutiya kingdom partially annexed to Ahom Kingdom under Suhungmung, and placed under the rule of *Sadiyakhowa Gohain*.
1527	Nusrat Shah's invasion, the first Muslim invasion of the Ahom kingdom, ends in failure.
1532	Turbak attacks Ahom Kingdom, the first commander to enjoy some success.
1533	Turbak defeated and killed. Ahoms pursue Gaur army to Karatoya river.

1536	Ahoms destroy Dimapur, the capital of the Kachari kingdom
1540	Nara Narayan succeeds his father to the throne of Kamata kingdom
1563	Chilarai occupies Ahom capital Garhgaon, end with Treaty of Majuli.
1568	Srimanta Sankardev dies
1581	Nara Narayana divides Kamata kingdom into Koch Bihar and Koch Hajo (to be governed by Raghudev).
1587	Naranarayana of Koch dynasty dies.
1588	Raghudev, son of Chilarai and ruler of Koch Hajo declares independence.
1609	Momai Tamuli Borbarua restructures Paik system in Ahom kingdom.
1609	Koch Bihar becomes a Mughal vassal
1613	Koch Hajo is annexed by the Mughal Empire
1615	Ahom-Mughal conflicts begin