History

The Brahmaputra valley has got a long history of settlement. This part of the country is inhabited by a number of aborigines namely the Koches, the Kacharies, the Chutias, the Ahoms etc. The written history is available only from the beginning of the Ahom rule in Assam. Prior to that, references regarding Assam and its geography are available in old Scriptures primarily in 'Kālikā Purāṇa' and 'Yogini Tantra'.

Besides, the account of Huien-Tsang, a Chinese explorer, also provides substantial information regarding ancient Assam. During the medieval period Assam was ruled by small kings and was divided into several sovereign kingdoms. The constant feuds and warfare between the sovereign States were put to an end after the arrival of the Ahoms, a Tibeto-Burman race from North Burma. So the medieval history of Assam is the history of the Ahom Kingdoms. From the year 1228 to 1826 the Ahom Kingdoms ruled

1 Kālikā Purāṇa and Yogini Tantra are the works on Tantrism centered round Mother Kamakhyā, written in Sanskrit during 10th and 12th century respectively.
this part of the country. During the period of 600 years of the Ahom rule, Assam was not only physically integrated but also the cultural influence spread all over the hilly areas too. In fact the socio-economic foundation of present Assam was laid down during this period. In 1817, the Burmese invaded the country and in 1822 they achieved the complete domain of Assam. In the year 1826 the Burmese depredations over the country were cleared off by the British invaders and since then a new history called the British history began in Assam. Inspite of their divide and rule policy, Assam was gradually consolidated into one political unit of British India. The present socio-economic set-up of the Brahmaputra valley has a definite lineage in the British history as the Britishers ruled Assam for almost a century.

Physiography

The Brahmaputra valley is an important physiographic unit of the North-East India. The region is bordered on the north by the Eastern Himalayan ranges constituting the Arunachal State (Figure 2). The Patkai range and the Naga hills shut the plain in the east and the Shillong Plateau lies on the south. To the west the plain opens out to the North-Bengal plain. It may be called a ramp valley. The
BRAHMAPUTRA VALLEY

RELIEF, DRAINAGE, AND PHYSIOGRAPHIC DIVISIONS

FIG. 2

MIDDLE BUILT-UP PLAIN

PHYSIOGRAPHIC DIVISIONS

- FOOT HILL ZONE
- MIDDLE BUILT-UP PLAIN
- ACTIVE FLOOD PLAIN

RIVERS

100 KILOMETRES

CONTOUR LINE
east-west length being about 720 kilometre, while the average north-south width is only 80-96 kilometres. The middle course of the mighty river Brahmaputra constitutes the Assam plain with its innumerable north and south bank tributaries. Being the plain stage, the gradient of the river valley is extremely low, on an average it is hardly 15.9 cms. per square kilometre.

The plain is fairly wide in the east which is about 96.0 kilometre. But it narrows down to about 56.0 kilometre in its middle part, where the Rengma hills project out to the plain. Beyond this physiographic constriction, the plain widens up again with the confluence of the Kopili valley that forms the Nowgong plain. From Kamrup plain onwards, the plain is again constricted slightly between the Meghalaya plateau and the Bhutan Himalayas. On the north, the average width of this portion of the plain is hardly 64 km. Further west, the Meghalaya plateau recedes southward and the plain widens slowly until it merges with the North-Bengal plain.

The north and south bank plains of the Brahmaputra remarkably differ in size and physiographic structures. The north bank plain from Pasighat to the Sankosh river is uniformly wide and is bordered by the Himalayan foothills
like a wall rising abruptly from the plain. Innumerable rivers - some large ones like the Subansiri, the Jia-Bharali, the Manas etc. are snow-fed and some are rain-fed, come down from the leafy foothills and suddenly debouch on the flat plain. This sudden break in their gradients renders them forceless. The rivers thereafter find their own sluggish way to the Brahmaputra through wide, shallow, braided and changing courses. The coarse alluvial materials deposited along the piedmont region have given rise to terai or semi-terai condition where water percolates down resulting in wet soil and unhealthy forest covers. Downward the rivers encounter the levee of the Brahmaputra and tend to flow parallel to it until they find some opening somewhere to reach the master river. This has resulted in the formation of swamps along the lower parts of the tributaries. Even in the middle parts there are innumerable 'bhils' and 'jhils' and ox-bow lakes abandoned by the meandering rivers.

A series of outliers of the Meghalaya plateau in the form of isolated residual hilleocks are found in the southern plain right from the projected part of the Rengma hills up to the western boundary of Goalpara. In between the hilleocks lie a series of swamps or bhils, most of which indicate the older course of the river.
The fairly large rivers like the Dibru, the Burhidihing, the Dikhow and the Dhansiri have created plain embayments in the border of the Naga hills. Thus the parameter of the Brahmaputra plain is increased in the south bank. The rivers Kopili and Dhansiri have not only added a sizable plain tract but also isolated the Rengma hills from the Meghalaya plateau and the Naga hills.

The sluggish Brahmaputra, specially in winter develops innumerable charlands or river islands in the entire course. Though most of them are temporary, 'Majuli' is an unique creation of the river, which is perhaps the largest riverine island in the world. This island covers an area of 906.50 sq.km. and is densely populated.

From the geomorphological features of the Brahmaputra valley, a number of physiographic zones can be demarcated: 1. Bhabar and Tera.: In the northern bank important geomorphological features comprise firstly a narrow Bhabar Zone along the piedmont region of the Lesser Himalaya. The Bhabar consists of fairly high ground, formed as a result of the coalescence of alluvial cones.

South of the Bhabar zone there occurs the flat Terai belt. This zone is fairly wide in the North Goalpara and the North Kamrup plains but tapers down in Darrang and Lakhimpur districts.

2. Middle Plain of the North Bank: To the south of the Terai zone, at about equal distances from the Brahmaputra to the south and the hills to the north lies a strip of high ground from east to west, which is not only the most densely populated area but also supports the rich rice fields. Through this zone run the roads and railways.

A special geomorphological feature of this zone, especially of the area east of the Jia-Bharsali river is the occurrence of patches of higher grounds of Older Alluvium. These are on the average 2 to 3 metres above the flood plain and constitute favourable sites of tea plantation.

3. The Flood-Plain and Charlands: To the south of the relatively high middle ground lies the wide and active flood-plain of the Brahmaputra. This occurs on both the banks of the Brahmaputra. In the northeast it extends from Saikhewaghat to Dibrugarh as also from the confluence of the Burhi Dihing to Nimati. To the west it extends over Majuli to the northern part of Dergaon and Bekakhat thana. The northern part in Newgong, the southern part in Kamrup including Palasbari,
Chalgaon and Boko and the thanas of Lakhipur and south Salnara in Goalpara district are included in the active flood plains. The north and south bank flood-plains including the riverine islands thus constitute a huge area, where jute, rice, mustard, potato and other vegetables are chiefly grown.

4. Middle Plain of the South Bank: The middle plain of the south bank is narrow. It is relatively large only in Dibrugarh and Sibsagar districts. Elsewhere it is literally confined to a narrow strip on either side of the "South Trunk Road" or the National Highways No. 31 and 37. This narrow strip of land is however, of immense human significance with high density of population and fairly intensive cultivation of rice, tea and vegetables.

5. The Southern Foothill: Unlike the north-bank foothill, the southern foothill does not have an extensive terai region. In the Dibrugarh and Sibsagar districts the foothill region is covered by high grounds and isolated hillocks which are occupied by tea plantations. In the districts of Nowgong, Kamrup and Goalpara, the southern foothill region is occupied by erosional platforms born out of age-old erosion by the streams alternated with 'bhils' and swamps.
The Brahmaputra river has a total length of about 2900 km. The magnificent river known as Tsanpo, flowing through Tibet and cutting across the mighty Himalayas, enters Assam through the extreme north-east corner of India. At the point of debouchment, it meets two other rivers, the Lohit and the Dibong flowing from east and north-east respectively and the combined water flows towards west in the name of Brahmaputra. The river has innumerable tributaries and sub-tributaries in both the banks. The notable tributaries of the Brahmaputra in the north bank are the Subansiri, the Renganadi, the Bharali, the Buranadi, the Pagladiya, the Puthimari, the Ali, the Manas and the Sonkosh and their innumerable inlets and sub-tributaries. In the south bank the important tributaries are the Burhi Dihing, the Dibang, the Dikhow, the Dhansiri, the Kopili, the Dighar, the Kuli, the Dudhnei and the Krishna. The whole river system forms a dendritic pattern.

The northern tributaries of the Brahmaputra are very notorious for flood. The rivers very frequently change their courses. This change of the river course in the northern plain takes place for the following causes: (1) low gradient (2) abrupt debouchment of the rivers (3) supply of abundant water during summer (4) frequent occurrence of flood and...
Composition of the soil. The rivers tumble down the plain unobstructed and frequently change courses. The constant deposition of silt materials at the river bed raises the level of the valley floor and as a result the surplus rain water of summer overflows the rivers.

Geology

Geologically the Brahmaputra valley is composed of tertiary alluviums (Figure 3). The alluvial deposits at different periods compose the entire stratigraphy of the plain. The deposits do not bear heavy minerals except tertiary coal and oil.

The scattered outcrops of the Archaean hard rocks belonging to the Meghalaya plateau break the monotony of the alluvial plain especially in the western half of the plain. Geological importance of the region is the presence of coal seams in many places of upper Assam like Borgolai, Makum, Namdang etc. Another important layer of clay named as Girujan clay is well exposed at Jaipur, Digboi, Dikhow valley region which have much economic importance.

Stratigraphically the alluvium is divided into three distinct categories: (1) Older Alluvium (2) Newer Alluvium and (3) Recent Deltaic Deposits. The Older Alluvium is well exposed especially in the south bank of the Brahmaputra. The
Newer Alluvium laid down along the present day valleys especially exposed in the entire north bank. The recent deposits on the river banks and in the valley floors are termed as Newer Deltaic Deposits. The charlands of the rivers are of this type.

**Climate**

The climatic individuality in the region is generated by its physiography.

Four conspicuous seasons - the winter, pre-monsoon, monsoon and retreating monsoon are found in the region as usual in the rest of the country (Figure 4). The trend, tendency and distribution of temperature, rainfall, number of rainy days and fogs are notable indices for identification of the above seasonality of the region.

The winter season i.e. the months of December, January and February, is cool and pleasant with little or no rainfall. The normal average winter temperature varies between 11°C and 19°C. Little rain occurs in this season. The average rainfall is less than 5 cms. But the north-eastern region receives more than 10 cms. e.g. Dibrugarh receives 11.5 cms.; Sibsagar receives 9.6 cms.; Digboi receives 12.2 cms. and Margherita receives 12.8 cms.

During the pre-monsoon period i.e. in the month of March, April and May considerable rainfall occurs. The
average rainfall in upper Assam is 23.12 cms. and lower Assam 15.6 cms. Significantly, most of rains in this season are associated with nor'-wester or local cyclonic storms. The real monsoon period starts from the month of June and continues up to the middle of September. This is the season of heavy rainfall. Monsoon weather in Assam is characterised by light to moderate winds, clouds and rainfall associated with thunderstorms.

The monsoon withdraws from Assam in the last week of September or in the first week of October. After the withdrawal of monsoon, light unsteady winds are experienced and the weather gradually clears up.

The distribution of rainfall is not uniform as it ranges from 175 cms. in the plains to 625 cms. in the hills. Heavy rainfall is confined to the five monsoon months, which is responsible for causing floods all over the plain. Strangely, the occurrence of heavy flood has not got regularity, for instance, the years 1931, 1935, 1948, 1951, 1954, 1962 and 1972 were the years of heavy floods, whereas the rest of the years may be said to be lean flood years.

Demography

The Brahmaputra valley with a geographical area of 56.3 thousand square kilometre has a total population of
about 12.5 millions in 1971. The average density is 221/sq.km. which is higher than that of the national average of 167/sq.km. in 1971. This has been abnormally increasing during the past few years as the estimated (projected) population during the year 1976-77 was 17.2 millions and consequently the average density has gone up to 306/sq.km.

Over the 100 years, since the inception of the official census in 1872, this part of the country exhibits a variable growth of population. The rate of growth has been different for different districts as is evident from the table 1.

**Table 1**

<table>
<thead>
<tr>
<th>Districts</th>
<th>Population in 1872</th>
<th>Population in 1971</th>
<th>Percentage variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Goalpara</td>
<td>387,342</td>
<td>2,225,103</td>
<td>475</td>
</tr>
<tr>
<td>2. Kamrup</td>
<td>561,681</td>
<td>2,854,183</td>
<td>409</td>
</tr>
<tr>
<td>3. Darrang</td>
<td>235,720</td>
<td>1,736,188</td>
<td>638</td>
</tr>
<tr>
<td>4. Newgong</td>
<td>260,238</td>
<td>1,680,895</td>
<td>546</td>
</tr>
<tr>
<td>5. Sibsagar</td>
<td>317,799</td>
<td>1,837,389</td>
<td>480</td>
</tr>
<tr>
<td>6. Lakhimpur</td>
<td>121,267</td>
<td>2,122,719</td>
<td>1,653</td>
</tr>
</tbody>
</table>

The variation was partly due to the natural growth and population influx from neighbouring countries. The tea
Garden labourers are generally imported from outside, mostly from Bihar, Orissa and Tamilnadu. At present more than 4 lakhs labourers are engaged daily in the tea gardens of Assam.

The land hungry people of East Bengal (Bangladesh) began to immigrate to Assam from 1911 and has continued to flow till this date. The districts of Goalpara, Kamrup, Darrang and Newgong are mostly affected by this immigration. At present the estimated number of immigrants is 7.1 million which accounts for about 48% of total population of Assam (including Cachar, North Cachar Hills and Karbi Anglong) in 1972.3

From the table 1 it is seen that Lakhimpur district (Dibrugarh and Lakhimpur) depicts the highest percentage of growth. This is due to the fact that various small scale industries like tea, ply wood, oil, coal have developed in these districts.

Out of the total population, 27.4% constitutes the working force over the valley region. The agricultural workers constitute 83.5% of the total working force and the rest is mostly engaged in other activities (Figure 5).

This signify the agrarian economy of the area.

As far as rural urban settlement structure is concerned, about 91.2% of the total population live in villages and the rest 8.8% live in urban centres (Figure 6).

In 1971, there are 62 urban centres in the Brahmaputra valley region. In 1901, there were only 10 towns and in 1951 the number increased to 20. From 1951 onwards, there has been a great leap in urban growth as the total number of towns rose to 46 in 1961. It is significant to note that most of the urban centres are located along the river banks and form the nodal points of communication.

Regional economy

The various natural resources like land, agricultural crops, forest products, minerals, working force etc. determine the regional economy of the valley. Owing to the variable distribution of the above resources, a disparity in regional economy is obvious. The growth of resource-based industries is an important breakthrough in the dominant agrarian economy of the area. The agrarian structure of the Brahmaputra valley is still in vogue inspite of a substantial changes.

Agriculture

From the agricultural point of view, the Brahmaputra valley may be divided into two crop regions based on
dominating crops, the upper Brahmaputra valley and the lower Brahmaputra valley. The upper Brahmaputra valley specialises in tea cultivation, sugar-cane and oil seeds. The lower Brahmaputra valley is more diversified in production of crops than that of the upper valley. Pulses, oil seeds, sugar-cane, jute, potatoes, tobacco together with rice constitute the list of crops grown in the lower Brahmaputra valley. Out of the total cultivable land of the valley 80% is put to crop production. This cultivated area produces 80% of Assam's total rice, 98% of jute, 86% of tea, 95% of oil seeds and 85% of sugar-cane. The most important crops such as rice, tea, pulses, oil seeds, jute, potatoes and sugar-cane occupy an area of 2.14 million hectares (Figure 7). Of this total cropped area, paddy occupies 75.04%; tea 6.72%, oil seeds 6.15%, jute 5.93%, pulses 3.69%, potatoes 1.3% and sugar-cane 1.1%.

The tea cultivation is mostly concentrated in the districts of Lakhimpur, Dibrugarh, Sibsagar and Darrang. About 60% of the total area under tea is concentrated in the upper Assam districts.

The jute cultivation is confined to Nowgong, Goalpara, Kamrup and Darrang districts only. In other districts, cultivation of jute is not very common as it
BRAHMAPUTRA VALLEY
CLIMATE: TEMPERATURE AND RAINFALL.

FIG. 4
BRAHMUPUTRA VALLEY
DISTRICT-WISE PERCENTAGE OF
RURAL AND URBAN POPULATION

XMS 20 40 60 80 100 120 KILOMETRE

FIG. 6.

POPULATION IN PERCENTAGE
100
50
5

RURAL

URBAN
BRAHMAPUTRA VALLEY
INDUSTRIES.

KMS 20 10 0 20 40 60 80 KILOMETRE

DISTRICT WISE REGISTERED FACTORIES:

- MANUFACTURE OF FOOD PRODUCTS
  (EACH REPRESENTS 15 FACTORIES)
- MANUFACTURE OF COTTON
- MANUFACTURE OF WOOD, WOOD PRODUCTS,
  FURNITURES ETC. (EACH REPRESENTS 10 FACTORIES)
- MANUFACTURE OF RUBBER, PLASTIC, PETROLEUM
  AND COAL PRODUCTS
- MANUFACTURE OF METAL PRODUCTS
- MANUFACTURE OF MACHINERY,
  MACHINE TOOLS & PARTS EXCLUDING
  ELECTRICAL MACHINERY
- MANUFACTURE OF TRANSPORT EQUIPMENT
  AND PARTS
- MANUFACTURE OF JUTE, HEMP AND MESTA
  TEXTILES
- MANUFACTURE OF SILK
- MANUFACTURE OF FERTILIZER
- MANUFACTURE OF PAPER, PAPER
  PRODUCTS AND PRINTING ETC
- MANUFACTURE OF MATCH
- MANUFACTURE OF SUGAR
- OIL REFINERY
- CEMENT FACTORY
- RAIL WORKSHOPS
- MANUFACTURE OF ALLUMINIUM
is in the above districts. This is primarily due to physical disadvantages and absence of expert jute retting cultivators. The rape and mustard are grown all over the valley districts and these are the major rabi crops. Goalpara is the largest producer of rape and mustard followed by Kamrup, Darrang and.Nowgong. Sugar-cane is also an important crop of the valley. Though it is cultivated all over the valley, high concentration and specialization in sugar-cane cultivation is found only in Sibsagar, Lakhimpur and Nowgong districts. Both sugar-cane and jute are notable industrial crops of the valley. As it is evident that eastern valley of the Brahmaputra specialises in cash crop production, whereas the western valley has mixed production of both cash and food crop production.

Forest

The forest of Assam contributes significantly towards its regional economy. The geographical area of the Brahmaputra valley is 57272.43 sq.km. of which 18557.35 sq.km. (about 32.9% of the total area) are occupied by forests.

The Assam forest is classified into two categories viz. (i) Reserved forest and (ii) Unclassified forest. Out of the total area under forest in the valley, the
reserved forest constitutes 72% and the unclassified category constitutes 28% only. The reserved forests contain varieties of valuable timber species of which Sal forest (Shorea robusta), Hollong (Dipterocarpus macrocarpus), Makai (Zea mays), Bonsoom (Phoebea parensia) mixed hard wood and Bamboo (Bambusa arundinaeae, Bambusa balcooa, Bambusa tulda) which have high economic importance. The Sal forest covers the north and southern part of the districts of Kamrup and Goalpara. The adjoining districts Newgong and Darrang also supply a meagre quantity of Sal wood.

Along the northern foothills of Goalpara and Kamrup districts, valuable forests of Sisso (Dalbergia sissoo) and Kheira (Acacia catechu) are found, Hollong is the predominant species in Lakhimpur and Sibsagar districts. Extensive growth of cane and bamboo is found in the entire valley. Along with the cane and bamboo, varieties of reeds are also found in association but more so in the hill slopes on either side of the valley.

Mineral

Assam is poor in mineral resources. Except oil and coal, other valuable minerals are not known. The oil and coal are the two vital economic minerals of the region. The present oil fields are located in the districts of Lakhimpur
Dibrugarh and Sibsagar. The following are the important prospecting oil centres: Digboi, Makum, Duliajan, Naharkotiya and Moran area. Recently the oil has been struck at Hagrijan, Doomdooma, Rudrasagar, Lakwa, Teok, Galeki and in other parts of Sibsagar district.

The discovery of new oil fields in the upper valley has opened new dimensions in the expansion of the oil industry in Eastern India. This entire area is believed to be potentially very rich in the mineral oil and natural gas.

The other important mineral is coal. The oldest and best known coal fields of Assam are at Joypur and Makum in Dibrugarh district. Most of the coal deposits are found in the foothills of Nagaland and Tirap bordering the valley. The coal belongs to tertiary age and are of inferior quality.

**Industries**

There are no industries worth the name, except tea in Assam. Since the initiation of the Five Year Plans in the country in the year 1951, a few medium and small-scale industries have come up(Figure 8), even then the total industrial population in the Brahmaputra valley is only 1.9% of the total working force in 1971 and only .5% is
engaged in trade and commerce.

Agro-based industries: The industrial entrepreneurship in the State has developed for its agro-based economy. The most important agro-based industry of the region is undoubtedly tea which has dominated the industrial sector of the economy of the State. The Brahmaputra valley produces substantial quantity of sugar-cane. It was formerly used for Khandsari or gur production. In the year 1955, the first public sector sugar factory was established near Baruah Bamungson in Sibsagar district. The factory had an original capacity of crushing 300 tons of sugar-cane per day. The production of the mill is gradually increasing. This sugar-mill can meet only about one-sixth of the State's requirement of sugar. Owing to its potentiality, the Government of Assam has proposed to establish more factories in the valley.

As an important rice growing area, the rice-milling industry has gradually grown in the region. There are about 200 rice-mills. Sibsagar district has the highest number of rice-mills in the valley. Besides rice-milling, flour-mills, oil-mills etc. have also come up to serve the local needs. There are all total 30 flour-mills in the Brahmaputra valley region. Nowgong and Kamrup district contain 15 mills.
Assam (Brahmaputra and Cachar Plain) accounts for about 20% of the total raw jute production in India. The average yield per acre in Assam is one of the highest in India owing to the favourable climatic condition of the region as well as the suitability of the soil for this particular crop. In 1971-72, both the valley regions produced about 1,138 thousand bales of jute and 36 thousand bales of mesta. In spite of the availability of sufficient quantity of raw jute, there was no serious attempt in the past for processing the raw material. It is estimated that the available raw jute of Assam can feed at least 10 medium sized jute-mills with 200 looms each. At present there is only one public sector jute-mill with 150 looms only in Assam, located at Silgat in Nowgong district. This mill has come up during the Fourth Five Year Plan and started its operation from August 1970. For the above advantages, proposals have been forwarded to establish three more jute-mills in the Brahmaputra valley. The work of the second jute-mill has already been started at Dalgaon in Mangaldai sub-division of Darrang district. It is further proposed to locate two other mills in Kamrup and Goalpara district.


With vast areas under deciduous and semi-evergreen forest, Assam is rich in forest resources. The forest of Assam provides adequate stimulus for development of varieties of forest-based industries such as match, saw-mill, ply-wood, hard-board, timber treatment plant and paper and paper-pulp industries. The first match-factory was started at Dhubri in Goalpara district.

The first saw-mill was started at Dihing in Dibrugarh district in 1880. Since then there has been sporadic growth of saw-mill industry in Assam. By the end of 1969 there were 14 saw-mills in the valley region.

Manufacturing of ply-wood is a recent addition in the saw-mill industry. Assam has enormous potentialities for ply-wood industry. There is a ready market for ply-wood in Assam as the tea industry requires huge amount of ply-wood for tea packages. Assam forests especially Dihing - Margherita reserved forest possesses huge quantities of ply-wood timber. It was only after the year 1950, large scale ply-wood production started in Assam. At present there are 39 ply-wood factories in the State of Assam, most of which are located in upper Assam. Factories can meet only 50% of the local demand of tea chests, the rest is to be imported from Calcutta.
There is one hard-board manufacturing factory at
Gauhati in Kamrup district and a paper and paper-pulp
industrial unit has been started recently at Jogighopa in
the district of Goalpara.

In order to utilise soft and the short durable timber
species, number of timber treatment industries has been
established which primarily cater the needs of railways.

Silk Industry: Silk industry in Assam valley region is
unique as cottage industry. Endi cloth is manufactured in
the district of Kamrup and the Roha area of Nowgong district.
The Sibsagar in upper Assam, Mangaldai in Darrang district
and Sualkuchi in south eastern part of Kamrup district are
important places of Muga and Pat silk manufactures. The Pat
silk is manufactured in Sibsagar district from the imported
yarns from Mysore State. For the manufacture of cotton, silk
and yarns, a spun-mill was established in 1962 at Jagirroad
in Nowgong district.

Mineral-based Industries: The only commercially exploited
minerals of Assam are petroleum and coal. Oil prospecting
was started in 1889, by the A.R.T.C. (Assam Railway and
Trading Company Limited). Later the B.O.C. (Burma Oil
Company) took over the oil exploration operated under A.O.C.
(Assam Oil Company) a British owned Private Company. After
the constitution of Oil India Corporation, a public sector
organisation, the oil exploration and prospecting works were taken over by it. The oil is available in upper Assam region, where the A.O.C. established the first oil refinery at Digboi. The refinery started processing work on the crude available in the Digboi field alone. At present this field has partially dried up. It is run on crude supplied from other fields via. Mahakatiya and Hugrijan. To process the newly found crude oil deposits, two refineries have been established in the public sector, one at Barawini in Bihar State and the other at Gauhati in the district of Kamrup in 1962. The Gauhati refinery was designed to refine yearly 0.75 million tons and the Barawini refinery was to refine 2 million tons annually. The Digboi refinery can process 10% and the other two refineries process more than 60% of the crude oil produced in fields of Assam.

A petro-chemical complex, with crude refinery unit has been set up at Bongesaon under the public sector. This complex has been established for new oil fields in the upper Assam. A loop pipe line has been constructed for supplying of crude from oil-fields in upper Assam to the refinery.

The occurrence of coal was reported as far back as
1825 and was mined near Saffrai in upper Assam in 1828. The geological survey undertaken in 1882 to determine the possibility of coal production in upper Assam opened several coalfields at the foothills of the Naga and the Tirap hills. The Assam Tea Company, one of the pioneer tea companies in India, started the coal mining at Jaipur in upper Assam. The oldest and best known coalfields of Jaipur, Lede, Borgelai, Namdang, Tipong and Nakum in Dibrugarh district produce about 99% of Assam coal. The mines of Dibrugarh district alone produces 5,78,213 tonnes and the mines of Sibsagar district produces 20,294 tonnes in 1975. The whole State produced about 582,164 tonnes in 1975.6

Chemical industry: Since the discovery of crude oil and natural gas in Naharkatiya area of upper Assam, steps had been taken to make a beginning of petro-chemical industry in Assam. Since then the Government of Assam has been trying to set up some industries based on natural gas. Subsequently in 1963, the Namrup Fertilizer Factory of the Fertilizer Corporation of India has come up for manufacturing ammonia based on natural gas for ultimate conversion to urea and ammonium sulphate.

In view of rapid increase in demand for urea as fertilizers for agriculture and other purposes the F.C.I. (Fertilizer Corporation of India) has produced 3,30,000 tonnes of urea by the end of 1971.  

Power generation: The Thermal Power Station of the Assam State Electricity Board has been established at Numrurp which is based on natural gas associated with oil of Naharkotiya area. Thus with the establishment of the F.C.I. and the Thermal Power Station, Numrurp becomes a small town with good transport and communication.