

Lesson-10

Our Industries



The state of Assam is rich in agriculture, greenery, minerals, and water resources. Depending on these resources, a large number of industries have been established in this state. In general, we get some of our necessary materials directly from natural resources. There are some other essential items that we do not get directly from nature. These items are prepared from natural resources with the help of machinery instruments in a certain method. In this way, for the production of materials, some production centres or industries have been set up. For instance, the industries of making clothes by preparing threads from cotton, cement from limestones, sugar from sugarcanes, paper from bamboo, carpets, bags, and sacks from jute, etc. From a single raw material, several items can be produced in industry, for example, ropes, bags, sacks, carpets, etc. can be prepared from jute.



Raw materials

The materials obtained from nature that are used to produce our essential, goods or articles are called raw materials or unprocessed materials.

The soil of Assam is suitable for tea cultivation. Here, tea is produced in extremely high amounts. That is why many tea industries have been started in Assam. In a place called Tocklai in the Jorhat district, there is a Tea Research Institute. Around 50 percent of tea in India is produced in Assam. In the production of tea, India's position is first in the world.

Let us know about the tea production of Assam–



Tea Garden



Tea industries

There are more than 800 big tea gardens in Assam. Tinsukia, Dibrugarh, Sivasagar, Jorhat, Golaghat, Sonitpur districts of Assam have a large number of tea gardens, whereas Darrang and Kamrup districts have fewer tea gardens in Assam. Tea is prepared by plucking the tender green leaves and drying them in a certain method. In this way, tea production centres have been set up in each of the tea gardens. Being commercially established, each of these tea production centres has been converted into a small-scale industry. Lakhs of people are making their livelihoods by working in these tea gardens. The tea from Assam is sent to different parts of India and abroad. Our country is economically benefited by exporting this tea to foreign countries.

Assam tea has been able to hold a good position in the international market. The government collects a large amount of revenues by exporting the tea produced in Assam to foreign countries. Out of all the industries in Assam, the tea industry is the most significant.

Field trip with teachers–

- Make a visit to any industry in your neighbourhood and try to write a short note on it.

The indigenously produced materials of Assam like tea, clothes made of '*paat-muga*' silk, etc. have received huge recognition in the country and abroad. However, in comparison to some other states of India, big industries have yet not been established in Assam as per need. The main reason for this is the lack of capital, big local market, skilled labourers, developed transport system, etc. essential for setting up of an industry.



Attire

With the help of the government, some industries have been established in Assam. Let us know about the names of different industries situated in Assam, the raw materials used by them, and the names of the manufactured items from the following table–

Raw materials	Industries	Manufactured items	Situated at
Crude oil	Oil industries	Petrol, Diesel, Cooking gas, Kerosene, Naphthalene,	Digboi, Numaligarh, Noonmati, Bongaigaon
Natural gas	Gas plant	Electric power	Kathalguri
Water	Energy industries	Electric power (Hydroelectricity)	Umrangsu (Kopili), Karbi Langpi
Natural gas	Energy industries	Electric power	Namrup
Limestone	Cement industries	Cement	Bokajan
Natural gas	Fertilizer industries	Chemical fertilizers	Namrup
Crude oil	Petrochemical industries	Polyester, Polythene	Bongaigaon
Jute	Jute industries	Sacks, Carpets, Bags, Ropes	Silghat
Coal	Coal industries	Coal	Lidu

Group work- (Teacher will help you)

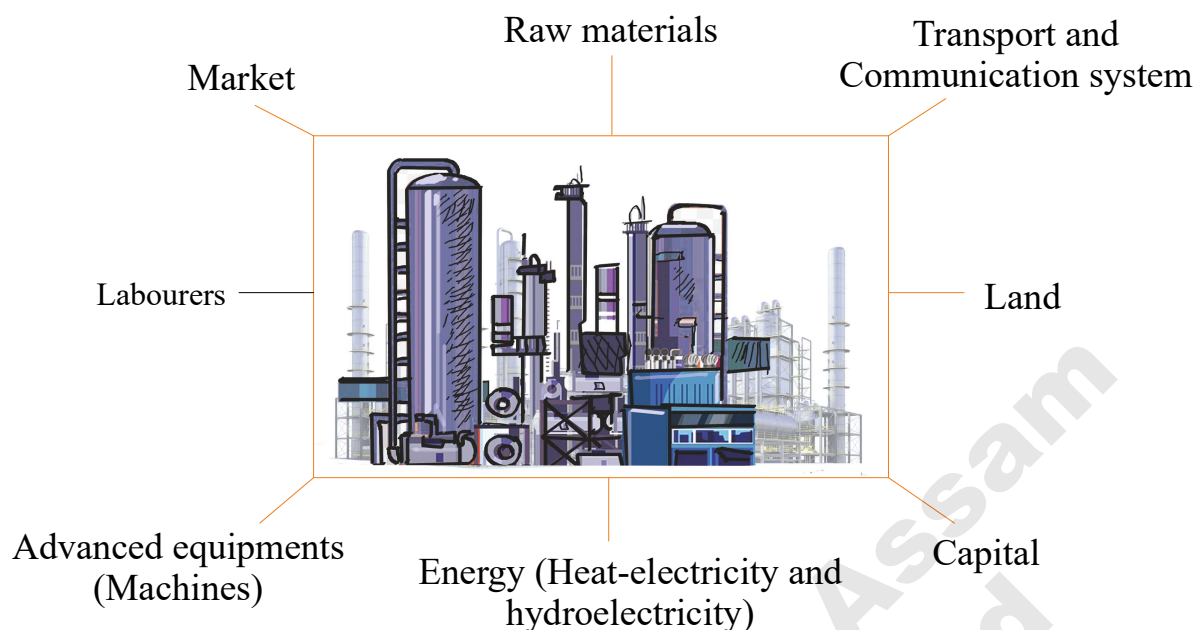
- Prepare a list of the natural resources present in your neighbourhood.
- What are the industries that have been set up in your locality and what are the raw materials used by them.

Let us know-

- ✱ In the year 1866, the British first discovered crude oil in Assam.
- ✱ In the year 1825, the first coal mine in Assam was discovered.
- ✱ In the year 1837, the first tea garden was established in Assam.
- ✱ In the year 1958, the sugar industry was established in Barua Bamungaon.

Based on the availability of raw materials in the country, some industries are established. Sometimes, despite the presence of natural resources, it may not be possible to establish industries in a certain place.

Let's know about the factors responsible for the growth of industries-



- ✧ For the setting up of an industry, sufficient amount of raw materials is required.
- ✧ For the establishment of an industry, land and a heavy amount of capital are required.
- ✧ A large number of advanced instruments are required to manufacture products from raw materials.
- ✧ Generally, the tasks and activities in the industries are carried out with the use of coal (heat-electricity) and energy from hydroelectricity. As coal is extensively available in West Bengal and Bihar, therefore, coal is mainly used to run the machineries in these two states. On the other hand, hydroelectricity is used in places where coal is not available.
- ✧ For selling the products manufactured in the industries it is necessary to have local markets along with the presence of national and international markets.
- ✧ To carry the raw materials and manufactured products, and to run the machineries, etc. labourers are required. To prepare the manufactured products in the industries specialized skills are required. In such cases, skilled labourers are essential.
- ✧ To carry the raw materials and other essential commodities to the industries and to transfer the manufactured products to the market advanced system of transport and communication is necessary. Because of the presence of developed modes of transport, many industries have been established in Kolkata, Mumbai, Jamshedpur, Kanpur, Chennai, etc.
- Is there an electricity connection available at your home? If yes, prepare a list on the activities in which electric power is used at your home.

Let us know about some of the notable industries of Assam—

Sugar industry—

Sugar industries are established in the areas where sugarcane grows immensely. Because it has the convenience of carrying raw materials from the production site immediately to the industries. For doing such works, advanced machineries and skilled labourers are needed. There are more than 200 sugar industries in India. Almost 60 percent of the sugar of the country is produced in northern India. On the other hand, since the soil of southern India is suitable for sugarcane cultivation, there has been the establishment of new sugar industries in that region. Sugar is produced in the states of Bihar, Uttar Pradesh, Andhra Pradesh, Tamil Nadu, Maharashtra, Karnataka, etc. Most of the sugar produced in our country is used in the country itself.

Paper industry— The principal raw material for the paper industry is bamboo.



Bamboo trees

Nowadays, due to the excess use of paper all over the world, it is also prepared from the pulp of the softwood of the pine tree, deodar cedar tree, etc. Apart from that, paper is also prepared from grass, old cotton, wastes from jute, etc. Compared to the other countries, the number of paper-producing industries is very less in India. Most of the paper industries in India are situated near Kolkata and Mumbai.

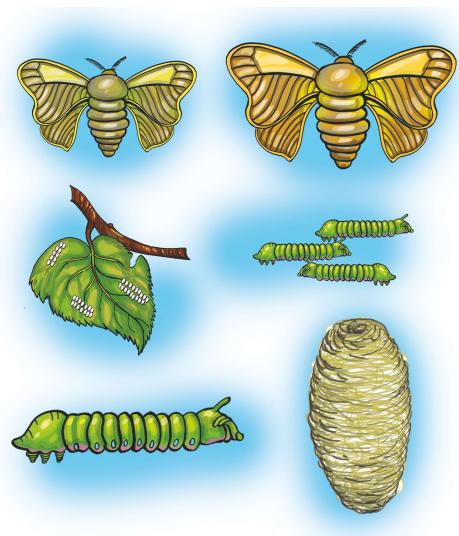


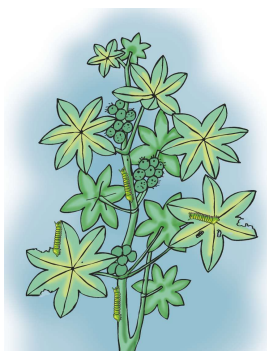
Paper Mill and production of paper

- Write down what are the raw materials used in making the papers of your book.

Silk industry—

The leaves of the mulberry tree are the food for silkworms. Silkworms are reared by farming the mulberry trees. The clothes of *paat* silk are prepared from the silk threads taken out from the cocoons made by the silkworms. The method of preparing threads this way is very complicated. It requires hard labour and skill. That is why at the beginning, these industries were set up as cottage industries. Nowadays, clothes of *paat* silk are also made in machines.





Castor Plant

India is recognized to be in the second position in the world in the production of silk clothes. Out of the total production in the country, the state of Karnataka alone produces half of the silk clothes. Besides Bengaluru from the state of Karnataka; Murshidabad and Bishnupur of West Bengal, Kanchipuram of Tamil Nadu, Srinagar of Kashmir, Benaras of Uttar Pradesh, etc. are famous for silk industries. Suwalkuchi, Dhakuakhana, Raha, Palashbari of Assam; Gandhinagar of Gujarat, etc. are renowned places of Silk industries.

Leaves of castor plants are the food for *eri* silkworms and the leaves of *som* (*Persea bombycina*) trees are the food for *muga* silkworms. *Muga* clothes are produced only in Assam.

Cotton textile industry–

- Prepare a list of the industries that have been set up in your region.



Silk worms on som tree

In the preparation of cotton textile, India is well known since ancient times. In the beginning, these industries were in the category of handicraft industries. At present, India has secured the second rank in the world in the production of cotton textiles. Mumbai is the first centre of India's modern textile industries. It has proper facilities for harbouring the import of instruments, coal, standard quality of cotton, and other essential items.



Cotton plant

Moreover, due to advanced communication with the cotton-producing regions, skilful labourers, big local market, and facilities of hydroelectricity, this industry has made a good establishment in Mumbai. After Mumbai, Allahabad is a worth-mentioning production centre for cotton textiles. Factors like adequate capital, advanced communication system, skilled labourers, etc. have helped in building the cotton textile industries in this place. There are many cotton textile industries in the states of Maharashtra, Gujarat, Madhya Pradesh, Uttar Pradesh, West Bengal, etc.



Textile industry

- Write what are the raw materials required for the production of the clothes that we wear.

Iron and steel industry–

The iron and steel industry is one of the large industries of India. Since ancient times, steel manufacturing industries are there in India. In these industries, iron ore, coal and limestone are essential as raw materials. As the raw materials of heavyweight and high volume are required, therefore, these industries are established near the iron mines. However, transportation of heavy products requires appropriate communication facilities. Based on these industries, different factories and industries for manufacturing machineries and tools have been setup. For the establishment of iron and steel industries, factors like huge amount of capital, advanced transportation facilities, adequate fuel, and raw materials are required. A large area of Chotanagpur plateau like West Bengal, Jharkhand, Bihar, Odisha, and Chhattisgarh have become a hub of iron and steel industries.



Iron ore

Apart from the above-mentioned industries, there are many large scale industries in our country. Industries provide major contributions to the economic development of a country. As soon as the industry is started, the transport and communication system of that region experiences development and the local market of manufactured products also evolves. Furthermore, the local people get employment opportunities in those industries.

Let us discuss–

Topic: ‘Natural resources play an impact on our economic aspect.’

Some aspects of the discussion-(use of raw materials, establishment of the industry, livelihood, market, and transportation).

➤ Fill up the blanks below as shown in the example–

Raw material	Industry	Manufactured product
Sugarcane	Sugar industry	Sugar
(a) Bamboo, the pulp of softwood	Paper industry
(b)	Textile industry	Clothes
(c) Crude oil	Energy or oil industry
(d)	Cement industry	Cement
(e) Tea tree leaves	Tea
(f)	Iron and steel industry	Steel

Exercise

1. Write in brief—

- (a) What do you understand by raw materials?
- (b) Why is advanced transport and communication system necessary for the establishment of an industry?
- (c) What are the factors required for setting up an industry?
- (d) What are the raw materials necessary for iron and steel industry?
- (e) How cloth as of *paat* silk are prepared?

2. Fill in the blanks—

- (a) Mumbai is the first centre of modern _____ industries in India.
- (b) The principal raw material for paper industries is _____.
- (c) Most of the silk clothes in India is produced in the state of _____.
- (d) The principal raw material for sugar industries is _____.

3. Match column 'A' with 'B'—

A	B
Oil refinery	Kathalguri
Gas plant	Namrup
Fertilizer industry	Silghat
Jute industry	Numaligarh

4. Using an example of a country illustrate that even without the availability of raw materials a large industry can be established.
5. Explain the reasons why many large scale industries have not been built up in Assam.
6. What do you mean by industry? Write names of four large scale industries of India.
7. Write short notes on—
Sugar industry, Paper industry, Cotton Textile industry, Silk industry, Iron and Steel industry.

