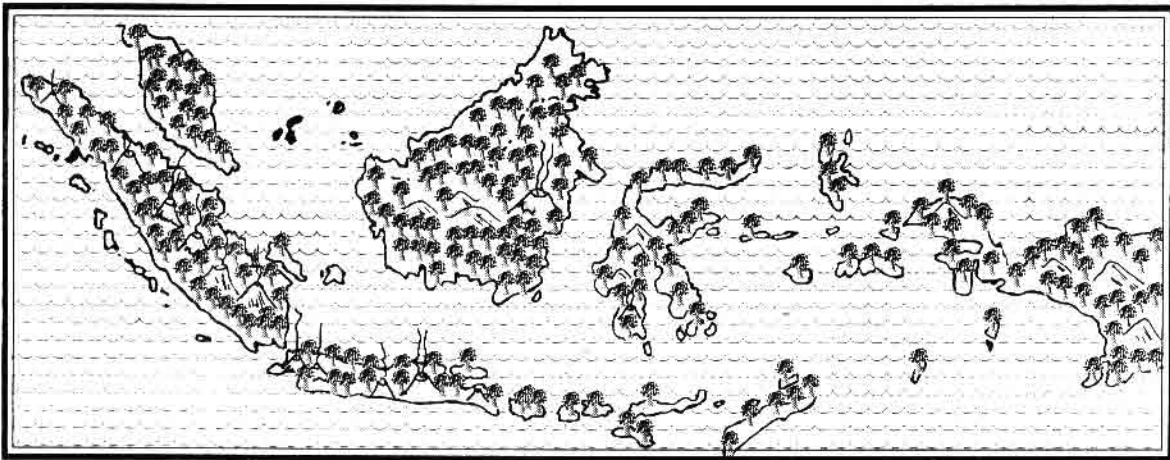


CHAPTER 10

INDONESIA



Thousands of islands, big and small, washed by high seas and covered with dense forests... Volcanoes towering above the forests... Molten rocks and fire gushing out of the volcanoes... Terrace fields hewn out of the hills and mountains... Plantations of rubber and pepper... Settlements dotting the land amidst the seas, plains, forests, rivers and volcanoes. This is the country of islands - Indonesia.

There are many pictures of Indonesia in this chapter. Go through them carefully. Compare the forests, fields, houses and people with those of our own country.

Where is Indonesia?

Indonesia lies to the south-east of India. There are more than 10,000 islands in Indonesia. All these islands are surrounded by the sea. One has to cross the sea by ships or big boats to reach Indonesia. People also use boats to travel between the different islands of Indonesia. What fun it must be!

- ***Open the atlas and look for Indonesia.***
- ***Which ocean has to be crossed to reach Indonesia from India?***

To go to Indonesia, one has to go to Chennai in Tamil Nadu, board a ship and sail for many days.

Map of Indonesia

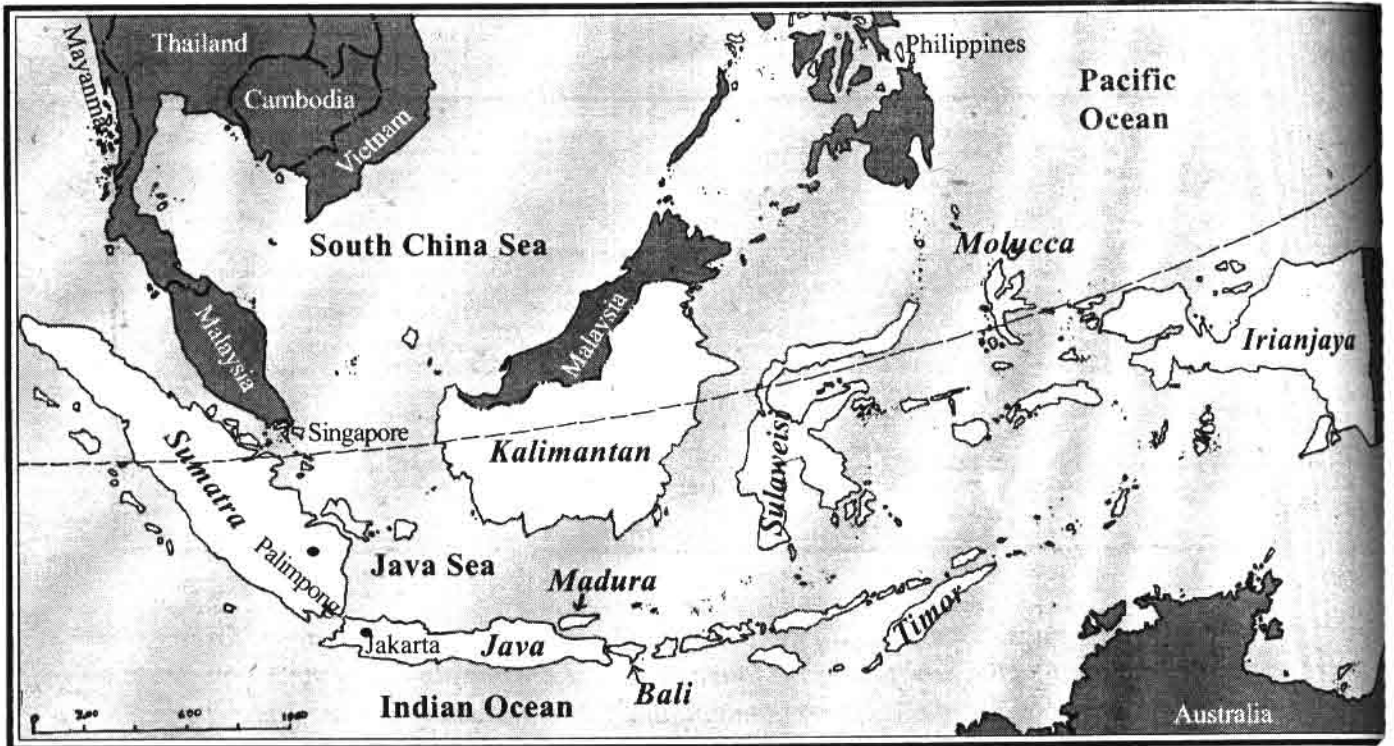
The names of different islands of Indonesia, the names of nearby seas and the names of neighbouring countries have been given in Map 1.

- ***Look at Map 1 and write -***
 - the names of the main islands of Indonesia -***
 - the names of the neighbouring countries -***
 - the names of the oceans and seas surrounding Indonesia -***

There are many mountains on the islands of Indonesia. Some of them are very high. There are some volcanic mountains, too, which keep erupting from time to time (fig. 2). When volcanoes erupt, plants, trees and settlements are destroyed. But the ash from the volcanoes makes the soil fertile. People get rich harvests from their crops here.

Look at the picture showing the physical features of the island of Java (fig. 5). Other islands of Indonesia also have similar features. Some of them are more hilly than Java. The

MAP 1 . INDONESIA AND IT NEIGHEOURS



Index

<p>Ocean / Sea</p> <p>Islands of Indonesia</p> <p>Equator</p> <p>Important cities</p>	<p>Indian Ocean</p> <p>Bali</p> <p>-----</p> <p>• Palimpong</p>
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Fig. 2. Sumeru and Bromo volcanoes of Java
 You can see a wide hollow at the peak of one of the mountains from where smoke is billowing out. This hollow is the mouth of a volcano, through which molten rock spills out from the interior of the earth. This molten (hot liquid) rock is known as 'lava'. Flowing lava seen from a distance looks like a river of fire. Ash, pebbles, gas and smoke are also thrown out from the volcano. When the lava cools down, it becomes hard rock.



major portion of these islands is covered with dense forests.

EQUATORIAL REGIONS

You probably remember that the Equator passes through Indonesia.

• *Which islands of Indonesia does the Equator pass through?*

You have seen the Equator on the globe in the previous chapter. You have also seen which continents the Equator passes through. The regions which lie on both sides of the Equator are always very warm and rainy.

You will read about Iran and Japan in the coming chapters. They are both situated far to the north of the Equator. They have winter for many months, and there is snowfall, too.

Warm and Rainy Climate

We have several seasons in our country, summer, monsoon, winter, etc. Life changes so much between them - we need warm clothing in winter but prefer very light clothing in summer. The fields are barren in summer but once it rains intensive agricultural work starts. It is, however, very different in Indonesia.

In Indonesia, there are no winter, summer or rainy seasons like we have in our country. All through the year, the sun shines overhead and it is warm all through the year. There is no cold season.

Along with the heat, Indonesia gets rainfall all through the year. Almost every afternoon, it rains there. Why is this so?

You have seen that the island of Indonesia is surrounded by water. Because of the direct rays of the sun, the water from the surrounding seas evaporates and forms clouds. When these clouds reach the interior of the island, they cause heavy rain (see figs. 3 & 4). Hence it rains in Indonesia throughout the year. Such warm and humid weather lasts throughout the year. If the sea was far away and not so near, it may have rained much less.

Cultivation is carried out throughout the year since it is never dry. In contrast, fields remain fallow during the summer in our state.

• *What is the difference between the climate of your state and that of Indonesia?*

Dense Forests

There are three important factors necessary for vegetation, namely - sunlight, water and soil. In Indonesia, trees get sufficient sunlight and enough rain throughout the year, so they grow very well. Thousands of varieties of trees and plants grow here. The forests are so dense here that it is dark on the ground even during the day. The trees grow in several tiers - the canopy of one growing over the other. These trees are home to several smaller plants and creepers. Large and strong creepers called 'lianas' climb over the tall trees. All plants and trees compete for sunlight and grow taller and taller (fig. 4).

Often due to the thick forest cover rain water which falls on the ground does not dry up and swamps are formed. It is difficult to clear these forests due to the dense growth and swamps.

Due to the warm and humid climate throughout the year, the forests do not have any particular leaf-shedding time. Leaves, of course, fall, but new leaves grow, and the forest remains constantly green. These forests are, therefore, known as 'Tropical Evergreen forests'. In Madhya Pradesh, trees shed their leaves at the onset of summer. The entire forest looks bare. After the rains in June-July, the forests become green again. This does not happen in Indonesia. The trees are always green there.

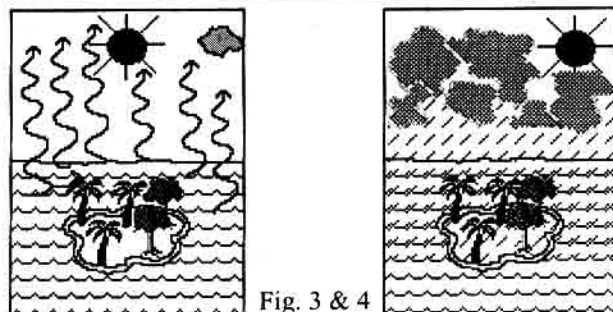


Fig. 3 & 4



Fig. 6. Equatorial Forest

- *Why does Indonesia have dense forests?*
- *Why do the trees in Indonesian forests grow very tall?*
- *Why doesn't Indonesia have a season when the trees shed their leaves as in Mdhaya Pradesh?*

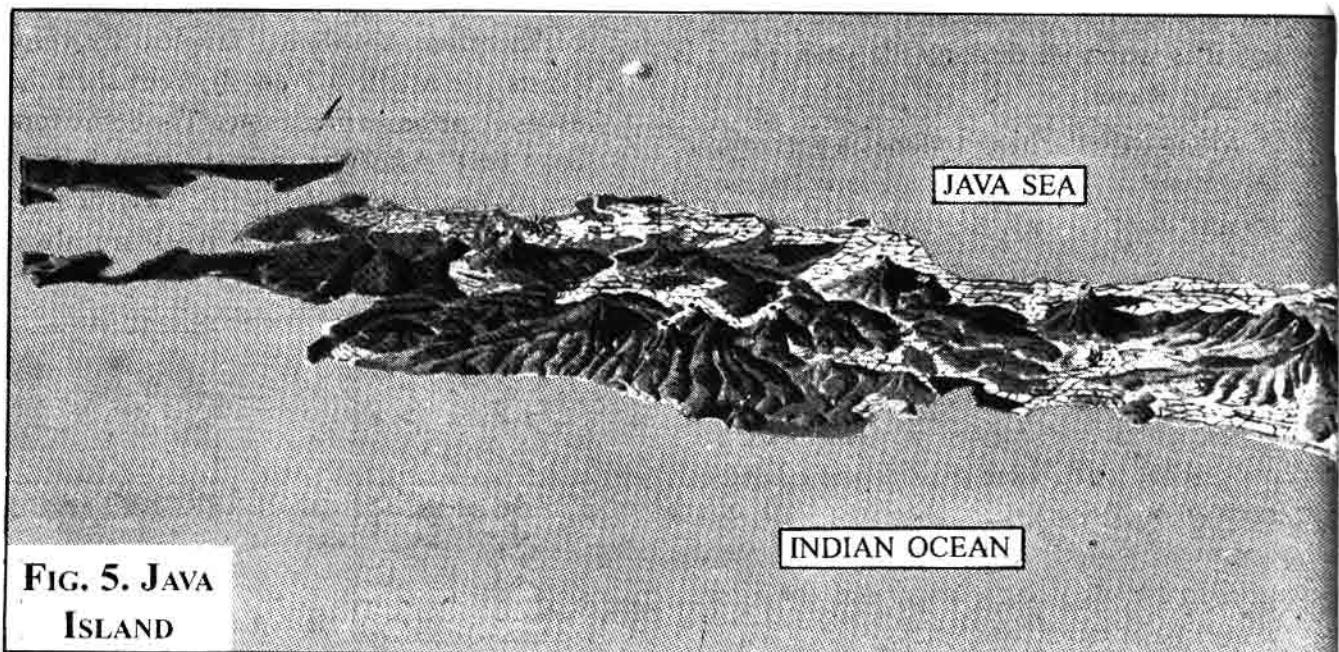
Birds of many bright colours can be seen in these forests. There are also plenty of wild animals like elephants, tigers, bears, deer, foxes and monkeys (figs. 7 & 8). These birds and animals get fruit and flowers to eat throughout the year. These forests being warm and moist, some tree or the other will always be bearing fruit.

Use of Forests

Hunting and Gathering: Even today, bands of hunter-gatherers live in the dense forests of Indonesia. They are able to meet all their necessities from the forests by hunting and gathering.

Slash and Burn Agriculture: Many people here cut down the trees and burn the forest with great effort, and cultivate crops on the ashes. When these ashes are depleted, they move on to some other part of the forest. This type of cultivation is known as 'jhum' or 'shifting cultivation'. You will read more about it in the following classes.

Valuable trees like teak, mahogany and ebony grow in plenty in these forests. Bamboo and cane, useful for building houses and ships, also grow here. These are exported to other countries. Ships loaded with timber can be seen at the ports of Indonesia. Indiscriminate felling of trees in the tropical forests has become a problem today. Due to excessive



felling, the forest is gradually diminishing. As a result of this, soil gets rapidly washed away during the rains.

• Do you find teak, cane and bamboo in the forests around you? If so, what are they used for?

Earlier, spices like pepper, cinnamon, clove and cardamom used to grow wild in these forests. Now they are cultivated. There are many trees and plants in the forests which are of immense use. Research is being carried out on this and attempts have begun to safeguard these forests.

AGRICULTURE IN INDONESIA

A major part of the islands of Indonesia is covered by forests even today. Agriculture is carried out only on the coastal plains. In many islands like Java, Bali, Madura and Sumatra, much land has been cleared and is being cultivated. Look for such plains in the picture of Java island. The people of Indonesia also cultivate on the mountain slopes. However, it is not easy to cultivate on the hills. If the hill slopes are cleared and ploughed, fertile soil will be rapidly washed away with the heavy rain. Hence the people here cut small terraces or steps into the slope. Along the edges, mud *bandhs* are made to stop the flow of water.

Fig. 7. Orangutan found in the jungles of Java

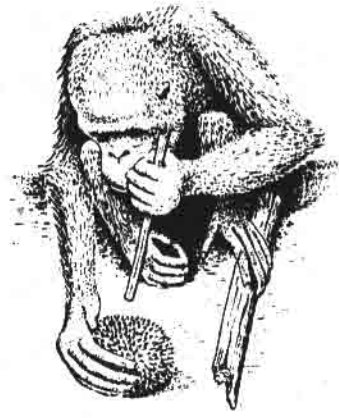


Fig. 8. Great Pied Hornbill found in Indonesian forests

Excess water is drained out through channels. Thus these fields retain both water and soil. Such fields are useful for the cultivation of paddy. The farmers of Indonesia raise three crops of rice in a year. Rice is, therefore, the principal crop of Indonesia.

In addition to rice, Indonesia produces maize, soyabean, sago, groundnuts, coconuts and bananas. Java island is famous for sugarcane cultivation. Tea, cocoa, and cinchona are also cultivated. Quinine, a medicine for malaria, is produced from cinchona.

Can you identify the volcanoes from the mountains in Java? Try to identify the plains too.

MADURA

BALI

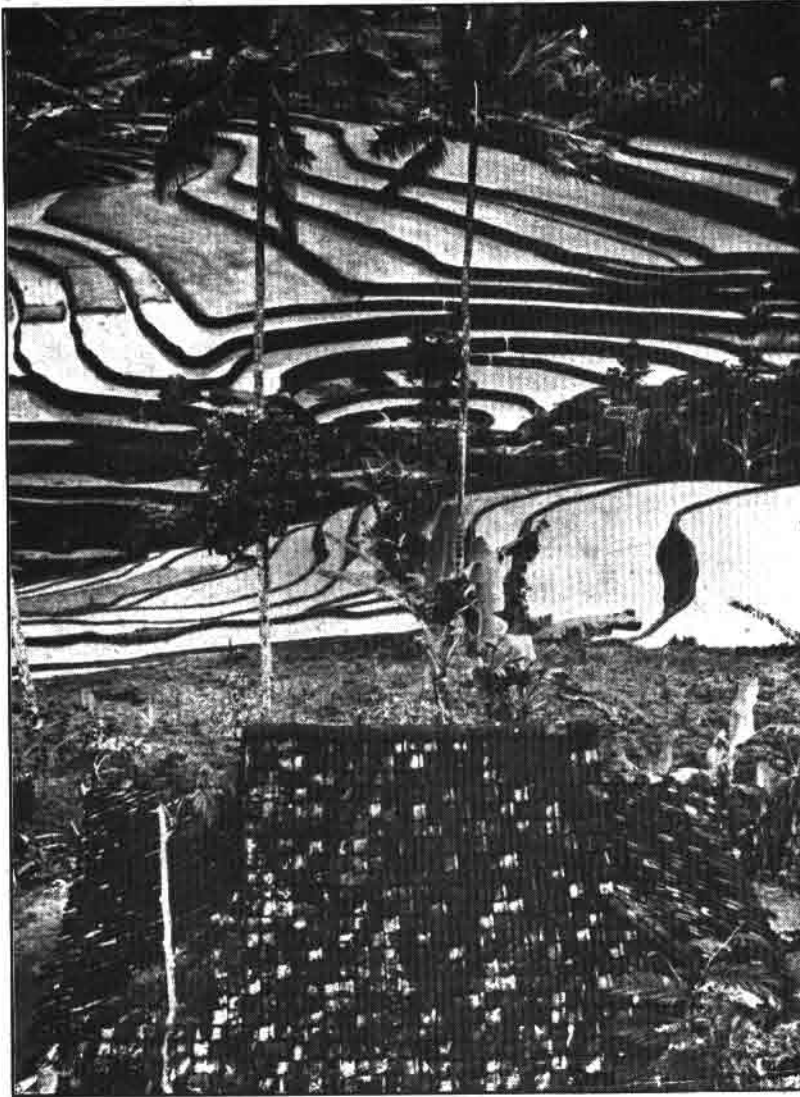


Fig. 9. Terraced Fields - What arrangements have been made to stop the flow of water? Which trees are shown? Are there similar trees in the fields around you?

- *In which season does rice grow in our country?*
- *Discuss why rice is the principal crop in Indonesia? Why is wheat not grown there?*

Spice Trade and Cultivation

For centuries, Indonesia has been famous for spices like cardamom, clove, nutmeg and pepper. In our country, these spices are grown in Kerala. Kerala, quite like Indonesia, is warm round the year, and also gets a lot of rain.

Spices grown in Indonesia are exported to other countries. European countries like, England, France, Italy, Holland, Spain, Portugal, etc. have been using these spices for many centuries. In the beginning, these spices

grew wild in the forests. People used to gather and sell them to traders in the towns. Traders from Holland and Arabia loaded their ships with these spices and made a lot of profit selling them in distant lands. These spices were not available in their own countries. Traders from India also used to come here for the spices. Many of these traders have settled down in Indonesia itself. As the demand for spices increased, people began to cultivate them.

You may know that long, long ago, the British came to India to trade and gradually established their rule over India. We had to fight for long to regain our independence. A similar thing happened in Indonesia. There, too, the traders who came to buy the spices gradually established their rule. In Indonesia it was the Dutch (from Holland) who ruled the country. Indonesia became independent a little after India in 1949.

Today Indonesia sells coffee, rubber, spices like pepper, tobacco, sugar, tea, coconut oil and copra (dried coconut) to other countries. These are grown in large plantations.

Plantations

Special crops like rubber, tobacco, sugarcane, coffee, tea and spices are grown in plantations. Plantations are big estates owned by large landlords who cultivate these crops on a very large scale for the purpose of selling them. They employ a large number of workers who live in quarters within the plantations. They tend the crops and harvest the products and pack them for sale and export. All these jobs are done on the plantation itself.

In the beginning most of the plantations were owned by the Dutch who kept the plantation workers as bonded labourers and treated them very badly. Today life has improved for the

Fig. 10. Work on a plantation. Look at the picture carefully and figure out who are the people shown here and where they must be living.



workers and most of the plantations are owned by Indonesians themselves.

The crops which grow in Indonesia need a lot of water. In India, Kerala, Bengal and Assam get plenty of rain, so some of these crops also grow in these states of India.

MINERALS AND INDUSTRIES

Indonesia has many mineral resources like tin, petroleum, manganese, bauxite, coal, iron, etc.

- *Do you know about any of these? Look at the metal objects around you and tell what metals they are made of.*

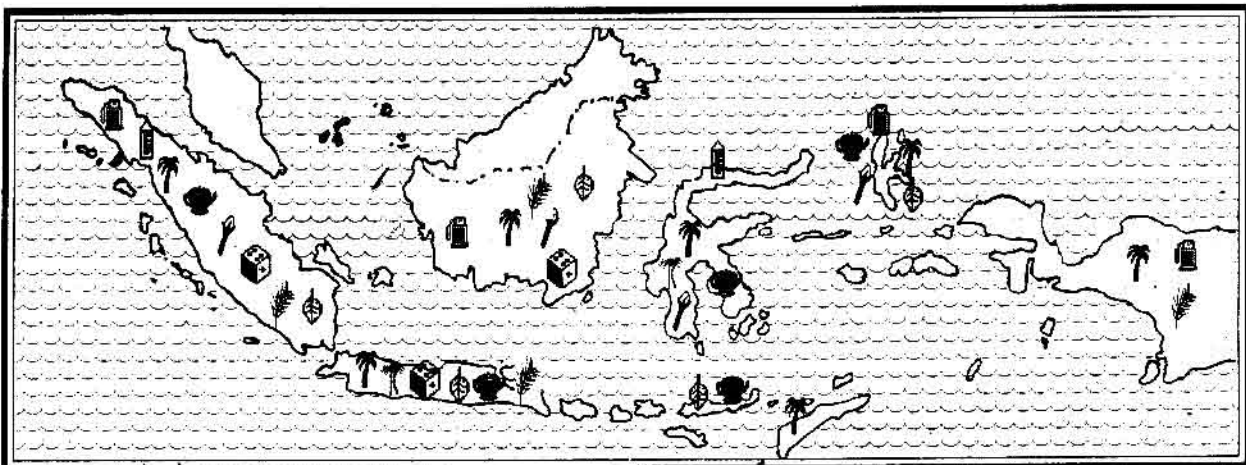
- *Write down the names of the crops which grow in Indonesia.*
- *Look at Map 2 and say which island produces which crops.*

Island	Crop

You must have seen aluminium utensils at home. The raw material from which aluminium is made is called bauxite. There are bauxite mines in Indonesia. Bauxite is mined in our Madhya Pradesh as well.

You may have noticed the white coloured coating inside brass utensils. This is a coating

MAP 2. AGRICULTURAL AND INDUSTRIAL PRODUCTS OF INDONESIA



Coffee	Coconut	Spices	Sugarcane	Rubber	Rice	Tobacco	Tin	Petroleum

of tin. You use kerosene to light cooking stoves. Scooters and motor cars run on petrol or diesel. These are all made from petroleum which is obtained from deep under the earth. Indonesia has large deposits of petroleum which are pumped out through oil wells.

- *Find out from Map 2 the islands of Indonesia on which tin and petroleum are found.*

Earlier, most of the oil wells of Indonesia were owned by the Dutch who used to export the oil to other countries. Indonesia became independent in 1949. Since then, an attempt has been made to develop new industries.

Earlier, most of the earnings of Indonesia came from the export of its petroleum. Recently Indonesia has been exporting many new products. Many of these new industries use the natural resources of Indonesia and some of them use imported raw materials. Some of the new important industries of Indonesia are - cotton textiles and garments,



Fig. 11 Tapping Rubber Sap. There are many rubber plantations in Indonesia. The sap is extracted from the trunk of the rubber tree and is used to produce rubber. What do you use rubber for?

footwear, wooden furniture, computers, canned fish, rubber, processed metals, etc.

- *Do you think cotton for the textile industry would be grown in Indonesia or imported from other countries?*
- *Which of the industries of Indonesia do you think use the natural resources of Indonesia? Name the raw materials used by those industries.*
 - cotton textiles and garments*
 - footwear*
 - wooden furniture*
 - computer*
 - canned fish*
 - rubber*
 - TV*
 - processed metals*

SETTLEMENTS

Many islands of Indonesia, especially Java, Madura and Bali are densely populated. Now people from these islands are moving to other islands like Kalimantan.

Indonesia has very big cities like Jakarta, which is the capital, Bandung, Jogjakarta, Surabaya, etc. Nevertheless, most people live in villages. Look at the pictures showing the houses of the villages and cities.

- *What are the differences between these two pictures?*
- *Why do the roofs have such a steep slope?*
- *The village houses are built on wooden stilts. Why is this so? Discuss.*

People of Indonesia

There are many differences between India and Indonesia about which you have read. But both these countries have people of different religions and different languages. Most Indonesians are Muslims, but there are many



Fig.12. Rural Houses

Fig. 13.City Houses

Hindus, Buddhists and Christians, too. Although the people of each island speak a different language, their way of life is similar. The national language is called Bhasha Indonesia.

There has been contact between India and Indonesia since a long time. The influence of the Sanskrit language in the names of people and places in Indonesia is apparent. There are many ancient temples like in India. The people here, too, celebrate Ramlila.



EXERCISES

1. How is Indonesia different from your state?
2. Find out what is said about 'lava' on page 124.
3. Write about the plants and trees of Indonesia in just three sentences.
4. Write about the main features of Equatorial regions in three sentences.
5. If it did not get so warm every day in Indonesia would it still rain daily there? Explain with reasons.
6. Under which sub-title would you find information about terraced fields - 'Hot and Rainy Climate', 'Dense Forest', 'Spice Trade and Cultivation' or 'Agriculture in Indonesia'?
7. What are the reasons for the cutting down of trees in Indonesia?
8. Why is it necessary to safeguard Equatorial forests?
9. What are the advantages of terrace cultivation? Select the correct answer -

a) We can prevent soil erosion.	b) There will be fewer weeds in the fields.
c) Water can be collected in the fields.	d) It becomes easy to use machines on the fields.
e) The soil becomes fertile.	
10. What are the advantages and disadvantages of volcanoes for the people of Indonesia?
11. Name 5 crops which are exported from Indonesia.
12. What did European traders buy from Indonesia?
13. The names of many places in Indonesia are given in this chapter. Which of these names are influenced by Sanskrit? Make a list of them with the help of your teacher.