

How does Production take Place?

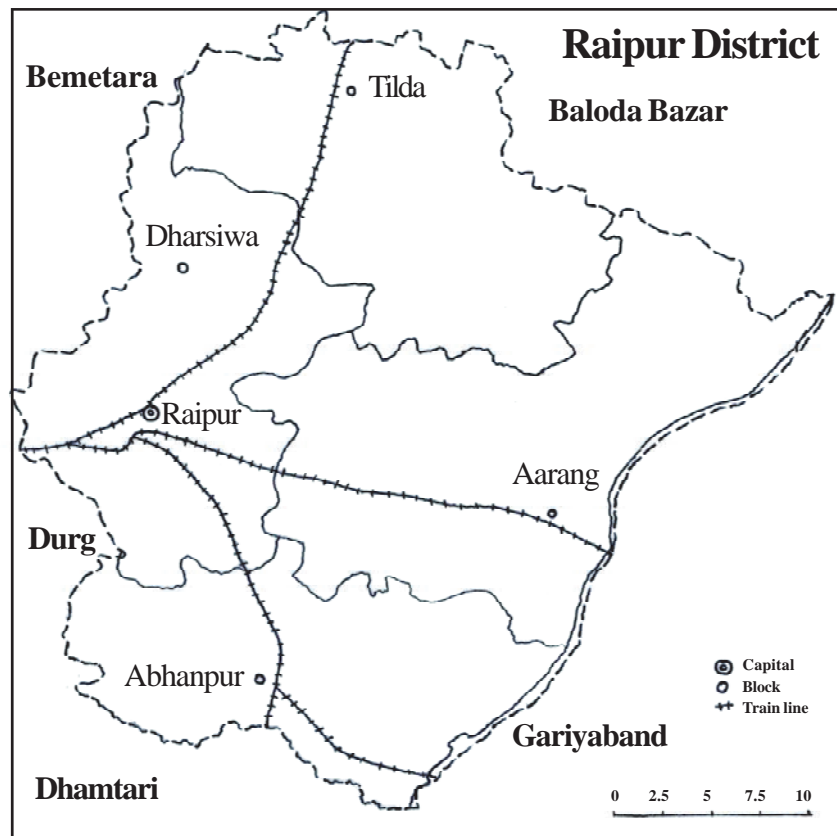
The production process has four main components - land, labour, capital and entrepreneurship. They are economic concepts that have a very specific meaning in the context of production. For example, we generally associate labour with hard, physical work. But in the context of production, it means the human contribution to the process, which could be either physical or mental. All four factors are essential for production. We shall try to understand what these economic concepts mean in this chapter. How do they come together in a production process? Who receives what from the process? How much does the worker earn for his contribution? Does the production yield a surplus? The answers to these questions depend on the existing social system in which the production is organized.

We shall use the city of Raipur as a case study to try and understand these factors in the production process. For this, the teachers and students should study the local production processes in their area and link them to these concepts to develop their understanding.

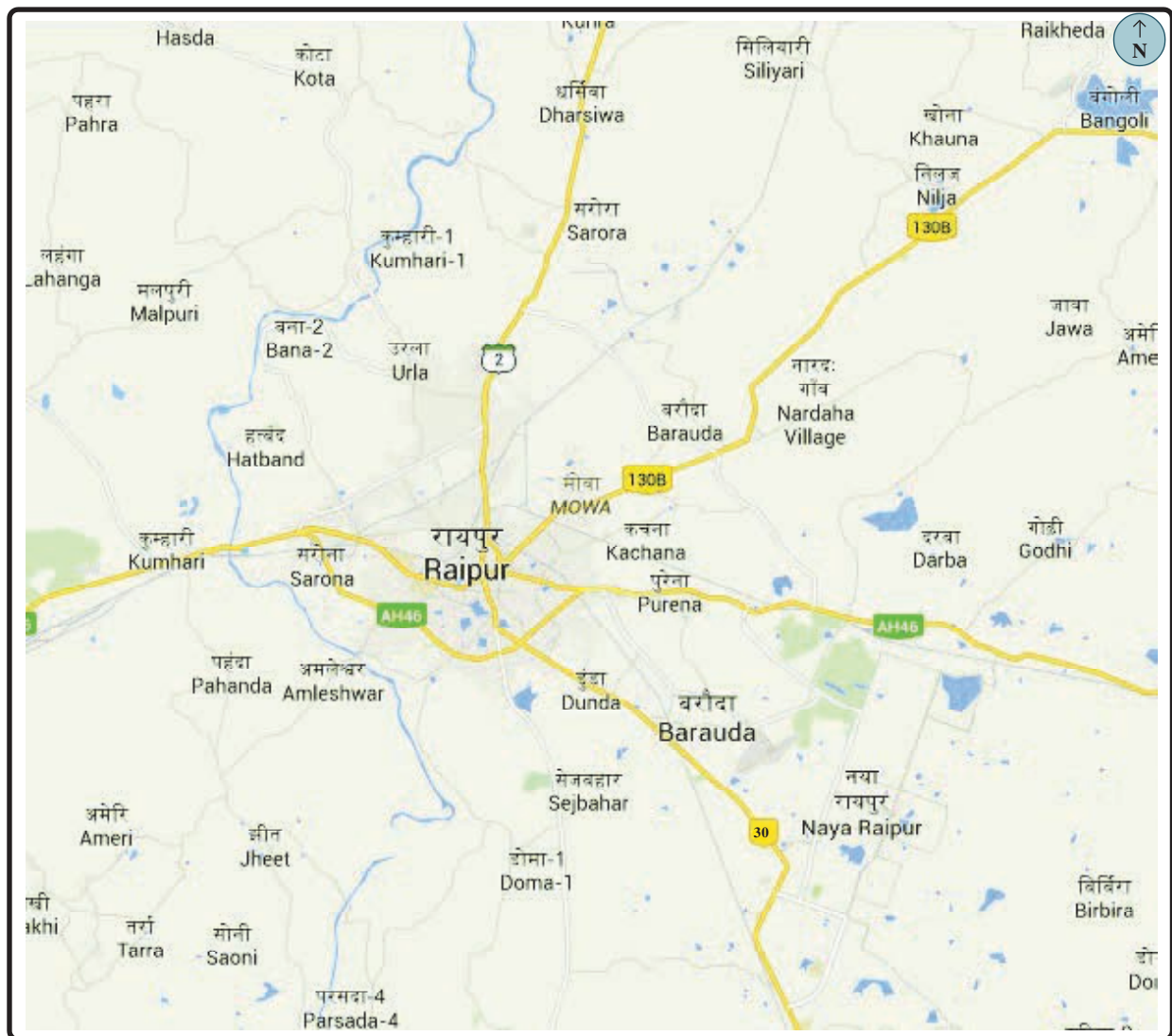
Raipur – an expanding city

Raipur is the capital of Chhattisgarh state. The city is also the headquarters of Raipur district. It was declared the capital in 2000, when Chhattisgarh became an independent state. The city has developed rapidly since then to become a major Indian metropolis by 2011.

The rich mineral deposits and forest resources available in various parts of the state have contributed to the city's industrial growth. Several important steel plants and cement factories have been established in and around Raipur. The city is a regional centre for electricity and steel production, leading to its emergence as an industrial hub of central and east India. It is also one of the



Map 18.1: Raipur district



Map 18.2: Raipur and the adjoining areas

country's prominent markets, with the state's vast forest resources making it an important trading post for forest produce. Its wholesale market serves the needs of not just Chhattisgarh but several districts of the adjoining state of Odisha.

Raipur is easily accessible from other important cities of India by the network of national and state highways. NH46, connecting Mumbai and Kolkata, passes through the city. NH30 connects it to Vishakhapatnam. Other cities like Bhopal, New Delhi, Mumbai, Bhubaneshwar and Nagpur are also connected by road or rail.

Over the last 15 years, large numbers of people from the rural areas have migrated to Raipur and its suburbs in search of employment in factories and offices. The city's geographical location, easy access by road and availability of civic facilities are major factors that draw people to it.

Map 18.2 shows the spread of industry, markets and civic services in Raipur. The industrial hub is located to the north of the city. It is a planned hub, with Urla, Siltara and Burnpur being important centres of small, medium and large enterprises.

Land

Land utilization in Raipur

In rural areas, land is primarily used for agriculture and people live in villages near their agricultural fields. In a city, there is no agriculture. People follow other occupations or do other kinds of activities. Land is used to establish factories, or construct government administrative offices, commercial offices, and residential buildings, or provide services like roads, schools, hospitals, markets, shops, etc.

The government provides many services to people living in urban areas, like transport facilities, electricity, water, etc. Apart from the government, private companies also provide these services in some areas.

A few years ago, the state government collected data of land utilization in the city and formulated an alternate plan for land use. One suggestion in the plan was to increase the land allocated for entertainment and leisure (parks, open spaces etc) from 3% to 21% (*Urban and Rural Investment Report, 2013*).

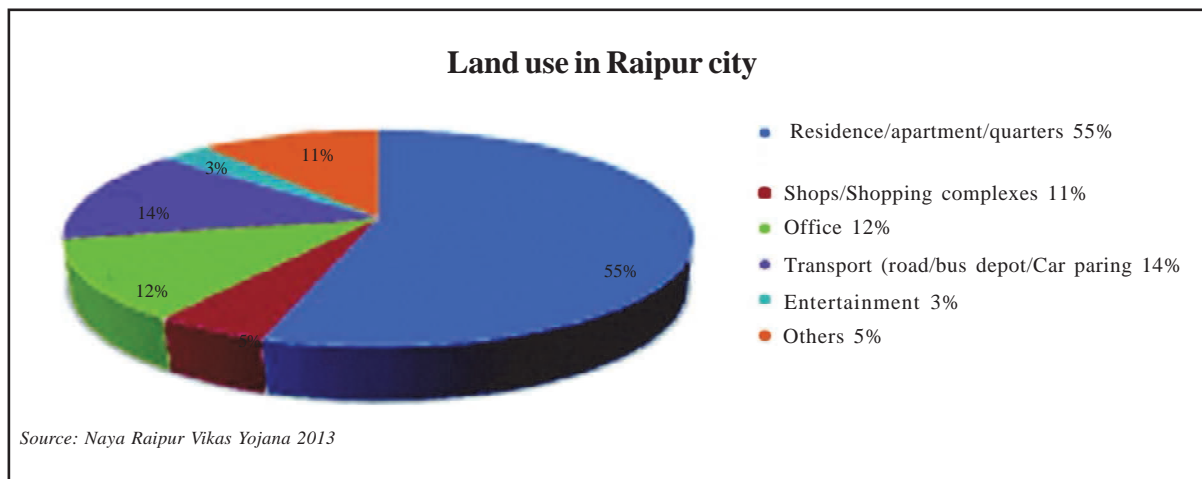


Figure 18.1: Pie chart of land use in Raipur city

Why did the government propose to increase the land allocated for entertainment?

Suggest a plan that could help in increasing the employment opportunities in Raipur?

Project work:

Study the land utilization in your locality and prepare a report.

People build houses in urban areas to live in but many house owners give their houses on rent. The rents vary according to the locality and the available services. People also rent shops for commercial activities. Rents of commercial spaces in shopping complexes, malls, and prominent market areas are high. But many self-employed traders run their business in small stalls and kiosks. They either own the kiosks or take them on rent. There are also many street-side vendors who cannot afford the rents. Many self-employed hawkers sell their goods on handcarts (*thela*). There is a lot of competition to get shops, kiosks and street side spots among the small traders, hawkers and vendors.

The distribution of land in cities is unequal and not according to people's needs. Hence, any development plans for cities must ensure that everyone gets a home and the opportunity to earn a livelihood.



Figure 18.2: A local bazar



Figure 18.3: A hawkker selling goods from a handcart

Labour

We have seen that land is an important source for earning a livelihood. Land is needed not just for the production of goods and services but also for residential purposes. If you do not have a house, what would your family do? They would probably rent a house to live in. Many families in the city live in rented houses. They have to spend part of their income to pay the rent. In Raipur, only 20% of the slum dwellers have title deeds to land (*pattas*) to build their own houses. (This legal document given by the government recognizes the holder as the owner of the land.) Slum dwellers also need civic facilities like drinking water, sanitation, toilets, public health centres, schools etc like any other citizen.

What are the possible ways in which low income families can increase their earnings?

Low income families in Raipur

People in cities live in many kinds of residences. Around 40% of the families in the Raipur Municipality live in slums. Of this population, about half have migrated to the city.

A survey was conducted in Raipur in 2012 to understand how people living in slums contribute to the economy of the city. The pie chart (Figure 18.4) shows that a large section of the slum population work as domestic help, porters, shop helpers, office peons etc.

The survey showed that the average earnings of slum dwellers was Rs.6763 per month. They spend their entire monthly wage on foodstuff - wheat, oil, vegetables, groceries etc. They have no savings to meet emergency needs so they are forced to take loans, which leaves them indebted.

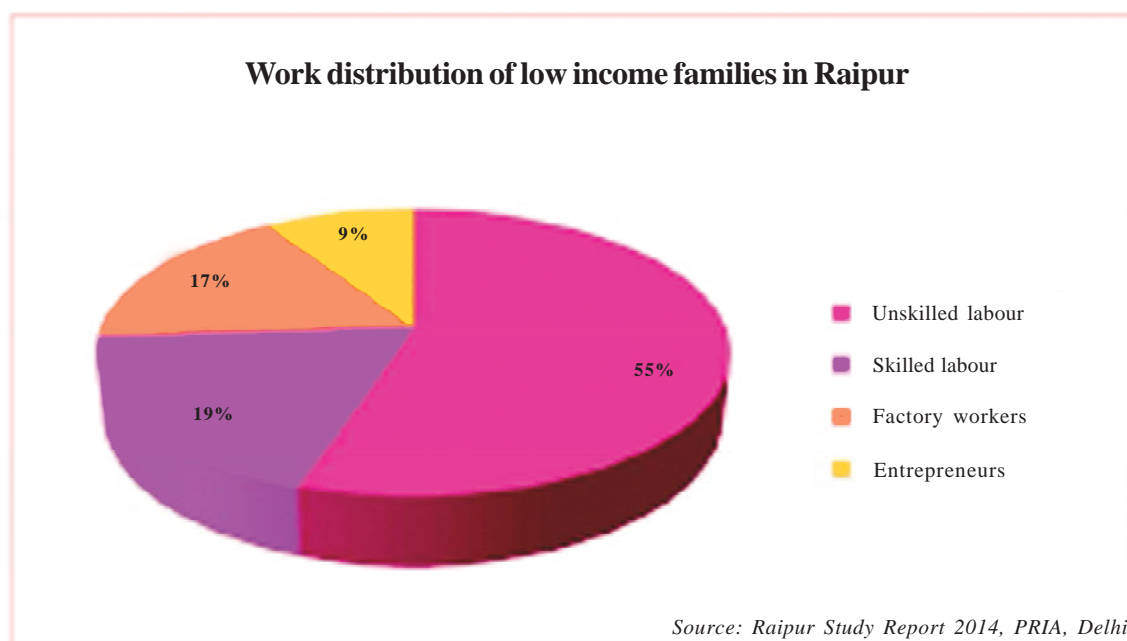


Figure 18.4: Pie chart of work distribution of low income families

Labourers in a city – Raipur as an example

Till now, we have looked at the role that land plays in the process of production in Raipur city.

Apart from land, the development of a city depends on people who can work in factories, offices, shops, schools and other institutions. Raipur is no different. Industrial growth has drawn many people to live in the city, both from within and outside the state. The growing population and expanding economy have boosted the service sector. Many people have come from other states and various parts of Chhattisgarh to work in factories and the different services. A large part of the workforce commutes daily from the neighbouring rural areas. People come from within a 25km radius on cycle and other modes of transport.

They include daily wage earners, unskilled and skilled workers, such as electricians, mechanics, fabricators etc, some of whom work in factories. Similarly, daily wage workers, masons, carpenters, plumbers, and electricians are engaged in the construction industry. Another category of labour includes supervisors, managers, accountants etc who are employed in factories and other businesses.

The service sector is also diverse, depending on the kind of services people are engaged in. Generally, the services cover wholesale and retail trade, transport and warehousing, hotels and restaurants, mobile and internet, finance and insurance, education, health, entertainment and administration.

The people who traditionally migrate to the city mostly belong to landless rural families. But the continuing slump in agriculture, displacement, and lack of employment opportunities in the villages are leading to large numbers of people from the scheduled castes, scheduled tribes and other backward castes (OBCs) migrating to the urban areas in search of employment. A survey report reveals that 49% of the population residing in Raipur's slums are scheduled castes, 26% OBCs, 13% minorities, 9% scheduled tribes and 2% others. (Source: Raipur Report, 2014, PRIA, Delhi).



Figure 18.5: Travelling to the city in search of employment

According to the 2011 census, the working population residing within the municipal limits of Raipur city totals 3.76 lakh people. They include salaried workers, wage earners and the self-employed.

Around 40% of the working people in urban India are self-employed, another 50% are in salaried jobs, and the rest are daily wage earners. The situation in

Raipur is unlikely to be different.

Let us examine a few examples to understand the condition of these categories of workers: .

Self-employed labour

Vegetable sellers who buy vegetables from the wholesale market and sell them in different localities are an example of self-employed labour. They work and earn on their own and are not employed by others. Their earnings from selling vegetables take care of their daily needs. Their income is not fixed but fluctuates. Such workers are denied benefits like accident insurance, provident fund etc.



Figure 18.6: People in search of work gathered at a locality

Unskilled labour

There are many small jobs in the city like manual labour, white washing, maintenance, etc done by unskilled labour. Most of them come from the rural areas. Their work is irregular so their earnings are also irregular. Chhattisgarh has a high percentage of unskilled labour.

Visit a locality where unskilled labourers gather in search of work. Speak to some of them and find out:

How many people gather here daily to look for work?

What is the percentage of women among them?

How many people, on average, get work in a day?

Skilled labour

Skilled labour are people who have an occupational skill. Doctors, lawyers, engineers, teachers, accountants, technicians etc fall in this category. These highly skilled people are employed in the organized sector so they enjoy the benefits of job security and an assured monthly salary. They also have assistants to help them.

Let us look at the example of a chartered accountant who works in a big factory. She has an office and assistants to help her. She gets a salary every month and several other benefits. She spends a fixed amount of her salary and saves the rest. She uses these savings to cover any planned future expenditure. She required a minimum educational qualification and had to continue her commercial education after college to attain a professional certificate to qualify as a chartered accountant. Only then did she come in the highly skilled labour category.

There are many other kinds of semi-skilled work such as those of electricians, plumbers, masons etc.

The table below lists the work in an area of Raipur and the prevalent wage rate:

Type of work	Wage rate (per day/month)
Factory worker (regular)	Rs7,000 to Rs15,000 per month (semi-skilled and skilled work)
Factory worker (daily wages)	Rs150 to Rs200 per day (unskilled labour) Rs300 to Rs400 per day (skilled labour)
Helper in a grocery store	Rs100 to Rs150 per day
Helper in a vegetable store	Rs50 to Rs100 per day
Domestic worker (full time)	Rs1,500 to Rs4,000 per month
Hotel worker	Rs200 to Rs300 per day
Transport worker (driver)	Rs5,000 to Rs10,000 per month
Temporary office worker	Rs3,000 to Rs7,000 per month
Construction worker	Rs150 per day (women) Rs250 per day (men)

Source: Field survey, 2014

The government has fixed the wages that employers should pay their employees in some occupations. The table below gives the wages an employer has to pay his employee according to Indian law. The wage rates were declared for 2014-15 and were implemented in Raipur and the entire state of Chhattisgarh.

Project work:

Compare the earnings from self-employment and salaried employment and state the differences between the two.

What kind of professional training needs to be imparted to ensure that more people acquire skills to qualify them for better jobs?

Why does the wage structure of various professions differ?

The wage rates for men and women construction workers in cities are different. Do you think this is a correct practice? Justify your answer.

Wage rate per day

Type of employment	Unskilled	Semi-skilled	Skilled
Farming	149	-	-
Production industry, cloth mill, rice mill, dal mill, grinding mill, saw mill	214	222	233
Transport or printing press	212	219	229
Hotel, shops and/or other businesses	212	219	229

Source: Commissioner of Labour, Minimum Wage Act, Chhattisgarh, 2014-15

Collect data from your city or village on the prevalent wage rates. Compare these rates with the rates given in the table.

What is the difference between the wage rate fixed by the government and the actual wage received by labourers in Raipur?

Why does the government fix a minimum wage for labourers? Discuss in class.

Planning for Production

We have seen earlier that four factors are involved in the production process. We have discussed land and labour. We tried to understand, through some examples, how the production process uses land and labour.

The production process requires land and natural resources such as water, mineral ores etc. The second requirement is labour. Some processes require highly qualified and skilled labour to carry out

specialized work. Other processes require physical labour. Each worker provides the required labour to carry out the production.

Here, labour does not mean only physical labour, which is the generally accepted meaning of the word. It means any form of human effort that is required to carry out the production process. For this, the worker earns a wage that is paid by the employer. A relationship is, thus, established between the employer and the employee.

We have discussed two factors of production, land and labour. The third factor is capital.

Capital

There are two kinds of capital – physical or fixed capital and working or variable capital.

Physical or fixed capital: This consists of equipment, machines, buildings etc. These machines are used for different categories of work. For example, plumbers, electricians, masons etc use simple tools, the vegetable seller uses a hand-cart to sell vegetables, a roadside barber uses a razor to shave. Factories use complex machines such as turbines, boilers, furnaces, computerized automatic machines etc. This equipment is not limited to a single production cycle but operates for years to produce goods. They require some repair and maintenance in order to run smoothly over the years. These assets are known as physical or fixed capital.

Working capital: Raw materials and finance are required to complete each production cycle. Various kinds of raw materials are required, such as bamboo for basket weavers; bricks, iron rods, sand and cement for construction work and so on. Unlike physical capital these raw materials are consumed in the production process. Money is also needed to pay the wages of workers engaged in production. The process takes a certain amount of time for completion. Thereafter, arrangements have to be made for these goods and services to be sold in the market. The money earned from selling these goods marks the completion of the production cycle. This money is utilized to purchase raw material and pay wages in the next production cycle.

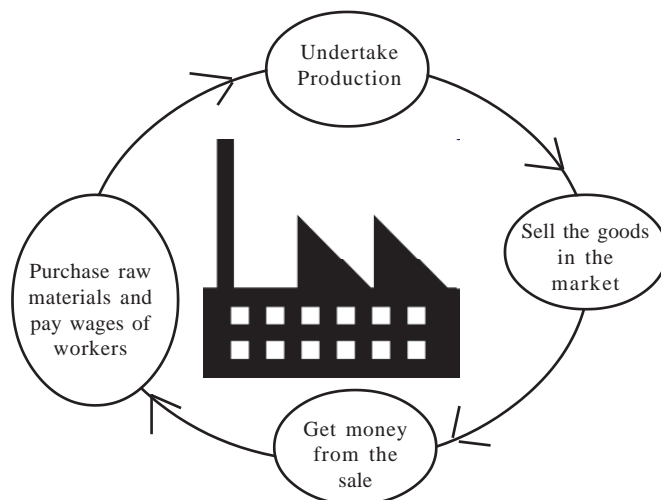


Figure 18.7: The production cycle

Raw materials and finances ensure that the goods are produced, hence they are known as working capital. This capital is required to start the production process so that the money earned from each cycle is used for the following production cycle. This capital is different from fixed capital because it is consumed and exhausted in the production cycle. So each production cycle requires fresh working capital.



Figure 18.8: An office building

Arranging fixed and working capital

Both fixed and working capital are needed for a production cycle. People arrange this capital from their savings or by using the land or buildings they own. They can also take a loan from a bank or borrow from other financial sources. The prevailing interest rate has to be paid when returning money loaned by a bank or a moneylender.

Interest rates vary between the different sources of finance. Banks charge an annual interest rate of 11% to 18%. Loans taken from informal sources such as traders and money lenders attract a much higher interest rate that can vary from 30% to even 200% a year.

People rely on various sources of finance for loans. They take production loans from formal sources like banks, cooperatives and bank linked self-help groups. But most low income families depend on informal sources like money lenders and wholesale traders. Sometimes, they also take loans from friends and relatives. It is necessary to ensure that these people can access formal sources for loans.

Entrepreneurship

Production requires in-depth knowledge of the process, faith in the venture and the ability to use land, labour and capital meaningfully. The owner of the fixed capital or the manager he employs provides this expertise. Owners also have to take the market risk – whether, or not, they will find buyers for their goods and services. In our society, goods and services are mostly produced for sale in the market. The risk is that demand for the product may change during the time it is produced and reaches the market.

It requires courage to take market risks. Such people could be a small shop owner or a large factory owner, or the owner of a company with different business interests. People buy their goods and services. The owners could make a profit or loss in the transaction.

Today, people in any area of business have to face obstacles and problems to earn a profit. Before embarking on a production process they have to arrange the required resources (land, labour, capital). Such people with the courage to take risks are called entrepreneurs.

Let's look at a few examples of entrepreneurship:

Jan Koum and his WhatsApp

Jan Koum is an American who grew up in poverty in a small village of undivided Russia. The family could not even afford electricity. Koum's mother worked as a governess, taking care of children. Koum worked as a janitor in a grocery and dreamed of starting his own venture someday. At the age of 18, he read a book on computer networking while working at the store and learnt everything about the subject. He subsequently worked as a security tester at San Jose State University. A turning point in his life came when he met Brian Acton, a computer



Figure 18.9: Jan Koum

engineer. Koum found work at Yahoo as an infrastructure engineer. This gave him hope to chase his dream. In 2007, Koum resigned from Yahoo and bought an iPhone. He spent hours trying to understand the dynamics of messaging. One day, an idea for an application sparked in his mind. He visualized a way to bring people from across the world together on a single platform to exchange news easily. Koum failed many times in coding and decoding before he achieved success in creating WhatsApp. Jim Goetz had faith in Koum's idea and backed it by investing money. Soon, WhatsApp became the number one application in the mobile application market.

Setting up a rice mill

A small trader called Rajendra had been trading in grain for many years. He wanted to expand his business. He decided to set up a rice mill. He owned land but had to arrange capital to begin production. He took a loan from a bank to organize the fixed capital of buildings, machines, furniture etc for the rice mill.

He used his own savings for working capital to purchase raw material, pay wages, get electricity etc. He also availed of government benefits such as subsidies and concessions provided to small scale industries.

Around 20-30 workers were employed in the mill, including 2-3 women. Most of them were casual labourers who received a daily or weekly wage. He had a few permanent employees who were paid a monthly salary along with other employee benefits such as insurance.

The modern machines he installed enabled him to mill rice throughout the year. He mostly procured paddy from the government warehouse and, after milling, despatched the rice back to the warehouse. He received payment for the rice almost every month. The government also permitted mill owners to procure paddy from the open market in times of drought to make good their losses. It was this support from the government that gave Rajendra the courage to start his own rice mill.

A local tea stall

Ramesh runs a modest tea stall in a busy area of Raipur. He shared his experiences of running the tea stall.

Ramesh borrowed Rs10,000 from his relative on interest to arrange the fixed capital for his tea stall such as utensils, gas cylinder, and wooden shelves.

Table: Ramesh's monthly income and expenditure

Monthly expenditure	Amount spent
Land rent	Rs 3,000
Raw materials- milk, gram flour, oil etc	Rs 24,000
Salary of helper	Rs 4,000
Electricity	Rs 1,000
Interest on loan	Rs 200
Repair, maintenance & other expenses	Rs 800
Total expenses	Rs33,000

Income:

Daily sale of tea and snacks: Rs2,000

Monthly sale for 26 days in a month: Rs52,000

Surplus (income–expenditure) Rs52,000-Rs33,000 = Rs19,000

Since he is self-employed, his surplus is used to meet his family expenditure of Rs16,000. He is, thus, able to save Rs3,000 every month, which is his profit. He plans to expand his shop in future with his savings.

Distinguish between fixed capital and working capital in the above examples.

Project work:

Discuss with an entrepreneur what motivated her/him to take the risk of starting a business and what challenges she/he had to face. Prepare a report.

Summary

Land, labour and capital are essential for any production process. The entrepreneur organizes these essentials to produce goods or services. The entrepreneur may arrange the land and natural resources through his personal means or with the support of the government. Labour includes the physical as well as mental efforts of the employees. The production process establishes a social relation between people, some as employers and others as employees. The benefits workers receive may differ significantly. In the organized sector, they earn a salary and other benefits. In the unorganized sector, their wages are low and they are deprived of social benefits. Capital has to be organized for production. We studied the differences between fixed and working capital and how they are organized. We also looked at some examples of entrepreneurship.

There are many production processes for goods and services in Raipur. There are steel plants and factories that manufacture metal products, which they supply to other cities. These factories use large, complex machines and provide regular employment to some highly skilled people and contract

work to unskilled labourers. So they employ people in both the organized and unorganized sectors. The factories are situated away from residential areas, on the outskirts of the city. We have also seen that Raipur is a fast developing city with many emerging services – a centre for agriculture and forest resources, a wholesale market for manufactured goods, and a hub for new educational services. Large enterprises continue to make a profit here while small enterprises have to struggle and face greater risks to grow.

EXERCISES

1. Fill in the blanks

- i) There are many industries producing and in and around Raipur.
- ii) Workers who achieve expertise in a profession are called labour.
- iii) National Highway 46, which connects Mumbai and Kolkata, passes through
- iv) Machines, buildings etc are categorized as capital.
- v) Arranging resources for production is called.....
- vi) All kinds of physical and mental effort is known as
- vii) Fixed and working capital are required to organize

2. Mark the odd one out

- i) Durg, Balodabazar, Aarang, Rajnandgaon
- ii) Land, labour, cement, capital
- iii) Machine, building, plant, raw material

3. Answer the following questions

- i) Compare how land is used in villages and towns.
- ii) The government is responsible for providing residential quarters for its employees. Do you agree? Explain.
- iii) Why is it important for the government to fix a minimum wage rate for labour?
- iv) How does fixed capital differ from working capital?
- v) Why are loan facilities not accessible to all?
- vi) What factors influence the rent of a building?

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