

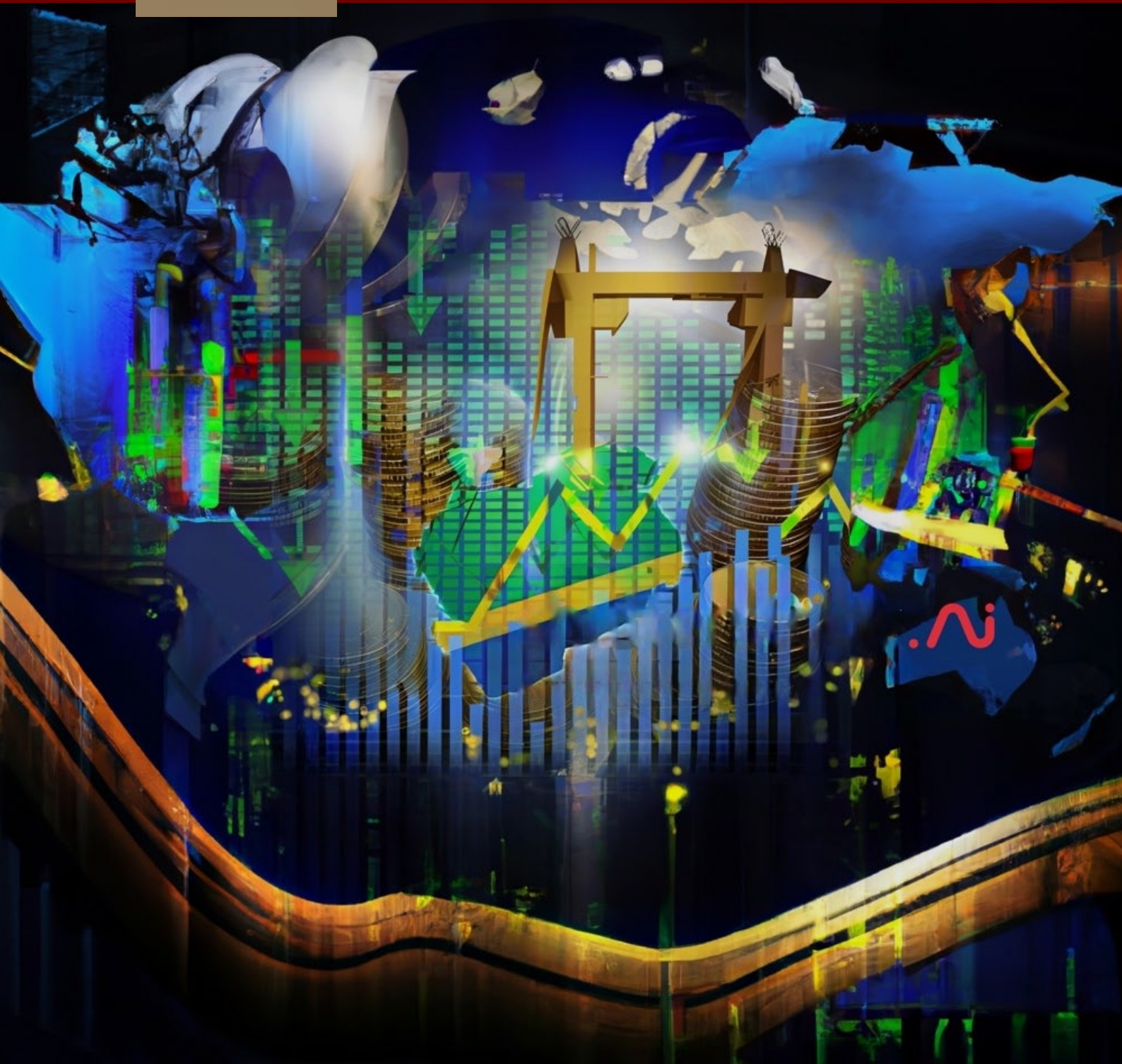
Economics

Year 1

SECTION

4

PRODUCTION



FIRMS' INNOVATIVE DECISION MAKING

Production of Goods and Services

INTRODUCTION

This section covers the production of goods and services. It highlights various factors of production and how they relate and differ from one another. It also shows how a producer will have to combine these factors to produce goods and services. Factors of production are also traded in a market and serve as a major source of income. Goods and services are produced using the four factors of production—land, labour, capital, and entrepreneurship. The section also deals with the rewards of the factors of production and shows the relationship between productivity and production. It explores the topic of location and the localisation of industry as well as the division of labour and specialisation.

At the end of this section, you should be able to:

- Explain the meaning of factors of production.
- Identify the rewards for each factor of production.
- Relate the concepts of production to productivity.
- Investigate location and localisation of Industries.
- Justify Division of Labour and Specialisation in production.

Key Ideas

- Factors of production are the resources used to create goods and services to satisfy human wants. They are grouped into land, labour, capital and entrepreneurship. Each factor of production receives a reward for contributing to the creation of goods and services.
- Production then is the act of combining resources (land, labour, capital and entrepreneurship) for the creation of goods and services to satisfy human wants.
- Productivity is important because it helps you to know the quantity of goods and services that can be produced with a given amount of resource(s). For example, productivity is high when labour uses fewer resources to produce higher quantities of goods and services.
- Location and localisation are not the same, even though they are related. Location of a firm refers to the siting of a firm in a particular geographical area or location, while localisation of industry is the concentration of a number of industries at the same location or place.
- Division of labour is necessary in the production process because it helps in breaking down work into simple or convenient tasks so that each task can be performed by a different person. Specialisation refers to the concentration of a worker's (labour's) effort on performing a particular task that matches their skills or ability.

PRODUCTION

Farmers employ resources in the production of crops. Resources might be in the form of their own thinking and organisational skills and physical labour, tools like a machete, hoe, plough, money for fertilisers and so on. The farmer clears the bushes, tills the land, sow the seeds, weeds around the seeds, applies fertilisers, and later harvests the crops when they are mature. These activities end up in the provision of food for people to eat. Also, Kente and Fugu (smock) weavers use their own energy, weaving loom, a pair of scissors, tread, needles, shed stick, warp yarn to weave Kente or smock for people to wear.

The series of actions or activities that the farmers or weavers take to combine various resources (both natural and human-caused) to create the commodity that will satisfy human wants are examples of Production.

Production therefore refers to the process of combining resources to create goods and services that will satisfy human wants.

THE FACTORS OF PRODUCTION

The factors of production are the essential inputs used in creating goods and services. These can be natural or artificial resources. Each of those factors are important and are used hand-in-hand to produce a commodity. Different economies have different quantities and qualities of these factors. The economic development of a country depends on the quantity and quality of these factors in the country, as well as how they are efficiently allocated. Factors of production are grouped into land, labour, capital, entrepreneurship.

In addition to the four groups, producers **apply technologies** (modern and scientific knowledge, innovation, technical skills) to add value to the factors of production. This helps to improve productivity and increase output, which will speed up the growth and development of a country.

1. Land: This includes any kind of natural resource that is employed to produce goods and services. Land is said to be a gift of nature which means that human beings did not do anything about how land is formed. It is nature that formed land.

This means that, land includes not just the bare land but all the natural resources such as gold fields, the soil, the trees, the sea, rocks, and mineral deposits. Different countries are endowed with different land resources. Ghana is blessed with abundant quantities of Cocoa and Gold, Nigeria is blessed with much oil.



Water Resources



Mineral Resources



Soil Resources



Forest Resources



Fossil Fuels



Marine Resources

Figure 4.1: Picture Showing Examples of Land (Some Natural Resources)

Land serves as a major source of raw materials for industries. It also provides sites where factories are built. Also, land provides food and protein that gives energy and healthy living for the population of a country.

2. Labour: This refers to the human efforts or abilities in terms of the mind and physical energies that workers apply to the production of goods and services.

A person can be described as skilled labour when they have undergone lengthy training and education. Skilled labourers apply more thinking skills and use less physical strength to produce goods and services. For example, teaching, navigation and banking. A person is an unskilled labourer when they have not gone through much training and education. Unskilled labourers apply more of physical and less of the mind to produce goods and services. For example, porters, truck pushers, and cleaners.

3. Capital: This includes any durable goods that are produced by human beings and are used as resources or inputs to further the production of other goods and services.

Capital can be grouped under physical (assets such as factory buildings, machines, tractors, roads,) or financial/money capital (the amount of money that is invested in a business).

To the carpenters, capital includes the saw, planes, hammers, nails, polish and bench as well as their workshop. To the farmers, capital includes machetes, hoes, tractors, wheelbarrow and farm buildings. To the dress makers, capital includes, the sewing machine, pair of scissors, tape measures, the fabric, and the thread used to sew the dress.



Fig. 4.2: Pictures Showing Some Capital Goods: Factory Buildings

Capital in economics is therefore more than only money but also, physical assets that are employed to produce goods and services. Capital helps to speed up the production of goods and services.

4. Entrepreneurship: This refers to the act of organising resources (land, labour, and capital) to produce goods and services. The person who organises and combines the various resources to produce goods and services is called an entrepreneur.

Entrepreneurs take all the initial decisions about what to produce, where to produce, method of production, whom to produce and means of distribution.

They provide the capital for the business enterprises to produce goods and services. Capital can however be sought out of personal savings or other sources.

Entrepreneurs bear all risks or disasters that will occur within the enterprise. In times of flooding, fire outbreaks, bankruptcy or raw material shortages it is the entrepreneur who bears all the risk.

Activity 4.1

Explain capital as a factor of production. Ask your friend to explain one more factor of production.

Activity 4.2

State the factors of production that are employed to produce goods and services on a cocoa farm and carpentry workshop.

Activity 4.3

Complete the table below by grouping the following resources below into the four factors of production.

LAND	LABOUR	CAPITAL	ENTREPRENEURSHIP

Laptop, economics teacher, rain, air, projector, school building, money, windows applications, time management, savings at the bank, school nurse, photocopy machine, school farm, creating a new product, negotiation ability, crude oil, organisational skills.

THE REWARDS OF THE FACTORS OF PRODUCTION

From the previous week, you learned that there are four factors of production. These factors of production are land, labour, capital and entrepreneurship. When these factors of production are linked to economic activities, they earn rewards. A reward is something given or received in return for effort, achievement, or to give encouragement. In Economics rewards can be in cash (wages) or have another value like enjoyment, or nutrition. The rewards for factors of production are rent, wages, interest, and profit. The balance between these rewards is essential for maintaining a stable and thriving economy that benefits both producers and consumers.

For example, these rewards help individuals to meet their basic needs such as food, shelter, and clothing. They also help them to access education, healthcare, and leisure activities. The level of rewards will affect the types of goods and services that they will buy. When individuals receive higher wages for example, their standard of living will increase because they have extra money and they be motivated to spend this money. This increased spending power will influence economic growth and development of the country. One impact of this is firms and businesses will have money to invest in new products and make more profit. These rewards are shown in figure 1 below.

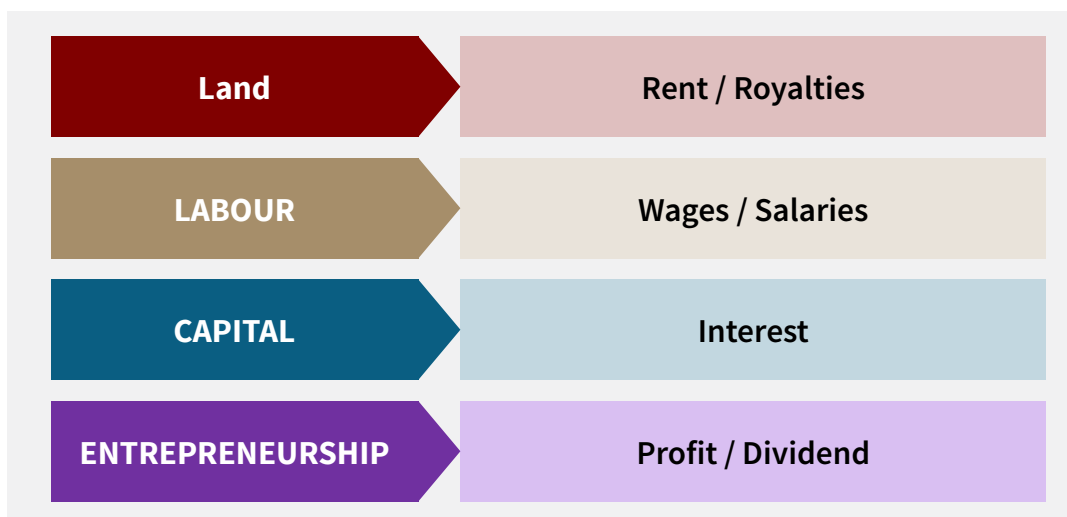


Fig. 4.3: Rewards To Factors of Production

- 1. Rent:** The reward for the factor of production “land” is rent. Rent is the reward for the factor of production **land** and other natural resources which are fixed in supply. To the people who own, rent is the total amount of money that they receive when the land they own is used for farming, shops, factories, or houses.
- 2. Wages:** The reward for the factor of production “labour” is wages. The amount of money that is paid to **labour** services is called a wage. Workers receive wages in return for their time, skills, and effort they put into the production of goods or services. Wages can be paid on a daily, weekly or monthly basis depending on the contract agreement between the workers and their employers.
- 3. Interest:** The reward for the factor of production “capital” is interest. People save part of their income to form **capital**. Their aim is to invest the capital to earn rewards. Investing capital could be letting a third party like a bank to use the capital for a fee, or reward. The reward they earn from investing their capital is called INTEREST. The interest received depends on the size of the capital sum. Large sums of capital can earn a lot of interest.
- 4. Profit:** The reward for the factor of production “entrepreneurship” is profit. Entrepreneurs earn **profit** in return for taking risks, organising resources (land, labour, and capital), and successfully producing and selling goods or services in the market. They incur some costs (expenses like labour and raw materials) for producing the commodity and sell the products to generate revenue. They do all these things with the aim of gaining **profit** as a reward for their efforts.

Profit is the amount of money left when total costs are deducted from total sales over a set period of time.

The level of profit entrepreneurs make depends on productivity and efficiency of factors of production, ability of the entrepreneur to see opportunities and how the customers (buyers) are satisfied.

Activity 4.4

Use arrows to match the various factors of production with the appropriate rewards.

FACTORS OF PRODUCTION	REWARDS
capital	Wages
labour	Profit
land	Rent
entrepreneurship	Interest

Activity 4.5

Study this scenario carefully and discuss it with a friend and your group members.

Unis B, the town Chief, Solomon, and Alisa are the players in this scenario.

Unis B, a factory owner, wants to start a new furniture business in a town called **Integrity**. The Chief of the town agrees to lease a piece of land to Unis B for a new furniture business charging a small fee. Solomon, an investor, has provided a loan of additional capital to support the new business. Solomon expects to make money when his capital is returned. Solomons loan has helped to give a high furniture output because more workers can be employed. Unis B also employs Alisa as a skilled secretary.

Complete the table by writing the rewards (wages, profit, rent, interest) each person will get from the furniture business:

Table 4.1

Owner of UNIS B	
The Chief	
Solomon	
Alisa	

RELATING PRODUCTION TO PRODUCTIVITY

This section deals with two closely related concepts, ‘production’ and ‘productivity.’

Production: This refers to the act of combining factors of production (resources) to create goods and services that will satisfy human wants. For example, at a bakery, bread production involves the steps of mixing some ingredients such as flour, sugar, salt, yeast, margarine and water until the flour is converted into a paste or dough. The

dough is then moulded into the required shapes and baked in an oven into loaves of bread. The loaves are then sold to customers at the market. All these activities from the mixing of ingredients through the baking to the sales of the loaves at the market is the concept of production.



Fig. 4.4: Bread making in Ghana

Productivity: This refers to the amount of output that is produced with a given number of inputs. It is the quantity of goods and services that are produced per unit of input. Productivity explains how efficiently factors of production (land, labour, capital, and entrepreneurship) are used. For instance, a baker's productivity is measured by how many loaves of bread they produce using a set of inputs (labour - workers and capital – ovens and other equipment) in a period of time. If the baker buys another oven and employs another person to help in the production process, then more loaves can be produced in the same amount of time. The baker's productivity increases as a result. He might make 200 loaves rather than 150 in one day. He will make more profit if he sells the extra loaves.

Productivity is high when more output is produced with the same or more inputs. This will add to the economic growth and development of a country. Productivity is low when fewer outputs are produced with the same number of inputs. This will reduce economic growth in the long run.

What are the Factors that Determine Productivity?

Productivity depends on the following factors:

1. Human capital (high level of skills, education, and experience of workers means tasks done faster, reducing errors and waste.)
2. Technology and equipment (modern tools and technological resources available to automate processes making output faster)
3. Work environment (building fit for purpose, safe and well organised – space, good lighting, seating, temperatures, low noise all reduce tiredness and improve concentration)
4. Worker engagement (motivated and involved with their work – higher effort and dedication with tasks, produce high quality work with attention to detail)

The size and growth of an economy depends on levels of productivity. Higher productivity enables more goods and services to be created and sold to generate income. This in turn might decrease prices of goods and services, increase profits for businesses, increase wage rates and improve the standard of living of the people.

Activity 4.6

Kindly pay a visit to a carpentry shop or tailoring shop in your community and perform the following activities.

- i. Observe the production process and list the stages involved from start to finish.
- ii. Identify the inputs (e.g., raw materials, labour, machine, equipment) used in the production process.
- iii. Measure the efficiency of the production of the product (e.g., chair or shirt) by asking how long it will take to finish a chair or a shirt.

Ask the producer any relevant questions to derive the information. Additionally, you can go online to research the information.

Activity 4.7

Welcome to another interesting case study.

ABC Furniture Company produces beds. The company has 15 employees and each of them works for 8 hours a day. The production target for each day is 120 beds.

The current situation in the company has revealed the following information: The company produces 90 beds per day. Each worker produces 6 beds. The company continues to use traditional tools and methods.

1. Calculate the current productivity of ABC Furniture Company.

NB: Use this formula: $Productivity = Output \div Input$.

Output = Number of beds

Input = Number of workers

2. Identify the factors affecting the productivity in the company.
3. Suggest to the owners of ABC Furniture Company (one of your classmates) three means by which productivity in the company can be improved.

LOCATION AND LOCALISATION OF INDUSTRIES

The location and localisation of industries is the geographical distribution and concentration of economic activities within a particular area or region. The location of an industry refers to the physical location of industrial facilities or manufacturing facilities. It concentrates on choosing certain sites for constructing factories, plants, or other industrial facilities. Businesses must carefully consider the location of their industries because it can have a big impact on their productivity and performance. Industry localisation, which is also referred to as industrial localisation or concentration, describes the tendency of industries or business types to group together in particular geographic areas or regions, often they are related in some way like chemicals and oil refining or cement manufacture and concrete structures. In other terms, it refers to the concentration of businesses in a location that is in the same or related industries. This occurrence can take place on a variety of scales, including local, national, and even global ones.

Location of Industry

This refers to the act of setting up a particular industry at a specific site or location.



Figure 4.5: Factors that affect location of industry

1. **Natural Resources:** Locating next to the source of raw materials reduces transportation costs and ensures a steady supply of the product – for example to make cement large quantities of rocks (limestone, shale, and gypsum) are needed. To reduce transport costs cement is made close to where the rocks are found or in the case of Ghana where they are imported.

2. **Labour Force:** Availability of specialized or skilled and affordable labour can attract industries to locate in a particular area – for example car assembly workers need to be skilled engineers so factories locate near other engineering works where they can take advantage of labour that does not need training.
3. **Infrastructure:** Good transportation, communication, and utilities support efficient production and distribution - for example processing and packing fresh food like meat needs good infrastructure so it can be delivered quickly to markets otherwise it will spoil.
4. **Market Proximity:** Being close to markets reduces distribution costs and ensures quicker delivery to customers – for example fast food and takeaway outlets need to be close to customers.
5. **Government Policies:** Favorable policies, such as tax incentives and subsidies, attract industries to locate in particular areas – for example, the Tema Export Processing Zone (EPZ), located near the port city of Tema benefits from tax free exports and imports.
6. **Clustering Effects:** Industries benefit from being near each other through shared services, suppliers, and a skilled labour pool – for example, the many industries in the Tema Industrial Area share essential services such as supply and delivery services, maintenance, and security, reducing costs and improving efficiency.
7. **Historical Factors:** Established industrial regions often have existing infrastructure and a skilled workforce – for example Kumasi is well known for its historical significance as the capital of the Ashanti Empire and has a long tradition of craft and artisanal industries, particularly in textiles and woodwork.
8. **Socioeconomic Factors:** Local economic conditions, such as income levels and consumer demand, influence industrial location – for example areas with high tourist traffic, like Accra and Cape Coast, have seen growth in hotels, restaurants, and related services, driven by the socioeconomic benefits of tourism.

Localisation of Industry

This refers to the siting or concentration of many industries at a particular geographical location. For example, in Ghana, our first President, Dr Kwame Nkrumah developed Tema to be a localised industrial town where industries such as Cocoa Processing Company Limited (CPC), Volta Aluminium Company Limited (VALCO), Tema Oil Refinery (TOR) were sited. The figure below shows part of the localised industrial zone in Tema.



Figure 4.6: Part of the localised industrial zone in Tema.

Advantages of Localisation of Industry

1. **Access to labour market:** A localised industry will attract both skilled and unskilled labour to the site. Labour with a variety of skills can migrate to that locality looking for employment. This will result in the development of a large market for skilled and unskilled labour both in the industries and other enterprises which provide goods and services for the labour. Firms may have access to labour services at a cheaper cost.
2. **Development of Financial institutions:** A localised industry will attract other allied industries such as financial institutions to the locality. Bank, and Micro Finance institutions can provide financial services. This might enable the industry to receive benefits from easy access resulting in cheaper credit facilities.
3. **Development of Subsidiary companies:** The localised industry will attract the other related industries. The by-products from the localised industry will be put to use by attracting additional industries and creating more employment opportunities.
4. **Improvements in communication and transport network:** Localised industries need to make and distribute goods and services quickly and efficiently over both long and short distances. New roads, railways and communication networks are vital to the success of localised industries so they can deliver goods and services to all parts of the country.
5. **Government taxes:** An area of localised industry is a major source of government revenue. The government could use the tax revenue to develop the roads and other communication networks in the locality. This will attract further industries and increase the productivity of the economy.

Challenges of Localisation of Industry

1. **Changes in the economy:** If one industry is suffering from a downturn in market conditions then all the others tend to suffer – for example if car production falls industries supplying parts like engines and tyres will also suffer.
2. **Natural Disasters:** Floods, fires, earthquakes and other natural disasters will affect all localised industries as they are all in the same place.
3. **Labour:** Competition between industries for skilled labour can result in shortages. Localised industry discourages the mobility of labour so industries in other locations find it hard to get workers.
4. **Congestion and pollution:** Large concentrations of industries in one area can cause congestion problems on roads when vehicles cannot meet supply chain demands. High levels of atmospheric pollution can cause workers health problems. This in turn affects attendance at work and productivity. Local soil and water sources can become polluted.

Activity 4.8

Here are two industries in Ghana.

Oil refining and Cement Production

INDUSTRIES	LOCATION	LOCATION FACTORS
Oil refining		
Cement Works		

1. Copy the table above and identify the location of each industry in Ghana.
2. For each industry research, find the location factors and add them to the table.
3. Create a PowerPoint presentation to summarise your research and use it to explain to your friends at school or at home why these two industries are sited at these specific areas.

Activity 4.9

Identify an area in Ghana where industry is localised. List the factors which have resulted in a number of industries being concentrated in this area.

Activity 4.10

Define 'location' and 'localisation' of industry in your own words.

Activity 4.11

Research the effect that location and localisation of industry has had on the economy of Ghana. Present your findings in a written report.

DIVISION OF LABOUR AND SPECIALISATION IN PRODUCTION

Division of Labour: Division of labour is an economic concept that refers to the process of breaking down the production of goods or services into smaller tasks, with each task assigned to specific individuals or groups. For example, construction of a house consists of different activities such as architectural designing, block laying, carpentry works, electrical works, plumbing works, and painting. Each task is done by different individuals or groups. For example, block laying works are done by masons, carpentry works are done by carpenters while plumbers do the plumbing work.

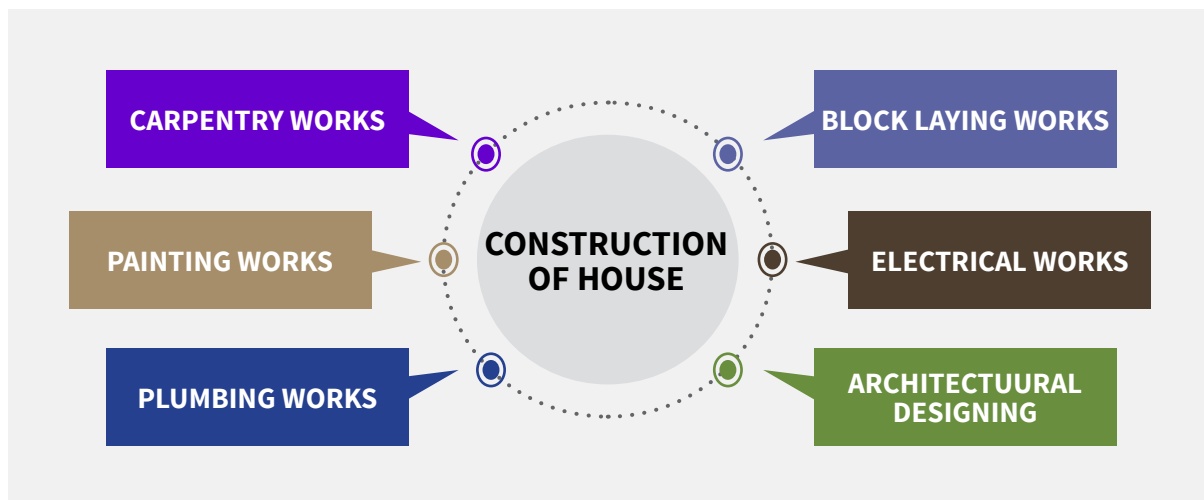


Figure 4.7: Division of labour in a house construction

Specialisation: Specialisation is where different tasks are assigned to specific individuals or groups to improve efficiency and productivity. For example, in house construction, one person in a specific group of workers might specialise in a particular area. Carpenters can do a variety of jobs when building a house. However more than one carpenter might be employed during house construction. One carpenter might make only roofs, another might only fit doors, another might only board floors. Each carpenter becomes skilled at the one task, taking less time and resulting in the house being finished faster.

Advantages of division of labour and specialism:

- 1. Increased Productivity:** When tasks are divided among individuals or groups, each can focus on specific aspects of production, becoming more skilled and efficient in their specialised area. This specialisation leads to increased productivity as workers can perform their tasks more quickly and accurately, ultimately contributing to a higher overall output.
- 2. Skill Development:** By specialising in a particular task or set of tasks, individuals can acquire specialised skills and knowledge, becoming experts in their respective fields. With time and practice, workers can develop efficiencies, innovative techniques, and problem-solving abilities that further improve productivity and quality.

- 3. Time Savings:** The division of labour allows workers to concentrate on specific tasks, reducing the time spent moving between different activities. Specialised workers become more skilled at performing their tasks, resulting in time savings throughout the production process.
- 4. Economies of Scale:** Specialisation enables businesses to achieve economies of scale by focusing on producing a limited range of goods or services. By producing on a larger scale, businesses can benefit from lower average costs.
- 5. Efficient Resource Allocation:** Specialisation helps with the allocation of resources. Different tasks require varying levels of expertise, equipment, and resources. By assigning specialised workers to tasks needing specific resources there is no need to worry about other workers wanting to share and make production slower.
- 6. Interdependence and Cooperation:** The division of labour fosters interdependence among workers and promotes cooperation within the production process. Each worker's output becomes a necessary input for another worker or department, fostering collaboration and teamwork.
- 7. Increased Output Variety and Quality:** Specialisation allows businesses to diversify their production and offer a wider range of products or services. Moreover, specialised workers' expertise contributes to higher quality output as they focus on perfecting specific tasks and processes.

Disadvantages of division of labour and Specialization.

- 1. Monotony:** As a worker must do the same work again and again, the task may become boring in nature. Workers who will start losing interest and pleasure in the work and productivity declines.
- 2. Lack of responsibility:** Under division of labour, the final product is not the output of a single person but the work of several workers. This implies that individual workers cannot be held responsible in case anything goes wrong.
- 3. Lack of Craftsmanship:** Division of labour does not make workers craftsmen. The workers are trained to perform only a part of the job instead of whole products. A worker cannot take pride in the final output because each worker does not know all the processes used to produce a product. Traditional craftsmanship declines.
- 4. Too much Interdependence:** Division of labour leads to a situation where one worker depends on the others to the extent that when a worker is absent the entire work may not continue. Also, if one worker does a poor job it may spoil the quality of the entire product.
- 5. Redundancy of Workers:** In division of labour, a worker may be redundant if his skill is no longer needed. Because the worker can perform only one task, transferring them to perform another task they are not trained to do is difficult. If they are then made unemployed, they might find it difficult to get a new job.

Activity 4.11

Describe the processes of division of labour in the construction of a house or any other production process you have studied.

Activity 4.12

Explain in your own words how division of labour is related to specialization.

REVIEW QUESTIONS

Review Question on Factors of Production

1. CASE STUDY: The Pineapple Drink Stand

Situation: Sarah decides to start a pineapple drink stand in her neighbourhood. She wants to sell pineapple drinks to make some extra money.

Questions:

- a. **Land:** What would be an example of the land factor of production in Sarah's pineapple drink stand?
 - b. **Labor:** Who would provide the labour for Sarah's pineapple drink stand, and what would they do?
 - c. **Capital:** What are some examples of capital that Sarah would need to run her pineapple drink stand?
 - d. **Entrepreneurship:** How does Sarah demonstrate entrepreneurship in this case?
2. i. Which of the following is considered a factor of production?
- A. A book
 - B. A factory worker
 - C. A car
 - D. A piece of clothing
- ii. What does the 'land' factor of production refer to?
- A. The tools and machines used in production
 - B. The natural resources and physical space used in production
 - C. The money needed to start a business
 - D. The people who run a business
- iii. Which of the following best describes <capital> in factors of production?
- A. The raw materials like iron or cotton
 - B. The entrepreneurs who start businesses
 - C. The cash or investments used to buy machinery
 - D. The workers who provide labour
- iv. Who would be considered an entrepreneur in the context of factors of production?
- A. A person who starts a new business and takes financial risks

- B.** A person who works in a factory
 - C.** A machine that makes products
 - D.** The land where a business is located
- v.** Which of the following is an example of 'labour' in factors of production?
- A.** The natural resources like water
 - B.** The tools used in a workshop
 - C.** The financial investment in a new company
 - D.** The skills and work done by a chef in a restaurant

Review Questions on Rewards to Factors of Production

- 1.** Factors of production received rewards for their contribution to the creation of goods and services to satisfy human wants.
 - a.** What are rewards for factors of production?
 - b.** Describe the reward paid to each of the following factors of production.
 - i.** Land
 - ii.** Labour
 - iii.** Capital
 - iv.** Entrepreneur
- 2.** The table below has specific examples of factors of production. Complete the table by writing in the spaces provided against each example the kind of reward they receive.

Example of factors of production	Rewards
Opening a savings account at a bank	
School bus driver	
10 plots for new school building	
proprietor of a provision shop.	

Review Questions on Production and Productivity

- 1.** Give a definition of production and productivity.
- 2.** Describe two factors that influence productivity.
- 3.** Explain how productivity and production are linked to economic growth in a country.

Review Questions on Location and Localisation of Industry

1. Describe at least four factors that are important in the location of industry in Ghana.
2. Explain the difference between location and localisation of industry.
3. Identify and list three examples of industries that have experienced localisation or clustering in Ghana. Explain why they have chosen to concentrate on those areas.
4. List the factors that led to the location of a cement works on the Ghanaian coast at Tema. Explain each factor.

Review Questions on Division of Labour and Specialisation

1.
 - a. Explain the difference between division of labour and specialisation.
 - b. In what way are division of labour and specialisation as economic concepts related?
2. State any two advantages and two disadvantages of division of labour and specialisation to the entrepreneur.
3.
 - i. What happens when tasks are divided among workers in a production process?
 - a. Each worker does all the tasks.
 - b. Each worker specialises in one task.
 - c. Workers change tasks daily.
 - ii. How does division of labour lead to specialisation?
 - a. Workers do multiple tasks.
 - b. Workers focus on one task, becoming experts.
 - c. Workers work alone.
 - iii. What is the relationship between division of labour and specialisation?
 - a. Division of labour leads to workers specialising on a single task
 - b. Division of labour leads to workers doing multiple tasks.
 - c. Specialisation leads to workers doing multiple tasks.
 - iv. What is the benefit of a worker specializing in a single task?
 - a. Improved productivity
 - b. Increased errors
 - c. Decreased quality.

ANSWERS TO REVIEW QUESTIONS

Answers to Review Questions on Factors of Production

Answers to review question 1

- a. **Land:** The space where Sarah sets up her pineapple drink stand, like a spot on her front lawn.
- b. **Labor:** Sarah herself, or any friends or family who help her make and serve the pineapple drink.
- c. **Capital:** The table, cups, pineapple drink pitcher, and any other tools or supplies used to make and serve the pineapple drink.
- d. **Entrepreneurship:** Sarah shows entrepreneurship by coming up with the idea for the pineapple drink stand, organising it, and taking the risk to invest in the supplies and manage the stand.

Answers to review question 2

- i. **B.** A factory worker
- ii. **B.** The natural resources and physical space used in production
- iii. **C.** The cash or investments used to buy machinery
- iv. **A.** A person who starts a new business and takes financial risks
- v. **D.** The skills and work done by a chef in a restaurant

Answers to Review Questions on Rewards of Factors of Production

Answer to review question 1

- 1. a. Rewards for factors of production are the incentives or motivation given to factors of production to drive them to contribute to the creation of goods and services to satisfy human wants. Examples of the rewards given to factors of production are rent for land; wages for labour; interest on capital; and profit for the entrepreneur.
- b. The following are the rewards received by land, labour, capital, and entrepreneurship.
 - i. **Rent:** This is paid to owners of land for commercial, agricultural, and industrial purposes.
 - ii. **Wages:** Wages are paid to people who offer or supply their physical and effort to produce goods and services to satisfy.

- iii. Interest: Interest is paid to owners of capital such as financial institutions (e.g., banks) who give out loans to business owners, as well as investment in savings.
- iv. Profit: Profit is received by entrepreneurs for taking risks to invest in businesses, organising other factors of production, and applying their managerial skills to ensure that the business succeeds.

2.

Factors of production	Rewards (factor income)
Opening a savings account at a bank	interest
School bus driver	wages
10 plots for new school building	rent
proprietor of a provision shop.	profit

Answers to Review Questions on Production and Productivity

Answer to Review Question 1

- **Production** - Production in Economics refers to the process of creating goods and services using various inputs or factors of production such as land, labour, capital, and entrepreneurship.
- **Productivity** – Productivity in Economics is a measure of the efficiency with which resources are used in the production process. It relates the output of goods and services produced to the inputs or factors of production that are used in creating that output. *For example:* quality of input, availability of resources, production methods, employee skills.

Answer to Review Question 2

Any two from human capital, technology and equipment, work environment employee engagement, communication, time management. Answer must describe how each influences productivity, for example:

- **Human Capital** - high level of skills, education, and experience of workers means tasks done faster, reducing errors and waste.
- **Technology and Equipment** - modern tools and technological resources available to automate processes making output faster.

Answer to Review Question 3

Production involves the creation of goods and services using various inputs, while productivity measures how efficiently inputs are used in this production process. High productivity is crucial for economic growth, competitiveness, and improving the overall standard of living. By aiming for increased productivity, economies can achieve higher wage levels, improved health, and happiness.

Answers to Review Questions on Location and Localisation of Industry

Answer to review question 1

Any four from the eight listed in the LM/TM: Natural Resources, Labour Force, Infrastructure, Market Proximity, Government Policies, Clustering Effects, Historical Factors, Socioeconomic Factors. There must be a description of each factor not just a list.

Answer to review question 2

Location of Industry: Refers to the specific site or place where an industry is situated. This choice is influenced by factors such as availability of raw materials, labour, transportation, and market proximity.

Localisation of Industry: Refers to the concentration of multiple firms from the same industry in a particular area. This clustering allows businesses to benefit from shared services, suppliers, and a skilled labour pool.

Answer to review question 3

a. Food Processing Industry in Tema

Reason for Concentration: Tema is strategically located near the Tema Port, providing easy access to both raw materials and export markets. The availability of infrastructure, such as cold storage facilities and transportation networks, supports the efficient processing and distribution of food products.

b. Textile and Garment Industry in Kumasi

Reason for Concentration: Kumasi has a rich cultural heritage in textile production, with a skilled labour force experienced in traditional weaving and garment making. The city's historical significance and established market for textiles make it an ideal location for the industry.

c. Oil and Gas Industry in Takoradi port

Reason for Concentration: Takoradi's proximity to offshore oil fields and the presence of the Takoradi Port make it a hub for the oil and gas industry. The city's infrastructure and support services, such as logistics and maintenance, are well-developed to cater to the needs of this industry.

Answer to review question 4

The key factors that led to the location of a cement works on the Ghanaian coast at Tema:

- a **Proximity to Raw Materials:** Tema's coastal location allows easy access to imported raw materials like limestone, clay, and gypsum, which are essential for cement production.
- b **Port Access:** The presence of the Tema Port facilitates the import of raw materials and the export of finished cement products, reducing transportation costs and improving logistics.

- c. Infrastructure:** Tema has well-developed infrastructure, including roads, utilities, and industrial facilities, which support efficient cement production and distribution.
- d. Market Proximity:** Being close to Accra, Ghana's capital, and largest city, provides a significant market for cement, ensuring high demand and easy distribution.
- e. Government Support:** The Ghanaian government has historically supported industrial development in Tema, providing lower tax incentives and infrastructure investments to attract industries.
- f. Skilled Labour:** The availability of a skilled labour force in Tema, due to its industrial history and educational institutions, supports the operational needs of the cement industry.

Answers to Review Questions on Division of Labour and Specialisation

Answer to review question 1

- a** Division of labour is the process of breaking down work into convenient tasks, with each task being performed by workers or departments with specific skills. Specialisation on the other hand is the concentration of a worker's efforts (mental or physical) on the performance of a particular task.
- b** Division of labour and specialisation are closely related. It is through division of labour that specialisation is made possible. It must also be noted that division of labour has become necessary because of the need for businesses to practice specialisation.

Answer to review question 2

- a.** Two advantages of division of labour and specialisation are:
 - i.** Division of labour and specialisation saves time and improves efficiency.
 - ii.** The concepts also help to improve productivity.
- b.** Two disadvantages of division of labour and specialisation are:
 - i.** It is expensive to practice division of labour and specialisation because more workers are needed.
 - ii.** Division of labour and specialisation can also slow down productivity during the absence of a worker.

Answer to review question 3

- a.** Answer (B)
- b.** Answer (B)
- c.** Answer (A)
- d.** Answer (A)

EXTENDED READING

1. <https://www.economicdiscussion.net/production/production-meaning-definition-types-and-factors>
2. <https://www.askdifference.com/location-vs-localization/>
3. <https://studymind.co.uk/notes/specialisation-and-the-division-of-labour-a-level-economics/>
4. https://youtu.be/RSyvcANRaOE?si=ovAvwQucD_xQgORv
5. [Economics Textbooks \(division of labour and specialisation\)](#)

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- Baye, M.R. (2010). Microeconomics and business strategy. New York, NY: McGraw-Hill Irwin
- Robbins, Lionel. An Essay on the Nature and Significance of Economic Science. London: Macmillan
- <https://images.app.goo.gl/BP5eUZTpsbrvZUFM8>
- www.steemit.com

GLOSSARY (key words)

WORD	MEANING
A Bond:	This is a fixed-income investment in the form of a loan that an investor lends to a borrower, usually corporate or government agencies.
An Economy:	How resources are allocated for the production, distribution and consumption of goods and services in a particular country.
Inputs:	These are the resources that are combined to produce goods and services.
Output:	These are the quantity of goods and services which are produced out of the process whereby a firm combines factors of product.
Producer:	This is a person or a business unit that creates and supply goods and services by combining factors of production.
Task:	A piece of work to be done

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