THE REPUBLIC OF UGANDA

Ministry of Education and Sports

HOME-STUDY LEARNING

SENIOR 5

ECONOMICS

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This material has been developed as a home-study intervention for schools during the lockdown caused by the COVID-19 pandemic to support continuity of learning.

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FOREWORD

Following the outbreak of the COVID-19 pandemic, government of Uganda closed all schools and other educational institutions to minimize the spread of the coronavirus. This has affected more than 36,314 primary schools, 3129 secondary schools, 430,778 teachers and 12,777,390 learners.

The COVID-19 outbreak and subsequent closure of all has had drastically impacted on learning especially curriculum coverage, loss of interest in education and learner readiness in case schools open. This could result in massive rates of learner dropouts due to unwanted pregnancies and lack of school fees among others.

To mitigate the impact of the pandemic on the education system in Uganda, the Ministry of Education and Sports (MoES) constituted a Sector Response Taskforce (SRT) to strengthen the sector's preparedness and response measures. The SRT and National Curriculum Development Centre developed print home-study materials, radio and television scripts for some selected subjects for all learners from Pre-Primary to Advanced Level. The materials will enhance continued learning and learning for progression during this period of the lockdown, and will still be relevant when schools resume.

The materials focused on critical competences in all subjects in the curricula to enable the learners to achieve without the teachers' guidance. Therefore effort should be made for all learners to access and use these materials during the lockdown. Similarly, teachers are advised to get these materials in order to plan appropriately for further learning when schools resume, while parents/guardians need to ensure that their children access copies of these materials and use them appropriately.
I recognise the effort of National Curriculum Development Centre in responding to this emergency through appropriate guidance and the timely development of these home study materials. I recommend them for use by all learners during the lockdown.

Alex Kakooza
Permanent Secretary
Ministry of Education and Sports

ACKNOWLEDGEMENTS

National Curriculum Development Centre (NCDC) would like to express its appreciation to all those who worked tirelessly towards the production of home–study materials for Pre-Primary, Primary and Secondary Levels of Education during the COVID-19 lockdown in Uganda.

The Centre appreciates the contribution from all those who guided the development of these materials to make sure they are of quality; Development partners - SESIL, Save the Children and UNICEF; all the Panel members of the various subjects; sister institutions - UNEB and DES for their valuable contributions.

NCDC takes the responsibility for any shortcomings that might be identified in this publication and welcomes suggestions for improvement. The comments and suggestions may be communicated to NCDC through P.O. Box 7002 Kampala or email admin@ncdc.go.ug or by visiting our website at http://ncdc.go.ug/node/13.

Grace K. Baguma
Director,
National Curriculum Development Centre

ABOUT THIS BOOKLET

Dear learner, you are welcome to this home-study package. This content focuses on critical competences in the syllabus.

The content is organised into lesson units. Each unit has lesson activities, summary notes and assessment activities. Some lessons have projects that you need to carry out at home during this period. You are free to use other reference materials to get more information for specific topics.

Seek guidance from people at home who are knowledgeable to clarify in case of a challenge. The knowledge you can acquire from this content can be supplemented with other learning options that may be offered on radio, television, newspaper learning programmes. More learning materials can also be accessed by visiting our website at www.ncdc.go.ug or ncdc-go-ug.digital/. You can access the website using an internet enabled computer or mobile phone.

We encourage you to present your work to your class teacher when schools resume so that your teacher is able to know what you learned during the time you have been away from school. This will form part of your assessment. Your teacher will also assess the assignments you will have done and do corrections where you might not have done it right.

The content has been developed with full awareness of the home learning environment without direct supervision of the teacher. The methods, examples and activities used in the materials have been carefully selected to facilitate continuity of learning.

You are therefore in charge of your own learning. You need to give yourself favourable time for learning. This material can as well be used beyond the home-study situation. Keep it for reference anytime.

Develop your learning timetable to ca ter for continuity of learning and other responsibilities given to you at home.

Enjoy learning

TERM 1

TOPIC 1: PRICE THEORY

Materials

notebook, pen, text/reference books, radio/TV, recorder and mobile phone

LESSON 1: THE THEORY OF SUPPLY

Learning Outcome

By the end of this lesson, you should be able to:

i) explain the meaning of supply.
ii) state the law of supply.
iii) illustrate the demand schedule and supply curve.

Introduction

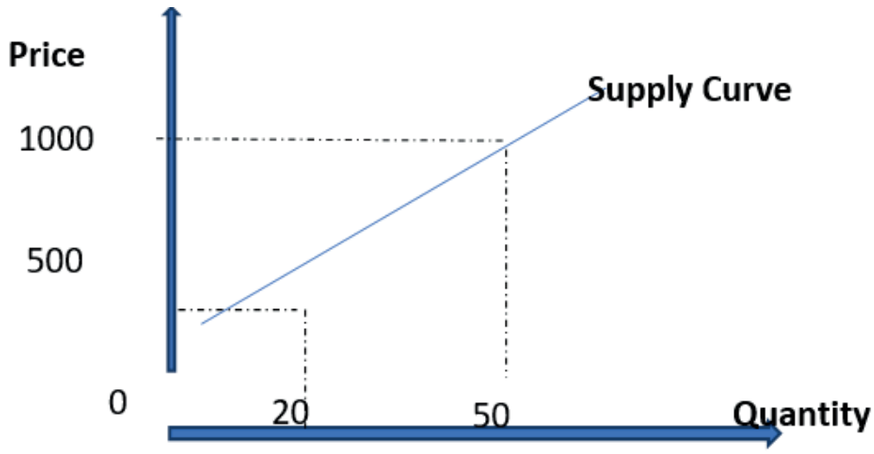
In the earlier section, we covered price and part of the demand theory. For one to demand a commodity there must be a willing supplier. In this section, we are going to look at the supply theory. You have engaged in production or witnessed production taking place whether in your home or neighbourhood. For instance, making snacks like pancakes and chapatti. Availing them for sale is referred to as Supply.

Therefore, Supply refers to the quantity of a good or service that a producer is able and willing to offer at a particular price in a given period of time. It can also be defined as the total amount of a given good or service available to consumers at a given time. In this case, the price induces supply to increase or reduce as shall be explained later.

THE LAW OF SUPPLY

You might have noted that whenever the price of a given commodity rises, more people are willing to supply such a commodity. This is so as to maximise profits. The law of supply states that the higher the price of a commodity, the higher the quantity supplied and the lower the price of a commodity, the lower the quantity supplied keeping other factors constant.

Illustrating the Law of Supply



When you carefully look at the illustration above, at a higher price of shs 1000, quantity supplied is higher at 50 units. At a lower price shs 500, less quantity is supplied thus confirming the law of supply that the higher the price the higher the quantity supplied and the lower the price the lower the quantity supplied holding other factors constant.

THE SUPPLY SCHEDULE

Imagine a situation where three suppliers; Ojambo, Mugisha and Nakintu produce and supply Masks at different prices. In this case, when you match the supplied masks to the prices at which they were supplied and put the information in a table, you will derive a supply schedule.

A supply schedule is a table showing different quantities of a commodity supplied at a particular price for a given period of time by a supplier. This table can be drawn for a single supplier in which case it is referred to as an Individual supply schedule, case in point is Ojambo's supply schedule below or for all suppliers leading to a Market supply schedule that is, for Ojambo, Mugisha and Nakintu. Based on the example of suppliers above, below is the illustration of an individual and market supply schedule.

Individual supply schedules for Ojambo, Mugisha and Nakintu

Ojambo Mugisha Nakintu

PRICE (shs)	QUANTITY SUPPLIED
20,000	30
10,000	20
5000	15
2500	10

PRICE (shs)	QUANTITY SUPPLIED
20,000	50
10,000	30
5000	20
2500	15

PRICE (shs)	QUANTITY SUPPLIED
20,000	20
10,000	10
5000	5
2500	2

From the illustrations above, Ojambo supplied 20 masks at shs. 20,000 and as the price reduced to shs 2500, he reduced supply to only 2 masks. Mugisha on the other hand supplied 30 masks at shs. 20,000 and when the price reduced to 2500, he decreased supply to 10 masks.

Activity: Analyse Nakintu's supply schedule and comment on her supply trend.

Having analysed the three individual supply schedules, you realise they all follow the law of supply since more is supplied at high prices (shs. 20,000) than at low prices (shs. 2500).

MARKET SUPPLY SCHEDULE FOR SUPPLIERS – OJAMBO, MUGISHA AND NAKINTU

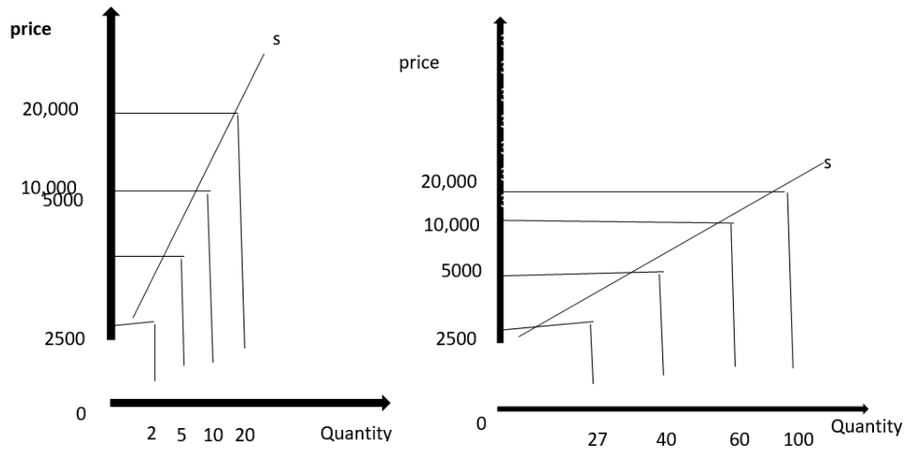
To obtain the market supply schedule, sum up quantities supplied at respective prices for Ojambo, Mugisha and Nakintu and put it in a table as below. Fill in the missing gaps

PRICE (shs)	QUANTITY SUPPLIED (kg)
20,000	100
10,000	
5000	
2500	27

Supply Curve

When the Information on a supply schedule is plotted on a graph, a supply curve is obtained. In this view, a supply curve is a graph showing different quantities of a commodity supplied at a particular price for a given period of time by a supplier. We can equally say that; it is a graphical representation of the supply schedule. It can be drawn for an individual supplier or all suppliers as illustrated below based on the supply schedules above.

Ojambo's individual supply curve MARKET SUPPLY CURVE FOR Ojambo, Mugisha and Nakintu



FACTORS THAT INFLUENCE SUPPLY

Now that you have explored the meaning of supply and derivation of supply curve from the supply schedule, you need to understand why more of a commodity is supplied at a high price and at a low price less is supplied. These are what they call the factors affecting supply. Before reading the next section, what do you think are some of the factors which influence supply?
The factors that influence supply are explained below:

Producers aim at making as much profits as possible and because of the price of the commodity in question. At a higher price more quantity is supplied in order to maximise profits, and at lower price less is supplied to avoid losses.

The cost of production can influence supply. At a high cost of production, supply is low. This is because the producer is not able to mobilise many factors of production to produce. However, at a low cost of production, supply is high because producers find it cheap to mobilise many factor inputs to produce more commodities and increase supply.

The level of technology. The use of modern and advanced means of production leads to high supply. This is because modern technology improves the speed at which goods are produced. However, poor methods of production limit the pace at which goods are produced leading to low supply.

Supply is also influence by the government policy of subsidisation and taxation. A favourable government policy, like increased subsidies and lower taxes to producers encourages production. This leads to high supply. However, unfavourable government policy, in form of high taxes discourages production. It leads to low supply.

The gestation period of a produce also influence supply. To produce a good, time is taken for inputs to be transformed into final goods and this could be long or short. The time taken is regarded as gestation period. The longer the gestation period, the longer it takes the producer to make goods or services and the lower the supply while a short gestation period leads to high supply.

The number of producers or suppliers in the market influence supply. When there are many producers, more output is realised. The higher the volume produced and supplied on the other hand, the fewer the number of producers or suppliers, and the lesser the quantity offered for sale.

Supply is also influence by the objective of the firm or producer. You need to note that most

firms aim at either profit maximisation or sales maximisation. Firms aiming at maximise sales produce a lot of output leading to high supply. However, the firms whose main objective is to maximize profits produce less output in order to change high prices and maximise profit. This leads to low supply.

The size of the market being served also influences supply. Existence of a large market encourages production. Producers make a lot of output to serve the big market and by so doing obtain higher profits. This leads to high supply. However, a small market discourages production leading to low supply due to fear of incurring losses.

The political state in the country also influences supply. Political stability encourages economic activities because producers are certain of the success of their investment which leads to high supply while political instability discourages economic activities because investors are not sure of their life or investments' returns leading to low supply.

The climate conditions of a place can also influence supply. Favourable climatic conditions, for example, reliable rainfall encourage production of agricultural commodities. This may lead to high supply. While unfavourable climatic conditions for example floods or unreliable rainfall destroys agricultural products leading to low supply.

You should note that more factors besides the above can be identified in influencing the level of supply in an economy. You are advised to search online for those who have access and other reference materials to find out the other factors.

Try out these tasks and submit them to your teacher when schools reopen.

Activity 1

i) **Explain why a normal supply curve is positively sloped?**
ii) **Explain the factors that lead to low supply of a commodity in an economy.**
iii) **Distinguish between change in supply and change in quantity supplied.**
iv) **Identify causes for a change in supply.**

Issues to note:

- The law of supply states that when the price of a given commodity rises, more producers will be motivated to supply.
- Supply in a market is represented by an upward sloping supply curve that shows how the quantity supplied will respond to different prices over a period of time.
- Businesses produce more when the price is higher because they want to maximise profits.

LESSON 2: CONCEPT OF ELASTICITY

Learning Outcome

By the end of this lesson, you should be able to:

i) define elasticity of demand.
ii) identify the types of elasticity of demand.
iii) define and calculate price elasticity of demand.
iv) interpret price elasticity of demand.
v) explain the factors that influence price elasticity of demand.

Introduction

I believe you have worn new and old stockings. New stockings are tight and therefore are said to be inelastic while old stockings are loose and are said to be elastic. The degree of responsiveness to force or pressure is what elasticity is about and it involves expansion and contraction. Elasticity therefore refers to the degree of responsiveness of a dependent variable (quantity demanded and quantity supplied) to an independent variable (factors affecting the level of demand and supply). The concept of elasticity is categorised into elasticity of demand and elasticity of supply. Let us begin with elasticity of demand.

ELASTICITY OF DEMAND

In the earlier section, we handled demand, and factors that influence demand. Some of of the factors are going to play an important role in this sub section. Elasticity of demand refers to the measure of the degree of responsiveness of quantity demanded of a commodity to any change in the major determinants of demand. The major determinants of demand are; price of the commodity in question, income of the consumer, and price of related goods because of their easy nature to measure.

Therefore, elasticity of demand is categorised into;

- Price elasticity of demand (PED)
- Income elasticity of demand (YED)
- Cross elasticity of demand

PRICE ELASTICITY OF DEMAND (PED)

In this type of elasticity of demand, the key factor is price. We shall look at how a change in price affects demand. Food for thought; what happens to the demand of a given commodity whenever a price increases or decreases? Do people demand more or less of that commodity?

The result of the above means that when the price changes from its original level, quantity demanded will also change from its original level. This is either by increasing or decreasing. In this regard therefore, Price elasticity of demand refers to the degree of responsiveness of quantity demanded of a commodity to a change in the price of the commodity in question. It is computed using the formula;

Price elasticity of demand = % change in quantity demanded

Price elasticity of demand = % change in quantity demanded

% Change in price of the commodity in question

OR

$$\text{PED} = \frac{\text{Change in quantity demanded}}{\text{Change in price of the commodity in qn.}} \times \frac{\text{Original price}}{\text{Original quantity}}$$

Note:

Price elasticity of demand is always negative which explains the negative slope of the normal demand curve. This is attributed to the inverse or negative relationship between price and quantity demanded. A negative (-) sign is therefore multiplied in the formula to make the final answer positive and meaningful.

Let us now calculate price elasticity using the formula given above.

Given that the price of the commodity decreased from shs. 400 to shs200 and as a result the amount demanded increased from 5 units to 10 units. Calculate the price elasticity of demand.

Step 1: Get the information you need from the question, that is;

Current price= 200

Original price = 400

Current quantity= 10

Original quantity= 5

Step 2: State the formula of price elasticity of demand.

$$P.E.D = -\left[\frac{\text{change in quantity demanded}}{\text{Change in price}} \times \frac{\text{original price}}{\text{Original quantity demanded}}\right]$$

Step 3: Substitute the figures into the formula and work out;

$$= -\left[\frac{10-5}{200-400} \times \frac{400}{5}\right]$$

$$= -\left[\frac{5}{-200} \times \frac{80}{1}\right]$$

$$= -(400/-200)$$

$$= -(-2)$$

$$= 2$$

Note that: i) Change means Current level minus Original level

ii) Elasticity has no units because they (the units) cross out during the process.

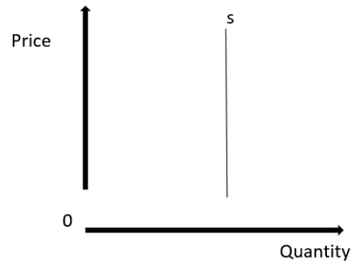
INTERPRETATION OF PRICE ELASTICITY OF DEMAND

Having calculated PED, we can now interpret and categorise demand based on the obtained answer in five types as follows:

Perfectly Inelastic Demand

This is when an increase or decrease in price does not affect the quantity demanded. In other words, even if the price of the commodity changes, the quantity demanded will remain the same. It is common with necessity goods like salt and soap. In this case, the price elasticity of demand is zero (0). Think of other examples of goods with perfectly inelastic demand and list them.

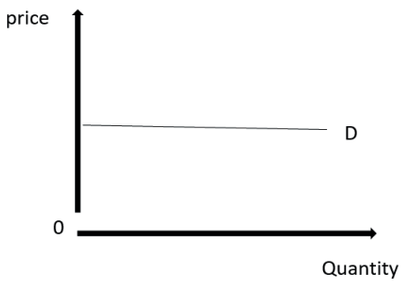
Illustration 2



Perfectly Elastic Demand

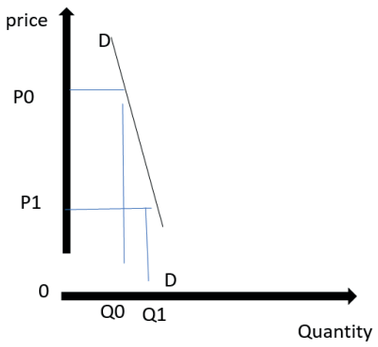
This is when an increase or decrease in quantity demanded is not due to changes of the price of the commodity but changes in the other factors that affect that demand. That is to say, buyers are willing to demand the commodity at only one price. Any increase in the price will result in a decrease in quantity demanded to zero. Therefore, at the same price, more or less is demanded; in this case the price elasticity of demand is equal to infinity.

Illustration 3



Inelastic Demand (Low Elasticity of Demand)

This is when the price elasticity of demand is greater than 0 but less than 1. A big change in price leads to a small change in quantity demanded. The response of quantity demanded to changes in price is low.



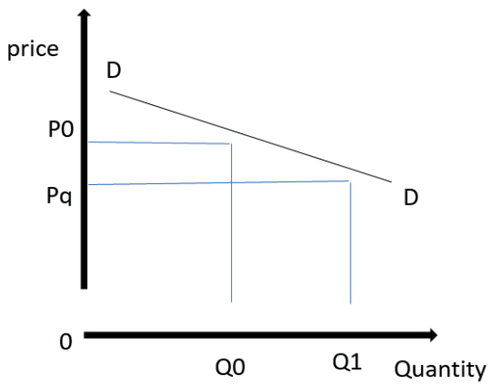
From the illustration above, a big change in price from P1 to P0 or P0 to P1 results into a small change in quantity demanded from Q1 to Q0 or Q0 to Q1 respectively.

Elastic Demand (High Elasticity of Demand)

This is when a small change in price levels leads to a big change in quantity demanded. In this case, the price elasticity of demand is greater than 1 but less than infinity. The response of quantity demanded to changes in price is high.

Illustration 4

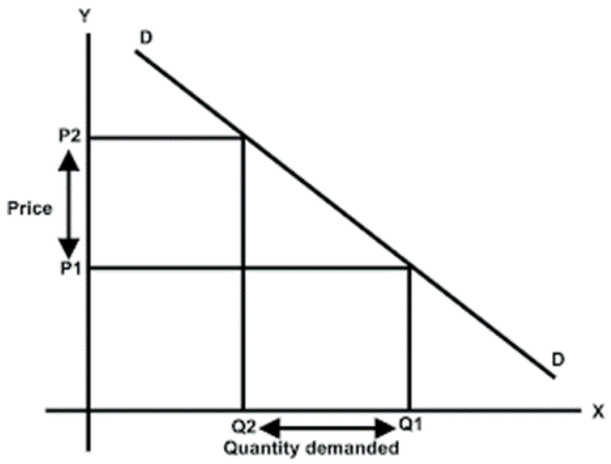
Illustration 4



From the illustration, a small change in price from P0 to P1 or P1 to P0 causes a big change in quantity demanded from Q0 to Q1 or Q1 to Q0.

Unitary Elasticity

This occurs when a change in price brings about an equal change in quantity demanded. In this case, the price elasticity of demand is equal to 1 i.e. the proportionate change in quantity demanded is due to an equal change in price.



From the illustration above, you notice that a given change in price from P2 to P1 or P1 to P2 leads to an exact change in quantity demanded from Q2 to Q1 or Q1 to Q2 respectively.

In summary, when elasticity = I; unitary elasticity

= O; perfectly inelasticity

=∞; perfectly elastic infinity

= 0 < e< 1 ; inelastic (between zero and 1)

=1 < e < 00 ; (between 1 and infinity)

Factors that Influence Price Elasticity of Demand

For demand to be elastic or inelastic, different factors come into play. The following are the factors that lead quantity demanded to remain almost the same or change by a big margin.

Income level of the consumers. Consumers with high incomes have inelastic demand. This is because even when the price increases, they are able to buy almost the same quantity. On the other hand, low income consumers have elastic demand because when the price increases, most of them cannot afford to buy and quantity demanded reduces by a great margin.

Availability of substitutes. From our introductory lessons we looked at substitute goods as goods that serve almost the same purpose. Therefore, goods with close substitutes have elastic demand. This is because the consumer has many alternatives to choose from when price increases. However, goods with no close substitutes have inelastic demand since the consumer has no alternative goods to buy.

The degree of necessity of a commodity. Imagine you need a commodity that you cannot do without. You will buy it regardless of the price such that even at high prices you will buy it. This implies that necessities or essential goods like salt and soap have inelastic demand. However, luxuries have elastic demand because consumers can easily choose to buy less when the price increases.

The degree of people's addiction to a commodity. The demand for addictive items like cigarettes and alcohol is inelastic. This is because such items form a habit in the consumer that even when price increases, he or she continues to buy. However, non addictive items have elastic demand since their demand can be reduced when the price increases.

The nature of the commodity. Durable goods like furniture tend to have inelastic demand because even if there is a fall in price, the consumer does not purchase additional unit. The same applies to perishable goods since one cannot increase their demand when the price reduces

since they easily go bad.

The number of uses a commodity can be put on. Take the example of electricity which has many uses, for example, it is used for cooking, ironing and lighting, among others. When its charges increase, people reduce its consumption. They will use it for only priority. This will make its demand to be elastic. This means that commodities with several uses have elastic demand because an increase in price makes consumers reduce the number of uses to which a commodity is put yet on the other hand, commodities with few uses have inelastic demand since their consumption remains almost the same even at high prices.

The proportion of income spent on the commodity. Commodities that take a very small proportion of the consumer's income e.g. safety pins, match box among others have inelastic demand since the cost burden is not felt. However, commodities that take a big percentage of the consumer's income have elastic demand since a slight increase in their price makes them less affordable.

The convenience traders have in getting the commodity. Goods that are easily accessed in buying have inelastic demand. This is because of the convenience associated with acquiring them. Those which are not conveniently accessible hence having elastic demand.

The brand loyalty of the commodity. Goods with a high brand loyalty have a more inelastic demand because a change in price will not affect the demand while those with a low brand loyalty have elastic demand.

Please do this activity and submit it to your teacher when schools reopen.

Activity 2

Account for:

i) price inelastic demand for commodities in an economy.
ii) price elastic demand for commodities in an economy.

LESSON 3: CROSS ELASTICITY OF DEMAND

Learning Outcomes

By the end of this lesson, you should be able to:

i) define and calculate cross elasticity of demand.
ii) interpret cross elasticity of demand.
iii) define and calculate income elasticity of demand.
iv) interpret income elasticity of demand.
v) explain the practical application of elasticity of demand.

Introduction

Another major type of elasticity of demand is Cross elasticity of demand. It deals with determining the relationship between two different commodities. The commodities may be substitutes or complements based on their prices and quantities demanded. What then is cross elasticity of demand?

Cross elasticity of demand refers to the degree of responsiveness of quantity demanded of one commodity due to a proportionate change in the price of another related commodity. Assuming you want to determine the relationship between two commodities x and y, you would calculate their cross elasticity of demand using the formula below;

Cross elasticity of demand = percentage change in quantity demanded of commodity X

Percentage change in price of commodity Y

OR

C.E.D =Change in quantity demanded of commodity x X original price of commodity Y

Change in price of commodity Y Original quantity demanded of commodity x

Let us now try out this example,

Calculate the cross elasticity of demand if the price of commodity p falls from shs. 1,000 to shs. 800 and the quantity demanded of commodity z increases from 10 units to 20 units.

Step 1: Get the information required in the calculation as below;

Original price of p = 1000

Current price of P = 800

Original Quantity demanded of = 10 units

Current Quantity demanded of z = 20 units

C.E.D = Change in Qd of z X Original price of p

Change in price of p original quantity of z

20 - 10 X 1000

800 – 1000 10

= 10/- 200 X 100/1

= (1000/-200)

C.E.D = -5

INTERPRETATION OF CROSS ELASTICITY OF DEMAND

Based on the coefficient of cross elasticity of demand obtained after the calculation, you can now tell the relationship between the two commodities. When the answer is positive, the two commodities are substitutes, when the answer is negative, the two commodities are complements and when the answer is zero, the two commodities are not related.

Food for thought

(i) What is the difference between substitutes and complements?
(ii) Provide at least two examples of each of the above goods.

INCOME ELASTICITY OF DEMAND

Now that you are familiar with price and cross elasticity of demand, let us look at income elasticity of demand. Income elasticity of demand is the degree of responsiveness of quantity demanded of a commodity to a proportionate change in the income of the consumer. In this case, we want to find out the effect of income change to quantity demanded of a commodity.

Y.E.D = Percentage change in quantity demanded

Percentage change in income of the consumer

OR

Y.E.D = change in quantity demanded X Original income

Change in price Original quantity demanded

In the example below, let us see how income elasticity of demand is calculated.

Given that the consumer's income increased from shs. 10,000 to Shs. 30,000 and the quantity demanded of commodity M decreases from 50 units to 20 units. Calculate the income elasticity of demand for commodity M.

Step 1: Get the information needed from the question as below;

Original income = 10,000

Current income = 30,000

Original quantity demanded =50

Current quantity demanded = 20

Step 2: State the formula and substitute in the figures as below;

Y.E.D == change in quantity demanded X Original income

Change in income Original quantity demanded

Step 3: Substitute the figures into the formula;

$$= \left[\frac{50 - 20}{30{,}000 - 10{,}000} \times \frac{10{,}000}{50}\right]$$

$$= \left[30 / -20{,}000 \times 200/1\right]$$

$$= -0.3$$

Interpretation of income elasticity of demand

Now that you have calculated income elasticity of demand, you can tell whether the good dealt in is inferior, normal or a necessity based on the answer. When the answer is negative the commodity is inferior, when the answer is positive, it is a normal good and when the answer is zero, it is a necessity good.

In the above example therefore, the commodity is an inferior good because of a negative coefficient.

PRACTICAL USES OF THE CONCEPT OF ELASTICITY

The concept of Elasticity can be applied in many ways. Having explored the basics on elasticity of demand, at this point we need to look at its importance to the producer, consumer and the government. To begin with, let us see how it is useful to the producer.

(a) To the producer

It guides employers when determining wages for their workers. The employers pay higher wages to employees who produce commodities with inelastic demand. This is because a high wage can be given by increasing price with limited decline in quantity sold. However, employers pay low wages to employees who produce commodities with elastic demand since their demand reduces once they attempt to charge high prices on them.

It is used in setting of prices in order to maximise profits. A producer who deals in a commodity with inelastic demand sets a high price to maximise the revenue per unit sold. This is in order to maximise profits. However, a producer who deals in a commodity with elastic demand sets a lower price to maximise the number of units sold in order to maximise profits.

It is used by monopoly producers during price discrimination. Price discrimination is the selling of a similar commodity at different prices to different buyers regardless of the cost of production. Monopoly producers charge high prices in the markets where buyers have inelastic demand for their products. However, they charge lower prices in the markets where buyers have elastic demand.

Guides producers on production decision to maximise profits. A producer whose commodity has inelastic demand produces less and supplies less on the market in order to maximise the profits. However, the person dealing in a commodity with elastic demand produces a lot and supplies large quantities in order to maximize sales and profits.

(b) To the government

The concept of Elasticity is useful to the government in the following ways:

It is used in its taxation policy. Taxes are imposed to raise government revenue. In order to maximise the tax revenue, the government sets a low tax rate for commodities with elastic demand and a high tax rate for commodities with inelastic demand.

It is used when pricing public utilities electricity and safe water. The government sets a low price to business firms and industrialists that use public utilities. This is because such utilities can afford alternatives, and have elastic demand for public utilities. However, domestic assets like households are charged high prices because their demand for such utilities is inelastic i.e. they cannot afford the substitutes like generators or solar electricity.

It is useful when discouraging the production and consumption of undesirable commodities. For commodities with inelastic demand, taxes are increased to effectively control their production and consumption. The other means of controlling trade like quotas, total ban or licensing are more effective compared to the taxes while for commodities with elastic demand.

It is useful in determining the tax incidence. Tax incidence is the final resting place of a tax charged by government. A bigger percentage of the tax charged on the producer is paid by the buyers for commodities with inelastic demand. This is because consumers buy them regardless of the price. However, for commodities with elastic demand, the bigger percentage of the tax is paid by the producer given that after-tax imposition, he cannot increase the price on them.

It is useful in its privatisation and nationalisation policies. The government nationalises firms dealing in commodities with inelastic demand. This is in order to check consumer exploitation by

the private sector. However, it privatises its firms dealing in commodities with elastic demand in order to improve their efficiency through competition in the private sector.

It is useful when determining the benefits from international trade. Countries exporting commodities with inelastic demand but importing those with elastic demand benefit more from international trade. It affects those countries exporting goods with elastic demand and importing goods with inelastic demand.

It helps government in its devaluation policy. Devaluation is the deliberate policy by government to reduce the exchange value of a country's currency in relation to other countries' currencies. Devaluation makes imports expensive and exports cheap. It therefore discourages the importation of goods but promotes exports. However, this is only successful when the elasticity of demand for exports and imports is elastic.

(c) To the consumers

To the consumer, the concept of elasticity can be useful in the following ways:

It is used when planning consumer expenditures. Consumers plan to spend more money on goods with inelastic demand, and less money on goods with elastic demand. For instance, they tend to spend more money on necessities and less money on luxuries.

Now try out the following activities. You will submit them to your teacher for checking when schools open.

Activity 3

1. Distinguish between income elasticity of demand and cross elasticity of demand.

2. Given that the consumer's income increased by 20% and his demand for commodity Z increased from 15 units to 30 units. Calculate the income elasticity of demand.

3. Given that the price of commodity Y decreased from shs. 15,000 to shs. 10,000 and the quantity demanded of another commodity remained constant at 2,000 kg. Calculate the cross elasticity of demand. How are the two commodities related?

4. Explain the importance of price elasticity of demand in an economy.

LESSON 4: ELASTICITY OF SUPPLY

Learning Outcomes

By the end of this lesson, you should be able to:

i) distinguish between elasticity of supply and price elasticity of supply.
ii) calculate price elasticity of supply.
iii) interpret price elasticity of supply.
iv) explain the factors that determine price elasticity of supply.

Introduction

ELASTICITY OF SUPPLY

Now that we are familiar with elasticity in general, let us look at elasticity of supply. . We are going to relate quantity supplied to a change in major factors that affect supply. To begin, what is elasticity of supply?

Elasticity of supply is the degree of responsiveness of quantity supplied of a commodity to a

proportionate change in factors that affect supply. In the next section, we are going to look at price elasticity of supply in details.

PRICE ELASTICITY OF SUPPLY

Price elasticity of supply explains the effect of a price change on quantity supplied of a commodity. It is therefore defined as the degree of responsiveness of quantity supplied of a commodity to a proportionate change in price of the commodity in question. It is computed using the formula;

$$P.E.S = \frac{\text{percentage change in quantity supplied}}{\text{Percentage change in price}}$$

OR

$$P.E.S = \frac{\text{change in quantity supplied}}{\text{Change in price}} \times \frac{\text{Original price}}{\text{original quantity supplied}}$$

Now that we have the formula, let us try out the following example

Given that the price of a commodity increased from shs. 400 per kg to shs. 800 per kg and the quantity supplied changed from 100kg to 400kg. Calculate the price elasticity of supply. State the degree of the price elasticity of supply

$$P.E.S = \frac{\text{change in quantity supplied}}{\text{Change in price}} \times \frac{\text{original price}}{\text{original quantity}}$$

$$= \frac{400 - 100}{800 - 400} \times \frac{400}{100}$$

$$\frac{300}{400} \times \frac{4}{1} = \frac{3}{4} \times \frac{4}{1}$$

$$= 3$$

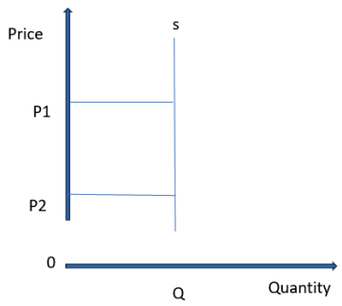
INTERPRETATION OF PRICE ELASTICITY OF SUPPLY

Having calculated price elasticity of supply, we can now categorise supply as;

Perfectly inelastic supply

This occurs where an increase or decrease in the price of the commodity in question does not affect the amount supplied. The quantity supplied does not change when the price changes in this case the coefficient of the elasticity of supply is zero (0).

Illustration 5

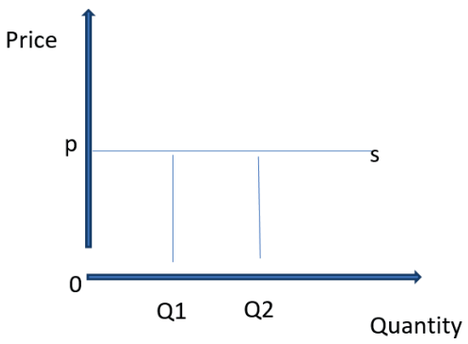


From the illustration above, the same amount of a commodity (Q) is supplied regardless of the price whether high at P1 or low at P2.

Perfectly elastic supply

This occurs where at the same price of the commodity in question, more or less is supplied. This may be due to the other factors that affect the amount supplied. The coefficient of elasticity of supply is infinity.

Illustration 6

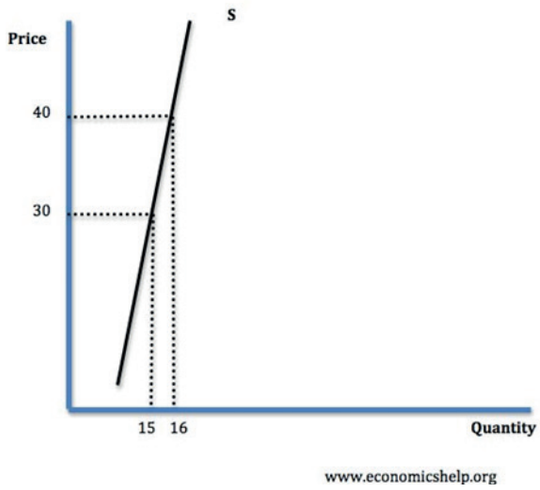


When you look at the illustration above, at a constant price (Po), quantity supplied can increase from Q1 to Q2 or reduce from Q2 to Q1.

Inelastic supply

This occurs where a big change of the price of the commodity in question leads to a smaller change in the amount supplied of the commodity in question. The coefficient of price elasticity of supply is greater than zero but less than one.

Illustration 7

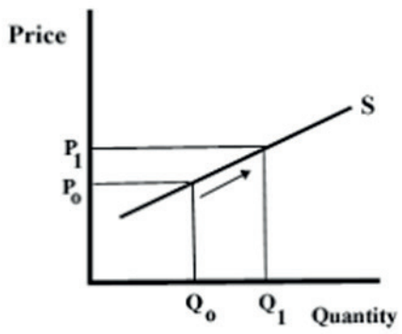


When you look at the illustration above, a big increase in price from shs. 30 to shs. 40 caused a smaller increase in quantity supplied from 15 to 16 units.

Elastic supply

This is one where a small change in the price of the commodity in question leads to a bigger change in the quantity supplied. The price elasticity of supply is greater than one but less than infinity.

Illustration 8

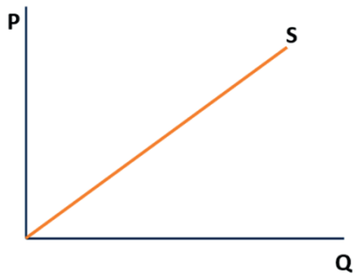


From the illustration above, increase in price from P0 to P1 caused a more than proportionate increase in quantity supplied from Q0 to Q1.

Unitary supply

This is where the price elasticity of supply is equal to one. A given percentage change in the price brings about an equal change in the quantity supplied.

Illustration 9



In summary:

Elastic supply is when price elasticity of supply is between 1 and infinity.

When it's between 0 and 1, then supply is inelastic.

When price elasticity of supply is equal to 1, then supply is unitary.

When price elasticity of supply is equal to 0, then supply is perfectly inelastic.

When price elasticity of supply is equal to infinity, then the supply is perfectly elastic.

FACTORS THAT DETERMINE THE ELASTICITY OF SUPPLY

Here, you have to ask yourself, why do some commodities have elastic supply while others are inelastic?

You should note that quantity supplied may remain almost the same or change by a big margin following a change in price. This is because of the following factors;

Availability of resources. The more readily available resources are, the more elastic supply becomes. This is because when the price increases, available resources are transformed into goods to increase supply. However, once the factors of production are scarce, supply becomes inelastic.

The gestation period. A long gestation period implies inelastic supply. For instance, agricultural products have inelastic supply because of their long gestation periods. However, a short gestation period makes supply to be elastic i.e. the supply of bread is elastic because it takes a short time to produce bread.

The freedom of entry and exit of new firms in the industry. Free entry of new firms in the industry implies that any increase in the price can attract new firms leading to a big change in supply hence elastic supply. However, restricted or blocked entry of new firms into the industry leads to inelastic supply.

The cost of production. Commodities that have very high risks of production have inelastic supply while those with low costs of production have elastic supply.

The nature of the product. Durable commodities have elastic supply since when prices increase; they are drawn from the store thus increased supply while perishable commodities have inelastic supply.

The method of production. Commodities produced with the help of efficient technology have elastic supply because production is easy and fast while those produced with the help of complicated and expensive technology has inelastic supply.

The production period. In the short run, supply is basically inelastic. This is because the period is short and some factors of production remain fixed. In the long run, supply is basically elastic because all the factor inputs become variables (can be changed).

Please attempt these activities as we endeavour to understand elasticity of supply.

Activity 4

1. Given that the price of a commodity decreased to shs. 2500 from 5000 per kg and the quantity supplied decreased by 50%. Calculate the price elasticity of supply and state the degree of elasticity.

2. Account for:

i) Price inelastic supply
ii) Price elastic supply in your country.

LESSON 5

SUB-TOPIC: PRICE MECHANISM AND RESOURCE ALLOCATION

Learning Outcome

By the end of this lesson, you should be able to:

i) define price mechanism.
ii) give the assumptions of price mechanism.
iii) explain the advantages and disadvantages of price mechanism.
iv) identify measures to control defects of price mechanism.

Introduction

In your earlier studies in the introduction to Economics, you must have looked at a free enterprise economy. This is where resource allocation is determined by forces of demand and supply, and ownership of resources is by private individuals. You realise that in Uganda today the private sector is encouraged and most investments are run by private individuals whose decisions are guided by forces of demand and supply with a lot of self-interest and profit drive. This explains price mechanism. In that regard therefore, Price mechanism is a system in a free enterprise economy where prices and resource allocation are determined by the inter – play of forces of demand and supply.

ASSUMPTIONS UNDERLYING PRICE MECHANISM

Price mechanism has underlying assumptions that govern its success and among them are the following;

- Consumers are regarded to be rational
- There is no government intervention as far as pricing and output policies of the producers are concerned.
- It assumes free mobility of factors of production, both occupationally and geographically.
- Consumer sovereignty prevails in the market.
- Production is profit – motivated, that is, producers aim at profit maximisation.
- Resource allocation is determined by the interaction of forces of demand and supply.

ACTIVITY:

Consider the assumptions underlying Price mechanism provided above and provide an explanation of each. Do research about them.

THE ADVANTAGES OF PRICE MECHANISM IN RESOURCE ALLOCATION

People and the economy at large benefit from activities under price mechanism. The advantages of price mechanism include the following:

It leads to efficient allocation of resources. Price mechanism is used by producers to distribute the scarce resources in the production of those goods needed by the consumers. Producers allocate more resources to those goods whose demand is high and fewer resources are allocated to those goods whose demand is low.

It answers the question of how much to produce (it provides automatic adjustment between supply and demand). When there is an increase in aggregate demand, prices increase. This attracts more firms into the industry and supply increases. Therefore, price mechanism sends a signal to the producers to increase supply in order to respond to the increase in aggregate demand. This created an automatic response between demand and supply.

It ensures efficiency of firms. High prices lead to high profits. Producers are encouraged to produce more output of better quality. This enables producers to expand their scale of production and become more efficient.

It promotes consumer sovereignty, that is, it helps in deciding whom to produce for. Producers tend to supply to those consumers who are willing to buy. The consumers influence what is to be produced and this promotes consumer sovereignty in production.

It determines where to produce from or where to locate the production unit. Production units are located in those areas where market is readily available and where the consumers are willing to pay the price charged by the producers. Hence price mechanism gives a signal of where production is to take place.

It determines income distribution / it distributes income. This is achieved when producers buy resources from the resource owners. At the same time the consumers buy goods and services supplied by the producer. This enables the producers to receive income from consumers. Hence income is distributed in the economy through price mechanism.

It helps producers to determine when to produce. Production always takes place at such a time when consumer's demand is high. This is common with seasonally demanded and supplied goods. The high demand forces producers to increase supply. Producers make a judgement of when to produce by looking at demand and supply forces in the market.

It determines what is to be produced. When the price of a certain commodity is high, the producers supply more of it in order to gain higher profits. On the other hand, the producers normally supply less of a commodity whose price is low. Hence the decision of what is to be produced is influenced by the price signals.

It determines the type of technology to be used in production. (It answers the question of how to produce). High demand for goods calls for an increase in supply to respond to that demand. This requires producers to apply better techniques of production in order to increase supply of goods.

It encourages flexibility in production. Producers use the price and products signals to change from less profitable to more profitable economic activities. For example, a coffee farmer may divert from growing of coffee to growing of vanilla should the price of vanilla become higher than that of coffee.

Consumers are availed with a variety of goods and services. Price mechanism generates competition among producers. This gives rise to a greater variety of goods and services in an economy. Consumers are able to exercise choice when improving their standards of living.

It encourages innovation and invention. Due to competition, producers tend to design new and better ways of production, distribution, branding and marketing of goods and services. This is done so that producers are able to supply what consumers need.

DEMERITS OF PRICE MECHANISM WHEN ALLOCATING RESOURCES IN AN ECONOMY

Now that you have explored the advantages of price mechanism, let us now look at the disadvantages of price mechanism. They include some of the following:

It promotes or accelerates income inequality. Efficient producers whose goods are highly demanded receive higher incomes than the inefficient producers. Therefore, the efficient producers get access to most of the resources in the economy. This creates income disparity in the economy.

It aids the emergence of monopoly power. Price mechanism creates private monopoly since inefficient firms are out competed. This leads to their closure and efficient firms monopolise the market. The monopoly firms restrict output in order to charge high prices. They also supply low quality goods due to the absence of competition in the industry which affects the consumers.

There is consumer exploitation due to ignorance. Many consumers are not aware of price changes and new goods on the market. As a result, consumers are exploited through persuasive advertisements and other forms of malpractices by profit – hungry traders.

There is a divergence between private benefit and public interests. You realise that private individuals are after enjoying maximum profits, therefore price mechanism does not consider the negative effects inflicted on the public for instance when natural resources are over exploited. Much emphasis is put on private benefit of profit maximisation without taking into account public interest. For example, when forest trees are cut down to get timber; there is a danger of deforestation and its negative impact on the environment. Unfortunately, this is not considered under price mechanism.

It results into unemployment. We earlier noted that under price mechanism are profit driven. This means that those which cannot make profits automatically go out of production. Therefore, labour which would have been employed in such firms remains idle and this creates unemployment in an economy.

Misallocation of resources is likely to occur. Price mechanism creates resource wastage and excess capacity in certain cases. Producers abandon production of those goods which are not highly demanded. This leaves some resources to be idle or underutilised. At the same time, excessive competition among producers leads to resource wastage.

It does not respond to rapid structural changes in an economy. Price mechanism fails to adjust to those structural changes which are desired in an economy. For example, price mechanism (market forces of demand and supply) cannot be used to repair destroyed infrastructure after a war because such structural change calls for government intervention and involvement.

It breeds economic instabilities, for example, traders who are interested in making business gains may hoard goods so that they create artificial shortages with motives of selling those

goods at higher prices.

It leads to failure to allocate resources to the provision of public goods. I hope you are familiar with public goods like street lighting. They are not profit making and therefore rarely provided by profit minded private individuals.

WAYS THROUGH WHICH GOVERNMENT INTERFERES WITH PRICE MECHANISM

The biggest responsibility of the government is towards its Citizens. As clearly noted, the people and economy are negatively affected thus need for government. Let us now look at some of the measures governments take to control negative effects of price mechanism.

Use of progressive taxation. You are aware that the biggest source of government revenue is taxation. Therefore, by use of Progressive taxes, government is able to re – distribute incomes. In this case high income earners are taxed more than the low-income earners. This narrows the gap between the rich and the poor.

Setting up and strengthening bureau of standards. In Uganda we have the Uganda National Bureau of Standard which inspects goods being produced to ensure that certain quality specifications are fulfilled before goods are put on market. A certification mark is given for goods that fulfil the required quality standards and this protects the health of consumers.

Subsidisation of firms especially those providing essential and merit goods. The government offers subsidies to firms which produce essential services so that the consumers are able to get such services at lower prices.

Setting up regulatory bodies to protect the environment. The National Environment and Management Authority (NEMA) in Uganda ensure that laws are put in place to govern the exploitation of resources, to protect wetlands and to enforce proper disposal of industrial wage.

Nationalisation of economic enterprises. Nationalisation is where the state takes over ownership of enterprises formerly privately owned. This is done to ensure that all people have access to those essential goods and services which the private sector could not adequately provide to the public.

Provision of public goods by the government. You realise that private individuals rarely provide public goods because they are not profit making. In this case therefore government can provide them, for example, the provision of better transport network in form of roads which help in the movement of goods. Hence shortages created through market forces of demand and supply are solved or checked.

Price controls by the government. In Uganda, price controls are still being debated. However, once adopted, they involve the legislation of minimum price (price floor) to protect producers and a maximum price (price ceiling) to protect consumers from being exploited.

LESSON 6: PRICE FLUCTUATIONS

Learning Outcomes

By the end of this lesson, you should be able to;

i) define price fluctuations.
ii) explain the causes of price fluctuations.
iii) identify the effects of price fluctuations.

Introduction

You should have observed that prices of agricultural products tend to persistently increase and decrease. Today Matooke have flooded markets and a cluster goes for as low as three thousand shillings. This was not the case sometime back when there were shortages causing prices to increase. Uganda being an Agro based economy, it is imperative for you to understand the causes, effects and measures to control the changes in prices. You need therefore to know what price fluctuations mean. Price fluctuation refers to the persistent rise and fall in prices of commodities. There instabilities are common with the prices of agriculture and primary products.

CAUSES OF PRICE FLUCTUATIONS IN THE AGRICULTURAL SECTOR

Now that you know that prices of agricultural products fluctuate persistently, you need to know what causes it. Among the causes are the following:
The long gestation period of agricultural products. You should be aware that Agricultural products have a long gestation period and therefore, before harvest there is shortage on the market and this increases prices. However, as the harvest session approaches, supply increases and this leads to a fall in the prices of agricultural products.

Bulkiness of agricultural products. Most agricultural products are bulky and heavy e.g. bananas, maize, sugarcane. They are therefore. not easy to transport from areas of plenty to areas of scarcity. Prices therefore fall in the areas of production.

Perishability of Agricultural products. Agricultural products are highly perishable e.g. Milk and tomatoes cannot be kept for a long period of time because they easily get bad. Therefore, during the harvest period, prices fall because farmers produce and supply a lot (little or nothing is stored).

Poor Storage of surplus agricultural products. There is a poor system of managing surplus outputs from farmers. This is due to poor infrastructure in form of poor roads and storage facilities. Therefore, during seasons of high excess production, the surplus produced is sold at low prices and part of it is exported.

Divergence between planed and actual output. When you look back in your villages, you will notice that most farmers are semi illiterate. This makes it difficult to predict their output, coupled with other factors like variations in climate. Therefore, when actual output is greater than planned output, there is a surplus on the market, leading to a fall in the prices. However, in seasons where the actual output is less than the planned output, there is a shortage on the market and prices increase.

Agricultural products have inelastic demand. You are aware that agricultural products are basically food and food is a necessity. This makes the demand for agricultural products price inelastic. A big change in the price causes a very limited change in the quantity demanded.

Therefore, in seasons of high supply, prices fall because buyers do not increase the amount they buy significantly. However, in seasons of low supply, prices increase because the buyers do not significantly decrease the amount they buy.

Agricultural products are income inelastic. The amount demanded of food and other agricultural products is not responsive to changes in people's income. The amount demanded changes by a very small percentage when the consumers' income changes. Therefore, during seasons of high supply, prices fall because the excess output is not bought and during seasons of low supply prices increase because the consumer whether rich or poor buys almost the same units.

Agricultural based countries have poor bargaining power on the international market. You realise that major buyers of agricultural products form LDCs are MDCs (more developing countries) sometimes MDCs set high prices and sometimes they set low prices. During seasons of low supply, MDCs set high prices for agricultural products from LDCs to attract supply; however, during seasons of high supply, they reduce the prices.

invention and competition with synthetic fibres. You might have used some of the artificial fibres like silk or polyester that have replaced natural fibres like cotton. This has meant reduced market for natural fibres leading to a fall in their prices. However, in seasons when the supply of the artificial fibres is low, the demand for cotton increases leading to an increase in its price.

EFFECTS / CONSEQUENCES OF AGRICULTURAL PRICE FLUCTUATIONS

You realise that when prices of agricultural products fluctuate, it affects many people who are directly or indirectly engaged in agricultural activities. In this section, we are going to explain the effects of prices increasing and reducing on the economy.

It leads to unstable export earnings. In seasons when agriculture exports are sold at increasing prices, the export earnings increase. However, in seasons when agricultural exports are sold at low prices, the export revenue declines.

It leads to unstable incomes to farmers. During seasons of high prices, farmers get high incomes and they improve their wellbeing. However, in seasons of low prices, farmers earn low incomes and their standards of living decline.

It causes unstable balance of payment position. During seasons of increasing prices for agricultural exports, the balance of payments position improves. However, during seasons of reducing prices of agricultural exports, the balance of payments problem worsens.

Difficulty in planning. The country gets problems in planning especially where the plans are financed by incomes from the exports of agricultural products. Sometimes plans have to be adjusted because of the fluctuating incomes earned.

The unstable prices frustrate the peasant farmers. Since the farmers earn unstable incomes, they are likely to lose the interest in farming. Some of them abandon their farms when prices are falling and re-organise them in seasons when prices are increasing. This leads to unstable output from the agricultural sector.

It contributes to rural urban migration with its associated problems. As incomes from the agricultural sector become unstable, many people especially the young migrate from rural areas to urban centres looking for employment opportunities with more stable rewards. However, this migration is associated with a number of evils like over population in urban areas, decreased labour in rural areas etc.

It may lead to seasonal unemployment. Some farmers decide not to produce in given seasons because they fear the miserable prices. Such farmers become seasonally unemployed i.e. they are employed when price is high and unemployed when they don't produce because of low prices.

It worsens income inequality. When prices of the agricultural products decline, the farmers earn less from their activities. This creates an income gap between the farmers and those in the other occupations with stable incomes.

It leads to unstable tax revenue to government. Increase in prices of agricultural products increases government tax revenue. This is because most of the farmers become able and willing to pay the taxes levied on them. However, when the prices of agricultural products fall, the government tax revenue reduces because most of the farmers fail to raise the money to pay the taxes.

In your free time you are encouraged to search online and other reference materials to look up for other effects that we may not have sighted above.

POSSIBLE MEASURES OF REDUCING PRICE FLUCTUATIONS OF AGRICULTURAL PRODUCTS

Now that we have seen negative effects of price fluctuations, let us look at some of the measures that can be adopted to minimise it.

Use of buffer stocks. This is where stock of agricultural products is accumulated in times of plenty. It is released to the market in time of shortages. Buffer stocks stabilise supply of agricultural products leading to more stable prices.

Improvement in transport facilities. When transport facilities are improved, movement of agricultural products from areas of plenty to areas of scarcity becomes easy. This can help to keep the prices stable in the different areas which lead to stable incomes for the farmers.

Embarking on further diversification of the economy. I believe you are familiar with diversification. There is need to encourage farmers to diversify their agricultural activities. The farmers can be encouraged to grow many crops instead of growing one crop. Therefore, if the price of one crop decreases, the farmer may resort to another crop whose price is stable.

Promotion of industrialisation programmes for the agricultural sector. You have seen industries established in your locality using agricultural raw materials, for example juice firms that use mangoes, passion fruits among others. Agro based industries can be used to buy excess output of agricultural raw materials. At the same time, these industries add value and durability to the agricultural products. This can enable the farmers to get stable incomes from their agricultural activities.

Improving storage facilities for agricultural products. Improved storage facilities enable the farmers to store the surplus and releasing adequate amounts as desired by the markets. This can stabilize supply of agricultural products leading to stable prices.

Carrying out technological and scientific innovations. This can be done through carrying out research to develop varieties of crops with shorter gestation period and greater resistance to pests and diseases. This enables the stabilization of agricultural output and supply in order to stabilise prices.

Strengthening international product / commodity agreements. International commodity agreements like the international coffee agreement can enable the member countries to have better bargaining power on the world market. Through these agreements, supply is controlled through quotas in order to have more stable prices.

Granting more subsidies to the farmers. Government should subsidise the activities of farmers in order to stabilise their costs of production. Once their costs of production are stabilised, prices also become stable.

Price legislation by government. The government can fix a minimum price above the equilibrium

price below which it is illegal to buy from farmers. This helps to stabilize prices at which the farmers sell to the different traders or buyers.

Strengthening regional economic cooperation. E.g. the East African customs union and the common market for Eastern and Southern Africa. (COMESA). This improves the bargaining power for member countries when dealing with developed nations.

Now try out these activities as you internalise price fluctuations the more.

ACTIVITY 6

(a)Account for the price instability of agricultural products in your country.

(b) What measures can be taken to stabilise prices of agricultural products in your country?

Note:

Some concepts have not been handled in this topic of price theory. You are therefore encouraged to research about them. Additionally, when schools reopen, please consult your teachers for more details.

TERM 2

TOPIC: PRODUCTION

SUB-TOPIC: PRODUCTION AND RELATED CONCEPTS

Resources to be Used

notebook, pen, text/reference books, internet if available, radio/TV, recorder and mobile phone

LESSON ONE: PRODUCTION

Learning Outcome

By the end of this lesson, you should be able to;

i) define production.
ii) identify the types and agents of production.
iii) define land and its payment.
iv) explain determinants of capital accumulation.
v) explain factors that influence mobility of labour.

Introduction

I believe you have engaged or witnessed production in the community you live in. You should have observed materials being changed into a desired final product. That act is called production. Production is an economic activity because it involves earning and spending money. Therefore, Production is the process of transforming factor inputs or raw materials into goods and services that satisfy human wants. This process can be done by an individual, a firm or the government.

TYPES OF PRODUCTION

Now that we know what production is all about, let us look at the various types. These include; Direct production and indirect production.
Direct production and indirect production

Direct production/Subsistence production. In your community, there people who produce goods like chapatis, farm products like beans, maize etc, not for sell but for their own consumption. Such is referred to as direct production. Direct production therefore refers to the production of goods and services for one's own consumption.

Indirect Production/Commercial production is the production of goods and services for exchange. It involves use of money to get what you cannot produce.

STAGES OF PRODUCTION/LEVELS OF PRODUCTION

In production of chapattis, wheat flour is used. The wheat is planted, harvested, dried, and processed up to the flour stage. It is then mixed with other ingredients to make chapatis. Production therefore involves basically three stages; primary, secondary and tertiary stage.

Primary Stage: This involves the extraction of goods from goods from earth's natural resources or raw materials to be used in the production of goods and services. Examples are; Agriculture, Mining, fishing, lumbering etc. The output from this type of production does not offer direct utility to the consumer in most cases.

Secondary Production: This stage involves the transformation of the extracted raw materials from nature into finished or semi-finished goods, and ready for use. The industries which carry out secondary production can be classified into processing, manufacturing, construction and assembling industries.

Tertiary Production: This involves the provision of services to the final consumers. Such services include teaching, banking and insurance among others.

FACTORS OF PRODUCTION/AGENTS OF PRODUCTION

We have noted that production cannot take place without using raw materials or inputs. These inputs are the factors of production. In this regard therefore, factors or agents of production are the resources or inputs that are used to facilitate the production of goods and services from the production process. They include land, labour, capital and entrepreneurship.

LAND

This refers to the natural resources on, under and below the earth's surface that facilitate the production process. They include water, air, soil, lakes, and rivers among others. The monetary reward for land is rent.

Characteristics of Land

- It is subjected to the law of diminishing returns.
- It is geographically immobile, that is; cannot be moved from one place to another but occupationally mobile.
- Its supply is fixed, that is; perfectly inelastic.
- It is a free gift of nature. Therefore, its supply price is zero.
- It is not homogeneous, that is; it varies in terms of fertility and value from one place to another.

Like noted earlier, the reward for land is rent and more precisely it is economic rent.

Rent: This refers to the monetary reward to land for its contribution in the production process as a factor of production.

Economic rent refers to the monetary payment to a factor of production over and above its supply price.

Economic Rent= Actual earnings (A) – Transfer earnings (T)/supply price

Transfer earnings/supply price refers to the minimum reward necessary to retain or keep a factor of production in its present employment without transferring to the next best alternative use or employment. Actual earnings are a summation of economic rent and transfer earnings.

Computation of Economic Rent and Transfer Earnings

Let us try out the example below;

Given that a factor of production receives a total earning of shs. 430,000 and supply price of 300,000, calculate the economic rent.

Solution

Total earnings = Transfer earnings + Economic rent

430,000 = 300,000+ Economic rent

Economic rent = 430,000 - 300,000

= shs. 130,000

Now, go ahead and look out for the factors that influence the level of economic rent.

CAPITAL

This refers to any man-made stock of assets accumulated by an individual or society for the production of other goods and services. They include: machines, buildings etc. Some of the sources of capital to an individual is; personal savings, inherited wealth or income, retained profits, loans acquired from financial institutions and friends, donations from various sources.

Characteristics of Capital

i) It has an opportunity cost
ii) It has a monetary value
iii) It depreciates over time
iv) It is a manmade factor of production

TYPES OF CAPITAL

Let us look at some of the types of capital;

Liquid Capital: This refers to capital inform of cash, i.e. coins and notes.

Working capital/Circulating capital: This refers to capital in form of Physical assets that are used in the day to day running of the business. It involves raw materials, fuel etc.

Human capital: This refers to the skills or knowledge that an individual uses in the production process. It is acquired through training.

Fixed capital: This refers to physical assets which are not used up in the course of

production but are used several times, to make goods and services. It includes land, buildings machinery etc.

ROLE OF CAPITAL IN ECONOMIC DEVELOPMENT

Starting a business requires mobilisation of funds. These funds are called capital. When you want to start a business, perform work very fast and improve your skills. You need both physical and financial capital. In this section, the role of capital in economic development are presented below:

Capital increases output. Capital increases the level of output. It simplifies and makes production quicker. Hence, accelerates the rate of economic growth.

It improves quality of output. Capital facilitates research which promotes production of better-quality output which improves people's standards of living.

It improves socio- economic infrastructure. Capital in form of machines helps to improve and construct new roads, extend or generate power which all promotes economic development.

It is used to reward other factors of production. Capital in form of liquid money is used to reward other factors of production such as labour in the production process.

It improves / increases efficiency or productivity of other factors e.g. labour efficiency; Capital in form of cash is used for further education and training which helps to increase labour efficiency. Furthermore, use of machines increases output produced by labour.

It facilitates full/optimum utilisation of resources. Capital in form of machines facilitates the exploitation of that would be idle resources. For example, uncultivated land, un-extracted minerals etc can be exploited.

It facilitates technological transfer and development. For example, capital in form of cash enables research which results in better production techniques. It also enables country/producers to buy more efficient methods of production from one country to another which improves efficiency in production.

It promotes industrial development/facilitates the industrialisation process. Capital in form of Plant and machinery is employed to establish industrial plants.

CAPITAL ACCUMULATION

Capital accumulation is the process of increasing the stock of a country's assets in order to improve on its productivity. Capital is accumulated through investment and saving.

FACTORS DETERMINING THE LEVEL OF CAPITAL ACCUMULATION

You realise that capital accumulation can be high or low the higher the investments or saving, the higher the capital accumulation. Below are some of the factors that lead to the above;

Income level determines capital. High income levels increase the level of saving and investment which results into a high rate of capital accumulation while low income levels discourage savings and investment leading to a low level of capital accumulation.

Market size. A wide internal and external market encourages investment leading to a high output level, income and saving hence high capital accumulation while a small market size discourages investment which leads to low output levels, income and savings thus limiting capital accumulation.

Population growth rate. A low population growth rate encourages saving and investment because it encourages producers to save which leads to a high rate of capital accumulation while a high population growth rate discourages saving due to high expenditure leading to a low level of capital accumulation.

Government policy regarding taxation and subsidisation. Favourable government policy of subsidisation and other incentives like tax holiday, exemptions, reductions etc given to producers encourages investment leading to a high rate of capital accumulation while unfavourable government policy of imposing heavy taxes discourages savings and investment leading to a low level of capital accumulation.

Political climate. Existence of political instabilities in some parts of the country discourages investment leading to a low rate of capital accumulation since it scares away investors while political stability in the country attracts investment hence a high rate of capital accumulation.

Rate of inflation. A high rate of inflation in the country discourages investment since it reduces the real value of savings causing a low rate of capital accumulation while a low level of inflation attracts investment since it increases profits in the businesses leading to a high rate of capital accumulation.

Level of technology: Advanced technology increases the level of production, income and saving leading to a high rate of capital accumulation while low levels of technology result into low levels of production hence low level of capital accumulation.

Level of infrastructural development: Well developed infrastructures such as roads, railways, financial institutions like banks etc promote investment in the country since they attract both local and foreign investors leading to high rate of capital accumulation while undeveloped infrastructural network e.g. unstable power supply, undeveloped roads etc discourages investment leading to low level of capital accumulation.

Level of Entrepreneurial Skills: High entrepreneurial skills promote the level of investment in the country since existence of potential entrepreneurs leads to efficiency in the production of goods which leads to a high rate of capital accumulation while low entrepreneurial skills discourage investment hence low level of capital accumulation.

LABOUR

Labour is another major factor of production. Labour refers to human effort which is either physical or mental that is directed towards the production of goods and services. Payment for labour as a factor of production is a wage.

FEATURES OF LABOUR

It can`t be stored, that is; when one is idle, labour is wasted.

It can`t be separated from a labourer.

It`s mobile, geographically and occupationally.

The supply of labour is variable and it depends on a number of factors such as size of the population.

PRODUCTIVITY AND EFFICIENCY OF LABOUR

Productivity of labour refers to the quantity of output that is produced by a given unit of labour in a given period. On the other hand, Efficiency of labour refers to the quantity and quality of output produced by a given unit of labour in a given period of time. When labour is productive and efficient, it leads to high and quality output.

FACTOR MOBILITY

It refers to the ease with which a factor of production moves either from one job to another or from one geographical area to another. Geographical mobility of a factor is the ease with which a factor of production moves from one area to another while occupational mobility of a factor is the ease with which a factor of production moves from one job to another. The inability of a factor of production to move from one job to another or from one area to another is known as factor immobility.

MOBILITY OF LABOUR

As you have already noted, labour is highly mobile. What then, does it mean labour should be mobile? Mobility of labour refers to the ease with which labour moves either from one geographical area to another or from one job to another.

FORMS OF MOBILITY OF LABOUR

Geographical mobility of labour. It is the ease with which labour moves from one geographical area to another looking for jobs.

Occupational mobility of labour. It is the ease with which labour moves from one job to another. It involves vertical mobility and horizontal mobility.

Vertical mobility of labour. This is the ease with which labour moves from one job to another job of a higher grade.

Horizontal mobility of labour. This the ease with which labour moves from one job to another of the same level.

FACTORS THAT INFLUENCE LABOUR MOBILITY

When you look at labour, it is quite mobile both geographically and occupationally. What do you think are some of the factors that influence labour's ability to move? Some of these factors include:

Degree of specialization. Highly specialised labour is immobile. This is because such labour finds it difficult to get particular tasks of their specialisation.

The wage level at the current job. When the wage level is high, labour is reluctant to move. This is because he/she is contented with the current payment. But when the wage level is low, labour is mobile as one is eager to change to a better paying job.

The cost of training to an alternative job. A high cost of training limits labour mobility as some workers fail to get the funds that are required for training. A low cost of training enables many workers to acquire skills that are needed for the alternative job thus increased mobility.

Working conditions at the current job. Good working conditions make labour comfortable and happy with the job. This thus limits mobility while poor working conditions make labour unhappy with the job thus promoting mobility.

Knowledge about the existing employment opportunities. When labour is aware of existence of alternative jobs, mobility is high. Since those with the required skills can easily take up such jobs. But when labour is ignorant about such job opportunities, mobility is low because even those with required skills are not aware of where to find jobs.

Political climate in alternative areas. When there is insecurity in areas of alternative jobs, labour is immobile as workers fear to risk their lives by going to such areas. But when there is political security, labour is mobile since people are sure of the safety of their lives.

Age of the workers. Young people are more mobile because they are more ambitious and eager to change jobs. While the old are reluctant to change jobs and most employers are not willing to employ them thus making them immobile.

Level of infrastructural development. Well developed infrastructure increases mobility since it makes it easy for labour to move to different parts of the country. But when infrastructure is poor, labour is immobile as some workers do not want to go to areas with poor infrastructure.

Cost of living in other areas. When it is high, labour is immobile as some workers fear the high expenditure in such areas. But when it is low, labour is mobile as many people are attracted to areas with a low cost of living.

Now try out these activities in a bid to understand the concepts better.

Activity 1

1a. Explain the factors limiting capital accumulation.

b. What measures can be taken to increase capital accumulation in an economy.

2a. What is meant by mobility of capital?

b. What factors limit mobility of capital as a factor of production?

3. Given that the factor's transfer earnings are shs. 150,000 and its economic rent is 1½ times the transfer earnings, find the factor's actual earnings.

5. Explain why all payment for land is regarded as economic rent.

7. Explain the factors that influence the efficiency and productivity of labour.

ENTREPRENEURSHIP

Resources to be used

notebook, pen, text/reference books, Internet sources (if available), radio/TV, Recorder and mobile phone

Learning Outcomes

By the end of this lesson, you should be able to;

i) define entrepreneurship.

ii) identify the functions of an entrepreneur.

iii) explain the factors that influence supply of entrepreneurs.

iv) define profits and explain the factors that influence the level of profits.

Introduction

You realise that for production to take place, there is a person who aids it, combines and pays all other factors of production. This is an Entrepreneur. Therefore, entrepreneurship is the factor of production that combines all the other factors of production in order to initiate production. In small scale firms, the entrepreneur is the organiser and the owner of the business while in large scale firms, the entrepreneur employs managers to organise other factors of production. The reward to an entrepreneur is a profit.

Functions of an Entrepreneur

The entrepreneur performs a number of functions which include:

a) Initiating/Starting the business and mobilising all the capital that is required to establish the business.
b) Co-ordinates and combines other factors of production in the required proportions.
c) Supervises and monitors other factors of production in order to ensure efficiency in production.
d) He/she is the risk bearer, when business succeeds, he/she enjoys profits but when it fails, he/she suffers the losses.
e) He/she is the final decision maker; he/she makes the final decisions on all issues regarding the production process.
f) He/she is the employer of other factors of production and he/she is free to hire or fire workers who are no longer needed in the enterprise.
g) He/she is the innovator; he/she brings out changes in the nature of goods and types of technology used with an effort to increase the profit level.

PROFIT

When one engages in business, in most cases the major aim is to make profits. What then are profits?

Activity 2

Identify a nearby shop or business in your locality. Ask the shop keeper or the owner of the business what profit means. This will help you to understand the meaning of profit better.

Profit is the reward for entrepreneurship as a factor of production. It is obtained by putting together all factors of production to produce goods and services to satisfy the needs of individuals. It refers to the remaining income an entrepreneur gets after deducting all costs that were met. These costs may be implicit or explicit. Explicit costs may include costs of production, raw materials etc while implicit costs may refer to costs that are met indirectly. For example, if an entrepreneur decides to become a manager of his/her foregoes working elsewhere to earn a secured salary. In other words, he/she foregoes the salary because he/she is working in his/her business. The loss of earning that salary is referred to as an opportunity cost and as such it is treated as an implicit cost of production. In economics, the opportunity cost of the economic resources is considered when calculating profit.

Example

Assuming you have a company and your total revenue is Ug. Shs. 600,000, total costs are Ug. Shs. 230,000 and you manage your own company. However, if you were to work for another company you would earn Ug. Shs. 150,000. The profit would be calculated as below:

Economic profit = Total Revenue – Total Costs – Opportunity Cost

= 600,000 – 230,000 – 150,000

= Ug. Shs. 220,000

Profits are categorised as normal and abnormal profits.

Types of Profits

Normal profits: These are earnings of a firm that are enough to maintain it in the current line of production without attracting other firms into the industry. They are earned when its average costs are equal to the average revenue. At a later stage, average cost and average revenue will be explained.

Abnormal profits/ Supernormal profits: are earnings by a firm which attract other firms into the industry. These are above high and above the normal profits and they are attained when the average revenue is greater than average cost.

LESSON 2: THEORY OF THE FIRM

Learning Outcome

By the end of this lesson you should be able to understand the behaviour of a firm in a free market enterprise

Introduction

While a firm is a production unit under unified control and management involved in production of goods and services, an industry is a collection /group of firms producing similar or related commodities.

LOCATION AND LOCALISATION OF FIRMS

You must have observed production plants situated in a particular area. That means, The place where the firm is situated is its location. Location refers to the setting up of a firm in an area irrespective of whether there are other firms in that area or not or a particular place where a firm is established.

When choosing the location of a firm, the producer makes sure that the costs have to be minimised so that profits are maximised. Since the major aim of firms is to maximise profits, firms will try to locate establishments at the lowest cost i.e. at locations where firms can easily get the factors of production at a low price.

FACTORS THAT INFLUENCE LOCATION A FIRM

Activity 3

There are a number of businesses in your locality. Find out from the owners, the factors they considered while establishing their business in the respective location. Having got some insights into some of the factors, you also need to know the factors that influence location of firms.

Remember it has been noted that most producers aim at making profits. Therefore, to achieve this, there are factors considered before locating a production unit and among these are the following:

Availability of raw materials. Have you ever asked yourself why Tororo cement factory is located in Tororo? The basic reason is availability and accessibility to the source of raw materials. Areas with fewer raw materials usually attract fewer firms and those with many raw materials tend to attract more firms. Therefore, some firms are located near the source of raw materials in order to minimise the cost of transport, especially where the raw materials are bulky or perishable.

Size of raw materials: The size of the materials will determine the location of a firm. Firms are in most cases located near raw materials that are bulky to avoid incurring a high cost of transporting such raw materials. In this case, in order to avoid the high cost of transport, such Industries are usually located near the source of raw material and are called rooted industries.

Size of the market. Some firms are located near the market especially where the products are perishable, delicate or bulky. In areas where the market is small, such firms are rarely established in order to minimize losses. This explains why you see many firms established in or near urban centres where markets are bigger. Such Industries located

near the market are called Tied industries while those that are be located anywhere without considering any locational factors are called Foot Loose firms.

Availability of power. Jinja district was once known as the biggest industrial district. Jinja has the source of hydroelectricity power which therefore attracted many industries to be located there. Most of such industries require a lot of power to run their machines thus need for reliable source of power. Case in point is Nyanza textile. Areas with low power hardly attract industries with heavy duty machines as this will increase production costs.

Availability of skilled labour. Some firms are located near the supply of skilled labour in order to reduce the costs of transport. Other are located where such labour is scarce.

Transport network. Most firms are located in areas with well developed transport network in order to ease accessibility to those raw materials and marketing centres. In areas where transport network is poor, fewer firms are established in order to avoid the high transport costs.

Availability of clean water. Some firms need water as an input while others need it to cool their machines. This is why more industries are located in areas with a reliable source of water as compared to areas with a problem of water shortage. For example, Uganda breweries limited located at Luzira.

Availability of land for expansion. Some firms are set up in areas with a lot of land in order to make expansion easy and areas with less land for expansion attract less industries/firms since it makes expansion more expensive.

Industrial inertia. This refers to the tendency of industries to continue being attracted to an area even if the original location factors are already out of existence. This may be due to the good name of the area or the well-developed infrastructure.

Political climate. Political security attracts firms since producers are assured of the safety of their lives and enterprises while insecurity scares away potential investors and increases the risk of losses.

Government policy on location. Have you heard of Namanve industrial park? This place was gazetted by the government for industrial development. Therefore, sometimes government influences location by providing investment incentives to people investing in areas of its interest and charging high taxes to those investing in those areas, where it wants to discourage location.

LOCALISATION OF FIRMS

Having looked at location of a firm, you also need to know what localisation is. Localisation is the concentration of firms or industries in a given area. It refers to the concentration of industries in a given area/region. This implies that all firms that deal in production of similar or related commodities are allocated in a particular area. This may be as a result of availability of market for the products in the area, availability of adequate power as sighted in factors influencing location and many other reasons.

Localisation has advantages and disadvantages.

Activity 4

Explain the advantages and disadvantages of localisation of firms on the economy.

OBJECTIVES/AIMS OF THE FIRM

This section presents what different firms would like to achieve within a specific period of time, and these include;

Profit maximisation: Most firms in the private sector aim at maximising profits and this is done either by minimising the costs of production or selling their commodities at high prices.

Sales revenue maximisation: Some firms aim at increasing the volume of sales in order to maximise their revenue. Such firms usually sell their commodities at a relatively lower price in order to increase the volume of sales and realise more revenue.

Long run survival: Some firms aim at surviving the stiff competition so that they are not driven out of production.

Good image/reputation: Some firms aim at maintaining their reputation in society and this may force them to continue producing when making losses.

Provision of employment: Some firms are set up to provide jobs to the family members in order to improve their economic welfare.

FACTORS THAT DETERMINE THE SIZE OF THE FIRM

As you may have noted, firms in an economy are of different sizes, some of which are big while others are small. The factors that explain this include:

Size of capital stock. A large capital stock enables a firm to acquire the necessary inputs, enables firms to make a lot of profits, plough back some of the profits and expand its size while a small capital stock limits the profit level and the production scale.

Availability of raw materials. Presence of adequate supply of raw materials enables the firm to get the necessary inputs and grow big while scarcity of raw materials may result into small scale production due to failure to access the necessary inputs.

Size of the market. A large market size encourages producers to increase output in order to cater for the high demand while a small market forces firms to operate on a small scale in order to avoid losses.

Easy access to land for expansion enables a firm to invest more and expand its production scale while shortage of land for expansion makes it difficult for the firm to invest more in order to expand the production scale.

Quality of management. Presence of efficient management ensures proper supervision of firms which improve its performance and ability to expand while poor management reduces a firm's efficiency and ability to expand.

Accessibility to credit facilities. Easy access to credit facilities enables the firm to acquire the funds that are needed to buy the necessary inputs and expand the production scale while limited access to credit facilities limits the ability of the firm to expand since it can hardly acquire the necessary inputs.

Level of infrastructural development. Well developed infrastructure enables firms to

access sources of raw materials and markets, reduce the costs of production and operate on a large scale while poor infrastructure increases the costs of production reduce the profit level thus limiting the production scale.

Level of technology. Use of advanced technology in production increases the efficiency of factors of production thus promoting large scale production while use of poor technology limits expansion of the production since it limits the efficiency of factors of production.

Activity 5

1. Entrepreneur is that factor of production which brings together all other factors to produce goods and services; therefore, its supply is vital for any firm. What factors determine the supply of entrepreneurship?
2. Explain the role of profits in a free enterprise economy.
3. Under what circumstances may profits of a firm be low in an economy?
4. In Uganda there exist both small scale and large-scale firms. Discuss reasons for continued existence of small-scale firms in spite of the advantages of large-scale production.

TOPIC THREE

SUBTOPIC: THE PRODUCTION FUNCTION

Resources: Notebook, pen, text/reference books, internet if available, Radio/TV, recorder and mobile phone.

Learning Outcomes

By the end of this lesson, you should be able to:

i) state the production function.
ii) explain product of a firm and the law of diminishing returns.
iii) explain the theory of costs and revenue.

THE PRODUCTION FUNCTION

This refers to the technical relationship between the output of a firm and its inputs. Its expressed as Q=f [K, L] where Q is quantity (output), K is capital and L is labour employed.

THE PRODUCT OF THE FIRM

This section presents how inputs are combined and the resultant output which in this case is a product. Product refers to the amount of goods or services that are produced by a firm using a certain combination of factors of production. It includes; Total prod-

uct, Average product and marginal product.
Total product [TP] refers to the total amount of goods or services produced by a firm from a given quantity of factors of production during a given period of time.

Average product [AP] refers to output that is produced by a given unit of a variable factor of production in a given period of time. That is, output per worker. It is calculated as;

$$AP = \frac{\text{Total product}}{\text{Total variable factor.}} \quad \frac{\text{Total product}}{\text{Total variable factor.}}$$

Marginal Product [MP]. This is the additional output produced by an extra unit of a variable factor employed.

$$MP = \frac{\text{Change in total product}}{\text{Change in variable factor}} \quad \frac{\text{Change in total product}}{\text{Change in variable factor}}$$

Note that the three product curves slope upwards, reach a maximum point and then diminish as illustrated in figure 1.

RELATIONSHIP BETWEEN INPUT AND OUTPUT IN THE SHORT RUN

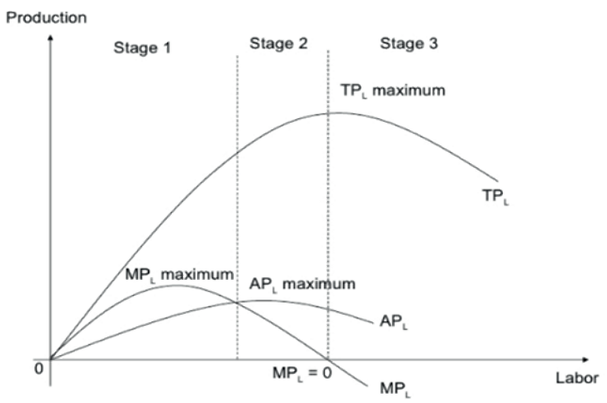


Illustration 1

From the above illustration, the following should be noted;

1. As more units of a variable factor are continuously added to the fixed factor the total product, marginal product and average product rise, reach a maximum and then fall.
2. When total product is increasing at an increasing rate (STAGE 1), marginal product is increasing, when total product is increasing at a decreasing rate, marginal product is reducing and when total product is at maximum (STAGE 2), marginal product is zero. When total product is declining (STAGE 3), marginal product is negative.
3. When average product is increasing, marginal product is above average product when average product is at maximum marginal product is equal to average product

and when average product is reducing, marginal product is below average product.

4. The shapes of the TP, AP and MP curves in the short run are explained by the law of diminishing returns that is explained below.

THE LAW OF VARIABLE PROPORTIONS/THE LAW OF DIMINISHING RETURNS

It states that as successive units of a variable factor are added to a fixed factor of production under the same state of technology, the marginal product increases, reaches a maximum and then declines.

Assumptions of the law

a. It assumes that production is in the short run.
b. There is a fixed factor of production.
c. There is a variable factor of production.
d. All units of the variable factor are divisible.
e. Technology is constant.
f. All units of the variable factor are homogeneous/equally efficient.

THE THEORY OF COSTS

Costs of production refer to the expenses incurred by a firm in production of a given quantity of output.

TYPES OF COSTS

Costs are categorised into:

You may recall that while discussing economic costs, two types of costs were identified, these include; implicit costs and explicit costs. Implicit costs: These are imputed costs / estimated value of the entrepreneur`s own resources and

Explicit costs: These are expenses incurred by a firm in buying inputs and services directly to produce goods and services e.g. wages, payment for the raw materials etc.

Costs may also be Total fixed costs, total variable costs or total costs.

Total Fixed Costs (TFC): These are costs which do not vary or change directly with the level of output. That is to say, such costs will be incurred whether production is taking place or not. They are also called overhead costs, supplementary costs, indirect costs or operating costs. They include; rent salaries for permanent staff, electricity costs on security lights among others.

Total Variable Costs (TVC): These are costs which vary directly with the level of output e.g costs of raw materials, power costs incurred during product production, Costs of advertising, Transport costs of raw materials, Wages for production labour, production costs of electricity among others. They are also called prime costs, direct costs or operating costs. They increase when the output increases and reduce when the output reduces.

Total Costs (TC): This refers to total (overall) expenses met by a firm in the production

of a given quantity of output. It is the summation of the total fixed costs and the total variable costs.

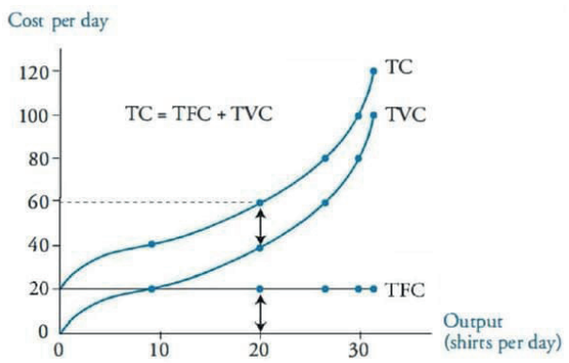
Total Costs= Total Fixed Costs + Total Variable Costs.

Table 1: Showing total costs in the short run.

OUTPUT	TFC	TVC	TC
0	20	0	20
10	20	20	40
20	20	40	60

From Table 1, Total Fixed Cost is the same (20) at all levels of output. Total Variable Cost increases as output increases (0 to 60) and Total Cost being a summation of TFC and TVC keeps on increasing above the total variable costs (from 20 to 80).

GRAPHICAL ILLUSTRATION (2) OF TC, TVC AND TFC



RELATIONSHIP BETWEEN TFC, TVC and TC

From the diagram above, the following should be noted;

1. The total cost curve and the total variable cost curve have the same shape because an increase in the total cost is a result of an increase in the total variable cost.
2. The total fixed cost curve is perfectly elastic because fixed costs do not vary with the level of output.
3. When the level of output is zero, the total costs are equal to the total fixed costs because the variable costs are zero.
4. As the level of output increases, the total costs and the total variable costs increase by the same amount (for example by output 20 on the illustration) since total fixed costs are constant at all levels of output.

PER UNIT COSTS IN THE SHORTRUN / SHORT RUN VARIATION IN COSTS

To analyse the relationship between costs and output, average and marginal costs are used instead of total costs in the short run period. Therefore, costs can be described as:

Average Total Costs/Average Costs. This refers to the total costs incurred in the production of each unit of output.it is calculated as:

$$\text{Average Costs} = \frac{Total\ cost}{Quantity}$$

Average Variable Costs. These are variable costs incurred in the production of each unit of output. It is calculated as:

$$\text{Average Variable Costs} = \frac{\text{Total variable costs}}{Quantity}$$

Marginal Cost: This is the additional cost incurred in the production of an extra unit of output.it is calculated as:

$$\text{Marginal Cost} = \frac{change\ in\ total\ costs}{change\ in\ quantity}$$

It should be noted that the average variable cost curve, the average cost curve and the marginal cost curves are U shaped in the short run because of the law of diminishing returns.

Average Fixed Costs: These are fixed costs incurred in the production of one unit of output.

$$\text{Average fixed costs} = \frac{total\ fixed\ costs}{quantity}$$

Now you realise that unlike AVC, AC and MC that are U- shaped, the Average Fixed Cost curve is downward sloping because as output increases, the Average Fixed Costs keep on declining. However, the Average Fixed Costs can never be zero since Total Costs are never zero.

Illustration 3

RELATIONSHIP BETWEEN (AC and MC) AND (AC and AVC)

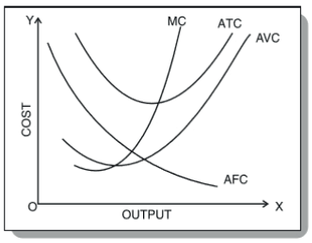


Fig. 1 : Short run Average and Marginal Cost Curves

When you critically study illustration 3 above, you will notice the following facts:

a. The AC (ATC) and the MC are both U shaped because of the law of diminishing returns that we looked at earlier.
b. When AC is falling, MC is below the AC.
c. Marginal cost curve cuts AC at its minimum point and at this point, marginal cost is increasing.
d. When average cost is increasing marginal cost is above the average cost.
e. AVC is also U- shaped because of the law of diminishing returns.
f. AC is greater than AVC at all units of output produced. This is because AC is a combination of AVC and AFC.
g. AVC reaches its minimum point before AC reaches its minimum point.
h. The difference between AC and AVC is the AFC. As output increases, the gap between the two curves narrows because of the decline in the decline in AFC.

It is also important to note that a firm producing at the minimum point of its average cost curve is called an optimum firm.

AVERAGE COSTS IN THE LONG RUN

A long run is a production period that is long enough for the producer to vary all the factors of production and expand the production capacity. Since all factors of production are variable in the long run, all costs of production are variable.

In the long run a firm can change the size of the plant in order to produce more output. The average cost of production can be increasing or reducing depending on whether the firm is earning economies or diseconomies of scale.

The long run average cost curve is U shaped because of the economies and diseconomies of scale.

Illustration 4

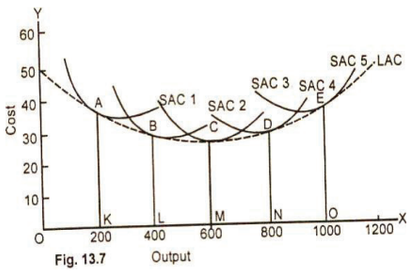


Fig. 13.7

Output 600 represents the optimum point of a firm and when the firm expands beyond this point, average costs of production begin increasing, which reduces the profit level of the firm.

The long run average cost curve is U shaped because of the economies and diseconomies of scale. The existence of economies of scale brings about a reduction in the average costs of production but when diseconomies of scale set in, the average costs of production begin to increase. It is derived from the short run average cost curves. It is also known as an envelope curve because it encloses a number of short run average cost curves as shown above.

ECONOMIES OF SCALE

These are advantages which accrue to a firm in form of reduced average costs due to expansion of the production scale. Economies of scale include;

Internal economies of scale: These are advantages which accrue to a firm as a result of its expansion due to favourable conditions within the firm, for example; technical economies, managerial economies, financial economies etc.

External economies of scale: These are advantages which accrue to a firm as it expands its production scale due to favourable conditions created for the firm in the industry e.g. research economies, economies of concentration, economies of specialisation etc.

DISECONOMIES OF SCALE

These are disadvantages which accrue to a firm in form of increased average costs of production due to overexpansion of the production scale. They are both internal and external.

Internal diseconomies of scale: These are disadvantages which accrue to a firm in form of increased average costs due to unfavourable conditions within the firm resulting from its expansion. They include managerial diseconomies of scale, technical diseconomies of scale, and Marketing diseconomies of scale among others

THE REVENUE OF THE FIRM

This refers to the amount of money/income received by the firm from the sale of its output. It includes;

Total revenue: This refers to the total income received by a firm from selling a given quantity of output.

Total revenue= Quantity x price.

Average revenue: This refers to income received by a firm from sale of each unit of output. It's the average price per unit output sold.

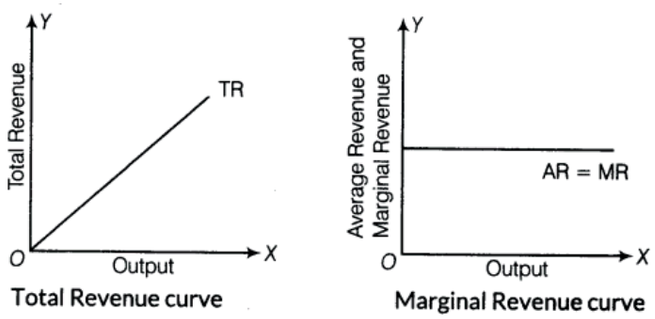
A. R= Total Revenue/ Quantity.

It should be noted that average revenue is equal to price.

Marginal Revenue: It is the additional revenue received by a firm from the sale of an extra unit of output.

MR= Change in total revenue / Change in quantity.

Illustration 5



Attempt the activities related to what has been discussed.

Activity 6

Complete Table 2 below and derive the TP, AP and MP curves and explain the relationship among these variables

Land	No. of workers	TP	AP	MP
4	**1**	**5**	**-**	**-**
4	**2**	**15**	**-**	**-**
4	**3**	**25**	**-**	**-**
4	**4**	**38**	**-**	**-**
4	**5**	**38**	**-**	**-**
4	**6**	**24**	**-**	**-**

LESSON 4:

SUBTOPIC: MARKET STRUCTURES

Resources to Be Used

notebook, pen, text/reference books, Internet if available, Radio/TV, recorder and mobile phone

Learning Outcome

By the end of this lesson, you should be able to;

i) give the meaning of market structures.
ii) identify the various market structures.
iii) give assumptions of monopolistic competition.
iv) explain and illustrate profit maximisation situation of a monopolistic competitive firm.
v) identify assumptions of oligopoly.
vi) explain and illustrate profit maximisation situation of oligopoly firm.

Introduction

Market Structures

These refer to the characteristics of market organisations which influence the behaviour and performance of the firms in the industry. It should be noted that firms operate under a certain environment that influence their performance. Market structures are classified according to the following;

Market structures include: Perfect competition, Monopoly, Monopolistic competition, Oligopoly among others.

Monopolistic Competition

This refers to a market structure where there are many firms selling commodities that are close substitutes.

Features of Monopolistic Competition

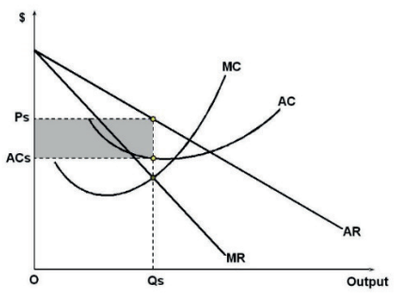
a. There are many buyers and many sellers in the market.
b. There's free entry and exit of firms in the industry.
c. There's a high level of persuasive advertisement among the firms.
d. Firms are price makers since they have some control over their brands.
e. The demand curve is fairly elastic. This is because firms have less control over the market price.
f. Firms produce at excess capacity. This is done to limit output, maintain high prices so as to avoid losses.
g. There is brand loyalty among the consumers, that is; some consumers only buy commodities from a particular firm.

h. Firms are price makers to a certain extent because of the monopoly they have over their brands.

SHORT-RUN PROFIT MAXIMISATION UNDER MONOPOLISTIC COMPETITION

Illustration 6

In the short-run, the firm maximises profits by producing output at a point where MC=MR.



In the short-run, output is determined at a point where MC=MR.

Costs are determined at a point where the output line meets the demand curve.

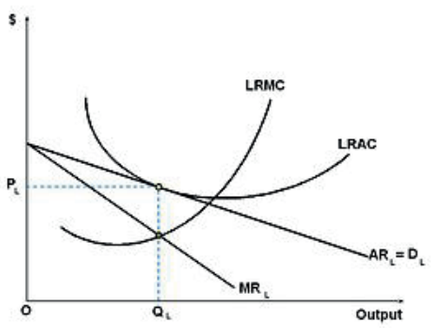
Price is determined at a point where the output line meets the demand curve.

The firm earns abnormal profits shown by the shaded area where average revenue is greater than average cost.

LONG-RUN EQUILBRIUM UNDER MONOPOLISTIC COMPETITION

In the long-run, normal profits are maximized at a point equilibrium where MC=MR.

Illustration 7



The firm attains equilibrium in the long-run by producing output at a point where

MC=MR.

Price (p1) is determined on the demand curve where the output line meets the demand curve.

Costs are determined at a point where the output line meets the average cost curve which is the same point where selling price is determined.

The firm earns normal profits where AC=AR. At this point, the average cost curve is tangent to the average revenue curve.

You should note that in the long-run, the firm produces at excess capacity in order to maintain high prices and avoid losses.

OLIGOPOLY

This is a market structure where there are a few firms dealing in either homogeneous or differentiated products but with many buyers.

Perfect oligopoly is a market structure where there are a few firms and many buyers of homogeneous products.

Imperfect oligopoly is a market structure where there are a few firms and many buyers of differentiated commodities.

Features of oligopoly

a. There are a few sellers and many buyers. Each firm has a considerable share of the market.
b. There's production of either homogeneous or differentiated commodities.
c. There's restricted entry of firms into the industry. Entry is mainly restricted by the high capital requirement.
d. There's close interdependence among firms. Each firm is concerned with the activities of the other firms because they affect its decisions.
e. There's a high degree of non-price competition e.g persuasive advertisement, provision of after sale services, offering of free samples to customers, use appealing slogans and many others.
f. There is uncertainty in the industry. An oligopolistic firm is said to face a high degree of uncertainty in the market as far as price and output decision of other firms in the industry are concerned. E.g. a price cut by one firm may lead to various reactions from rival firms.
g. There is no unique pattern of pricing policy in the industry. This is due to rivals arising from interdependence among oligopolistic firms. There is price rigidity in the industry. Price setting tends to remain constant for some time since all firms fear to take the first move to change the price for fear of activities of rival firms.
h. Firms have a kinked demand curve. An oligopolistic firm is faced with a kinked demand curve due to uncertainty and high degree of inter dependence and uncertainty. A kinked demand curve is a demand curve facing oligopoly firms characterized by a bend and it is elastic above the bend and inelastic below the bend.

Illustration 8 of a kinked demand curve

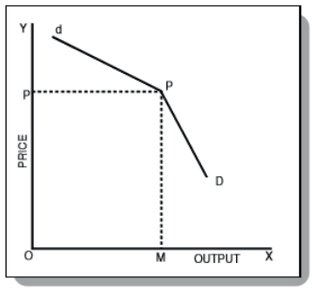


Fig. 1 : Kinked Demand Curve under oligopoly

From the illustration above, p is the administered price; dd is the demand curve for an oligopolistic firm with a kink at d

Having described oligopoly, can you sight some examples of firms in this market structure in Uganda? Some of such firms in Uganda include; Beer industry (Nile breweries, Uganda Breweries Limited), Cement industry (Tororo, Hima), Newspapers industry , Telecommunications e.g. MTN, UTL, Celtel, etc, Soft drink producers e.g crown bottlers, lake Victoria bottling company etc. Please go ahead and identify more.

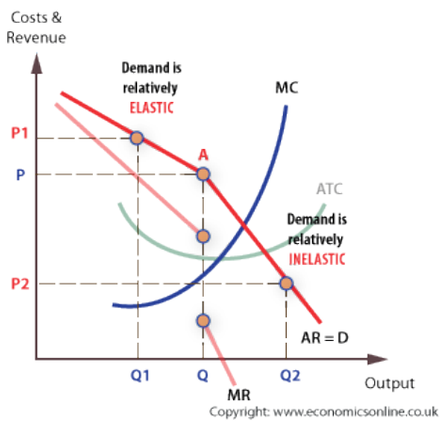
PRICE DETERMINATION UNDER OLIGOPOLY

You should note that under oligopoly, there is no single method of determining price. Price can be determined by Independent pricing where each firm or seller within an oligopoly industry takes an independent action to fix a price where it shall maximise profits or through Collusion where firms in the same industry set a common price in order to reduce competition and increase profits.

HOW OLIGOPOLISTIC FIRMS MAXIMISE PROFITS, DETERMINE OUTPUT AND PRICE

An oligopolistic firm maximises profits where MC=MR.

Illustration 9



Source: https://www.economicsonline.co.uk/Business%20economics%20graphs/Oligopoly-kinked-demand.pngAccessed July 2020

From the illustration above the MR curve has two parts, one for the elastic part of the demand curve and another one for the inelastic part of the demand curve

a. Oligopoly firm maximises profits at a point of equilibrium where MC=MR, at equilibrium level of output (Q)
b. Output is determined where MC= MR within the discontinuous gap of the MR curve.
c. Price is determined where the output line meets the demand curve or AR curve at point A which is the rigid price.
d. Costs are determined where output line meets the average cost curve at point B which is OC1
e. A firm under oligopoly in the short run earns abnormal profits where AR>AC represented by the shaded area PeABC1. It is got by subtracting Total Costs (0C1BQ) from Total Revenue (0PeAQ). Hence, profits= 0peAQ-0C1BQ = PeABC1

Note: An oligopoly firm in the long run continues to earn abnormal profits due to restricted entry and exit of firms under oligopoly.

Activity 7

1. **Explain the advantages and disadvantages of monopolistic competition.**
2. **Explain the advantages and disadvantages of oligopoly.**
3. **Explain the equilibrium position of a monopolistic competitive firm both in the short run and long run.**

TERM 3

TOPIC: NATIONAL INCOME

LESSON 1: NATIONAL INCOME CONCEPTS

Resources to be Used

Notebook, Pen, Text/Reference books, internet if available, Radio/TV, Recorder and Mobile phone

Learning outcome

By the end of this lesson, you should be able to;

i) define national income and the corresponding concepts.
ii) explain the determinants of national income.
iii) identify the methods used in measuring national income.
iv) explain the importance of national income.

NATIONAL INCOME

You earlier looked at the topic of production within which you saw that a combination of different factors of production, results into production of goods and services. When output of these goods is converted into monetary terms, it becomes national income. National income therefore refers to the total monetary value of all goods and services arising from the productive economic activities carried out by the nationals and foreigners in the country in a given period of time.

CONCEPTS OF NATIONAL INCOME

Gross Domestic Product (GDP): This is the monetary value of all goods and services produced within a country (by nationals and foreigners) in a given period of time (including the value of depreciation).

Net Domestic Product (NDP): This refers to the monetary value of all the final goods and services produced within the territorial boundaries of a country (by both nationals and foreigners) in a given period of time excluding the value of depreciation. NDP = GDP-Depreciation. Depreciation is the wear and tear of capital equipment during the production process. It is also referred to as capital consumption.

Gross National Product (GNP): This refers to the total monetary value of all the final goods and services produced by the nationals of a country (both within and abroad) in a given period of time (including the value of depreciation). GNP = GDP + Net income from abroad.

Note that net income is the difference between the incomes got from nationals abroad and incomes got by the foreigners from the country.

Net National Product (NNP): This refers to the monetary value of all final goods and services produced by citizens of a country (both at home and abroad during a given period of time excluding depreciation.

NNP = GNP-Depreciation

Other concepts related to national income include.

Income per capital: This refers to the average income per person in a country in a given period of time. It is obtained by dividing the country's national income by population.

$$\text{Income per capita} = \frac{\textit{Total National income}}{\textit{Total population}}$$

Disposable income: This refers to the income available to the individuals for spending/ saving after the personal income taxes and other compulsory contributions have been deducted.

Transfer payments: These are payments received without corresponding exchange of goods and services. In other words, they are payments for no work done, for example; in form of old age pension, student's allowances, pocket money, gifts, unemployment benefits, social, to mention but a few.

DETERMINANTS OF THE LEVEL OF A COUNTRY'S NATIONAL INCOME

You realise that production is high and sometimes it is low. This implies that national income is sometimes high and low at other times. In the next section, the factors that determine the level of national income are presented. These include:
The level of technology used in production. You are aware that technology plays a big role in production. With modern technology, national income is high due to efficiency in production. Poor technology leads to low productivity of labour which leads to the low volume of goods and services produced and therefore low levels of national income.

The size of a market. From price theory you are aware that demand determines supply. Therefore, a large market encourages investments in the country which leads to high output production and output of goods and services thus high levels of national income while a small market discourages investments which leads to low levels of output and low levels of national income.

The political climate. Political instabilities in a country discourage investments which leads to low production and output hence low levels of national income while political stability encourages investments which leads to high production and output hence high levels of national income.

The level of skills/ labour skills. A high level of skills of labour in a country results into high productivity of labour and high output of goods and services and therefore high levels of national income but low levels of skills leads to low productivity of labour this leads to low output and low levels of national income.

The size of capital stock. A high capital stock leads to a high level of investments hence leading to high production, output and high levels of national income but a small size of capital stock leads to low level of investment thus leading to low production and output

hence low levels of national income.

The level of development of a country's infrastructure. Infrastructure discourages investments in a country which leads to low output and low levels of national income while well-developed infrastructure encourages investments which leads to high output and high levels of national income.

The investment climate/ availability of investment incentives. A conducive investment climate characterized by low taxes, tax holidays encourages investments which leads to high output and high levels of national income but a poor investment climate e.g. high taxes discourages investments which leads to low output and low levels of national income.

The population growth rate. A high population growth rate leads to a high expenditure on consumption which leads to low saving, low investments, low output and low levels of national income while a low population growth rate results into a high level of saving, high level of investments, high output and high levels of national income.

The level of entrepreneurship skills. A high level of entrepreneurial skills leads to a high level of investments, high output and high levels of national income but low entrepreneurship skills lead to low investment rates, low output and low levels of national income.

The rate of inflation. High rates of inflation discourage investors. It leads to an increase in production costs thus leading to low output and low levels of national income. While low rates of inflation encourage investments, which results into high output and thus high levels of national income.

MEASUREMENT OF NATIONAL INCOME

National income is measured or computed by use of the three approaches in order to obtain the national income figures. These are:

The Income Approach: This involves a summation of all incomes received by the factors of production in a country from productive economic activities in a given period of time. It should be noted that only incomes received from productive economic activities are considered when computing national income. In this case, transfer payments (I believe you still remember what we said about transfer payments. These are incomes received without corresponding exchange of goods and services), should not be considered when computing national income. Computation of national income using the income approach involves adding the wages received by labour, rent received by owners of land and property, interest received by owners of capital and profits received by owners of business entrepreneurs. Thus, using the income approach;

National income=wages +rent +profits +interest.

Note: National income at factor costs:

This is the national income obtained by adding the payments made to the factors of production for their contribution in production of goods and services in a given period of time. It involves adding subsidies and subtracting indirect taxes.

The Expenditure Approach: This involves a summation of all the expenditures of final goods and services in an economy and in a given period of time. It involves a summation of consumption expenditure, investment expenditure, government expenditure and foreign expenditure (X-M). Thus, using the expenditure approach;

National income =consumption expenditure+ government expenditure + investment expenditure + (X-M).

The national income obtained by using the expenditure approach is usually referred to as the national income at market price.

Note: National income at market price; This is the national income obtained by adding up the payments made for goods and services in the market in a given period of time. It involves adding direct taxes and subtracting subsidies.

The output approach/ product method/ value added method: Using the output method, we add up the monetary value of output of all final goods and services produced by the firms at successful stages of production in a country in a given period of time.

The value-added method of a firm is used by subtracting the value of inputs used by the firm in production from the values of its outputs.

Value added=value of outputs –value of inputs.

IMPORTANCE OF NATIONAL INCOME STATISTICS

You should note that national income is measured for a number of reasons as presented below;

National income statistics are used in planning. The government and the policy makers use information about a country's national income for instance GDP, GNP, investments and consumption in formulation of policies for national development.

National income statistics are used to calculate the country's income percapita. The concept of per capita income was introduced earlier. It is possible to determine per capita income by measuring national income. This is calculated by dividing a country's national income by the population.

National income statistics are used to measure the standard of living. This is found out by looking at a country's income per capita. Generally, a high income per capita implies a high standard of living and low income per capita implies a low standard of living.

It is used to indicate the distribution of income in the country. From the income approach, national income=wages+ rent+ interest+ profits. This indicates that proportion of a country's national income which goes to wages, capital and interest, land (rent), and to the entrepreneur (profit).

National income statistics indicate the productive sector of a country's economy and their relative performances for example, using the output approach, you can find out the value of output from the agricultural sector, industrial sector, the service sector, tourism sector among others.

National income statistics are used for comparison purposes between countries especially when it comes to the standard of living and economic performances. Generally the standard of living is higher in a country with higher income per capita.

It can indicate the level of dependency of a country's economy on other countries' economies. This is indicated by the level of exports and imports. A high level of import implies a high level of dependence on those countries where the imports came from.

National income statistics are used by countries when soliciting for foreign aid. Donor countries need to look at the country's national income statistics and figures before

extending aid to that country.

PROBLEMS ENCOUNTERED IN CALCULATION OF NATIONAL INCOME

The problems encountered in the computation of national income are divided into two;

(a) Conceptual problems.

These are problems related to the interpretation of national income in form of what should be included and excluded from the definition of national income. They include:

i) The difficulty of determining the boundary of production, that is; what to include and what to exclude.
ii) The problem of unpaid for services e.g. those of a house wife.
iii) The failure to distinguish between the final and intermediate products for instance, sugar is both a final product and yet an intermediate.
iv)

(b) The statistical problems

These are problems related to data collection. They include;

Inadequate statistical data. There is not enough information regarding people's incomes, expenditures and output. This is largely due to lack of proper keeping of records.

The problem of double counting. This is where by the value of an item/activity is counted more than once when computing national income. Double counting usually arises out of the failure of distinguishing between the final and intermediate products. Double counting increases the national income. These results may lead to wrong policy formulation.

The difficulty in valuing subsistence output in monetary terms. Subsistence output does not go through the market and therefore has no market price. Thus the value of subsistence output can only be estimated. This brings about inaccuracies in the national income estimation.

There is a difficulty in calculating depreciation. This is because of the wear and tear of machinery, buildings that are difficult to express in monetary terms.

The problem of unpaid for services. You notice that many times in a family business, the wife and children are not paid. Additionally, for house work, house wives carry out a number of productive economic activities within a home but don't receive payments for such activities /services. Therefore, valuing their services in monetary terms is a very big problem.

It is difficult to estimate the country's income from abroad. This is due to lack of records for such incomes as so many people do not declare such incomes.

The problem of price changes especially due to inflation. As the prices increase in an economy, the country's national income will appear to increase even though the actual output of goods and services has not increased. Thus the normal national income figure has to be deflected to minimise the effects of inflation in order to get the real national income figure.

Errors of omission and commission. Errors of omission arise due to poor statistical records and inadequate statistical experts. This results into income items either being

wrongly excluded or included into the national income. Errors of commission are caused as a result of wrong interpretation of national income data. Hence both errors result in either over estimation or under estimation of national income.

It is difficult to determine the boundary of production. Boundary of production refers to those activities that are considered to be productive and which must be considered when computing national income. Those unproductive activities are outside the boundary of production. Thus, are not considered when complying national income. The boundary of production may vary from country to country.

The problem of illegal activities. These include activities like gambling, prostitution, black marketing etc. The incomes from such activities may wrongly be considered when computing national income. Such activities have to be identified and excluded when computing national income.

The problem of transfer payments/incomes. These do not reflect any economic activity and therefore should not be considered when computing national income.

The problem of inventories and the work in progress. Some goods are produced in a particular year and are not yet sold at the end of that year period. Some productive activities extend over several years. This brings a problem when computing national income or total output in a particular year.

Now try out these activities. You are expected to submit the work to your teachers for checking when schools reopen.

ACTIVITIES

1a) Account for the low levels of national income /GDP in your country.

b) Suggest measures of increasing the level of national income in your country.

2. Why may income per capita not be a good measure for comparing people's welfare in different countries?

3a) Why may income per capital not be a good measure for comparing people's welfare overtime?

b) Explain the steps that should be taken to increase the level of national income

4. Given a country's stock of machinery, valued at 100billion at the start of the year, the total output from these machines during the year was 500 billion; depreciation costs during the year were 20%. Calculate;

i) The value of depreciation

ii) Net output

LESSON 2: INCOME MODELS, STANDARD OF LIVING, COST OF LIVING, PRICE INDICES AND INCOME DISTRIBUTION

Resources to Be Used

notebook, pen, text/reference books, internet if available, radio/TV, recorder and mobile phone

Learning Outcome

By the end of this lesson, you should be able to:

i) distinguish between standard of living and cost of living.

ii) show the steps followed in computing price indices.

iii) explain the causes and measures to reduce income inequalities.

INCOME MODELS

An income model shows how households and various firms obtain and spend their incomes. There are two main income models: i. The circular flow of income and expenditure in a closed economy, and ii. The circular flow of income and expenditure in an economy.
The circular flow of income shows the flow of resources (FOP) and commodities (real flow) and flow of expenditure (money) between households and firms. In this section focus will be on only the circular flow of income in a closed economy and you will research about the flow in an open economy.

THE CIRCULAR FLOW OF INCOME AND EXPENDITURE IN AN ECONOMY

This shows how a house hold earns and spends income and how a firm earns and spends its income in a close economy with only two sectors i.e. households and firms.

CLOSED ECONOMY

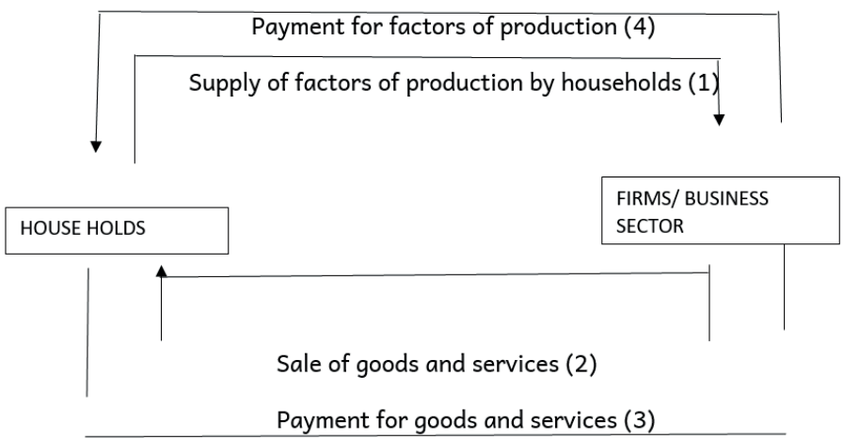
This is an economy which does not participate in international trade or which does not interact with other economies.

The formula for national income in a closed economy is C+I+G where, C= expenditure on consumer's goods, I=investment expenditure or expenditure by firms on investment, G= government expenditure

ASSUMPTIONS OF CIRCULAR FLOW OF INCOME IN AN ECONOMY

i) It assumes a simple economy which is made up of only two sectors, that is; business sector or firm and households.
ii) Households are assumed to be closed, that is; there is no foreign trade. It is in state of autarky, meaning that it does not participate in international trade.
iii) All production is assumed to take place in the business sector and no consumption takes place in this sector or firms produce output which they sell to households.
iv) The household sector is the consuming unit. They buy and consumer goods and services supplied by the firms.
v) It is assumed that there are no leakages or withdrawals of income from the circular flow of income. In other words, all the income earned by the households is used to purchase final goods produced by the firms and firms use all the income earned from the sale of goods and services to pay for factor services.
vi) In the two-sector model, it is assumed that there is no government intervention inform of taxes and subsidies.

ILLUSTRATION 10: THE CIRCULAR FLOW OF INCOME IN A TWO SECTOR MODEL (CLOSED ECONOMY)



NOTE:

You should note the following on the above circular flow of income with reference to its assumptions:

i) Arrows 1&2 show real flow. They represent flows of factors of production or factor prices from households to firms and flow of final output (goods and services) from firms to households. Arrows 3 and 4 show the financial or money flow from firms to households as payment for factor services. Arrow 4 show money flow from households to firms as payment for final output in case of arrow 3.
ii) The households supply factors of production i.e. land, labour, capital, and entrepreneurship to firms. This is shown by arrow 1 used as factors of production by firms to produce goods and services which they sell to households (consuming

unit). This is shown by arrow 2.

iii) The firms pay for the factors of production (arrow 4). The expenditure (E) by the firm on factor services is received by households as income (Y) and profit. Hence (E) is equivalent to (Y).

iv) The income (Y) earned by households is equal to the value of output (O) purchased from the firms. Hence the expenditure (E) by the households is equal to the value of output (O) purchased from the firms implying that expenditure is equal to output E= O.

v) The value of output (O) is the same as income (Y) received by the firms from the sale of the final output (O) hence output equals income.

vi) Since E=Y and O=E and O=Y, it follows therefore that Y=E=O.

THE STANDARD OF LIVING

You realise that when people live in poor conditions of life e.g. poor housing and sanitation, poor feeding, lack of freedom etc. Their standard of living is said to be poor or low. Identify other situations that depict low standards of living in the community you leave. This refers to a measure of human level of social and economic welfare of an individual or society as determined by the level of goods and services consumed. You can as well say standard of living refers to the conditions of life in which people live.

You are in school to attain education and training. How is education beneficial to a person? A high level of education and skills provides opportunities to most people to access jobs and incomes. They can afford to purchase and enjoy enough goods and services. Low levels of education and skills may impede access to profitable employment opportunities that may result into low standards of living.

Determinants of Standard of Living

You have heard people say that someone is either enjoying a high standard of living or low standard of living. In the next section, some of the factors that influence standard of living to be high or low are explored:

The price level of goods and services. A high price level of goods and services leads to a low standard of living. This is because with a high price level, goods and services are expensive and unaffordable for most of the people. A low-price level leads to a high standard of living because people are able to buy more goods and services as they are affordable.

The level of incomes in a country. High income levels lead to a high standard of living. This is because with high income levels, people have enough money and can afford to enjoy various goods and services. While low income levels lead to low standards of living because individuals are unable to purchase the goods and services. Distribution of income leads to high standards of living as majority of people has incomes that are able to purchase goods and services.

The quality of goods and services produced in a country. We have all purchased and consumed low quality goods knowingly or unknowingly. Poor quality goods and services in a country lead to a low standard of living. This is because such goods endanger people's health resulting into high expenditure on treatment. While high quality goods in a country lead to a high standard of living.

The nature of goods produced in a country. Production of more capital goods at the

expense of consumer goods leads to a low standard of living because capital goods do not directly contribute to people's welfare while production of more consumer goods in a country leads to a high standard of living.

The political climate prevailing in a country. An area characterised by wars is referred to as politically unstable. Therefore, political instability in a country leads to a low standard of living. This is because with political instability people cannot settle down to become productive and their lives and property are always in danger. While political stability in a country leads to a high standard of living because people are settled and more productive.

The level of social costs in a country. High levels of pollution in a country lead to a low standard of living. This is because pollution endangers people's health leading to high expenditure on treatment instead of consumption. But low levels of pollution lead to a high standard of living.

You should note that these factors have not been exhausted. Please read further and find out more.

LIMITATIONS FOR USING INCOME PER CAPITA ASA MEASURE OF THE STANDARD OF LIVING IN A COUNTRY

When you critically look at the economy, a high income per capita implies a high standard of living and a low income per capita implies a low standard of living. However, this is not always true as there are likely to be instances when the standard of living is low despite the high income per capita. This is because income per capital ignores a number of important factors that affect people's standards of living. Some of these important factors it ignores include:

The general price level of goods and services in a country. A high price level in an economy implies that goods and services in an economy are very expensive and unaffordable for majority of the people. This may lead to low standards of living despite high income per capita.

The distribution of income in a country. Uneven distribution of incomes in a country implies that majority of the people have low incomes. This makes it difficult for them to acquire goods hence leading to low standards of living despite a high income per capita.

The nature of goods and services produced in a country. Production of capital goods at the expense of consumer goods leads to a low standard of living despite income per capita being high.

The quality of goods and services produced in a country. Production of poor quality goods and services in the country leads to a low standard of living despite income per capita being high. This is because poor quality goods endanger peoples' health resulting into high expenditure on treatment.

The political climate prevailing in a country. A poor political climate characterised by wars results into a low standard of living despite a high income per capita.

The level of taxation in the country. High levels of taxes in a country reduce the disposable incomes of consumers leaving them with less and less money for purchasing goods and services. This leads to a low standard of living despite a high income per capita.

The rate of unemployment in a country. Unemployment is a global problem that leaves people poor. A high rate of unemployment in a country leads to a low standard of living despite income per capita being high. This is because with a high rate of unemployment, many people have no jobs, no incomes and therefore cannot afford to purchase and enjoy enough goods and services.

The social costs like pollution. A high level of pollution for example air and water pollution in a country leads to a low standard of living despite a high income per capita. This is because pollution endangers people's health.

THE COST OF LIVING

The amount of money needed for purchasing goods and services depends on the general price levels in a country. If the price level of goods or services is high, it means that goods and services are very expensive. It will require a lot of money to purchase the goods and services. This implies that the cost of living is high. Thus, the cost of living directly varies with the price level in the country in that if the price level is high, then the cost of living is high and if the price level is low, then the cost of living is also low. The cost of living refers to the amount of money required for purchasing goods and services to maintain a given level of standard of living in a country in a given period of time. PRICE INDEX

Now that you know that price level highly affects the cost of living, it is imperative to also know how relative changes in prices are measured. The relative change in prices is thus measured using price indices. A price index therefore, is a number or figure that measures relative changes in the price levels of goods and services in a country from one period to another.

The consumer price index: This is a price index that measures relative changes in price of consumer goods from one time period to another.

The cost of living index: This refers to a measure of relative changes in the cost of living or relative changes in the average prices of goods and services on an economy from one time period to another.

COMPUTATION OF PRICE INDICES

The following steps or procedures can be followed when compiling price indices e.g. the simple index.

1. Selection of the base year: This must be a year when the prices of commodities were relatively stable.

2. Selection of the market baskets: This refers to a set of commodities consumed in a country that are chosen to represent all the commodities consumed. The market or representative basket should not be based to a given income group or region.

3. Collection of information or data: That is information about the prices of the selected commodities both in the base year and the current year as well as the quantities of those commodities consumed.

4. Calculation of the price relative or simple price index for each one of the selected commodities. This is calculated by the use of the expression;

$$\text{lative} = \frac{\text{Current year price}}{\text{Case year price}}$$

5. Calculation of the average price relative: This is calculated by summation of the price relatives by the number of commodities.

$$\text{Simple price index} = \frac{\sum \text{Price relative}}{\text{number of commodities}}$$

6. Weighting of the commodities/ attaching weights to the selected commodities. Weights are numbers which indicate the relative importance attached to each one of the commodities by the consumer. A commodity which is more important to the consumer is assigned a bigger weight than a commodity which is less important.

7. Calculation of the weighted price index for each commodity. This is calculated by multiplying the price relative for each commodity by the weight attached to the commodity.

WPI = price relative x weight

8. Calculation of average weighted index. It is calculated;

$$\text{AWI} = \frac{\sum \text{Weighted index}}{\sum \text{Weights}}$$

PROBLEMS ENCOUNTERED IN COMPUTING OF PRICE INDICES

Difficulty in selection of the base year. This is because it is very hard to find a year where prices are stable.

Difficulty in selection of a representative basket. This is because there are many commodities consumed in the country and selecting a few of them without being biased is not easy. A market basket which represents the purchases of all the people in the country is difficult to obtain.

Changes in tastes and preferences. This result into a change in composition of the commodities actually consumed by the people in the country compared to the commodities considered in the market baskets when computing the price index.

Inadequate statistical data. There isn't enough information about the prices of the commodities selected both in the base year and current year. This is due to lack of proper keeping of records.

Lack of adequate skills. There are inadequate personnel with appropriate skills for computing the price indices e.g. economists. The use of people without appropriate skills in computing price indices sometimes results into unreliable figures of the price indices.

Appearance and disappearance of some commodities from the market. Sometimes, commodities disappear from the market e.g. due to changes in seasons or in times of off season. These results into a change in the composition of commodities consumed by the people compared to those considered in the market basket when computing the price index.

Variation in prices of the different regions or areas of a country. The same commodity may be sold or bought at different prices depending on the area of a country where you are buying it from. Thus, if prices of a commodity in one area are considered, the price index computed may not be valid for the rest of the commodities in the country.

Changes in the prices of the commodities during the year especially due to inflation. As prices increase during the same year, the actual price level of a commodity in the economy turns out to be higher than what the computed price index indicates.

USES OF PRICE INDICES

In the next section, the uses of price indices are presented;

Price indices are used in determination of wages. In some cases, wages are adjusted upwards depending on the price level or cost of living. If the computed price index indicates that the cost of living has gone up, then wages have to be adjusted upwards.

Price indices are used to measure the rate of inflation or deflation. The rate of inflation is indicated by the percentage increase in the price level from the base year to the current year e.g. if the computed price index is 110, then the rate of inflation is 110 – 100 = 10%. When a high rate of inflation is determined, then it implies loss in value of money.

Price indices are used to determine the cost of living in a country. If the computed price index is greater than 100 then it implies that the cost of living has gone up and if it is less than 100 then the cost of living has gone down.

They are used in determining the taxation rates or levels on an economy. If the computed price index indicates that the prices of consumer goods have gone up then taxes on consumer goods have to be reduced to enable the people afford the goods and services.

Price indices are used to deflect or adjust nominal GDP to real GDP. Such a price index is referred to as the GDP deflator. It adjusts or converts nominal GDP to real GDP by removing the effect of deflation from nominal GDP.

NOTE:

Real GDP is the GDP expressed at base year prices while Nominal GDP is the GDP expressed or valued at current year prices.

SAVINGS

Sometimes you are given pocket money and you reserve a percentage for use on a given date in future. That is referred to as a saving. Therefore, saving refers to the proportion

of income which is not used for current consumption but instead kept for future use.

TYPES OF SAVING

Personal savings: These are savings of individuals out of their income.

Corporate/ company savings: These are savings of corporations/companies out of the profits made in a given period of time.

Compulsory savings: These are savings that individuals are required by law to make out of their income at the end of each month. In Uganda, this applies to individuals employed in private companies or enterprises and government institutions towards National Social Security Fund (NSSF).

Public savings: These are the savings by the government out of the revenue from taxation of other sources.

Now that you know what saving is, engage a selected person in your community to find out why they save.

DETERMINANTS OF THE LEVEL OF SAVING AND INVESTMENTS

ACTIVITY. Carry out an interview to about 10 people from your community. (Be careful to observe the SOPs). Ask them about what determines the level of savings and investments.

Carry out further reading from other sources and write a report on the determinants of savings and investments.

NATIONAL INCOME EQUILLIBRIUM

National income is said to be in equilibrium when it neither increases or decreases at a given period of time. This happens when; a) Aggregate demand is equal to aggregate supply. If aggregate demand is greater than aggregate supply then the level of the country's national income increases but if aggregate demand is less than aggregate supply then the level of a country's national income reduces, b) National income also happens to be in equilibrium when the total injections are equal to the total leakages in an economy.

Note:

Leakages are elements that reduce the circular flow of national income.

They consist part of the incomes of the households that are not spent on goods and services produced by the business sector of the country's economy.

Example of leakages:

savings, taxation, imports, capital outflow

Injections

These are elements that add to the circular flow of national income.

They consist of expenditures on domestically produced goods and services that arise out of the circular flow of income and expenditure i.e. they do not arise from the household.

Examples of injections include; investments, government expenditure, exports capital inflow

If injections are greater than leakages, the country's national income increases. If injections are less than the leakages, the level of the country's national income reduces.

INCOME DISTRIBUTION

What do you know about incomes? Incomes are earnings that people receive from various sources. So, income distribution refers to the way incomes and wealth is shared among individuals, sectors and regions in the country. Most times incomes are unfairly distributed leading to income inequality. Let us now look at income inequality in details.

INCOME INEQUALITY

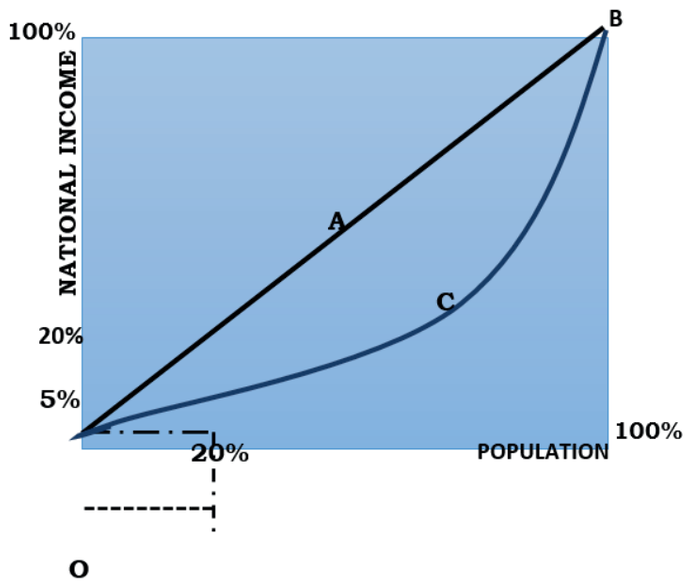
This refers to the uneven or unfair distribution of income amongst individuals or groups of individuals in a country. It can be looked at as the income gap or distance between the rich and poor. It implies that some individuals (minority) get very high income while majority get very low income or are very poor.

You are aware that most people acquire education for a better life in future. Individuals with high levels of education and skills get high income because they are able to access better paying jobs. Individuals with low levels of education and skills are unable to access better paying jobs thus leading to low incomes.

NOTE:

You should note that the distribution of income is determined by the Lorenz Curve. A Lorenz Curve is the graph that shows the overall distribution of income amongst the population of an economy.

ILLUSTRATION 11 OF A LORENZ CURVE



From illustration 11, OAB, that is; the straight line is the line of perfect equality. It shows even distribution of income for example 20% of the total population share 20% of the total income. While on the Lorenz Curve OCB there is uneven distribution of income for example 20% of the population only shares about 5% of the national income. Therefore, the further away the Lorenz Curve is from the line of perfect equality, the bigger the income gap.

CAUSES OF INCOME INEQUALITIES/ DISPARITIES

ACTIVITY. Make Research from various sources available to you and write about the causes of income inequality in a country and how it can be reduced.

LESSON 3

TOPIC: STRUCTURE OF UGANDA'S ECONOMY SUB- TOPIC: UGANDAS ECONOMY

Learning Outcome

By the end of this topic, you should be able to;

i) describe the structure of Uganda's economy, agricultural, industrial, and informal and the foreign sectors of Uganda's economy.

ii) explain the implications the structure of each sector and suggest measures to

improve.

Introduction

Let us first look at what structure of an economy means. An economy is an institutional framework through which resources are owned, allocated/distributed and utilised to produce goods and services in order to achieve development goals. A structure is the way in which the parts of something are connected together, arranged or organised. Therefore, structure of an economy refers the basic or salient features of an economy. When considering the structure of an economy, put into consideration the major sectors of an economy, the ownership and control of resources, the size, composition and strength of the sectors in the economy.

SALIENT FEATURES OF UGANDA'S ECONOMY

These are the major features that characterise the Economy of Uganda.

Uganda's economy is dominated by the agricultural sector. Majority of Uganda's population is employed directly or indirectly in the agricultural sector. It is also the major source of food and foreign exchange earner for the country.

It has a small but growing industrial sector. Most of the industries are small and mainly concentrated in urban or semi-urban areas. The few large industries are owned by foreigners. The industrial sector contributes less than 15% of GDP.

It has elements of dualism. A dual economy is one where there is co-existence of two contrasting sectors one being superior, modern and desirable and the other being inferior, traditional, backward and undesirable. Uganda is technologically, socially, economically and regionally dualistic in nature. However, the informal sector is developing gradually.

High level of excess capacity existing in many sectors. Many sectors produce at less than optimal capacity due to inadequate technical knowledge and capital.

It is a mixed economy. The ownership of resources, making of economic decisions and allocation of resources are undertaken by both the government and the private sector.

Highly dependent economy. Uganda heavily relies on foreign resources and foreign decision making for her survival and development.

High population growth rate. The population growth rate is about 3.4% which is very high due to high birth rate, high fertility rate and declining death rate.

Widespread unemployment and underemployment. This is due to abundant supply of unskilled and semi-skilled labour force in the country.

Underdeveloped infrastructure. Both the social and economic infrastructure in Uganda is still underdeveloped.

It is an open economy. The country highly depends on foreign trade in order to promote her development.

High level of illiteracy characterised by abundant supply of unskilled labour. This is due

to low levels of education.

IMPLICATIONS OF THE STRUCTURE OF UGANDA'S ECONOMY

Since the structure of Uganda's economy shows mainly unfortunate features, it obviously generates unfortunate implications and these are;

Unfavourable balance of payments position (B.O.P). This is mainly because of exporting agricultural products that fetch low prices therefore generating low foreign exchange earnings and importing expensive manufactured goods which increases import expenditure hence causing a B.O.P deficit.

Low personal income levels. This is due to the high levels of unemployment and the predominance of subsistence agriculture where many people receive no income.

Production of poor-quality goods. This is because of using poor methods of production and unskilled labour.

Low levels of technological advancement. This is caused by technological dualism in Uganda. There is still predominance of rudimentary/ backward skills of production in many parts of the country because of conservatism among people and limited capital.

Having predominantly unskilled labour. This arises from the high levels of illiteracy and as a result many people fail to acquire the necessary skills and training needed in the labour market.

Low levels of government revenue from taxes. This arises from the small industrial sector, high levels of unemployment and a big informal sector which create a narrow tax base in Uganda.

Low savings, low investments and low levels of capital accumulation. This arises from the high population growth rate which increases the dependence burden on the working population such that most of the income is for consumption. This gives rise to low savings among the working population, low levels of investments and finally low levels of capital accumulation.

Income inequalities arise. This is due to the high levels of unemployment and under employment where many people are not earning income or earning little while the few who are employed are earning high income.

Poor terms of trade. Import prices of manufactured goods always rise faster than the export prices of agricultural products. This gives rise to poor terms of trade in Uganda.

Low levels of Gross Domestic Product (GDP). This arises from production at excess capacity where some resources remain underutilised and less goods and services are produced in Uganda.

THE AGRICULTURAL SECTOR

Agriculture consists of crop husbandry, forestry, fishing and livestock keeping. It is the backbone of Uganda's economy. Over 75% of the people are dependent directly or indirectly on agricultural activities for their livelihood.

STRUCTURE/ FEATURES OF UGANDA'S AGRICULTURAL SECTOR

ACTIVITY.

1. **Conduct research from internet and other sources available to you and describe the features of Uganda's agricultural sector.**
2. **Explain the implications of the features identified above to the economy of Uganda.**
3. **Suggest ways of improving Uganda's agricultural sector.**

LESSON 4: THE INDUSTRIAL SECTOR

INTRODUCTION

The industrial sector in Uganda is small but steadily growing and expanding. The percentage contribution of the industrial sector to Uganda's GDP was small but is steadily increasing according to the national budget for the financial year 2019 – 2020.

FEATURES OF THE INDUSTRIAL SECTOR IN UGANDA

ACTIVITY

1. **Conduct research from internet and other sources available to you and describe the features of Uganda's agricultural sector.**
2. **Explain the implications of the features identified above to the economy of Uganda.**
3. **Suggest ways of improving Uganda's agricultural sector.**

LESSON 5: INFORMAL SECTOR, FOREIGN SECTOR AND ECONOMIC DEPENDENCE

Learning Outcomes

By the end of this topic, you should be able to:

i) describe the structure of informal and the foreign sectors of Uganda's economy.
ii) explain the implications the structure of each sector and suggest measures to

improve each sector.

iii) explain the forms, causes, implications and solutions to economic dependence.

Introduction

THE INFORMAL SECTOR

Today there are many activities which have slowly developed from the traditional form of production and to being modernised. These activities are mainly carried out by self-employed people for example tailors, mechanics, furniture sellers, drivers, modern fabricators, food sellers, petty traders. All this falls under the informal sector. Therefore, the informal sector is an inter-mediate sector which exists between the modern sector and the traditional sector.

THE STRUCTURE OF UGANDA'S INFORMAL SECTOR

The structure of the informal sector in Uganda is described by the following characteristics:

1. Production is mainly on a small scale.
2. Predominantly use simple technology or labour-intensive technology.
3. Mainly located in urban and semi-urban areas.
4. Mostly produce low quality and quantity output.
5. Mainly run by sole proprietors.
6. Mainly produce consumer goods for the local or domestic market.
7. Basically, use local resources or inputs
8. The sector is characterised by basically low output or generally low productivity.
9. Production units mainly operate at excess capacity.
10. Private ownership of firms is dominant in the sector.
11. There is limited formal book keeping in the sector.

THE CONTRIBUTION OF THE INFORMAL SECTOR

The informal sector plays a vital role in the development of the country. Its Positive contribution includes the following:

Creates more employment opportunities: The informal sector creates jobs for many people since it mainly uses labour intensive tec. The employed earn income and are able to sustain their lifestyle.

Promotes innovations and inventions i.e. promotes technological development: In the long run, better and efficient techniques of production are developed in the informal sector which leads to technological development.

Promotes commercialization of the economy: The informal sector goods are sold in exchange for money thereby expanding the commercial sector of the economy.
Promotes entrepreneurial skills: Through the informal sector, people learn to bear risks and how to organise the available factors of production. This gives them the confidence to invest hence promoting entrepreneurship in the economy.
There is production of a wide variety of goods: There are many activities in the informal sector which results into provision of a variety of goods. This widens consumers' choice hence improving people's welfare.
Facilitates utilisation of local resources: There is use of local raw materials in the informal sector e.g. scrap materials, cotton in the textile industry, etc.
Provides a cheap training ground for local labour: As people work in the informal sector, they gradually learn new skills on the job. This leads to the development of local skills in the long run.
It leads to greater diversification of the economy: This arises from the many activities carried out in the informal sector.
There is production of locally affordable goods: As people are able to afford the goods produced in the informal sector, their standards of living is encouraged.
Increases the GDP/ output of the country: More goods are produced in the informal sector and this increases the country's national income/ GDP.
There is reduction in foreign exchange outflow: The informal sector produces goods that would have been imported. This cuts down on foreign exchange outflow.
To some extent, it contributes some revenue to the government: The investors in the informal sector pay for licenses to the government to be allowed to run their activities in a given time. They also pay some taxes to the government hence a source of government revenue.
Enhances a fairer distribution of income: As people earn income in the informal sector, the income gap between the rich and the poor is gradually reduced.

NEGATIVE IMPLICATIONS

Despite the positive contribution of the informal sector, it has negative effects which include the following:

Creates congestion in urban and sub-urban areas: This is because the sector is dominant in semi-urban areas thereby attracting many people in such areas. This results into a high crime rate and open urban unemployment.
Results into duplication of services due to wasteful competition: Many people get involved in one line of activity or one line of operation within the informal sector and yet they all serve the same market. This creates wasteful competition which finally results into resource wastage.

Causes pollution of the environment: Informal sector activities lead to air and water pollution especially in the areas of their operation due to poor disposal of wastes e.g. in Katwe and Kisenyi, metal scrap fabricators pollute the environment.
It causes public revenue instabilities: The informal sector is not a reliable and significant source of revenue to the government due to the unstable incomes of the operators and the poor record keeping that makes tax assessment difficult.
It is associated with high administrative costs: Sometimes the government uses local authorities like Kampala Capital City Authority (KCCA) to remove businesses of the informal sector from particular areas and this involves a high administrative cost on the part of government.
Hampers provision of quality services because the informal sector uses poor technology and unskilled labour: This results in production of poor-quality commodities that are sold at low prices.
Gives rise to disguised unemployment and under-employment: This is because of the small nature of the business activities in the informal sector.

SUB- TOPIC: ECONOMIC DEPENDENCE

"No man is an island" in our daily lives, we depend on other people for survival and for our welfare directly or indirectly. In the same way countries depend on others for their survival and / or development. Therefore, Economic dependence is a situation in which an economy mainly relies either on specific sector/sectors or on other countries for decisions and resources for her economic survival or development. Economic dependence may take the following forms: -

Direct economic dependence: This involves reliance of a country on foreign decisions or it is the reliance of an economy on other countries and international agencies for some of its economic and political decisions.
External resource dependence: This is where a country relies on foreign factor services such as foreign technology, foreign skills (expatriates) and foreign capital from other countries to supplement her productive resources. The foreign capital is in form of foreign investments and loans secured from other countries.
Trade dependence: This is the reliance of economy on international trade transactions. For example, Uganda exports a narrow range of primary products and import products like petroleum, industrial machines, chemicals, vehicles, military equipment etc from other countries
Sectoral dependence: This is the reliance of a country on one major sector or a few sectors for her economic survival. In Uganda, there is sectoral dependence on agriculture.

IMPLICATIONS OF ECONOMIC DEPENDENCE IN UGANDA

Demerits/negative implications of economic dependence in Uganda

N.B: No single country in the world desires to be dependent or to rely on other countries for its survival. For that reason, economic dependence is one of the macro-economic problems confronting Uganda's economy. Since it is a problem to the economy, it

generates mainly negative implications only/undesirable outcomes. The negative side of economic dependence is explained below.

Creates balance of payments problems commonly called B.O.P problems: This arises from reliance on imports of capital, consumer and intermediate products which lead to rising foreign expenditure on buying goods from other countries. However, Uganda has low earnings from her exports and this creates a B.O.P deficit.

Encourages laziness i.e. discourages local initiatives: The country always relies on foreign capital and technology. This kills the initiative to develop our local methods of production and the country continues to rely on other countries for such technology.

Accelerates capital outflows in form of profit repatriation: Uganda relies on foreign investors who bring in capital and invest in various sectors of the economy. However, these investors repatriate profits to their mother countries and this slows down the development process in Uganda.

Worsens technological unemployment: This arises from reliance on imported capital in form of modern machines that replace human labour in production.

Low volume of imports due to low export earnings: Since earnings from exports are low, Uganda gets difficulties in financing her import expenditure especially imports of important consumer, capital and intermediate products.

Results into underutilisation of natural resources: There is reliance on external resources which renders exploitation of local natural resources to be neglected e.g. Uganda's dependence on oil imports may cause underutilisation of oil deposits in western Uganda.

Leads to economic domination of Uganda by foreigners: Foreign countries and organisations on which Uganda relies for external resources like capital, technology and skills dictate economic policies such as retrenchment, cost sharing, etc. such policies should be implemented for Uganda to get foreign assistance.

Discourages domestic savings and investments: Ugandans rely on buying goods and services from other countries, the capacity/ ability to save and invest is reduced.

Results into fluctuation of prices of agricultural exports: This arises from dependence on exportation of a few agricultural products whose prices are unstable on the world market e.g. prices of coffee, cotton, tobacco, vanilla, etc. The unstable export prices frustrate the exporters.

Leads to cultural erosion/ social cultural domination: Uganda relies on foreign capital that at times has negative strings attached. These negative cultural values destroy the morals of society e.g. promotion of homosexuality and lesbianism.

It discourages domestic savings and investment: Since Ugandans rely on buying goods and services from other countries; the capacity to save and invest is reduced.

SUB- TOPIC: THE STRUCTURE OF UGANDA'S IMPORTS AND EXPORTS

The Structure of Uganda's Foreign Trade /Imports and Exports Sector

Table 3: Showing the features / characteristics of Uganda's Foreign trade sector/ import and export trade:

Exports	**Imports**
Exports are mainly primary/agricultural products for example according to 2019 UCDA statistics, coffee contributes about 30% of Uganda's total export earnings.	Imports are mainly industrial / Manufactured products
Limited variety of exports	Imports are of wide variety
Basically, semi-processed or unprocessed products are exported/ exports are mainly of low value	Imports are mainly of high value/mainly fully processed
Limited range of markets for exports/ exports are mainly to few countries	Imports are mainly from few countries (geographical concentration of trade)
Few manufactured consumer goods are exported	Imports are mainly manufactured consumer and intermediate goods
Exports are mainly of low quality	Imports are mainly of high quality
Few services are exported	Many services are imported
Prices of exports are mainly low and fluctuating	Prices of imports are mainly high and stable
Exports are mainly of low volume/ quantity	Imports are mainly of high volume/ quantity

THE POSITIVE IMPLICATIONS OF THE FEATURES OF IMPORT AND EXPORT TRADE IN UGANDA INCLUDE THE FOLLOWING:

Foreign exchange earnings. This is got from the export of agricultural products.
Leads to economic growth. There is widened market for locally produced goods in other countries, this increases output thereby contributing to economic growth
Promote international friendship and trade (Co-operation). There is improvement in international relations because of the need to import from other countries as well as exporting locally produced goods to other countries
Leads to utilisation of idle resources. This is due to utilisation of the land resources to produce more agricultural products for export.

Provision of revenue to the government. Revenue is generated by the government through taxing some imports and exports.
Provides employment opportunities. There is provision of more employment opportunities in the import and export trade sector for example people involved in clearing goods and forwarding, insurers, transporters.
Promotes innovations and inventions in order to compete in the global market. The importation of industrial machines leads to transfer of better technology from other countries; this facilitates increased output as well as improving the quality of goods in Uganda.
Widens consumer choices due to importation of a variety of goods. High variety of goods imported leads to a wide consumer choice for goods and services in the country hence better standard of living.
Fills the technological gap/resource gap due to importation of intermediate products and capital goods. It encourages technological development and technology transfer because of high importance of capital goods.
Fills the manpower gap. It supplements the locally available skilled labour due to the importation of high level of foreign skilled manpower.
Improved quality of output due to competition with high quality imports. The high-quality manufactured imports help to improve the standards of living of the citizens.
Increased efficiency of local firms due to competition from better quality imports.

NEGATIVE IMPLICATIONS

Leads to poor terms of trade because of exporting mostly poor quality, unprocessed primary products that fetch low prices and importing expensive manufactured goods.
Leads to unfavourable balance of payments position due to limited variety of exports and high variety of imported goods, these results into more import/export expenditure compared to the foreign exchange earnings from abroad.
Underutilisation of some resources due to narrow range of exports.
High level of unemployment due to collapse of local industries as a result of competition from high quality imports.
Dependence on some countries, for example, for markets, supplies etc. it leads to trade dependence where by Uganda relies on a few export markets in the developed countries. The developed countries in most cases dictate prices at which they buy Uganda's exports.
High level of capital/income outflow due to importation of intermediate goods and expensive manufactured products.
Low foreign exchange earnings due to low price, low quality, low quantity and limited variety of exports.
Collapse of local firms due to competition from imports of high quality.
Leads to income inequality. Falling export prices of agricultural commodities lead to declining incomes of farmers and exporters, assuming other factors constant, this may worsen income inequalities in Uganda.
Fluctuations in foreign exchange earnings due to fluctuations in prices of exports.

Conclusion

Having looked at the structure of Uganda's economy; answer the following questions in your book.

ACTIVITY

a) Explain why it is necessary to change the structure of:
- i) **Informal sector**
- ii) **Import – export sector: in your country**

b) Suggest measures to improve the structure of the above sectors in your country.

c) i) Account for the economic dependence in your country.
ii)Explain reasons why economic dependence is undesirable in an economy.
iii)Suggest measures that should be taken to reduce economic dependence in your country.

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We thank God for the continued protection against the Corona Virus. You need to continue keeping yourself and family safe by observing the SOPs. Wash your hands regularly with soap or sanitize, wear a mask to cover the nose and mouth, observe the Social distance and avoid crowded places.

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