THEORY OF THE FIRM

Def:

(i) **A firm;** This is a single unit of business organization that brings together the factors of production to produce any given commodity.
-A firm may also be defined as a business enterprise under one management and control.
Example; Mumias sugar factory, Bata Shoe Company e.t.c
-Firms may be sole proprietorship, partnerships or companies. They may therefore be small e.g. an artisan or mechanic working in her/his garage or large like a multinational limited company producing many different products e.g. coca-cola company.
-A firm even though under one management and control may have several branches/plants.

(ii) **An industry;** This refers to all those firms producing the same product for a specific market/a group of related firms that compete with one another i.e.

a) Firms that produce the same product e.g. the firms operating as sugar manufactures as Mumias Sugar Company, Sony Sugar Company and Miwani Sugar Company.
b) Firms that extract the same raw materials e.g. the salt mining firms, Magadi Soda Company and other firms which mine salt at the North coast Region near Malindi.
c) Firms that provide similar services e.g. the transport industry such as Akamba Bus service, coast Bus Company and Easy Coach Company.

NOTE: In the definition of the firm, we assume that a firm in a unit that makes decision with respect to the production and sale of goods and services in the regard, we assume that
-All firms are profit-maximisers i.e. they seek to make as much profit as possible.
-Each firm can be regarded as a single consistent decision making unit.
The life of all business enterprises/firms are therefore characterized by several decision-making processes which are all aimed at facilitating realization of the objectives(profit maximization) such decisions may include; what to produce and how much, where and when to produce, how much to invest and how much to price goods/services e.t.c

<u>DECISION ON WHAT GOODS AND SERVICES TO PRODUCE</u>

A firm makes a number of important production decisions. Some of the decision may involve;

i. What to produce
ii. How production is to take place e.g. what raw materials and machinery should be utilized
iii. Where a production plant should be located
iv. When to produce
v. The scale of production e.g. how big should the factory

vi. When and where to invest

vii. How the production can be improved and controlled

viii. What type of business activity to engage in

NOTE: One production decision may lead to a series of decisions requiring to be made e.g.

-for a firm to decide on what goods and services to produce, market research to evaluate the likely success of the product is necessary.

-after establishing the viability of the product in the market, other activities like product design are carried out (the firm may consider redesigning existing products, introducing a product similar to the one in the market or developing a completely new product.

-production may then follow

<u>Factors that influence decisions on what goods and services to produce</u>

Certain factors have to be considered before committing a firm into production of either a new product, adopting or redesigning the existing product.

These factors include;

i. **Whether the firm is product-oriented or market-oriented**

   Product oriented firms; This is when the nature of the product itself (its functions and unique qualities) are enough to make sure that the product sells e.g. when cars were first developed, its uniqueness sold it

   Market oriented firms; These are firms that produce products that are meant to meet the consumer needs e.g. over time cars are being developed to suit consumer needs.

ii. **Level of competition**

   In order to survive in a competitive market, firms must come up with products that consumers prefer.

   Firms may therefore develop products which are not currently available or copy rivals ideas and improve on them

iii. **Level of available technology**
   The level of technology has a strong influence on the product that a firm produces
   New inventions and innovations often result in new products or improved products

-Improved technology may also reduce the costs of production. This means the same output maybe produced using less factors of production or more output may be produced using the same factors of production.

iv. **Management role**

Senior management have the sole responsibility of deciding on what product to produce. A wrong decision may ruin rather than bailed the enterprise. The manager's ability to design a viable product is therefore a vital factor in product development

v. **Financial viability**

In order to determine whether a product will be viable or not, the cost of production and the expected returns should be considered. Funds may only be approved for the product that promises long term benefits to the firm. So if the benefits of the product outweigh the costs, then such product will be developed and if not so, it will be dropped.

vi. **Amount and type of capital in the firm**

Capital refers to machines, equipment, factories, plants and other human made aids to production.

Both financial and physical capital facilitates the production process. The amount of capital in a business will therefore influence what goods it can produce and in what qualities i.e. a firm with physical capital that is very specific may not be able to produce other type of products e.g. a clothing factory may not be able to produce any other goods such as cement.

Other factors may include;

-Need of the consumers

-Need for better quality or more fashionable product

-Need for an easier to market product

-Unmet needs

-Need for a product for which factors of production and technology are easily available

<u>COSTS OF PRODUCTION</u>

Def: Cost: This is a payment made to the factors of production for their services.

Production costs thus refers to the expenses incurred in acquiring factors of production (inputs) The sum total of all payments to the factors of production engaged in its production.

Types of production costs;

I. **Opportunity costs;** These are values of any alternatives forgone. The cost forgone when the choice of one thing requires the next best alternative to be abandoned
Example: A student with only sh.50 may have to decide on whether to buy a text book or a pair of shoes. If she decides to buy a text book, the pair of shoes will have to be forgone because it's not possible to buy both with only sh.500.
The opportunity cost of buying a text book in this case is the cost of the pair of shoes which was abandoned.

II. **Fixed and variable costs**

Costs may be classified according to their behavior in relation to various levels of output as follows:

a) Fixed costs
b) Variable costs
c) Semi-variable costs

a) **Fixed costs**

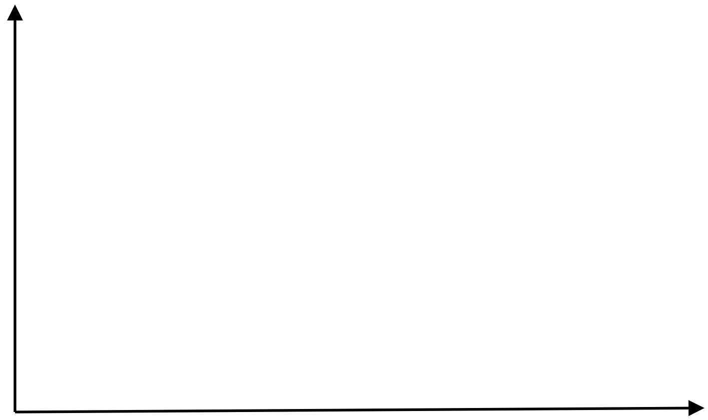
These are expenses which do not change with changes in levels of output/quantity of output. These costs therefore remain the same whether the firm is producing anything or not i.e. whether production is maximum or zero.

Examples;

a) Rent for premises/buildings
b) Depreciation charge on physical facilities
c) Salary of administrative staff
d) Interest paid on loans (borrowed capital)
e) Liance fees e.t.c

Output (units	**FC (sh)**
100	200
200	200
300	200
400	200
500	200

This may be represented graphically as:



b) **Variable costs**

These are costs that vary proportionately with changes in levels of output. This means that when output decreases the variable costs decrease in the same proportion and when output increases, they also increase in the same proportion. If nothing is produced VC=0

Examples;

a) **Payments on raw materials**
b) **Wages paid to casual labour**
c) **Water, transport and electricity bills**

Output (units)	variable cost (shs)
0	0
100	200
200	400
300	600
400	800
500	1000

This can be represented graphically as;

c) **Semi-variable costs**

These are costs that vary in relation to changes in output but not proportionately e.g. if output doubles, the semi-variable costs might increase by half.

Those production costs that do not fit in either fixed or variable costs are semi-variable costs.

Example

(i) **Labour (permanent employees); No matter what level of output, their salary is fixed. However if one is asked to work extra time and on weekends to cope with extra** production levels, then the extra cost is variable. Thus because labour is not totally fixed nor totally variable, it becomes semi-variable.**

(ii) Cost of telephone charges. This is because there is often a fixed or standing charge plus an extra rate which varies according to the number of calls made.

-Thus semi-variable (semi-fixed) costs have both fixed and variable component.

Output (units)	**cost (sh)**
0	**4**
1	**10**
2	**18**
3	**24**
4	**27**
5	**32**

This may be represented graphically as;

(iii) Total costs

Total cost is the sum of all costs incurred in the production at a given level of output i.e. the sum of fixed and variable costs

Total cost=Fixed costs+ variable costs.

-As output increases total costs will also increase.

<u>**Illustration**</u>

<u>**NOTE:**</u> It has been assumed that semi-variable costs are part of fixed and variable costs.

(iv) Direct and indirect costs

Costs can be classified according to the way they affect the product. They can either be direct or indirect costs.

a) **Direct costs**

These are costs that can be physically traced to the final product/process.

Examples

i) **Raw** materials i.e. all the materials that can be physically traced to the final product

ii) **Direct labour i.e.** wages for those factory employees directly engaged in the manufacture of the product e.g. wages for machine operators,packers,mixers,assemblers e.t.c

iii) Packing materials used.

iv) Direct expenses i.e. expenses which are directly allocated to a particular unit of goods being made.e.g maintenance costs of machines and equipment, designs and drawings, hire for special tools or equipment for a particular production.

-These costs are also known as ***prime costs.*** They are usually variable costs.

Indirect costs (factory overheads)

These are costs which cannot be traced or directly identified in the final product i.e. they cannot be attributed to any specific output.
They also include the costs that appear in such small quantities that their effects are negligible.

Examples:

i) Payment for stationary and other items such as lubricating oil, small tools, telephone use, cleaning and transport for employees.
ii) Wages and salaries for managers, supervisers, store keepers, clerks and watchmen.
iii) Payment for rent, land lease, insurance, advertising, warehousing and audit fees.
iv) Payment for the power used in the production process
Indirect costs are also known as ***overheads.*** They are usually fixed costs.

Average costs

-Average costs refer to costs per unit output

-It is determined by dividing the total of a particular cost by the total output at each level of output.(They are also known as unit costs)

Types of Average costs

i) Average fixed costs
ii) Average variable costs
iii) Average total costs

a) Average fixed costs; (AFC)

Average fixed cost (AFC) is the total fixed cost at each level of output divided by the total output at that level.

AFC=<u>Total fixed costs</u>

Total units produced

Output (units)	**Fixed costs (sh)**	**Average fixed costs (AFC)**
	200	**200**
100	**200**	**2**
200	**200**	**1**
300	**200**	**0.66**
400	**200**	
500	**200**	

b) Average variable costs (AVC)

AVC refers to total variable costs at each level divided by the total units of output produced at that level.

Average variable costs (AVC)=<u>Total variable costs</u>

Total units produced

Output (units)	Variable costs (sh)	AVC
100	200	2
200	400	2
300	600	2
400	800	2
500	1000	2

c) Average Total Costs (ATC/AC)

Average total cost (ATC) is divided by;

i) Dividing the sum of fixed and variable costs (total costs) by the total units produced.i.e

ATC=<u>fixed costs variable costs</u>
Total units produced

ii) Adding average fixed costs (AFC) and average variable cost (AVC) i.e

ATC/AC=AFC+AVC Thus

Output (units)	Total cost	ATC
100	400	4
200	600	3
300	800	
400	1000	2.5
500	1200	2.4

OR

Output (units)	Average fixed costs (AFC) (sh)	Average v costs	ATC=AFC+AVC
100	2	2	4
200	1	2	3
300	0.66	2	2.66
400	0.5	2	2.5
500	0.4	2	2.4

(V) MARGINAL COSTS MC

The marginal cost is the change in total cost (ATC) which results from a unit change in output

Marginal cost is the cost of producing one extra unit of output

E.g. when total costs increase from sh.300 to sh.350 when an additional unit is produced, then MC=sh.50

LOCATION OF THE FIRM

Location; is the site or place from which the business operations/firm would be established.

The management has to make appropriate decisions concerning the location of the firm since a good location would lead to success while a bad location would lead to failure of the business enterprice.

Factors determining the location of the firm

a. **Raw materials**

The availability of raw materials is one of the factors that determine the location of firms. Firms should be located near the source of raw materials when;

(i) The raw materials are heavy and bulky so that costs of transporting them to far distances would be too high.

(ii) The raw materials are perishable

Advantages of locating firm near source of raw materials;

-Transport cost of raw materials is minimized

-production process can run uninterrupted because of constant supply of raw materials thus continuous production

-storage cost of the raw material will be minimized

-It is easier for the firm to select the quality of raw materials required.

-Easier to get fresh raw materials/undamaged raw materials

b. Labour (Human Resources)

This is divided into 3 categories; semi-skilled and unskilled labour

-Labour intensive firms must be located in areas where there is both abundant labour force and appropriate labour force.

-Firms requiring labour of any kind maybe located in the urban centres because in such areas labour is in plentiful supply

-Agricultural processing firms are found in the rural areas

-Location of the firms near the source of labour reduces the cost of transporting labour force to factories and also reduces time wasting in transporting labour from far.

c. Market

A firm may be located near the market for it products to cut down on production costs.i.e to avoid the costs involved in transportation of the finished products.

Reasons locating near markets

-where the finished product is more bulky or more difficult than the raw materials, then the industry would be located near the market e.g. blocks and bricks used in building will be manufactured near the place where they are required than the source of raw materials because the finished product is more delicate to transport and is susceptible to damage.

-it reduces the cost of transporting the products to the market.

-To minimize the damage of the final product

-where the finished product is perishable or fragile, the industry should be located near the market to avoid breackages or spoilage. Examples are commodities like milk or bread which usually go bad very quickly and therefore need to be consumed immediately they are produced.

d. Transport and Communication.

Efficient transport is the lifeline of modern businesses. Firms will choose those locations that have well-developed transport facilities such as roads, railway lines, seaports and airports because;

i) They require constant supplies of raw materials
ii) They need to distribute/send out finished products to different destinations
iii) They need to be in contact with other business associates like suppliers, customers and competitors.

Poorly developed transport facilities may lead to;

-High transportation costs especially where raw materials or the finished products are bulky

-Delays in receiving the raw materials and distributing the finished products

-Where communication network is poor, business people will not be able to give or get information in time.

e. Power and Water Supply

Fuel and power are required to run machines and ensures smooth operations for the business.

Water is required for cleaning, cooling and even as a raw material. They are therefore strong factors in determining the location of a firm i.e. firms that require a lot of power and water need to be located where there is adequate supply of these factors.

f. Government policy

The government may formulate policies that may have implications on the location of the firms, especially with regard to physical planning. Such planning may be aimed at checking rural-urban migration, environmental degradation or for strategic concerns.

The government may therefore encourage the development of firms in some areas by offering concessions to industrialists such as;

a) Offering free or cheap land
b) Reduction of taxes
c) Offering subsidies
d) Offering direct financial assistance
e) Improvement of infrastructure

Other factors;

Proximity to source of credit; Some firms that need credit to finance their operations from time to time might require locating near a reliable source for such funds

Availability of security services; This is an important consideration when deciding where a firm will be located as this has implications in almost all factors of production. Firms will tend to avoid locations that do not have adequate security.

Social amenities; Some firms take into account various activities and institutions that will benefit their employees. Such will include hospitals, schools, social halls or studios.

Availability for ample room for expansion; Businesses will tend to prefer locations that can provide ample room for expansion in future. This will eliminate the need for relocation when the firm experiences expansion

Climate; This is an important factor for agro-based businesses (such as floriculture, horticulture, dairy farming e.t.c) which have to seek locations with suitable climatic conditions

Localisation and delocalization of firms.

LOCALISATION OF FIRMS

Localisation of firms means the concentration of similar firms in one particular area/region.

Subsidiary industries usually develop around the main industries, either to use the by-products of the main industries or to supply them with component parts.

The factors which encourage localization of firms include;

i) A well developed infrastructure in an area which attracts firms into that area
ii) Availability of large population which may provide both labour and market
iii) Interdependence among various firms in areas such as training of personnel
iv) Government policy requiring firms to be located in a certain area
v) Availability of raw materials in a certain area
vi) Availability of ancillary services such as banking, insurance and warehousing

Advantages of localization

Service industries/Ancillary services; It encourages the establishment of support business enterprises e.g. if many firms are located in one region, institutions such as banks, insurance companies and distributors are likely to set up businesses in the area to offer services required

Creation of pool of labour;When industries are concentrated in one area, people tend to migrate to that region in search of employment thus encouraging creation of a pool of labour force. This enables firms to meet their labour force requirements.

Creation of subsidiary industries;Localised firms are likely to attract others which use the finished products of the established firms as raw materials or selling raw materials to the existing firms.

Disposal of waste; Localised firms are able to easily dispose off their waste by either selling them to other firms for recycling or by jointly undertaking waste disposal projects.

Creation of employment; It encourages creation of employment opportunities in the region (it creates interests in the type of labour required thereby leading to creation of employment opportunities.

Development of infrastructure; Concentration of firms in one area encourages development of the necessary infrastructure such as water systems, roads, communication network, health and education facilities in the region

Economies of scale; Firms can combine to employ benefits of large scale production for the benefits of consumers.

Reduction in costs; Firms that depend on each other for inputs or disposal of outputs are able to save on transport costs when they are located near each other.

<u>Disadvantages of localization</u>

Adverse environmental problems; Concentration of firms in one region may have a negative impact on environment in that region e.g. emissions from factories may cause both air and water pollution; there may also be noise pollution and poor dispasal of refuse.

Unbalanced regional development; Localisation of firms may lead to regional imbalance in development. For instance, areas of industrial concentration tend to enjoy provision of social amenities in terms of roads, schools, hospitals and other facilities while other regions suffer. This may cause dissatisfaction among the citizens and disturb national cohesion and unity.

Rural-urban migration;Localisation of industries contributes to rural-urban migration. People migrate from rural to urban regions in search of employment and better living conditions. Such movements may cause;

i) Open unemployment in towns while in rural areas they may cause labour deficiency
ii) Increased population in the areas of industrial concentration sparking a series of problems such as congestion, increased rate of crime, poor living conditions, spread of diseases e.g. HIV and housing problems.

Possible massive unemployment; A fall in demand of products produced by localized firms would result into a widespread unemployment in the affected area.

Strategic reasons; The concentration of firms in one area is risky for a country especially in times of war or terrorism activities as such are easy targets for attack. This may destroy the country's industrial base/capability which may take many years to rebuild.

Dependence; Localisation of firms in one area creates an over-dependence on the products of a single industry. In case of a calamity, the supply of the product from the firms may be disrupted, resulting in serious shortages.

Delocalization of firms

Delocalization refers to establishment of firms in different parts of the country as opposed to localization where firms are concentrated in one area.

Delocalization is usually a deliberate government policy of encouraging establishment of firms in various parts of the country, and is applicable under the following circumstances;

-where there is need to curb migration to certain towns

-Due to need to reduce the rate of urban unemployment

-In order to achieve balanced economic development

-As a measure of reducing pollution and social evils in certain urban areas.

Advantages of delocalization

Employment creation in many parts of the country; it provides employment opportunities to people living in rural areas thereby improving the peoples living standards and reducing rural-urban migration.

Balanced economic development/balanced regional development; economic development is initiated for many, if not all parts of the country. This promotes national cohesion and unity; and also reduces rural-urban migration.

Market for raw materials; delocalisation creates market for locally produced raw materials thereby creating employment and earning producers income.

Urbanization; This accelerates the rate of urbanizing in many parts of the country, especially to the rural areas.

Service delivery to rural areas/Development of social amenities; It encourages the growth of both social amenities such as hospitals, schools and security firms and infrastructure.

Reduces the effects caused by occurrence of war, terrorism attacks or earthquakes.

Disadvantages

a) **Difficulty of attracting requisite personnel;** This is mainly in the remote or rural areas where the delocalisation may be done. These areas do not usually have the comfort of social amenities of the urban areas, hence are less appealing to highly qualified personnel.
b) **Difficulty of accessing certain assential services;** These are services that may not be in the rural areas where delocalisation is done e.g. banks, insurance co's e.t.c
c) **Spread of pollution, congestion and social evils;** These vices spread to various parts of the country.
d) **Tax burden;** The incentives which are provided by the government to promote smooth relocation are expensive and are an extra burden to the tax payer.
e) **Security;** This maybe a problem in some areas.
f) **Substandard goods;** Continued protection from foreign competition by the government may make the firm to continue producing substandard products.

ECONOMIES OF SCALE

Economies of scale are the benefits the firm or industry derives from expanding its scale of production/the advantages of operating on large scale.

There are two types of economies of scale;

i) *Internal economies of scale*
ii) *External economies of scale*

i) Internal economies of scale

These are advantages that accrue to a single firm as its production increases, independent of what happens in the other firms in the industry.

Internal economies of scale result from an increase in the level of output and cannot be realized unless output increases.

The internal economies of scale may be achieved by a single plant of the firm or they may arise from an increase in the number of plants.

The internal economies of scale include;

i) Marketing economies (Buying and selling economies)

These are the benefits which a firm derives from large purchases of inputs or factors of production due to the discounts offered in the process e.g. trade and quantity discounts

The firms may also incur less cost per unit in transportation of the goods bought

Selling economies of scale arise from the distribution and sale of the finished product as the scale of production increases, i.e it is likely to incur less cost per unit in areas such as advertising, distribution e.t.c

ii) **Financial economies;** As a firm grows, its assets also increase. These assets can be used as security to borrow money/loan from financial institutions at low interest rates.
Large firms can also raise more funds through selling and buying of shares and debentures.

iii) **Risk bearing economies;** Large firms can reduce risks involved in the market failure through diversification of products or markets.
Diversification of markets or products can be done so that;

a) Failure of one product is offset by the success of other products
b) A failure of a product in one part of the market may be offset by the success of the same product in another part of the market
-Large scale firms are also able to obtain supplies from alternative sources so that failure in one does not significantly affect the activities of the firm.

iv) Managerial economies/staff economies

Large firms are able to hire/employ specialized staff and management. This increases the firms efficiency and productivity i.e.

a) The staff is able to make viable decisions that can go along way in increasing the firms output.
b) The firm/management is also able to put in place better organizational structures which allow for departmentalization and subsequent division of labour.Division of labour leads to specialization and hence the overall increase in the firms output.
-the costs of hiring/employing the specialized staff/management are spread over a large number of units of output of variable cost of production.Thus,the cost of labour is minimized when production increases leading to increased profits.

v) Technical economies;

These are benefits that accrue to a firm from the use of specialized labour and machinery. Large firms have access to large capital which they utilize to obtain those machines and hire the specialized labour.The machines use the latest technology and are put to full use, making the firm production more efficient i.e. cost of the machines and labour are spread over many units of output hence less costly but giving higher profits.

vi) Research economies;

Large firms can afford to carry out research into better methods of production and marketing.(Research is necessary because of the increased competition in the business world today) This improves the quality of the products and increases the sales and profits made by the firm.

vii) **Staff welfare economies;**

Large firms can easily provide social amenities to their employees including recreations, housing, education, canteens and wide range of allowances. These amenities work as incentives to boost the morale of the employees to work harder and increase the quality and quantity of output. This leads to higher sales and profits.

viii) **Inventory economies**

A large sized firm can establish warehouses to stock raw materials and therefore enjoy large stocks of raw materials for use when the raw materials are in short supply.Thus, the firm can avoid production stoppages that can be occasioned by shortages of the raw materials. The suppliers of such material may be sold at a higher price to realize profit.

External economies of scale;

External economies of scale are those benefits which accrue to a firm as a result of growth of the whole industry. They are realized by a firm due to its location near other firms. They include;

- **a)** **Easier access to labour;** Where many firms are located in one area a pool of labour of various skills is usually available. Therefore firms relocating to the area find it easy to obtain.
- **b)** **Improved/efficient infrastructure;** Usually where many firms are located, infrastructure would be highly developed e.g. roads, power, water and communication facilities. Firms relocating in that area thus enjoy the services of infrastructure already in place.
- **c)** Firms may be able to dispose off their waste product easily
- **d)** **Ready** market may be available from the surrounding firms
- **e)** Readily available services such as banking, insurance and medical care
- **f)** Adequate supply of power due to large volume of consumption e.t.c

Diseconomies of scale

A firm cannot continue to expand indefinitely or without a limit.As a firm grows or industry expands, the benefits the firm can reap or get from such growth or expansion have a limit.

Any further expansion in the scale of production beyond the limit will actually create negative which would increase the cost of production.

The negative effects to a firm due to its size or scale of production are referred to as ***diseconomies of scale.***

Diseconomies of scale are therefore the problems a firm experiences due to expansion.

Sources of diseconomies of scale

Diseconomies of scale may arise from;

a) Managerial functions which become increasingly difficult to perform as the firm expands. Communication and consultations take more time than before.
b) Changing consumer tastes which may not be fulfilled immediately because decision-making may take too long.
c) Increase in the costs of transporting raw materials, components and finished products.
d) Labour unrest or disputes and lack of commitment from the employees because they are not involved in decision making
e) Stoppage of production process when disputes arise since all production stages are interdependent and labour specialized.
f) Lack of adequate finances for further expansion of the firm.

There are two forms of diseconomies of scale fiz internal diseconomies and external diseconomies of scale.

Internal diseconomies of scale

These are the problems a firm experiences as a result of large scale production due to its persistant growth. They include;

i) **Managerial diseconomies of scale**

These are the losses which may arise due to the failure of management to supervise and control the operations properly. This may be because the firm is large resulting into;

a) Difficulties in controlling and coordinating the departments leading to laxity among employees.
b) Difficult in decision making and communication and co-ordination between management and workers. Delays in decision making means lost opportunities.
c) Impersonal relationship between management and workers, and staff problems not easily established which could lead to low morale, disputes, unrests/skills.
d) An increase in management tasks leading to increase in number and impact of risks i.e. any error in judgement on the part of management may lead to big losses.

ii) **Marketing diseconomies of scale**

These are losses which may arise due to changes in consumer tastes. These may be as a result of;

a) A change in tastes leading to fall in demand for the firms products. A large firm may find it difficult to immediately adjust to the changes in the tastes of consumers, hence it will experience fall in its scale.
b) An increase in the scale of production, which leads to higher demand for factor of production such as labour, raw materials and capital. This will result into higher prices for them. This will push up the prices of the goods and services produced, which will cause a fall in sales.

iii) **High overhead costs**

When the output of a firm increases beyond a certain limit, some factors may set in to increase the average costs.e.g the overhead costs incurred in production and marketing activities may increase. This is because firms may intensify their promotional campaign, incur heavy transport expenses and be forced to offer generous discounts in an effort to attract more clients. All these are factors that may increase overheads without any corresponding increase in real benefits to the firm.

iv) **Financial diseconomies of scale**

These are losses which may arise due to a firm's inability to acquire adequate finances for its expansion. This will prevent the firm from expanding further thereby limiting its capacity to increase the volume of its output.

External diseconomies of scale

These are demerits that affirm experiences as a result of growth of the entire industry. These include;

-scramble for raw materials

-inavailability of land for expansion

-scramble for available labour

-competition for available market

-easy targets especially in times of war.

Existence of small firms in an economy

As the firm grows in size, its scale of production increases.However, many firms remain small even though they face stiff competition from larger firms. Some of the reasons for existence of small scale firms include;

a) **Size of the market**

Large scale production can only be sustained by a high demand for a product. If the demand for a product is low, it may not be advisable for a firm to produce on a large scale, hence it will remain small.

b) **Nature of the product;**

The nature of the product sometimes makes it impossible to produce in large quantities e.g. personal services e.g. hairdressing, painting or nursing can only be provided by an individual or a small firm.

c) **Simplicity of organization**

Small firms have the considerable advantage of simplicity in organization. They avoid bureaucracy, wastage and managerial complexity associated with large scale organizations.

Where a firm intends to take advantage of simplicity, the proprietor may maintain its small firm.

d) **Flexibility of small firms**

Small firms are flexible i.e. one can easily switch from one business to another where an owner of a business wishes to maintain flexibility so as to take advantage of any new opportunity, he/she may have to maintain a small firm.

e) **Quick decision making**

In a situation where proprietors want to avoid delay in decision-making, they may opt to maintain a small business as this would involve less consultation.

f) **Belief that a small firm is more manageable**

Many small businesses have the potential of expansion, yet their owners prefer to have them remain small believing that big businesses are difficult to run.

g) **Rising costs of production**

In situations where production costs rise too fast, such that diseconomies of scale set is very early, the firm has to remain small.

h) **Need to retain control**

In order to retain control and independence, the owners of the firm may wish to keep it small.

i) **Legal constraints/Government policy**

In some situations, the laws may restrict the growth of a firm. In such circumstances the existing firms remain small.

j) **Small capital requirements**

As opposed to large scale firms, small firms require little amounts of capital to start and operate.

<u>Implication of production activities on environmental and community health</u>

As production activities take place in a given area, the environment and the health of the community around may be adversely affected by these activities. Some of these effects include;

a) **Air pollution**

This is caused by waste which is discharged into the atmosphere leading to contamination of the air. Such waste may be in funs of industrial emissions and toxic chemicals from the firms. These pollutants cause air-borne diseases. Acid rain due to such emission may also affect plants.