

MERRYLAND HIGH SCHOOLS ENTEBBE

KIGUNGU AND KATABI

S6 TERM ONE 2020 HOLIDAY WORK

ECONOMICS

Topic 7: DEVELOPMENT PROCESS AND THE CHOICE OF DEVELOPMENT STRATEGY:

Sub- Topic 1: Agriculture versus Industrial Development Strategies:

Development process refers to ways of raising the standards of living of the people in a country by increasing incomes, producing basic needs, increasing employment opportunities etc.

(Economic) Development strategy refers to the broad policy guideline which a country takes on and follows in the formulation and execution of its policies aimed at attaining specified development goals and objectives.

AGRICULTURAL DEVELOPMENT STRATEGY: This is a broad policy guideline a country takes on and follows in formulation and execution of its policies aimed at attaining specified goals and objectives of agricultural development.

Objectives of agricultural development strategy

- To facilitate growth and development of agro-based industries.
- To increase income per capita of farmers.
- To increase labour productivity in the agricultural sector.
- To adopt modern methods of agricultural production.
- To improve on quality and quantity of agricultural output.
- To diversify agricultural production mainly for export market.
- To increase agricultural contribution to gross domestic product or national income

INDUSTRIAL DEVELOPMENT STRATEGY: This is a broad policy guideline a country takes on and follows in formulation and execution of its policies aimed at attaining specified goals and objectives of industrial development.

Objectives of industrial development strategy:

- To increase industrial contribution to gross domestic product or national income.
- To increase employment level in the industrial sector.

- To ensure optimum exploitation of available valuable resources.
- To improve country's balance of payments by commodities meant for export.
- To save developing countries from effects of price fluctuations by processing agricultural and mineral resources.

Merits of agricultural development strategy:

- It leads to creation of more employment opportunities for both skilled and unskilled labour as it is labour intensive. Developing agriculture encourages development of many activities which results creation many job opportunities..
- It leads to creation of wide source of food to the growing population. Agriculture is the main source of food and developing it helps in saving developing countries money that would have been used to import food for the growing population.
- It leads to generation of more foreign exchange to the country through exportation of agricultural commodities. Agriculture provides the bulk of exports to the international markets, therefore developing it increase the volume and revenue from exports for developing countries.
- It ensures equitable income distribution since it is basically labour intensive. Expanding agriculture helps to offer very people a source of income; this is because it is widespread and employs very people.
- It is relatively cheaper to undertake than industrial development strategy. This is because the costs of its inputs are far lower than for the industrial and tertiary sectors.
- It leads to provision of raw materials to agro-based industries. Expanding the agricultural sector ensures constant supply of raw materials domestically to the agro-based industries; this saves the foreign exchange that would have been used to import them.
- It leads to generation of revenue to the government through taxation of the agricultural products and the incomes earned by the people in sector.
- It leads to increased supply of surplus labour which can be used in other sectors. In the long run as the sector develops, it requires less labour since it now turns to be more capital intensive; therefore the excess labour is absorbed in other sectors.
- It encourages development of infrastructure especially roads connecting producing areas to marketing centers. Developing the agricultural sector compels the government to develop infrastructure such as roads, railways facilities in order ease the transportation of agricultural inputs to the farms and the agricultural produce to the market.
- It leads to balanced regional development as it caters for all regions of a given country. This is because agricultural activities are widespread in the different parts of the country which enables the different regions to grow more or less at the same pace.
- It leads to creation of a wider market to industrial sector. The expansion of the agricultural sector helps to provide market to industrial sector through providing income to the people in the agricultural sector and even purchasing industrial output as inputs for the agricultural.
- It has quicker returns. The returns from agriculture are quicker than those of the industrial sector due to the fact that when crops are planted they take a shorter period to be sold and farmers earn returns. For the industrial sector more time is required to set up the industries and sometimes it takes years for the entrepreneurs to start earning profits.

Demerits of agricultural development strategy:

- It generates low tax revenue to the government. The low domestic and international market prices mean low incomes of the people which in turn mean that the government cannot collect much revenue from its citizens through direct taxes.
- It is highly subjected to diminishing returns. Agriculture is susceptible/vulnerable to diminishing returns, implying that as the population grows there is a likelihood of additional output to continue falling due to overutilization of land.
- It leads to seasonal and disguised unemployment. This is because agriculture does not employ people throughout the year since it heavily relies on natural factors. This results into seasonal unemployment. In addition as the population grows, the available land is utilised by more and more people thus resulting into disguised unemployment.
- It is highly subjected to price and income instabilities. This is because agricultural activities heavily rely on natural factors which are sometimes unfavourable and this discourages investment in agriculture.
- It increases external dependence. This is because of the inadequate public revenue from the agricultural sector, inadequate skilled labour, limited technology which forces the country to rely on other countries for such resources for her survival.
- It may perpetuate unfavourable terms of trade. Relying on agriculture means continuing to depend on low priced exports and expensive imports.
- It may perpetuate balance of payments problem/deficit. Relying on agriculture means unending balance of payments deficit because of low volume and low prices of agricultural exports, which results into low export revenue and yet such countries have to continue importing high volumes of expensive manufactured goods.

MERITS OF INDUSTRIAL DEVELOPMENT STRATEGY:

- It creates more employment opportunities in the long run. Expansion of the industrial sector creates employment opportunities both directly and indirectly. Directly people are employed in activities of the industrial sector and indirectly people are employed through forward and backward linkages.
- Provides wider source of revenue to the government. Industrialisation widens the tax base by availing more goods and firms to tax. As the industrial sector grows the government is able to collect higher levels of revenue since prices of industrial products are higher and more stable compared to those of agricultural products.
- It improves the balance of payments position. Industrialisation reduces the need for imported manufactured goods, which reduces foreign exchange expenditure on such goods, and at the same time especially in the long run industrialisation helps the country to export manufactured goods whose value added increases the prices of such products.
- It encourages technological development. The competition that exists in the industrial sector stimulates constant innovations so as to improve on the product and methods of production. This in turn helps to improve the technology used and thus helps the economy to acquire modern techniques of production.
- It encourages infrastructural development. Industrial development compels the government to develop infrastructure such as roads, railways to ease the movement of raw materials to the industrial sites and the finished products to the market.

- Reduces economic dependence. Industrialisation leads to production of the formerly imported industrial goods thus reduced importation of industrial goods. At the same time it leads to diversified economic activities which widens the sources of public revenue internally and thus reduces reliance on external financial resources.
- Improves terms of trade. Industrialisation helps to add value to the products which leads to increase in prices of exports hence improving the terms of trade of the country.
- Provides market to other sectors due to its linkages. Industrialisation provides market for the products from the agricultural sector(backward linkage), forward linkage is also created through encouraging firms that use their output and those that market and distribute the industrial output.
- It leads to structural transformation of the economy. Industrialisation helps the economy to shift from being an agrarian rural based subsistence economy to a modern urban market based economy.
- Leads to higher and more stable prices. The prices of the industrial output are higher and more stable than those of agriculture mainly because there is value added and it is possible to control supply to match demand.
- It encourages development of skills. Industries require skilled labour and this prompts people to acquire such skills as a means of getting the highly paying jobs in the industrial and tertiary sectors. In addition as a way of improving on their employees industries tend to carry out specialised training.

DEMERITS OF INDUSTRIAL DEVELOPMENT STRATEGY:

- It is expensive. The setting of up of industries is far more expensive than expanding agriculture, yet developing countries are poor and do not have the required capital to set up the industries.
- It encourages external economic dependence. Developing the industrial sector makes the developing economies more dependants because they have to rely on other countries to finance the setting up of industries and necessary infrastructure.
- It leads to high social costs. Industrialisation is associated with social costs that arise in the process of production, e.g. air and water pollution.
- It encourages rural urban migration and its associated evils. This is because most industries are urban based which attracts very many people to move to urban centers with hope of acquiring better jobs and enjoying better lives, however most of such people fail to get jobs and end up creating slums and increasing crime rate in the urban areas.
- It worsens the problem of income inequality. This is due to the fact that it highly pays a small section of the population leaving the majority of the people in sectors earning far lower incomes.
- It leads to over exploitation of resources. The industrialists overexploit the natural resources to produce more goods and earn more profits, this leads to quick depletion of such resources.
- It causes regional imbalance in development. Industries are usually concentrated in a few areas which favour their locations and such areas tend to be far more developed than the rest of the country.
- Leads to low employment creation especially in the short run. Modern industries essentially mostly employ capital intensive techniques of production, which reduces the level of employment created since most of the work is done by machines.

- It leads to low returns/ returns are not immediate. The returns from industry are not immediate; this is due to the high cost of setting up industries and the long time taken to set them up.

AGRICULTURAL MODERNISATION:

Agricultural modernisation refers to the **changing** of the agriculture sector from subsistence production to commercialised high yielding sector.

OR:

The policy of increasing the output and incomes of agriculture sector through measures such as mechanisation/use of better production techniques, use of improved breed.

METHODS OF AGRICULTURAL MODERNISATION:

- Rehabilitation and extension of infrastructure i.e. rural feeder road development. This eases the movement of agricultural produce to the market.
- Land reforms. Land reforms are intended to improve the land tenure system in order to make land more accessible to farmers.
- Research / use of scientific methods for example at Kawanda research station, Namulonge research station and Kabanyoro. This is intended to improve breeds of animals and crops thereby increasing agricultural productivity.
- Provision of farm inputs to farmers at subsidized prices in order to reduce costs of production.
- Diversification of agriculture. This is intended to reduce effect of price fluctuations which discourage farmers from producing.
- Mechanisation of agriculture. This is intended to reduce the amount of labour input necessary to produce a given level of output.
- Industrialisation within agricultural sector. This is intended to add value to primary products.
- Ensuring political stability. This is intended to instill confidence among investors in agricultural activity and increase output at all times.
- Training manpower. This is intended to help in carrying out extension services and setting up of demonstration farms.
- Irrigation farming. This is intended to reduce dependence on nature in the agricultural sector. Irrigation involves increasing the water supply, draining swampy land and regulating quantity and quality of water flow.
- Provision of credit facilities. This is intended to enable farmers buy farm inputs and implements.
- Development of the co-operative movement, this eases the joint marketing of their produce, buying agricultural inputs at subsidised prices due to bulk purchase, improves the bargaining power of the farmers.

REASONS FOR AGRICULTURAL MODERNISATION:

- **To increase output hence economic growth.** This is achieved because of adoption of modern technology such as irrigation and mechanisation. These result into increased

volume of output in the agricultural sector since machines increase the acreage of land under cultivation.

- **To create employment opportunities/to minimise seasonal unemployment.** This is because agricultural modernisation reduces reliance on nature and thus ensures production throughout the year which reduces seasonal unemployment.
- **To reduce income inequality.** This is because agricultural modernisation leads to increased agricultural production and diversification within the sector all of which widens employment opportunities and thus increased earnings for the people.
- **To reduce dependence on imports/ few economic activities.** Agricultural modernisation leads to increased agricultural output which reduces agricultural imports and at the same time it widens economic activities within the sector thus reducing dependence on a few activities and its negative effects.
- **To provide more revenue to the government.** Modernisation of agricultural leads to increased agricultural output and incomes of the farmers on which the government imposes the taxes.
- **To improve terms trade.** Agricultural modernisation leads to improved quality of agricultural exports due to industrialisation within the sector, such products are command higher prices on the world market and thus
- **To stabilise/ increase producer's.** This is due to introduction of irrigation farming which ensures production throughout the year and ensures steady supply and thus minimise price fluctuations of prices such products.
- **To promote food security and ensure a healthy population.** Modernisation of agriculture leads to increased production of a variety of agricultural output and thus ensures steady supply of food requirements for the country.
- **To promote innovations and inventions/ technological development/transfer.** Modernisation of agriculture creates competition among the commercial farmers, this prompts them to invest in research and thus come up with better methods of production to produce better quality output and earn more profits.
- **To control/minimise/solve structural inflation.** Modernisation of agriculture involves adoption of irrigation in farming which ensures supply of agricultural output throughout the year and this helps to minimise shortages of such products arising out of unfavourable natural factors.
- **To improve B.O.P position/to increase foreign exchange earnings.** Modernisation of agriculture involves increased production of quality agricultural exports which leads to increased foreign exchange earnings and thus improved Balance of Payment Position.
- **To promote in sectoral/regional development/to reduce rural urban migration and its associated effects.** Agricultural modernisation leads to rural transformation and since it is mainly rural based, it leads to balanced regional development.
- **To utilise idle resources.** Agricultural modernisation involves large scale production due mechanisation in the sector, this leads increased utilisation of the idle resources such as land and labour.
- **To widen consumer choices.** This is due to production of a wide variety of agricultural products resulting from agricultural diversification.
- **To promote infrastructural development.** Modernisation of agriculture compels the government to improve infrastructure such roads, railway system so as to ease the

movement of agricultural inputs to the farms as well transporting agricultural produce to the market.

- **To promote industrial development/to sectoral linkages.** Modernisation of agriculture involves large scale production due to mechanisation; this ensures increased supply of raw materials to the agro based industries.
- **To improve/increase labour skills.** Modernisation of agriculture requires employment of skilled, this compels people to train and acquire the necessary skills so as to be able to acquire jobs.
- **To promote entrepreneurship skills.** More people are encouraged to invest in the agricultural sector due to the increased profits enjoyed resulting from improved quality of agricultural output because of mechanisation in the sector.
- **To improve quality of output.** Modernisation of agriculture involves the adoption of modern farming methods such as use of machines, setting up of agro-processing industries. These lead to improved quality of agricultural output.

MERITS OF AGRICULTURAL MODERNISATION:

- It leads to creation of more employment opportunities in agricultural sector.
- It reduces heavy dependence on nature through irrigation farming.
- It increases producers' incomes thereby re
- It increases on the level of tax revenue through taxing the products and incomes of farmers.
- It leads to increased level of output due to large scale production hence economic growth.
- It leads to increased foreign exchange earnings due to increased volume of agricultural exports.
- It facilitates growth of commercial/monetary sector by reducing subsistence output.
- It leads to development of industrial sector through set up of agro-based industries.
- It increases on food security hence ensuring a healthy population.
- It leads to development of infrastructure for example rural feeder roads thereby encouraging effective movement of inputs and agricultural products.
- It controls price fluctuations through agricultural diversification hence improving incomes of farmers.
- It attracts training of available manpower which helps in carrying out extension services and setting up of demonstration farms.

Demerits of agricultural modernisation in a country:

- It is very expensive especially where a country is capital deficient.
- It causes strain on meager foreign exchange due to massive importation of capital goods, expensive fertilizers and farm implements.
- It leads to unemployment due to specialisation and wide application of machinery.
- It worsens income inequalities as it favours a few farmers who have access to capital and large plots of land.

FACTORS LIMITING AGRICULTURAL MODERNISATION:

- **Under developed infrastructure.** This limits agricultural modernisation due the difficult to transport agricultural inputs to the farms and the agricultural products to the market.
- **Unfavourable natural/ unpredictable natural factors/ natural hazards.** The natural calamities such as prolonged drought and floods tend to disrupt production largely because of the low level of technology used which does not give an opportunity to tame nature, such as the inability to use irrigation methods to overcome drought.
- **Limited labour skills.** This leads to low labour efficiency and productivity discouraging commercial production due to low levels of profits.
- **Small market size.** This discourage large-scale commercialised agriculture since farmers find difficulty in marketing their products and for fear of making losses by remaining with unsold output.
- **Unfavourable political climate/atmosphere.** This discourages investment in the agricultural sector; this is due to the fear of loss of lives and property by the farmers.
- **Limited capital/funds.** Many farmers do not have adequate capital, which prevents them from engaging in commercial farming because of the inability to fund expansion of their farming activities.
- **Limited entrepreneurial ability.** This limits investment in the agricultural sector since people are unable to undertake risks and mobilise
- **Low/fluctuating prices of agricultural products.** The prices of primary agricultural products are highly unstable. This results into fluctuations in farmers' income, discourages large-scale investment in agriculture
- **Conservatism of most farmers.** This is the tendency of farmers to stick to the traditional backward methods of production that deter growth and development of the sector.
- **Poor techniques of production.** This leads to inefficiency in production leading to low profit levels and thus discouraging commercial production.
- **Unfavourable/rugged topography.** The hilly areas discourage mechanisation of agriculture because machines cannot be used on such landscape.
- **Low level of accountability.** Some government officials misuse funds meant for agricultural development such as research like in organisation like NAADS and NARO.
- **Poor land tenure system.** This limits accessibility to land by potential farmers, discouraging large scale production.

AGRICULTURAL MECHANISATION STRATEGY:

Agricultural mechanization refers to extensive use of machinery in farm production activities thereby reducing the amount of labour input necessary to produce a given level of output.

Methods of agricultural mechanisation

- Land reforms to increase agricultural productivity.
- Provision of credit facilities.
- Introduction and use of modern tractors.
- Adoption of machines for planting.
- Adoption of harvesters.
- Use of ploughs.
- Use of irrigation practices.

Merits of agricultural mechanization in a country

- It increases agricultural output and economic growth. This is because it promotes large scale farming.
- It reduces average costs of production. This is by substituting machinery for increasingly expensive regular labour.
- It leads to development of skills of labour through on job training.
- It creates employment opportunities for labour at various stages of production for example mechanics, drivers, and managers.
- It leads to production of better quality products due to use of irrigation practices, better spacing and use of fertilizers.
- It facilitates research since it is done on large scale hence improvement in quality of products.

Demerits of agricultural mechanisation in a country:

- It is very expensive to carry out due to high import costs of machinery and maintenance.
- It leads to technological unemployment due to extensive use of machinery in farming.
- It promotes income inequalities as it benefits only a few farmers.
- It leads to creation of landless class of people due to opening up of large scale farms.
- It leads to poor quality output due to use of mechanical harvesting especially in tea growing.

Factors limiting agricultural mechanisation in a country

- Limited skilled manpower. This makes it difficult to run and maintain the machines.
- Underdeveloped infrastructure. Underdeveloped infrastructure in form of feeder roads discourages production due to increased costs.
- Poor land tenure system. Many farmers own small pieces of due land fragmentation which makes difficult to apply machines such as tractors.
- Small domestic and foreign markets for agricultural produce. These discourage farmers from producing because they are left with a lot of unsold output hence losses.
- Limited capital. This makes it hard for farmers to acquire and maintain farm machinery and also hire skilled personnel thereby limiting agricultural expansion.

- Limited entrepreneurial skills. There are a few entrepreneurs to undertake the initiative to invent and innovate so as to improve the productive capacity of developing countries.
- Conservatism of farmers who are not willing to adopt new techniques of production.
- Unstable agricultural prices. Price fluctuations lead to unstable incomes of farmers' thereby discouraging production.
- It's inapplicable where human judgment is necessary for example in tea picking.
- Unfavourable topography. This limits its applicability especially in hilly areas.
- Limited accountability/corruption by implementing agents.

AGRICULTURAL DIVERSIFICATION STRATEGY:

Agricultural diversification strategy is one which involves introduction and growing of various crops, and rearing of different animals in a country. In a situation where diversification takes place within one sector, it is known as intra-sectoral diversification but where it takes place in many sectors, it is known as inter-sectoral diversification.

Merits of agricultural diversification in a country:

- It leads to creation of more employment opportunities due to many economic activities that take place in agricultural sector.
- It widens consumer's choices due to a variety
- It widens export base of a country hence more foreign exchange earnings.
- It increases tax base as many economic activities are undertaken hence increased government revenue.
- It reduces rural urban migration and its evils as people actively get involved in several agricultural activities.
- It increases country's gross domestic product/e commodities produced.
- It promotes linkages between different sectors of the economy. This is through exchange of products and bi-products, and raw materials between industry and agricultural sector.
- It leads to optimum exploitation and utilization of available resources
- It reduces risks and uncertainties in agricultural sector due to diversified production.
- It overcomes the problems of price fluctuations and its negative effects such as discouraging investment in agriculture.
- It reduces effects of economic dependence on one or a few commodities.
- It ensures fair distribution of income due its wide coverage.
- It leads to development of infrastructure due to increased level of economic activities which compels the government to put up infrastructure so as ease the transportation of the required farm inputs as well as marketing the agricultural produce..
- It helps to solve the problem of structural inflation due to a variety of output produced.

Limitations of agricultural diversification in a country:

- Limited number of marketable commodities for export due to limited diversification.
- High level of concentration on cash crops that takes long to mature than food crops.

- Unfavourable natural factors more so prolonged drought which reduces agricultural yields.
- Limited research funds to come up with better breeds of animal and crop varieties.
- Underdeveloped infrastructure. This makes it hard to transport output to market centers thereby discouraging farmers to diversify in agricultural sector.
- Inadequate labour skills for carrying out various economic activities in agricultural sector.
- Limited domestic and foreign markets for commodities. The domestic market is inadequate due to poverty among nationals leading to low purchasing power while the foreign market is inadequate due to trade restrictions.
- Inadequate farm implements highly needed by farmers due to limited capital.
- Conservatism of farmers which limits adoption of new farming methods in agriculture.

AGRICULTURAL TRANSFORMATION STRATEGY:

Agricultural transformation refers to the **total or complete change** in the existing agricultural structure in form of **changing activities and techniques** of production to increase agricultural production. It involves shifting from peasantry agricultural systems to high yielding commercial agricultural systems.

Agricultural transformation strategy requires the following:

- Larger amounts capital to facilitate mechanization i.e. purchase of heavy machinery like tractors.
- Collective farming whereby people work as a team on large-scale units.
- Extension of public sector into the agricultural sector through large-scale state farms.
- Change of culture and attitudes towards production for the market.
- Movement of people and therefore organization of resettlement schemes.

Merits of agricultural transformation:

- It leads to creation of greater employment opportunities due to large-scale operation.
- It widens export base of a country hence more foreign exchange earnings.
- It increases tax base hence increased government revenue.
- It increases country's gross domestic product/large volumes of product/output.
- It leads to optimum exploitation and utilization of available resources
- It leads to development of infrastructure due to increased level of economic activities.
- It helps to solve the problem of structural inflation due to larger volumes of output.

Demerits of agricultural transformation:

- It is very expensive to carry out due to high import costs of machinery and maintenance.
- It leads to technological unemployment; this is due to heavy use of machines in farming.
- It promotes income inequalities as it benefits only a few farmers.
- It leads to creation of landless class of people due to opening up of large scale farms.
- It leads to socio-political problems due to consolidation of small plots of land into large ones.

ECONOMIC DIVERSIFICATION STRATEGY:

Economic diversification refers to the act or practice of manufacturing a variety of products, investing in a variety of securities, selling a variety of merchandise etc so that a failure in or an economic slump affecting one of them will not be disastrous.

Note: To diversify the economy of a country would mean not to throw all your eggs in one basket. This means that an investor will not rely on one form of investment as fluctuations and crashes in some instances are inevitable.

MERITS OF DIVERSIFICATION OF PRODUCTION:

- It helps to create employment opportunities. This is due to development of a number of economic activities which widen job opportunities.
- It widens consumer's choice. This is because variety of goods and services.
- It increases foreign exchange earnings/ Improves Balance of Payment position. This is because diversification widens the export base of a country and this leads to increased foreign exchange earnings.
- It increases the tax base/ Tax revenue of the country. This is because economic diversification leads to a wide range of products produced from several sectors, and government imposes tax on such products, thus increasing her revenue.
- Ensures balanced regional development and thus reduces rural urban migration and its associated evils. This is because economic diversification leads to development of economic activities both in the rural and urban areas for instance agricultural and industry.
- It increases the country's Gross Domestic growth/Increases output. This is because economic diversification leads to a wide range of economic activities in the different sectors of the economy which leads to overall increase in the total output produced in the country.
- It leads to optimum exploitation and utilisation of resources. Economic diversification leads to production of a wide range of products in different sectors of the economy which necessitates the utilisation of the would be idle resources in the country.
- It promotes linkages between the different sectors of the economy. Economic diversification leads production of a wide range of products in different sectors of the economy, which results into development of other economic activities either to provide raw materials or markets to the already established economic projects.
- It helps to avoid the risks and uncertainties in some sectors for example agriculture. Diversification within the agricultural sector helps to overcome the problem of price fluctuations and its negative effects such as discouraging investment in agriculture.
- It helps to overcome the problem of price fluctuations and its negative effects. This is because of the wide variety of products produced in the different sectors of the economy, which implies that a fall in price of one economic activity can be balanced by increase in price of another economic activity.

- Ensures fair distribution of income. Economic diversification leads to development of a variety of economic activities which avails employment opportunities to many people and thus improve their earnings.
- It helps to solve structural inflation. Economic diversification ensures steady supply of variety products in an economy which enables the economy to reduce/avoid shortages and thus control structural inflation.
- It leads to development of infrastructure. Economic diversification leads to production of a wide range of products in different sectors of the economy, this compels the government to develop infrastructure such roads and railway transport to ease the movement of the necessary inputs to the production units as well enable easy marketing of the products.
- It reduces the effects of dependence on one or few products/ countries. This is because economic diversification enables a country to earn incomes from various economic activities other than relying on one economic activity./product or a few products.

Sub- Topic 2: Labour Intensive versus capital intensive Strategies:

LABOUR INTENSIVE/CAPITAL SAVING/ONE POUND (1£) TECHNOLOGY:

Labour intensive techniques are production techniques that employ relatively more units of labour than other factors of production especially capital.

OR: Methods of production which use relatively more labour than other factors of production especially capital.

MERITS OF USING LABOUR INTENSIVE TECHNOLOGY IN DEVEL OPING COUNTRIES:

- It is cheap and easily afforded due to the abundant supply of labour.
- It is a source of employment since many countries experience high rates of unemployment hence it helps to provide employment to the abundant labour force.
- It helps in reducing income inequality since it employs many people which help them to improve on their earnings thereby helping to control income inequality.
- It facilitates the use of vast rural potentials since the technique is mainly rural based.
- It uses the locally available resources and therefore helps to reduce dependence on other economies.
- It widens the tax base; this is because the government is able to impose taxes on the employed people. Government taxes the wages /salaries earned by the different people in the different sectors of the economy.
- The technology is needed in the agricultural sector where human judgment is paramount.
- There is no need to import expatriates since the techniques are operated by the locally available labour.
- It leads to increased output in the economy because it is easily spread all over the economy.
- The technique requires limited skills and therefore can easily be adopted in developing countries where there is insufficient skilled labour.

- It reduces social costs in form of pollution.
- As more people are employed, income and aggregate demand increase hence encouraging more investment.
- The technology helps to control over- exploitation of resources because a few resources are used at a time.

DISADVANTAGES OF LABOUR INTENSIVE TECHNOLOGY:

- It results into low productivity because it is inefficient.
- It is costly in the long run because the workers have to be fed, given medical care as well as accommodation.
- It leads to production of low quality output because human beings are not as efficient as the machines.
- It results into under utilisation of resources since few resources are exploited at a time due to inefficiency.
- It does not encourage skill development because people who are employed are unskilled and they are not motivated to improve their skills.
- It doesn't encourage technological and development innovations.
- It encourages labour unrest (strikes) as workers demand for higher pay and better conditions of work and this disrupts production.
- It is slow and time consuming.
- It is hard to standardize output using labour intensive techniques of production because human beings are largely inaccurate.

CAPITAL INTENSIVE/LABOUR SAVING/1000£ (ONE THOUSAND POUND)

TECHNOLOGY:

Capital intensive technology is production method that employs relatively more units of capital than other factors of production especially labour.

OR: they are methods of production which employ relatively less labour than other factors of production especially capital.

An illustration of capital intensive and labour intensive technology.

On the diagram above, Point C represents use of capital intensive technology since more units of capital (K_1) are employed than units of labour (L_1)

Point P indicates labour intensive technology since more units of labour are employed than units (L_2) of capital (K_2).

Merits of using capital intensive technology:

- Use of capital intensive technology facilitates resources because machines are faster at work.
- It leads/encourages production of better quality goods because use of machines leads to efficient production and thereby ensuring quality products.
- Use of machines facilitates mass production i.e. larger amounts of goods can be produced in the shortest possible time.
- It minimises/reduces the size of the wage bill that would have been paid to the labourers because it employs very few labourers.
- The use of machines in production promotes labour efficiency and thus labour becomes more productive at work.
- This technology facilitates technological development and technological transfer in developing countries since it necessitates the use of machines.
- It promotes the training/development of the skills of the workers. This is so the workers have to learn how to use the machines.
- The technique facilitates the development of infrastructure in the country such as roads, railways to ease the movement of such machines to where they are needed.
- It minimises industrial unrest (strikes) because a few people are employed and it is not easy for them to rise up to agitate for their rights and also machines do not strike for wages and poor working conditions.
- The use of machines is time saving hence work is done faster as compared to labour.
- It helps to sustain output since machines can be programmed for that effect.

Demerits of capital intensive technology in developing countries:

- The technology is expensive to acquire because the producer needs a lot of capital to acquire such technology and maintain the machines.

- The technique leads to technological unemployment in developing countries since machines replace human labour and yet developing countries have surplus labour yet such technology has low labour absorptive potential.
- Leads to/accelerates income inequalities because producers using such technology earn more income than those using other inferior technologies and also because it employs fewer workers implying that the employer is capable of giving better wages to those few employees.
- It leads to quick depletion of natural resources due to over exploitation of such resources. This is because machines are faster at work.
- It increases social costs in the country in form of pollution because the machines give off fumes and gases which negatively affect the health of human beings.
- Use of machines leads to mass production which is not suitable for a small domestic market where people have a low purchasing power because of poverty hence leading to wastage of resources.
- This technique of production encourages dependence in other economies by the developing countries especially the developed countries where those machines are made.
- It leads to rural urban migration and associated evils because it is mostly used in urban area and therefore it attracts the people from rural areas with the help of getting better paying jobs offered by the firms/industries using such technology, unfortunately majority of such people fail to get jobs leading to open urban unemployment and other evils such as prostitution, robbery etc.

Limitations to the adoption of capital intensive technology in developing countries.

- Limited capital i.e. the capital is not enough to buy the machines as well as maintaining them through repairs or buying spare parts.
- Small market which discourages the investor for setting up enterprises that would employ such technology and this is so because investors fear making losses.
- Poor infrastructure e.g. poor road network which makes it difficult to transport goods to the market and also limits the transportation of machines to different places where they are needed.
- Limited entrepreneurial skills; this makes the management of the technology difficult. limited entrepreneurial ability also implies that there are few people to initiate business which would have used such technology.
- Limited labour skills; to manage the technology and ensuring its proper application.
- Political instability; This discourages potential investors especially those from abroad who would have utilised such technology.
- Poor land tenure system e.g. land fragmentation which makes the use of capital intensive technology uneconomical especially in the agricultural sector.
- Conservation of the people i.e. people resist change from the traditional methods of production and therefore making it difficult to adopt such techniques of production.

Since both labour and capital intensive technologies have disadvantages there is need for developing countries to carry out research and appropriate technology.

Sub-Topic 3: Intermediate versus Appropriate Technology:

INTERMEDIATE TECHNOLOGY:

This refers to the method of production which is neither so advanced nor so primitive for developing countries and using equipments which are efficient in both technical and economic sense, thus it is a technology which is between advanced and primitive technology.

FEATEURES OF INTERMEDIATE TECHNOLOGY:

- It should be technically and economically efficient to maximize output at lowest cost possible.
- It should be able to reduce income inequalities.
- It should be able to use local resources.
- It should encourage inventions and innovations.
- It should be able to employ surplus unskilled labour.

Advantages/merits of intermediate technology

- It improves on labour productivity
- It promotes acquisition of skills.
- It leads to better resource utilisation
- Helps in the creation of employment opportunities especially through self-employment since the technology is affordable by many people.
- It helps in saving foreign exchange because it uses local inputs/raw materials.
- It helps to reduce on dependence on foreign technology.
- Stimulates technological development.
- Reduces income inequalities as a result of creation of more job opportunities.

Demerits of intermediate technology:

- It leads to low productivity because the technology is not very efficient.
- There is limited capacity to create jobs because the technology allows small scale operations.
- It leads to production of poor quality output because the use of this technology is not very efficient.
- It leads to under utilisation of resources because of small scale operations.

Limitations of intermediate technology in developing countries:

- Inadequate capital.
- Political instability rampant in developing countries
- Inadequate skilled labour
- Limited entrepreneurial skills
- Inadequate markets for the technology and the products

APPROPRIATE TECHNOLOGY:

This is the method of production which is socially and economically suitable for a given economy/society.

OR: It's a production method which is in the line development level of an economy.

FEATURES OF APPROPRIATE TECHNOLOGY:

- It should be suitable for available local resources.
- It should be simple and comparatively cheap.
- It should solve local problems of a country i.e. it should be able to create employment opportunities and hence solving the problem of inequalities.
- It should be ecologically sound, in complete harmony and conformity with local environment.

Factors that determine/affect/influence the development of appropriate technology in developing countries :

- **Availability of funds;** Economies that have sufficient funds have undertaken intensive research which has enabled them to come up with appropriate technology, yet those with insufficient funds have failed to carry out research and thereby limiting the development of appropriate technology.
- **Level of skills/training/education;** Economies which have sufficient supply of skilled labour force have been able to carry out intensive research and thereby enabling them to develop appropriate technology suitable for their social, economic conditions yet those economies which do not have sufficient supply of skilled labour force have failed to carry out research and thereby limiting the development of appropriate technology
- **Level of entrepreneurship;** Economies which have adequate supply of entrepreneurs have been able to develop appropriate technology because such entrepreneurs undertake risks in different ventures including development of appropriate technology yet those economies with inadequate supply of entrepreneurs have failed to develop appropriate technology because there are very few people willing to undertake risks in different ventures including development of appropriate technology.
- **Level of innovations and inventions;** High level of innovation and inventions lead to increased research which helps in the development of appropriate technology yet low level of

innovations and inventions leads to limited research and thereby limiting the development of appropriate technology.

- **Degree of external/foreign interference.** High level of foreign interference into development effort of developing countries limits the development of appropriate technology for fear of reducing demand for their products, such countries may do so by limiting funding research projects to the that effect. On the other hand, low level of interference by foreign countries allows developing countries to develop their own technology, for instance such countries may fund research activities and thus enable developing countries to come up with appropriate technology. .
- **Government influence on technological development;** where government injects money in research , it facilitates inventions and innovations which encourages/motivates people to come up with the appropriate technology on the other hand, limited government influence in terms of limited funds released for research hinders inventions and innovations which limits the development of appropriate technology.
- **Availability of market for the technology and the products it produces.** Presence of a big market size for the technology and the products it produces encourages people to be innovative, which enable them to come up with such appropriate technology because the investors are encouraged by the prospects of high profits from such a venture. On other hand limited market for the technology and the products it produces discourages the development of appropriate technology, since investors have no motivating factor to that effect.
- **The cultural factors/degree of conservatism:** In a situation where people are willing to adopt better production techniques encourages faster development of appropriate technology because the presence of market for it. On the other hand, cultural rigidity/ high degree of conservation discourage the development of appropriate technology the investors fear to make losses since people are not willing to purchase and use such technology.
- **Natural factors like topography;** Poor terrain such as hilly areas or valleys discourage the use of machines thereby limiting the development of an appropriate technology since it's cannot easily be used in such hilly areas. On the other hand favourable terrain such as flat areas encourages the use of machines thereby encouraging the development of appropriate technology in such field.

TECHNOLOGICAL DEVELOPMENT AND TECHNOLOGICAL TRANSFER.

TECHNOLOGICAL DEVELOPMENT: This refers to the process of introducing, initiating, and improving the indigenous techniques of production to suit the local, social, economic and environmental needs of a country.

FACTORS INFLUENCE/AFFECT/DETERMINE TECHNOLOGICAL DEVELOPMENT:

- Level of skills/education/training.

- Level of capital for research.
- Level of entrepreneurship.
- Political atmosphere in the country.
- Size of the market for the new technology and new products produced by such technology.
- Degree of conservatism.
- Level of accountability.

Factors limiting technological development in Uganda

- Limited capital
- Limited entrepreneurial ability
- Poor infrastructure
- High degree of conservatism
- High level of corruption/low levels of accountability.
- Small/inadequate market for technology and products.
- Political instability in some parts of the country.

TECHNOLOGICAL TRANSFER;

This is the shifting or movement of new and efficient production techniques from one economy to another mainly from developed economies to less developed/developing countries/economies.

Advantages of technological transfer:

- The technological transfer through multi-national corporations increases competition in the developing countries. This leads to increase in efficiency in resource utilisation and production of better quality products/s services.
- Some of the technology in developed countries is cheap and therefore the developing countries find it easier to import such technology than developing their own technology which is costly.
- Transfer of technology enables developing countries to have access to technical knowledge/skills of entrepreneurship which is highly required in the development process.
- Technology transfer from developed countries is associated with modernity which improves on the efficiency of labour.
- When technology transfer takes the form of foreign direct investment, it enables the country to close the saving investment gap.
- It enables developing countries to increase the level of output, therefore creating more employment opportunities since it operates on a large scale

Demerits of technological transfer:

- It is associated with uneven development because it is mainly urban based which may lead to rural urban migration and its associated evils e.g. open urban unemployment, congestion in towns, prostitution, robbery.
- It usually tends to be capital intensive in nature and not labour intensive and since developing countries have surplus labour, it leads to technological unemployment.
- It discourages local initiative to develop local/appropriate technology. People become reluctant to invest in the development of technology since they can import technology from other countries.
- Dependence on technological transfer through multinational corporations can easily lead to rise and emergence of monopoly firms which may lower competition and efficiency in production.
- Technology transfer promotes dependence on other developed countries for methods of production. This makes the developing countries never to be technologically independent.
- Does not involve developing countries in research work and its development since it is done at the country of origin of such technology making developing countries remain or lag behind in technological skills.
- Technological transfer is associated with loss of revenue to the government. This is due to the fact that, the owners of the technology are sometimes given tax holidays to attract them into the country.
- It leads to capital outflow. This is because a lot of money is spent on spare parts and repairs to maintain such technology.

Limitations of technology transfer:

- Prohibition by patent laws from developed countries.
- Inadequate funds in recipient developing countries to purchase and maintain it.
- Inappropriateness of technology being transferred to developing countries.
- Lack of efficient scientific skills for manning technology transferred.
- Political instabilities.
- High level of conservatism of people in developing countries.
- Protective policies of recipient developing

Sub- Topic 4: Small Scale versus Large Scale Industries:

A small scale industry is one that employs relatively little capital and its output is usually low and mostly produces for the domestic market.

OR:

Small scale industries are those which produce small output, employ small labour force and invest small amount of capital.

Examples of small scale industries include: leather tanning, poultry feeds, wooden and steel furniture industries, maize milling etc.

NB: Small scale industries are sometimes referred to as cottage industries.

Characteristics of small scale industries:

- They **mainly** produce poor/low quality output.
- They **mainly** use labour intensive technology
- They **mainly** utilise local resources
- They **mostly** produce for the domestic market
- They **mostly** occupy small/little space
- They **mainly** use unskilled and semiskilled labour
- They **mainly** produce low output.
- They have **limited** linkages with other industries.
- They are **mainly** privately owned.
- They **mainly** produce consumer goods.
- They **mainly** employ semi-skilled and unskilled labour.
- They are **mainly** located in urban and peri-urban areas.

Merits of Small Scale industries:

- They promote utilisation of local resources that would have remained idle, this is so because they mostly utilise the local resources.
- They promote even distribution of income/ reduce income inequality; this is as a result of increased job opportunities which help to improve their earnings.
- They facilitate industrial development. This is so because when small scale industries are well managed, they grow and become larger industries.
- They provide ground for technological development/technological improvement. This is because produces are constantly innovating which leads to emergence of better methods of production.
- They provide government revenue. This is because government imposes taxes on activities of small scale industries.
- They increase employment opportunities. This is because such industries are mostly labour intensive and thus need people to perform different activities in their factories.
- They provide variety of goods since there are several/many industries which produce different products. This widens the consum
- They enable low income earners to have access to goods. This is because they produce affordable goods.

- They help to save the scarce foreign exchange. This is because of limited importation of raw materials.
- They promote development of infrastructure. The government is compelled to put infrastructure so as to ease the transportation of raw materials to the factories and also finished products to the markets.
- They lead to creation of forward linkages. This is because they provide market for the already existing industries since small scale industries use products as inputs or raw materials.
- They help in promotion of self sufficiency/ Self sustenance. This is due to the increased domestic production of different industrial products and thus reduced dependence on foreign commodities
- They help in acquisition of labour skills. This is a result of people getting involved in different activities of small scale industries.
- They lead to improvement in the balance of payment position. This is as a result of reduced importation of industrial consumer goods, which helps to reduce foreign exchange outflow.

Demerits/ Disadvantages of Small scale industries.

- They lead to production of poor quality goods. This is due to the poor technology used as well as limited labour skills.
- They lead to limited generation of government revenue. This is so because many of such industries dodge paying taxes and at the same time government fears to impose high taxes on such industries.
- They lead to congestion in urban and peri-urban areas. This is because they crowd in particular places; this causes inconveniences to motorists and pedestrians.
- They lead to low output/low economic growth rate. This is so because they operate on small scale and at the same time utilise fewer resources, thus leading to under utilisation of the natural resources.
- They lead to increased social costs i.e. pollution in urban areas. This is because they are mainly urban based. The heavy concentration of such industries results in pollution of the atmosphere, soil and water when such industries emit hazardous materials which cause health risks to urban dwellers.
- They lead to high administrative costs. The central and local governments have to incur high costs in cleaning the areas where such industries are established since they lead to pollution.
- They lead to wastage of resources. This is because of the unnecessary competition and competition and duplication of activities.
- They lead to limited job creation since they operate on small scale basis.

Limitations to development of Small Scale industries:

- Limited entrepreneurial abilities hence production on small scale.
- Poor infrastructure i.e. poor roads, power shortages which increases production costs.

- Limited domestic and foreign markets for the products produced.
- Limited capital due to lack of collateral securities required by banks to access credit facilities.
- Political instabilities.
- Limited basic raw materials required in production of goods and services.

LARGE SCALE INDUSTRIES:

These are industries with large capital investment and produce large quantities of output and in many cases use capital intensive technology.

Characteristics of large Scale Industries:

- They mostly occupy large space.
- They mainly produce high quality products.
- They are mainly located in urban areas.

Advantages of large scale industries:

- They lead to increased employment opportunities because they operate on large scale and therefore recruit many workers
- They increase government revenue. This is so because the government imposes taxes on the different activities and also the profits of those industries i.e. corporation taxes. Government imposes taxes on income of the people employed by these industries.
- They lead to improvement in infrastructure. This is because government is compelled to establish good infrastructure in order to facilitate the running of these industries.
- They lead to production of better quality output. This is so because they mostly use capital intensive technology.
- They lead to increased resource utilisation because more resources are used due to large scale operations.
- They accelerate the rate of economic growth rate/ increased output. This is as a result of increased output of goods and services due to production on large scale.

Demerits of Large Scale Industries.

- They lead to increased social costs such as pollution because the industries give off bad fumes which negatively affect people's health
- They lead to technological unemployment. This is because of the preference of use of capital intensive technology in their activities in order to increase output and quality.
- It is expensive to establish large scale industries. This is because they require a lot of capital to establish.

- They worsen the problem of income inequality. This is so because the owners of such industries generate more income and those employed in those industries are better paid than those in other economic activities.
- They lead to over production. This is due to production on large scale, this leads to resource wastage because all output produced may not be bought.
- It leads to quick depletion of resources. This because of increased demand for the resources so as to increase the supply of goods.

Sub- Topic 5: The role of Foreign Aid in the Economic Development of a country:

Foreign aid is the international transfer of resources/funds in the form of loans or grants or technical assistance, etc. either directly from one government to another (bilateral aid) or indirectly through the vehicle of a multi-lateral assistance agency like world Bank and the International Monetary Fund (Multi-lateral aid).

OR: Foreign Aid is the transfer of resources from one country to another; either directly or indirectly through international agencies.

Features of foreign aid:

- It mainly flows from developed countries to developing countries, which shows high level of dependence.
- It is usually tied to donors by source, project or commodities.
- It usually given at very high interest rates especially if it flows through commercial banks in form of hard loans.
- It is sometimes unproductive especially where it is double tied.

Qualities of good foreign Aid:

- Good aid should be directed in areas where domestic investment is inadequate to bridge the gap.
- Foreign aid should be interest free i.e. i.e. in form of grants that do not burden the developing countries
- It should not undermine the sovereignty/ independence of developing countries but rather promote strong bi-lateral and multi-lateral relationship.
- Good aid in form technology should enable developing countries to develop appropriate technology to suit the needs of the country/society.
- Good aid should enable developing countries to use/exploit their resources e.g. raw materials, existing labour force etc.
- Good aid should not promote the element of neo-colonialism.

Categories of Foreign Aid:

- (a) **Bi-lateral aid:** This refers to direct assistance from one country to another. E.g. China giving assistance to Uganda.

- (b) **Multi-lateral aid:** This is the assistance offered to a country through International aid agencies/multi-national agencies e.g. World Bank, IMF etc.
- (c) **Project or Programme aid:** This is one which requires the recipient country to invest funds to productive sectors or specific projects.
- (d) **Tied Aid:** This aid which requires the recipient country to abide by the conditions set by the donor country e.g.
- The recipient country is required to purchase goods from the donor country using the grant/funds acquired.
 - Aid given to finance specific projects named by the donor
 - The recipient country is required to implement social, economic and political conditions dictated by the donor countries before the aid can be given.
- (e) **Untied Aid:** This is aid given to a recipient country without any conditions set by the donor country i.e. the recipient country can use the aid she has received according to her wish without any restrictions from the donor country.

Forms of foreign / Types of foreign aid in developing countries:

- **Technical aid/assistance.** Technical assistance is aid in form of technical personnel/experts to manage key institutions in recipient countries. It also includes of scholarship offered to citizens of the recipient country to be trained in different fields and in some case they receive the training from abroad.
- **Technological aid/assistance.** This aid is given in form of advanced technology to use in different sectors of the economy so as to achieve faster rate of economic growth and development.
- **Relief/Humanitarian assistance.** Humanitarian assistance is aid usually advanced to countries experiencing food shortages due to wars, famine and victims of other natural catastrophes such as earthquakes, landslides etc. In this case donor agencies include; World health Organisations, World Food Program, Red Cross.
- **Military aid.** Military aid involves provision of military training and military hardware to restore peace and stability of a recipient country.
- **Political aid:** This is concerned with sending to recipient countries highly skilled politicians to help in having dialogue among conflicting parties/politicians so as to have amicable solutions to the conflicts.

THE IMPACT OF FOREIGN AID IN THE DEVELOPMENT OF AN ECONOMY:

The positive impact:

- It **helps** in filling the savings- investment gap by supplementing the domestic savings. The saving- saving investment gap is the difference between the funds needed for

investment and funds raised from savings. Developing countries are characterised by low incomes and savings. Acquisition of foreign aid helps to supplement their savings.

- It **fills** the foreign gap by getting foreign exchange to finance the country's exp Developing countries earn very little from their primary exports compared to what they need for their expensive imports. Foreign aid helps in closing this gap.
- It **fills** the skilled manpower gap/ Enables the country to get skilled manpower from other countries. The skilled manpower gap is the difference between manpower available and what is required for development. Skilled manpower from developed countries helps in closing this gap which wide in developing countries.
- It **closes** the technological gap/Leads to technological transfer. Foreign aid in form of technology enables developing countries to have access to better technology which is lacking or insufficient in developing countries.
- It **fills** government-revenue expenditure gap/source of government revenue through borrowing, grants/ It helps in closing government revenue expenditure gap/budgetary gap. Normally expenditure exceeds expected revenue, thus the governments in developing countries are able to fill this gap through foreign aid.
- It **helps** in alleviating the effects of natural disasters/catastrophes. Through aid in form relief/humanitarian aid developing countries are able to overcome the effects of natural disasters like floods, droughts and hence safeguarding people from starvation or living under very miserable conditions.
- It **facilitates/helps** in development of infrastructure. Foreign aid in form capital enables developing countries to undertake the establishment and development of basic social and economic infrastructure such as schools, roads, railways, power facilities etc. which are very crucial for the development of a nation.
- It **increases** employment opportunities through increased investment. Foreign aid invested in the establishment of industries and other economic activities lead to creation of employment opportunities to people in the receipt countries.
- It **facilitates** in the utilisation of idle resources. This is so when the country receives modern techniques of production which accelerates resource exploitation and thus avoiding resource wastage.
- Foreign aid in form of capital investments accelerates industrial growth/ **Helps** to diversify the economy. This country's enable the receipt country to attain high level of industrial development.
- It **strengthens** international relations/ Improves international relation between countries or among countries. This leads to political stability among nations, this promotes international trade.
- It leads to development of local skills. This is through training where scholarships are given to nationals go and train in different fields or donor countries send experts to come train the nationals in the receipt country and thus help in building capacity in such a country.
- **Promotes** economic growth. This is when the resources acquired are channeled into different economic activities which leads to increased volume of goods and services produced in the receipt economy.

Negative impact of foreign aid in the country:

- It leads to balance of payments problems due to repayment obligation especially when the aid is tied.
- Leads to unemployment due to automation. Sometimes technological aid is inappropriate causing technological unemployment.
- Undermines capital formation due to debt servicing and repayment. Debt servicing sometimes denies nationals essentials goods and services.
- Encourages laziness/kills local initiatives. Provision of needs to the nationals by the donors makes in the recipient country reluctant to work because they expect to get free more things.
- Leads to planning difficulty due to aid being inconsistent, inadequate, tied etc. It becomes very difficult for developing countries to plan effectively because they are not certain of the amount of aid to receive and it can be withdrawn anytime.
- Political strings attached to aid undermine the political sovereignty of the recipient country. The recipient country is compelled to accept conditions dictated by the donor country, this denies opportunity to such countries to make independent decisions.
- Leads to underutilisation of local resources/ leads to reduced domestic production of some goods/hinders growth of consumer goods industries.
- Leads to high cost of borrowing due to aid being tied to source/purchases/tied aid. The donor country may require the recipient country to purchase goods from the donor country giving the aid using the grants/funds acquired and yet such goods may be highly priced.
- Leads to brain drain. This normally arises when some nationals in the recipient country are given scholarships to go and train from the developed countries; unfortunately some of these people are not willing to come back to their own countries because they are given better paying jobs in the donor countries/developed countries.
- Leads to cultural erosion/corrodes social values.
- Worsens economic domination by donors. This is so when economic activities are in the hands of foreigners.
- Sometimes preset conditions are disastrous. The donor countries in most cases set conditions to recipient countries and they end up benefiting less.

Sub –Topic 6: Role of infrastructure in the Development Process:

MEANING OF INFRASTRUCTURE:

Infrastructure refers to a **facility** that is put in place to **support** the production of goods or ease the provision of a service or services to the public. In simple terms infrastructure is a production supporting facility or a service rendering facility. It can be in form of a road, a school, hospital, power dam, bank, water pipeline etc.

Forms of infrastructure in Uganda

- **ICT/COMMUNICATION INFRASTRUCTURE:** This includes telephone lines, mobile phones, telefax and telex equipment, Internet communication facilities etc.
- **POWER/ENERGY INFRASTRUCTURE:** This includes hydro electric power dams e.g. Owen Falls Dam at Jinja, Power lines, Solar energy equipment, Oil refineries, power lines etc.

- **TRANSPORT INFRASTRUCTURE:** For example roads, railways, airports, Pipelines, Ships, and Water ferries on lakes, Industries/Factories.
- **HEALTH OR MEDICAL INFRASTRUCTURE:** For example hospitals, health centers.
- **EDUCATIONAL INFRASTRUCTURE:** For example Schools, Colleges, Universities, Agricultural research centers or institutes such as Kawanda Research Centre, Public libraries, Industrial research Institutes etc.
- **FINANCIAL INFRASTRUCTURE:** For example banks, Insurance companies, Capital markets.
- **RECREATION INFRASTRUCTURE:** For example sports stadia like Mandela Sports Stadium at Namboole, theaters.
- **WAREHOUSING INFRASTRUCTURE:** For example bonded warehouses.
- **INDUSTRIAL INFRASTRUCTURE:** For example processing firms, manufacturing industries etc.

ROLE OF INFRASTRUCTURE IN THE DEVELOPMENT OF UGANDA:

- **Source of government to revenue.** Government collects taxes from education institutions like private schools and television stations etc.
- **It promotes investment or capital inflows.** Foreign investors are attracted to invest in Uganda due to existence of supporting infrastructure in form of banks, roads, communication facilities.
- **It promotes the development of labour skills.** Education institutions like and universities train people who acquire skills which they use in the production of goods and services.
- **It promotes trade and accessibility to markets.** The roads are used by traders to transport goods from places of production to market centers. This creates place utility and exchange of goods and services is encouraged in Uganda.
- **It facilitates increased utilisation of resources.** For example power dams generate electricity which is used in production firms. Since production is taking place, resources that would have remained idle are put to use hence reducing excess capacity.
- **Provides employment opportunities.** People are hired to work in schools (teachers and bursars), hospitals (medical doctors and nurses), radio stations (journalists and engineers) this enables them to earn an income to station welfare.
- **It improves social welfare of the people.** Hospitals provide vaccination services against certain diseases like polio and measles as well as treating the sick people and this improves social welfare.
- **Promoting industrial development.** Hydro electricity power generates power which is supplied to industries. This power is used to run industrial machines to produce commodities hence developing the industrial sector in Uganda.
- **It increases productivity/ it enhances growth of GDP.** The existence of various infrastructures like roads and banks encourage production of more goods and services. This is because transportation of goods and access to credit from banks are made easier.
- **Facilitating innovations and inventions/technological transfer.** Modern machines like tractors are acquired from abroad to assist in construction of and repair of infrastructure such as roads, rail lines and power dams. This leads to technological transfers.

- **Fighting inflation.** The roads assist in supplying goods to different areas in Uganda. This increases aggregate supply of goods on market and shortages are eliminated hence checking inflation.
- **It promotes diversification.** Investors are able to set up enterprises in the different sectors to invest in infrastructural development. e.g., investors in sectors like telecommunication (MTN, AIRTEL), Energy, education, health, transport etc.
- **It promotes entrepreneurial skills.** The presence of infrastructure encourages investment. The investors bear risks in production and they develop abilities in organisation and they develop abilities in organising the other factors of production to increase output.
- **It leads to increased foreign exchange earnings.** Some industries produce goods for export and the country is able to earn foreign exchange. This has added benefit of improving the Balance of Payments Position.
- **It enables mobility of factors of production.** By using roads and other forms of transport labour is able to change geographical location or occupation.
- **It reduces conservatism/ fights rigidities among the people.** Through communication infrastructure like radios, people are educated about modern methods of production. This changes attitudes of people and conservatism is reduced. This promotes economic development.

PROBLEMS/ CHALLENGES FACED IN DEVELOPING INFRASTRUCTURE IN UGANDA:

- Limited stock of existing capital / inadequate capital.
- Limited labour skills
- Poor land tenure system that limit access to land for setting up and expanding infrastructure.
- Insecurity in some parts of Uganda.
- Limited investment incentives offered by the government
- Poor entrepreneurial skills
- Limited market especially for industrial goods.
- High rate of inflation that lead to rising production costs and rising costs of setting up and maintaining infrastructure.
- Poor state of technology
- Low levels of accountability/ Corruption
- Conservatism/Cultural rigidities among the people
- Inadequate/ unreliable foreign aid
- High interest rate on loans for infrastructural development

MEASURES THAT HAVE BEEN TAKEN TO IMPROVE INFRASTRUCTURE IN UGANDA:

- **Improved accountability in departments that handle infrastructure/ Fought corruption.** The money intended for development of infrastructure is put to its purpose and this has encouraged its development.
- **Government has improved political climate.** This has reduced uncertainties and investors have confidence to set up industries, communication facilities, schools, hospitals e.tc. This has led to improvement in infrastructure in Uganda.

- **Private- Public participation in infrastructural development has been undertaken.** The government has hired services of local private companies to construct public schools, public health services and upgrading roads in semi-urban and rural areas.
- **Government has publicized/ advertised opportunities (potential) in the sector.** This has attracted many investors to Uganda to establish industries, communication enterprises, schools, etc. This has promoted the development of infrastructure in Uganda.
- **Changed land tenure system/provided/acquired land for infrastructural development.** This has enabled people to easily access land for the development of various form of infrastructure such as schools, hospitals , telecommunication forms etc
- **Developed/decentralized the sector/provided road equipment to local authorities.** This has enabled the local authorities such as districts to construct new road and frequently upgrade and maintain the existing ones.
- **Diversified the sector.** The government has encouraged development of various forms of infrastructure such as roads, power facilities, telecommunication services, insurance services, banks etc. this has led to improvement in the state of infrastructure in the country.
- **Provided incentives to investors in the sector.** This has reduced the cost of setting up and maintaining such infrastructure which has motivated many people to invest in such infrastructure due to the high profits enjoyed.
- **Liberalized investment in the sector in the economy.** This has attracted many private individuals to invest in the sector due to the removal of the unnecessary restrictions in the sector.
- **Imported modern technology.** This has enabled the construction of modern infrastructure such roads, telecommunication services etc.
- **Improved skills of labour.** This has provided the necessary manpower required in the construction and maintenance of the established infrastructure
- **Raised funds both locally and externally.** This has enabled the government and private investors to invest in the construction and maintenance of various form of infrastructure such as roads, schools, telecommunication services.
- **Setup supportive institutions such as UNRA, UCC.** These have enabled the construction and maintenance of maintenance of the such infrastructure
- **Contracted private firms to develop infrastructure.** These have put up various of infrastructure such as roads due to their financial ability and close supervision by the management of such firms.
- **Rehabilitated/renovated/maintained infrastructure.** The government has renovated the various forms of infrastructure such roads, education institutions, power dam projects, public hospitals in the different parts of the country, this has led to improvement of such infrastructure.
- **Constructed infrastructures.** The government has constructed new infrastructure such power dam projects like Bujagali power dam project, new hospitals such as KCCA-MULAGA KIRUDDU branch in order to expand the infrastructural facilities in the country.

Sub-topic7: The role of Education in the economic development process:

Meaning of Education:

Education refers to a process of acquiring knowledge, value and skills resulting into increase in stock of human capital in a given period of time. Education is both formal and informal.

Education is regarded as an investment *in human capital*. There are private benefits of education as well as social benefits.

Private benefits are the merits enjoyed by an individual as a result of attaining education such as high salaries at places of work.

Social benefits of education are the advantages enjoyed by the whole/entire society out of an individual's education e.g., passing, increased on the acquired skills to efficient other people e.t.c

Education is regarded as investment, consumption good or an economic good.

Education as a consumer good

Education is regarded as a consumer good in the following ways;

- It gives satisfaction (utility) to consumers through development of skills.
- It raises status of educated people as compared to the uneducated.
- It raises life expectancy of people.

Education as an economic good

Education is regarded as an economic good in the following ways;

- It has opportunity costs involved such as sacrifice of present consumption.
- It is relatively scarce to those people who cannot afford to pay for it.
- It has got a market price.
- It gives satisfaction to the consumer.

Education as an investment:

Education is regarded as an investment in the following ways:

- Like other investments, it **involves costs** since people spend part of their income on education.
- It **involves opportunity cost** and trading off in terms of leisure foregone, incomes foregone to pay for education services e.t.c.
- It is also an investment because **it increases productivity of labour** through the skills acquired in the education process.
- Education is an investment because **it has future returns** in form of improved standard of living, placement in better and high paying jobs, higher labour efficiency e.t.c.

It is also an investment because **it has some risks and uncertainties** such as failing examinations and not proceeding to the next level, drop-out due to lack of money to pay tuition/school fees

FEATURES OF UGANDA'S EDUCATION SYSTEM;

- Very few people get access to education.
 - There are high costs in the education system and they increase at higher levels of the education cycle.
 - Uganda's education is based on –theBritain andforeignEnglish syl language is the official medium of instruction in schools.
 - The teacher –student ratio is very high. In some schools, there are more than 100 students per teacher.
 - The education system is largely examination oriented. This means that promotion from one level to another depends on passing a given set of examinations.
 - The education system in Uganda puts **more** emphasis on theoretical subjects and less emphasis on technical subjects like wood work, brick laying and construction, agriculture e.t.c
 - There is over-crowding in schools mainly in rural areas due to poor facilities and few schools.
 - It terms of location, good schools are confined to urban areas and also many qualified teachers prefer to work in urban areas to rural areas.
- Government owned and private owned schools or education institutions operate side by side

N.B: Education reforms:

- It means making **desirable or positive changes** in the process of imparting knowledge, skills and attitudes to learners in the academic institutions. For example, introducing practical –based subjects that can provide vocational skills for self-employment, making subject content to be relevant to the needs of society, developing talents of students in schools e.t.c.

Reasons for encouraging education in developing countries include;

- To increase employment creation
- To raise the social status of the people
- T o break cultural rigidities and backward attitude such as conservatism
- To facilitate research and technological progress
- To facilitate development of skills
- To reduce government expenditure on expatriates
- To promote literacy and awareness among
- To increase labour productivity and efficiency
- To increase government revenue through taxation
- To encourage industrial development
- To facilitate implementation of government policies

Positive contribution of education

- It leads to the **development of skills and knowledge among people**. Such skills are applied in the production of goods and services to increase efficiency of labour.
- It **facilitates innovations and inventions**. Education institutions such as Universities and Research institutes undertake research in modern agriculture and industrial production methods. Such innovations help to increase output as well as improving its quality.
- It **helps in creating more employment opportunities**. Jobs are created in education institutions for professional teachers, lecturers, secretaries, accountants, education consultants, e.t.c
- Education **helps in controlling the population growth rate**. This is because the time spent in school while studying reduces early marriages hence prolonging the time of child-bearing.
- It **helps in reducing conservatism among people**. This is achieved by promoting literacy which reduces backward attitudes like belief in witchcraft, superstition, poor attitudes towards work e.tc. This makes people to be more progressive and they adopt better production methods.
- Education **facilitates easy implementation of government policies by the educated citizens**. This is because the educated people easily understand government policies and their socio-economic benefits. Such people readily support government in implementing its programs/development plans.
- It **reduces government expenditure on hiring expatriates** (it reduces external resource dependence). The government trains its local manpower hence cutting down on the expenses involved in paying expensively expatriate labour.
- It **encourages industrial development**. This is because skilled labour like mechanical engineers and technicians are hired in industries after training. They are able to use and maintain industrial machines hence increasing output in industries.
- It **facilitates rural transformation**. This is achieved by setting up schools in rural areas, sending agricultural officers to rural areas to teach rural farmers modern farming methods like use of fertilizers, proper crop spacing, and appropriate soil conservation measures, methods of controlling crop and animal diseases. This promotes development of rural areas .t.c
- The **education sector creates linkages with other sectors of the economy**. For example industries or firms are established to produce goods needed in education institutions like chalk, books, papers, pens, textile materials for making school uniforms, furniture, e.t.c
- It is a **source of tax revenue to the government**. This is achieved through imposing taxes on private education institutions as well as charging income tax on incomes of employees through a system of PAYE (Pay As You Earn)
- It **promotes international relations due to educational exchange programs with other countries**. This has a benefit of encouraging exchange of ideas and increasing volumes of trade with other countries.
- It **encourages the development of infrastructure**. The education institutions have to be connected to well developed roads, ICT facilities such as Internet, telephone facilities, power lines, water supply e.t.c. This stimulates infrastructural development in those areas where institutions are located.
- It **accelerates economic growth**. Education services provided in the country contribute to GDP of Uganda.

Negative contribution of education system in developing countries:

- It **promotes income inequalities** because it is not widely provided to a large section of the people (masses). Those who can afford to attain higher education earn more income as opposed to those with low skills.
- It **encourages or accelerates rural urban migration and its related evils**. This is because the educated people prefer to stay in urban centers where there are better amenities of life. This results into open –urban unemployment, creation of slums, exerting pressure on infrastructure in urban areas e.t.c
- It **encourages training of job seekers rather than job makers**. This is created by a theoretical – based education system which puts less emphasis on acquisition of practical or technical skills among school leavers.
- The system **may result into brain-drain** where highly educated people decide to move from Uganda to other countries in search for greener pastures/better remuneration/pay.
- It **results into an increase in expenditure on imports which are demanded by the highly educated people**. Such people have a high desire to buy expensive imported goods hence worsening the B.O.P position.
- Education is **very costly to government and society**. It involves high costs in terms of constructing school premises, buying scholastic items, paying salaries to teaching and non-teaching staff e.t.c
- It **involves high risks and uncertainties** such as failing examinations, failing to get jobs after training. This may discourage other people from investing in education

CHALLENGES/PROBLEMS FACED BY THE EDUCATION SECTOR IN UGANDA.

- Dilapidated premises in schools, colleges and universities which require a lot of money to rehabilitate/repair.
- Low enrolment of students in rural schools due to wide spread poverty in Uganda.
- Shortage of highly qualified staff such as university lecturers and professors.
- Inadequate funds necessary to set up the education institutions and the workers.
- Poor supervision and inspection of education institutions. This has created inefficiency because there is limited government follow-up of activities in those institutions.
- Poor accountability/corruption.
- Shortage of instruction materials in schools in form of text books, laboratory equipment, and teaching aids/visual aids. This complicates the process of imparting knowledge and skills to students in schools
- Poor infrastructure.
- High population growth rate which exerts pressure on the existing education institutions or facilities.
- Political instability in some parts of Uganda.

- High rate of inflation- this increases cost of setting up schools as well as providing education services in Uganda.
- Poor land tenure system. This limits accessibility to land for expansion of education enterprises.
- High drop-out rate due to failing of examinations or low incomes among Ugandans.
- Low motivation of teaching staff and other workers due to low salaries. This creates inefficiency in schools, and strikes by teaching and non-teaching staff in Public universities like Makerere hence disrupting academic activities and research programs.
- High levels of unemployment. This discourages people to invest in education on grounds that even those who have qualified from education institutions are jobless.
- Loss of school property due to strikes organized by students, fire outbreaks e.t.c

Measures that can be undertaken to reduce the challenges associated with the education system in developing countries include:

- Undertake education reforms/ vocationalise the education system
1. Encourage female education to reduce gender inequality/ Continue to implement affirmative action for the education of the girl-child (female Ugandans) e.g. the extra or additional **1.5 points entry scheme** for female students in the Public universities.
- Integrate education system in the community by setting up community service oriented skills such as agricultural education
 - Ensure even distribution of education facilities both in the rural and urban areas
 - Provide free universal primary and secondary education to enable the children of the poor access education.
 - Reduce the cost of education to make it affordable to all
 - Carry out proper manpower planning to ensure that the man power trained matches with the available.
 - Improve remuneration of skilled labour to retain skilled man power in the country
 - Improve and maintained political stability. This will motivate private investors to establish education institutions since they are assured of security for life and property
 - Construct new schools and rehabilitate dilapidated classrooms blocks and staff houses.
 - Train and recruit teaching and support staff in schools, colleges and Public universities
 - Improved inspection of schools by strengthening the school inspectorate department in the ministry of education
 - Allocate more funds to the education sector in the national budget
 - Liberalise investment in the education sector. This will encourage the setting up of private education institutions like privately owned primary schools, secondary schools, universities
 - Improve accountability by fighting corruption. This will ensure that the money allocated to the education ministry is put to proper use.
 - Organise periodic education sector review workshops or conferences to follow-up plan implementation in the ministry of education

- Organise training programs for education managers e.g. .Head teachers, Principals, to equip them with better management skills. This has improved efficiency in service delivery in the education sector
- Gradually increase salaries of teaching staff in government aided schools, colleges and Public universities.
- Attract funds in form of aid from donors to support the sector- from USAID, Norwegian Development Agency, Aghkan Foundation **e.t.c.**
- Provided free teaching and learning materials to government –aided schools in form of text books, science laboratory equipment and chemicals

QUESTIONS:

1. (a) Explain the role of education in the economic development process of Uganda.
(b) Explain the strategies that have been taken to improve on the education sector in Uganda.
2. (a) Why is education regarded as an investment?

(b) Why does the government increasingly allocate high portion of their national budget to education?

(c) What are the demerits of the current education system in Uganda?
3. (a) Differentiate between **Education** and **Manpower planning**.

(b) Why is there the need for education reforms in Uganda?

Sub-Topic 8: RESOURCE ENDOWMENT AND ECONOMIC DEVELOPMENT:

Natural resource endowment is the natural occurrence of resources in the earth' i.e. beneath, on and above the earth's surface.

Examples of natural resource endowment

- Fossil fuels(petroleum, natural gas, coal)
- Minerals (diamond, gold, copper, silver)
- Natural vegetation, forests
- Air, wind
- Water, water power, wetlands, water sources, lakes
- Animals (salmon, whales, deer)
- Sunlight
- Soil, top soils.

Role of natural resource endowment to the economic development of a country:

- Creates employment opportunities. This is because natural resources promote industrial development because they provide the necessary raw materials such as copper, silver and

they also provide power sources which run machines in factories, these include petroleum, natural gas and coal.

- Increases foreign exchange earnings. The natural resources such as petroleum, natural gas and coal are exported to different countries and thus increase foreign exchange earnings for the country with such a country.
- Provides raw materials to the industrial sector/promotes industrialisation. The natural resources provide the strategic raw materials such as diamond, necessary for industrial growth in a country, they also provide cheap source of power such coal to run machines in industries.
- Promotes tourism. The natural resources such as natural vegetation, wild animals attract people from both within and outside the country to watch or to study the ecosystem; this promotes the tourism industry which generates revenue to the government.
- Promotes economic diversification. The different natural resources of a country such soils, sunlight, wetlands, lakes, fossil fuels promote different economic activities such agriculture, tourism, industrialisation which results into economic diversification in the country.
- Promotes infrastructural development. The existence of natural resources indifferent parts of the country compels the government to develop the necessary infrastructure such as roads, railways, power dam projects so as to ease the exploitation and transportation of such minerals to where they are needed.
- Encourages production of a wide variety of products/reduces dependence on a few economic activities. The presence of natural resources such as fossil fuels, minerals, natural vegetation sunlight enables the production of different commodities needed in the country.
- Promotes international relations. Natural resources such rivers and lakes that cut across boundaries, the exported natural resources makes the countries friendly so as to continue with the mutual inter dependence of all those countries involved.
- Increases government revenue. The natural resources such as fossil fuels, minerals soils, sunlight widen the range of commercial activities in the country which widens the government tax base.
- Increases incomes to the owners. The owners of such natural resources exploit and sell them and thus increase their incomes.
- Improves balance of payment position. The natural resources of a country promote domestic production of the formerly imported industrial goods which reduces foreign exchange expenditure on such goods, at the same the exploitation and exportation of such resources like petroleum natural gas also increase foreign exchange earnings for a country and thus improve the balance of payments position.
- Promotes urbanisation which reduces conservatism. The exploitation of natural resource endowment leads to increased in the commercilisation which attract many people to adopt modern ways of living.
- Encourages skill development. This enables in resource exploration and exploitation of such natural resources and thus avoiding such resources remaining idle.
- Promotes research/inventions and innovations. The existences of vast natural resource endowment attract entrepreneurs to carry out inventions and innovations so as to promote exploitation of such resources and thus earn more profits.

Measures being taken to increase exploitation of natural resources in Uganda:

- Improving the state of infrastructure e.g. roads.
- Strengthening investment bodies aimed at coordinating exploitation of particular resources.
- Stabilising prices of goods and services.
- Promoting industrialisation.
- Publicizing Uganda's potential international investors.
- Widening markets for the products produced from natural resources.
- Privatising of public enterprises that were originally controlling and exploiting natural resources.
- Reforming the land tenure system.
- Liberalising the economy
- Extending affordable credit facilities to potential investors.
- Fighting corruption/ensuring proper accountability
- Promoting political stability.
- Providing investment incentives to potential investors.

