

SETTLEMENTS, URBANISATION, GROWTH OF TOWNS AND PORTS.

A settlement is any place where people live. It might be small for example hamlet or big for example a city. Settlements may be temporary or permanent. Temporary settlements are usually occupied for a small period of time for example the camps of nomadic herders while permanent settlements are those areas or places which are occupied all the time.

The settlements are very important in a way that they tend to reflect that man is responsible for his environment as well as the social, religious, customs of the societies that occupy them.

CLASSIFICATION OF SETTLEMENTS

Settlements are classified using different criteria for example size of the population or nature of the activities that are carried out.

According to the United Nations, settlements are classified into the following hierarchy.

Single homestead

These are in a nuclear family of about four people and in an extended family of between 15-20 people.

Village

These are settlements which have more than 4 people but do not go beyond 20,000 people.

Towns

Are settlements with over 20,000 inhabitants but less than 100,000.

City

Is a settlement which is occupied by more than 100,000 people, sharing common services and facilities like schools, hospitals, recreation centers, refilling stations, police stations and many others.

Conurbation

Is where two or more towns or cities are joined together through horizontal expansion to form one large urban complex and it becomes difficult to tell the boundary of one town or city from the other. Examples include the Ruhr industrial conurbation in Germany and the Whiteland conurbation in south Africa, Randasterd conurbation of Netherlands as well as Tokyo Asscac conurbation of Japan.

Megalopolis

is a settlement where very many cities, town and villages are joined together to form one very large continuous urban area. The best example is the Megalopolis of North Eastern USA stretching from the country's Northern border of Canada that is St Lawrence river up to Newyork and beyond.

RURAL AND URBAN SETEMENTS

The most important categorization of settlements is the rural and urban settlements although it is not easy to distinguish between rural and urban settlements for example, Kenya uses a size of

more than 20,000 inhabitants for towns yet other countries use 5,000 or 10,000 people as their cut off for urban settlements.

A rural urban settlements is usually made up of firm houses and other smaller buildings. Sometimes the buildings are widely scattered over the country side ad in other cases they are clustered together to form villages and hamlets.

There are various factors that influence the development of rural settlements and they include;

1. Defense
2. Supply of fresh water
3. Soils
4. Shelter and aspect
5. Biotic factors for example pests and diseases
6. Transport and communication
7. Political or administrative influence
8. Influence of modern economic activities for example mining, industry and so many others.
9. Building materials and fuel
10. Flood avoidance

URBAN SETTELMENTS

It is not easy to define and urban settlement but difference criteria can be used to distinguish between the rural and urban settlements for example the population size density , social and economic infrastructure and many others. There are various factors responsible for the growth of the urban settlements which may include;

1. Availability of natural resources for example forests, minerals, fisheries and many others.
2. Defense
3. Strategic location
4. Transport routes
5. Administration
6. Fertile soils
7. Industrial activities
8. Cultural factors

URBANISATION

This refers to a process whereby an increasing proportion of the world`s, nation`s or region`s population lives in urban areas.

It is the process whereby an increasing proportion of the total population becomes concentrated in the towns.

Since the 19th century the wage of the people living in the town areas has been increasing steadily for example the world`s population living in urban areas in 1950 was 29.2% which rose to 37.1% in the 1970 further increasing to 45.2% in the 1990 and it is estimated that by 2020 the percentage will be 54.4%.

There is a clear distinction between developed countries and the developing countries on the basis of level of urbanization. The developed countries have more people living in the urban areas as compared to the developing countries. The United Nations predicts that by 2020, 77% of the people in the developed countries will live in the urban areas and only 53% for the developing countries.

Secondly, while rapid urbanization is an integral part of development in the developed countries, in most developing countries of Africa, Asia and South America, urbanization is a consequence of population movement and growth resulting from the process of migration from rural areas, high rates of natural increase as well as decline in death rates.

CAUSES OF URBANISATION

The growing concentration of the population in urban areas that is the drift to towns has been brought about by several factors. Some of them are referred to as pull factors and others are the push factors.

Pull factors are those that attract people from the country side or rural areas to come and settle in the urban centers whereas "push factors" are those factors that act within the rural areas forcing people to move away from such areas to come and settle in towns. In other words push factors relate to the poor social economic conditions in the rural areas which force people to migrate to the towns.

PULL FACTORS

The need for employment opportunities is one of the factors responsible for rapid urbanization especially in the developing countries. Towns tend to provide more and better employment opportunities as well as better pay than in rural areas. Towns have industries as well as tertiary services which tend to provide jobs to a great number of people thereby hereby forcing many people that are under unemployed in the country side to migrate to the towns in search for employment.

Improved social services in the urban centers also leads to rapid urbanization. The availability of efficient social services in towns and cities has contributed to rapid rates of urbanization. Such services and facilities include piped water, electricity, recreation, schools and many others which attract people from the rural areas to the urban areas.

The lure and fascination of towns. Regardless of their ability to provide social and economic services, towns are naturally known to possess better quality life, opportunities and attractions which are quite known in rural areas. Therefore such a fascination attracts more people to come and stay in the urban areas compared to the country side rural areas leading to a greater percentage of people staying in urban centers hence urbanization.

Protection and security has also led to urbanization in many developing countries. Some people concentrate in towns and cities because they feel more secure and protected when in urban areas compared to when in the rural areas. Generally in towns there tends to be more security arising from the various security agencies for example the army police, local defense personnel, private guards and many others. All these offer security to the people and their property compared to the rural areas where there are few security agencies as well as many hiding places or safe havens in the form of bushes and forests for the wrong doers.

Education and other services are also major causes of urbanization. In many developing countries education institutions produce white collar job seekers who cannot work comfortably in the rural areas and so offer school most graduates would rather stay unemployed than go to distant rural areas to work from there.

Better standards of living in the urban centers is a major cause of urbanization. In many towns, people have access to cheaper clothing, electricity, piped water, improved transport systems, medical services which raise the standards of living in such towns. On the other hand, many rural areas have poor standards of living as there are inefficient services as some of them are lacking. That is why people come from the country to come and settle in towns.

Extended family system is also a major cause especially in the developing countries. Many developing countries of Africa, Asia and South America have an extended family system and therefore both distant and close relatives are likely to leave the rural areas to come and settle or live with their relatives in the urban centers. This therefore increases the number of people living in the urban areas hence urbanization.

PUSH FACTORS

Population pressure on land.

Rapid population increase in many developing countries like Rwanda, Nigeria, Brazil has led to high rate of unemployment as well as lack of land not only for settlement but also agriculture and other activities. The lack of land in many rural areas being a result of population pressure forces people to migrate to the urban areas to look for other jobs other than agriculture thereby increasing the number of people living in the urban areas.

Declining productivity of land.

In many developing countries, farmers use poor farming methods for example tilling up and down the crop, monoculture, intensive cropping and others which lead to soil exhaustion and declining productivity of land which may result into shortage of food, unemployment and other problems which will force people to migrate to urban areas leading to urbanization.

Natural hazards and calamities.

These include landslides, volcanic eruptions, earthquakes and so many others and they are known to force people from abandoning the country side to the urban areas for fear of their lives. In many rural areas, emergency services, if at all such a hazard occurs are usually slow and inefficient leading to loss of lives compared to the urban areas which tend to have efficient emergency services.

Cultural practices are also major causes of urbanization.

Forced marriages, circumcision which craft and family hatred have often forced people to migrate to towns and cities abandoning the rural areas where such practices are rampant. For example in most rural areas, girls are forced into marriages due to poverty and other considerations, circumcision ceremonies are usually carried out to initiate boys into adulthood and in some areas female genital mutilation to initiate girls into adulthood. Witchcraft and other cultural voodoo practices are also known to force people to migrate to urban areas thereby increasing the population numbers in the urban areas.

Political instabilities are also a major cause of urbanization.

Many countries are undergoing political instabilities involving war and rebel activities. In such countries, the country side or rural areas are affected more than the urban areas for example in case of rebel groups, they usually use the rural areas as their bases and at times they attack such areas so as to get food supplies therefore many people are forced to migrate to urban centers which are more secure compared to the rural areas.

CONSEQUENCES OF URBANISATION

Urbanization results into different consequences some of which are positive and others are negative. The Positive consequences or contribution include the following;

Urbanization promotes unity as people from different parts of the country with different cultures and backgrounds come together thereby sharing same services and facilities for examples schools, hospitals, recreation facilities and even at times intermarry. Through such

unity formerly upheld predices and stereo types are done away with leading to meaningful economic growth and development in the country.

There will be full utilization of resources because of the great demand caused by the increasing population. Swamps, hilltops, steep slopes and other types of marginal lands will be converted into residential or commercial areas which would have been difficult without the great demand coming in from the increasing population.

Urbanization brings about economic development. When any people concentrate in towns and cities there will be growth of economic activities for example shopping malls, market centers and many others which will propel economic development.

Urbanization results in expansion of cities. When many people leave the country side for the urban areas formerly smaller cities expand in the conurbations and megalopolises. This is through the increased demand for land as well as increase activities leading to horizontal and vertical expansion of the existing towns and cities.

Urbanization leads to promotion of market as large population in towns and urban centers will provide market for both agricultural products and manufactured products from the industries. This is so due to the increased population in such cities as well as the fact that many are town dwellers with enough disposable income to spend on essential as well as luxurious goods.

Urbanization increases the country's tax base. This is so as cities as well as municipal authorities impose various taxes upon the city dwellers thereby generating revenue so as to run the city affairs like administration, health facilities, education services and many others.

Provision of labour is also a consequence of urbanization. Urban dwellers provide labour force in industries, mines government departments and insurance companies. A great number of the unskilled usually do not have salary based jobs thereby forming cheap service of the casual workers.

Rural development is also a major consequence of urbanization. Urbanization has been seen to influence the development of the rural areas in that farmers in the rural areas work hard to produce more food for the ever increasing urban market. In addition urban dwellers also tend to put up investments in their home areas thereby resulting in the development of former rural areas into urban areas.

Urbanization leads to reduced population pressure on agricultural land in rural areas mainly through the rural urban migration. This reduces land fragmentation and results in the increased food production.

Urbanization is an index or measure of economic development for example many people prefer to stay in cities and urban centers and therefore this shows an index of development as the country starts developing various urban centers with modern facilities that can attract the population from the country side to such urban centers. Secondly many people migrate from the rural areas due to the improved social and economic infrastructures which are a manifestation of economic growth and development.

Urbanization encourages innovations and inventions. When people are many in an area there is competition for services and resources which creates critical thinking leading to new innovations and inventions so as to succeed in such a competitive environment.

Urbanization brings about provision of improved security which is so much necessary in attracting investments, protecting the citizens plus their property so as achieve meaningful economic growth and development.

Urbanization helps in easy dissemination of information and ideas. Many ideas usually start from the city centers after which they are spread to the surrounding areas or the country side. This is mainly through various media for example news papers, radios, televisions, internet and many others.

Negative

There is a problem of overcrowding in many centers and a consequence of urbanization. Many people flock the urban areas leading to congestion as well as accidents.

Urbanization leads to unemployment as there are many people in towns chasing after fewer jobs which leads to unemployment. This is the major cause of prostitution, drug trafficking, robberies and many others.

There is environmental pollution that is air and noise pollution. this results from the so many people in the urban centers leading to noise and the great traffic in most urban centers. Waste disposal is also a major problem and this leads to water and air pollution.

Urban areas reduce percolation of water because of the concrete as well as passing of every place. This increases surface run offs leading to flooding of the urban areas.

Urbanization leads to slum development. When many people leave the rural areas to come and settle in the urban areas, they are not employed and therefore cannot afford decent housing units. Therefore they put up shanty settlements in areas like rubbish dumping sites, swamps or any other free areas leading to the development of slums.

Urbanization is associated with special urban micro-climates like smog, hot temperatures and many others due to the reflection of the sun's rays by roads and concrete channeled winds and very hot temperatures and that is why most urban centers are referred to as urban heat islands.

Urbanization leads to spread of diseases and this is due to the overcrowding, poor housing, poor sanitation and many others. Therefore contagious diseases can easily spread from one person to another for example cholera, dysentery and many other diseases.

Urbanization results into moral decay or degeneration. When many people leave the rural areas for the urban areas and the cities become a meeting point of the different tribes and the social backgrounds. The scarcity of resources and the policy of every man for himself leads to erosion of various cultural norms and values which are cherished in most villages. For example teamwork, sharing, empathy and many other values are lost as many people move to urban areas.

It leads to encroachment of land that could have been used for other purposes for example recreation.

The high urban population puts unnecessary pressure on available social services recreations, health care that is hospitals, schools and many others.

Urbanization also creates a problem of juvenile delinquency. This is brought by the breakdown of family problems and loss of parental love for such children. At other times it is caused by poverty as young children are forced to care for themselves at a very young age. This has resulted into children and associated problems.

Urbanization is associated with high costs of living since in the cities and towns everything has to be bought for example water, food, clothing and many others. Yet many people are unemployed and this results into poverty and poor living standards.

There is increase in crime rates due to high unemployment levels which forces people to look for any means of survival for example robberies, kidnappings, prostitution, drug trafficking and so many other vices.

There is limitation of planning. The rapid rates of planning puts great pressure or strain on town planning as city authorities as well as non government organizations cannot cope up with the ever increasing population. Therefore provision of low cost houses, water and other facilities becomes an extra burden to the government or to the local authorities. At other times, government also faces opposition from the urban dwellers whenever new policies are being brought up.

TEMA (GHANA)

Tema is an artificial port found in Ghana in West Africa. The port was constructed by the government of Ghana so as to handle the increasing volumes of trade and to reduce congestion at the port Accra which was the major port by then.

The port was opened up in 1962 and in over the years it has become a major industrial port as well as a major industrial area. The site where the port is located was selected due to the various factors like the gentle relief of the area that enabled the construction of the port facilities, nearness to the Akasombo power station which was a supply for the HEP, availability of building stones from the Shai hills and the deepness of the waters which reduced on the dredging needed.

To enhance fast growth and development of Tema, road and railway connections were constructed connecting Tema to other major towns of Ghana like Accra, Sekondi, Takoradi, Tamale, Sunyani, Kumasi and many others.

FACTORS FOR TEMA'S GROWTH AND DEVELOPMENT.

The presence of deep waters of the Atlantic ocean favored the development of Tema. Such deep waters of the Atlantic allowed large ocean vessels to anchor or dock. This therefore increased the cargo that was being handled by the port which resulted into more revenue being collected by the port authority. This was used in the expansion of the port facilities. The port's deep waters also gave it a competitive edge over other ports like Sekondi and Takoradi making it handle more cargo.

The strategic location of Tema also led to its growth and development. The port is located in west Africa off the Atlantic ocean which ocean commands various shipping lanes from different parts of the world for example North Africa, Western Europe, North America, the far east that is Asia and the others. This therefore increases the volumes of cargo being handled.

The gentle relief or the flat landscape of the area also favored the port's growth and development. Such gentle relief favored the construction of various port facilities for example dock, ware houses, ship repair yards, packing areas and many other facilities. In addition the gentle relief also favored the construction of transport routes for example roads and railway lines connecting Tema to other parts of Ghana and thus widening its hinterland.

The favorable climatic conditions of the area where the port is located also led to its growth and development. Ghana is found in the tropics and therefore it is ice free throughout the year. This means that shipping activities can go on uninterrupted throughout the year leading to more cargo being handled and thus increased revenue for the port's growth and development.

The presence of a low tidal range experience at Tema has led to the port's growth and development. There is no marked difference between the low and high tidal levels and

therefore this has led the port to be more operational throughout the year allowing large ocean going vessels to easily anchor at all times of the year.

The presence of the building materials from the nearby Shai hills also made the construction of the port facilities easy and cheap as the building materials were sourced locally and at a cheaper cost.

The presence of the hard basement rocks also favored the growth and development of Tema. The site where the port is located has hard basement rocks which offered a firm foundation for the construction of the port and various port facilities for example ware houses, docking areas and many others.

The sparse population also favored its growth and development. The population being sparse created room for the ports growth and development since few people were to be displaced and therefore compensation was not that expensive. The sparse population has also made the expansion of the port relatively easy.

The presence of the sheltered waters at Tema also led to the growth and development of the port. Being an artificial port, an artificial harbor was created thereby sheltering the port from the open waters of the Atlantic ocean and therefore this created a sheltered harbor where the vessels can easily anchor for loading and off loading without disturbances from the Atlantic ocean currents and tidal waves.

The presence of an extensive and rich hinterland also favored the growth and development of Tema. The port serves a wider hinterland of eastern Ghana, central and northern parts of the country together with the neighboring countries like Togo and Burkinafaso. Such a productive hinterland comprising of agricultural produce like coffee, cocoa, palm oil as well as minerals like gold, diamonds, boxite and others has led to more cargo being handled by the port resulting in increased revenue for its growth and expansion.

The overcrowding and congestion at Accra as well as Takoradi has also favored the development of Tema. It was the overcrowding at Accra with its resultant congestion and delays that led to the government to look for a new port so as to decongest Accra and thus provide efficient cargo handling.

The favorable government policy of Ghana. Government policy has been supportive after acknowledging the congestion and slow clearance of goods at Accra. Therefore the government decided to open up a new port and therefore funded its construction and maintenance until when Tema authority started obtaining revenue for its maintenance and expansion. Government also opened up road and railway links to other parts of the country like Tamale, Kumasi, Sunyani, Koforindua and others thereby creating a wider hinterlands for the port. Government has also maintained security for life and property thereby attracting more investors into the port area.

The proximity of Tema to Accra also favored its growth and development. Tema is only 17 miles from Accra and this allowed the easy overflow of cargo from Accra to Tema whereby making the port to handle more cargo. This proximity also allowed easy transportation of man power as well as construction materials from Accra to Tema.

Availability of power also favored the ports growth and development. Power is mainly got from the nearby Akasombo power station and the power is used to carry out various port facilities like loading and off loading using crane electronic weighing scales, processing of cargo as well as general computerization of all port facilities and activities leading to efficient cargo handling.

The well developed transport and communication network. The port is well linked with a network of roads and railway lines to other ports and towns of Ghana for example Accra, Kumasi, Achimota, Tamale and others. This has widened the port hinterland leading to more cargo being handled and thus increased revenue for its growth and development.

The rapid industrial development at Tema. Many industries have been setup in the port areas for example agro-processing, aluminium, smelting, fish processing, oil refineries, petroleum-chemical industries and many others. Such industries usually import raw materials and export manufacture products through Tema thereby increasing the volume of cargo being handled by the port. The industries have also attracted the people into the area leading to the expansion of the port.

Political instability. Ghana has been politically stable for a long period of time and this stability made the construction and development possible together with the attraction investments in form of industries and others. Such stability has also created a conducive atmosphere for carrying out shipping activities in the area which has made Tema to become a major port "call" in the area.

Rapid population growth at Tema. The port city's population has been increasing over the years and with an increase in population comes with an increase in demand for various services for example schools, recreation facilities and many others. The provision of such facilities to the increasing population has led to the growth and expansion of the port.

The use of modern technology has also favored the growth of the port. The port uses the automatic on and off loading cranes, marine navigation radar so as to direct the incoming and outgoing vessels as well as computerization of all port facilities with an electronic weighing system which has made cargo handling relatively easy and efficient.

Availability of labour especially skilled labour like engineers, technicians, managers, accountants, ship captains and many others have been used at different stages of the port stages leading to efficient cargo handling services and thus increased revenue of the port's growth and development.

Availability of capital. Initial capital was provided by the Government of Ghana leading to the setting up of the port and its various facilities of recent capital is being provided by the Tema port facility as well as expansion of the port.

Continuous research carried out by the Tema growth authority. Research is carried out on the best ways of cargo handling, how to approach the harbor areas as well as general needs by the ship merchants. This therefore has led to provision of fairly made packages as well as efficient cargo handling services making the port much sought after port in Ghana.

A long period of operation has led to growth and development of Tema. Through such experience in cargo handling as well as various port facilities, the port has become more efficient thus attracted more vessels leading to increased revenue as a result of cargo being handled.

A SKETCH MAP SHOWING THE LOCATION AND SITE OF KENYA

LAGOS (NIGERIA)

Lagos is the biggest city in Nigeria and the second biggest in Africa. It is a major port, commercial as well as industrial city. It's situated on a lagoon at the coast of west Africa. It has an island site comprising of several islands like Lagos, Victoria, Iddo, Ikoy and many others.

The site on the lagoon made it sheltered for the strong waves and tidal currents of the Atlantic ocean. Lagos was extensively used for slave trade because of its easily defendable position.

In 1861, the British occupied the site and started commercial as well as trading activities. Their population went on increasing and by 1898 there were over 200 British residences. The original site was mainly occupied by the Yoruba however with the expansion of the modern commercial activities it is now a meeting port comprising of several races and tribes from all over Nigeria.

For a long time, Lagos was the capital city of Nigeria however a new capital was set up at Abuja so as to decongest Lagos which was the major port and major commercial center.

However it is only the administrative functions that were taken over by Abuja as Lagos remains the major port and commercial center of Nigeria.

FACTORS FOR THE GROWTH OF LAGOS.

The equal defendable position of Lagos led to its growth and development. Its location on a lagoon as well as on the island site made it easily defendable from aggressors and that is why trading activities thrived in the area. The British also occupied the same area getting it from the Portuguese who had also realized its defendable position. It is the British who gave Lagos the initial lay out and planning of a modern port city.

The early European settlement at Lagos. When the British came to Lagos most of them settled on the eastern side of the Ikoy island and by 1898, the number had grown to over 200 residences. These provided the capital and skills for the initial layout of Lagos making it to become a major trading and commercial center as well as a port.

The strategic location of Lagos. The port city is situated in the south west of Nigeria along the coastal lagoon which protects it from strong winds and tidal waves of the Atlantic ocean. This location also makes the port to handle cargo from various parts of the world for example west Africa, North and south America as well as from the far east due to the major shipping lanes across the Atlantic from such areas. Such increased cargo has led to more revenue and therefore leading to growth and development of the port.

The different transport and communication facilities at Lagos. Lagos is well connected to other parts of Nigeria via a network of roads and railway lines for example from Lagos to Abuja, Ibadan, Cano, Enugu, Benin city and other parts of the country. In addition the port is well linked internationally via the Atlantic ocean through the numerous shipping lanes as well as air transport at Lagos international airport. Such an efficient transport has not only widened the ports hinterland but also made cargo handling highly efficient.

The presence of a rich and wider hinterland. The port serves the whole of Nigeria which is a very wide hinterland comprising of agricultural produce for example rubber, cocoa, palm oil, coffee and many others. Agricultural products together with various minerals like oil, natural gas, iron ore and many others. In addition the port also serves neighboring countries of Benin in the west and Niger in the north. Such a very wide and productive hinterland has led to more cargo being handled thus more revenue for the ports growth and development.

The presence of deep waters. The deep waters of the Atlantic have favored the anchoring of large ocean going vessels leading to more cargo being handled by the port. At first the harbor

area was not that deep but due to the dredging, this depth was increased and therefore larger ocean going vessels can now anchor at the port.

The favorable climatic condition experienced at Lagos. Lagos lies in the equatorial belt with hot temperatures and heavy rainfall meaning that it is ice free throughout the year and the heavy rainfall has resulted in the deep waters enabling anchoring of large ocean going vessels. The ice free conditions have made the shipping activities to go on uninterrupted throughout the year.

The presence of a low tidal range. The difference between the high and low tide is small and negligible and therefore shipping activities are not interrupted by the change in tide. This therefore allows anchoring of large ocean going vessels throughout the year leading to more revenue for the port's growth and development.

The rapid industrial development of Lagos. Many industries have been set up in the various industrial areas around the port for example at Apapa, Ikeja, Ilupeju, Ibeju-Lekki. Such industrial centers with iron and steel, oil refineries, chemical and petro-chemical industries have increased the volumes of cargo being handled by the port through the regular import and exports leading to growth and expansion of the port.

Rapid population increase at Lagos. This rapid population increase resulted in increased demand for certain facilities and services for example residential, health, recreation and others for example in 1963, Lagos had a population of 1.4 million people. The provision of such facilities led to the horizontal expansion and growth of the port city.

The supportive government policy of Nigeria. The government financed the construction and maintenance of the port as well as the expansion of the port. Government has also maintained stability together with the physical planning of the area and town. All this has aided Lagos growth and development.

The presence of power also favored the growth and development. The port has various sources of power the most important and common being HEP generated from the Kainji power station. Thermal power is also used together with the natural gas. Such power is used to run the various port facilities and services like electronic weighing systems, loading and off loading cranes and the marine navigation aids and many others together with the computerization of the port activities. This power has also attracted plenty of industries thus leading to the growth and development of the port.

The gentle relief of the area. This gentle relief of the area made it easy to construct various port facilities and in addition favored the setting up of the various road and railway lines to connect the port to various inland towns of Nigeria like Kano, Abuja, Ibadan, Enugu and many others. This therefore widened the port's hinterland making it draw more cargo as thus increased revenue of the port's growth and development.

The presence of the hard basement rocks in the Lagos area. The area where the port is located had hard basement rocks which a firm foundation for setting up the port and port facilities like warehouses, grain elevators, underground oil bunkers, extensive docking areas and so many other facilities.

Availability of skilled labour also led to the development of Lagos. Skilled labour was at first provided by the ex-patriates from Britain but today local Nigerians have acquired the necessary skills and techniques in port construction and development.

The use of modern technology for example loading and off loading cranes, a policy of containerization, computerized port facilities and services together with the use of modern marine aids so as to direct incoming and outgoing vessels.

The political stability of Nigeria. Nigeria has been relatively politically stable despite the numerous coups as well as the present terror attacks. This stability especially in the port area created a conducive atmosphere for shipping activities together with industrial activities and also assured the port users of security of both life and property making many people making Lagos as their port and shipment and to enhance its growth and development.

A long period of operation. This long period of operation has made the Nigerians acquire plenty of skills and experience as far as cargo handling is concerned. This therefore has led to efficient cargo handling and thus attracting more people to the port.

Continuous research in the port activities. Research is carried out and the needs of various shipping companies infrastructural needs of the port areas as well as the best ways of cargo handling so as to minimize the delays and wastage. This therefore has made the port to become highly efficient and thus attract more people to the area.

PROBLEMS FACED BY LAGOS

Inadequate land due to the island site and much of the land being used.

Inadequate land due to the ever increasing population leading to slum development.

Congestion in the public places like markets, public parks and recreation facilities.

Traffic jam especially during the rush hours leading to delays and time wastage. Constant silting up of harbor areas which requires regular dredging and this is costly as well as inconvenient.

Inadequate communication with the hinterland due to the island which limits the construction of the railway lines.

The city has administrative problems as it is too large to be administered effectively and this is compounded by the fact that it is a coastal city.

Inadequate social services for example HEP, fresh water supplies, medical facilities and many others due to ever increasing population.

Pollution that is air, water due to high population and high rates of industrialization.

High crime rates due to high levels of unemployment and high cost of living.

Urban terrorism by Boko Haram and other terrorist groups.

A SKETCH MAP SHOWING THE SITE OF LAGOS

CAPE TOWN

Cape town is a strategic port found in the south west of the republic of South Africa. Its history of development dates back in 1652 when Janvanriebeeck established a station to supply fresh produce to the Dutch east African vessels in 1652. Ever since then the town has been growing steadily and it is now a major port city as well as industrial area. It is also the legislative capital of the republic of USA .

The port is located off the shore of table bay off the shores of the Atlantic ocean. This makes it well sheltered port and thus making it a major international port of all ports playing the various Atlantic shipping lanes as well as those of the Indian ocean. Today the port city's` 150 hectare harbor is one of the best in the world with modern facilities like cooling sheds, 930,000turn capacity elevator, coal oil bunkers, ship repair yards as well as modern crane facilities for loading and off loading of cargo. However the presence of the table mountains which are part of the cape ranges has limited inland expansion and therefore reclamation of the land is being carried out from the Atlantic ocean in order to expand the port.

It is through such reclamation schemes that a new 10 hectare Duncan dock has been built to accommodate more vessels. The port city's` development is also linked to the white settlers since they always settled at the cape town before moving in the interior. Therefore they provide the initial lay out and planning of the cap town.

FACTORS FOR THE GROWTH OF CAPETOWN

The strategic location of cape town in in the south western tip of Africa which made it commanded busy ocean routes of both the Atlantic and Indian ocean. The position also gave the export a major command of feeder roads and railway lines connecting to other parts of the republic of S A as well as neighboring countries like Namibia and Botswana. This location made the port handle more cargo resulting into more revenue for it growth and development.

Cape town is a major entry port for the republic of south Africa. The port handles more cargo coming in from western Europe and from the far east making it the major entry port leading to more revenue from such cargo being handled and thus able to develop and expand.

The presence of deep natural harbor. Table bay harbor is well sheltered and has deep water of the Atlantic ocean which allows ocean growing at the port for example super oil tankers resulting into more cargo and thus revenue for the ports growth and development.

Presence of the hard basement rocks. The area where the port is located that is the Table bay ha shard basements and these provided a solid foundation upon which port facilities could be set up that is ware houses, the docking area, underground oil and coal bunkers and many others. In addition to hard rocks also found a solid foundation for setting up various roads and railway lines connecting the port to other towns of the republic of south Africa.

The port serves a wide and rich hinterland covering the whole of the south African republic and extending to the neighboring countries like Zimbabwe, Namibia and others. This hinterland comprises of available minerals like gold, diamonds, iron ore together with agricultural produce and manufactured industrial products. This therefore translates into more cargo being and thus more for the ports growth and development.

Cape town being a major international port. The port is a major transshipment center for vessels form far east, middle as well as those from Europe and south America leaving out those from north America. Many vessels from such areas use cape town as their major port and call so as to replenish their suppliers of fuel, fresh foods and many others. This therefore has made the port to acquire more revenue and also various commercial activities.

The rapid industrial development as well as the development of commercial activities at Cape Town. Many industries have been set up at Cape Town for example textiles agro processing, oil refineries, fruit packaging, wineries and many others. Thereby increasing the volume of cargo being handled through transportation of raw materials as well as export of manufactured products from the industries.

The presence of favorable climatic conditions being experienced in the area. The port is located in the southern hemisphere and experiencing type of climate making it ice free throughout the year therefore shipping activities go on uninterrupted throughout the year.

The restrictions on the giant oil tankers from using the Suez canal. The Suez canal has a low tonnage limit and therefore super oil tankers and other larger vessels cannot pass through the canal route via the Atlantic or Indian ocean and thus continuing to use Cape Town as their major port call which has led to more revenue.

The supportive government policy of the Republic of South Africa. Government financed the construction and the initial layout of the port, maintained stability of life and property together with financing reclamation projects aimed at expanding the port. All this has led to the port's growth and development.

Efficient transport and communication. The port city is well linked to other major parts of South Africa and other neighboring countries through a network of highways and railway lines. This therefore has led to efficient cargo handling as well as widening of the port's hinterland making it handle more cargo not only for the Republic of South Africa but also other neighboring countries like Namibia and Botswana and many others.

The rapid population increase in the port city has led to the development and growth. Cape Town's population has been increasing steadily over the years and the increase in people led to an increase in demand for certain facilities and services for example housing facilities, recreation and other facilities. The provision of such facilities has led to an expansion of the port area as well as its development for example the town's recent population is over 4 million people.

The availability of capital has also favored Cape Town's growth and development. The original capital was provided by the white settlers especially the Dutch who provided the initial planning and layout of the port city. More capital was provided by the individual Dutch merchants and commercial banks. Of recent money for reclamation projects is being provided by the Cape Town Port Authority and this has been used to pay for skilled workers, construct modern port facilities and many others.

A SKETCH MAP SHOWING THE SITE OF CAPE TOWN PORT.

CAIRO (EGYPT)

Cairo is one of the largest cities in Africa and the middle east. It is located at the focal point of a river and other land routes. The city has a high day population of over 15 million people. It was built in 1964 AD at a site of a Roman fortress and an earlier Greek settlement. The city became the national capital of Egypt in 1863 and it has now spread along a low spur of the Mokotam on the right bank of the Nile to cover nearly 20km². It's a major commercial, recreational, residential, educational as well as a major tourist resort.

FACTORS FOR THE GROWTH OF CAIRO

Its location at the focal point of the early caravan routes of Tunisia, Jerusalem as well as Asia minor. Such location gave Cairo a good command of this trade thereby attracting people from the North and West Africa, Asia and the middle east and others. It's from this commercial background that the city grew and expanded to its present state.

The gentle relief of the area. This gentle relief aided the construction of settlements as well as other infrastructures for example roads, railway lines leading to the town's growth and development.

Availability of fertile soils also favored the growth and development of Cairo. Being located on one of the banks of the river Nile, the area had fertile alluvial soils which favored agriculture and thus attracted more people in the area. In addition the fertile soils led to flourishing agriculture and thus more agro-based industries were set up in the area attracting more people and other investments leading to its growth and expansion.

The role of river Nile. The river supplies fresh water for domestic as well as for industrial use and it also provides a cheap form of transport for both passengers and cargo from different parts of Egypt especially the Northern and southern parts of Egypt. The banks of the river also had fertile soils and during flood times the river supplied flood waters that were used in irrigation purposes.

The modified climatic conditions, Egypt experienced a hot desert climate but Cairo city has a modified type of climate due to the presence of river Nile that impacts on the area's humidity. Afforestation and re-afforestation programmes were also carried out in the area leading to the growth of various economic activities as people were attracted to the area due to favorable climatic conditions.

The supportive government policy of Egypt. Government has carried out deliberate planning of the city together with funding of the various activities and setting up various infrastructures. This was so especially after the proclamation of Cairo as the capital city of Egypt in 1863.

The city is well linked to other parts of Egypt with various modes of transport that is inland water transport in the form of river Nile, road and railway links as well as air transport from Cairo to other parts of Egypt like Alexandria, Aswan Luxor, Asyut, port Suez, port Saidi and others thereby widening the city's sphere of influence and thus leading to its growth and development.

Cairo being or having the head quarters of the Arab league has acted as the political capital of various Arab countries of north African and the middle east. This therefore has attracted investments from such countries leading to its growth and expansion. Annually delegates from these various countries visit Cairo for various meetings and this necessitated the construction of various hotels to accommodate the delegates. It also helped to promote the tourist sector as most of the delegates after their meetings tour various attractions in the city.

The rapid population growth of Cairo. The city's population has been increasing steadily over the years for example by 1479 the city had 6.5 million people. However this has increased tremendously to over 15 million people to date. This increase in population led to increased demand of various services and facilities for example water supply, housing apartments, public works, medical centers, schools and a host of other facilities. The provision of such facilities led to the expansion of Cairo and also attracted more people in the city turning into Africa's largest city.

The increase in industrial activities. Many industries have been setup in the city and its environs (surrounding areas) for example iron and steel, textiles, electronics, toiletries, dish ware such industries with the area attracted more people into the area leading to the city's growth and development.

The growth of tourism sector. Cairo is a major tourist resort and destination with plenty of attractions like river Nile including the boat cruise, sport fishing, diving and swimming in the Nile waters, museums, ancient buildings and their marvellous architectural designs, the tombs of ancient pharaohs and many other attractions. There are many tourists who visit the country to increase that is the demand for hotels and other facilities and the provision of such facilities by both the government and private investors led to the growth and development of Cairo.

Political stability enjoyed by the city. Cairo has been for a long time been politically stable except the recent event of 2011 which had its epic-center at Tahrir square in the middle of Cairo. Such a long history of political stability has not only attracted massive investments but also created a conducive atmosphere for the growth and development of the city.

A long history of existence. Cairo was set up in 969 AD as one of the major towns of Fatimid dynasty. Later it was taken up by other rulers of the Roman empire and others giving it a long period of existence up to date. Such a long period of existence has given the city plenty of challenges as well as experiences upon which the city has depended to as to efficiently plan for the city's growth and expansion and also have to handle various problems associated with the urban growth.

Capital

Skilled labour

Continuous research

A SKETCH MAP SHOWING THE LOCATION OF CAIRO

ROTTERDAM

Rotterdam is one of the biggest ports in the world (was the leading busiest port from 1962-2002). It is also commonly known as Euro port meaning it is the major entry port of west Europe.

It is located in the south east Netherlands at the mouth of river Rhine. The completion of the new water way in 1872 gave Rotterdam a direct link to the north sea thereby allowing large ocean going vessels to anchor at the port and hence increase the volume of cargo being handled at the port.

The port serves a wider hinterland comprising of the whole of western Europe or the Rhine land countries or basin that is Switzerland, German, Belgium, France, Australia, Poland, Italy and many others. The port owes much of its development to the presence of river Rhine and its importance as the major means of transport for both imports and exports of the Rhine land countries. This river or port serves a very wide hinterland which has been made possible by the construction of the various canals that link up the Rhine and other countries of the world that is the Rhine-Ron canal, Kiel canal, Dortmunds canal, Rhine-Herne canal, Lippesitte canal and many others.

Apart from being a major port it's a major commercial and industrial area as well as a tourist resort.

FACTORS FAVOURING THE GROWTH AND DEVELOPMENT OF ROTTERDAM

The strategic location of Rotterdam. The port is located at the mouth of the world's busiest river that is river Rhine as well as a busy shipping lane that is the north sea and the north Atlantic shipping lane comprising of countries like England, German, Norway, Sweden, France and many others. This therefore has made the port to handle more cargo leading to more revenue for the growth and development.

The presence of natural sheltered harbor. The port is not located at the coast but sheltered away in the deepened estuary of river rotte. This therefore has provided it with a sheltered natural harbor which protects it from the strong currents as well as tidal waves of the north sea. The sheltered harbor therefore provided the best site for the construction of unions port facilities and thus making the port handle more cargo leading to its growth and development.

The gently sloping surface or relatively flat area where the port Located. The port area is relatively flat being the delta region of 3 important rivers that is river Rhine, river Meuse (maas) as well as Scheldt. This flat area therefore made the construction of port facilities and other infrastructures relatively easy and cheap. It is made it possible to easily construct transport routes like roads and railway lines connecting the port to other major ports of Netherlands and neighboring countries which has expanded the ports hinterland.

The low tidal range experience at Rotterdam. The difference between the high and low tidal is low and negligible meaning that shipping activities can go throughout the year with minor disturbances therefore large ocean going vessels can comfortably anchor or dock at the port throughout the year making the port to handle more cargo for its growth and development.

The deep waters of the north sea. Such deep waters allow the anchoring of large ocean going vessels for example oil tankers and others that carry more cargo. Such cargo results into more revenue being handled by the port thereby leading to its growth and development.

The favorable climatic conditions experienced at the Rotterdam. Netherlands has a temperature type of climate however the port area experiences a modified mild temperature climate and this has been mainly modified by the north Atlantic drifts, a warm ocean current

that transfers warm conditions from the tropics to the temperate latitudes. This therefore makes the port ice free for a greater part of the winter season leading to shipping activities being carried on throughout the year.

The presence of a wide and productive hinterland. The port has a wide hinterland comprising of all Rhine countries for example German, Switzerland, Belgium together with neighboring countries like Poland, Austria, Italy, France. Such a wide hinterland which is also highly industrial has made the port to handle more cargo resulting into more revenue for its growth and development.

The favorable government policy of Netherlands. The government has financed the construction of port facilities, maintained security, laid down the basic infrastructure, roads and railway lines connecting Rotterdam to other major parts of Netherlands and the Rhineland countries. Government has also financed research resulting into acquisition of modern techniques of cargo handling. Government has also financed the expansion of the port through land reclamation for example the 1952 Botlek expansion as well as the Maasvlakte.

The construction of the new canal in 1872 also favored the growth and development of Rotterdam. This is a canal which was constructed to give Rotterdam a direct link to the North sea through the deepening of the canal. This helped in such a way that large going ocean vessels could now easily access Rotterdam leading to more cargo being handled as well as more revenue from such cargo leading to the port's growth and expansion.

Rapid industrial development at Rotterdam. Many industries have been setup in the port area for example oil refineries, chemical and petro-chemical industries, textiles, agro-processing, iron and steel, motor vehicle assembly as well as ship building and repair. Such industries increase the volume of cargo due to the importation and exportation of raw materials and finished industrial products respectively.

The use of modern technology. Handling of cargo inspection as well as discharge are well carried out with modern technology that is computer systems resulting into efficient cargo handling. Loading and off loading systems as well as weighing systems are automatic as well as electrified. There is also the use of marine navigation readers to direct incoming and outgoing vessels and of recent there has been an introduction of automatic flood gates which close off the gate when sudden floods are detected. All these have led to efficient cargo handling making the port western Europe's major entry point.

Efficient transport systems have also led to the growth and development. The port is well served by an efficient network of roads, railway lines, inland water transport and many others which have led to efficient cargo handling as well as extension of the port's hinterland.

The increase in the population in the port area. Rotterdam's population has been increasing steadily over the years and with the increase in population there has been an increase in demand for various services and activities for example housing apartments, roads, health and recreation facilities and many others. The provision of such facilities has led to an expansion of the port at Rotterdam.

The prosperity of the Ruhr region. The Ruhr region of Germany became the major industrial region comprising of large scale manufacturing industries for example iron and steel, textiles, heavy engineering. These industries and many more import numerous quantities of raw materials and export their finished industrial products through the port thereby increasing revenue for the port's growth and expansion.

Availability of capital. This capital has been mainly provided by the government of Netherlands and of recent the Rotterdam port authority. Such capital was used to set up various port

facilities like the docks, coal and oil bunkers, dry docks for ship repairs and many others. Capital has also been used to carry out land reclamation from the North sea so as to expand the port.

Political stability of Netherlands. The country has been politically stable for a longer period of time especially after the end of the second world war. This period of stability has attracted plenty of investment in the port area assured sailors and merchants for their continued use of the port together with creating of a conducive environment for carrying out shipping activities and thus leading to its growth and development.

Availability of skilled labour. The Dutch being located in the area that is so low lying and therefore prone to flooding from both the north sea as well as river Rhine acquired skills to water control and have now become masters of marine operations worldwide. Therefore this has created a large body of skilled workers for example engineers, technicians, managers, accountants and many others resulting into efficient port facilities and handling services.

Continuous research carried out by the Netherlands and Rotterdam port in particular. Through research, modern trends of cargo handling have been realized as well as the different needs of particular sailors and merchants. This therefore has made the port to offer tailor made packages that suit every sailors or merchants needs. This therefore has made the port to have efficient handling facilities and thus out competed other ports along the North Atlantic shipping lanes.

The policy of containerization. This policy requires all cargo passing through the port to be packed in metallic containers of definite sizes. This therefore makes cargo handling so easy and efficient since the metallic containers are easily loaded and off loaded from the ships thus saving time and unwanted delays.

PROBLEMS FACING ROTTERDAM

Limited land for expansion as most of the land has been used up and this has necessitated reclamation which is costly.

Congestion at the port due to too much cargo being handled resulting in delays in the clearance and delivery of goods.

There is silting up of the port area and the river channel thereby reducing its depth. Therefore large going ocean vessels at times cannot dock and this calls for regular dredging which is costly.

High maintenance costs due to regular dredging and regular attacks from the North sea.

Shortage of housing apartments and other facilities and settlements leading to the growth of slums and other shanty settlements.

Sea attacks from the North sea especially during high tide leading to flooding of the port area and at times temporary closures. Occasional flooding by river Rhine especially during spring and summer when the glacial melt water from the alps increase the volume of water and at times puts shipping activities at a standstill.

Pollution especially air, water and noise pollution mainly from the high levels of industrialization in the port area. Noise is mainly due to increased port activities as well as high population.

High crime rates due to the high levels of unemployment and also due to the high population.

Competition from other neighboring ports for example Antwerp in Belgium as well as Amsterdam in the Netherlands.

Accidents are common at the port leading to death of workers as well as destruction of merchandise.

HONG KONG

Hong Kong is located in the south east China on the island in the south China sea. The port city has developed into a major port city and industrial area not only serving China but also other neighboring countries of the south east Asia. The port city is one of the largest entry points in the whole world and of recent it is a major industrial center specializing in electronics and electrical goods, chemical and pharmaceutical products as well as being the headquarters of various multi-national companies in the south east Asia. The port city for a long period of time was under the British occupation until 1997 when it was handed back over to the mainland China and it is now under its control.

FACTORS FOR THE DEVELOPEMNT OF HONGKONG

The location of the city on a defensive site. Hong Kong is located on an island on the east of china in the south china sea off the main land. This location made it well sheltered from any possible evasion and also made it easily defendable in the event of any attack.

The presence of deep natural harbor also favored Hong Kong's development. This deep natural harbor allows access to and anchorage of large going ocean vessels resulting into handling of more cargo and thus more revenue for the ports growth and development.

The strategic location of Hong Kong in the south east of china which is one of the most densely industrial parts of the country. In addition the port is located amidst highly populated and rapidly industrializing countries like Japan, Korea, Malaysia, Philippines and many others thereby serving a very wide area. In addition the port city also controls man international shipping lanes both from developing and developed countries and thus handling more cargo which has resulted into more revenue for the ports growth and development.

The earl settlement and occupation of the port city by the British. This occupation helped the port city in a way that Britain carried out the initial lay out and planning of the port city making it a port of international standards. This occupation also opened links between Britain and Hong Kong as well as the rest of Europe. It also became an important distribution center for British goods and all this led to the ports growth and development.

The favorable climatic conditions experienced at Hong Kong. Being located on monsoon Asia, the port is ice free throughout the ear making shipping activities to go on uninterrupted all ear and this has led to more cargo being handled by the port hence leading to its growth and development.

The presence of rich wide hinterland. Hong Kong serves almost the whole china together with neighboring countries like southern Japan, Malaysia, Philippines, and many others. It is located in one of the greatest industrialized conurbations of China in the world, Guangzhou Shenzhen-Hongkong conurbation. With many industries both manufacturing and service industries. Therefore this has led to more cargo being handled in the form of raw materials and finished industrial products. Apart from conurbation, mainland China is also Hong Kong's` major hinterland comprising of agricultural produce minerals and many others products leading to more revenue for the ports growth and development.

The presence of a low tidal range. Hong Kong experiences a small or negligible tidal range which allows shipping activities to go on throughout the year as large ocean vessels can dock at the port throughout the year without interruptions.

The supportive government policy of Hongkong as well as the mainland of China. The port city for a long period of time was under the British occupation and has offered support for the growth and development of the port and after it was handed over to mainland China on 1st July 1997. The Chinese government has been supportive through financing various port facilities, maintaining stability and attracting plenty of investments all of which have led to the growth and development.

The presence of hard basement rocks. Such rocks provided a solid or firm foundation for the construction of various port facilities for example ware houses, docking areas, underground storage facilities and many others leading to the port city's growth and development.

The rapid industrial development in Hongkong. Many industries especially the multi-national companies setup shop in Hongkong for example electronics and electrical industries, food processing, textiles, chemical and petro-chemical agro processing and many others. This rapid industrial development has increased the volume of cargo being handled through the increase in imports as well as raw materials of industrial products.

Rapid population increase in Hong Kong. This increase in population has been mainly as a result of many Chinese migrating from mainland China to come to Hong Kong for employment as well as higher social and economic infrastructures. Others have to come in from neighboring countries like Malaysia, Philippines, and many others. Today the port city has more than 7 million inhabitants and this has increased the demand for various services and facilities like housing apartments, recreation facilities and many others. The provision of which has led to the physical expansion of the port city.

Availability of capital. This capital was at first mainly provided by the British who financed and setup various port facilities in the area. In addition, more capital was provided by the rich Chinese entrepreneurs from mainland China who opened up various industries on the island. Such capital has been instrumental in setting up various port facilities as well as the expansion of Hong Kong.

Availability of skilled labour which was mainly provided by the British expatriates who were brought in to plan and lay out the port area. They also provided building skills for the various port facilities resulting in the construction of various port facilities that not only stood the test of time but also the element of weather.

The use of modern technology. Modern techniques of machinery were brought in by the British making the port a modern international port with modern efficient facilities like loading and off loading cranes to direct incoming and outgoing vessels, weather warning systems so as to detect sudden storms and computerization of all port activities. All this has made the port more efficient and thus attract more cargo leading to increased revenue for development.

The efficient transport and communication facilities at Hongkong. These comprise of railway transport which is fully electrified and serves the port city and its neighboring areas like Kowloon, Lantau and Kwaichung. Road transport is also highly developed connecting various parts to the city center. The port is also linked internationally with the use of air transport as the major used by national carrier Cathay Pacific. Such efficient transport system has led to easy delivery of cargo to and from the port.

The ports location at the mouth of river Xian commonly known as river pearl. This river connects the port to mainland China. It also supplements road and railway transport also offers fresh water for both domestic and industrial purposes.

The political stability enjoyed at Hong Kong for a long period of time that is over 100 years since the early British occupation. Such a long period of stability attracted massive investments and

also created a conducive environment for the growth and expansion. It is this stability that has made the port to become a major international port of call.

The policy containerization. This policy ensures that all goods passing through the port are packed in metallic containers of given dimensions. This helps in a way that such cargo is easy to handle as loading and off loading becomes easy and efficient due to the use of loading cranes.

The development of the tourism industry destination for many visitors all over the world due to its diverse attraction both physical and human. The increase in tourist activities led to an increase in demand for various facilities like hotels, modern roads recreation, security and all of which led to the growth and expansion of Hong Kong.

A SKETCH MAP SHOWING THE LOCATION OF HONG KONG

CONURBATIONS

A conurbation refers to a region comprising of a number of cities, large towns and other urban areas that through population growth and physical expansion have merged to form one continuous urban and industrially developed area.

The towns not so much that there are no clear demarcations or boundaries between them as it all becomes one large urban area. The growth of a conurbation in many cases reflects the rates of urbanization, urban development as well as the levels of development of the country.

The major conurbation in the world include;

The Ruhr conurbation comprising of Essen.

The great lakes conurbation in USA comprising of towns like Pittsburgh, Cleveland, Detroit, Duluth, Chicago and many others.

The megalopolis of USA's eastern seaboard comprising of towns like Hartford, New York, Baltimore, Philadelphia and many others.

The British midlands of the UK comprising of towns like Birmingham, Smithwick, West Bromwich, Walsall and Wolverhampton.

The Tokyo-Nagoya-Osaka conurbation of Japan.

The west Holland conurbation of the Netherlands comprising of cities like Rotterdam, Hague, Utrecht, and Amsterdam. This is commonly called Randstad conurbation.

Guangzhou, Hongkong Macau conurbation of China.

The northern France conurbation with Paris as the principal city and others include Lille, Le Havre, Nancy and Strasbourg.

The Witwatersrand conurbation of south Africa comprising of Pretoria and Johannesburg.

FACTORS FOR THE GROWTH OF CONURBATIONS.

Availability of minerals.

Where minerals occur in large quantities over a wide area, fewer towns tend to emerge. These are basically mining towns which attract industries through the expansion of towns later merge to form one large urban area called a conurbation for example the Ruhr of Germany, coal and iron were the major minerals in the region of south Africa. Gold and diamonds were the basic minerals while the great lakes region and the Atlantic seaboard had coal, limestone, iron ore and plenty of other minerals.

The presence of a large and productive hinterland.

A productive hinterland contributes to the growth of diverse economic activities for example trade and commerce, fishing, tourism, mining and others. Where these activities take place, towns emerge and later for example emerge to form one large urban complex called a conurbation.

The rapid increase in population also leads to the emergence of a conurbation.

This large increase in population provides market and impetus to the various economic activities in the several towns for example the eastern seaboard of USA has over 200 million people and Tokyo Nagoya Osaka conurbation has over 25 million people. The increase in population within

the towns increases the demand for housing and other facilities and the provision of such facilities usually leads to expansion of the towns and these later merge or form a single urban complex called conurbation.

Availability of capital also led to the growth of the conurbation.

The capital I needed to provide the basic infrastructures for example railway lines efficient power supply and others. It is this capital that is used to set up the industries and also to sustain the various economic activities in them. Such capital is usually from the government, financial institutions, foreign investors, local entrepreneurs.

Sufficient transport and communication.

Roads, railway line areas with as well as air transport for both settlement plays a lot in enhancing activities in such area between the towns and the climatic conditions are expansion and merge more towns from a single area.

Availability of water especially fresh water.

Water is a basic necessity for life and therefore for town growth and development. It is so much needed for both domestic and industrial activities and that is why major conurbation have come up in areas that have access to fresh water sources especially rivers and lakes for example the great lakes of USA, the Rhine and its tributaries like the Ruhr, Escher and Wupper for the Ruhr conurbation as well as the Rhine Meuse and Scheldt for the Rand stard conurbation of Netherlands.

Availability of gently sloping land.

Areas with gently sloping land are likely to develop into conurbations compared to areas with a rugged mountainous landscape. The flat landscape enables horizontal expansion of the existing towns which later merge to form a conurbation for example the Tokyo Nagoya-Osaka conurbation of Japan is found on the Kantō plain which enables horizontal expansion of the towns. Likewise the great lakes conurbation have also developed due to the gently sloping landscape which enabled horizontal expansion of the towns.

Availability of power.

Power can be the form of HEP oil, natural gas coal, nuclear or any other form of power. Such power is used for both domestic and industrial purposes and therefore with time the various towns that have come up resulting into conurbations for example the Ruhr conurbation of Germany had coal as the major source of power in the olden days though later other sources were also found and used.

Supportive government policy.

Government setup basic infrastructure for example roads, railway lines together with social amenities for example schools, health centers, recreation facilities and others all of which attract people into a certain area inter developing into towns and these towns merge to form conurbations.

Strategic location is also responsible for the conurbation growth. Some areas are strategically positioned for trade and commerce, easy accessibility as well as linkage with other areas of the country for example the eastern seaboard and the great lakes region of USA which have cheap water transport and are nearer to Europe which position made it develop faster into major towns and these later merged to form conurbations.

Favorable climatic conditions.

People always settle in areas with favorable climatic conditions for both settlement and other economic activities therefore areas with favorable climatic conditions are likely to develop into more towns compared to areas with unfavorable climatic conditions for example the eastern sea board of USA is ice free due to the influence of the North Atlantic drift which made the area to develop into a conurbation compared to other areas like on the western sea board with harsh climatic condition for example freezing during the winter season.

Rapid industrial growth.

As industries locate in certain areas more industries are likely to come and join them due to the industrial inertia (location advantages) that are found in the area. As more industries join the already existing industries there will be horizontal expansion of the industrial towns as well as attraction of more people in the area resulting in an industrial conurbation.

Political stability.

For towns to develop, they attract more people and later merge to form conurbations. There must be a long period of stability as well as investments. This stability results in rapid urban growth and development which later transforms into conurbations.

Historical factors.

The eastern sea board of USA developed into major industrial area due to the role of migrants who had come in for the industrialized western Europe. These setup industries leading to growth of towns and cities which later merged to form conurbations. Similarly the conurbations of Eastern China comprising of towns like Beijing, Nanjing, Shenyang, Lanju and others trace their early development to the early settlement by the Japanese who set up small scale industries in the area leading to their growth and development.

Availability of better social and economic infrastructures for example roads and railway lines, health facilities, recreation facilities and many others which continue to pull or attract man people in the area. The more the population the increase will be in demand for various services and facilities resulting expansion of the already existing towns to merge with other neighboring towns resulting into conurbation growth.

EFFECTS OF CONURBATIONS

Positives

1. Offer market to both agricultural and industrial products due to high population and incomes.
2. To promote better social services to the people living in the area.
3. The reduce population pressure in the rural areas as many people migrate to the urban centers.
4. Provision of employment opportunities to a great number of people both skilled and non skilled due to many economic activities in the area.
5. Provision of security since they tend to be more secure compared to the country side.
6. Conurbations promote innovations and inventions through the stiff competition for resources and other facilities.
7. Promotes industrialization due to the provision of market, labour and other locational advantages.
8. Promotes unity and cooperation among the people.
9. It widens the tax base of the municipal or town authorities as well as the government.
10. There is maximum utilization of resources for example land is optimally used.
11. It is an index of development as it shows a higher level of urban development as towns merge with others.

12. Promotes tourism development as many people flock such urban centers for various attractions they are in, that is high rise buildings or sky scrapers, amusement parks, public parks and the fact that urban dwellers have higher disposable incomes allowing them to engage in luxuries like tourism.

Negatives.

1. High crime rates.
2. Increased pollution levels and that is water, air and noise.
3. Overcrowding or congestion in public parks and other public places.
4. Environmental degradation for example swamp reclamation.
5. Increased cost of living.
6. Development of slums and shanty settlements.
7. Inadequate social services.
8. Unemployment.
9. Traffic congestion and accidents.
10. Reduction of agricultural, recreational due to urban spiral.
11. Easy spread of diseases for example cholera, Ebola.
12. Moral degeneration that is prostitution, drug abuse trafficking, kidnappings.