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## Geography (UACE 250/2) paper 2 Urbanization and Port development in the world

### Definitions

**Urbanization** is a process where there is an increasing percentage of the country's population living in towns. It is also a process of town development in terms of population and function.

A **city** is an urban area, differentiated from a town by high population density, importance or legal status.

A **port** is a harbor town or city where ships may take on or discharge cargo. Ports usually develop into city

**Site of a port** refers to the actual ground where the port is built / situated. This includes the harbours, the port built- up area and the docking areas

**Hinterland** of a port refers to the area served by the port i.e. the area which supplies food /where exports and imports are handled

A **Conurbation** is a continuous urban belt/complex formed due to the amalgamation of two or more cities.

### Examples of conurbations include

**The Ruhr region** in Germany consists of Duisburg – essen – Dortmund complex and Bochun – Meriheim complex.

**The Japan conurbation** consists of Osano – Kobe – Kyoto complex and Tokyo – Kawasaki – Yokohama complex

### Causes of urbanization

The causes of Urbanization are categorized as push and pull factors.

### Pull factors

- Presence of security or political stability in urban centres like Lagos, Ibadan, Abuja in Nigeria, have attracted many people in those areas because this favor settlement, trade and commerce, and acquisition of social facilities like health care, education necessary for development.
- Presence of employment opportunities in cities such as Lagos, Ibadan. Abuja has led to growth of urban centres. People go to live in those towns to work as shopkeepers, security officers, market vendors, Journalists, engineers so as to earn an income to improve their standard of living.
- Presence of better social services like electricity for domestic use like cooking, lighting, running water for drinking, cleaning, cooking, health centres to provide health services, schools to provide education have attracted many people to towns leading to their growth as urban centres.
- The presence of efficient means of transport such as railways, roads, canals and airfields that enable free movement of people to go to work, transportation of commodities and manufactured products to market centres for sale have led to growth of urban centres like Lagos, Abuja in Nigeria
- The supportive government policies such as urban planning, development of infrastructure like roads, railways, establishment of markets, administrative structures have led to growth of towns like Lagos, Ibadan, and Abuja.

#### **Push factors**

- Insecurity or political instability in some areas have forced people to move from the insecure areas because of the fear to lose lives and property to go to the secure areas like Lagos hence urbanization.
- Unemployment in the rural areas of Nigeria have led to loss of incomes to use in acquiring social needs like clothing, food, better accommodation and this has forced people to move from those areas to go to areas where jobs are thus creating urban centres.
- Population pressure or limited land in remote areas of Nigeria has forced people to migrate in large numbers to other areas with limited population resulting into growth of urban towns.
- The limited social services in villages or upcountry such as recreation, health services, education, running water has forced people to move to other area where such facilities do exist resulting into growth of urban centres such as Lagos, Ibadan, and Abuja.
- Natural calamities like drought, floods, and diseases in some parts of Nigeria have forced people to leave certain areas and go to others where such poor conditions don't exist. This has led to growth of those areas as urban centres or towns e.g. Lagos, Ibadan, Abuja.
- The nature of the land tenure system where in some areas land is privately owned has left many people landless and so has to find ways of getting their land or source of livelihood and this is often in towns thus leading to their growth of urban centres.
- Decline in the productivity of land or soil in villages has led to limited food; harvested and this has forced people to migrate to other areas which are relatively developed resulting into their growth as urban centres.

- Undesirable cultural practices such as female circumcision in some communities in Nigeria have forced people to leave those areas and go to towns where such practices are limited. This has brought in many people leading to growth as an urban centre.
- Historical factors like in areas which had social problems like slave trade belts in western Africa forced people to leave those areas and congest in a smaller secure area leading to its growth as an urban centre.
- The poor or unreliable transport facilities to use in labour mobility, distribution of commodities, trade and commerce in certain areas have forced many people to leave certain areas and go to others thus turning them into urban centres.
- The love for adventure have compelled many people from villages to migrate and go to other areas which are relatively developed thus turning them into urban centres

### **Effects of urbanization**

#### **These are positive and negative**

#### **Positive effects**

- Creates revenue used for development of the country collected from various economic activities such as transport, service sectors like telecommunication, education, health centres leading to development of the country.
- Urbanization improves the provision of social services like health care, education, electricity for domestic uses such as cooking, lighting, clean running water for drinking, cooking thus improving the peoples standard of living.
- Urbanization has led to development of transport routes such as roads, railways, airports which are used to transport people and raw materials to industries for processing and the finished goods to market centres for sale thus leading to development.
- Urban centres such as Lagos, Ibadan, and Abuja contribute to supply of both skilled and semi-skilled labour important for development of industrial sector and the service sector as transport, health services etc.
- Urban centres like Lagos, Ibadan, and Abuja provide market for both agricultural and industrial products such as food stuffs and products like electronics, textiles, cutlery, and clothing thus stimulating development of the country.
- Urban centres such as Lagos in Nigeria create several employment opportunities from which people earn incomes to improve their standard of living. Such employment opportunities include trade and commerce, health care services, to doctors, education services o teachers, administration to social workers and administrators, security services to policemen, shop keeping, cleaners etc.
- Urban centers such Lagos, Ibadan and Abuja attract investments which arc important for the country's development These include establishment of power stations (thermal generation) to provide electricity for urban use, industries to provide social needs like sugar, soap, clothing, mattresses and the service sector schools, hospitals etc.

- Urban centres such as Lagos, Ibadan, and Abuja have promoted unity and cooperation between people of different tribes, religion and ideological background and this is necessary in promoting security, harmony and national development. Such unity is due to the fact that people are living together and dealing with each other enabling them to tolerate each other.
- Urban centres with their modern infrastructure such as high rise buildings, railways, recreation facilities, and museums, shopping malls in Lagos, Ibadan, and Abuja have promoted tourism which is a source of foreign exchange used for development of the country.
- Urban centres contribute to full utilization of resources for example, sand is exploited and used to build houses, fishing is done to provide fish protein to the urban population. Forests are also exploited to provide timber for furniture making, roofing of urban structures like houses thus stimulating economic development.
- Urbanization reduces pressure on land in rural areas of Nigeria thus encouraging agricultural practices to produce food to support the urban population and the country at large.

### **Negative effects of urbanization**

- Urbanization is associated with development of slums with their associated evils such as congestion, poor hygiene, poor accommodation, crime proliferation in towns like Lagos, Abuja and this has compromised the people's standards of living.
- Has led to strain on social services like; roads, water, electricity, healthcare, education often leading to decline in quality hence affecting the people's standards of living in big cities Lagos, Ibadan, Abuja.
- Urbanization has led to congestion and overcrowding for example Lagos with negative consequences such as slowing down business transaction and spread of air borne diseases like Typhoid, flu and colds which affect people's lives.
- Has led to pollution of air, water and land due to industrial effluent such as fumes, smoke and dust that are released into the atmosphere. Toxic wastes are also often dumped urban water channels and stream and end up in major lakes and rivers thus killing aquatic life and exposing the urban population to contaminated water supplies. Urban garbage like packaging materials, domestic wastes is often dumped or heaped on land thus exposing people to health hazards in cities like Lagos, Ibadan and Abuja.
- Urbanization has led to loss of desirable cultural practices such as marriage arrangements, way of dressing, religion and many others. It has led to adoption of some undesirable behavior such as homosexuality or lesbianism, drug abuse and alcoholism etc.
- Urbanization has led to loss of labour from rural areas resulting into decreased food production that offsets food shortages, famine and high cost of food stuffs in the country often leading to poor standard of living among the poor people.
- Urbanization has promoted the unemployment problem in towns like Lagos, Abuja and this has led to low standards of living and or increased violence and other forms of crimes like theft, murder by the unemployed people who are struggling to survive.

- Has promoted juvenile delinquency where a number of street children increase in the city and these often live a misery life and may be a threat to development of the city in that they use resources irresponsibly involving poor garbage disposal, pick pocketing and burglary.
- Urbanization tend to accelerate flooding of the city through poor planning and construction or blocking of urban drainage channels; thus leading to destruction of properties, settlements and delaying of traffic along flooded roads.
- Urbanization encourages encroachment on marginal lands like forests and swamps in the quest to expand the town like Port Harcourt and Abuja in Nigeria and this has affected the ecosystem due to destruction of habitats for wild animals and birds.
- Urbanization has created uncomfortable micro climate of high temperatures to towns like Lagos, Ibadan, Abuja due to blocking of wind movements by the tall structures and heat generated from activities like cooking, vehicle industries etc.
- Has led to increased cost of living to the inhabitants in big cities Lagos, Ibadan, Abuja in form of accommodation, transport, feeding, healthcare and this has affected the peoples savings thus retarding their development

## **General factors that favors development of a port**

### **Physical factors**

- Favourable climate e.g. the ice free conditions
- Deep water for anchoring large ships
- The hard basement rocks(i.e. for both Europeport and Hong Kong)
- The low tidal range ( for both Europeport and Hong Kong)
- The gently sloping relief for port construction
- Sheltered natural harbour for Hong Kong and a sheltered harbor for Europeport from the strong Ocean waves
- Strategic location along the major water bodies which international water bodies which are international waterways
- Extensive and productive hinterlands
- Presence of land for port expansion (Hong Kong)

### **Other factors**

- Availability of adequate capital
- Presence of labour i.e. both skilled and manual labour High levels of technology for port development
- Favourable government policy for port development
- Political stability in the country
- Presence of other modes of transport network/ facilities
- Research to modernize the technology for port construction and handling services
- Presence of power e.g. HEP, thermal power, nuclear power, etc.
- The development of industries

- Historical factors especially by the TOTAL Europeans.

## **Contributions of ports to the development of a country**

### **Positive impacts**

- Handle imports and exports of a country
- Provides employment opportunities in form of managers, handlers, clearing agents etc.
- Source of government revenues from taxes
- Promotes the development of the tourist industries which bring in foreign exchange used for development.
- Promotes the development and provision of social services e.g. medical, education; commercial that lead to better standards of living.
- Promotes national / international unity by facilitating trade among countries.
- Encourages the development of industries due to a large population leading to provision of consumer goods like sugar, milk, wheat necessary for development of a healthy population
- Leads to improvement of transport routes like railways, canals, airports for air transport which facilitates transportation of raw materials to industries and merchandise to market centres for sale.
- Promotes high innovations and technology necessary for development of the industrial, agricultural and service sector leading to development.
- Provision of abundant labors; skilled, semi-skilled and manual labour necessary to develop the country.
- Full utilization of available natural resources e.g. land, minerals thus stimulating development.
- Promotes easy dissemination of information or Diffusion of ideas necessary for development.
- Promotes agricultural development through demanding for agricultural commodities like milk, beef, wheat, rice, Vegetables to feed the population thereby leading to development of rural areas.

### **Negative impacts**

- Encourages rural-urban migration with associated problems like spread of diseases like tuberculosis AIDS etc.
- Over expansion/ urban sprawl takes over formerly productive agricultural land resulting into food scarcity and malnutrition.
- Encourages de-vegetation where large tracts of land are cleared for settlement and construction hence affecting wildlife and encourages soil erosion.
- Leads to pollution of air, water and soils due to agricultural, industrial and domestic effluents thus leading to health hazards.
- Traffic congestion that cause delays of business; transactions thus affecting trade and commerce
- Growth of towns and associated problems e.g. slums, poor sanitation increased crime, urban unemployment which compromise peoples standards of living.

- Erosion of culture due to amalgamation of people with different cultures leading to adoption of undesirable behaviors
- Leads to shortage of productive labour force in the rural areas due to Rural-urban migration leading to food shortages and mal-nutrition in both towns and villages.
- Regional imbalances where urban centres are more developed than remote areas.
- Increased government expenditure through provision of social services thus affecting development of other sectors like tourism, industrialization thereby retarding development.

## **Selected ports/cities**

### **New York**

New York is located in the north-east of USA on a number of Islands including the Long Island, Manhattan Island, Governor's Island, etc.

### **Factors for the development of New York as a port**

#### **Physical factors**

- Presence of a deep and sheltered natural harbour that allows big ship to sail and anchor along the area. These brought all forms of merchandise hence promoting trade and commerce in the areas.
- Ice-free condition because of the warm gulf stream that raised temperatures in the area facilitate business transactions and sailing along the port throughout the year.
- New York is located in an area that experiences a low tidal range and this makes landing and anchoring of ship of all sizes to take place throughout the year.
- Relatively flat relief facilitated construction of very tall buildings (sky crappers) e.g. the empire state building, airports e.g. J. F Kennedy airport and roads.
- The numerous Islands around New York such as governors' Island, Staten Island, and Coney Island provides a good defense strategic location and shelters the city against strong sea waves
- Existence of hard basement rocks along Manhattan Island, Governors' Island provided a strong base for building big and tall skyscrapers, railways and roads.
- Strategic location in the middle of North America and along a busy trans-Atlantic trade route to Europe and Africa increased business opportunities in New York.
- Presence of a rich productive hinterland that provided minerals and agricultural goods to New York and for export purposes to Europe.

#### **Other factors**

- High levels of technology in form of civil, electrical and mechanical engineering have led to the growth and expansion of New York by way of constructing tall buildings , railways and roads.
- Presence of well-developed network of roads, railways and tunnels and bridges that link the New York city/ port to the mainland USA enables transportation of both people and merchandise. Examples arc Brooklyn Bridge, George Washington Bridge, Verrazano Bridge, etc.

- Existence of enough capital used to construct port handling facilities, administrative infrastructure as well as roads, universities encouraged growth of New York as a city and port
- Political stability and security of USA has favored long term investment in developing New York as a port / city by constructing several infrastructures like office buildings, roads, ware houses etc.
- Existence of favourable government policies that have attracted trade in New York for example relatively low taxes, quick customs clearance and forwarding services, etc.
- Existence of administrative functions for example it's where the headquarters of the United Nations (UN) are located. This has attracted, international presidents in the region .
- Presence of many tourist attractions that bring in many people to carry out business transactions. These include the empire state building, modern and long bridges such as statue of liberty, have attracted tourist in the areas leading to expansion in form of hotels, restaurants etc.
- Existence of a large affluent population of over 8 million people provides both ready market and skilled labor necessary for the growth as port or city.
- Existence of various employment opportunities in New York attracted many people in the area For example textile, precision industry, service industry etc.

## **ROTTERDAM**

It is an international port on the shores of the Northern Sea (Atlantic Ocean) located in Netherland at the mouth of river Rhine; it is connected to the sea by an artificial canal. Rotterdam is the busiest and most important port in Europe. It handles imports and exports from the interior of Western Europe. It is a modern port with modern facilities to handle large volumes of cargo.

**Europoort** is a port in the Netherlands situated in the port of Rotterdam and the adjoining industrial area in the Netherlands; developed in the 1960s; handles chiefly oil.

### **Factors for the development of Rotterdam as a port**

#### **Physical Factors**

- Presence of a deep and well sheltered natural harbour at the mouth of river Rhine enables big ships to land and brings imports as well as takes exports necessary for development.
- Low tidal range that allows ships to use the port throughout the year has increased business at the port thus contributing to capital accumulation.
- Ice-free conditions as a result of the presence of the warm North -Atlantic drift which rises the temperature enabling operation of the port throughout the year.
- Relatively flat relief of Rotterdam favors the construction of high rise buildings, warehouses for storage of both imports and exports merchandise leading growth as a port.
- Presence of a rich and productive hinterland of Switzerland, Germany and France which provides adequate minerals, like iron ore, silver and agricultural products such as wines, timber making the port busy throughout the year.
- Location along the navigable river Rhine (gateway to Europe) which meanders in many countries of Europe e.g. Germany. France and Switzerland makes Rotterdam a very busy port/city with abundant merchandise and business opportunities.



- Strategic location in the heart of Europe and near rich countries such as UK, German , and Netherlands with great quantities of both imports and exports through Rotterdam has encouraged growth as a port.
- Hard basement rock for the construction of the port facilities

### **Other factors**

- Supportive government policy of Netherlands that directed the development of Rotterdam as both a port and City by developing port handling facilities such as ware houses etc.
- Presence of adequate capital for port development in form of road construction, port handling services, buildings, security etc. Such capital was got from international trade, tolls on ships that use the Rhine River, World Bank etc.
- Presence of an efficient and modern transport network that links onto Rotterdam. These are canals, electrified railways and roads.
- Presence of administrative services, recreation and tourism in Rotterdam has led to an increase in the number of people in Rotterdam hence its growth into a city or port.
- Political stability provided by the Netherlands police and army have led to the growth of Rotterdam as a city because of reliable security to carry out trade, tourism and investments.
- Modern technology involving civil engineering that lead to construction of high rise buildings, modem bridges, port handling facilities like forklifts, heavy duty loading cranes.
- Presence of a high level of adequate skilled labour that provides financial services, business management, handling of exports and imports through clearing and forwarding, construction of buildings, bridges have led to growth of Rotterdam as a port or city.
- Presence of a wide range of industries in Netherlands reflected by the fact that the country is the sixth largest exporter of manufactured goods has attracted a large population in Rotterdam. Such industries include, ship building, food processing and oil refineries
- Influence of foreign investment. Being the gateway to Europe many countries have put their investments in Rotterdam thus leading to its expansion and development as a port and city.
- Construction of other ports such as Hoek Van Holland, Europort, Maasvlakte to reduce congestion in Rotterdam facilitated its growth as an efficient port and city.
- Presence of research and education facilities in Rotterdam has attracted many people in this region leading to its growth as a port/ city.
- Availability of abundant power in form of Hydro-electricity, Natural gas and Coal used for processing industrial raw materials, lighting of homes, roads, and warehouses has attracted many industries and settlement in Rotterdam leading to its development as a port.

### **Mombasa port**

Mombasa is located in East Africa (Kenya) along the shores of the Indian Ocean. Mombasa is the biggest and busiest port in East Africa serving a very big hinterland i.e. Uganda, Tanzania, Southern Sudan Rwanda, Burundi Kenya etc.

### **Factors that have led to the growth of Mombasa as a port**

## Physical factors

- Presence of a deep well sheltered harbour that enables big ships to reach the port to bring in imports and take out exports.
- Ice - free conditions at Mombasa makes the port operational throughout the year enabling business to be done throughout the year leading to long term investments such as industries at the port.
- The relatively flat relief favors construction of roads, railways and other port handling facilities such as warehouses for merchandise.
- The low tidal range enables ships to sail around Mombasa throughout the year and to bring in and take out merchandise necessary for development as a port.
- Strategic location in the middle of Africa and along a major Trans-Indian trade route have attracted many ships to anchor at Mombasa hence its development
- Strategic location for defensive purposes. Being located on Island making it easy to detect rebels from a distance.

## Other factors

- Historical factors such as the early settlers from Portugal and Arabs led to the development of port/city by constructing a variety of infrastructures such as Fort Jesus. slave trade markets, roads which continued to attract settlement
- Mombasa is a major tourist destination in Africa with beautiful white sand beaches. This attracted many tourists in the area hence expansion in form of Hotels. Restaurants, night clubs leading to development as a port.
- Presence of many industries such as oil refineries, cement factories has attracted many people here for employment or trade purposes leading to development as a port.
- Mombasa is a big hinterland for Kenya, Uganda, Tanzania, Rwanda, Dr. Congo hence handles a lot of exports and imports of these countries leading to its growth as a port/ city.
- Application of modern technology such as use of crane lifters, containerization has led to efficiency of Mombasa as a port.
- Presence of abundant skilled labour that work for 24 hours in form of clearing agents, custom officials to collect taxes, technicians, drivers, bankers and insurance services have increased efficiency at Mombasa hence its growth as a port.
- Supportive government policy of developing Mombasa as a port and city through developing several administrative, health, port handling facilities, security have led to growth.
- Relative political stability at Mombasa has led to its growth as a port because long term investments such as industries like oil refineries have been established.
- Availability of large sums of capital got from international trade and the World Bank to develop Mombasa as a port by constructing port handling services such as airport, clearing ware houses etc.
- Presence of a reliable or developed transport networks that link Mombasa to the interior. For example the Kenya - Uganda railway facilitates international trade between Mombasa, Kenya, Uganda Rwanda enabling its growth as a port.

- Availability of extensive land for expansion particularly at Mtongwe, Changamwe and Nyali have led to expansion and development of Mombasa by establishing several infrastructures like an airport, industrial zone, residential zone, ware houses, port handling such as container yard has led to its growth .
- Availability of abundant electricity in form of HEP, thermal energy for both industrialization services, delivery (IT) section in the clearing and forwarding section have led to growth of Mombasa as a port.

### **Hong Kong**

- Developed by the British to handle trade between East Asia and the rest of the world
- It is an entre-port opened in 1962

### **Tema**

- It is an artificial port that was constructed by Ghana government to handle increasing volumes of trade and reduce congestion in the port of Accra in 1962

### **Factors for development of Tema as a port**

#### **Physical factors.**

- Presence of a deep well sheltered harbour that enable big ships to reach the port to bring in important as and take out exports
- Ice- free conditions at Tema enables the port operation throughout the year.
- Presence of a deep dredged channel that connects the Tema port to the open sea of Atlantic Ocean enables big ship to sail deep into the interior to load exports and deliver imports.
- Availability of extensive hinterland in the main land for several exports such as cocoa, coffee, rubber, palm oi etc.
- The low tidal range enables ships to sail around Tema throughout the year.
- Tema is strategically located in case of defense.
- Strong basement rocks to support port structures.
- Availability of land for expansion

#### **Other factors**

- Historically tema was a major slave trading centre and later a colonial centre. This led to development of several infrastructures such as roads, health centres, schools etc.
- Tema is a major tourist destination in Africa with beautiful sand beaches led to development of accommodation, hotels, sports etc.
- Presence of many industries such as oil refineries and other industries that attract people for employment leading for port development
- Application of technology such as containerization leads to efficiency.
- Presence of urbandant skilled and unskilled labour to handle port activities
- Presence of reliable transort network that links the port and its hinterland.

- Support government policies that protect and expand the port
- Availability of capital for construction of port facilities.
- Presence of large population to provide local market and labor.
- Availability of power to run the industries, light and other port activities
- Relative political stability to enable long term investments.

### **Shanghai city and port in China**

It is located in eastern China on the Huangpu river, a tributary of the Yangtze River, near the Yangtze's mouth to the East China Sea. It is China's most important port, commercial hub and industrial centre.

### **Factors that favored growth and development of shanghai**

#### **Physical Factors**

- Availability of large land area for development of a city
- Presence of a gently sloping landscape which enabled construction of buildings, transport system etc.
- Presence of reliable sources of water used in industrial purpose
- Presence of rich Hinterland for provision of, food for people, market and raw materials to the industries.
- Presence of conducive climate for settlement

#### **Other factors**

- Presence of well established communication network.
- Availability of large population to provide market for goods and services.
- Presence of skilled and unskilled labor to handle port and industrial activities
- Availability of capital for construction of port structures and industries
- Availability of abundant power to run port activities
- Rich historical past where people carried out trade
- Availability of employment that attracts people in the area.
- Supportive government policies that favor establishment of a port and city
- Political stability that has enabled long term investments.

Thank you

Dr. Bbosa Science