

**STANDARD HIGH SCHOOL ZZANA**  
**GEOGRAPHY DEPARTMENT**  
**S.4 GEOGRAPHY PAPER TWO NOTES**

**TRANSPORTATION IN AFRICA**

The transport and communication networks in Africa have evolved from primitive means like using human messengers, caravans, canoes on water to modern means like road, air, water, railway, pipeline, subways, etc

Transport refers to the movement of goods, services and passengers from one geographical location to another.

Types of transport refers to the category of description like land, air and water

Means of transport refers to the nature or mode with which goods, services and passengers are transferred from one place to another like road- cars, cycles, railway- wagons or locomotives, air- airplanes,

Parachute, rocket, helicopter, pipeline- synthetic or metal pipes for liquids, etc

**Road transport**

This concerns movement of goods, services and passengers on a road using cars, Lorries, motorcycles, bicycles, etc

**Advantages**

- Very cheap for the lay man and short distances
- Very flexible in case of change in plan
- Relatively fast for short distances
- Very reliable due to unpredictable life changes
- Very convenient especially for door-to-door delivery
- Easy to construct as compared to railway and air
- Less affected by relief and drainage since it can maneuver
- Links up very remote areas with ease

**Disadvantages**

- Limited carrying capacity
- Prone to weather conditions like rainfall, etc

- Faces traffic jam especially at peak hours
- High risks of high jacking, highway robbery and political instability
- Relatively expensive for long distances with cargo/luggage
- Prone to accidents and the survivors are few in case it is fatal
- Return journeys are always uneconomical since items to return may not be there
- Not very suitable for transporting very perishable and valuable items for long distances
- Sometimes affected by relief in terms of construction

### **Railway transport**

This concerns the movement of goods, services and passengers on well-developed rails using wagons or locomotives. In Africa, this is limited to transporting goods and services except for Egypt, South Africa, Zimbabwe, and Kenya where passenger trains still exist.

### **Advantages**

- Very convenient for bulky goods over long distances
- Less affected by weather
- When constructed, it is cheap to repair
- Relatively cheap when transporting bulky goods over long distances
- Very convenient for transportation of very many goods due to many wagons
- Has a large carrying capacity as compared to road
- Has a fixed time table or schedule for departure and delivery

### **Disadvantages**

- Very slow leading to delay in delivery
- Very expensive when establishing and constructing due to a lot of steel and aluminium required
- prone to political instability
- Not very convenient for emergency deliveries
- It is only limited to places where the rails exist

- Networks are not evenly distributed in many parts of a given country and other countries have different gauges limiting cross border links
- Has limited carrying capacity especially the old models in many African countries

## **Water transport**

This concerns the movement of goods, services and passengers on navigable water bodies using canoes/boats, ferries, ships, sub-marines, etc.

### **Advantages**

- Offers the best alternative where the others do not exist
- Carry bulky goods between territories especially those bordered by water
- Canoes, boats, ferries, etc are easily constructed due to abundant wood, plastics and aluminum
- Rarely affected by political instability except where navigation decrees have been made
- Well defined time schedules for departure and delivery
- Relatively cheap when transporting bulky goods overseas

### **Disadvantages**

- In case of accidents, survivors are few
- Greatly affected by weather like fog, frost, rainfall, etc
- Interrupted by rapids and falls especially on rivers and some water bodies are narrow and shallow
- Prone to accidents caused by underlying rocks, strong waves, marine predators, weather, etc
- Maintenance costs are very high due to the various chemicals in water that affect vessels.

## **Air transport**

This concerns the movement of goods, services and passengers at a recommended height above sea level in specific pressure zones using

space wagons like rockets, parachutes, planes, etc

### **Advantages**

- Quickest means of transport
- Has an established time schedule
- Less affected by congestion especially in space
- Less affected by relief during the course of travel
- Very convenient for perishable and expensive goods
- Carries a variety of goods and passengers though with specific weight

### **Disadvantages**

- Has limited carrying capacity
- Limited by international space boundaries like no-fly zones
- Flights are limited to high pressure belts due to body weight
- Inconvenienced by weather like cloudiness, mist/fog. Etc
- In case of accidents, there are a few survivors

### **Tazara/ Tanzam railway**

This is one of the major railway networks in Africa constructed between 1971 and 1975 aimed at opening up landlocked Zambia to the outside world.

The project was initiated with the help of China which had already developed interests in port Dar- es-salaam.

It costed nearly 400 million dollars covering a distance of 1860km moving through towns like Dar- es-salaam, Mbeya in Tanzania, Kasama, Mpika, Kapiri-mposhi, Lusaka, and Livingstone in Zambia.

The railway line had an initial carrying capacity of 30,000 tons of copper joining other networks linking to Bulawayo in Zimbabwe, Lobito in Angola, etc.

Sketch map showing the extent of the Tazara





## Objectives

- To provide Zambia with an alternative route to the sea for easy export of copper
- To open up remote parts of southern Tanzania which were rich in coal and iron ore plus northern Zambia
- To reduce transport costs in importing and exporting goods to and from Zambia.
- To pave way for mineral exploration particularly copper in the Shaba province of Zambia
- To enhance international or regional relations between Tanzania and Zambia

## Benefits

- It has strengthened political and social ties among Tanzania
- Provided landlocked Zambia with a reliable access route to the Indian Ocean.
- Stimulated mineral exploration and exploitation of copper in Zambia and iron ore, coal, diamond in Tanzania.
- Promoted plantation agriculture in southern Tanzania like rice and sugar cane in Kilombero valley
- Growth and development of ports like Dar-es- salaam acting

as an entry port

- Promoted industrialization in southern Tanzania and northern, central Zambia e.g. copper refineries.
- It eased the importation of machinery which was very vital for copper mining in Zambia and coal in Tanzania
- Job creation in the area particularly the train sector as captains and station managers.
- Opened up very remote areas of northern Zambia and southern Tanzania to trade hence development.

### **Problems facing the Tazara railway.**

- Very expensive to maintain due to long distance of 1860km from Dar-es-salaam to Lusaka
- Its slowness has limited its usage affecting benefits and business potential
- Changing political priorities of the two governments i.e. Zambia and Tanzania.
- Inadequate funds to buy new wagons, spare parts hence reducing on the commodities carried.
- Withdrawal of the Beijing government support from fully funding the project following its initial investment of 400 million \$
- Prone to hijackers who steal items being transported, vandalizing wagons parts and rails, etc
- Occurrence of accidents due to de-railing damaging wagons, goods being transported , etc

# URBANIZATION

## Case study (a) Lagos, Nigeria

It is the most populous city or  
Populous conurbation in Nigeria, with nearly 8m  
inhabitants, and the second most populous city in Africa

Lagos has a total of 1380.7 square miles (3577 square kilometers), of which 303.8 square miles (787 square kilometers) is made up of lagoons and creeks.

Greater Lagos includes Mushin, Maryland, Somolu, Oshodi, Oworonsoki, Isolo, Ikotun, Agege, Iju Ishaga, Egbeda, Ketu, Bariga, Ipaja, Ajah and Ejigbo.

### LAGOS TOWN





- Ice free conditions all the year enhances activities use
- Easy access to the rich hinterland consisting of Nigeria, Niger and northern Cameroon
- Well-developed transport routes connecting the islands by bridges and freeways , air ports , railway lines, etc
- Low tidal range at the Atlantic shores enabling easy landing and sailing
- Ancient kingdoms like the Yoruba and the Benin that often transacted with neighbors like the Ghana kingdom
- Historical activities like slave trade i.e. trans- Sahara and Triangular trade where human beings were being sold and later legitimate trade
- Supportive government policy that aimed at putting up a territorial administrative centre to run the regions activities before it was later transferred to Abuja
- Shielded from strong waves by ocean islands like Equatorial Guinea making it safe for activities
- Conducive equatorial climate that attracted traders and natives to move to the coastal areas hence developing the area
- Relatively flat and gently sloping relief towards the ocean conducive for settlement, agriculture and trade

## **Functions of Lagos**

- Industrial center with textile, printing, motor vehicle assembly, saw milling, vegetable oil processing, plastic making, etc
- Financial center with the leading major banks, insurance companies, etc
- Education center with the University of Lagos, Yaba college of Technology, Lagos State university, etc

- Residential center housing thousands of people working in industries, government, etc
- Cultural center with many art galleries, entertainment, museum etc
- Nodal/transport center from which major air, road and railway routes radiate from
- Administrative center with many government offices, non-governmental organizations, etc

### **Problems faced**

- Over crowding in the city with a density of over 2500 people per square kilometer
- Pollution of the environment from industries, vehicles and people
- Inadequate supply of fresh water due to the increasing population
- Development of slums and their related evils
- Limited land for expansion as the city is basically surrounded by water
- Flooding due to the low lying altitude and heavy rains
- High crime rate caused by high population and unemployment
- Traffic jam due to the high number of vehicles on the road slowing down movement of passengers and goods
- Silting of the water ways that limits sailing inland towards the dock

### **Solutions to the above**

- Transfer of the capital from Lagos to Abuja to reduce on the number of administrative duties
- Increasing on the number of states from twelve to nineteen each with its own capital
- Construction of housing estates and sky scrapers reducing on slums and crowding

- Construction of bridges to link islands to the mainland like C
- Encouraging self-help projects providing more employment op
- Tightening security to curb crime and ensure law and order

### **Case study (b) Addis Ababa**

Sometimes spelled Addis Abeba, is the capital city of Ethiopia. It is the largest city in Ethiopia, with a population of 3,384,569 according to the 2007 population census.

### **Factors for development**

- Strategic location at the foothills of Ethiopian highlands
- Ice free conditions all the year enhances activities use
- Easy access to the rich hinterland consisting of Djibouti, Sudan
- Well developed transport routes connecting the city to major regions, air ports , railway lines, etc
- Historical activities like Christian civilization from Israel by the queen of Sheeba during the reign of king Solomon
- Supportive government policy that aimed at putting up a territorial administrative centre to run the regions activities
- Shielded from strong winds by the Ethiopian highlands making it conducive for settlement
- Conducive tropical climate mixed with desert climate that attracted traders and natives
- Relatively flat and gently sloping relief towards the Awash river for settlement, agriculture and trade

### **Functions of Addis Ababa**

- Industrial center with textile, printing, motor vehicle assembly, saw milling, etc
- Financial center with the leading major banks, insurance companies, etc
- Education center with colleges, universities, etc, etc

- Residential center housing thousands of people working in industries, government, etc
- Cultural center with many art galleries, entertainment centers, religious institutions, etc
- Nodal/transport center from which major air, road and railway routes radiate to Egypt, Sudan and Djibouti
- Acts as political capital of Africa formerly housing the O.A.U and now the A.U

### **Problems faced**

- Over crowding in the city due to the influx of natives, tourists and foreigners
- Pollution of the environment from industries, vehicles and people
- Development of slums and their related evils
- Limited land for expansion as the city is near the highlands in the north and Awash river valley in the south
- Flooding due to the low lying altitude of the Blue Nile and Awash and heavy rains
- High crime rate caused by high population and unemployment
- Traffic jam due to the high number of vehicles on the road slowing down movement of passengers and goods

### **Solutions to the above**

- Construction of housing estates and sky scrapers reducing on slums and crowding
- Encouraging self-help projects providing more employment opportunities
- Tightening security to curb crime and ensure law and order
- Acquiring more land on the western side for expansion

### **Sample questions**

- (a) Describe the factors which led to the development of Addis Ababa as an urban centre.
- (b) Explain the functions of Addis Ababa city.
- (c) Outline the effects of urbanization on the environment in Ethiopia.
- (d) Draw a Sketch map of Addis Ababa