#### KAMSSA 2022 GEOGRAPHY 2 SECTION A

1. Study the table provided below showing land area and population size for selected African countries and answer the questions that follow.

Country	Land area ('000s km²)	Population size('000s)
Algeria	2,382	30,800
Central African Republic	623	3,800
Chad	1,259	7,900
Djibouti	23	600
Egypt	995	65,200
Ethiopia	1,000	65,800
Libya	1,760	5,400
Morocco	446	29,200
Niger	1,267	11,200
Somalia	627	9,100
Sudan	2,376	31,700
Tunisia	155	9,700

[Adopted: 2003 African development indicators: World Bank, Washington DC P5]

- (a) Calculate the population density for each of the selected countries shown in the table **6mks**
- (b) Using the base map provided, draw a choropleth (density) map to represent the information obtained. In (a) above. **9mks**
- (c) Outline the merits and demerits of using the statistical method used in (b) above.

**5mks** (d)

Explain the causes of the variations in the population density of the region shown on the base map. 5mks

#### **SECTION B**

Answer **three** questions from this Section.

- 2. To what extent have physical factors favoured the development of Estate farming in **either** Liberia **or** the Republic of South Africa? (25marks)
  - 3. a) Distinguish between Boreal forests and tropical rain forests.

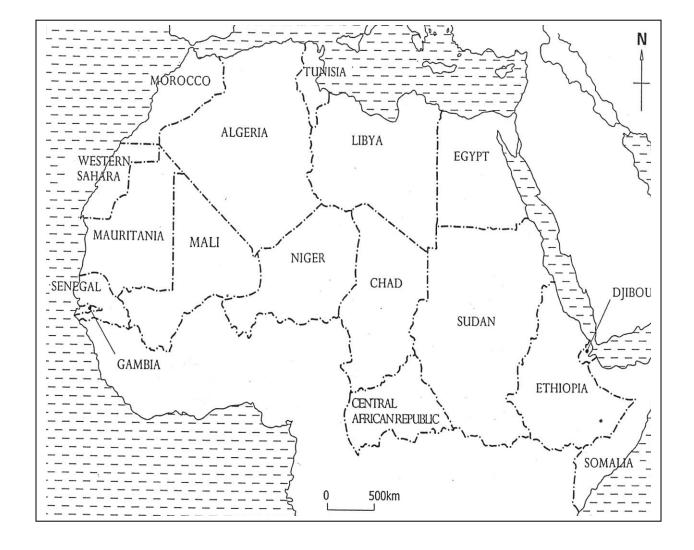
[10mks]

- b) Describe the factors which have favoured the development of the forestry sector in **either** British Columbia **or** Gabon. [15mks]
- 4. (a) Distinguish between;
  - (i) Site and situation of a town
  - (ii) Conurbation and hinterland
  - (iii) Immigration and out migration.

(12 marks)

- (b) Account for the growth and development of **either** Lagos port **or** Rotterdam. (13 marks)
- 5. Account for the development of the fishing sector in any **one** country in either North West Atlantic **or** South East Pacific fishing ground. (25marks)
- 6. Assess the contribution of **either** the Rhine waterway **or** the St. Lawrence sea way to the economy of the countries where they are found. [25mks]
- 7. With reference to either **Egypt** or **California**, explain the basis for the development of the tourism industry. (25 marks)
- 8. "The famine crisis among countries in the Horn of Africa is initiated". Discuss. (25 marks)

**END** 



(a) Calculate the population density for each of the selected countries shown in the table **6mks** Population Density for each country.

Population Density = 
$$\frac{Total\ population}{Total\ land\ Area}$$
Algeria =  $\frac{30,800,000}{2382000}$  = 12.9people/sqKm

Central African Republic =  $\frac{3,800,000}{623,000}$  = 6.0people/sqKm

Chad =  $\frac{7,900,000}{1,259,000}$  = 6.2people/sqKm

Djibouti =  $\frac{600,000}{23,000}$  = 26.0people/sqKm

Egypt =  $\frac{65,200,000}{995,000}$  = 65.5people/sqKm

Ethiopia =  $\frac{65,800,000}{1,000,000}$  = 65.8 people/sqKm

Libya =  $\frac{5,400,000}{1,760,000}$  = 3.0people/sqKm

Morocco =  $\frac{29,200,000}{446,000}$  = 65.4people/sqKm

Niger =  $\frac{11,200,000}{1,267,000}$  = 8.8people/sqKm

Somalia =  $\frac{9,100,000}{627,000}$  = 14.5people/sqKm

Sudan =  $\frac{31,700,000}{236,000}$  = 13.3people/sqKm

Tunisia = 
$$\frac{9,700,000}{155,000}$$
 = 62.5 people/sqKm

(c) Outline the merits and demerits of using the statistical method used in (b) above.(5mks)

# Merits/ Advantages of choropleth /shading maps

- They are relatively easy to construct (especially with a low range of values)
- Gives a good visual impression
- Easy to interpret (especially for population data)
- Useful for comparison purposes
- Shows quantitative analysis (relates data to area)
- Some other information can be included on the map

# Demerits/Disadvantages of choropleth maps

- Variations of density within each boundary are not shown, giving a wrong impression of uniform density.
- Boundary lines between the density zones give a wrong impression of sudden change in density (assumes abrupt change in density which is unrealistic).
- Difficult to get appropriate grades or classes especially if a large range of values are involved.
- Consumes a lot of time when shading
- (d) Explain the causes of the variations in the population density of the region shown on the base map.(5mks)
  - variations in climatic conditions
  - Variations in soil types
  - Varied relief/topography/landscape/Altitude
  - pests and diseases
  - Natural vegetation.
  - Drainage
  - influence of government/ government policy
  - levels of employment opportunities in sections like manufacturing, mining and agriculture.
  - transport / Accessibility
  - Urbanisation/ presence of towns.
  - Strategic location/ coastal influence.
  - level of political stability.
  - historical factors.
  - influence of trade and commerce.
  - Cultural factors.

#### **SECTION B**

- 2. To what extent have physical factors favoured the development of Estate farming in either Liberia or the Republic of South Africa? (25marks)
  - Candidates are expected to choose any case study.

- Candidates are expected to define Estate farming, Give the characteristics.
- ❖ They should explain how physical factors have favoured Estate farming.
- They should clearly explain other factors for the development of estate farming.

-Estate farming is a form of farming that involves the growing of a single crop on a large scale under scientific methods for commercial purposes.

#### Estate farming characterized by;

- Crops are grown on large scale.
- Plantations usually specialize in the production of a single crop for a long time (monoculture).
- Large numbers of workers are employed -skilled, semi-skilled and unskilled labour..
- Involves heavy capital investment to set up the plantation infrastructure such as constructing transport routes, housing estates, setting up processing plants among others.
- Plantation crops have a long gestation period between 1.5 years to 7 years for any harvest to be made
- Many plantations are owned by foreigners.
- Plantation farming is characterized by high output because large areas of land are cultivated using improved seeds.
- The plantations are scientifically managed, involving mechanization, application of fertilizers.
- The plantations are highly mechanized involving use of tractors, bulldozers, combined harvesters, sorters, and processors among others.
- Plantations crops are intended for sale, that is, it is commercial-oriented either for domestic of foreign markets.

#### South Africa

- ❖ Natal is one of the provinces of the republic of South Africa growing Sugar canes.
- Sugarcane growing is confined to a narrow strip of land extending rarely 25km from the coast.
- ❖ Most of the sugar is grown on the coastal plain between Margate and Lake St. Lucia a distance of 400km.
- ❖ There are well over 362,000 hectares of Natal's farmland devoted to the growing sugarcane. The 25 vast estates are owned by big companies. Sugarcane takes 18-20 months to mature, and the canes are transported by lorry or railway to factories; sugarcane industry is administered by the South African sugar association (SASA) which is one of the biggest corporations in the world

# **Physical Factors**

- Influence of the warm Mozambique current—southward flowing current keeps the temperatures up over the Natal coast where sugarcane is grown.
- The on-shore winds which blow over the warm Mozambique current. These bring in moist conditions to the Natal coast,
- The general high water table levels, which compensate for the low rainfall received. Natal area receives on average 1000mm of rainfall per annum which is not enough for

sugarcane growing (since sugarcane requires rainfall ranging from 1800-2500mm per annum).

- Availability of abundant water provided by rivers like Umkuse, Umgeni, Tugela, Pongola, Umfolosi.
- Low altitude/ low lying coastal land suitable for growing of sugarcane.
- The generally flat landscape of the Natal region which promotes mechanization
- The deep, dark, fertile alluvial soils washed from the Drakensburg mountain ranges...
- Presence of extensive land for sugarcane growing.

#### Other factors

- Large supply of skilled and unskilled labour to work in plantation farming.
- Presence of adequate capital to invest in the sugar
- Presence of a large/ready market for sugar, both domestic and abroad.
- Presence of cheap transport facilities in the area especially the railways stretching along the coast and roads.
- Increased research to develop better varieties of sugarcane which are quick maturing.
- Presence of improved technology used for example in planting, and processing of sugarcane.
- Supportive government policy towards the sugar industry.

#### **LIBERIA**

In tropical Africa the most important country with plantation agriculture is Liberia and the most important crop is rubber, although other crops like coffee, cocoa, oil palm, sugar are also grown.

- -It is a country of West Africa famous for rubber growing and rubber production started as far back as 1910, when the British planted 800 hectares at Mt. Barclay near Monrovia, but later on abandoned due to falling world prices.
- -The largest plantation was established at Harbel on the Farmington River with approximately 25km from the coast, and the other at Cavalla in the extreme south east of Liberia. In all there are nearly 120,000 hectares devoted to rubber production. About 60,000 hectares belong to Liberia individual farmers.

# **Physical Factors**

- The heavy rainfall averaging over 2500 mm per annum with a long wet season.
- Hot temperatures throughout the year ranging from 24-27° c favouring the growth of rubber trees..
- · Presence of well drained fertile soils partly
- Low altitude also partly responsible for the hot temperatures in Liberia,
- The generally flat landscape/relief which enables
- The influence of tropical rain forests which provide shade for the seedlings.
- Availability of extensive land for rubber growing.
- High relative humidity content of above 75%.

#### Other factors

- Presence of adequate capital provided by large to establish plantations/rubber estates
- Large supply of skilled and unskilled labour.
- The development of transport infrastructure for example the road and railway networks.

- Presence of a large market both local and foreign.
- Increased research in rubber growing and this involves production of fast maturing, high yielding and disease resistant varieties.
- Presence of various factories which process the latex or the milky liquid rubber
- Supportive government policy towards the rubber growing industry.

# **3. (a)** Distinguish between tropical rainforest and coniferous forests. *(10 marks)* Candidates should specify the differences between tropical rainforests and coniferous forests.

Tropical rainforests are also known as equatorial forests / selvas forests and they are mainly located between  $0^{\circ}$  –  $10^{\circ}$  N/S of equator while coniferous forests are temperate forests / boreal located in humid areas between  $50^{\circ}$ N and  $70^{\circ}$ N.

Tropical rainforests exist in countries like Nigeria, Angola, Ivory Coast, Gabon, Senegal, Central African Republic, Democratic Republic of congo, Brazil of South America, etc while coniferous forests exist in temperate area / countries like Sweden, Norway, Finland, Canada etc Examples of Tropical rainforests include Green heart, Mahogany, rose wood, Iron wood, while pines, western Red ceder, western hemlock, douglas fir, spruce. etc. are coniferous.

Tropical rainforests	Boreal forests	
Yeild hard woods like Mahogany and	Yeild soft woods like Pines, spruce	
Iron wood		
They grow impure stands (mixed)	They grow in impure stands not mixed	
	one single species	
Trees are very tall and straight to over	Trees are tall and straight (i.e. have	
46 metres	medium height) of 30m	
They have climbing plants such as	They don't have climbing plants	
lianas and epiphytes		
They have canopies / umbrella	Have no canopies	
shaped		
Broad leaves to help them during	Have tiny narrow leaves to reduce	
evaporation	winter loss	
Thick and luxuriant	Not thick and luxuriant	
Long gestation	Short gestation	
Possess buttress roots to support	Lack buttress roots	
them in soil		

# b) Describe the factors which have favoured the development of the forestry sector in either British Columbia or Gabon. [15mks)

# **Approach**

- Choose a case study
- Define forestry
- Locate the area
- Give types of forest species and their characteristics
- Give physical and human factors

#### British Columbia

Forestry refers to the exploitation and conservation of forest resources. British Columbia is a province of Canada covered by coniferous forest with species like pod, cedar, pine, Cyprus, podocurpus, douglas fir, spruce, western hemlock, etc.

#### Gabon

Forested areas are along the coast of Atlantic Ocean, Port Gentile, R. Rivindo, Quendo, R. Ogoowe, areas masathu, belinga, mahambako, matookou and mountain ibudgi etc.

#### **Factors**

- The equatorial climate characterized by heavy rainfall of over 1500mm and which is well distributed throughout the year and hot temperatures of 26°c and above
- Presence of many valuable tree species. Okoume, mahogany, ebony, Ozigo, red wood.
- The sparse population/ low population density which has favoured continued existence of forests.
- Presence of various rivers like Ogowe/ Ogooue and its tributaries (Como, Nyanga, and Offoe) for transportation of light.
- The relatively flat nature of the landscape which facilitated the construction of transport routes particularly road network and railway.
- The fairly fertile soils which have supported the growth of various tree species .
- The presence of abundant power eg hydro-electric power generated from the rivers which helps to run machines in the saw mills and other factories..
- Availability of large sums of capital for commercial exploitation.
- The use of improved technology eg using powered saws for feeling trees, trimmed and hauled using tractors to collecting centres.
- Presence of skilled labour / highly skilled and specialized labour especially the French.
- The improved transport network such as the Trans—Gabon railway (from Libreville at the coast to Franceville in the interior), and roads .
- Presence of a large market for the forest products both local and foreign.
- Favourable/supportive government policy towards the forest

#### **British Columbia**

- Rugged /mountainous nature of the landscape consisting of the Coastal ranges and Rocky Mountains—which prevented other land uses.
- The temperate climate with warm summers and mild winters which is ideal for the growth of coniferous forests .
- The infertile and thin soils which prevent crop growing and are also responsible for the sparse population, and this allowed a large area of the province to be left for forest growth.
- Availability of extensive forestland with over 60% of the British Columbia forested.
- Presence of many valuable/commercial tree Douglas fir, Spruce western Hemlock, western Red ceder, Balsam fir.
- The homogeneous nature of the forests( the trees exist in pure stands of a single species)
- The coniferous logs are light in weight and therefore easy to transport.
- The short gestation / maturity period of the softwood trees ie 10 to 20 years.

- Presence of many fast flowing rivers which help in transporting logs and yet rivers like Peace, Nechako, and Columbia.
- Availability of adequate capital to invest in forestry
- Presence of skilled labourforce which is relevant to modern forestry operations
- Availability of modern technology which promotes extensive and intensive mechanization of the forestry sector.
- Presence of a large market for softwood products both local and foreign.
- Well developed transport system by road, railway and water connecting the forested areas to the sawmills, pulp and paper industries.
- Favourable/Supportive government policy for example the Forests are under the control of the Canadian government which minimizes careless and wasteful exploitation the forests..
- Intensive research carried out in the forest sector to develop fast maturing, high yielding and disease resistant tree species.
- Political stability of the country/the continent for a very long period of time which has enabled long-term investment in the forestry sector .

#### 4. (a) Distinguish between;

Candidates are required to give the differences of the two with examples.

#### (i) Site and situation of a town

Site of a town is the exact piece of land upon which it is built while situation of a town is where the town is in relation to the surrounding area.

# (ii) Conurbation and hinterland

Conurbation refers to a great aggregation or continuous network of urban communities. It is therefore a situation where one urban area swallows up others to form a continuous urban area. It is the merging of two or more of the neighbouring urban centres or towns into a single urban complex. Examples of conurbations include:- Ruhr conurbation in Germany with towns like Essen, Bochum Dortumund, Duisburg, Dusseldorf.

Rand cornubation in South Africa, made up of Johannesburg, springs, Pretoria, Germinston, Krugersdrop.

Randstad of Holland / Netherland, made up of Rotterndam, Amsterdam, the Hague, Utrecht.

#### While

Hinterland refers to an area influenced by a port or town. The hinterland therefore serves or is served by a port or town. Examples of hinterland include; Mombasa, Rotterdam.

# (iii)Immigration and out migration.

(12 marks)

Immigration refers to the movement of people into a country from another country like from Sudan into Uganda, Kenya into Uganda

#### While

- Out migration is the movement of people from one area to another are of the same country like from Mubende to Kampala of Uganda.
- (b) Account for the growth and development of either Lagos port or Rotterdam. (13 marks)
  - Candidates are required to give reasons that led to the growth of Lagos / Rotterdam.
    <u>Lagos</u>

- Located on the Gulf of Guinea in southern Nigeria, along the Atlantic Ocean. It used to be the capital city of Nigeria but today Abuja is the capital with a population of over 378,671 people.
- ❖ It occupies Lagos Island, Ikoyi Island and Victoria Island, as well as a large area on the mainland.

#### **Rotterdam**

- Located in Netherland / Holland at the mouth of river Rhine as it enters the North Sea, Rotterdam is the busiest and most important port in Europe.
- The reasons that account for the growth of Lagos / Rotterdam are almost the same and include:-

# Physical factors / reasons;

- Deep and well sheltered natural harbor
- At the mouth of river Rhine. This enables big or large ships or vessels to land here and carry out commercial activities
- Low fidal range of less than 2 metres that allows ships to use the port throughout the year.
- Relatively flat relief that favours the construction of high buildings; ware houses for storage of both imports and exports of merchandise.
- The rich and productive hinterland of Switzerland, Germany, France for Rotterdam, that provides adequate minerals like iron ore, silver and agricultural products such as wires, timber making the port busy throughout the year.
- The ice free conditions as a result of the warm north Atlantic drift for Rotterdam. This rises the temperature making operations of the port throughout the year.
- Strategic location at the North Sea for Rotterdam, along the Atlantic Ocean from Lagos, making a major international trade routes to overseas.

#### **Human factors**

- High level of technology used in the construction of New waterway
- Presence of a large population which provided skilled labour in the establishment of manufacturing and services industries and provide market for the goods produces.
- Availability of a large capital to develop the port such as docking, loading and unloading.
- Supportive government policies of Netherland through developing port handling facilities, ware houses.
- The efficient and modern transport networks that links to Rotterdam / Lagos in form of roads, railways and Canals.
- Abundant power in form of hydro electricity, natural gas and coal that has attracted many industries and settlements.
- Intensive research and education facilities that has attracted many people in this region leading to its growth
- The relative political stability of both Rotterdam in Netherland and Lagos in Nigeria has
  enabled the area to grow without revenges of wars that bring threats. (13 marks)
- 5. Account for the development of the fishing sector in any one country in either North West Atlantic or South East Pacific fishing ground. (25marks)

#### **Approach**

- Identify the case study of a Country
- Define fishing
- Locate the major fishing grounds
- Mention the types of fishing methods used
- Mention the fishing species common in the areas
- Show the factors that have led to the development of fishing in areas identified

# North West Atlantic fishing ground.

- This region is located along the eastern shores of Canada and USA.
- ❖ It extends from eastern Canada coastal lands downwards to the Georgia bank.
- ❖ The North West Atlantic fishing grounds has along coastline of about 8000km, with a fishing area of about 520,000km². The fishing region is categorized as follows:

#### Canadian fisheries

• n the Canadian fisheries today the main species are: flounder, turbot, halibut, crabs, lobsters, shrimps, herrings, plaice, haddock, oyster, cod, and salmon among others.

# Factors which have favoured the development of fishing in the northwest Atlantic Physical factors

- Presence of a wide/ broad and shallow continental shelf extending from southern New England to Newfoundland area which provides an excellent breeding ground for fish..
- The convergence of the cold Labrador Current and the warm gulf stream which condition favours the existence of abundant planktons and hence large stocks of fish.
- The cool temperate climate which ensures cool waters which favour the growth of abundant planktons and the survival of various marine fish species, hence large-scale commercial fishing.
- Presence of a variety of valuable fish species and which exist in large quantities which include: flounders, turbot, halibut, herrings, lobsters, plaice, haddock, mackerel, salmon, sardines, cod, shell fish, menhaden in the Canadian and US fisheries.
- Presence of many offshore islands which include Newfoundland (the main island), Anticosti island in the Gulf of St. Lawrence, Prince Edward island, Cape Breton island, and Sable island...
- Presence of large stretches of temperate forests which were used by the early settlers (like the Dutch) to make fishing vessels/crafts to extract fish.
- Limited productive natural resources in many parts of the mainland.
- Presence of many rivers and streams which include St. John River, St.Croix River and Restigouche River in Brunswick; Jupiter River on Anticosti Island, Churchill River in Labrador; Exploits River and Gander River on Newfoundland.
- Presence of large fishing grounds/ large water bodies.
- Presence of a smooth ocean floor.

# Others factors/ human factors

- Availability of large sums of capital invested in the fishing industry provided by the US federal governments and the Canadian federal governments.
- Presence of a large market, both local and foreign. The local market is especially provided by the urbanized north east of USA (including towns like Boston, St. John, New Haven,

Newyork etc). For example St. John is a large settlement zone with about ¼ of Newfoundland's population..

- Availability of skilled labour to work in the fishing sector.
- Advancement in technology like use of drifters
- The developed transport system by water, electrified railway, air etc
- Relatively Political stability of the region.
- Supportive/ favourable government policy towards fishing.
- Continuous research in the fishing industry.

#### South East Pacific fishing ground.

- ❖ This fishing region includes the fishing nations of Chile, Equador and Peru in South America.
- The main species of fish caught include anchovy, pilchards, tuna, haddock, sole, mackerel, smelt, flounder, lobster, sardines, and shrimp, among other marine species.
- ❖ Modern methods of fishing are employed such as drifting, longlining Purse seining, Trawling are used.
- ❖ For Peru, there are over 50 important fishing ports on the coast of Peru, but Chimbote and Callao are the most important. Other ports are Ilo, Atico, Pisco, Vegueta, Casma, Trijillo, and Cheilayo
- ❖ For Chile, the chief fish ports are Temuco, Talca, Puerto montt, Antofagasta, Arica, Punta Arenas, Valdivia etc.
- ❖ For Equador, the chief fish ports are Guayaquil, Machala and Manta

# Factors for the growth and development of the fishing industry in Chile, Equador and Peru Physical factors

- Presence of along coastline of over 2000km and this ensures a large fishing area and commercial deep-sea fishing.
- Presence of a relatively indented coastline which has provided good sites for construction of fishing .
- Extensive and Shallow continental shelf which allows the penetration of sunlight to the seabed, which promotes the growth of phyto-planktons.
- Existence of many valuable/ commercial fish species such as anchovies, tuna, mackerel, bonito, sardines, pilchard, haddock, sole, smelt, flounder, lobster, shrimps.
- The influence of the cold Humboldt Current (Peruvian current) which creates cool conditions for large quantities of phyto-planktons and in turn large populations of fish survive for example anchovy.
- Presence of many birds which provide guano for plankton growth
- Presence of some small off—shore islands which increase on the fishing villages for example San Lorenzo Island and other smaller islands..
- The limited productive natural resources on the mainland such as due to presence of the Atacama Desert stretching from Peru to the south of Chile
- Presence of large fishing grounds/ large water bodies.
- Presence of a smooth ocean floor

#### **Human factors**

- Presence of adequate capital to invest in the fishing industry.
- The development of many processing plants at the coast such as Chimbote, Callao, and Lima.
- Supportive / favourable government policy towards fishing.
- Presence of a large and ready market, both internal and external.
- Improved fishing technology using drifting, long lining Purse seining, Trawling methods.
- Continuous research in the fishing industry.
- Improved transport system
- Relative political stability of the country.

# QN 6. Assess the contribution of either the Rhine waterway or the St. Lawrence sea way to the economy of the countries where they are found. [25mks]

The candidates are expected to select one country / region and identify the in land water ways that are navigable.

# The Rhine waterway

- ❖ The Rhine is the most important waterway in Europe and is the world's most efficient waterway system. It is the principle route from Basel in Switzerland to Rotterdam in Netherlands.
- ❖ It is linked with a system of canals which improves its transportation capacity; such as Rhine-Rhone canal, Main-Danube canal, the Mosel-Rhine canal, Dortmund Ems.
- ❖ The Rhine passes through the most industrialized part of the continent-the Ruhr region) and enters the busiest sea in the world −the North Sea. From the source (Swiss Alps) to the mouth (Rotterdam) it serves
- 6 Western Europe countries Switzerland, Germany, France, Netherlands, and Belgium. Its tributaries include: Mainz, Lippe, Mosel, and Ruhr.

# Positive Importance of the Rhine waterway

- Facilitates trade and commerce through importing and exporting large quantities of commodities for countries like Germany, France, Belgium, Netherlands and Germany.
- Promotion of industrial development along the length of the Rhine River, the most spectacular being the Ruhr industrial complex attributed to the cheap water transport for imports and exports.
- Promotion of port and urban development, the most spectacular being Rotterdam port at the mouth of the Rhine River acting as the entreport for Western Europe include Basel, Strasburg, Mainz, Bonn, Essen, Dusseldorf, Leverkusen, and Koblenz..
- Promotion of mineral exploitation for example coal mining from the Ruhr and Saar fields of Germany, limestone from the Jura region of Switzerland.
- Facilitation of agricultural development by opening up agricultural regions such as the alluvial plains of Germany for growing of sugar beet, maize, tobacco, vines and market gardening in Germany; horticulture and cattle rearing in Netherlands.
- Promotion of tourism development in the Rhine lands especially in Switzerland apart from the waterway being a tourist potential itself.
- Provision of employment opportunities to many people such as engineers who carry out dredging, straightening of the waterway, hydrologists who monitor the water levels..
- Generating of government revenue by taxing the shipping companies /cargo handling companies pay and workers' incomes..

- Facilitation of international relationship between the Rhineland countries that is, Netherlands, Germany, Switzerland.
- Diversification of the economy in the Rhineland countries. It has diversified transport in Western Europe but also the economy by providing an alternative source of income.
- Stimulation of forestry development by enhancing the exploitation of forests such as the black forests of south Germany, and Haardt forests of central Germany.

# Negative Effects/Short Comings of the Rhine Waterway

- Congestion of vessels on the waterway due to increasing use of the waterway by many vessels, it limits its size causing delays.
- The waterway limits the size of vessels used on the route. Due to the ever growing technology the bigger ships cannot sail easily along some sections of the waterway especially the canal sections.
- Silting of some sections of the Rhine River and this calls for continuous dredging which is costly yet the period of dredging limits the use of the waterway.
- The upper course of the waterway has rugged relief that is, from Basel towards the Alps. This makes the upper part less or not navigable and thus foregone economic opportunities.
- Freezing of the Rhine River during winter season especially in the upper course, which limits its use as a waterway.
- The waterway is associated with urbanization and related problems such as traffic congestion, slum growth, drug trafficking, unemployment, and high crime rate.
- Pollution problems are associated with the waterway such air and water pollution due to moving water vessels, growth of industries due to the discharge of toxic wastes and other urban activities
- The Rhine waterway results into regional imbalance in development since it has attracted most economic activities along its course from Basel to Rotterdam
- Its associated with accidents leading to loss of lives and merchandise
- Siltation of canals which calls for expensive dredging.
- High taxes imposed on water vessels using the Rhine water way disrupts navigation
- Occasional flooding especially in the lower Rhine area.
- Smog causing poor visibility hence occurrence of accidents

# St. Lawrence sea way

- ❖ The St. Lawrence Seaway is the most important waterway in North America shared by Canada and USA. It connects the great lakes region and the Atlantic Ocean on the eastern part of North America.
- ❖ It stretches for over 3760km (2350miles) from Duluth on Lake Superior to the estuary of the St. Lawrence below Quebec.
- The US and Canadian governments constructed the St. Lawrence sea way which was completed in 1954.

# Positive significance of the St. Lawrence sea way

• The sea way has promoted trade and commerce in the region for example Importing and exporting large quantities of commodities like iron ore, coal, crude oil, cotton wool, food stuff; tropical hard wood timber chemicals, vehicles, machinery, diesel engines, newsprint, textiles, and automobiles.

- Promotion of industrial development along the length of the St. Lawrence seaway attributed to the cheap water transport for imports and exports.
- Promotion of port and urban development with modern facilities such as containerization, use of cranes. These include buffalo, Chicago, Duluth, Montreal, Cleveland, Thunder bay, and Toronto.
- The sea way has facilitated mineral exploitation for example coal mining from Pittsburgh, and Appalachian coalfields, iron ore from Labrador and Mesabi ranges.
- Facilitation of agricultural development by opening up agricultural regions such as dairy farming at Michigan, wheat growing in the prairies, horticulture and market gardening, maize production, agro-based industries.
- waterway being a tourist potential itself. It provides cheap transport for tourists from Europe, Africa and other parts of the world, to the tour resorts.
- Provision of more employment opportunities to the people of Canada and USA such as engineers who carry out dredging, straightening of the waterway, hydrologists who monitor the water levels.
- Generating of government revenue through taxing the shipping companies /cargo handling companies and workers' incomes. .
- The sea way has promoted political harmony/ relationship between the USA and Canada.
- Diversification of the economy because it has diversified transport in North America and by providing an alternative source of income /revenue..
- Promotes the development of other infrastructure such ad road and railway network in the Great lakes region, education facilities, canals linked to other areas.

# Negative Effects/Short Comings of the Seaway

- Congestion of vessels on the waterway due to increasing use of the waterway by many vessels, it limits its size causing delays.
- The sea way has limitation in the size of vessels used on the route. Due to the evergrowing technology, the bigger ships (super tankers) cannot sail easily along some sections of the seaway especially the canal sections.
- Silting of some sections of the river and this calls for continuous dredging which is costly yet the period of dredging limits the use of the waterway.
- Freezing of the river during winter season which limits its use as a waterway
- The sea way has many locks used to adjust water levels and ease navigation. These various locks lead to delays in the shipment of cargo.
- The Seaway is associated with urbanization and related problems such as traffic congestion, slum growth, drug trafficking, unemployment, high crime rate.
- Pollution problems are associated with the waterway such air and water pollution due to moving water vessels, growth of industries.
- The seaway results into regional imbalance in development since due to the discharge of toxic wastes and from other urban activities.

**7.**With reference to either **Egypt** or **California**, explain the basis for the development of the tourism industry. (25 marks)

#### **Approach**

- Choose a case study
- Define tourism
- Identifying the tourism attractions and centres
- ❖ Give the factors for the development of Tourism (physical and human)

#### California

- Tourism refers to the movement of people to different places just to enjoy leisure time, curiosity and fees is paid for a service.
- California is a state on the west coast of U.S.A. and it is one of the states with flourishing tourism industry.
- Tourism is based on physical and human factors.
- Some of the tourist resources include mountain, coastal landscape, drainage features, wildlife, desert climate and vegetation.

#### Physical factors.

- Presence of varied climate has favored tourism in that during winter tourists can engage in winter games such as skiing and skating on snow or glaciers and watching of beautiful scenery.
- Presence of varied relief features that promote research, filming and mountain climbing. Such mountains are Mt. Whitney, Mt. Shasta, the sierra Nevada ranges, coastal ranges with glaciated landscape has attracted many tourists.
- Presence of a variety of wild animals such as bears, wolves, deer, sea birds, ostriches in national parks such as san Diego, yellow stone national park
- Presence of varied drainage features such as coastal waters of the pacific ocean with plenty of marine life, Rivers such as San Joaquin ,The coastal beaches, cliffs, caves.
- The varying vegetation such as the desert cactus and thorny bushes, the giant tall sequoias trees to carry out watching, filming, camping, art and design e.t.c.
- California is strategically located on the pacific coast making it accessible for tourists from within the interior of U.S.A and other countries such as Japan, china, Europe, and so this has brought in many tourists.
- The presence of large areas of land for preservation and conservation of tourist resources such as yellow stone national park and zoos like San Diego.

#### **Other factors**

- Presence of historical resources/ antiquities such as museums, forts, castles, rock paintings, scientific works, automotives in towns like long beach, Los Angeles.
- Presence of a flourishing film industry at Hollywood which is the most important in the world has attracted many artists .
- Presence of well developed and efficient transport facilities such as airports, cables, roads and railways with the fastest trains that create access to tourism centres.
- Presence of efficient and modern hotels, game lodges, camps that provide better accommodation and feeding have attracted tourists in California..
- The high levels of tourist hospitality of the people in California has favoured development of tourism in that the tourists are not looked at as strangers but visitors who deserves better treatment.

- Availability of large sums of capital to enhance development of tor4ism by constructing modern roads and railways to transport tourists, hotels chalets and restaurants
- The high level of advertisement or publicity of the tourism industry through varying media like magazines, newspapers, televisions, internet.
- The favourable government policy of preservation of the tourist resources i.e. investing in hotels, roads, security, visa allocation to tourists have favoured tourism in California.
- California has many immigrants from all over the who have different cultures, languages and religious beliefs.
- California has an efficient banking system which makes it easy to carry out international transfer of funds
- There is a variety of international languages spoken and realized in California such as Spanish, French, English, Germany, Arabic and this has made communication with tourist s easy
- The presence of an affluent class inform of rich people with a surplus income to spend on tourism...
- The provision of organized tour packages with branches all over the world in New York, shanghai, London etc
- California is a politically stable country with the local police on 24 hour surveillance to curb insecurity, theft and disorderliness in cities like Los Angeles.
- Modern technology used to develop modern transport routes such as fly overs, recreation centres such as amusement parks, gambling centers in casinos modern and five and six star hotels in loss Angels etc.
- Continuous research to promote tourism through innovations such as introduction of international cuisines, improvement of hotel and transport
- Existence of skilled labour in form of transporters, tour guides who move with tourists showing them areas of interest, linguisticians, hotel chefs who prepare international dishes

# **Egypt**

Egypt is located in northern Africa and the country has a prominent tourist industry, and the country receives a large number of tourists per year.

# The major tourist attractions include:

- . There are many desert features such as sand dunes, rock pedestals, and oases ( Siwa, Baharia, Farafra, Dakhla and Kharijah found in the west
- Drainage features . These include the Nile River and Nile delta, Delta features such as lagoons and flood plains of the Nile delta, Mediterranean Sea, Red Sea, the Suez canal Lake Nasser
- Relief features. The main tourist mountain is Mt. Sinai found in the north east, several depressions within the desert including the Qattara depression, the Libyan plateau
- Wild life in Varied vegetation types such as Mediterranean vegetation, desert vegetation, palm trees and flowers around the oases.
- Historical sites/ attractions such as the pyramids—which served as tombs for kings and queens,.
- Diverse cultural attractions especially the Arabs and mixed races;

- Industrial establishments and towns such as in Cairo (El Qahira), Alexandria (El Iskandariya), El Minya, El Giza, Qena Ismailiya, El Mansura, Damanhur, Tanta, El Mahalla El Kubra, Port Saidi, and Mut.
- Water management schemes which include Aswan high dam project with a reservoir lake—lake Nasser, irrigation projects along River Nile
- Mining areas. The minerals include petroleum, natural gas, and phosphates
- Note: The tourists come from Europe (Spain, France, Holland, Italy, and Germany), Asia and North America, plus the rest of Africa.

#### Factors for the development of the tourism sector in Egypt

- Presence of varying and attractive climatic types. About 90 % of Egypt is desert including
  the western desert in the west and the Arabian Desert in the east. There are many desert
  features such as sand dunes, rock pedestals, and oases
- Presence of various attractive wild life which include vegetation types such as Mediterranean vegetation, desert vegetation, palm trees and flowers around the oases..
- Presence of beautiful/impressive landform scenery which includes mountains like Mt Sinai; depressions like the Quattara depression.
- Presence of attractive drainage features/water bodies which include the Red Sea, Mediterranean sea, the Suez canal, River Nile and the man-made lake Nasser.
- Presence of various developed economic activities such as mining of oil from the gulf of Suez; industry in Cairo and Alexandria; irrigation farming in Baharia and Dakhla oases; trade and commerce in urban centres like Cairo, Alexandria, Qena, Ismailiya and Suez.
- Presence of diverse Egyptian cultures for example the Arabs with varying ways of life especially religious beliefs such as dressing in Hijabs, praying while facing Kabba in Mecca
- Strategic coastal location of Egypt near the Mediterranean sea and in close proximity to Europe and Asia which enables the country to receive many tourists from countries like Italy, Germany, France, Saudi Arabia, china, and India.
- Presence of developed accommodation facilities catering for all needs and classes of tourists such as Nasser international hotels, forte grand pyramids hotel in Cairo, and other first class and middle class hotels in Cairo, Port Saidi, Aswan and Alexandria.
- Presence of modern/developed transport facilities with railways and roads linking various centres like Cairo, Alexandria, Aswan, Asyut, and Qena
- Good Hospitality of many Egyptians /they are welcoming people
- The diversity of international languages spoken which adds to their ability to handle various categories of tourists regardless of social and political consideration. The languages include Arabic, English, Kiswahili, Italian and French.
- Large supply of skilled labour to manage tourism such as game rangers, receptionists, chefs, tour guides, managers, supervisors in hotels, tours and travel agencies, tour resorts in various parts of Egypt.
- Efficient tourism management standards such as by developed Tours and Travel Agencies with experienced management and many of them are linked to international companies which offer attractive tour packages
- Availability of adequate capital to develop the tourism sector provided by the government, local and foreign investors.

- Improved/ wide advertisement (developed tourism publicity), with increased use of local and international newspapers, magazines/journals; use of the internet, television networks like Aljazeera, CNN (cable news network) and BBC.
- Relative political stability of the country which has enabled tourism investment and welcoming of many overseas visitors.
- Supportive government policy towards tourism development.
- Good international relationship between Egypt and other countries due to developed import and export trade such as the Rest of Africa, Asia, and North America..
- Tourism development in Egypt is also explained by the historical factor such as early civilizations, the pharaoh ancient palaces, the pyramids, museums in Cairo, temples.

# 8. "The famine crisis among countries in the Horn of Africa is initiated". Discuss. (25 marks)

- ❖ Candidates are required to define famine, mention countries affected by famine in the horn of Africa and explain human factors that initiate famine. Later explain factors that bring famine in the region.
- ❖ Famine refers to an acute shortage of food. It is a condition in which there is food scarcity or insufficiency in food supply for a relatively long period of time like 3 months and beyond.
- Countries affected by famine in the horn of Africa include:- Somalia, Eriteria, Ethiopia, Djibouti.
- ❖ Forms or categories of famine should be specified i.e. persistent famine and periodical famine.

# Famine among countries in the horn of Africa is initiated by the following human factors:-

- Limited capital to buy farm inputs like fertilizers, improved seed varieties, machinery like tractors, set up irrigation schemes hence resulting into food shortage like in Ethiopia.
- The political instabilities in form of wars that create threats to farmers like in Ethiopia and Somalia.
- Rural Urban migration leaving the old and energy less people to tilt the land.
- The unfavourable government policies like giving priority to industrial sector like in Ethiopia, Eritrea.
- The poor farming methods i.e. monoculture, bush burning.
- Poor storage facilities
- Inaccessibility or poor transport and communication facilities limiting dispatching of food from areas of excess to those lacking food.
- Land tenure systems like communal ownership discouraging intensive farming and thus affecting agricultural productivity
- Limited research
- Conservatism or illiteracy / cultural norms resulting into refusal to change from traditional / cultural systems to modernity.

#### Other factors

- Pests, diseases and wild animals e.g. cassava mosaic, stalk boerer in maize affecting crop production
- The rugged topography / relief like in Somalia, Ethiopia affecting use of agricultural modernization

- Poor seed breeds resulting into low yields.
- Absence of surface water e.g. in Somalia.
- Unfavourable climatic conditions like prolonged drought like in Ethiopia, Eritrea resulting into drying of crops.
- Natural vagaries like mass wasting, eruptions like in Ethiopia.
- Deteriorated and exhausted soils due to soil erosion leading to reduced yields. (25 marks)

**END**