IASBABA'S TLP 2023 (PHASE – 1) – DAY 58 SYNOPSIS

Q-1- Analyse the factors responsible for concentration of automobile industries in certain regions of the world including the role of labor availability, cost of production and access to markets and resources?

Approach

A simple straightforward question where candidates need to write about factors responsible for concentration of automobile industries in certain regions of world and role of labour availability, cost of production, and access to markets and resources.

Introduction

The automobile industry is highly concentrated In a few countries with the majority of production taking place in China, the United states,japan,Germany ,and south Korea. and accounts 60 % of world global automobile production,other player include India, Brazil etc. Many factors responsible for their concentration in regions.

Body

There are several factors that can contribute to the development of the automobile industry in a particular region. These include,

Access to natural resources:

- Automobile manufacturing requires large amounts of raw materials, such as steel and aluminum. Regions with abundant natural resources, such as iron and coal deposits, may have an advantage in this regard.

Skilled labor force:

- The automobile industry is highly technical and requires a skilled workforce. Areas with strong engineering and technical education programs may be more likely to develop a robust automobile industry.

Government policies and incentives:

- Government policies and incentives can play a significant role in the development of the automobile industry. For example, governments may provide subsidies for research and development, or offer tax breaks for companies that invest in the industry.

Access to markets:

- The automobile industry is highly globalized, and having access to large domestic and international markets is crucial for the success of the industry.

Economic stability:

- A stable economy with low inflation and steady GDP growth can attract investors and manufacturers to invest in the industry.

Infrastructure:

- Good infrastructure such as highways, ports and airports are necessary for the industry to thrive, as it ensures ease of movement of goods and people.

Innovation:

- Automobile industry is constantly innovating and changing, having research and development centers and companies with forward-thinking approach can be an advantage for a region to have a well-developed automobile industry.

cheap land availability:

- These industries need large tract of land to setup assembly lines, administrative buildings and testing facilities.

Cheap Skilled Labour:

- These industries are capital intensive with high capital investment per ca pita employee. Industry prefers cheap and easy availability of skilled labour and if government initiatives for skill developments are ongoing in an area, then it is also preferred.

Good Quality logistics:

- These industries need supply of accessories such as window glass, tyres, paint etc. And are committed to provide delivery of final product at per-determined time. This requires better connectivity with roads, trucks etc.

Industrial conglomeration:

- When a industry is setup in an area, gradually over time supporting infrastructure is put in place by the authorities. New industrial proposals take advantage of already developed resources and prefer setting up plants in the same area.

Closeness to final customer:

- It is preferred to serve the customer better with reduced transportation cost of the final product and learn the change in their taste to update manufacturing plans.

Closeness of suppliers-

- Industry has to interact with number of OEMs for window glass seats, wipers, tyres etc. If these are at a distance from the manufacturing plant, it will increase the input cost for final product making them less competitive in the market. Hence, closeness is preferred with OEMs. Ex: Manesar and gurgaon.
- Mostly in India we have our auto industries in three clusters namely NCR Chakan and Chennai.
- Auto industry started in India in 1940s with setup of Hindustan and Mahindra and Mahindra.
- After independence, import substitution industrialization was set in place. Monopolistic tendencies were checked by limiting production quota. Ambassador was dominant product and served government.
- Late 1980s saw efforts for more production for example Maruti Udyog whose Maruti 800 captured the market. After 1991, many foreign investors and companies came in the fray and the target is increasingly middle class, urbanizing, daily commuting population of India.
- Rural markets are dominated by two wheels. Indian cars are more focused on low-cost, fuel-efficient products and are exported to various destinations including US, Europe, Africa, etc.
- Many luxury segment cars are in demand in India as well. Domestically, density of cars has increased immensely specially after Nano model of Tata.
- Pollution standards of Bharat stage 4 and 3 are enforced. There is an increased emphasis on adapting electric and hybrid vehicles in near future as well.

Conclusion -

The future of automotive industry will hinge on four major technologies: automation, connectivity, electric power, and the shared economy. Perhaps the most obvious and fundamental change facing the auto sector is the rise of autonomous cars hence there will be some changes in location factors regarding automobile industry.

2. Discuss the impact of energy costs and government policies on the location of oil refineries and how it affects the global oil industry.

Approach

Candidates can start the answer with giving basic idea about location of oil industries and refineries and how cost and policies impacting global oil industry.

Introduction

Energy costs and government policies have a significant impact on the location of oil refineries, which in affect the global oil industry.

Body

Energy costs and policies are a major factor in the location of oil refineries:

- Oil refineries require large amounts of energy to operate, and the cost of energy can significantly impact their profitability. Therefore, oil refineries are often located in regions with low energy costs, such as the Gulf Coast of the United States, which has access to low-cost natural gas.
- Government policies also play a significant role in the location of oil refineries. Government regulations and taxes can affect the profitability of oil refineries and therefore influence where they are located.
- For example, some governments provide tax breaks or subsidies to oil refineries in order to attract them to their region.
- Additionally, governments may have restrictions on the location of oil refineries, such as zoning laws, which can affect where they are built.
- The location of oil refineries can also have an impact on the global oil industry. For example, if most oil refineries are located in one region, such as the Middle East, it can create a dependency on that region for oil products.
- Additionally, if oil refineries are located close to the sources of oil production, such as in the Gulf of Mexico, it can make the transportation of oil more efficient and cost-effective, which can benefit the global oil industry.
- Government policies and incentives: Government regulations, taxes, and incentives can affect the profitability of oil refineries and therefore influence where they are located. For example, some governments provide tax breaks or subsidies to oil refineries in order to attract them to their region.
- Environmental regulations and compliance costs: Oil refineries are subject to strict environmental regulations, so they are often located in regions with less stringent regulations or where the government is willing to provide incentives

for environmental compliance. These regulations and compliance costs can have a significant impact on the operating expenses of a refinery.

- Energy costs: The cost of energy important factor to consider when it comes to the location of oil refineries. Refineries located in regions with lower energy costs can have a competitive advantage in terms of their operating expenses.

Conclusion

In nutshell, the location of oil refineries is influenced by energy costs, government policies, and other factors, which in turn can affect the global oil industry by influencing the cost and availability of oil products, and the dependency of a certain regions for oil products.

3. Evaluate the role of technological advancements and international trade agreements on the location of high-tech industries, particularly in the field of information technology and semiconductors.

Approach

Candidates can start the answer with giving basic idea of food value chain also with giving an example highlight the challenges of FPI in India.

Introduction

The location of the industry at a particular place is the result of a number of decisions taken at various levels. There are certain non-geographical factors such as technology advancement and agreements that facilitate this decision-making.

Body

Technological advancements and international trade agreements have had a significant impact on the location of high-tech industries:

- Technological advancements have made it possible for companies to produce and distribute products and services more efficiently and at a lower cost, which has led to the decentralization of production and the emergence of global supply chains.
- This has allowed high-tech industries to locate in areas with lower labor costs, such as developing countries, while still being able to access advanced technologies and specialized inputs from other countries.
- International trade agreements, such as the North American Free Trade Agreement (NAFTA) and the World Trade Organization (WTO), have also played a role in the location of high-tech industries.

- These agreements have reduced trade barriers and increased access to foreign markets, making it easier for companies to locate production in countries with lower labor costs and then export their products to other countries.
- This has led to the growth of high-tech industries in countries such as China and Mexico, which have become major exporters of high-tech products.
- Moreover, the increasing use of digital technologies and the increasing trend of outsourcing and offshoring have allowed companies to relocate their high-tech industries to cheaper locations.
- This has led to the growth of high-tech industries in countries such as India, where labor costs are relatively low and there is a large pool of skilled workers with expertise in areas such as software development and data analysis.

Semiconductor and IT industries:

- Access to R&D and advancements: Semiconductor and IT industries rely heavily on R&D to stay competitive and develop new technologies. Locations with strong R&D capabilities and resources, such as universities and research centers, are more likely to attract semiconductor and IT companies.
- Agreement and policies stability: Semiconductor companies are looking for locations that have a stable political environment and robust security measures to protect their assets and intellectual property.
- Government agreements: Many governments offer various tariff, such as tax breaks and subsidies, to attract high-tech industries to their region. Locations that offer attractive incentive packages are more likely to attract IT and semiconductor companies.

Conclusion

In summary, technological advancements and international trade agreements have led to the decentralization of high-tech industries and the growth of high-tech industries in countries with lower labor costs, as well as increased access to foreign markets and specialized inputs.