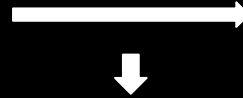


# Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation

## Introduction -



**Supply location  
(Industry)**



**Traders  
[Transportation]**



**Demand location  
(Consumer)**

**∴ Pace of development depends upon the production of goods and services as well as their movement over the space.**

# Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation



## Introduction -

→ Movement of goods and services can be over three important domains of our earth.

### Land transportation



### Water transportation



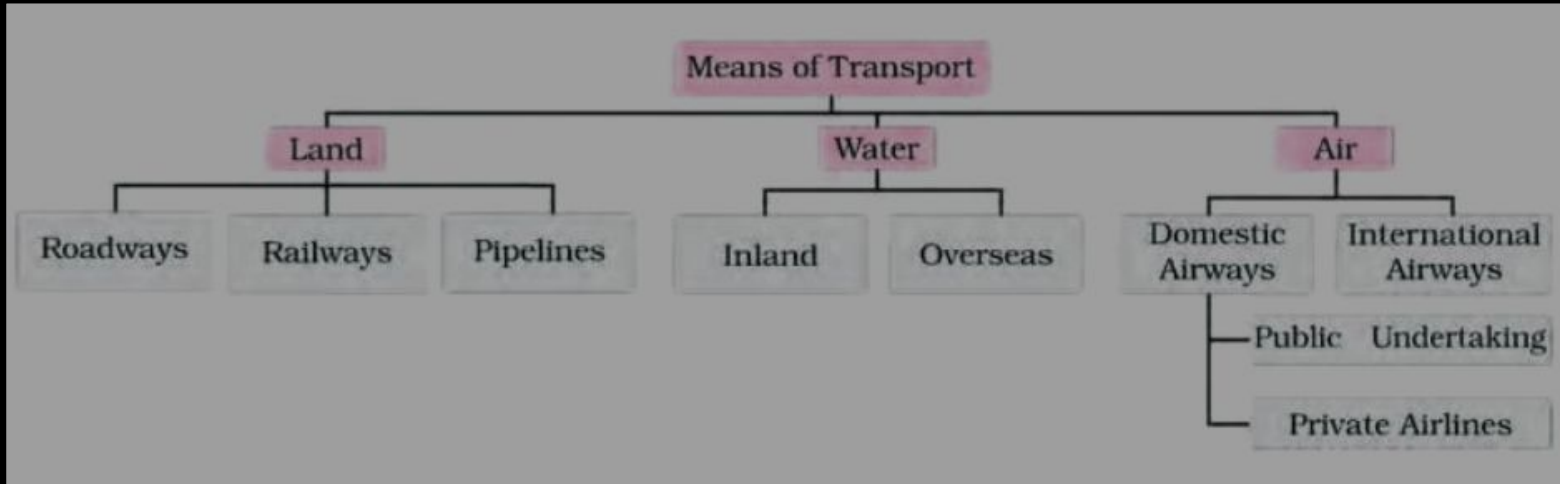
### Air transportation



# Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation



## Introduction -



## Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation



### Introduction -

Initially *Trade* and *Transport*



Development in science and technology  
expanded trade and transport.



- Were restricted to limited space. 🤔

• Transport + Communication = ↑ Connectivity = *Huge trade*  
[Railways, Waterways] [Radio, Internet] [Global village] [Local to international]

∴ Dense and efficient network of transportation and communication is  
prerequisite for local, national and global trade of today.



## Introduction -

What we are going to study in this chapter?

- ❖ Roadways
  - Classification of roads
- ❖ Railways
- ❖ Pipelines
- ❖ Waterways
  - Major sea ports
- ❖ Airways
- ❖ Communication
- ❖ International trade
- ❖ Tourism as a trade

Land transportation



### Roadways -

→ India has one of the largest road networks in the world, aggregating to about 56 lakh km.

In India, roadways have preceded railways



Reasons

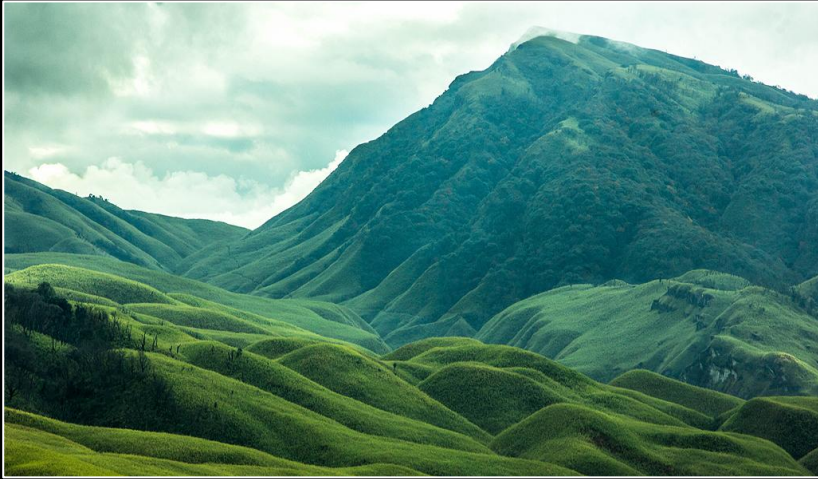


- a. Construction cost is much lower.
- b. Roads can transverse/cross comparatively more dissected and undulating topography.
- c. Roads can negotiate higher gradients of slopes.
- d. Road transportation is economical to transport goods and persons over short distance.
- e. Provide door to door service, thus cost of loading and unloading is much lower.
- f. Road transport is also used as a feeder to other modes of transport.

## Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation



### Roadways -





## Roadways : Classification of Roads -

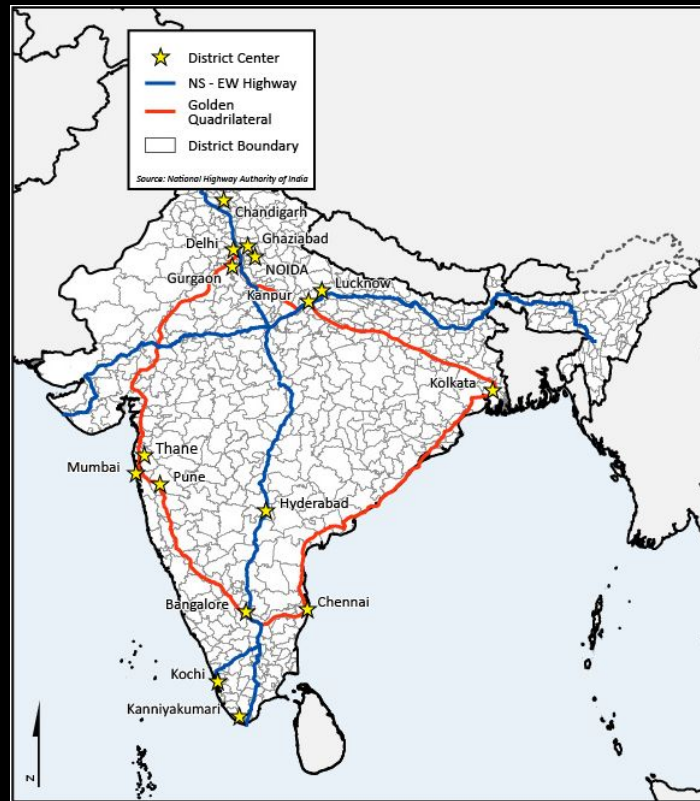
### Golden quadrilateral super highways



Major road development project linking Delhi-Kolkata -  
Chennai - Mumbai and Delhi by six-lane Super Highways.

### It consists of -

- The **North South corridors** linking Srinagar (Jammu & Kashmir) and Kanyakumari (Tamil Nadu).
- **East-West Corridor** connecting Silchar (Assam) and Porbandar (Gujarat) are part of this project.







### Roadways : Classification of Roads -

#### Objectives



To reduce the time and distance between the mega cities of India.



These highway projects are being implemented by the **National Highway Authority of India (NHAI)**.



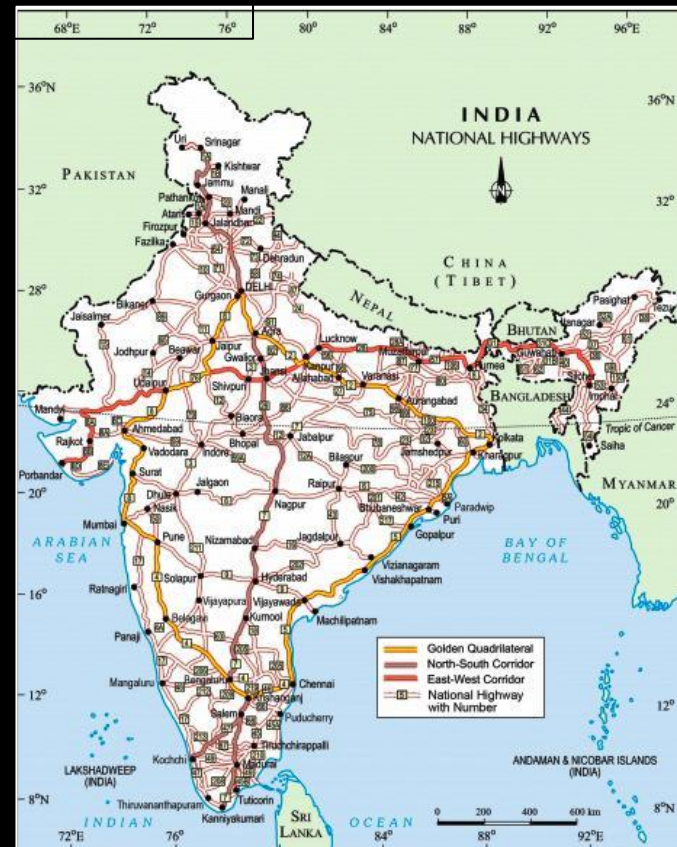
# Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation

## Roadways : Classification of Roads -

### National Highways



- National Highways link extreme parts of the country.
- These are the primary road systems and are laid and maintained by the **Central Public Works Department (CPWD)**.
- Spread all over the country.
- The historical Sher-Shah Suri Marg is called National Highway No.1, between Delhi and Amritsar.





## Roadways : Classification of Roads -

### State Highway



- Roads linking a state capital with different district headquarters are known as State Highways.
- These roads are constructed and maintained by the **State Public Works Department (SPWD)** in State and Union Territories.





### Roadways : Classification of Roads -

#### District Roads



- These roads connect the district headquarters with other places of the district.
- These roads are maintained by the **Zila Parishad**.

#### Other Roads



- Rural roads, which link rural areas and villages with towns, are classified under this category.
- These roads received special impetus under the **Pradhan Mantri Grameen Sadak Yojana**.
- Constructed to increase the connectivity between village and town by an all season motorable road.

# Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation



## Roadways : Classification of Roads -





## Roadways : Classification of Roads -

### Border Roads



- Border Roads Organisation (BRO), established in 1960, a government of India undertaking constructs and maintains Border Roads.



Roads made in the bordering areas.

### ***BRO (Border Roads Organisation)***



Established in 1960 for the development of the roads of strategic importance in the northern and north-eastern border areas.



These roads have improved accessibility in areas of difficult terrain and have helped in the economic development of these area.



### Roadways : Classification of Roads -

→ Classification on the basis of the types of material used.

#### ***Mettalled Roads -***

- Made of cement, concrete or even bitumen of coal.
- All weather road.

#### ***Unmetalled Roads -***

- Made of mud and sand.
- Go out of use in Rainy season.



# Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation



## Railways -

Railways

→ Principal mode of transportation for freight and passengers in India.



Useful for *multifarious activities*. 🤔



Business, sightseeing, pilgrimage along with transportation of goods over longer distances.



- Railways in India bind the economic life of the country as well as accelerate the development of the industry and agriculture.





### Railways -

→ The Indian Railways is the largest public sector undertaking in the country.

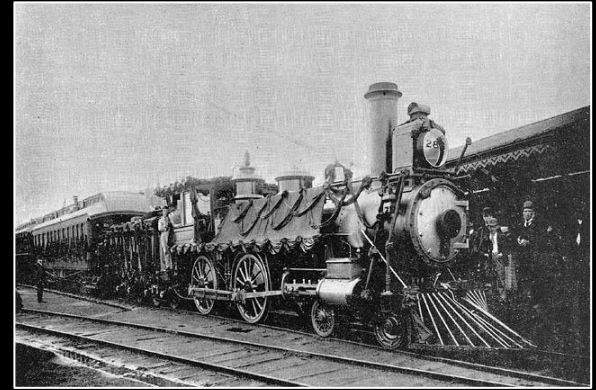


The first train steamed off from *Mumbai to Thane in 1853.*



*Covering a distance of 34 km.*

→ The Indian Railway is now reorganised into 16 zones.



# Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation

## Railways -





### Railways -

The distribution pattern of the Railway



Largely influenced by physiographic, economic and administrative factors. 🤔

Northern Plain



- Vast level land, high population density and rich agricultural resources provided the most favourable condition for their growth.
- However, a large number of rivers requiring construction of bridges across their wide beds posed some obstacles.

# Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation



## Railways -

### Peninsular Region

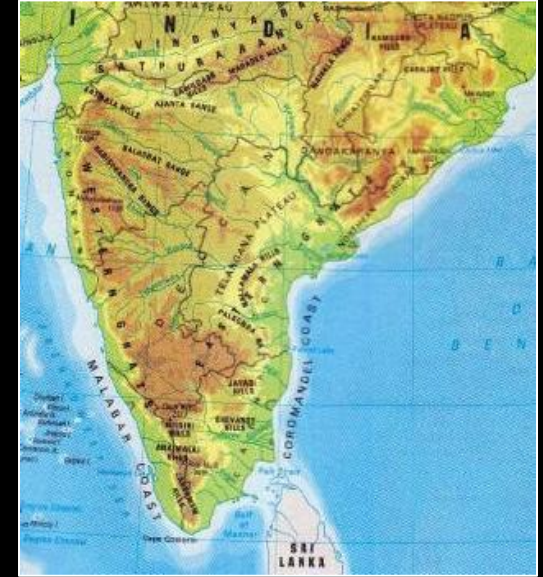


- Hilly areas.
- Railway tracks are laid through low hills, gaps or tunnels.

### Himalayan Region



- Unfavourable for the construction of railway lines due to high relief, sparse population and lack of economic opportunities.





### Railways -

#### *Challenges faced by Railways -*

I. *Difficulties to lay railway lines in areas such as -*



- Sandy plains of Rajasthan.
- Swamps of Gujarat.
- Forested tracks of Madhya Pradesh, Chattisgarh, Odisha and Jharkhand.
- Stretch of sahyadri could be crossed only through gaps and passes.



### Railways -

- II. Sinking of track in some stretches and landslides.
- III. Many passengers travel without tickets.
- IV. Thefts and damaging of railway property has not yet stopped completely.
- V. People stop the trains, pull the chain unnecessarily and this causes heavy damage to the railway.





### Pipelines -

- New found means of transportation.

Pipelines as a means of transportation



- In the past, these were used to transport water to cities and industries.
- Now, these are used for transporting crude oil, petroleum products and natural gas fields to refineries, fertilizer factories and big thermal power plants.
- Solids can also be transported through a pipeline when converted into slurry. 🚚







## Pipelines -

Pipelines



Initially cost (establishment ↑) 🐛



- Subsequent running costs are minimal.
- It rules out trans-shipment losses or delays.





# Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation

## Pipelines -

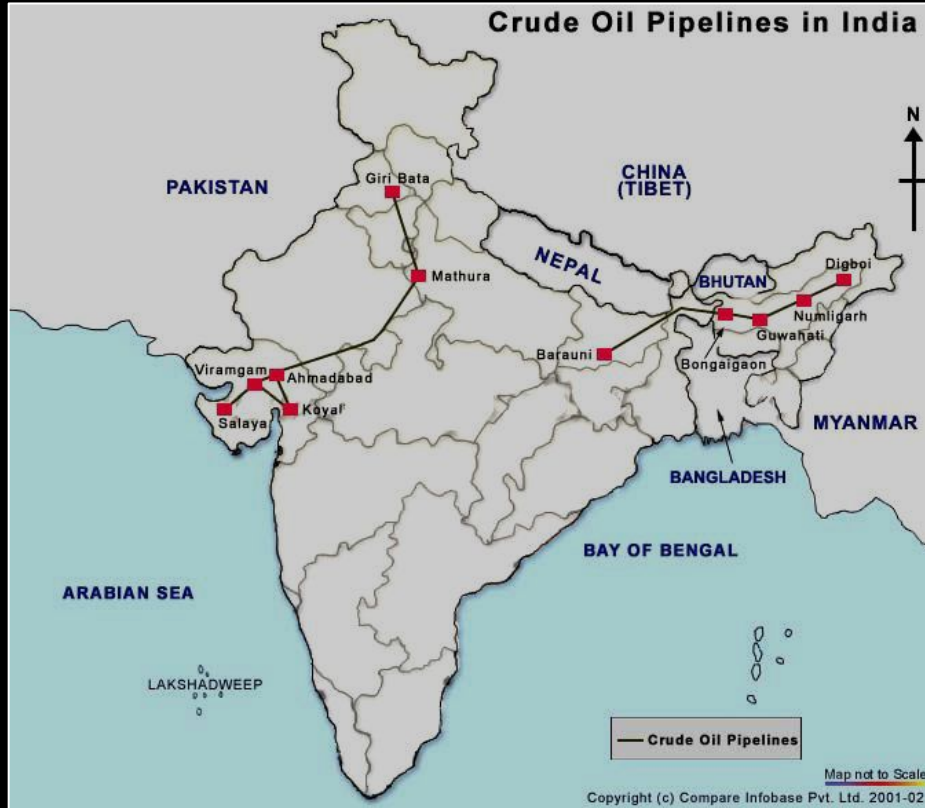
*Important network of pipeline transportation -*

- I. *Upper Assam to Kanpur*  
➔ Via Guwahati, Barauni and Allahabad.
- II. *From Salaya in Gujarat to Jalandhar in Punjab*  
➔ Via Viramgam, Mathura, Delhi and Sonipat.
- III. *From Hazira in Gujarat to Jagdishpur in U.P.*  
➔ Via Vijaipur, Kota, Shahjahanpur and Babrala.



# Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation

## Pipelines -



## Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation



### Waterways -

India



One of the *seafaring country*. 



Its seamen sailed far and near, thus, carrying and spreading Indian commerce and culture.

- **Waterways**  Cheapest means of transportation. 



For heavy and bulky goods.

- ➔ It is a fuel-efficient and environment friendly mode of transport.
- ➔ India has inland navigation waterways of 14,500 km in length. Out of these only 5685 km are navigable by mechanised vessels.

**National  
Waterways**



### Waterways -

**National Waterway No. 1**

- The Ganga river between Allahabad and Haldia (1620 km).

**National Waterway No. 2**

- The Brahmaputra river between Sadiya and Dhubri (891 km).

**National Waterway No. 3**

- The West-Coast Canal in Kerala (Kottapuram-Kollam, Udyogamandal and Champakara canals-205 km).

**National Waterway No. 4**

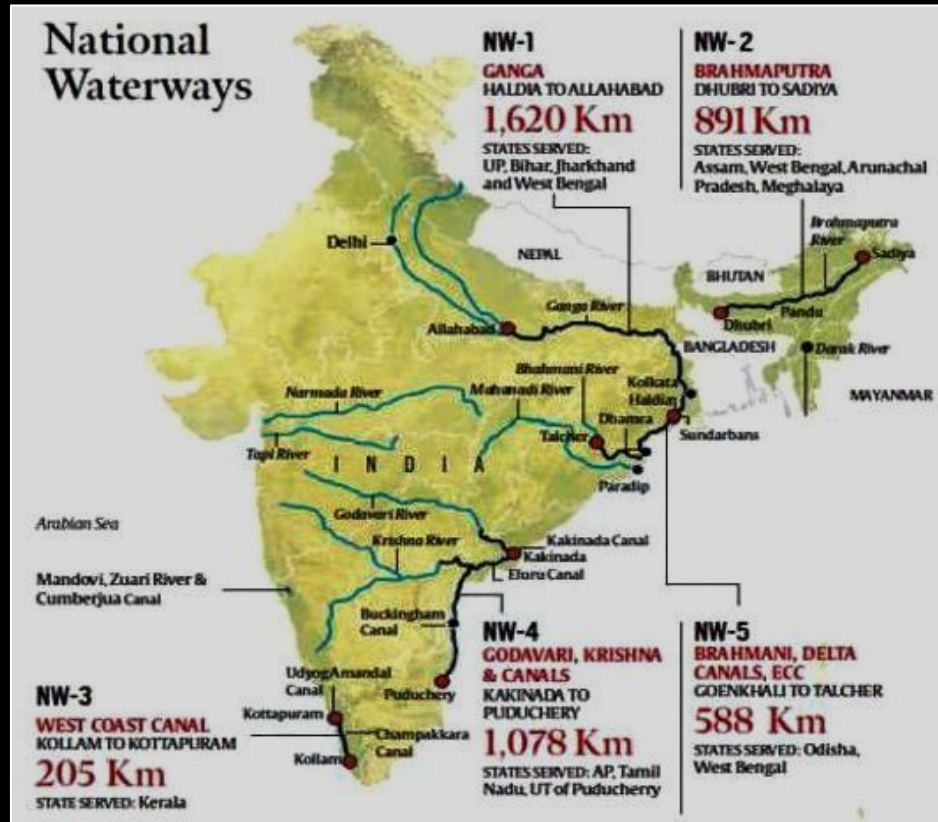
- Specified stretches of Godavari and Krishna rivers along with Kakinada Puducherry stretch of canals (1078 km).

**National Waterway No. 5**

- Specified stretches of river Brahmani along with Matai river, delta channels of Mahanadi and Brahmani rivers and East Coast Canal (588 km).

# Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation

## Waterways -





### Waterways -

#### Inland Waterways

- Inland waterways on which substantial transportation takes place.
- These are Mandavi, Zuari and Cumberjua, Sunderbans, Barak and backwaters of Kerala.

*India's trade with foreign countries is carried from the ports located along the coast.*



→ 95 per cent of the country's trade volume (68 per cent in terms of value) is moved by sea.





### Major Sea Ports -

The coastline = 7,516.6 km



- India is dotted with 12 major and 200 notified non-majors (minor/intermediate) ports.
- These major ports handle 95 per cent of India's foreign trade.



### Major Sea Ports -

#### Kandla Port



- First port developed soon after Independence to ease the volume of trade on the Mumbai port, in the wake of loss of Karachi port to Pakistan after the Partition.
- Kandla also known as the *Deendayal Port, is a tidal port.* 🚢
- It caters to the convenient handling of exports and imports of highly productive granary and industrial belt stretching across the states of Jammu and Kashmir, Himachal Pradesh, Punjab, Haryana, Rajasthan and Gujarat.







### Major Sea Ports -

#### Mumbai Port



- The biggest port with a spacious natural and well-sheltered harbour.
- The *Jawaharlal Nehru port* was planned with a view to decongest the Mumbai port.





### Major Sea Ports -

#### Marmagao Port



- The premier iron ore exporting port of the country.
- This port accounts for about fifty per cent of India's iron ore export.

#### New Mangalore Port



- Located in Karnataka caters to the export of iron ore concentrates from *Kudremukh mines*.





### Major Sea Ports -

#### Kochi Port



- Extreme south-western port, located at the entrance of a lagoon with a natural harbour.

#### Tuticorin Port



- Extreme southeastern port.
- This port has a natural harbour and rich hinterland.
- It has a flourishing trade handling of a large variety of cargoes to even our neighbouring countries like Sri Lanka, Maldives, etc.





### Major Sea Ports -

#### Chennai Port



- The oldest artificial ports of the country.
- It is ranked next to Mumbai in terms of the volume of trade and cargo. 🚢

#### Visakhapatnam Port



- The deepest landlocked and well-protected port.
- This port was, originally, conceived as an outlet for iron ore exports.





### Major Sea Ports -

#### Paradip Port



- Port located in Odisha, specialises in the export of iron ore.

#### Kolkata Port



- Kolkata is an inland riverine port.
- This port serves a very large and rich hinterland of Ganga-Brahmaputra basin.
- Being a tidal port, it requires constant dredging of Hooghly.





### Major Sea Ports -

#### Haldia Port



- Port was developed as a subsidiary port, in order to relieve growing pressure on the Kolkata port.





### Airways -

Airways



Fastest, most comfortable and prestigious mode of transport.



It can cover very difficult terrains like high mountains, dreary deserts, dense forests and also long oceanic stretches with great ease.



Explain



- The air transport was nationalised in 1953.
- ***Pawanhans helicopter Ltd.*** provides helicopter services to oil and natural gas corporation in its offshore operations to inaccessible areas and difficult terrains.
- Indian airlines operation also extend to the neighbourhood countries.

# Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation

## Airways -

### Air Travel



Is not within the reach of the common people.



It is only in the north-eastern states that special provisions are made to extend the services to the common people.





# Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation

## Communication -

Communication



Not a new phenomenon.

But, the pace of change, has been rapid in modern times.

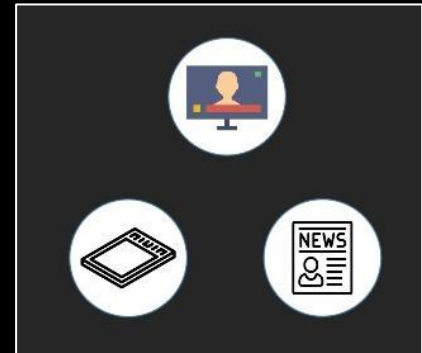
Explain



Personal Communication



Mass Communication





### Communication -

→ The *Indian postal network* is the largest in the world.



It handles parcels as well as personal written communications.



#### First class mail

- Cards and envelope.
- Airlifted between station covering both land and air.

#### Second class mail

- Book packets, registered newspaper and periodicals.
- Carried by surface mail, covering land and water transport.

→ To facilitate quick delivery of mails in large towns and cities, six mail channels have been introduced recently.



*Rajdhani Channel, Metro Channel, Green Channel, Business Channel, Bulk Mail Channel and Periodical Channel.*

# Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation



## Communication -



First Class Mail



Second Class Mail



### Communication -

India



One of the largest telecom network in Asia.



- More than two-thirds of the villages in India have already been covered with **Subscriber Trunk Dialling (STD)** telephone facility.
- The government has made special provision to extend twenty-four hours STD facility to every village in the country.
- Integrating the development in space technology with communication technology.



### Communication -

#### Did you know?

**Digital India** is an umbrella programme to prepare India for a knowledge based transformation. The focus of Digital India Programme is on being transformative to realise - IT (Indian Talent) + IT (Information Technology) = IT (India Tomorrow) and is on making technology central to enabling change.



## Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation

### Communication -

#### Mass Communication 🤔



Provides entertainment and creates awareness among people about various national programmes and policies.

- **All India Radio (Akashwani)**
- **Doordarshan**



The national television channel of India, is one of the largest terrestrial networks in the world.

- India publishes a large number of **newspapers and periodicals annually**.
- India is the largest producer of feature films in the world.



**The Central Board of Film Certification** is the authority to certify both Indian and foreign films.



## Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation



### Communication -

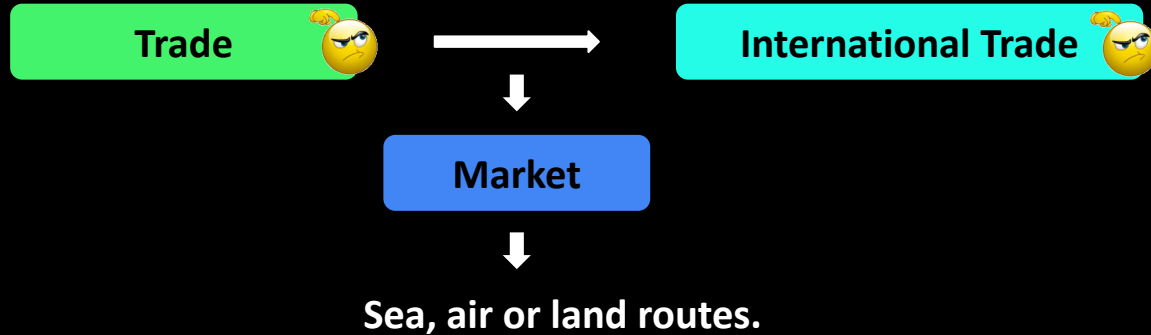




## Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation



### International Trade -



The exchange of goods among people, states and countries is referred to as trade.  
Trade between two countries is called *international trade*.

Advancement of international trade of a country  
is an index to its economic prosperity. ➡

Economic barometer for a country.

## Class 10th - Geography - Lifelines of National Economy - Full Chapter Explanation



### International Trade -





## International Trade -

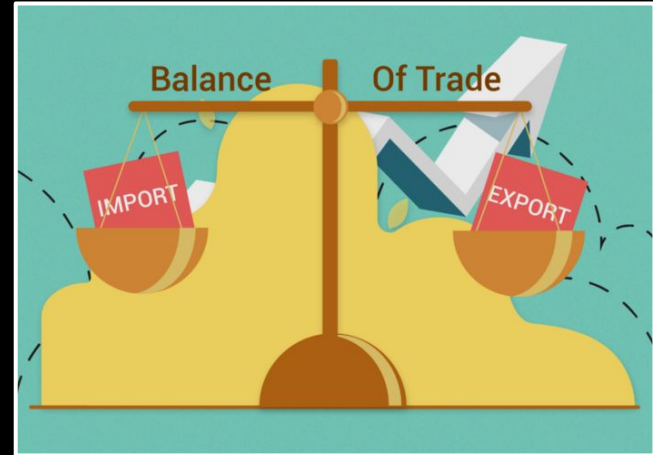
### Balance of trade



The balance of trade of a country is the difference between its export and import.



- *Favorable balance of trade.*
- *Unfavorable balance of trade.*





## International Trade -

### International trade and India



- **Commodities which India exports:** Agriculture products, ore and minerals, gems and jewellery, etc.
- **Commodities which India import:** Petroleum and petroleum products, pearls and precious metals, electronics items, etc.

India



Software giant at the International level.



***Helpful in earning large foreign exchange.***



## Tourism as a Trade -

Tourism



A sector having potential to generate more employment and economic activities.



More than 15 million people are directly engaged in the tourism industry.



How?





### Tourism as a Trade -

#### Benefits of tourism as a trade



- Promotes national integration.
- Provides support to local handicrafts and cultural pursuits.
- Helps in the development of international understanding about our culture and heritage.



- Foreign tourists visit India for *heritage tourism, eco tourism, adventure tourism, cultural tourism, medical tourism and business tourism.*



**Chapter Completed**



# STAY CONNECTED

KEEP LEARNING

TOGETHER  
WE CAN

