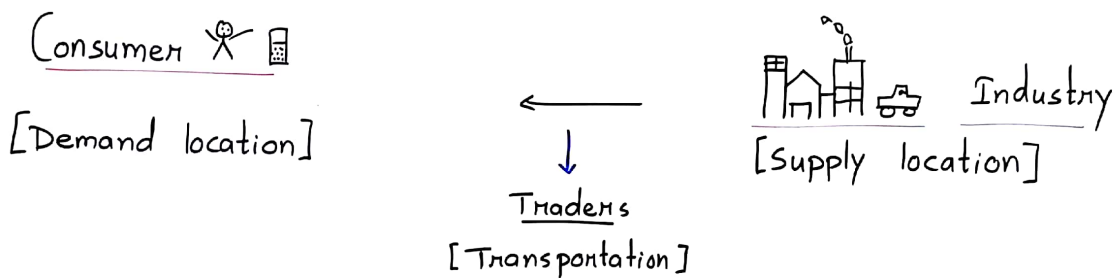


# Class - x chapter - 7 [Geography] Life lines of National Economy

## Introduction

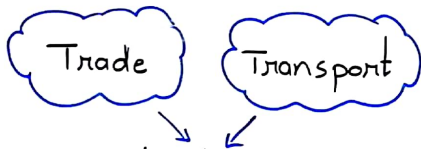


∴ Pace of development depends upon the production of goods and Services as well as their movement over the Space.

∴ Means of transportation includes : 1. Land 2. Water 3. Air

## Class - x chapter - 7 [Geography] Life lines of National Economy

### Trade, transport and Communication



• Were restricted to limited space

→ Development in Science and technology  
Expanded trade and transport.

• Transport + Communication =  $\uparrow$  Connectivity = Huge trade  
[Railways, Waterways] [Radio, Internet] [Global village] [local to International]

∴ Dense and efficient network of transportation and Communication is pre-requisite for local, National and Global trade of today.

## Class-X Chapter-7 [Geography] Lifelines of National Economy

### Transportation : Roadways

→ One of the largest road network in the world. [Aggregating to about 2.3 million km]

\* Roadways have preceded railways. Reasons ??

- (a). Construction cost is much lower.
- (b). Roads can traverse/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-X Chapter-7 Geography Lifelines of National Economy

### Classification of Roads - I

#### 1). Golden Quadrilateral Super Highways :

- ① linking Delhi - Kolkata - Chennai - Mumbai - Delhi by six lane Super highway.
- ② Consist of North-South Corridors linking Srinagar (J&K) to Kanyakumari [T.N]. East-west Corridors linking Silcher [Assam] to Porbandar (Gujrat).
- ③ Implemented and maintained by (NHAI) National Highway authority of India.
- ④ Connecting Mega Cities.

#### 2). National Highways :

- ① linking extrem parts of Countries. Various State Capitals.
- ② Laid and maintained by Central public works Departments [CPWD]
- ③ Spread all over the Country evenly.

#### 3). State Highways :

- ① Roads linking a State Capital with different district headquarters.
- ② Constructed and maintained by the State public works Department [PWD]

## Class-X Chapter-7 Geography Lifelines of National Economy

### Classification of Roads - II

#### 4). District roads :

- ⇒ Roads connecting district headquarters with other places of the district.
- ⇒ Maintained by zila parishad.

#### 5). Other Roads :

- ⇒ Rural roads [linking rural areas and villages with towns.]
- ⇒ Special benefits under pradhan mantri Gramteen sadak yojana.
- ⇒ Constructed to increase the connectivity between village and town by an all season motorable road.

#### 5). Border Roads :

- ⇒ Border Roads organisation [BRO], a government of India undertaking. established in 1960.
- ⇒ Roads made on border areas of the country.
- ⇒ Constructing roads in remote areas had helped in economic development of these area.

## Class-X Chapter-7 Geography Lifelines of National Economy

### Classification of Roads - III

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

#### (i). Metalled Roads

- Made of Cement, Concrete or even bitumen of Coal.
- All weather road.

#### (ii). Unmetalled Roads

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

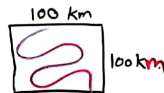
#### ∴ Some facts:

- National Highway No. 1 = Sher shah Suri marg [Between Delhi and Amritsar]
- National Highway No. 7 = longest NH [2,369 km] from Varanasi to Kanyakumari.
- National Highway No. 8 = Connects Delhi to Mumbai.
- National Highway No. 15 = Covers Most of the Rajasthan.

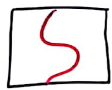
## Class - X Chapter - 7 [Geography] Lifelines of National Economy

### Road Density

→ The length of road Per 100 Sq/km of area.



→ Distribution is not uniform in the Country. [on 31 March 2011]



⇒ 12.14 km [J&K]

to



517.77 km [Kerala]



142.68 km [National Average]

\* Challenges faced by Road transportation ÷

- (i). large volume of traffic and Passengers and road network is not Sufficient for it.
- (ii). Half of the roads are unmettled. They are of No use in rainy season.
- (iii). Roads are Congested in Cities.
- (iv). Most of the bridges and Culverts are old and Narrow.

## Class - X Chapter - 7 [Geography] Lifelines of National Economy

### Transportation: Railways

- Mode of transportation for both freight and Passangers.
- Used for multiple activities like Business, Sightseeing, pilgrimage and transportation of Goods over long distance.
- A great integrating force for economy. Accelerate the development - of the Industry and Agriculture.
- Indian Railways is largest public sector under taking in the Country.

!! first train !!

Mumbai to Thane in 1853  
34 km.

Indian Railways  
Reorganised into 16 zones

7,133 Stations  
spread over 64,460 km



## Class - X Chapter - 7 [Geography] Lifelines of National Economy

### Distribution pattern of Railways in India

→ The distribution pattern is influenced by physiographic, economic and administrative factors.

#### • Northern plains

→ Plain area and high Population.

∴ ↑ in Railways.

→ But large number of rivers  
Require construction of bridges.

#### • Peninsular region

→ Hilly area

→ Track are to be laid  
from gaps and tunnels.

#### • Himalayan Mountains

→ unfavourable for railway  
construction.

→ High relief, Sparse population  
and lack of economic opportunity

∴ ↓ development of Railways.

## Class - X Chapter - 7 [Geography] Lifelines of National Economy

### Challenges faced by Railways

- 1) Difficult to lay railway lines in areas such as → • Sandy plains of Rajasthan  
• Swamps of Gujrat → • forested tracks of Madhya pradesh, chhattisgarh  
Orissa and Jharkhand. → • stretch of Sahyadri could be crossed only through  
gaps and passes.
- 2) Many passengers travel without ticket.
- 3) Theft and damaging railway property still continuous.
- 4) unnecessarily chain pulling.

## Class - X Chapter - 7 [Geography] Lifelines of National Economy

### Pipelines

→ New found Means of transportation.

→ Earlier used to transport water. Now transportation of Crude oil, petroleum products and natural gas to refineries, fertilizer factories and big thermal plants is done by pipelines.

\* Solids → Slurry → Transported through pipelines.

→ Initial Cost [Establishment] (↑) ⇌ Running Cost [Maintenance] (↓) 😞??

• Also there is low chances of Trans-shipment losses and delays.

## Class - X Chapter - 7 [Geography] Lifelines of National Economy

Important networks of Pipeline transportation

(i). Upper Assam to Kanpur

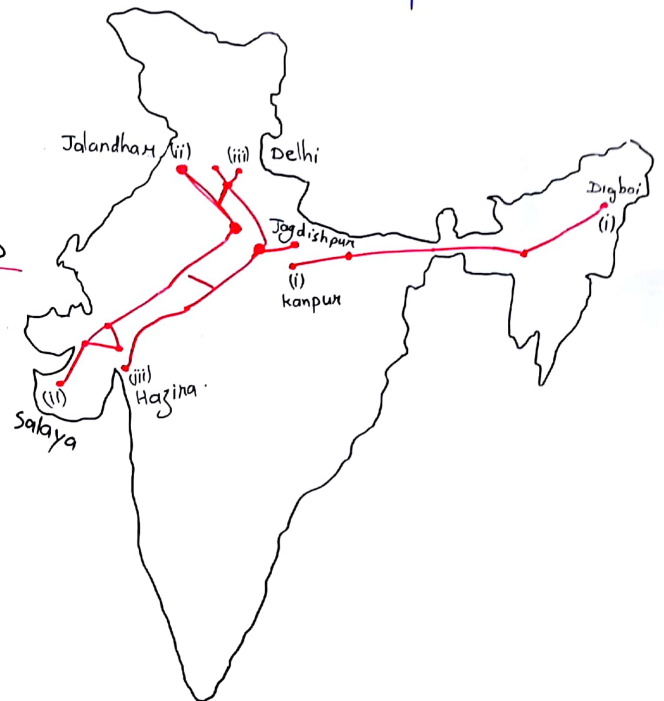
→ Via Guwahati, Barauni and Allahabad.

(ii). from Salaya in Gujarat to Jalandhar in Punjab

→ Via Viramgam, Mathura, Delhi and Sonapat

(iii). from Hazira in Gujarat to Jagdishpur in U.P

→ Via vijaipur, Kota, Shahajahanpur, Babrala.



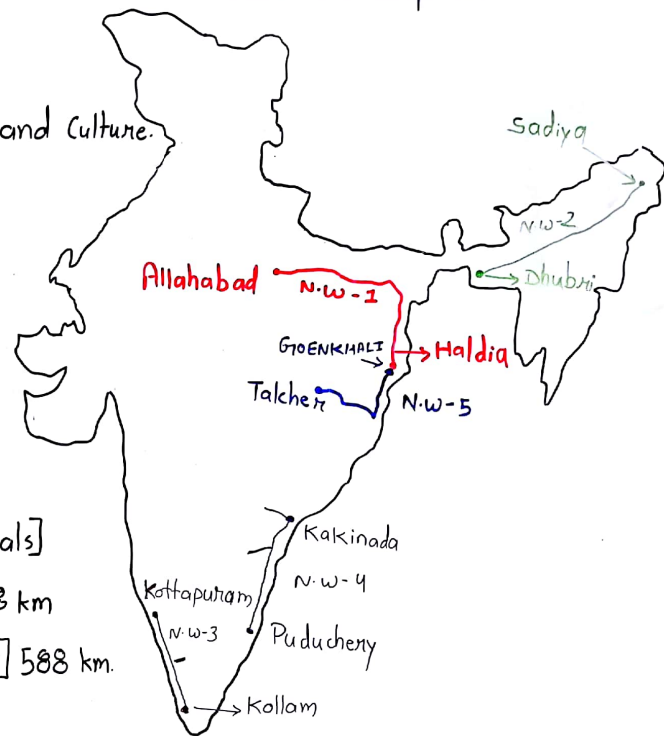
## Class - X Chapter - 7 [Geography] Lifelines of National Economy

### Waterways

- Role played by it in Spreading Indian Commerce and Culture.
- Cheapest means of transport. [In terms of volume]
- Full efficient and Environment friendly.

### ✱ National Waterways

- N.W. No - 1 [Allahabad to Haldia] 1620 km [Ganga river]
- N.W. No - 2 [Sadiya and Dhubri] 891 km [Brahmaputra R.]
- N.W. No - 3 [West-Coast Canal, Kerala] 205 km.  
→ [Kottapuram - Kollam, Udyogamandal and Champakkara Canals]
- N.W. No - 4 [Stretches of Godavari and Krishna] 1078 km
- N.W. No - 5 [Stretches of River Brahmani, Mahanadi delta] 588 km.



## Class - X Chapter - 7 [Geography] Lifelines of National Economy

### Major Sea port

→ On the Coastline of 7,516.6 km we have 12 Major and 187 Notified Non-Major port. Handling 95% of foreign trade.

#### \* Kandla port

- Developed in the wake of loss of Karachi port [Partition]
- Tidal port → Handles trade of grain and industry

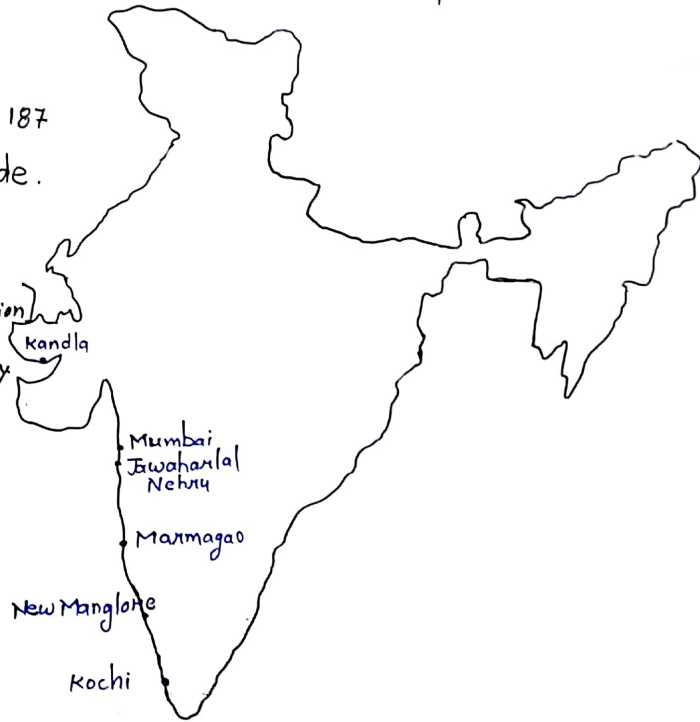
#### \* Mumbai port → Biggest port

- Jawaharlal Nehru port was planned to decongest it.

#### \* Marmagao port and New Mangalore port.

- Major iron ore exporting ports

#### \* Kochi port [Extreme south-western port].



## Class - X Chapter - 7 [Geography] Lifelines of National Economy

### Major Sea ports - II

\* Tuticorin [Extreme South-Eastern port]

→ Natural Harbour and rich Hinterland, Handling Cargoes from Neighbouring Countries

\* Chennai Port

→ oldest artificial Port, Ranked next after Mumbai [volume]

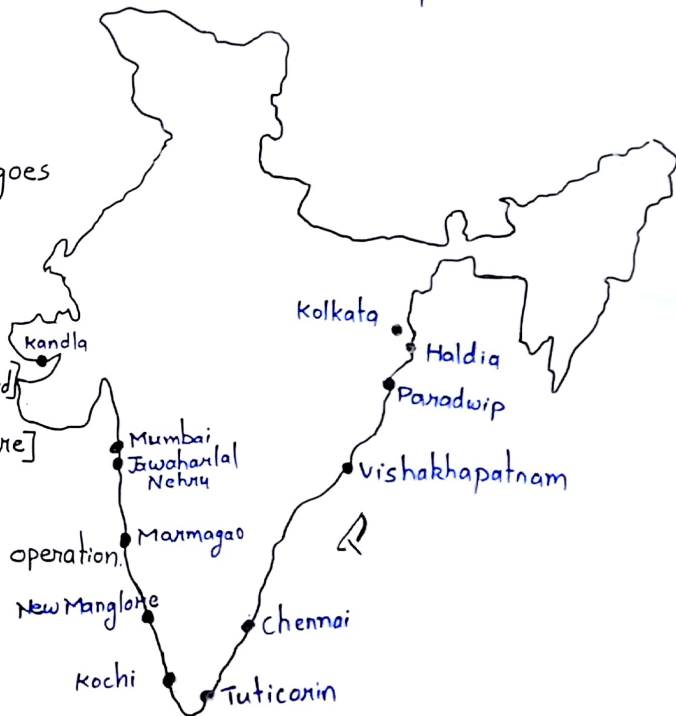
\* Vishakhapatnam Port [Deepest, landlocked and well-protected]

\* Paradwip port [Specialises in the export of Iron ore]

\* Kolkata port

→ Inland riverine port, require water from Hoogly for operation.

\* Haldia port [Subsidiary port to Kolkata port]



## Class - X Chapter - 7 [Geography] Lifelines of National Economy

### Airways

→ fastest, Most Comfortable and Prestigious Mode of transport.

→ Can cover → Difficult terrain like

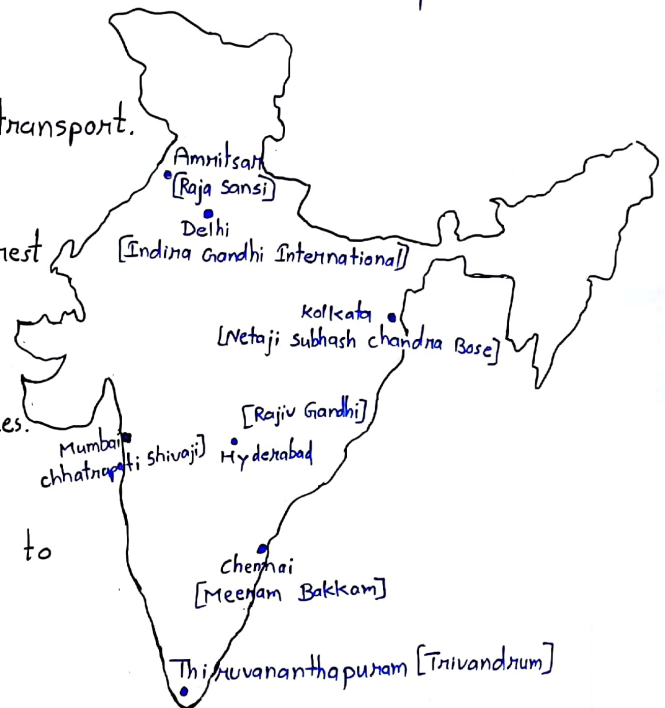
• High Mountains, long oceanic stretches dense forest  
[North eastern states], Deserts [sahara]

→ Air transport was nationalised in 1953

→ Pawanhans helicopters Ltd. provide helicopter services.

→ Air transport → ⊗ → Common peoples

→ But in North eastern states special provisions are made to extend the services to the common people.





## Class - X Chapter - 7 [Geography] Lifelines of National Economy

### Communication

- It is there since humans appeared on the earth. But, the pace of change has been rapid in modern times.
- Personal Communication  $\Rightarrow$  Mobile, letters etc.
- Mass Communication  $\Rightarrow$  Television, radio, press etc.
- Indian postal network is the largest in the world.
- One of the largest telecom networks in Asia.

#### Mass Communication

- $\rightarrow$  All India Radio (Akashwani)
- $\rightarrow$  National television channel (Doordarshan)
- $\rightarrow$  Newspapers [about 100 languages and dialects]
- $\rightarrow$  India is largest producer of feature films [Central board of film Certification] Certify films.

#### STD [Subscriber Trunk dialling]

- $\rightarrow$  2/3 of village are covered by it.
- $\rightarrow$  24 hours STD facility to every village.
- $\rightarrow$  Integrating space technology with communication

## Class - X Chapter - 7 [Geography] Lifelines of National Economy

### International Trade

→ The exchange of goods and services among people, states and countries is referred to as trade. When such trade takes place between two countries it is known as international trade.

Market

Routes → Land, water and air.

Economic Barometer

→ Resources are space bound → ∴ International trade is necessary.

• Balance of Trade [BOT] → The difference between the export and import of any country.

(i) favourable balance of trade =  $\text{Exports} > \text{Imports}$       (ii) unfavourable balance of trade =  $\text{Export} < \text{Imports}$

→ Commodities which India exports : Agriculture products, ore and minerals, gems and jewellery etc.

→ Commodities which India imports : petroleum and petroleum products, pearls and precious stones etc.

→ Exchange of Goods and Services (↑) → with IT. India = Software giant [Exporting IT services and goods]

## Class - X Chapter - 7 [Geography] Lifelines of National Economy

### Tourism as a Trade

→ Tourism: A sector having potential to generate more employment and economic activity.

- foreign tourist arrivals ↑ by 11.8% during 2010 as against the year 2009.

- Contributing to Rs 64,889 Crore of foreign exchange in 2010.

- 5.78 Million foreign tourist visited India in 2010.

- Benefits of tourism:

- It Promotes National Integration, provide supports local handicrafts and cultural pursuits.

- It develops an international understanding about our culture and heritage.

- foreign tourists visit India for : Heritage, eco, cultural, Adventure, medical and business tourism.