

ESI-2021-22 AND OTHER CA 2021-22

INFRASTRUCTURE

(ESI – CHAPTER-8) – PART-6

PORTS, SHIPPING SECTOR, NATIONAL WATERWAYS ETC.

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1. INFRASTRUCTURE: PORTS, SHIPPING SECTOR, NATIONAL WATERWAYS ETC.

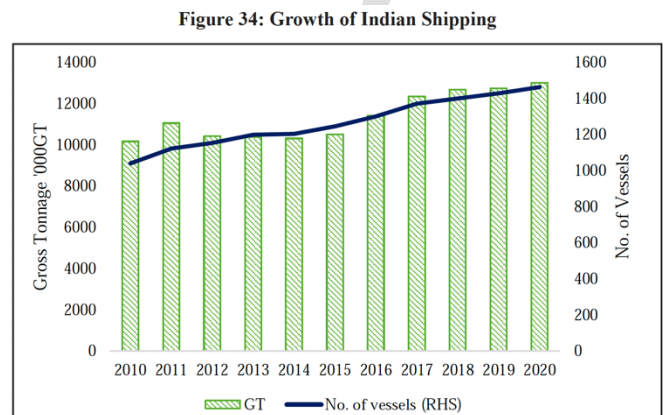
1) BASIC INFORMATION

- Shipping is crucial for both commodity and service trade of India.
 - » Around 95% of India's trade by volume and 68% in terms of value is transported by sea.
- India is endowed with a rich coastline of ~7500 km and has a strategic location on key international maritime trade routes.

- **Currently**, India had a fleet strength of more than 14,000 vessels and 12,746 thousands of GT at the end of 2019.

- However, Indian fleet is just 1.2% of the world's fleet in terms of capacity and carries only 7.8% (for 2018-19) of India's EXIM trade.

- With the cost of using services of foreign shipping company is less than that of a local shipping company, most freight moves in foreign ships leading to a huge foreign exchange outflows.



Source: Survey calculations based on data from Ministry of Ports, Shipping and Waterways.

- **ESI 2021-22: Steps to promote Indian Shipping sector:**
 - In order to address the cost of disadvantage suffered by Indian flag ships, in July 2021, the Union Cabinet has approved a **scheme providing subsidy support of Rs 1,624 crore to Indian Shipping companies** in global tenders floated by Ministries and CPSEs over five years to promote flagging of merchant ships in India.
 - **Other initiatives:**
 - Sagarmala
 - The Major Port Authorities Act 2021
 - A new Captive Policy for Port Dependent Industries has been prepared to address the challenges of renewal of concession period, scope of expansion, and dynamic business environment.
- **Maritime India Vision 2030 (MIV 2030)**
 - » With the objective of propelling India to the forefront of the Global Maritime Sector, the Maritime India Vision 2030 (MIV 2030), a blueprint to ensure coordinated and accelerated growth of India's maritime sector in the next decade was released on March 2021.
 - Develop world class mega ports, transshipment hubs, and ensure infrastructure modernization.
 - » **Investment Requirements:**
 - The investment requirements will be around 1 lakh - 1.25 **lakh crores**.
 - » **Advantages**
 - The vision estimates that development of Indian ports could save Rs 6,000 - 7,000 crore per annum for EXIM clients.
 - The augmented operations are estimated to create around 10 lakh jobs in the sector

2) SEA PORTS IN INDIA

- **Introduction**

- Our coastline is not very serrated and therefore we have very few natural seaports on our coast. There are **13 major** and **about 200 non-major ports** in India.
- **Port development** in India is a concurrent subject.
- The Major seaports are maintained and managed by central government (Ministry of Shipping) under Major Ports Act, 1963 and other seaports are controlled by the state governments under the Indian Ports Act, 1908.
- **Installed capacity of major ports** in India has increased to 1534.91 MTPA in March 2020.

A) MAJOR PORT AUTHORITIES ACT, 2021

- **The need of this act?**
 - As per Ministry of Ports, Shipping, and Waterways, the Major Ports Trust Act of 1963 was deemed to be restrictive, with major ports "finding it difficult to operate in a highly competitive environment and respond to market challenges".
 - Further, the Board of Trustees was felt to be too large and disparate to allow efficient decision making.
- The new act bestows upon the major ports an increased level of autonomy. It is aimed at reorienting the governance model in central ports to landlord port model in line with the successful global practice.
- The act applies to the **major ports** of Chennai, Cochin, Jawaharlal Nehru Port, Kandla, Kolkata, Mumbai, New Mangalore, Mormugao, Paradip, V.O. Chidambarnar, and Vishakhapatnam.
- **Major Port Authorities Board:** It provides for creation of a Board of Major Port Authority for each major port. These boards will replace the existing Port Trusts.
- **Composition of the Board:** The Board will consist of a chairperson and a deputy Chairperson, both of whom will be appointed by the Central government on the recommendation of a selection committee. Further, it will include one member each from (i) the respective state government ii) Ministry of Railways; iii) Defence Ministry; iv) the Customs Department. The board will also include some independent members and some members representing the interest of the employee of the Major Port Authority.
- **Powers of the Board:** The act allows the Board to use its property, assets, and funds as deemed fit for the development of major port. The board can also make rules on: (i) declaring availability of port assets for port related activities and services, ii) developing infrastructure facilities such as setting up new ports, jetties, and iii) providing exemption or remission from payment of any charges on any goods or services
- **Fixing of Rates:**
 - **Earlier**, the Tariff Authority for Major Ports (TAMP), established under the 1963 act, fixed the rates for assets and services available at major ports.
 - Under the new law, the Board or committee appointed by the Board will determine these rates.
 - » This fixing of rate will not be retrospective in nature and should be consistent with the provisions of the Competition Act, 2002, or any other laws in force, subject to certain conditions.
- The **Boards of Port Authority** have been delegated full powers to enter into contracts, planning, and development, and fixing of tariff, except in matters of national interest, security and emergency, arising out of inaction and default.
 - In the previous MTP Act, 1963 prior approval of the central government has been required by the port trust in 22 instances.
- **Financial Powers of the Board:**
 - Earlier, the board had to take permission from central government, to raise any loan. **Now**, the board has been given autonomy to raise loans from India or abroad. Permission will only be required if the loans above 50% of the capital reserves are being raised.

- **Corporate Social responsibility:** The act provides that the Board may use its funds for providing social benefits. It could be health, education, infrastructure, skill development etc for employees, customers, business partners, local communities etc.
- **PPP Projects:** PPP projects are those projects which are taken up by a concession contract by the Board. In such projects revenue share will be on the basis of the specific concession agreement.
- **An adjudicatory board** will be created by the central government to carry out residual functions of the erstwhile TAMP. It will look into disputes between Ports and PPP concessionaires, review stressed PPP projects, and suggest measures to revise them, among other things.
- **Key Criticisms/Opposition:**
 - A move towards privatization -> backdoor entry to crony capitalism
 - Interests of state governments have not been kept in picture

B) DRAFT INDIAN PORTS BILL, 2021

- » **Why in news?**
 - The Draft Indian Ports Bill, 2021 was circulated on 10th June, 2021 for stakeholders' comments (June 2021)
- » The bill seeks to repeal and replace Indian Ports Act, 1908. Through this it proposes to transform the existing management system for minor ports, which are presently under the jurisdiction of state governments or state maritime boards.
 - The bill provides to confer upon the centrally instituted Maritime States Development Council, which is presently an advisory body, the authority to plan, develop, and control minor ports - powers which have been hitherto been practiced by the state governments.
 - **MSDC** will also be able to perform other administrative and financial functions as may be entrusted to it by the Central Government.
 - The up-to-date provisions of the proposed Bill would ensure safety, security, pollution control, performance standards and sustainability of ports
 - The bill also seeks to provide increasing opportunities for public and private investments in the Indian maritime and ports sector.
 - It also ensures that all upto date conventions/ protocols to which India is a party, are also suitably incorporated. This will promote marine safety and security in the true sense.
- » **Criticisms/Oppositions**
 - **Coastal states** like Gujarat, Andhra Pradesh, Tamil Nadu, and Odisha have protested due to proposed dilution of the state government's authority.

3) INDIA'S 13 MAJOR SEA PORTS

C) KANDLA (NOW KNOWN AS DEEN DAYAL) - GUJARAT

- Located in Gulf of Kutch and is the largest port by volume of cargo handled. It's harbor is natural and protected.
- Kandla port also is a free trade zone, where import duties are not levied. The basic concept is that entrepreneurs setting up units in the zone can import raw material and machinery free of duty but the manufactured products must be completely exported and not sent into hinterland. Consumable articles like TV, tape recorders etc can't be imported in the free trade zone.
- The port is famous for import of petroleum products.
- One limitation of the port is that it is situated in a earthquake prone zone (zone v).

- Updates:

DEENDAYAL PORT TRUST BAGS RAJBHASHA KIRTI AWARD FOR THE SECOND TIME CONSEQUENTLY (AUG 2021)

- Why is this award given?
 - » Department of Official Language, Ministry of Home Affairs, GoI gives this award for excellent performance in the field of Official Language amongst various boards/Autonomous Bodies/ Trusts/ Societies etc. of Government of India.
 - » Deendayal Port Trust got the "Rajbhasha Kirti Award (Third Prize in 'B' region)" for the year 2020-21.

KANDLA BECOMES THE FIRST GREEN SEZ (JULY 2021)

- It achieved CII's IGBC (Indian Green Building Council) Green Cities Platinum Rating.
 - » With this KASEZ (Kandla SEZ) has become the first Green SEZ to achieve the IGBC Green Cities Platinum Rating for Existing Cities.
 - » It has been awarded for 'Green Master Planning, policy initiatives, and implementation of Green infrastructure.'
- It shows that GoI is working towards ensuring environmentally sustainable development.

D) MUMBAI:

- It is situated in the natural serrated area of the Salsette Island and thus have a natural harbour which is safe too.
- Here also, there has been an establishment of free trade zone.
- It is the largest port in India.

E) NHAVA SHEVA OR JAWAHARLAL NEHRU SEAPORT (JLNP)

- It is an all weather tidal port.
- Developed near Panvel in Navi Mumbai to ease off the pressure of Mumbai port. It is the most modern seaport of the country.

F) MORMUGAO PORT

- Situated on the left bank of Zuari river in Goa. It is a natural seaport protected by backwater and also by a mole. It is specially known for the export of iron ore (as Goa is rich in it), other products which are exported from here includes Cashew, fish, spices, rice etc.

G) NEW MANGALORE

- It handles iron ore export from Kudremukh mines. Other items exported include, fish, fertilizers, cashew, forest products and coffee.

H) KOCHI

- It is a natural harbour located in the Vembanad lake on Wellington island on the coast of Kerala. It is situated on the mouth of a large lagoon parallel to the sea.
- Major items exported from here are coconut products, cashew, tea, rubber, fish and spices.
- Important items imported from this port includes mineral oil, fertilizers, coal and edible oils.

I) NEW TUTICORIN (V.O. CHIDAMBARNAR PORT)

- It is one of the major ports in TN, located in Gulf of Mannar. It is **an artificial, deep sea, open seaport** which is located 9 km from the eastern side of Hare Island.
- It's harbour has been made deeper and it has been developed artificially.
- The port handles the trade of coal, food grains, salt, sugar, petroleum products etc.
- **Updates: Inauguration of Direct Port Entry Facility (Oct 2020)**
 - DPE will enable **direct movement of container from factories to the container terminal round the clock**, without intermediate handling at CFSs.
 - **Earlier**, factory stuffed containers were taken to container freight stations (CFS) or inland container depot in Tuticorin. But CFSs operated only between 10 am and 8 pm on working days, resulting in considerable delays in admitting container into terminals.
 - This will expedite cargo movement and thus increase EODB for exporters by increasing efficiency and improving the competitiveness of shippers in international trade.
 - DPE has been developed to enable export clearance for faster and cost-effective export admittance. The port entered into an MoU with Central Warehousing Corporation (CWC) to operate the facility for 30 years. The customs department also approved operating the port's DPE facility.
 - The facility is set up in an area of 18,357 square meters inside the truck parking terminal

J) CHENNAI PORT

- It is a major seaport on east coast of India. It is an artificial port and is located in open seas where the ships have to face the wave. To protect the ships, a 914 km long wall has been built at 3 km away from the coast.
- It is the second largest trading seaport after Mumbai.
- Key imports: Iron ore, food grain, leather, sugar, tobacco, coconut products, etc.
- Key exports: Petroleum, coal, edible oil, chemicals, cotton etc.

K) ENNORE PORT (KAMARAJAR PORT)

- Located in Tamil Nadu, North of Chennai. Developed to ease pressure on Chennai.
- Especially significant for coal trading. The Tamil Nadu government gets internal and imported coal for itself from this sea-port.
- It is different from the other major ports which are run as trusts, it is incorporated as a company.
- **Note:** Chennai Port Trust acquired the 67% stake of Centre in the Kamarajar Port Limited on 27th March 2020. The remaining 23% was already held by the Chennai Port Trust.

L) VISHAKHAPATNAM

- Port of Vishakhapatnam, a deep, natural harbour, was opened to commercial shipping in 1933. It is self-protected from storms because of a hills called 'Dolphin Nose' juttet out of the sea at the mouth of the harbour.
- It is the only Indian Port possessing three international accreditations viz. ISO 14001; 2004 (EMS)/OHSAS 18001 and ISO 90001:2000 (QMS).
- The iron ore of Bailadilla area is exported from this seaport.

M) PARADEEP

- It is an artificial seaport on the coast of Odisha. Here there is a mechanical facility of loading and unloading of Iron ore and coal.

N) KOLKATA PORT TRUST / DR. SHYAMA PRASAD MUKHERJEE PORT TRUST (RENAMED TO DR. SHYAMA PRASAD MUKHERJEE PORT IN JAN 2020)

- **About the Port**
 - » It is a riverine port located on the left bank of the Hugli river in West Bengal. It is the **only riverine major port in the country**.
 - » It is the **oldest operating port** in India and was constructed by **British East India Company**.
 - Deposition of silt doesn't allow big ships to reach this port. So, the **Diamond Harbour** has been constructed in the open bay 64 km away from Kolkata.
 - » The port has **twin dock system** viz., **Kolkata Dock System on the eastern bank** and a deep water dock at **Haldia Dock Complex** on the western bank of river Hooghly.
 - **Haldia dock complex** eases off the pressure on Kolkata Seaport. It is the harbor of those large sized ships which don't reach Kolkata.
- **In Jan 2020**, on the occasion of **150th birth anniversary** celebration of the Kolkata Port Trust, it has been renamed after **Dr. Shyama Prasad Mukherjee**. This was approved by Cabinet in June 2020.



O) PORT BLAIR PORT

- Under the Indian Port Act, 1908, GoI declared Port Blair port as major port in 2010.
 - All major provisions of the Major Port Trusts Act, 1963 has become applicable to the major Port Blair from 1 June 2010.
- The port is of **strategic importance** for India and is located close to **two international shipping lines**, namely Saudi Arabia-Singapore and US-Singapore.
- But **lack of traffic** may soon become a reason for government taking away the major port tag.

4) SAGARMALA INITIATIVE

- **Vision**
 - » Reduce logistic cost for international and domestic trade.
- **Aims/Objectives**
 - » **Promote Port Led Development**

- The prime objective of the Sagarmala project is to promote port-led direct and indirect development and to provide infrastructure to transport goods to and from ports quickly, efficiently and cost effectively.
- It involves development of Coastal Economic Zones (CEZs). Each CEZ will be attached to one port - either private or public.
 - The government has identified 14 CEZs and process of working on land acquisition has already commenced.
- » **Enhancing the capacity of major and non-major ports**
 - Thereby enabling them to become drivers of port led development,
- » **Developing new lines linkages for transport** (including roads, rail, inland waterways and coastal routes)
- » **Setting up logistic hubs**
- » **Establishing of industries and manufacturing centers** to be served by ports in EXIM and domestic trade
- » **Simplifying procedures** used at ports for cargo movement and promote usage of electronic channels for information exchange leading to quick, efficient, hassle-free and seamless cargo movement.
- **Focus on three pillars of development**
 1. Supporting and enabling Port-led Development
 2. Port Infrastructure Enhancement, including modernization and setting up of new ports,
 3. Effective evacuation to and from Hinterland
- **Sagarmala is an amalgamation of various projects** categorized into port-connectivity, freight expressways, coastal tourism, offshore storage and drilling platform, pipelines for crude transportation, ship building, repair and recycling, logistic parks, warehousing etc.
- **Currently** (Jan 2022), there are 802 projects worth investment of Rs 5.5 lakh crores for implementation under the Sagarmala Program by 2035

A) COASTAL ECONOMIC ZONES

- Centerpiece of Sagarmala project is to usher in "port-led industrialization and the development of CEZs or **coastal economic Zones**).
 - » CEZs will be a **spatial economic region** which would extend along 300-500 km of coastline and around 200-300 km inland from the coastline. Each CEZ will be an agglomeration of coastal districts within a state.
 - » Each CEZs will be attached to one port - either private or public. The government has identified 14 CEZs, and the process of working on land acquisition has already commenced.
 - » These CEZs are expected to provide **business-friendly eco-system** including ease of doing business, ease of exporting and importing, swift decisions on applications for environmental clearance, and speedy water and electricity connections.
 - » It will also include Community Development without which all the plans will crumble.
 - This will include fishery development and skill development.
- **14 CEZ being developed under Sagarmala covering all Maritime States and Union Territories**
 - » Proposed locations include
 - Gujarat - 3 (Kutch, Saurashtra, Suryapur), **Maharashtra** 1 (North Konkan), **MHA-GOA** 1 (South Konkan) **Karnataka** 1 (Dakshin Kanara) **Kerala** 1 (Malabar), **Tamil Nadu** 3 (Mannar, Poompuhar, VCIC South), **Andhra** 2 (VCIC Central, VCIC North), **Odisha** 1(Kalinga) and **West Bengal** 1 (Gaud).

5) COASTAL SHIPPING

- Advantages

1. **Lowers logistic cost**
2. **Alleviate pressure on country's roads and rail**
3. **Save fuel and thus reduce the greenhouse gas emission**
4. **Improve financial performance of ports and logistic companies too**
5. **Long Coastline (7500 kms) provide ideal alternate option**
6. **Promote development in coastal region**
7. **Promotion of cruise tourism** will be another benefit of promoting coastal shipping
8. **Reinvigorate ties between India and BD**

▪ Reduce the cost of goods transport to north-east India

- Goods can be transported through coastal shipping to Chittagong and then by road/rail to Northeast India.

- Key factors which have worked against India's Coastal Shipping Industry

1. **History**
2. **Geographical Factors**
3. **India's regulatory environment has not helped historically**
4. **Lack of funds for infrastructure development** in recent times has been one of the key reasons

- Recent Steps to promote coastal shipping

- » Mercifully, India has woken up from the Myopia. The new political will has emerged to promote coastal shipping. Recently government has taken a number of steps to promote coastal shipping:

a. Sagarmala Project

b. Tweaking of Cabotage rules

- Now, specific, specialized foreign-flag vessels are allowed to operate along India's coast.
- E.g. Cruiseliners and Ro-Ro Boards have been allowed as India lacked its own cruiseliners and Ro-Ro Boards.

c. Introduction of subsidy to encourage shippers to use coastal transportation

d. Other steps

- Moderating the manning and technical requirements for vessels operating within Indian territorial waters through a River-Sea vessel notification.
- Issuing Coastal Shipping Rules for coastal vessels operating within 20 miles off the coast.
- Reduction of Service Tax on coastal shipping
- Exempting Custom and Central Excise Duty on bunker fuels (IFO 180 and IFO 380CST) by Indian flagged coastal container vessels

6) INLAND WATER TRANSPORT

- Need for improving and Inland waterways and ports

- i. **Contribution in trade** Only 3.5% of trade in India is done through the mode of Inland waterways, which is 47% in China, 40% in Europe, 44% in Japan and Korea and 35% in Bangladesh.
- ii. **Fuel Efficient -> Cost Effective**
 - Logistic cost in India is 18% whereas in China it is 8 percent and in Europe 12 percent.
- iii. **Less Polluting:** Environment friendly as the emission per unit distance per unit weight is lesser.
- iv. **Economic growth and jobs:** It will boost economy and provide more jobs especially in inland regions which needs desperate boost to economies.
- v. **Reducing Pressure on Road -> less congestion**
- vi. **Fewer accidents** - when compared to any other mode of transport

- vii. **Less Land Acquisition Problems and Less Deforestation:** As land capital required in case of water transport is minimal when compared to road and rail transport.
- **Challenges faced by Inland Waterways development in the country**
- i. **Finance**
 - ii. **Who will use inland waterways**
 - iii. **Seasonal Variation in Navigable depth**
 - iv. **Most river transport routes are short**
 - River transport routes should run uninterrupted for at least 300 km at a stretch so that desired logistics cost saving might be achieved.
 - v. **Dams and Barrages interrupt the water supply**
 - Tussle between states would lead to unviability of some of these projects.
 - vi. **Environmental Concerns**
 - **Other Concerns** -> low transport speeds, limited areas of operation etc.

A) CONSTITUTIONAL PROVISIONS

- **List 1: Union List**
- » **Entry 24**
 - Shipping and navigation on inland waterways, declared by parliament by law to be **national waterways**, as regard mechanically propelled vessels;
 - The rule of the road on such waterways
 - » **Entry 30**
 - Carriage of passengers and goods by railways, sea or air, or by national waterways in mechanically propelled vessels
 - » **Entry 56**
 - Regulation and development of the inter-state rivers and river valleys to the extent to which such regulation and development under the control of the Union is declared by Parliament by law or to be expedient in public interest.
- **List 2: State List**
- » **Entry 56**
 - Communications, that is roads, bridges, ferries, and other means not specified in List 1; municipal tramways; ropeways; inland water ways and traffic thereon subject to the provisions of List 1 and List 3 which regard to such waterways.
 - Vehicles other than mechanically propelled
 - » **Entry 17**
 - Water, that is to say, water supplies, irrigation and canals, drainage and embankments, water storage and waterpower subject to the provisions of entry 56 of the List 1
- **List 3: Concurrent List**
- » **Entry 32**
 - Shipping and navigation on inland waterways as regard mechanically propelled vessels and the rule of the road on such waterways, and the carriage of passengers and goods and inland waterways subject to the provision of List 1
 - » **Entry 30**
 - Carriage of passengers and goods by rail, sea or air, or by national waterways in mechanically propelled vessels

B) INLAND VESSELS ACT, 2021

- Why in news?

- The Parliament has enacted the Inland Vessels Act, 2021 to replace the 100 years old Inland Vessels Act, 1917 and usher in a new era in the inland water transport sector (Aug 2021)

- Details

- Purpose:
 - Making legislative framework user friendly and promote ease of doing business.

- Background: Inland Vessels Act, 1917

- The Inland vessels Act of 1917 was conceived to be a pure consolidating legislation having limited applicability and purposes. Though the act has had several amendments, but it still suffered from a number of limitations.
 - Under the 1917 act, separate rules have been framed by different states
 - The Law had provisions for restrictive movement of mechanically propelled vessels within the jurisdiction of the State Government;
 - requirement of endorsements
 - limited applicability and validity of certificates, non-uniform standards and;
 - regulations that varied from one State to another led to hindrances and hurdles in a seamless navigation across States and development of the sector.
- The **new act** is expected to solve the above problems:

- The new act provides for harmonized and effective regulation of the inland vessels and their seamless and safe navigation across the states. The benefits include:

- Uniformity of rules and regulations** across the states -> seamless, safe and economical transportation.
 - For instance, the certificate of registration granted under the law will be deemed to be valid in all states and UTs, and there will not be a need to seek separate permissions from other states.
- Standards for classification and categorization of mechanically propelled vessels, standards and processes** involved in registration of vessels.
- Preserving the statuses of authorities** established by the respective State Governments and thereby ensuring the effective administration of the provisions of the proposed legislations.
- The act provides for a **Central database/E-Portal** which will include all information about registration of vessels, vessel crew, and certificates issues.
- A **Development Fund** will be set up for various purposes such as emergency preparedness, containment
- Stipulating higher standards** regarding safety, navigation, environment pollution, trade practices, accountability, training of workforce etc.
 - It requires that vessels follow specifications for signals and equipment to ensure navigation safety including ones pertaining to responding to distress signals.
 - Further, it requires vessels to have an insurance policy to cover liabilities for death, injury or damage to the usage of the vessel including accidental pollution.
- Covers the future developments and technological advancements** in vessel construction and usage.
- Introduction** of provisions related to wreck and salvage. Receiver of Wreck to be appointed by the State government.
- Provisions regarding principles of liability and limitations of liability** introduced. To ensure secure trade and trade practices, concept of insurance improvised and expanded.
- Provisions relating to casualties and investigation improvised.
- Ease of compliance for service providers and service users
- Provisions related to non-mechanically propelled inland vessels:**

- The bill empowers the state governments to delegate certain functions related to non-mechanically propelled inland vessels to their local government. These include collecting data, and conducting advisory programs for owners, operators, and users of such vessels

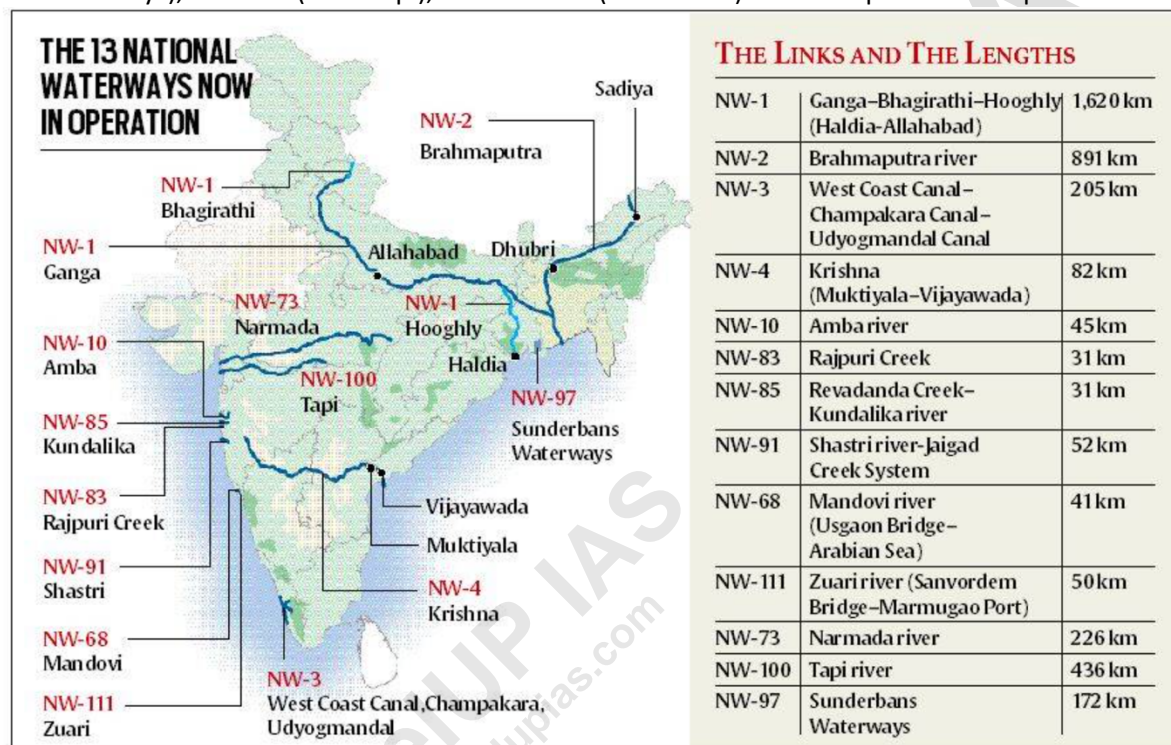
C) INLAND WATERWAYS AUTHORITY OF INDIA ACT, 1985

- Empowers the government to declare waterways with potential for development of shipping and navigation as National Waterways and develop such waterways for efficient shipping and navigation.
- For development and regulation of inland waterways in the country the Inland Waterways Authority of India (IWAI) was set up in October, 1986
 - » IWAI is the nodal agency under the Ministry of Shipping to make National Waterways commercially navigable. It aims to increase the cargo transportation through IWT.
 - » Currently, it is developing the National Waterways for commercial navigation, including with assistance from the World Bank.
- It is **headquartered** in **Noida** and have regional offices at Patna (Bihar), Kolkata (WB), Guwahati (Assam) and Kochi (Kerala) and sub offices at other places throughout India

D) NATIONAL WATERWAYS ACT, 2016

- **Commenced in 2016**
- **Provisions**
 - » The act merged five erstwhile acts which had declared 5 National Waterways. It also proposed 106 additional National Waterways.
 - » The act has thus **declared 111 rivers or river stretches**, creeks, estuaries as National (inland) Waterways (including the five older ones)
 - » Now, according to entry 24 of the Union list of the seventh schedule, the union government can regulate these waterways for development with regard to shipping, navigation and transport through mechanically propelled vessels.
- **Other details**
 - » These 111 waterways pass through 24 states and two UTs with an approximate length of 20274 km². These will pass through nearly 139 river systems, creeks, estuaries and related canal systems of India.
 - » Assam (17) and WB (16) will have the highest number of waterways.
- **Steps taken to promote National Waterways Recently**
 - Sagarmala Project
 - Declaration of 106 new waterways as National Waterways (total 111) through an act in 2016.
 - Implementation of **Jal Marg Vikas Project (JMVP)** to **augment capacity of NW-1** with the technical and financial support of the WB.
 - It's **objective** is to achieve an appropriate depth and width to enable commercial navigation of vessels with capacity of 1500-2000 DWT (deadwood weight tonnage)
 - The project entails development of fairway with 3 meter depth between Varanasi and Haldia (Phase-1) covering a distance of 1380 km at an estimated cost of Rs 5369 crore with target for completion in six years (by 2023). It also involves major infrastructural development like multi-modal and inter-modal terminals, Ro-Ro facilities, ferry services, and navigation aids.
 - In Jan 2018, cabinet gave approval for the implementation of JMVP
 - The first multimodal inland port was inaugurated in Nov 2018, in Varanasi on Ganga River.
- **Important Inland Waterways in India**
 - National Waterway - 1:** (Allahabad to Haldia - 1620 KM): Ganga - Bhagirathi-Hoogly River system
 - **States Served:** UP, Bihar, Jharkhand and WB.

2. **National Waterway - 2:** (Dhubri - Sadiya - 891 km): River Brahmaputra
 - **States Served:** Arunachal Pradesh, Assam, West Bengal, Meghalaya.
3. **National Waterway - 3:** West Coast Canal (Kottapuram-Kollam) along with Udyogmandal and Champakara Canals (205 km)
 - **States Served:** Kerala
4. **National Waterway - 4:** Kakinada-Puducherry canals along with Godavari and Krishna rivers (1078 km)
 - **States Served:** AP, TN, UT of Puducherry
5. **National Waterway - 5:** East Coast Canal integrated with Brahmani river and Mahanadi delta rivers (588 kms)
6. **National Waterway - 16:** Between Laxhipur and Bhanga of the **Barak river**.
 - **State Served:** Assam, Mizoram, Tripura and Manipur
7. **NW-10 (river Amba), NW-68 (Mandovi river), NW-73 (river Narmada), NW-83 (Rajpuri Creek), NW-85 (Revadanda Creek - Kundalika River system), NW-91 (Shashtri River - Jaigad River system), NW-97 (Sundarban waterways), NW-100 (river Tapi), and NW-111 (Zuari River)** also are operational in parts atleast.



The 13 national waterways now in operation

- Status of various waterways

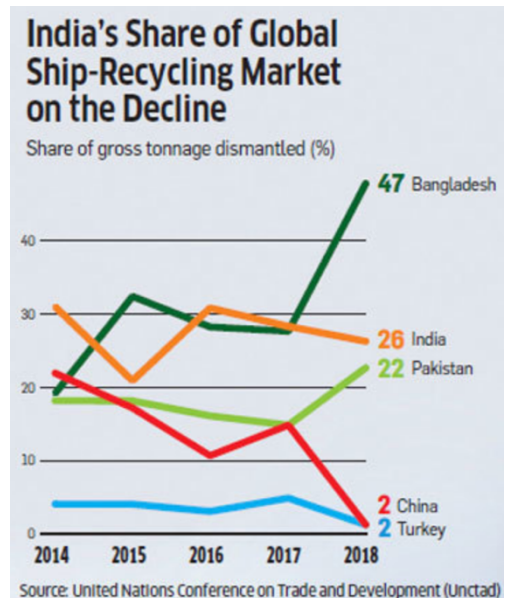
» As of **Aug 2021**,

- **13 National Waterways** are operational for shipping and navigation and cargo/passenger vessels are moving on them.

7) SHIP RECYCLING

- About Ship Recycling

- Though, the ship recycling industry is a green industry as it allows recycle and reuse of many components of ship, at the same time, it creates a number of challenges in terms of environmental pollution, safety of workers etc.
 - **India is a world leader** (after Bangladesh) in Ship Recycling sector with a market share of 26%. Bangladesh in recent year has emerged as the most important player in the industry as it pays higher value per kg of ship and also has abundant labor force.
 - **Note:** Gujarat's Alang is the world's biggest shipyard and is expected to take more load in future. It is responsible for 98% of the total ships recycled in India. The other centers are Kolkata in WB and Azhikkal in Kerala.
- It is a labor-intensive industry and thus also provide a potential to increase employment opportunities in the country. After the coming into force of the Recycling of Ships, Act, 2019 the Government of India is targeting a market share of 60%.
- **Need of a law**
 - Ship recycling has remained **poorly regulated sector in India.** It has resulted into negative environmental impact and hazardous working environment for the workers.
 - **Safety Requirements** are not properly fulfilled with workers having to work without proper **protective gears** and with little **training.**
 - Ship recycling generates **various hazardous waste** such as asbestos, Polychlorinated biphenyl (PCB), heavy metals etc.
 - The Ship recycling **pollutes marine bodies** through suspended solids, nitrates, heavy metals etc.
- **About the Act:**
 - The act provides for regulation of recycling of ships by setting up certain international standards and laying down the statutory mechanisms for enforcement of such standards. It restricts the use of hazardous material on ships.
 - **The law is applicable** to all new and existing ships registered in India, all ships entering a port or terminal in India and any warship or ship used on government non commercial service and ship recycling facilities.
 - The act provides for **following requirements for ships:**
 - Ships **should not use prohibited hazardous material.** This applies irrespective of whether the ship is meant for recycling or not.
 - The National Authority will carry out **periodic surveys** to verify the prescribed requirements.
 - » The authority will be notified by the government to administer, supervise and monitor all activities related to ship recycling.
 - Every ship must obtain a **certificate on the inventory of hazardous material** from the National Authority and maintain it and update it throughout the life of the ship.
 - » These **requirements will not apply** to any warship, ship used on government non-commercial service, and ships with internal volume less than 500 tonnes.
 - Ship will be recycled only at **authorized recycling facilities.**
 - **Each ship recycler** must maintain adequate measures for emergency preparedness and response, safety, health, training, and welfare of workers as per the Factories Act, 1948. It must also provide **insurance coverage** for regular and temporary workers.
 - **Recycling Process** has also been provided in the new law
- **Other Steps**



- India has also acceded to the Hong Kong International Convention (HKC) for Safe and Environmentally Sound Recycling of Ships, 2009 in Nov 2019.
 - » It is a convention under WMO which aims to ensure that recycling of ships don't pose any unnecessary risks to human health, safety and to the environment. It also addresses the working and environmental conditions at recycling facilities.
 - » Though the **convention is not in force yet** as it has yet not been ratified by 15 nations, representing 40% of the world merchant shipping gross tonnage (capacity) and a maximum annual ship recycling volume of not less than 3% of the combined tonnage of the countries.