

E-Commerce and Logistics Revolution

What is the issue?

\n\n

\n

- The e-commerce firms are driving many technological changes.
- The Centre must create an enabling logistics environment to benefit from them.

\n

\n\n

What are the emerging developments?

\n\n

\n

- The global logistics sector is undergoing a quiet revolution.
- The key benefits are reduced costs, quick arrivals and complete tracking of goods.
- The new technologies like the Internet of Things (IoT) and people's changing preferences in buying goods online are driving this.

\n

\n\n

Why is the logistics sector significant?

\n\n

\n

- Logistics cost includes all expenses in taking a product from factory to consumer.
- These include direct costs like transport cost or indirect costs like charges of freight forwarders, etc.
- Logistics cost is significant, and add on an average of 30 to 40% to the cost of the goods.

- \n
- Thus, while world trade is about \$17 trillion, the global logistics sector has a turnover of \$5 trillion.
- \n
- The logistics revolution will transform India's ocean shipping and trucking sectors.
- \n

\n\n

What are the limitations at present?

\n\n

- \n
- The logistics sector currently is less automated.
- \n
- Firms move light packets through the courier firms that do end-to-end job.
- \n
- It takes within 1 to 3 days generally, but the costs are high.
- \n
- Firms thus choose to ship large or less urgent consignments by sea.
- \n
- It is cheap compared to the courier, but delivery takes more time.
- \n
- This is because of complex shipping, and customs procedures.
- \n
- It is also because over 70% of the logistics sector is in small, unorganised hands.
- \n
- However, this model is set to change.
- \n
- Many large firms are now entering the cargo business to offer worldwide door-to-door delivery.
- \n

\n\n

How is e-commerce a driving factor?

\n\n

- \n
- The major push for logistics transformation comes from the online e-commerce firms like Alibaba and Amazon.
- \n
- So far these firms have been focussing on flying light packets.
- \n

- But people now prefer buying even bulky goods like foodgrains or steel online.
\n
- The e-commerce firms have to use the ocean route to keep cost under control.
\n
- But current long delivery times of sea transport do not help the fast-paced e-commerce delivery model.
\n
- So, these firms plan to develop end-to-end supply chain for sea-based shipments also.
\n

\n\n

How does technology help?

\n\n

- A range of technologies is making ship or truck journey more secure and efficient.
\n
- This applies to a combination of the IOT, Block Chain, and Artificial Intelligence (AI).
\n
- **IOT** - IOT sensors provide a unique internet address to each device they are attached to.
\n
- They feed the location information into the global database.
\n
- Data collated from the devices generate real-time weather and traffic advisory using AI tools.
\n
- **Sensors** - Internet-connected sensors are placed on the individual packets/consignments.
\n
- They make tracking possible across the supply chain.
\n
- It also ensures against pilferage and contamination.
\n
- Satellite trackers do this even when there is no mobile coverage.
\n
- **Blockchain technology** - Data from the sensors can be uploaded on the blockchains.
\n

- This allows everyone in the supply chain to view the condition of a packet during the journey.
\n
- **Apps** - Return of empty ships and trucks after delivery of goods increases the cost by about 30%.
\n
- Simple mobile apps now facilitate customers and owners to strike a quick deal to ensure near-total use of space.
\n

\n\n

What lies ahead for India?

\n\n

- **Technology** - The variation in time for an export container moving from a factory to port ranges between 40-70 hours.
\n
- The uncertain delivery time increases inventory and freight costs.
\n
- India's logistics costs are 40% higher than in most developed countries.
\n
- Incentivising the use of new tools will provide more certainty in cost and time of delivery.
\n
- **Skilling** - The logistics revolution will lead to business consolidation leading to tough times for small players.
\n
- About 7.5 million jobs are estimated to disappear in the US alone in the next 10 years.
\n
- The situation in India will be no different, with e-commerce and logistics related changes.
\n
- Logistics service providers/ small trucking and shipping firms must look to upgrade their skill.
\n
- Changes in the logistics sector will deeply integrate India with global supply chains.
\n

\n\n

\n\n

Source: BusinessLine

\n

