Improving Cold Chain Systems

Why in news?

Robust cold chain systems are an investment in India's future pandemic preparedness.

What has the pandemic reminded us?

- India accounts for the second highest caseload of COVID-19 globally.
- The nation had to take on the task of rolling out one of the largest vaccination drives in the world which is not new to India.
- India's Universal Immunisation Programme (UIP), launched in 1985 to deliver routine immunisation, showcased its strengths in managing large-scale vaccine delivery.
- But the pandemic reminded us that vaccines alone do not save lives, vaccination does.
- While we have set up a strong service delivery network, the pandemic showed us that there were weak links in the chain, especially in the cold chain.

What is the need for a cold chain system?

- Cold chain system augments the immunisation landscape.
- It will be the only way to ensure access to the last mile with life-saving vaccines.
- It reduces vaccine wastage thus reducing the cost implications.
- It also aids in achieving the immunisation targets.
- Robust cold chain systems are an investment in India's future pandemic preparedness.

What about the cold chain management in India?

- Nearly half the vaccines distributed around the world go to waste, in large part due to a failure to properly control storage temperatures.
- In India, close to 20% of temperature-sensitive healthcare products arrive damaged or degraded because of broken or insufficient cold chains, including a quarter of vaccines.
- India's UIP comprises upwards of 27,000 functional cold chain points of which 3% are located at the district level and above while the remaining 95% are located below the district level.
- The Health Ministry has been digitising the vaccine supply chain network in recent years through the use of cloud technology, such as with the Electronic Vaccine Intelligence Network (eVIN).
- The role played by supportive infrastructure for cold chain such as a regular supply of electricity is essential for which the potential of solar-driven technology must be explored.

> *eVIN is an innovative technological solution aimed at strengthening immunization supply chain systems across the country being implemented under National Health Mission (NHM) by Ministry of Health and Family Welfare.*

References

1. https://www.thehindu.com/opinion/op-ed/improving-cold-chain-systems/article65423158.ece
2. http://nhp.gov.in/electronic-vaccine-intelligence-network(evin)_pg