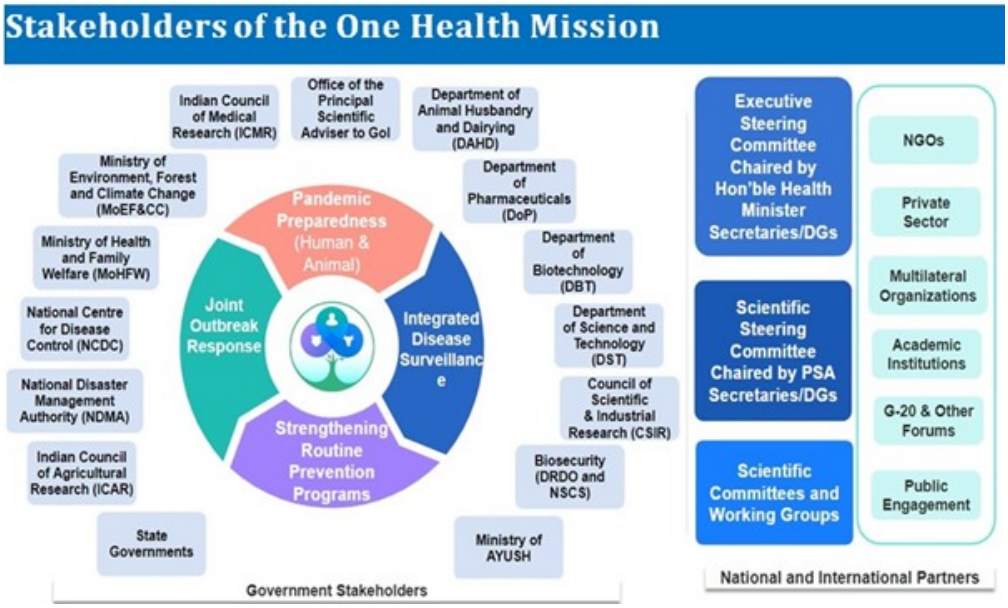
National One Health Mission

Prelims: *Current events of national and international importance | Polity and Governance*

Why in News?

Recently, The 5th Scientific Steering Committee Meeting of the National One Health Mission at New Delhi.

- It is a cross-ministerial initiative that unifies human, animal, and environmental surveillance to strengthen pandemic preparedness and deliver integrated disease detection, response, and control.
- **Launched in –** 2024.



- **Objectives**
  - Strengthen preparedness against zoonotic and climate-sensitive health threats.
  - Enhance inter-sectoral coordination across ministries and departments.
  - Develop integrated surveillance, laboratory networks, AI-enabled pathogen detection, and medical countermeasures.

Need for One Health

- **Risk Factors –** India's diverse wildlife, large livestock population, and high human density increase chances of inter-compartmental disease spread.
- **Recent Outbreaks –** COVID-19, Lumpy Skin Disease, and Avian Influenza underscore vulnerabilities at the human-animal-environment interface.

Features

- **Targeted R&D –** Development of key vaccines, drugs, diagnostics, and platforms.
- **Data Integration –** Creation of databases and cross-sectoral data sharing mechanisms.
- **Governance Mechanisms –** Strengthening governance at local, national, and international levels.
- **Regulatory Streamlining –** Simplifying regulatory and approval processes in the One Health domain.
- **Cross-Sectoral Integration (Human-Animal-Environment) –** It aims to create an agile response system to prevent inter-compartmental disease spread like Zoonoses.
- **BSL-3/4 Labs Network** – National network for high-risk pathogen research and outbreak response.
- **Genomics & Metagenomics Surveillance** – AI tools, NGS (Next-Generation Sequencing) pipelines for novel pathogen discovery.
- **IRDLs (Infectious Disease Research & Diagnostic Labs)** – Regional referral labs for bacteriology, mycology, parasitology; biorepositories and accredited diagnostics centres.
- **Multi-Layered Surveillance Systems –** Wastewater Surveillance, Slaughterhouse and Market Surveillance and Syndromic Surveillance to spot unusual disease clusters early.

References

1. PIB Delhi | One Health Mission
2. ICMR | One Health Mission

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