



ONE HEALTH APPROACH - GS III MAINS

Q. Analyse the significance of the One Health Approach to meet major global health challenges. Suggest a transformation process for India to switch to a One Health approach. (15 marks, 250 words)

News: *One Planet, One Health*

What's in the news?

- The interdependence of health between people, animals, plants and the environment is undeniable.

Key takeaways:

- The One Health approach recognizes this intricate web of life. Designed to balance and optimize all the components of our ecosystem sustainably, this holistic approach calls on different sectors, disciplines and communities to work together to promote well-being and address threats to health and ecosystems.

FAO and One Health:

- The Food and Agriculture Organization of the United Nations (FAO), together with the United Nations Environment Programme (UNEP), the World Health Organization (WHO) and the World Organisation for Animal Health (WOAH), promotes a One Health approach to prevent, detect and control the spread of pathogens and diseases among animals, humans and the environment.
- FAO's One Health approach also drives agrifood system transformation by addressing threats such as pests and diseases in animals, plants, aquatic animals and forests that reduce productivity, endanger biodiversity and threaten livelihoods.

One Health:

- One Health is an interdisciplinary approach that recognizes the interconnectedness of human, animal, and environmental health.
- It emphasizes the need for collaboration between various sectors, including public health, veterinary medicine, environmental science, and others, to achieve optimal health outcomes for all.

Key Components of India's One Health Approach:

1. Pradhan Mantri Ayushman Bharat Health Infrastructure Mission (PM-ABHIM):

- The flagship program launched in October 2021 aims to prevent, prepare, and respond to pandemics. It seeks to fill the gaps in health systems at the national and state levels.

2. National Institute for One Health:

- The foundation for the institute was laid recently in Nagpur. It will identify hotspots for endemic and emerging zoonotic diseases to contain their spread early on.



3. Creation of a Network of Institutions for Genomic Surveillance:

- During the COVID-19 pandemic, India created a formidable network of institutions that can identify new pathogens. This can now be complemented with wider testing of wastewater and samples from incoming ships and aircraft.

4. Coordination Between Ministries:

- Several ministries, including health, animal husbandry, forests, and biotechnology, have been brought under the Principal Scientific Advisor to address overlapping mandates and improve coordination.

5. Expansion of Research Laboratories:

- India is expanding its network of research laboratories, which primarily focused on influenza, to cover all respiratory viruses of unknown origin.

6. Partnerships Between Research Bodies and Manufacturers:

- Indian manufacturers produced vaccines, test kits, therapeutics, masks and other items at very competitive prices, both for India and other countries.
- The partnerships between research bodies and manufacturers will need to be sustained and enhanced to make India a global hub in the biopharma sector.

7. Clinical Trial Network:

- The clinical trial network set up under the National Biopharma Mission is a positive step toward improving access to affordable new vaccines and drugs in India and around the world.

8. Ayushman Bharat Digital Health Mission:

- The mission can facilitate the bringing of private hospitals and clinics under a common platform and placing data in the public domain to augment surveillance in vulnerable areas.

9. Municipal Corporations Mandated to Provide Early Alerts:

- Municipal corporations have been mandated to identify the most vulnerable areas and provide early alerts.
- For this to be successful, strong partnerships with communities, dairy cooperatives, and the poultry industry will be needed to identify new infections.

Significance of the One Health Approach:

1. Holistic Approach:

- The One Health approach looks at the interconnectedness of human, animal, and environmental health.
- By taking a holistic approach, it enables a better understanding of the complex interconnections between human, animal, and environmental health, and can lead to more effective interventions and solutions



2. Early Disease Detection:

- The One Health approach emphasizes the importance of early disease detection in animals, which can serve as an early warning system for potential human outbreaks.
- This approach can help prevent the spread of diseases and reduce the risk of pandemics.

3. Better Disease Surveillance:

- The One Health approach facilitates better disease surveillance by enabling the sharing of information and resources between different sectors, including human health, animal health, and environmental health.

4. More Effective Responses:

- The One Health approach can lead to more effective responses to outbreaks by facilitating collaboration between different sectors and stakeholders, and ensuring a coordinated response.

5. Improved Animal Health:

- The One Health approach recognizes the importance of animal health and welfare, and can lead to improved animal health through better disease control and prevention measures.

6. Better Environmental Management:

- The One Health approach also recognizes the importance of environmental management and conservation, and can lead to more sustainable environmental practices that benefit both human and animal health.

India's One Health approach is a positive step towards addressing the health of people, animals, and ecosystems together. The country's efforts to tackle future pandemics are commendable, and the success of these efforts will be critical. The rise of new pathogens, zoonotic diseases, and antibiotic resistance highlights the need for a comprehensive approach to prevent future pandemics. India's efforts to build stronger health systems, prevent pandemics, and respond to outbreaks will help protect its citizens and set an example for the world.