'One Health' Approach

What is the issue?

The battle against COVID-19 should be used as an opportunity to meet India's 'One Health' targets.

What is the "One Health" approach?

- The approach that acknowledges the interconnectedness of animals, humans, and the environment is referred to as "One Health".
- The father of modern pathology, Rudolf Virchow, emphasised in 1856 that there are essentially no dividing lines between animal and human medicine.
- Studies indicate that more than two-thirds of existing and emerging infectious diseases are zoonotic.
- In other case, they can be transferred between animals and humans, and vice versa, when the pathogen in question originates in any life form but circumvents the species barrier.
- Another category of diseases, "anthropozoonotic" infections, gets transferred from humans to animals.

What is the significance now?

- The transboundary impact of viral outbreaks in recent yearshas further reinforced the need to consistently document the linkages between the environment, animals, and human health.
- These include the Nipah virus, Ebola, Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome (MERS) and Avian Influenza.
- This concept is ever more salient now as the world continues to grapple with the COVID-19 pandemic.

What is India's framework for "One Health"?

- **Framework** - India's 'One Health' vision derives its blueprint from the agreement between the tripartite-plus alliance comprising –
  i. the Food and Agriculture Organization of the United Nations (FAO)
  ii. the World Organisation for Animal Health (OIE)

iii. the World Health Organization (WHO) (and)
iv. the United Nations Environment Programme (UNEP)

- It is a global initiative supported by the UNICEF and the World Bank under the overarching goal of contributing to 'One World, One Health'.
- **Initiatives** - In keeping with the long-term objectives, India established a National Standing Committee on Zoonoses as far back as the 1980s.
- Recently, funds were sanctioned for setting up a 'Centre for One Health' at Nagpur.
- Further, the Department of Animal Husbandry and Dairying (DAHD) has launched several schemes to mitigate the prevalence of animal diseases since 2015.
- The funding pattern works along the lines of 60:40 (Centre: State), 90:10 for the Northeastern States, and 100% funding for Union Territories.
- Under the National Animal Disease Control Programme, around Rs. 13,000 crore have been sanctioned for Foot and Mouth disease and Brucellosis control
- In addition, DAHD will soon establish a 'One Health' unit within the Ministry.

- Additionally, the government is working to revamp programmes that focus on –
  - capacity building for veterinarians
  - upgrading the animal health diagnostic system such as Assistance to States for Control of Animal Diseases (ASCAD)
- In the revised component of assistance to States/UTs, there is increased focus on vaccination against livestock diseases and backyard poultry.
- To this end, assistance will be extended to State biological production units and disease diagnostic laboratories.
- **Rabies** - WHO estimates that rabies (also a zoonotic disease) costs the global economy approximately $6 billion annually.
- Considering that 97% of human rabies cases in India are attributed to dogs, interventions for disease management in dogs are considered crucial.
- DAHD has partnered with the Ministry of Health and Family Welfare in the National Action Plan for Eliminating Dog Mediated Rabies.
- This initiative is geared towards sustained mass dog vaccinations and public education to render the country free of rabies.

What is the impending challenge?

- Scientific observations suggest that there are more than 1.7 million viruses circulating in wildlife.
- Many of them are likely to be zoonotic.
- This implies that unless there is timely detection, India risks facing many more pandemics in times to come.

- To achieve targets under the 'One Health' vision, efforts are ongoing to address challenges pertaining to –
    i. veterinary manpower shortages
    ii. the lack of information sharing between human and animal health institutions
    iii. inadequate coordination on food safety at slaughter, distribution, and retail facilities

What is the way forward?

- Existing animal health and disease surveillance systemshould be consolidated.
- E.g., the Information Network for Animal Productivity and Health, and the National Animal Disease Reporting System
- Best-practice guidelines should be developed for informal market and slaughterhouse operation (e.g., inspections, disease prevalence assessments)
- Creating mechanisms to operationalise 'One Health' at every stage down to the village level is another essential requirement.
- Now, as India battle yet another wave of a deadly zoonotic disease (COVID-19), awareness generation, and increased investments toward meeting 'One Health' targets is the need of the hour.

Source: The Hindu