

## Emergence of Epidemics

### What is the issue?

- Scientists believe that the loss of biodiversity, and wildlife trade, have strong linkages with the emergence of epidemics.
- Pandemic is an opportunity to explore the consequences of its unscientific actions on nature and prepare for behavioural change.

### Is there a link between loss of biodiversity and epidemics?

- Dangerous infectious diseases (Ebola, SARS, Nipah, etc.) have been transferred from wild animals to humans.
- In order to clear land for agriculture and development, forests and habitats have been destroyed.
- In the process, several species are lost.
- Human-induced environmental changes reduce biodiversity resulting in new conditions that host vectors and/or pathogens.
- It is not yet fully understood which species have contributed to the transmission of COVID-19 and how.
- However, according to experts, there is strong evidence that it spread from a wildlife market in Wuhan, China.

### Is there a link between illegal wildlife trade and epidemics?

- **Organised crime** - Trafficking in wild plants and animals and wildlife products has become one of the largest forms of organised crime.
- By deliberately pursuing and hunting certain species or by establishing monocultures, habitats and ecosystems are being damaged or destroyed.
- **Threat to India** - Illegal wildlife smuggling is an emerging threat to India's unique wildlife heritage.
- India shelters a number of vulnerable and threatened species.
- Body parts of animals like pangolins, rhinos, etc., are being traded illegally to countries such as China, Vietnam, etc,
- Species are being wiped out for manufacturing traditional Chinese medicines by organised trade networks.
- People extensively encroach natural habitats; hence biodiversity is declining significantly.
- By disturbing the delicate balance of nature, ideal conditions for the spread

of viruses from animals to humans has been created.

### What could be done?

- There is a need to **revisit our relationship with nature** and rebuild an environmentally responsible world.
- Nations should work towards realising the **2050 vision for biodiversity**, 'Living in Harmony with Nature'.
- **One health approach** must be followed, which considers the health of people, wild and domesticated animals, and the environment.
- The high-risk wildlife markets should be strictly regulated.
- There is a need to promote green jobs and work towards achieving carbon-neutral economies.
- India should strictly enforce,
  1. The Wildlife (Protection) Act of 1972, which prohibits the trade of 1,800 species of wild animals/plants and their derivatives;
  2. The Biological Diversity Act of 2002;
  3. Strategies and action plans like the National Biodiversity Targets;
  4. The National Biodiversity Mission.
- The mainstreaming of biodiversity is needed in India's post-COVID-19 development programme.
- Mass biodiversity literacy should be a mission.
- Ecosystem integrity will regulate diseases and restrict the transmission of pathogens from one species to another.

**Source: The Hindu**