

## Antimicrobial resistance

### What is the issue?

Antimicrobial resistance is growing exponentially and is becoming a global health and development threat.

### What is the Antimicrobial resistance?

- Antibiotic resistance (AMR) occurs when germs like bacteria and fungi develop the ability to defeat the drugs designed to kill them.
- Globally, about 35% of common human infections have become resistant to available medicines.
- About 700,000 people die every year because antimicrobial drugs are becoming less effective to combat pathogens.
- India being the largest consumer of antibiotics in the world, AMR is a serious problem.
- According to **The Lancet** study, in India approximately 58,000 new-born children die annually from sepsis because antimicrobial drugs are becoming less effective.

### Why AMR occurs?

- Human activity has significantly accelerated the process of microorganisms developing resistance to antimicrobial agents.
- The misuse and overuse of antimicrobials for humans, livestock and agriculture is seen as cause for AMR.
- Water is seen as major mode for the spread of AMR, especially in places with inadequate water supply, sanitation and hygiene.
- India has a capacity to treat only about 37% of the sewage generated annually & rest is discharged into natural water bodies without treatment.
- The release of untreated effluents from households, health, pharmaceutical facilities and agricultural run-off is propagating resistant microorganisms.

### What are the initiatives taken to combat AMR?

- UNEP in its 2017 **Frontiers Report**, identified AMR as one of six emerging issues of environmental concern.
- In 2017, the UN Environment Assembly advocated for understanding the role of environmental pollution in spreading AMR.

- UN agencies are working together to develop the **One Health AMR Global Action Plan** that addresses the issue in human, animal, and plant health and food and environment sectors.
- In 2020, MoEF&CC issued draft standards which sets the residue limits of 121 antibiotics to be released from drug production units.
- Governments need to factor in new research before it is becoming a threat to human & environment.

**Source: The Hindu**

