

ONE HEALTH SOLUTION TO THE PROBLEM OF ANTIMICROBIAL RESISTANCE; IT'S MUCH MORE THAN ONE

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Antimicrobial Resistance (AMR) is a rapidly emerging public health concern as antimicrobial medicines are becoming increasingly ineffective against the disease-causing microbes. The problem has magnified in the recent years, mainly because common people do not only consume antibiotics through prescribed or self-purchased medicines, but also through their daily intake of food and water. Antibiotics enter the food chain and environmental resources through more than one pathway such as animal farming, fishery and agriculture, and through hospital, pharmaceutical and household waste streams. AMR bacteria from various sources, like pharmaceutical effluents, biomedical waste and effluents, litter and manure from poultry and livestock farms, aquaculture, plant agriculture, household sewage, and slaughterhouse waste either directly contaminate the aquatic environments or contaminate the soil. 'One Health' approach to AMR recognizes the interlinkages between human health, animal health and the environment. Considering the increasing human, animal, environment interfaces and interactions, concept of One Health has been conceptualized to protect the health of all sectors together. In 2021 definitions of One Health came in place globally. India developed its first National Action Plan (NAP) on AMR in April 2017 but environmental dimensions were included in the second NAP -AMR in 2022. While all these efforts reflect the intent of the country to address the policy gaps in AMR mitigation, enforcement of all these will only be feasible and consistent if these interventions are backed up by a comprehensive, cross-sectoral institutional framework where different actors in these three sectors will come together and work on a common, collaborative platform.
