

In honor of One Health Awareness Month, Agrivida explores

THE CONNECTION BETWEEN HUMAN, ANIMAL, AND ENVIRONMENTAL HEALTH

DRUG-RESISTANT BACTERIA

- According to estimates from the Union of Concerned Scientists, 24.6 million pounds of antimicrobials are used for non-therapeutic purposes in livestock each year.
- Antibiotic overuse leads to the development of antibiotic-resistant strains of bacteria.
- More than 2.8 million antibiotic-resistant infections occur in humans in the US each year (Source: CDC).

ZOONOTIC DISEASES

- Zoonotic diseases can spread to humans through contact with domestic, agricultural, or wild animals.
- According to the CDC, 3 out of every 4 new or emerging infectious diseases in humans originate in animals.
- More than 60% of all known human diseases are zoonotic in origin (Source: CDC).

FOOD WASTE

- Diseases like African Swine Fever (ASF) ravage animal populations and necessitate the culling of herds to prevent disease spread.
- In 2019, a quarter of domestic pigs died because of ASF, either from direct infection or because of culling (Source: New Scientist).
- In 2004, Canada announced plans to cull 19 million poultry to slow an avian flu outbreak (Source: University of Michigan).

FOOD SECURITY

- Diseases like avian flu and foot-and-mouth disease (FMD) cause disruptions in food availability.
- According to a report from George Mason University, a 2004 outbreak of avian flu increased international poultry prices by 30%.
- A 2015 outbreak of avian flu in the US affected 48 million birds and caused egg shortages that lasted 18-24 months beyond the initial outbreak (Source: Business Insider).

ENVIRONMENTAL CONCERNS

- Good animal nutrition makes for healthier animals with stronger immune systems that are less susceptible to disease.
- The use of feed enzymes in livestock improves efficiency in nutritional performance, leading to less excretion of phosphorus, nitrogen, and undigested carbohydrates into the environment.
- Greenhouse gas emissions from livestock production could be reduced by as much as 30%, in part by implementing existing health and husbandry best practices (Source: FAO).