also in agrifood systems from animals to people, through direct contact with animals, contact with animal environments, and through the food we eat. It also impacts animal health, productivity and the livelihoods of people who rely on agriculture for a living. AMR is directly responsible for over 1.3 million deaths globally each year.

ACT project in Pakistan

The ACT project collaborates with livestock farmers, government livestock departments, food authorities, veterinary diagnostic laboratories, veterinary professionals, consumers, and students in Pakistan.

ACT aims to enhance awareness of antimicrobial resistance (AMR) among producers, consumers, and food safety officials. It supports the adoption of Codex Alimentarius recommendations for the responsible and prudent use of antimicrobials and strengthens the capacity of food safety laboratories to test for AMR. This enables the identification of risks and the development of effective responses to them.

Success story

Which spreads faster, disease or knowledge about its prevention? Okay, this may be more of a rhetorical than a real question, but we know which is preferable. Finding an answer would depend on factors such as what measures are put in place to control the disease and how much effort is invested in transferring knowledge and information from one person to another.

Take, for example, the global public health threat of antimicrobial resistance (AMR) - the situation where microorganisms have evolved so that the medicines we typically use to treat these infections are no longer effective. Antimicrobial resistant organisms are spread from human to human and...
However, we have ways that can help reduce the impact of AMR. Foremost among the control measures available to us in agrifood systems is to raise awareness and spread information about the threats of AMR and the strategies we can use to counterbalance the emergence and transmission of resistant organisms.

Dr Samina Anwaar, a veterinary doctor posted in Jhatta Hathyal village in Rawalpindi, Pakistan, is a champion of such AMR awareness raising. Having taken part in an FAO training course on how to reduce the spread of foodborne AMR, she is now training others, and collectively their efforts are tipping the scales to help awareness and knowledge win the race.

Complementing Anwaar’s work is an FAO project, “Action to Support the Implementation of Codex AMR Texts (ACT)”, that was launched in 2021 with the aim of assisting six low- and lower-middle-income countries, including Pakistan, to adopt international guidelines, standards and codes of practice developed by the Codex Alimentarius Commission, thereby reducing the spread of AMR in foods.

During the 2022 World AMR Awareness Week (WAAW), Anwaar participated in a workshop on the responsible and prudent use of antimicrobials. This workshop was organized by FAO as a key component of the ACT project. Anwaar reflects on her experience and her professional journey over the following year:

“Since that session, I have been educating dairy farmers, especially women, about AMR and its consequences. I stress that antimicrobials should not be used in animals without the prescription of a veterinarian, as their misuse can lead to the development of resistant pathogens, ultimately affecting the health of both animals and humans.

I am pleased to see that women farmers have been receptive to my advice and have started using antimicrobials more responsibly. Over the past year, I have noticed a significant improvement in how they handle their animals, all thanks to our efforts in raising AMR awareness, supported by the ACT project.”
Dr Anwaar’s emphasis on women is important in Pakistan. The majority of those involved in livestock rearing are women and it is appropriate for them to be served by female veterinarians.

Motia Bibi, a farmer who participated in one of Anwaar’s training sessions, says that the knowledge she received now helps her to make well-informed choices.

“Inflation has increased a lot, and our animals are crucial for our livelihood. Losing them is not something we can afford,” Bibi explains.

Anwaar’s informative sessions explored the responsible and prudent use of antimicrobials, good animal nutrition, and preventing disease with vaccination, rather than treating illness using antimicrobials without veterinarians’ prescription. By adopting these practices, Bibi feels the health of her animals has improved significantly and the occurrence of disease has reduced. Importantly, Bibi is excited to share what she has learned with other women farmers in her community.
Pakistan and AMR

In 2019, there were 221,300 AMR-associated deaths in Pakistan.1

With a population of over 240 million, the country has a strong and diverse agriculture and farming tradition, which makes up the largest sector within the nation’s economy. The majority of the population relies on agriculture for a living.2

Veterinarians are pivotal in combating AMR, primarily through providing essential consultations to farmers. However, a recent study underscores an urgent need for enhancing veterinarians’ understanding and knowledge concerning AMR.3

Sources

Other dairy farmers, Malik Hamza and Nizam-ud-Din, who also participated in training offered by Anwaar, emphasize that since attending these sessions they have started to use antibiotics for their animals only according to the advice of their veterinarian, and they stick to the treatment regime prescribed by animal health care professionals.

“Our goal is to have a balance between animal health and responsible and prudent use of antimicrobials, ensuring the well-being of our livestock while minimizing the risks associated with antimicrobial resistance,” says Hamza.

With respect to additional activities to control AMR under the ACT project umbrella, FAO’s ACT Project Coordinator in Pakistan, explains: “We work on raising awareness about AMR within both the public and private sectors involved in food production. Our close collaboration with government officials remains pivotal in driving the adoption of good practices outlined in the Codex Alimentarius.”

In Pakistan, the ACT project is proving that with concerted efforts at local, national, and international levels, and across sectors, it is possible to effectively spread the knowledge that is needed to combat the threat of AMR.

It is clear that when the right messengers raise awareness with those on the frontline of antimicrobial use, the message is assimilated and behaviours change to the benefit of us all.