Both smallholder farmers and larger livestock operations use veterinary drugs to treat animals when they are sick or to keep them from getting sick. The higher the threat of disease, the more need to administer drugs. Problems arise when farmers do not have correct advice on what drug to buy, or do not follow instructions on how and when to administer the drugs or how long to wait until the drugs have cleared the animal’s body. Misuse comes with consequences. The organisms causing the disease being treated can develop resistance, which means the farmer will have to increase dosage or find different or more powerful drugs. Or the drugs remain in the animal’s body and these residues, although often at only trace levels, are health hazards and impediments to trade.

During fiscal year 2014–2015, Pakistan’s agriculture sector grew 2.9 percent, but the livestock sector grew 41 percent and now contributes more than 11 percent to the national GDP. As agriculture in general and livestock in particular have grown, the sectors have faced some harsh realities, such as the EU’s rejection of 134 food export consignments due to the presence of contaminants. When this happened, it raised concern in Pakistan of the need to provide training for farmers working with livestock but also to improve its food safety control system.

To make this happen, the Joint Division worked together with Pakistan’s Nuclear Institute for Agricultural Biology, National Institute for Genetic Biotechnology and the National Veterinary Laboratories of Islamabad to develop cost-effective methodologies to test for veterinary drug residues. With the Joint Division’s support, the laboratories have improved their testing capabilities by, for example, optimizing existing facilities instead of buying commercial tools. They have gone through proficiency testing, improved their ISO accreditation, and are authorized to provide eight analytical services to test for compliance – services they make available to the private sector. To date, more than 45 private and public institutions involved in food production and export can benefit from the laboratory testing capabilities.
Pakistan calls for farm-to-fork diligence in food safety

According to the principle of food safety, the ultimate responsibility is with the producer. But in reality, when looking at the food sector as a “farm-to-plate” industry, it becomes obvious that problems can happen anywhere. The farmer may produce food safely, but contamination can enter the picture during transport, during storage, at home or even at the market. Thus the project created awareness at both field and laboratory levels of the importance of laboratory accreditation as well as production that meets international standards, something that had not been specifically addressed for veterinary drug residues before the project. Through organizing classes, workshops and farmers’ days, it not only raised awareness of the importance of food safety for farmers and agriculture students, it also facilitated their ability to share their new knowledge with others.

For farmers, solutions lie in knowing the rules and following directions. For example, smallholder dairy farmers must learn when and how to administer drugs, and how to manage their livestock so they do not contaminate the milk. At the same time, as laboratories increase their competencies, they will be able to ensure that Pakistan’s name becomes associated with high quality products in international trade.