JOINT CROP AND LIVESTOCK SERVICES FOR SMALLHOLDER FARMERS

Locations Kenya, Uganda

Dates 01/01/2021 - 30/06/2025

Summary

Crop and livestock health is crucial to agricultural productivity and farmer livelihoods. However, in low-income countries, smallholders are often left without sufficient support to deal with crop and animal problems due to existing agricultural extension services being understaffed and underfunded. CABI's work in plant health and plant clinics over the last 18 years has revealed potential 'One Health' (OH) benefits of broadening the scope of plant clinics to better meet farmers' need for advice. This project will develop integrated crop-livestock health advisory services that will enable male and female smallholder farmers in Uganda and Kenya to address major health and production problems affecting crops, livestock and food safety.

The problem

Agricultural productivity, animal and plant health are intrinsically linked to the health of humans, livestock and the environment in many different ways. Livelihoods, food security and food safety rely on healthy plants and animals which in turn need robust production systems. However, smallholder farmers often face challenges that impact production. The Platform for Agricultural Risk Management (PARM) identified pests and diseases in crops and livestock among the most important constraints to agricultural productivity in several African countries, including Uganda. Some of the causes include:

- Insufficient crop and livestock extension officers and vets
- Limited awareness and knowledge among farmers of crop and livestock health management
- Lack of practical and actionable solutions for farmers

- Poor soil fertility and crop/livestock nutrient management

The crop, livestock and veterinary sectors share similar challenges when delivering timely, quality services to smallholders. Such patterns are common in low-income countries, notably remote communities where the need for adapted services to safeguard rural livelihoods is huge.

CABI's work with plant clinics over the last 18 years, first under the Global Plant Clinic, followed by the Plantwise programme, revealed potential OH (cross-sectoral, value-added action to solve inter-related problems) benefits of broadening their scope in order to better meet farmers' demands for agricultural advice.

Similarities were first noted in Nicaragua, Bangladesh and Uganda between 2005-2007 where plant clinics informally responded to farmers' requests for advice on livestock. A survey of 180 plant doctors from five countries (including Uganda) confirmed this trend and the need for integrated health services – over 80% said they regularly receive queries from farmers on livestock topics because farmers have nowhere else to go.

What we are doing

The project's overall goal will be to contribute to improving the health and livelihoods of smallholder farming families in East Africa.

Experiences with integrated crop-livestock clinics are informal and under-documented. This CABI-led project will test how, and under what circumstances, such a farmer service can operate effectively and with what benefits through integrated OH-oriented services, crop-livestock health advisory services that enable male and female smallholder farmers to address major health and production problems affecting crops, livestock and food safety.

The outcome will support the development of an integrated clinic model that adds value to existing farmer services. The project started initially as a pilot and had three main objectives:

1. Improving access to joint crop-livestock health advisory services for smallholder female and male farmers
2. Strengthening the crop-livestock service advisory system among plant and livestock outreach services
3. Exploring the possibilities of expanding the model to farmers in Kenya from lessons learnt from the pilot in Uganda

Key activities in phase one included collecting farmer baseline information and practices on OH, establishing and operationalizing 80 joint crop-livestock clinics and consultation sessions in four districts of Uganda, training crop and animal health officers in identified OH topics and providing relevant information materials for farmers and veterinary staff on OH topics.

Other activities included assessing farmers' demand for livestock advice at plant clinics in Kenya and sharing experiences from the Uganda pilot with relevant crop-livestock stakeholders in Kenya to pilot crop-livestock clinics and consultations in Kenya.

Following the success of the pilot phase, the initiative scaled out further in Uganda and into Kenya.

The initiative aims to directly benefit 11,550 smallholder farmers (40% women) and 100 crop and livestock service providers, and indirectly benefit 34,650 other farmers and the wider community (40% women), and 300 crop and livestock service providers.

Results so far

Uganda

After the initial pilot phase in 2021, during which four joint-crop livestock clinics were established, a further two were successfully set-up. To increase the reach across villages, clinics are now taking mobile clinic approach and, in Luwero, government resources are being used to operate the clinics. A total of 38 clinics have now been set-up in Uganda since the start of the project, six of which are directly supported by the project and 16 supported by the respective districts.

In total, 5532 smallholder farmers (2153 female, 3378 male) have been reached via joint crop-livestock clinics in Uganda.

The clinics have received thousands of queries on both crop and livestock problems. Of these queries, the OH top issues include aflatoxins, rabies and misuse of pesticides and drugs. Forty-four vaccination sessions have been held where 594 dogs and 57 cats were vaccinated against rabies and 11,000 birds were vaccinated against Newcastle disease.

The main crops observed during clinics include bananas, coffee, cocoa, tomato, other cereals and fruits and vegetables. Farmers also take cattle, chickens, pigs and goats for livestock advice. Rabbits, turkeys and pets (cats and dogs) have also been taken for advice on vectors, feeding or shelter.

To capture data, 12 tablets have been provided to clinic staff and 49 staff (agriculture, veterinary, supervisors, regulators/MAAIF, university) are now equipped with skills on data handling and management. Data collected has been submitted to the National Food and Agricultural Statistics System.

Kenya

The project was officially launched in Kenya in May 2022 when county officials committed to support the new initiative and prioritized OH issues that need to be addressed. Three joint clinics have since been implemented in Trans Nzoia and Elgeyo Marakwet districts and are being run by individuals from crop, livestock, veterinary and public health departments. These clinics have reached 558 smallholder farmers (184 female, 374 male) and received 232 crop queries and 461 animal queries.

Donors	Biovision Foundation, WTS Welttierschutzstiftung
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