JOINT CROP AND LIVESTOCK SERVICES FOR SMALLHOLDER FARMERS

Locations
Kenya, Uganda

Dates
01/01/2021 - 31/12/2024

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.
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 counties (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.
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 (results below), the initiative is now being scaled out further in Uganda in two additional districts 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.
2021 achievements in Uganda

Joint crop-livestock clinics/consultation centres have been implemented in four districts (Mukono, Luwero, Buikwe, Kayunga). The clinics received 1080 queries, 15% of which were both crop and livestock problems, from 741 farmers (43% female), inclusive of repeat visits, between April and December 2021. The main crops observed included bananas, coffee, cocoa, tomato, other cereals and fruits and vegetables. Farmers also took cattle, chickens, pigs and goats for livestock advice. Rabbits, turkeys and pets (cats and dogs) were also taken for advice on vectors, feeding or shelter. Farmers shared their problems with the plant and veterinary doctors and get real-time advice tailored to their specific needs and prevention.

Lessons learned include:

- increased awareness among staff and farmers on the interrelated health issues between plant, animal health and the environment.
- cross-learning among agriculture, veterinary staff and farmers in crop and animal pests and diseases through shared experiences.
- further knowledge gained from factsheets and other materials.
- data captured on the digitized tools, created for the clinics, is useful to track and follow-up farmer’ queries.
- farmers’ demand for crop and livestock advice is broad and diverse.
- advisors get backstop support from senior officials visiting the clinic session – viewed as an important aspect of the service model.
- the village-based, mobile clinic approach increased farmer reach and service – supporting farmers who are unaware of the services and those in inaccessible areas.
- cost-saving, cost-efficiency and improved service delivery through shared staff transport planning and training.

These promising lessons were shared with the Kenya project team. Phase two of the project (which started in 2022) now includes two counties in Kenya and extended activities in Uganda.

2022 achievements

Uganda

Joint clinics in two new districts (Kagadi and Hoima) were launched and attended by plant doctors, agriculture and veterinary staff, district leadership and representatives from the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF). Twenty-four staff (eight female and 16 male) from six participating districts and MAAIF have also been trained on the digitized tools for data capture and data management.

Existing joint clinics were attended by 238 farmers (84 female and 154 male, of which 93 were classed as youth). Furthermore, 13 (one female) animal husbandry officers and veterinary staff were trained in cattle and poultry health management and nutrition. Materials were also created and distributed to the joint clinics to help with service delivery and publicity.

Kenya

An inception workshop was attended by key stakeholders from two counties (Trans Nzoia and Elgeyo Marakwet) – representation was from the Directorates of Agriculture, Livestock, Veterinary and Public Health. The county officials committed to support the new initiative and prioritized OH issues that need to be addressed in the areas of zoonoses, anti-microbial resistance, mycotoxins, pesticide residues, food and water contamination. Joint clinics have since been implemented in these two districts and will involve a public health representative.

Donors
Biovision Foundation, WTS Welttierschutzstiftung
Partners
Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), Makerere University, Selected District Local Governments of the four districts in Uganda, Self Help Africa

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