Promoting IT solutions for surveillance and pest reporting

This project aims to develop a regionally harmonised pest information framework. It will promote best practice in surveillance planning and implementation, efficient collection and management of surveillance information, and evidence-based reporting on pest status. This will enable participating countries to:

- compile credible pest lists which are required to initiate bids for access to lucrative international markets;
- demonstrate pest status to maintain market access; and
- meet the reporting obligations of International Plant Protection Convention (IPPC) signatories.

Specifically, the project will demonstrate the feasibility of a regionally harmonised, pest information framework based on streamlined data collection, internationally recognised data standards, and simple protocols for exchanging data with existing national systems.

STDF/PG/432

Status
On-going

Start Date
01/12/2016

End Date
31/12/2020

Project Value (US$)
$1,705,455

STDF Contribution (US$)
$997,595

Beneficiaries
Cambodia
Lao PDR
Malaysia
Papua New Guinea
Philippines
Thailand
Viet Nam
Implementing Entities
Australian Department of Agriculture and Water Resources

Partners
CAB International (CABI)

Background

The project addresses the inconsistent approach to pest surveillance in the Asia-Pacific region and the poor standard of reporting of surveillance outcomes. This weak performance of what is a basic National Plant Protection Organisation (NPPO) responsibility undermines the credibility of pest status claimed to prospective trading partners. The project complements the surveillance work program of the Asia-Pacific Plant Protection Commission and provides impetus to usage of the IPPC’s 2016 Plant Pest Surveillance manual and the Australian Centre for International Agricultural Research's 2005 ‘best practice’ publication "Guidelines for surveillance for plant pests in Asia and the Pacific."

Surveillance activities will target pests and diseases of diverse crops and commodities which are important in regional trade, including the movement of planting material. The crops include soybeans, cashews, maize, cassava, aquatic plants, citrus, sugarcane, bananas, coffee, cacao, litchi, longans and oil palm.

A series of case studies, including surveillance to support market access proposals, define pest distributions and assist early detection of high priority quarantine pests, will be used to demonstrate that a regional framework can enable more cost-effective collection of pest records, more robust management of pest data, and more credible and timely reporting of changes in pest status.

The project will use coordinated surveillance activities across the collaborating countries to showcase:

- the use of mobile devices and a customisable smartphone app (‘P-tracker’) to record surveillance data in the field; and
- a simple process for importing these surveillance data into a low-cost, flexible, in-house information system, the Surveillance Information Management System (SIMS).

Expected Results

New technologies for collecting surveillance data

The Project has provided hand-held devices with the P-tracker app which has been customised to suit the surveillance targets chosen by participating countries. The devices are used in the field to record automatically geocoded, surveillance data. Surveillance data are then downloaded into the SIMS on laptop computers, also provided by the Project. Through a series of workshops, key staff from participating countries are being trained in the use of the devices, P-tracker and SIMS. By the end of June 2017, staff from nine countries had taken delivery of devices, laptops and software, and benefited from the first round of training, which comprised a workshop in Malaysia for all participating countries (February 2017) and single-country workshops in Cambodia, Lao PDR, the Philippines and Vietnam (between April and June 2017).

Planning for surveillance

At these same workshops, staff who will be involved in surveillance activities are being trained in best practice for surveillance and guided through a systematic, planning process to develop detailed plans for their chosen surveillance activities. The plans must meet the surveillance objective (e.g. to provide a precise distribution map for a pest), define exactly how the surveillance is to be performed (e.g. ‘one surveillance site in each province’), identify personnel and resources required, and prescribe how the surveillance will be achieved within a set budget. A total of 22 surveillance plans (one for each target in each country) and 15 protocols (describing the surveillance techniques) are being created during the workshops. By the end of June 2017, drafts of 12 surveillance plans and 12 protocols were developed.