Strengthening capacity in Africa to meet pesticide export requirements

This project seeks to improve capacity of selected African countries to meet pesticide-related export requirements based on international (Codex) standards through extensive capacity building in both the field and laboratory.

STDF/PG/359

Status
Completed

Start Date
01/05/2013

End Date
30/04/2017

Project Value (US$)
$1,064,450

STDF Contribution (US$)
$446,150

Beneficiaries
Benin
Cameroon
Ghana
Kenya
Malí
Senegal
Tanzania
Uganda
Zambia

Implementing Entities
African Union Inter-African Bureau for Animal Resources (AU-IBAR)

Partners
Food and Agriculture Organization of the United Nations (FAO)
Governments of Benin, Cameroon, Ghana, Kenya, Mali, Senegal, Tanzania, Uganda, Zambia
Rutgers, The State University of New Jersey, USA
USDA Foreign Agricultural Service

Background

Pesticide residue data needed to establish Codex Maximum Residue Levels (MRLs) are almost exclusively generated in industrialized countries. Very rarely are data generated in developing countries and, therefore, few Codex MRLs are established for minor-use crops (crops of low pesticide usage on a global scale, often termed “specialty crops” or minor crops), such as tropical fruits grown in developing countries. Where MRLs do not exist, exporters often face challenges to reach export markets. If MRLs do not reflect the actual pesticide use patterns where the crops are grown, then pests will not be controlled effectively. This project helped African countries to generate residue data in order to facilitate
the registration of new crop protection tools, inform the establishment of MRLs, and boost international trade. The focus was on low-risk pesticides and tropical fruits. National authorities in African countries collaborated with each other, the private sector and international partners to conduct coordinated and complementary pesticide residue studies. Skills and experiences gained enabled African countries to expand and prioritize their residue programmes, proactively address emerging pest control needs, and comply with international food safety standards. This project was part of a global MRL initiative to enhance market access for specialty crops, with complementary STDF-funded projects in Latin America and ASEAN Member States.

A result story on the project is available here.

Results

Improved technical expertise in African countries to generate, review and interpret pesticide residue data

The project established training programmes and developed capacity of national residue study teams to conduct supervised residue trials. The programme focused on training in both the field and laboratory and was based on the principles of Good Laboratory Practices (GLPs). Upon completion of this project, study teams (laboratory, field trial experts, others) had improved their ability to conduct new residue studies as part of national pesticide registration processes.

Increased participation of African countries in setting Codex MRLs

A major component of this project was to harmonize MRLs in accordance with international standards to improve market access for agricultural products. This was achieved through a process to facilitate the establishment and implementation of Codex MRLs for minor-use crops. Seven residue studies were implemented that could support new Codex MRLs for the commodities selected. The studies used a very low-risk test pesticide (sulfoxaflor), focused on mango. Efficacy trials in three countries will be completed in 2018 to enable national registration of the compound. Upon completion of the studies, the residue data generated can be packaged and submitted to Codex to support the establishment of MRLs. Participating countries received guidance on how to nominate their pesticide/commodity to be placed on the FAO/WHO Joint Meeting on Pesticide Residues (JMPR) review schedule, how to prepare and package the data submission, and how to best coordinate efforts with other countries.

More efficient use of available resources through enhanced collaboration

The project established and implemented a new collaborative approach for pesticide data generation and exchange within African countries, based on public-private partnerships and regional cooperation. This is expected to result in an increasingly efficient use of resources. In order to improve cost-effectiveness and avoid duplication of efforts, the project facilitated collaboration among selected national SPS authorities and the private sector (including a multinational pesticide manufacture, local agricultural commodity export organizations, industry associations and farmers). A regional minor-use expert group, comprising public and private sector partners met regularly to discuss and develop solutions on regional minor-use issues, and identify and prioritize pesticide and MRL needs. This prioritization enabled countries to develop strategies to maximize outputs by dividing work, resources and responsibilities to generate necessary residue data. The cost-saving of collaborative versus individual generation of data is estimated to be over 90%.

Increased environmental and consumer safety through upgraded crop protection tools

While second and third generation pesticides are being phased out by developed countries due to human and environmental risks, farmers in developing countries often continue to use these chemicals because of the lack of international MRLs based on newer, safer (less toxic) pesticides for their specialty crops. Due to this situation, farmers are limited in their crop protection tools (continued use of more toxic chemicals) resulting in economic loss (restricted market access), lower crop productivity (increased rate of pest resistance), and negative impacts on environmental, worker, and consumer safety. This project helped to resolve these issues, with additional benefits for agricultural productivity, environmental safety and consumer safety.
Enhanced market access for specialty crops

Developing countries frequently encounter market access obstacles resulting from insufficient international trade standards for minor-use crops. By developing a process to facilitate the establishment of Codex MRLs for minor-use crops of economic importance to African countries, this project enhanced the ability of producers in developing countries to access important export markets. The project will deliver its full benefits once the new Codex MRLs are established.