

GIZ CROP PROTECTION BASELINE STUDY

Locations

Benin, Burkina-Faso, Cameroon, Ethiopia, Ghana, India, Kenya, Malawi, Mali, Mozambique, Nigeria, Togo, Tunisia, Zambia

Dates

11/07/2017 - 30/11/2018

Summary

Pests and diseases often limit how much smallholder famers can produce. They affect crops both pre and post-harvest by reducing their value or making them unsafe for human consumption. Farmers try to reduce losses through a range of techniques, some of which have human or environmental health impacts. This project aims to understand and report on current crop protection practices and identify the most effective, safe and innovative options to integrate into GIZ's programmes in 14 countries.

The problem

As their livelihoods depend on the crops they can sell, farmers look for the most cost-effective measures available to protect their produce from pests and diseases.

Traditional measures such as ecologically sound pest management practices include crop rotation, adjusting planting times and destroying infected crop residues. Farmers also use botanical pesticides – extracts made from locally available plants. Other options include commercial synthetic pesticides sold by local retailers. This option has problems though. The accompanying agricultural advisory services and legislation in many countries are often under-resourced and the safeguards needed to ensure that pesticides are properly handled are often missing.

Gaps in regulations concerning pesticide registration, safe packaging, marketing, storage and safe disposal all mean that farmers, their families and the surrounding environment can be exposed to harmful toxic pesticides. Their use also disrupts naturally occurring pest control provided by beneficial insects and predators in farmers' fields.

What we are doing

By undertaking a baseline study in 14 countries in Africa and Asia, CABI is contributing to the sustainability and effectiveness of crop protection and supporting GIZ's Green Innovation Centres for the Agriculture and Food Sector programme.

The baseline study is gathering information from publically available sources to build a picture of the national legal framework for pest and pesticide management in each of the 14 countries.

For eight of these countries, the baseline study is complemented by information collected from in-country surveys including interviews, focus groups discussion and questionnaires with farmers and other crop protection stakeholders. These cover current practices in crop protection and examine all stages of crop production and the pesticide life-cycle from production through to unused pesticide disposal.

In Ghana, we will also develop biopesticide management approaches to Fall armyworm. The reports will constitute a base on which GIZ can build on for all future crop protection work through its Green Innovation Centres for the Agriculture and Food Sector programme.

The study teams will work with GIZ and national partners in each country to support the identification of effective, innovative and affordable crop protection and pesticide management solutions suited to the national context.

Results so far

Study findings show that the alignment of national pesticide legislation with international standards ranged from good to poor across the 14 countries and almost 20% of registered pesticides are classed as highly hazardous pesticides (HHPs). Few low-toxicity or biological products are registered and a specific registration pathway for biological products exists in only six countries, whilst farmers, retailers and extension workers showed a lack of awareness of safe pesticide handling.

At the national level, policies to phase-out of HHPs from the country's supply chain are required, together with policies to increase the availability and affordability of safer, low-toxicity alternatives. GIZ are already excluding recommendation, procurement or use of HHPs within their programmes.

National policies to promote the implementation of integrated pest management (IPM) are in place in some countries but knowledge of IPM remains low. To address this, further key stakeholders should be supported to promote and implement IPM and innovative and complementary extension methods including ICT can be used to increase reach with farmers. Green Innovation Centres for the Agriculture and Food Sector should promote relevant voluntary standards among young transitional farmers in particular and support farmer compliance with the standards (including IPM implementation).

Fall armyworm is a major invasive pest in Africa (see <u>evidence note by CABI)</u> and adopting IPM is the safest long-term control option. GIZ is working with manufacturers of biological control products to promote their development and uptake.

Other CABI work on FAW is being conducted under the <u>Action on Invasives</u> <u>programme</u> and our <u>fall armyworm portal</u> provides resources on identifying and

managing the pest.

Donors GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit)

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