1. Introduction to the Training Guide

1.1. The need for training on Integrated Pest Management in tobacco

1.2. Goals of the guide

1.1 The need for training on Integrated Pest Management in tobacco

When used judiciously, crop protection agents (CPAs) such as insecticides, fungicides and herbicides can play an important role in plant protection, reducing the impact of pests on the yield and quality of tobacco. By their nature, CPAs affect living organisms so there are also hazards associated with their use. When CPAs are not used appropriately, they can become a cause for concern due to the risks that they pose to the health and safety of farmers, farm workers and consumers as well as their potential impact on the environment. Likewise, indiscriminate use of CPAs can exacerbate pest problems through the loss of natural pest control mechanisms and the development of pest resistance. The public in general and consumers in particular are sensitive to these health and environmental concerns. Thus, the risks posed by CPAs must be managed by following strict guidelines for their use.

Certain circumstances and behaviours can contribute to unnecessary CPA use, selection of CPAs which are harmful and poor CPA management. For example, farmers and their workers do not always understand the risks associated with CPAs. Many lack knowledge about how to properly select, store, handle and apply CPAs.

Implementation of Integrated Pest Management (IPM) can help to address these issues. IPM is a shift in all parts of the supply chain to an eco-system approach, promoting best practices for the prevention and management of pests in tobacco and clove. IPM seeks to reduce the risk of harm to people and the environment. Attaining the objectives of IPM will depend in particular on changes in farmers’ behaviour so that they reduce unnecessary CPA use, use the least hazardous CPAs which are registered for use in tobacco, and manage CPAs appropriately.

From one location where tobacco is grown to the next, there are often fundamental differences in language, infrastructure, national regulations and their enforcement. The CPAs that are registered, the means by which CPAs are obtained, and the tools used for CPA application also all differ. Likewise, farmers vary in terms of their education in general, their experience with tobacco and their experience with other crops. Even so, many challenges and training needs are shared across locations. Hence, the overall objectives and targets are the same for all suppliers, but the situation on the ground and the baseline from which they start differs from place to place. Training activities undertaken to support the implementation of IPM and the appropriate use of CPAs must take these differences into account and they must be tailored to the countries in which they are implemented.

A lack of knowledge on IPM amongst the farmers (and sometimes field technicians) can be a barrier to responsible CPA management and use. Hence, addressing any knowledge gaps is a necessary first step in order for changes in behaviour to take place. This Training Guide provides training material to address training needs and offers guidance on how to adapt the core material to local conditions through the national training programmes. This Training Guide focuses on the some of the key principles of IPM and appropriate use of CPAs. Through training on the topics in the Training Guide, farmers and field technicians will learn tactics for reducing unnecessary CPA use, they will find out how to select less toxic CPAs which are registered for use on tobacco, and in particular they will learn how to manage CPAs appropriately. While training alone will not solve all of the aforementioned challenges, it will help to put these goals within reach.

1. Any species, strain or biotype of plant, animal or pathogenic agent injurious to plants or plant products (ISPM 5, 2015).
1.2 Goals of the guide

This Training Guide (hereafter referred to as “the guide”) is targeted at the core training team in each country. The core teams will be responsible for leading the implementation of their national training programmes. The goal of the guide is to provide them with the necessary tools to design and implement a training programme to support the implementation of IPM and appropriate use of CPAs. The guide presents a core training package with detailed curricula to address all aspects of responsible CPA management. The guide provides background information to support technical understanding and, through activity descriptions with notes for the facilitators, it provides sufficient guidance for trainers to be able to lead trainings on the technical content. The guide also provides step-by-step guidance to support all stages of the implementation of the training programme.

Chapter 2 of this guide begins with an overview of the steps needed to design and implement a national training programme. Each step is then covered in detail in the subsequent sections. For example, descriptions are provided on how to plan for and conduct trainings of trainers (ToTs). In many countries where training is being implemented there will be two types of ToTs; trainings for national master trainers, and trainings for field technician trainers. These two groups are the main examples covered. Key competencies and responsibilities for the trainers at each level are described. Chapter 2 also provides guidance on how to identify training needs, design an approach for addressing these needs, and plan for the implementation of the training programme for field technicians and farmers. A description of a modular training approach is complemented with information on other approaches for knowledge transfer such as video and radio. These other approaches can be used to re-enforce messages presented in the modular core training package. There is also a section with tips on how to facilitate participatory trainings. Chapter 2 concludes with guidance for national adaptations of the core training package. The core training team will be responsible for working with the CABI IPM country coordinators and other relevant partners to customise the materials. Once adapted as necessary to national context and priorities by the core training team, the material extracted from Chapter 3 can be provided to the national master trainers and field technicians who will facilitate training.

In Chapter 3, all of the topics in the core training modules are presented in detail along with descriptions of practical activities. Each topic is introduced by a description of the rationale for conducting training on the topic and the topic’s learning objectives. The target group for the topic is identified, and essential background information is also provided. The training exercises are described and the materials needed for each training activity are listed. The training programme presented here is highly participatory and activity driven; there are no PowerPoint presentations. Guidance is provided on how to lead the training on each topic.

Chapter 4 deals with the process of monitoring, evaluating and assessing the impact of the national training programmes. As stated in the previous section, the training programme contributes to enabling changes in practices that are necessary in order to reach the training programme goals. In order to achieve these goals, the following requirements must be met:

- successful rollout of the programme through training of the target field technicians and farmers;
- field technicians and farmers have to learn from the training;
- they subsequently have to put their new knowledge into practice; and
- these changes in behaviour must make a contribution towards the desired outcomes.

Activities to monitor and evaluate the training programme against these requirements must be planned for at the same time that the training programme itself is being planned.