

Participatory training: principles, methods and experiences

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What is participatory IPM training for farmers?

According to the Food and Agriculture Organisation of the United Nations (FAO), participatory training is: ‘An interactive learning process enabling individuals and communities to develop skills, knowledge and attitudes, and to share lessons learnt, so that they actively contribute to food security and poverty alleviation.’

Participatory Integrated Pest Management (IPM) training has been a proven success in helping farmers to adopt and implement innovative and sustainable pest control strategies in a number of programmes both globally and in a recently completed IPM development programme coordinated by Szent István University in Central and Eastern Europe.

Participatory IPM training does not simply provide information for farmers, but develops the capacity and knowledge of both farmers and the farming community. Although this leaflet addresses participatory training for farmers, its principles can also be applied for training of advisers and students.

‘IPM means the careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keep pesticides and other interventions to levels that are economically justified and reduce or minimise risks to human health and environment. IPM emphasises the growth of a healthy crop with the least possible disruption to agro-ecosystems and encourages natural pest control mechanisms.’

Extract from ‘Development of guidance for establishing Integrated Pest Management (IPM) principles; 07.0307/2008/504015/ETU/B3’. Available at: <http://ec.europa.eu/environment/ppps/home.htm>.

Why participatory IPM training is a promising option

Learning through hands-on experiences facilitates the learning process, especially when the topics are related to everyday practices. During participatory training, participants are encouraged to explore and discover for themselves. Knowledge obtained this way is more easily internalised and put into practice.

Sustainable pest control strategies are more efficiently implemented if the farmers are aware of the functioning of the agro-ecosystem. This means they must understand the elements of the agro-ecosystem and how these elements affect each other.

To conduct participatory IPM training, farmers should consider IPM as an approach rather than as a ‘toolbox’. The IPM approach considers time (pre-crop, planned crop for the next year) and space (neighbouring fields, surrounding cropped and non-cropped habitats), focuses on prevention and uses chemical controls as a last option.

Challenges to efficient participatory training

Participatory training requires quite a lot of time and energy from farmers as well as facilitators. On the one hand farmers are very busy during the crop growing season, and therefore it may be difficult to find the motivation to participate in training sessions in this period. However, the outcome of participating in a participatory training session greatly beats the challenges. After a training session, farmers will have gained knowledge and useful insight in a subject of very practical relevance to them. More importantly, however, the participatory method helps farmers remember the lessons learned. Based on this we can say that **there is no good excuse not to conduct farmer training in a participatory way.**

How to initiate participatory training

Farmers are generally very busy and to initiate participatory training it is therefore very important to highlight the benefits this kind of training provides. If the participants of a participatory training session can see the added value it offers it will keep them motivated and interested. The main benefits (among others) of participatory IPM training could be:

> Increased knowledge on pests and diseases

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- > Acquaintance with monitoring tools to evaluate pest incidence
- > Ideas for optimal pest control strategies.

The main characteristics of participatory training

Participatory training must be centred on the participants and developed according to their needs. While training is likely to be successful if farmers understand why the topic is important for them, there will be cases where the situation is new and the facilitator must raise awareness through participatory discussions. In either case, farmers must feel they have ownership of the whole process. The main characteristics of participatory training include:

- > Open communication between participants and facilitator
- > Participants must be able to pose questions
- > Participants must be involved in the whole process (curriculum development, execution, evaluation)
- > Participants must actively contribute
- > The process should be developed according to the expectation of participants. Discovery-based learning and learning by doing plays a central role.

It is very important that all the information provided and the experiences generated during the training are science-based.

In-field participatory training

Farmers will be more motivated to implement and adopt innovative and sustainable pest control strategies if they have a sound understanding of the agro-ecosystem and if they see the promising effects of the IPM strategies and approaches suggested. This means training has to be season-long and conducted in the field.

Season-long training is required because:

- > Pest problems are specific to each stage of the crop
- > Population dynamics, disease epidemics, possible plant compensation and crop development are processes which develop over the course of the cropping season and need to be observed completely
- > The results of management decisions made during one crop stage are observable only at a later crop stage, and most often at harvest
- > Farmers, and facilitators, must be able to solve most problems without outside assistance. Longer field-based training provides these skills.

Field-based training activities are very much preferred, since:

- > Farmers will understand how the agro-ecosystem is working if they observe it in real life
- > Farmers will learn how to sample pests and beneficial arthropods and how to estimate what is happening in the whole field
- > The result of sampling will be used with other information such as thresholds, natural enemy ability, plant health, farm budget and weather to make an analysis of the field for decision making.

The Integrated Pest Management (IPM) for Western Corn Rootworm (WCR) FAO project sponsored by the Italian government and coordinated by Szent István University was conducted in seven Central and Eastern European countries. The objective was to protect maize production from losses caused by WCR through the development and implementation of IPM strategies by farmers, based on a sound understanding of local agro-ecosystems and the protection of biodiversity to ensure sustainability in agricultural production.

For more information go to:

- > <http://w3.mkk.szie.hu/dep/nvtt/wcrnet/wcrnet-2.htm>
- > http://www.endure-network.eu/about_endure/all_the_news/learning_ipm_lessons_from_wcr_in_hungary
- > <http://www.pan-uk.org/pestnews/Issue/pn78/pn78p8-9.pdf>
- > <ftp://ftp.fao.org/docrep/fao/008/af156e/af156e00.pdf>

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Summary

Participatory IPM training has been a proven success in encouraging farmers to adopt and implement innovative and sustainable pest control strategies both globally and in a recently terminated Integrated Pest Management (IPM) development programme coordinated by Hungary's Szent István University in Central and Eastern Europe.

The authors identify the key aspects of participatory training which make it such a promising option, and examine the main characteristics of successful participatory farmer training. They explore the reasons why it needs to be both season-long and conducted in the field and how this can result in the successful adoption of an IPM approach by farmers. They stress the importance of making all activities farmer-centred and ensuring farmers take ownership of the activities, with learning based on discovery and doing.

They also identify why this approach need not be limited to the training of farmers but can be applied, using the same principles, to the training of advisers and students and in a range of national and local situations.

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About ENDURE

ENDURE is the European Network for the Durable Exploitation of Crop Protection Strategies. ENDURE is a Network of Excellence (NoE) with two key objectives: restructuring European research and development on the use of plant protection products, and establishing ENDURE as a world leader in the development and implementation of sustainable pest control strategies through:

- > Building a lasting crop protection research community
- > Providing end-users with a broader range of short-term solutions
- > Developing a holistic approach to sustainable pest management
- > Taking stock of and informing plant protection policy changes.

Eighteen organisations in 10 European countries are committed to ENDURE for four years (2007-2010), with financial support from the European Commission's Sixth Framework Programme, priority 5: Food Quality and Security.

Website and ENDURE Information Centre:

www.endure-network.eu

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