

African Organic Agriculture Training Manual
A Resource Manual for Trainers

INTRODUCTION



IMPRINT

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This is an interim version. Comments and recommendations for improvement are welcome.

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All materials resulting from the Africa Organic Agriculture Training Manual project are available free of charge in the internet under www.organic-africa.net

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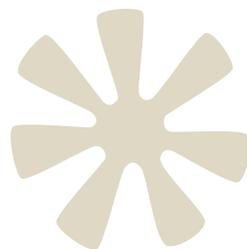
ABOUT THIS TRAINING MANUAL

A-1 Organic agriculture – an initiative within sustainable agriculture

Most small-holder farmers in Africa rely on locally available technologies and on-farm inputs to improve food production and food security for their families and for the market. In order to use available resources efficiently, apply appropriate technologies and implement sustainable practices, farmers need:

- > Access to information, knowledge and the possibility to transform them into skills.
- > Access to inputs such as seeds or biological agents.
- > Access to sales markets.
- > Access to supporting services, such as advice and microcredit, as well as supporting policies.

A major constraint to adopting low input sustainable agriculture in Africa is the low education level of the farmers. Nevertheless, African farmers, both women and men, show great interest for new methods of farming, especially if they are low-cost and promise to stabilize and increase their income.



Organic agriculture provides tools for sustainable agriculture:

Organic agriculture is an initiative within sustainable agriculture that can increase resource efficiency, secure agricultural productivity and raise incomes, as it:

- › Relies on low cost and low foreign input technology.
- › Is based on farmer-owned and locally available resources.
- › Enhances soil fertility and natural pest control by applying appropriate technologies.
- › Establishes diversified farming systems that improve tolerance to climate change, pests, and changing markets.
- › Provides farmer access to value chains and attractive organic markets that offer fair compensation due to high consumer demand of organic products.

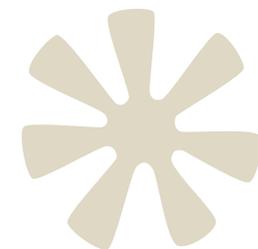
Organic agriculture provides important benefits especially in resource poor ecosystems and economies. It provides valuable tools for sustainable agriculture (i) to manage resources efficiently and (ii) to improve incomes. Together with other methods of intelligent agronomy, this approach contributes to improve livelihoods in sub-Saharan Africa.

A-2 The African Organic Agriculture Training Manual project

Organic agriculture is knowledge-intensive. Therefore, education is key to developing this form of sustainable agriculture. Farmers need to know, be able to analyse, be able to plan and to implement site-appropriate, sustainable farming systems. For example, they need to know:

- › How to increase resource efficiency and to secure agricultural productivity.
- › How to improve resilience of the production system.
- › How to improve the value of their products and how to become more competitive.
- › How to raise incomes and how to improve their livelihood.

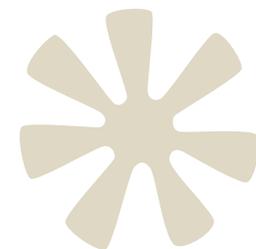
In agricultural education, a good extension worker or a lead farmer can make a great difference for a farmer group. Today, however, many advisors and trainers work without any educational material. FiBL has joined forces with education experts in Africa to address the gap in agricultural education by providing solid training and learning tools.



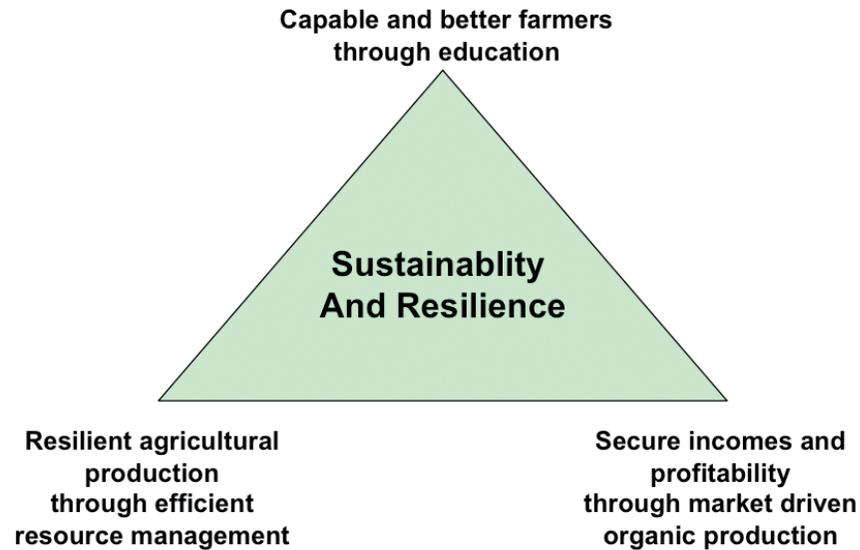
The African Organic Agriculture Training Manual project started in October 2009 with funds from the Bill and Melinda Gates Foundation (BMGF) and the Syngenta Foundation for Sustainable Agriculture (SFSA). The project aims at delivering and enabling best farming practices to farmers, farmer groups, extension workers, and trainers. This project produces materials for indoor and outdoor training including technical and didactical information, overhead transparencies for trainers, posters, booklets, videos, and radio programs. The appropriate training materials will help extension workers to better address and communicate with small-holder farmers and, as a result, encourage application of new technologies on sustainable agriculture. The overall goal of the project is to increase the options for farmers through knowledge and empowerment. The project aims to:

- › Improve the capability of African farmers to be **better farmers and to express their needs**, by providing education and knowledge on sustainable agricultural techniques;
- › **Secure resilient agricultural production** by managing local resources efficiently and sustainably, focusing on organic techniques;
- › Increase **incomes and profitability of African farmers**, and contribute to food security in Africa by promoting improved technologies for organic production and market-driven organic production systems.

This training manual is a key ingredient in the dissemination of sustainable agriculture best practices. There is a great need to enhance knowledge for development and dissemination. SFSA and BMGF aim to boost adoption of sustainable practices in agriculture by joining forces in this cooperation.



Goals of the project

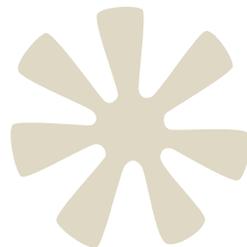


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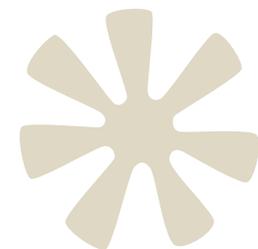
A-3 Working steps and training tools

In order to achieve these goals, the project includes the following five working steps, delivering a set of outputs for each step:

1. **Collect and evaluate training material:** Since 2009, FiBL and its partners in Africa have been collecting and evaluating existing knowledge and training materials. This evaluation lays the foundation for the development of new training materials. The most relevant of the collected materials are available online at www.organic-africa.net.



- 2. Production of the manual:** In 2010 and 2011, FiBL and its partners in Africa developed the manual and adjoining training tools. Since June 2011, Version 1.0 of the manual is available for download at www.organic-africa.net free of charge. The available contents and tools of Version 1.0 are listed below. Additional modules, units and tools will be added in subsequent upgraded versions.
- 3. Launch of the webportal and resource directory:** In June 2011, FiBL and its partners launched a webportal www.organic-africa.net, where all materials and tools of the manual are available for download free of charge. In addition, the webportal provides a detailed resource directory on relevant topics, by country or by region for sub-Saharan Africa, such as:
 - A link library with key information resources
 - An address directory of support services
 - Market-related resources
 - Country regulations and statistics
 - An annotated bibliography
 - Calendar of events and news
- 4. Validation:** From June 2011 onwards, the drafted training materials will be validated by African training organizations in pilot trainings and dissemination trials and will be improved stepwise in the years that follow based on a defined procedure and resulting feedback. The validation refers to (i) the quality of the tools including information, illustrations, didactical recommendations, suitable language and layout and (ii) practicability and usefulness for the trainers and farmers. This iterative and participatory development process shall contribute to highly practice-oriented training materials in terms of content and methodology. The goal of this procedure is to support trainers and farmers in Africa in successfully promoting and implementing organic and sustainable farming techniques.
- 5. Wider dissemination:** Following the development and validation of the training materials for Africa, the project intends to facilitate dissemination and sharing of experiences of African trainers with trainers from Latin America and Asia (South-South exchange). Additionally, the market potential for organic products from sub-Saharan Africa will be explored and gaps for developing the organic markets will be analysed.



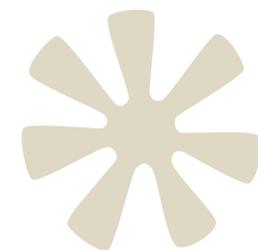
A-4 Tools and structure of the manual

The modules and units are structured in a way to make communication of the content applicable for the trainers and logical for the farmers, to enhance discussion and support decision making, and to encourage adoption of appropriate methods for improvement.

In addition to the English version a French translation is planned. Translations into African languages are also desired.

The set of training materials and tools

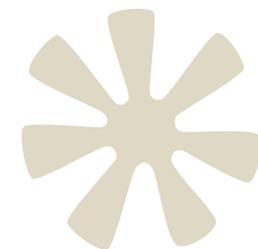
Tools	Date/Version
1. Training manual for trainers and extension workers containing information on organic and sustainable production methods as well as management and marketing techniques.	Draft version 1.0 available since June 2011.
2. PowerPoint presentations for trainers and extension workers containing illustrations, charts and figures in order to illustrate the information provided in the trainers' manual.	Draft version available since June 2011.
3. Illustrated booklets for farmers on basic approaches and practices of organic agriculture.	Draft version available since June 2011.
4. Illustrated factsheets for farmers on management of crops and farm animals.	Draft version available since June 2011.
5. Illustrated posters for training	Draft version 2.0 available in 2012.
6. Training videos	Draft version 2.0 available in 2012.
7. Radio scripts	Draft version 3.0 available in 2013.



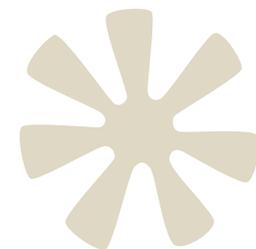
The trainers' manual has a modular structure consisting of 10 modules. The yellow and orange marked modules and tools are available since June 2011. The grey modules and tools are available at a later date on with Version 2.0 in 2012.

Modular structure of the training manual and associated tools

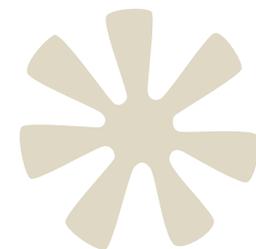
Training Manual Modules	PPT Transparencies	Booklets	Factsheets	Posters	Videos	Radioscripts
Tool for Trainers	Tool for Trainers	Handout for Farmers	Handout for Farmers	Tool for Trainers	Tool for Trainers	Tool for Trainers
M1 Definition and Benefits	X	Booklet 1: Definition and Benefits		X	Video 1: Why Organic Agriculture?	Radio 1: What is organic farming?
						Radio 2: Benefits of OA; scientific and practical evidences
						Radio 3: Adaptation potential of OA to climate change
						Radio 4: Organic agriculture and health issues
M2 Soil Fertility and Plant Nutrition	X	Booklet 2: Soil fertility management and plant nutrition		x	Video 2: Soil Fertility Management	Radio 5: Definition and relevance of soil fertility management in organic agriculture
		Booklet 3: Soil cultivation		x	Video 3: Compost Management	Radio 6: Organic soil fertility management



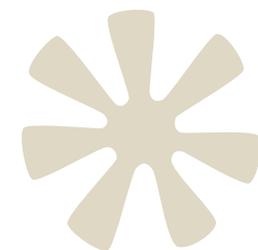
Training Manual Modules	PPT Transparencies	Booklets	Factsheets	Posters	Videos	Radioscripts
Tool for Trainers	Tool for Trainers	Handout for Farmers	Handout for Farmers	Tool for Trainers	Tool for Trainers	Tool for Trainers
M2 Soil Fertility and Plant Nutrition		Booklet 4: Composting		x	Video 4: Water management	Radio 7: Green manuring
		Booklet 5: Water Management		x		Radio 8: Nutrient recycling
						Radio 9: Possibilities to improve water use efficiency
M3 Diversification strategies	X	Booklet 6: Diversification strategies		x	Video 5: Diversification strategies in East West, South Africa	Radio 10: Relevance of farm diversification; possibilities of crop diversification
		Booklet 7: Seed production and propagation		x		Radio 11: Agroforestry issues
						Radio 12: Relevance of seed type, quality and origin
M4 Pest, Disease and Weed Management	X	Booklet 8: Pest and Disease Management		x	Video 6: Pest and Disease management	Radio 13: Natural pest and disease control: How can it work? Farmers' experiences
		Booklet 9: Weed Management		x		



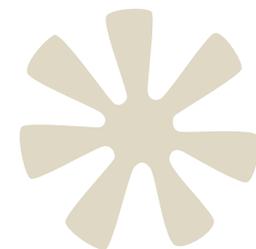
Training Manual Modules	PPT Transparencies	Booklets	Factsheets	Posters	Videos	Radioscripts
Tool for Trainers	Tool for Trainers	Handout for Farmers	Handout for Farmers	Tool for Trainers	Tool for Trainers	Tool for Trainers
		Booklet 10: Post harvest management and storage		x		Radio 14: Efficient weeding without herbicides – approaches and farmers’ experiences
M5 Animal husbandry	X	Booklet 11: Animal Husbandry		x	Video 7: Animal Husbandry	Radio 15: Animal health; contributions of OA; farmers’ experiences
M6 Farm Management	X			x		Radio 18: How to make organic farming profitable; economic performance of OA; farmers’ experiences
M7 Marketing and trade	x	Booklet 12: Marketing		x	Video 8: Marketing	Radio 16: Market potential, marketing techniques; possibilities of collective marketing
	X	Booklet 13: Certification		x	Video 9: Certification	Radio 17: How to obtain organic certification; participatory guarantee systems



Training Manual Modules	PPT Transparencies	Booklets	Factsheets	Posters	Videos	Radioscripts
Tool for Trainers	Tool for Trainers	Handout for Farmers	Handout for Farmers	Tool for Trainers	Tool for Trainers	Tool for Trainers
M8 Conversion to Organic Farming	X	Booklet 14: Conversion		x		Radio 19: How we became organic farmers: organic farmers explain how they adopted organic farming
M9 Crops						
Rice	X		X	x		
Maize	X		X	x		
Millet	X		X	x		
Sorghum	X		X	x		
Fonio	X		X	x		
Cassava	X		X	x		
Yams	X		X	x		
Beans	X		X	x		
Cow peas	X		X	x		
Groundnuts	X		X	x		
Soy	X		X	x		
Vegetables	X		X	x		
Coffee	X		X	x		
Cocoa	X		X	x		
Tea	X		X	x		
Cotton	X		X	x		
Black Pepper	X		X	x		
Papaya	X		X	x		
Banana/Plantain	X		X	x		



Training Manual Modules	PPT Transparencies	Booklets	Factsheets	Posters	Videos	Radioscripts
Tool for Trainers	Tool for Trainers	Handout for Farmers	Handout for Farmers	Tool for Trainers	Tool for Trainers	Tool for Trainers
M9 Crops						
Pineapple	X		X	x		
Citrus	X		X	x		
Mango	X		X	x		
Avocado	X		X	x		
Guava	X		X	x		
Passion fruit	X		X	x		
Vanilla	X		X	x		
Sesame	X		X	x		
M10 Animals						
Bees	X		X	x		
Rabbits	X		X	x		
Poultry	X		X	x		
Goats	X		X	x		
Sheep	X		X	x		
Cattle	X		X	x		
Camel	X		X	x		
Pigs	X		X	x		
Acqua-culture	X		X	x		



TRAINING MANUAL



TRANSPARENCIES



BOOKLETS



FACTSHEETS



POSTERS



VIDEO



RADIO

Reference to:

- > Transparencies
- > Booklets
- > Factsheets
- > Posters
- > Videos
- > Radio scripts

To allow a quick overview of existing tools to a specific module or unit, the associated tools are indicated with an icon on the first page.

The layout of the training manual is divided into three columns:

1. The center column provides the information for the trainer.
2. The left column depicts the PowerPoint slides created to illustrate specific information.
3. The right column provides didactical recommendations for the trainer to be used as a basis for interacting with farmers. It includes ideas for discussions, group works, practical demonstrations, field excursions or experiments.

Detailed explanations for the trainer



Discussion on benefits of organic farming

Divide the participants into three groups (1. multifunctional benefits; 2. climate change, 3. food security). Let each group critically analyze the benefits of organic agriculture. What is needed to boost these benefits in Africa? Let the groups present their results and moderate a plenary conclusion-discussion.

Didactical recommendations for the trainer

A-5 How to use this manual

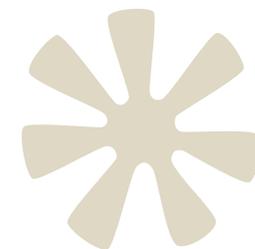
The modular structure of the manual allows for presentation of individual subjects and their combination. The trainer ideally starts reading the manual and then selects the corresponding PowerPoint presentation and other tools based on the needs of the training.

This training manual:

- › Offers a resource basis for trainers with the idea of encouraging individual adaptation and further development of the material according to the needs.
- › Can be used as a guide and source book to implement training programmes.
- › Will help develop the structure of a training course or workshop and provide material and ideas for its organisation.
- › Presents a diverse set of approaches to organic agriculture, from technical guidelines and strategies to commercial orientations, from practical to science-based, from subsistence to export oriented production, from non-certified to certified organic production. However, more locally adapted approaches may need to be added by the trainer;
- › Reflects best organic or sustainable practices, innovative approaches, local solutions and practical experiences in different parts of Africa; it provides an open understanding of organic agriculture as a tool of sustainable agriculture and tries to avoid idealistic approaches.
- › Provides information that helps trainers to understand the organic approach and guide the farmers in decision making and implementation. Focuses on the key aspects and features, it is not a compendium.
- › The geographical focus of the manual is sub-Saharan Africa. Some parts may also be applied to other regions.

Requirements for the trainers:

- › The training manual addresses trainers and resource persons, who are engaged in training activities on organic agriculture.
- › It is anticipated that the trainers have an agricultural background.
- › It is anticipated that the trainers have a good command of the English language. If necessary, they would need to translate into local languages.
- › The trainers may need to locally adapt the content, add learnings and topics relevant for the participants.



- › For some participants, the provided topics or the language might be too complicated, such that trainers may need to simplify and use local examples for illustration.
- › The manual provides a mix of didactical recommendation, from listening, seeing, experience sharing and trying out practices. The trainers may need to provide additional, locally adapted interactive elements and practical exposure.
- › Trainers ideally combine two roles: transferring their knowledge and experience to the farmers by telling them about it; and facilitating the learning process asking challenging questions, creating an atmosphere of learning, providing the opportunity for a positive experience, as well as promoting the participants' self-confidence.
- › It is anticipated that the trainers are familiar with suitable training methods, adapted to the target group of their trainings. Some recommendations on how to proceed:
 - Trainers are recommended to prepare their training program well, addressing the right group of people in the right way, based on the objectives of the training.
 - Which kind of knowledge, awareness and skills do trainers want to develop among the participants?
 - How to arrange the topics in a logical order so as to help the participants find their way through the training?
 - Diverse training methods should be used so that the selected topics can be most efficiently transferred to the participants.
 - During the training, but especially towards the end of a course, trainers should check whether the objectives were reached.

