SUSTAINABLE CONSUMPTION AND PRODUCTION PROJECT

REPORT ON SUSTAINABLE ORGANIC AGRICULTURE (SOA) TRAINING OF TRAINERS FOR MINISTRY OF AGRICULTURE SENIOR STAFF

20th - 24th March 2017

TRAINING CONDUCTED BY KASISI AGRICULTURAL TRAINING CENTRE P. O. Box 30652, Lusaka, Zambia, www.katczm.org 0211 840303/0965 840303







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ACRONYMS

1.	AIDS	.Acquired Immune Deficiency Syndrome.
2.	CBO	Community Based Organisation
3.	CSEF	Civil Society Environmental Fund
4.	GMOs	Genetically Modified Organisms
5.	HIV	.Human Immune Virus
6.	KATC	.Kasisi Agricultural Training Centre
7.	MoA	.Ministry of Agriculture
8.	NGO	Non-Governmental Organisation
9.	SOA	.Sustainable Organic Agriculture
10	LINEP	United Nations Environment Programme

1.0. Introductions

Kasisi Agricultural Training Centre (KATC) was engaged by Ministry of Agriculture (MoA) to train Participants in Sustainable Organic Agriculture. The participants were drawn from all the Ten (10) Provinces of Zambia.

Kasisi Agricultural Training Centre (KATC) offers a variety of sustainable agriculture related courses to small scale farmers, school teachers, extension staff, community based extension workers and community leaders among others. KATC is situated 30km north-east of Lusaka and 10km north-east of Kenneth Kaunda International airport. It was founded in 1974, is owned by the Society of Jesus (Jesuits)-Malawi-Zambia Province. KATC staff have diverse backgrounds which include General Agriculture, Agronomy, Soil science, Plant Pathology, Forestry, Project Management, Agribusiness, etc. The institution focuses on "Sustainable Organic Agriculture". KATC operates across five key strategic areas namely: Training, Extension, Research, Production and lobbying and advocacy

The participants sponsored by UNEP/MOA Zambia were drawn from all the 10 provinces of Zambia. UNEP is working with MOA which is in turn working with KATC on a project called *Sustainable Consumption and Production* in Zambia. Within the broader objectives of the SCP project the collaboration between MoA and KATC is specifically to create awareness on sustainable organic agriculture as a viable alternative farming system and provide training on SOA.

This is a report on the training for MoA senior staff conducted by KATC. The report is structured as follows; Introduction, Training Objectives, Progress on training objectives and workshop expectations, recommendations and conclusions

2.0. Training Objectives

To equip participants with knowledge and skills in Sustainable Organic Agriculture and expose them to technologies and practices under sustainable organic agriculture.

3.0. Process of the training

In order to meet training objectives, the training methods used are as follows:

- Class room lectures
- Group work
- Buzz group discussion
- Plenary discussion
- Practical work and exercises
- Visit to practicing farmer

4.0 Progress on the training objectives

The course objectives were fully covered and this was done through class room lectures, group discussions and assignments, buzz group discussions, plenary sessions, hands on practical work and exercises and a visit to a practicing farmer. The trainer provided guidance to participants and ensured that the participants followed and understood the course material. The trainer equally assessed the participants on their assigned tasks and work.

The participants were exposed to practical and theoretical aspects of SOA. Going by the course evaluation at the end of the course, the participants were satisfied with the course content and delivery process. The importance of SOA in relation to climate change and HIV/AIDS was discussed, with emphasis on SOA practices/ techniques and the nutrition aspects of managing HIV and AIDS.

The course took five (5) days. The first day of the training was more on introductions and tackled more of the theory and a bit of practical aspects of soil organic matter and the critical role that organic matter plays in soil health. The second day of the training, participants were exposed to hands on practical exercises of compost making, and soil and water conservation. Day two closed with a talk on GMOs. The third day was on pest identification and management, and agroforestry (practical and theory), on this third day a mid-point evaluation of the training so far was done. Climate Change, integration of small animals in SOA, and value addition/ agro processing were done on the fourth day of training. On the very fourth day of training, participants were taken on a field tour to a practicing small scale farmer to see the application of SOA. Participants were also taken to the site where small scale farmers are practicing SOA in the production of organic vegetables under center pivot irrigation. The project is funded by the Finish government through Civil Society Environmental Fund 2 (CSEF 2). The training ended on day five (5) after a wrap up session, course evaluation and presentation of certificates to the participants.

5.0. Structure of the Course

The course was tailored in a way that was precise, clear and easy for participants to follow and understand. The training was highly interactive and the trainer mostly used English and to some extent local languages (Nyanja and Tonga). The course contained modules which are designed to equip participants with knowledge and skills in SOA and some cross cutting issues such as climate change, GMOs and HIV/ AIDS.

5.1 Introductions and ownership of the workshop

The course started with introductions. This is to break the ice and get to know each other. All participants present including facilitators introduced themselves. The areas of focus during introduction were:

- a) Name of the participant,
- b) Marital status,
- c) Occupation and
- d) Place of residence (residential address)

Immediately after introducing themselves, responsibilities and duties were identified and shared amongst participants. Free and participatory approaches were used in choosing these leaders. Among the responsibilities and duties which were filled in were those of Chairman, Health officer, Catering officer, Energizer, sticker, House Keeper, Librarian, Time keeper and Prayer Leader

5.2 Ground rules

Basics governing principles of conduct for the workshop were set by participants with the guide of the facilitators. These governing principles helped the workshop to be conducted without disturbance, put the house in order and in respect of all participants' views.

5.3 Expectations

The platform was given to each participant to present their expectations from the workshop and the course at large. Nineteen (19) expectations were recorded. See Annex 10.1

5.4 Course theory

The participants were taught theoretically; the definition of SOA, principles of SOA, and practices of SOA.

5.5 Course practical

During practical sessions, participants were exposed to materials required for and the actual practical steps in making compost. In addition they were taught how to prepare tea manure.

5.6 Field tour

The tour was done in the afternoon. The objective was to show course participants how other farmers who were trained in SOA are implementing the knowledge and skills they acquired. The selected host farmer (visited) is one of KATC trained farmer youth. The farmer received training in SOA in 2012. He adopted the concept and he is producing crops organically. The visited farmer also rears small animals, this was equally a good exposure to participants as they had chance to see the integration of small animals in SOA.

5.7 Mid-Point Evaluation

Half way through the five days of the course a mid-point evaluation was conducted to assess how the course material had been delivered and comprehended by the participants so far. The mid-point evaluation enables gapping/filler sessions in case there are modules which have not well understood by the participants.

5.8 Analysis and rating of different course modules/ Course Evaluation

The course was analysed by module and rated on the scale of 1 to 10. 1 (one) being very bad and 5 (five) being fair whilst 10 (ten) being excellent. The two main areas of assessment were *content* of the module that includes the relevance, completeness, depth and actual material delivered by the trainer. The second area of assessment was the *process* of delivering course material. This assessed how the material in each

module was delivered including timing, methodology and skill used in transferring information relating to subject matter to the participants. See Annex 10.2.

6.0 Certificate presentation

Twenty-four (24) participants graduated and were successfully awarded certificates of attendance at the end of the course. See Annex 10.3

7.0 Meeting expectations of participants

According to the course evaluation, 96% of participant's expectations were met. This was evidenced by the scores obtained during evaluation of the course and by one to one interaction with participants during and after the course sessions.

8.0 Recommendations to Ministry of Agriculture

- ✓ It was observed that during the course of the training questions on how to manage pests and diseases in SOA were frequently raised, it is therefore recommended that the MoA staff be trained in Biological Pest Management.
- ✓ Briefing of the participants on the venue of the training i.e., type of facilities available and what they should expect should be done before the participants sign up to attend the training. If this is not done adequately it leads to participants demanding facilities and services which the institution does not offer and are thus not included in the quoted cost of the training..

9.0 Conclusion

From the course evaluation, it was clear that," all modules were well articulated and understood. The level of confidence and interest expressed by participants after the training clearly demonstrated that the course material/content was comprehensive and that the process of delivering the course content was effectively handled. This was also evidenced during the wrap up session of the course. Above all participants were content and satisfied with the training and expressed confidence in implementing the knowledge and skills acquired in SOA.

10.0. Annexes

Annex 10.1 Participants workshop expectations

10.1.1 To le	earn about SOA
10.1.2 To s	ee the practical aspect of SOA and see small scale farmers practicing SOA
10.1.3 To k	now how to control pests organically
10.1.4 To le	earn how organic farming addresses the issue of climate change
10.1.5 To le	earn means and ways in which soil can be kept fertile organically
10.1.6 To s	ee the commercial part of organic farming for KATC
10.1.7 To k	now how to make compost
10.1.8 To k	now specific types of crops which do well organically
10.1.9 To k	now how farmers can be convinced to farm organically
10.1.10	To be awarded certificates
10.1.11	To be given handouts/ materials after the course
10.1.12	To do a gross margin of organic farming and conventional farming
10.1.13	To learn more the common pests in Zambia
10.1.14	To learn different ways in which to prepare the land before planting
10.1.15	To see the practicality of SOA
10.1.16	To understand the principles of organic farming
10.1.17	To understand the link between organic farming and health
10.1.18	To learn more on green manures
10.1.19	To know what research has KATC done regarding SOA.

Annex 10.2. Evaluation and Scoring of different course modules by Participants

Sustainable Organic Agriculture Course	Total Score (Percent)				
Topics	Total Score		Total St	Total Score (Percent)	
Introduction	8	9	80	90	
Ownership of the workshop	9	9	90	90	
Expectations and ground rules	9	9	90	90	
SOA overview	9	9	90	90	
Soil Organic matter matters/ Soil Fertility Management	9	9	90	90	
Mainstreaming HIV and AIDS	7	8	70	80	
Green manures	9	9	90	90	
Compost and compost making (Theory)	9	8	90	80	
Compost and compost making (Practical)	9	9	90	90	
Seed and seed issues	9	9	90	90	
Genetically Modified Organisms (GMOs)	8	8	80	80	
Soil and water conservation (Theory)	7	6	70	60	
Soil and water conservation (Practical)		9	90	90	
Pest control in SOA (Theory)		10	100	100	
Pest control in SOA (Practical)	9	9	90	90	
Pest control in SOA (Theory & Practical)		9	90	90	
Midpoint evaluation		8	80	80	
Agroforestry in SOA (Theory)	9	8	90	80	
Agroforestry in SOA (Practical)	9	9	90	90	
Animals in SOA	9	9	90	90	
Value addition/ Agro processing	9	9	90	90	
Climate change and SOA	7	8	70	80	
Visit to a sustainable practicing farmer (Briefing)		10	100	100	
Visit to a sustainable practicing farmer (visit)	10	10	100	100	
Putting it all together	10	10	100	100	
Certificate presentation, evaluations & wrap		9	90	90	
up					
Other aspects of the workshop		In percent (%)			
Food		90			
Sanitation	80				
Entertainment	50				
Cleanness of the dormitory/rooms			90	90	

Other Comments

- 1. Participants pointed out that KATC should establish tuck shop to enable participants to access basic needs nearby (talk time, soap, lotion etc.)
- 2. Library must include Audio CD, movies on KATC activities and selected topics on courses offered at KATC
- 3. Leakage of water from showers

Annex 10.3. List of participants awarded Certificates of Attendance			

	NAME	POSITION	PROVINCE	CELL NUMBER	E-MAIL ADDRESS
1	Banda Stanley	SLHO	North- Western	0977682543	stanleybanda@yahoo.com
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