



Final Report Training Course

The Impact of Climate Change and Desertification on Agriculture and Food Security

14-26 May, Ouagadougou, Burkina Faso

FINAL REPORT

Training Program on “ The Impact of Climate Change and Desertification on Agriculture and Food Security”

14 – 26 May 2012

Ouagadougou – BURKINA FASO

First Week

Prof. (Dr) Yassin Mohamed Ibrahim Dagash

The Training program is sponsored by AFTAAC (Arab Fund for Technical Aids to African Countries) and the African Union SAFGRAD (Semi Arid Food Grain Research and Development). The training started at May 14, 2012 for twenty participants from different regions of English speaking African Countries.

The course content comprised a variety of materials from general information to basic subjects, from general and specific facts to statistics, and from specialized materials to research results and findings. The main strategy of information dissemination relied on specifying a focal point or key words for each presentation and then tried to set specific SMART objectives that will cover that subject. Then each participant will suggest the suitable learning outcomes that will map with each of the objectives. The half hour discussion at the end of each presentation will depend largely on those outcomes coupled with the experience of each country.

Normally the presentations of each day were prepared to cover general information, then a certain concept and a brief scientific explanation and lastly some general questions that can encourage the participants for more discussions. This trend will shift the training from continuous lecturing to group participation and discussion.

Each presentation consisted of more than one talk in order to cover a wide range of topics and disciplines and to give the participants the chance to share their experiences. Different types of approaches, modeling, forecasts and projections were thoroughly discussed bearing in mind the traditional differences and socioeconomic considerations.

The program of the first week is attached. It consisted of a set of presentations ranging from 3-4 sessions per day as illustrated in the attached program. Each session included a variety of topics as shown below:

1. Introduction to climate change and Agriculture

a) World Agriculture

- 1. Introduction to climate change and Agriculture**
 - a) World Agriculture
 - b) Climate Change and Food Security
 - c) Risk Reduction: Agriculture and Food Security
 - d) Agricultural and Climate Change
- 2. Climate Change and Agriculture in Africa**
 - a) Adapting Agriculture in Africa to Climate Change
 - b) Assessment of Impact, Adaptations and vulnerability to Climate Change in Africa
 - c) Climate Change, Agriculture and Food Security in Africa.
- 3. Drought Concept**
- 4. Impact of Climate Change on Agriculture and Plant**
- 5. Environment and Plant Growth**
- 6. Climate Change – Sudan Experience**
 - a) Climate Change Adaptation for Sustainable Crop Production
 - b) Enhancing Social Protection and well-being for food security and climate change adaptation
 - c) Urban and Rural Poverty
 - d) Policies and strategies for food security
- 7. Cereal Production and Climate Change**
 - a) Barley Production
 - b) Maize Production
 - c) Corn Production out look
 - d) Wheat Production
 - e) Sorghum Production
 - f) A new challenge for cereal production
- 8. Cereal Gene bank**
 - a) Modern Agricultural approaches
- 9. Water Harvesting**
 - a) Water harvesting
 - b) Water collection
- 10. Organic Farming**
 - a) Organic Farming: Production Healthy, Safe Quality food
 - b) Organic farming: Freedom Farm
 - c) Farming for Healthy Agriculture and Human Health
- 11. Genetically Modified Crops**
 - a) Farm Scale Evaluations of spring sown genetically modified crops
 - b) Genetically modified foods
 - c) Hidden threats: Food from genetically modified crops
- 12. New Agricultural Systems**
 - a) Agricultural Innovation and Agricultural Innovation Systems

- b) The Agricultural Revolution
- c) Agricultural systems in the developing world
- d) Modern agricultural approaches
- e) Post-harvest and off-farm techniques

13. Modern Agricultural Research Techniques

Each two participants are requested to write a daily report for one of the six presentation days expressing the content and their thoughts. The trainee prepared country seminars and presented them in class expressing their own thoughts and country experience. Additionally, the participants were divided into five sections for group discussions and writing a detailed report on the following topics:

1. The Role of Technology in the advancement of African Agriculture
2. Sustainable Agriculture farming systems in Africa
3. Catalyzing Investment for African Agricultural Research
4. The Role of Agricultural Research on Adaptation and Mitigation of Climate Change (Climate Change Research Approach)
5. The Role of Research in the Advancement of African Agriculture Sector.

Final Comments:

I think the training was informative, comprehensive and quite useful. The following are some general observations:

1. The set-up and organization were excellent
2. The material covered was very dense. The advantage of that is the huge amount of information gained but the drawback is that the participants have no time for site-seeing, shopping and recreation.
3. The background of the trainee was quite diverse which enriched the discussions and added more experience for each one.

Prof. (Dr) Yassin Mohmed Ibrahim Dagash
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Second Week

Prof.. Eltayeb E. A. Ahmed

The training programme started on Monday 21 May 2012. It was attended by 20 trainees from 12 African countries (Botswana, Egypt, Eritrea, Ghana, Malawi, Liberia, Lesotho, Nigeria, Sierra Leone, Tanzania, Uganda and Zimbabwe). The training programme continued from Monday to Thursday with lectures, presentations and discussions from 09: in the morning to 17:30 in the afternoon. A site visit was arranged on Friday and Saturday saw the closing ceremony.

The training programmes was designed to enrich the knowledge of trainees on matters related to desertification aridity and land degradation and the possible remedial measures for combating these phenomena. The impact of desertification on natural resources and African agriculture was a central issue in the training programme. Sustainable land management which is a key management in the efforts to combat desertification was given ample coverage.

An interactive approach of training, whereby the trainees were given ample time for discussions and interventions, was adopted. The trainees showed a keen interest in the topics presented to them which was manifested in the lively discussions and intervention which continued sometimes beyond the prescribed time and outside the conference hall.

Details of the programme were as follows: on Monday the trainees were given three sessions. The first on basic concepts on aridity and desertification, the second on Action Programmes and Strategy of Scientific research on desertification and the third on food security and cereal banks, the fourth session was for country presentations.

Three sessions were also given on Thursday. The first on sustainable land management, the second was also on sustainable land management and integrated crop-livestock management and the third was on combating desertification. The fourth session was for country presentations. Four sessions were given on Wednesday as follows: selected biological processes underpinning good farming practices, conservation agriculture and related new farming systems, water management and harvesting techniques and agroforestry and rangeland management.

Four sessions were also given on Thursday. The first was on soil conservation and integrated soil fertility management and the second was devoted to a general discussion and wrap-up. The third and fourth sessions were delivered by invited experts. One on resource mobilization and the other was an overview on UNCCD.

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The programme on the whole was quite successful. The trainees gained a lot of experience on topics related to desertification, its combat and different practices to mitigate its effects and sustain agricultural production in Africa.

I would like to express my sincere gratitude to the Arab League and the AU Office in Burkina Faso for availing me this opportunity to participate in this very vital activity which, I am sure, will mean a lot to the trainees and their countries.

I would especially like to thank Dr. Ahmed Elmekass, Coordinator, AU/SAFGRAD and his supporting staff for the excellent organization of the whole activity.

Prof.. Eltayeb E. A. Ahmed

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