

## **SHORT SUMMARY of PROJECT ACTIVITIES**

**May 15/2000**

### **Low Input Sustainable Agriculture in the Rift Valley, Central Ethiopia UPCD Tier 2 Project 098/S47074-139.**

Ethiopia has the third lowest GNP per capita in the world and shortfall in food, even though agriculture plays a significant role in the country's economy. Currently farmers have difficulty growing crops sufficient for themselves and their income level is extremely low. Better management of soil resources will alleviate rural poverty substantially.

#### **Goals of the project:**

The goals of the project are to enhance the capacity of Ethiopians to contribute to sustainable land use in South Central Ethiopia by:

- a- upgrading human resources of three agricultural training, research and service institutions (Awassa College of Agriculture, Awassa Agricultural Research Center, and the National Soil Research Laboratory) in Ethiopia,
- b- addressing the land degradation problems such as erosion, salinity, soil quality loss, and provide research experience for scientists and extension specialists,
- c- establishing a framework for continuing collaboration amongst four partner institutions (three Ethiopians and the U. of S) in the research for innovative and environmentally sustainable technologies, which are compatible with local conditions in order to increase food production of drylands.

#### **Specific Objectives:**

- 1) To link the three Ethiopian institutions with the U of S to develop land-management practices which could reverse the process of land degradation in the Rift Valley,
- 2) To enhance the capabilities in the Ethiopian Institutions to promote improved land management practices among the farmers in the semi-arid Rift Valley by the adoption of sustainable land management technologies.
- 3) To contribute to the U of S to become a center of excellence for training, education, and research in dryland agriculture and further strengthen their internationalisation initiatives.

#### **Networking, GIS, Field, and Lab Works :**

##### **A) HTML course in Addis Ababa September 15-October 15/1998).**

Twelve staff members from the three Ethiopian collaborating Institutions took part in this course, a number that was much beyond what was planned in the project. All three institutions have now Internet capability. The project provided support to establish the Internet connection to the National Soil Research Laboratory.

##### **B) GIS Training**

Mr. Getachow Demissie was selected from the National Soil Research Laboratory for GIS training and spent three months (July 27-October 25/1999) in Saskatoon. A special computer was arranged for Mr. Demissie with a plotter to exercise three-dimensional reconstruction of the research sites in Ethiopia. The special GIS training was provided by the Saskatchewan Land Resource Center. Preparation is underway to equip the National Soil Research Laboratory with GIS facilities for further work in Ethiopia.

### C) Field and Lab Works

- 1) It took a lot of effort to establish the procedure and selection of the site and farmers that are co-operating with three Ethiopian institutions on field scale experimentation in *Low Input Sustainable Agriculture (LISA)*.
- 2) Based on project document, research carried out by each institution was complied. This was followed identifying research priorities on *Land Degradation* and *LISA*. While the Awassa College of Agriculture controls financial matter regarding the field works, the Awassa Agricultural Research Center acts as main institution for field works and research.
- 3) The National Soil Research Laboratories in Addis Ababa completed characterisation analyses of soils from the experimental sites.
- 4) A car was purchased from Japan, shipped to Ethiopia, and is now available for the field work activities.

Documents related to field works activities are attached to the Project Co-ordination Committees and annual reports.

Within the framework of the project field activities, land management practices for the promotion of technologies including extension activities are done by direct involvement of the farmers. It is agreed that this is a powerful tool in increasing farmer interest and understanding of how to make the best choices from the options available. While the number of farmers involved in the field program is restricted, but at the end of the season a field day helps a large number of farmers becoming aware of low input sustainable agriculture and land degradation problems in Ethiopia. Certainly the increased knowledge of the farmers is an important step towards better farming systems. Despite its high cost, the experimental studies are augmented with “modest levels of inorganic fertiliser inputs, which is consistent with the goals of LISA, as well as considering the food security.”

The lack of sufficient moisture, including droughts is an unpredictable factor that influenced the low crop production last year. Build up of soil organic matter and other soil qualities are expected to reduce the risk in the future.

### D) Newsletter and Poster

- 1) August/98, Newsletter
- 2) January /1999, Newsletter
- 3) November/1999, Poster presented during the Annual Project Directors Meeting in Ottawa.

## **Human Resource Development**

### 1) Staff Training:

In addition to twelve staff members on HTML and one individual on GIS, nine staff members were trained on "*ION EXCHANGE TECHNOLOGY*". Dr. Peiyuan Qian, has provided the training between 5-14 March/1999 in Addis Ababa. A total 22 trained staff members was much beyond (Total 6) what it was planned for the project.

### 2) Graduate Training

Two students Ms. Martha Dawit and Mr. Berket Abebe have arrive in Saskatoon September 1999 and have now successfully completed their term of 8.5 months training. Because of their high marks both were offered scholarships from other researchers at our University. This matter was discussed in the Canadian Co-ordination Committee and Ethiopian Committee was informed together with the AUCC. Taking into account the human resource development for Ethiopia, this move was found in line with Canadian ODA priorities. Regrettably, these students will not work with a topic related to the project but are receiving excellent graduate training.

Considering the experience we had so far with graduate training, the Canadian Co-ordination Committee has decided to make further alteration in graduate training as described below. The Ethiopian Co-ordination Committee was informed and it is hoped that this could be quickly finalised.

The Canadian Co-ordination Committee determine that about \$ 120,000 designated for Graduate Training involving, both Ethiopian and Canadian students. Considering the difficulty of finding Canadian students willing to work one year in Ethiopia, that part of the budget should be translated to the training of Ethiopian students. About \$ 90,000 is available now, and can be used to cover all expenses of three Ethiopian Graduate students. The students may do field work in Ethiopia and enroll the U of S as fully qualified M. Sc. students. This notion is currently under discussions by all parties involved and ultimately will require permission from AUCC as well.

**Other Activities:**

- 1) Based on request, books were bought and together with donated books shipped to Ethiopia.
- 2) Awassa College of Agriculture has signed a Memorandum of Understanding with the U of S College of Agriculture in April 28/99.
- 3) AUCC (Mrs. France Tremblay) has visited the Ethiopian Institutions, May 4-10/98.
- 4) Three Ethiopian Institutions has signed agreement with each other to promote co-operation in Ethiopia (June 3/98).
- 5) Several contacts were made with the Alamaya University in Ethiopia for the arrangement of the Graduate works, as the Awassa College of Agriculture currently cannot provide Graduate program (Letters are in the memorandum file).
- 6) A General Agreement was reached on Visiting Graduate students in the U of S in August 6/99.
- 7) A www page was established for the project (currently under review).
- 8) Ethiopian Minister of Agriculture was visited (June 3/98) to ensure his support.
- 9) Dr. Fissaha Itanna has spent 2 months in October-November 1999 as a visiting scientist with Dr. Anderson and additional 3 months was arranged for him to work in Agriculture Canada (Feb-May/2000). Dr. Itanna has provided his input on several matters on project, during his stay in Saskatoon.
- 10) The preparation is underway to find two individuals for mid-term project evaluation.
- 11) Regional Land Degradation meeting for the project is also underway and it will take place in September, 18-23/2000.

**Project management and reporting:**

- 1) First Project Co-ordination Committee Meeting October 29/1997, Awassa College of Agriculture.
- 2) Ethiopian Committee Meeting January 22/1998, Awassa College of Agriculture.
- 3) Second Project Co-ordination Committee (April 11-27, 1998), in Saskatoon. The Ethiopian Committee members were introduced agri-business companies and local farmers.
- 4) Third Project Co-ordination Committee Meeting May 21-22, 1998, Awassa College of Agriculture.
- 5) Fourth Project Co-ordination Committee Meeting October 12/1998, Awassa College of Agriculture.
- 6) Meeting with D. W. Anderson and Ethiopian Co-ordination Committee April 26-May 12/1999.
- 7) Fifth Project Co-ordination Committee Meeting July 27-August 11/1999, in Saskatoon.
- 8) Canadian Co-ordination Committee Meetings (May/2000).

As per contribution agreement all activities are reported to AUCC through U of S International Office twice a Year (January 31<sup>st</sup> and July 31<sup>st</sup> of each year).