



# Improving Productivity & Market Success of Ethiopian Farmers

Report on IPMS Environmental Training

July 23-24, 2007

Axum Hotel, Mekelle, Tigray, Ethiopia



Canadian International  
Development Agency

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Federal Democratic Republic of Ethiopia  
MINISTRY OF AGRICULTURE AND  
RURAL DEVELOPMENT

# Improving Productivity & Market Success of Ethiopian Farmers

## **Report on IPMS Environmental Training Workshop**

**July 23-24, 2007**

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## **1. Introduction**

A two days training workshop on Agriculture and the Environment was held from 23 - 24 July, 2007. Participants included 9 IPMS Pilot Learning Wereda Research and Development Assistants (RDAs), ten wereda and four Regional Natural Resource Management experts. The objective of the training was

- a) Familiarisation and training of IPMS and government counterpart staff in integrated agricultural and environmental management, particularly for participants for whom the topic was new;
- b) Review of the Environmental Management Plans for each Pilot Learning Wereda (PLW);
- c) Strengthen the monitoring of the implementation of mitigating measures designed to mitigate environmental impacts, as designed and agreed at the May, 2006 workshop at Yirgalem.

## **3. Presentations**

There were three main topics covered by the consultant-trainer:

- (i) Agriculture and the Environment (Annex 3);
- (ii) Environmental Impact Assessment (Annex 4); and
- (iii) The IPMS Environmental Impact Assessment Screening Report (Annex 5).

### *Agriculture and Environment*

Regarding Agriculture and Environment, the consultant-trainer defined the environment as dealing with two dimensions, the biophysical and the human aspects and the relationships between them. He stressed an integrated approach to the two topics. He demonstrated that human activities, particularly agriculture, and the environment have been inseparable for thousands of years in Ethiopia. However, some agricultural activities in Ethiopia have been unsustainable.

In conclusion, there needs to be a balanced relationship between human activities and agriculture if the environmental is to be sustainably managed. This is because if eco-systems are unsustainable, then agriculture becomes also unsustainable. As a result, livelihoods dependent on agriculture will suffer the consequences. This is why IPMS considers this environmental training crucial not only in supporting its objectives to avoiding any negative environmental impacts, but also to ensure the long-term sustainability of its interventions in the agricultural sector.

### *Environmental Impact Assessment*

Following the topic on Agriculture and Environment was a training session on Environmental Impact Assessment (EIA). The concept of EIA has been operational for some 30 years. EIA is a method of ensuring that newly introduced projects or activities are environmentally sustainable, by identifying potential environmental impacts of the project or activity, and mitigating these potential impacts.

It was noted that impacts could arise not only from the project affecting the environment, but the environment could have impacts on the project. The objective of EIA is therefore to predict the negative impacts and suggest appropriate modifications will be made to ensure environmental sustainability. If projects could not be modified to ensure environmental safety/ sustainability and the

cost of the project (economic, aesthetic) is much higher. Therefore EIA is a friend of development - not otherwise. It was observed that only in rare cases are projects closed due to potential environmental impacts. In most cases, so long as action is taken early on, it is possible to modify the project design to avoid the problem.

Seven different steps applied in EIA, from screening to monitoring were defined. All the steps and what are needed to be done in each step were also elaborated in detail. This will help the trainees to acquaint themselves and understand the terminologies and their meanings to easily to understand the whole process of EIA. In Ethiopia, there is a separate proclamation regarding EIA and it is the project owner that needs to conduct and present the EIA report to the responsible body in the country depending on the scale of the project's operation. For example, if a project is operated at a national level, the Federal Environmental Protection Authority (EPA) reviews the EIA and takes appropriate action. However, if the project is operated by the regions, the regional environmental bodies will be responsible to review and accept or reject the projects. Under normal conditions, very small-scale projects do not require EIA.

#### *IPMS Environmental Assessment and Screening Report (EASR)*

The third part of the training dealt with the IPMS Environmental Impact Assessment and Screening Report. Even though each individual IPMS intervention is small, the IPMS programmes are in most cases intended to encourage many farmers to adopt many of these innovative techniques. Hence, the project has to take precautionary measures to care for possible short and long term environmental impacts as a result of these interventions in the PLWs. During this exercise, the Canadian International Development Agency (CIDA)-designed approach to EIA for small rural projects was introduced.

In all 8 PLWs, where IPMS interventions could potentially result in negative environmental impacts, EASRs had previously been prepared. One EASR is prepared for all of the activities to be conducted in a single PLW that could have environmental impacts. Each EASR describes the activities concerned, the project surroundings, potential environmental impacts and concerns, recommended mitigating measures, potential cumulative or interactive impacts, potential effects of the environment on the project, the nature of public participation in the process, and proposed follow-up programme. The heart of the EASR is a matrix of potential impacts and planned mitigating measures.

Following on from the EASR each PLW has an Environmental Monitoring Plan which should be regularly followed.

#### **4. Environmental Monitoring**

In the previous, 2006 training workshop at Yirgalem, the EASR system had been introduced, and draft EARSs were discussed by the trainees at that time. The participants of that workshop had come up with minor modification of the reports, and had then developed indicators for monitoring the concerned activities and implementation of the recommended mitigating measures. They had also come up with some additional mitigating measures and possible indicators for the new specific interventions. Furthermore, they had identified who, how, when and where the information should be collected. As noted above, this information was subsequently compiled into Environmental Monitoring Plans (EMP): one for each PLW.

It was noted, however, that the monitoring had not been carried out as expected. It was therefore necessary to follow up the matter, review the monitoring system, and find a way of ensuring that regular monitoring would become an integral part of the regular activities in the IPMS programme.

To support this effort, the consultant-trainer had designed and prepared Data Collection Sheets for all of the PLW that had EASRs. These sheets are based on the monitoring requirements of the Environmental Monitoring Plans. Instead of just giving a list of indicators required, they constitute the actual report form. The writer simply fills in the indicators according to the instructions given (ie., who collects, when, etc.). It is hoped that the simplicity of filling the forms in will improve the implementation of the system. It was further agreed that these forms would be filled in by the RDAs as part of the regular 6-monthly IPMS reporting system.

#### **5. Regional Perspectives and Responses**

Staff from each region presented very interesting and useful regional perspectives on the EASR and the EMPs which were reviewed in detail by break-out groups representing each region concerned. They covered the environmental monitoring they had done, and made many suggestions for improving the EMPs.

In the case of the new PLWs, Goma and Bure, new EASRs and EMPs were developed. These were presented by the concerned teams, and agreement was reached on improvements to the Data Monitoring system. The RDA from Goma and the wereda NRM expert promised to prepare detailed EMP plans as soon as go back to their respective PLWs.

#### **6. Agriculture and Environment: Follow-up from Previous Workshop**

The 'follow-up' aspect of the workshop was well catered for by two excellent presentations by participants:

##### *Coffee Processing*

Wolde-Berhan Kuma, of SNNPR Regional Environmental Protection Agency, who had attended the 2006 workshop which included a focus on the environmental impacts of coffee processing, made an

outstanding presentation. He showed the participants a film he had made, as a result of being inspired by the Yirgalem workshop.

The film:

- (i) created heightened awareness of the issues,
- (ii) presented the technical aspects of good practice, and
- (iii) demonstrated how training such as the training given at the Yirgalem workshop encourages and contributes to ongoing environmental awareness and management practices.

Ato Wolde-Berhan was heartily congratulated by the workshop participants for his commendable efforts and very worthwhile contribution to the workshop, and to the topic of mitigation of coffee processing impacts throughout Ethiopia. Ato Wolde-Berhan's work was recognised to be an indicator of the value of the IPMS environmental workshops.

#### *Groundwater Issues in Atsbi Wereda*

Another very interesting presentation was given by Hailay Berhane, who had taken up another subject from the Yirgalem workshop: the question of potential lowering of the water-table in Gergera watershed, Atsbi Wereda, resulting from increased water abstraction encouraged by the IPMS programme. This had been highlighted by Kahsay Berhe at Yirgalem as an example of interaction between agriculture and environment, in which hydrological research and analysis were called for to address the potential problem.

Ato Hailay made a power-point presentation, outlining the situation in Atsbi, the soil and water conservation activities that had been promoted there, and the issues at stake in determining actual or potential lowering of the water-table.

The presentation was much appreciated by the participants, who agreed that a field trip to Atsbi to examine the situation on the ground would be appropriate.

## **7. Field Visit**

The objective of the field visit was to observe the balance in the Gergera watershed between agricultural activities and the environment. There had been concern that the water abstraction arising from enhanced agricultural activities (e.g. irrigation) might deplete the groundwater to the point of getting it out of balance with the inflows, and eventually beyond the reach of the poorer members of the community. It was planned that the participants would see the extent of the irrigation activities and their potential environmental impact, particularly on ground-water.

The participants all reached the Gergera watershed, and were able to appreciate the environmental setting, and the delicate balance between agricultural activities and the environment. However, due to heavy rainfall, the visit was limited to the first phase, i.e., the upstream watershed, where the participants were able to see check-dams and other systematically implemented soil and water

conservation projects. It was therefore not possible to view the small-scale irrigation schemes at first hand.

## **8. Conclusion and Outputs**

The two-day training workshop was closed at about 18:00 hrs. The workshop had enjoyed a very lively and active discussion by participants. Although it was noted that environmental monitoring needed strengthening, the data collection system was streamlined, and renewed commitments made to integrate it into the regular 6-monthly IPMS reporting system.

Specific outputs were new EASRs and EMPs for Goma and Bure, revised EMPs for all the other PLWs, and agreed new Data Collection Sheets for the streamlined monitoring system.

In addition, the workshop had demonstrated tangible outcomes from the previous 2006 workshop, and expectations were high that there would be further initiatives in integration of agriculture and environment arising from the present workshop.

**Annex 1. Programme for IPMS Environmental Training, Axum Hotel, Mekelle, Tigray,  
July 23-24, 2007**

<b>Date</b>	<b>Time</b>	<b>Topic</b>	<b>Speaker/Facilitator</b>
<b>Monday, 23 July</b>	8:00-8:30	Registration	Kahsay Berhe
	8:30-8:40	Welcome address	Dr. Berhanu Gebremedhin
	8:30-9:00	Introduction to IPMS and objectives of the training	Kahsay Berhe
	9:00-9:30	Agriculture and the Environment	Ian Campbell
	9:30-10:00	Example: Environment and Agriculture (Atsbi)	Hailay Berhane
	<b>10:00-10:15</b>	<b>Health break</b>	
	10:15-10:45	Environmental Impact Assessment	Ian Campbell
	10:45-11:30	IPMS Environmental Assessment and Screening Report	Ian Campbell
	11:30-12:00	Regional perspectives and plenary discussion (5 minutes each)	Ian Campbell /Kahsay Berhe
	<b>12:00-13:30</b>	<b>Lunch break</b>	
	13:30-15:00	Review and filling in of EMPs by Regional Groups	Ian Campbell /Kahsay Berhe
	<b>15:00-15:20</b>	<b>Health break</b>	
	15:20-16:40	Group reports	Ian Campbell/Kahsay Berhe
<b>Tuesday, 24 July</b>	8:30-10:30	Development of EASRs and EMPs for Goma and Bure	Ian Campbell /Kahsay Berhe
	<b>10:30-10:45</b>	<b>Health break</b>	
	10:45- 11:15	Bure Group report	Ian Campbell /Kahsay Berhe
	11:15-11:45:	Goma Group report	Ian Campbell /Kahsay Berhe
	11:45-12:15	Conclusion and way forward	Ian Campbell /Kahsay Berhe
	<b>12:15-13:15</b>	<b>Lunch break</b>	
	13:15-18:00	Field visit to Gergera watershed (Atsbi)	Ian Campbell /Kahsay Berhe

## Annex 2. List of participants in the Environmental training, Mekelle, Tigray, July 23-24, 2007

No	Name	Organization	Address			
			P. O. Box	E-Mail	Phone	Fax
1	Berhanu W/berhan	Alaba, OoARD Expert, NR Team	P.O. Box 21, Alaba Kulito		0465 560039	0465 560043
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4	Eyob Alemayehu	Mieso OoPRD Expert, NRM			0911995998	
5	Hailay Berhane	Atsbi, Head, OoARD			0344 410285	
6	Bubu Haile	Dale OoARD, NRM			0462 251515	
7	Kassegne Tsega	Fogera OoARD Expert, Land Survey			0584 460546 0918705203	
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14	Mohamed Siraj	Goma NRM				
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