

## Trash lines as indigenous soil erosion control in Kaffa Zone

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Farmers in every location have the intention of increasing their crop productivity from their land. For the majority of farmers, land degradation through soil erosion is the major problem in many parts of Ethiopia. Because of improper continuous cultivation for many years, the crop yield has been gradually declined. As a result, application of artificial fertilizer comes to the farmer's mind directly, assuming that yield is only affected by the absence of fertilizers. Despite of fertilizer application, the farmers do not get yield increased but observe opposite.



Trash lines put across slope for preventing soil erosion from farmland

FRG member farmers in the Kaffa Zone have been carrying out a research on reducing soil erosion on slope farmland together with Bonga Agricultural research Centre. The farmers commented on this problem saying that it was due to the run off of applied fertilizer with eroded soil on the slope. The FRG members also shared their traditional method of soil erosion control "trash lines" in their sloping farmland using crop residue and/or weed. This was not by constructing structure based on engineering design and survey of experts but simply by farmers themselves. They justified that there is a need to cultivate slopes because of the shortage of leveled land. They knew that some kind of measure needed to be taken to prevent soil erosion on the slope, but conservation works needed soil bunds or *fanyajuu* terrace construction which required labor and the loss of land for embankments. They put trash lines across slopes after harvesting. They also shift trash lines every season since the trash decomposes and is applied as organic matter to the soil. It has double advantages of erosion control and organic fertilizer for the next season. Previous researches evaluated and recommended that this method was effective on less than 15% slopes, provided that it was placed according to contour lines. The traditional method does not hold engineering accuracy but is still effective to control erosion. The FRG members shared general

comments that this traditional method could be modified by incorporating contour surveys with the help of Development Agents. (gebremichaelaby@gmail.com)

## Take the first step to Extension material development

Hiroshi Kikuchi, Short Term Advisor

Promotion of development of extension materials by the researchers is one of FRG II's core activities. The 'Extension material development workbook' that aims to guide researchers to take the first step of developing materials, has been prepared. Using the workbook, a two-day workshop was conducted with selected researchers in February 2013. During the workshop, researchers learnt basic theories and design of extension materials as well as some tips for MS word operation using examples. They also developed prototype materials based on their own research results. Participants had active and fruitful discussions. Developing extension materials is the key process to thinking about how to apply research outputs into actual farming. It is expected that every researcher considers how researches can be more applicable through the extension material development. The workbook will be published from the project for wider circulation.

## Sharing Experiences between Ethiopia and Madagascar

Researchers visited each country

Ethiopian and Malagasy agricultural researchers have started learning from each other since last year. A team of Malagasy researchers from FOFIFA (Malagasy agricultural research institute) visited Ethiopia last September to learn about the rice development in the country as well as FRG II's activities on promotion of participatory research. During the team's visit, FOFIFA and EIAR discussed possible cooperation between the two for researchers' capacity development in the area of rice research and participatory approach.

A team of Ethiopian researchers visited Madagascar in January this year to share experiences on rice production and research in Madagascar. The team discussed and agreed with the FOFIFA management that EIAR's FRG II Project would accommodate Malagasy researchers in FRG approach training program while Ethiopian rice researchers would be trained in Madagascar. Practical Ethio-Malagasy cooperation plans to start by three Malagasy researchers attending a FRG approach training to be held in April at Adami Tulu Agricultural Research Centre.

## OTHER INFORMATION RELATED TO THE PROJECT

The following publications are available at FRG II Project Office.

- Seminar proceedings No.5: Seed Demand Assessment: Practice, Challenges and Options
- FRG II Research Inventory, October 2012