

## "Seed for Farmers": integrating formal and informal seed systems



A seminar on "Seed for Farmers" was held on August 12, 2010 at Ethiopian Institute of Agricultural Research (EIAR). Participants from higher learning institutes, public research institutes, public extension services, NGOs, parastatal and private seed enterprises, and donor agencies gathered to discuss the seed system of the country. Eight papers were presented during the seminar.

An ideal seed system which fits to the Ethiopian context is required to accommodate diverse needs under different socio-economic conditions as well as for benefit of short and long terms. Professor Yoshiaki Nishikawa (Nagoya University: NU) in his keynote presentation introduced the potential impact of integration between scientific knowledge based formal system and local knowledge based informal seed system through case studies from Burkina Faso and Japan<sup>1</sup>. Dr Friew Mekbib (Haramaya University) also emphasised that integration of the informal and formal seed systems was the way to enhance the knowledge which farmers had been managing their seed according to their given local conditions through support by formal systems.

The formal seed system in the country has been implementing scaling up of improved variety based technical packages to strengthen the research-extension linkage and improved access to available technologies in the country. Dr Abebe Atilaw (EIAR) described this by presenting general trend in the production of seeds for major crop. The growth of formal seed production has been high in the last few years. However, Dr Abebe described that improved seed coverage so far is only around 6% of the total cultivated area due to insufficient availability of quality seed, the focus on few crops by the formal system, absence of seed producers, inefficient seed distribution system, weak variety release and quality control system, etc. Mr Kenichi Banba (Quality Seed Promotion Project: QSPP) presented the result of his study on seed value chain and pointed out that the market price of seed did not reflect seed quality. He stressed that quality based pricing was the key to seed production increase.

Potential of informal seed system is high. Community seed bank (CSB) has been one of the strategies to maintain and utilise biodiversity at community levels so that farmers are able to access diverse options. Mr Genee Gezu (Ethiopian Organic Seed Association: EOSA) presented the experience of a CSB project implemented by EOSA. Mr Genee described that the CSB positively contributed to the conservation and sustainable use of crop varieties by the community. Results of a study on seed related interventions by EOSA (CSB), SG2000 (hybrid maize) and FRG (irrigated improved vegetable) showed, as it was presented by Ms Seiko Fukuda (NU), that while CSB maintained more choices for farmers, all cases could provided similar income increase to farmers. According to the study, farmers were able to manage well hybrid and

improved varieties, which gave them high income, however it might be associated with higher risks while CSB could contribute both to agro-biodiversity and seed security for farmers.

One of the problems public research institutes in Ethiopia faced in general was ever increasing demand for seed they were asked to produce. It eventually forced them into tapping the potential of informal seed production. One such example was by Melkassa Agricultural Research Centre (MARC) in collaboration with Farmer Research group Project (FRG) and Tropical Legume II Project (TL II) for ensuring both availability and accessibility of seeds of improved bean varieties through farmers' informal seed system. Mr Endeshaw Habte (MARC) claimed that both projects enabled relatively a large number of farmers living in a less accessible area to obtain improved varieties. Access to other inputs, quality of seed recovered, partners' commitment, field management for seed production, traceability of seed after harvest, storage facility and seed prices were among the challenges reported.

Another example of public research institute's attempt to promote informal seed system on improved maize was presented by Mr Bedru Beshir (MARC/NU). MARC implemented FRG based research on community seed production in collaboration with, church and Oromia Seed Enterprise. The project showed better seed dissemination efficiency within a limited area but technical and organisational constrains became apparent to maintain isolation distance and quality control.

A project on informal forage seed production implemented by Adami Tulu Agricultural Research Centre (ATARC) was presented by Dr Able Ebro (ATARC). Value chain of forage seed was considered from planning stage so that variety selection, field management, marketing and organisation for marketing were worked out spontaneously. The project showed that forage seed production as well as forage cultivation had a potential to improve farmers' income from livestock. It may need further analysis of forage seed production in livestock-crop systems.

The participants largely agreed that dual seed systems of formal and informal contribute to ease farmers' constraints on access to seed, improve productivity thus increase income and strengthen farmers coping strategies under changing economic and natural environment in a longer term. There are, however challenges remaining to establish an integrated seed system which is functional, flexible and efficient. The seminar has shed light to the following questions which need to be addressed:

- 1) What type of public and private interventions is required to better integrate formal and informal seed subsystems in the short and long-term for the different agro-ecologies, type of crop, and farming systems? And who should take the responsibility? What are the role of each stakeholder in its process?
- 2) How quality of seeds is maintained by both formal and informal systems and what should be done to ensure quality?
- 3) What specific support is required for the informal seed subsystem to ensure the availability of quality seed at reasonable price at the required time? Are there specificities between marginal and potential areas?

The seminar was organised by Farmer Research Group Project II (FRG II) of EIAR/JICA, Quality Seed Promotion Project (QSPP) of MoARD/JICA and Nagoya University. The organiser wants to continue facilitating discussions among stakeholder for answering above questions and contributing to establishing seed systems through which farmers can have better access to seed of what they need.

The seminar's proceedings will be compiled and available to the public soon.

1. Professor Nishikawa's study in Burkina Faso was funded by JICA and Mitsui Co. Environment Fund.

### OTHER INFORMATION RERATED TO THE PROJECT

- The project's website has been set up.  
<http://www.jica.go.jp/project/english/ethiopia/001/>
- If you have been forwarded this newsletter and would like to receive it in future, please send e-mail to <research4farmers@gmail.com>