Through a vibrant and pluralistic seed sector, quality seed of superior varieties are available and affordable to a larger number of farmers, thereby contributing to agriculture for food security and economic development in Ethiopia

DETAILS OF COVER PHOTOS

From left to right

- A farmer monitoring a potato field at Bilisa SPC, Gemochis woreda
- Clustered wheat farms under Haqan Gudina SPC being visited by farmers, stakeholders, and HU officials
- A farmer sharing his experiences on maize seed (Rare 1) production at Abdi Jalala SPC, Chiro Woreda (Page i)
CONTRIBUTORS

Kemal Kasim
Knowledge Sharing and Capacity Development (KSCD) Innovator

Dandena Gelmesa
Seed Innovator

Ashebir Demie
Partnership and Private Sector Innovator

Reta Wagery
Agri-business Innovator

Nigussie Dechassa (PhD)
Scientific Coordinator
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<th>Description</th>
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<tr>
<td>SPCs</td>
<td>Seed Producer Cooperatives</td>
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<tr>
<td>LSB</td>
<td>Local Seed Business</td>
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<td>COBFU</td>
<td>Chercher Oda Bultum Farmers Union</td>
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<td>ISSD</td>
<td>Integrated Seed Sector Development</td>
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<tr>
<td>McARC</td>
<td>Mechara Agricultural Research Centre</td>
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<tr>
<td>FARC</td>
<td>Fedis Agricultural Research Centre</td>
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<tr>
<td>FBSM</td>
<td>Farmer Based Seed Multiplication</td>
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<tr>
<td>CAiLR</td>
<td>College of Agro-industry and Land Resource</td>
</tr>
<tr>
<td>HU</td>
<td>Haramaya University</td>
</tr>
<tr>
<td>BOA</td>
<td>Bureau of Agriculture</td>
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<tr>
<td>Qt</td>
<td>Quintal (a unit weighing 100 kg)</td>
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<tr>
<td>NGOs</td>
<td>Non Governmental Organizations</td>
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<tr>
<td>DAs</td>
<td>Development Agents</td>
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<tr>
<td>KATVET</td>
<td>Kombolcha Agricultural Technical Vocational</td>
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<tr>
<td></td>
<td>Educational Training</td>
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<tr>
<td>DLS</td>
<td>Diffused Light Storage</td>
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Greetings to all of our readers in Ethiopia and abroad! This is the very first edition of the ISSD Oromia East magazine, and we are pleased to share it with you. The ISSD programme aims to strengthen the development of a vibrant, market-oriented, and pluralistic seed sector in Ethiopia.

In a changing rural context, where smallholder farmers are constrained by multiple challenges on a daily basis, a one-way communication is obsolete. The element that is often missing in development programmes is a two-way communication between decision makers, experts, and beneficiaries. Our experience in the field of communication made us to realise the importance of diverse communications to effect a wider dissemination of knowledge and information. It is based on this background knowledge that, the ISSD programme has been making a number of interventions to promote effective communications among partners and stakeholders. This magazine aptly exemplifies the benefits of a two-way communication among stakeholders engaged in meeting a common objective.

The magazine will give a glimpse of the activities of the ISSD Oromia East programme. It specifically focuses on the efforts the programme has been exerting to increase availability of affordable quality seeds of desirable crop varieties to a large number of farmers at local levels through enhancing the capacity of Seed Producing Cooperatives (SPCs) in the region.

I wish you good reading!

Kemal Kasim, Knowledge Sharing and Capacity Development Innovator

The information and success stories contained in this magazine have emanated from reflections obtained and experiences gained at the grass-roots level from farmers, local organisations and other stakeholders. With this edition, we hope to share knowledge and information about the ISSD Oromia East programme.

The magazine is intended to serve the ISSD Oromia East programme as a vehicle of disseminating its activities and success stories. It is generally hoped to provide readers with an insight into the activities and achievements of the programme during the time spanning from late 2013 to mid-2014.

The information and success stories contained in
Seed is a basic input for agricultural production. One has to make a distinction between seed as a grain (for consumption) and seed as a planting material. Seed as a planting material is a demanding commodity in the sense that it has to be of high quality to generate high yield. Seed quality constitutes four basic aspects: physical quality (freedom from admixtures), physiological quality (optimum internal conditions), genetic quality (the right variety or cultivar), and seed health (freedom from diseases and pests).

Quality seed is a scarce commodity in Ethiopia. Therefore, most farmers plant grains rather than seeds, sustaining yield reductions of at least 30%. This is because there is no enough seed supply. Seed suppliers in Ethiopia are mostly public institutions such as research and agricultural universities or public seed enterprises. However, the amount of seeds the public institutions supply is very small compared to the demand. A few private seed companies also supply seeds. However, they are profit-oriented and do not supply seeds of crops that are important for food security particularly self-pollinated, open-pollinated, and vegetatively propagated crops. Therefore, smallholder farmers benefit little from these supplies.

As a whole, the supply of quality seed does not match its demand in Ethiopia. Thus, aimed at contributing to the nation-wide efforts of increasing household and national food security and economic development, the ISSD programme has initiated and established a system of improving the availability of quality seeds through capacitating smallholder farmers as seed producing entrepreneurs, supporting private seed sector development and institutionalising seed sector development using partnership projects. The programme has registered considerable achievements in Ethiopia in increasing the supply of quality seeds to farmers at affordable prices.

This magazine describes activities and achievements of the ISSD programme in eastern Oromia region. It is hoped to give our readers an insight into the challenges, opportunities, and the general prospect of the seed sector development in Ethiopia.

_Nigussie Dechassa (PhD), Coordinator of the ISSD Ethiopia Programme, Oromia East Unit_
The Integrated Seed Sector Development (ISSD) Programme in Ethiopia: Overview

The ISSD Ethiopia programme is implemented by a consortium of partners including four universities (Bahir Dar, Haramaya, Hawassa, and Mekelle), Oromia Seed Enterprise, Ethiopian Seed Association, and Centre for Development Innovation (CDI) of Wageningen University and Research Centre. The programme is implemented in four regions [Oromia, Amhara, Tigray, and Southern Nations, Nationalities and Peoples’ Region (SNNPR)] in the country in collaboration with several partners at national, regional, and local levels. The financial support is from the Dutch Ministry of Foreign Affairs through the Royal Netherlands Embassy in Addis Ababa.

The first phase of the ISSD programme was implemented from 2009 to 2011 mainly through the LSB (Local Seed Business) project, with 34 Seed Producers’ Cooperatives (SPCs) in the country. Under the LSB scheme, the LSB farmer groups have been supported to become technically better equipped and more commercial in their seed production and marketing efforts, as well as to become more autonomous in their operations in the seed sector.

Later, ISSD Ethiopia phase II programme was launched in January 2012. This phase of the programme was launched with the vision of realising a vibrant and pluralistic seed sector development, where quality seed of superior varieties become available and affordable to a larger number of farmers, thereby contributing to agriculture for food security and economic development in the country.

Components of ISSD Ethiopia Programme Phase-II

The objective of the ISSD programme phase II is to strengthen the development of a vibrant, market oriented and pluralistic seed sector development in Ethiopia. The programme follows the ISSD development principles in targeting its activities at specific sectors, including local seed businesses (LSBs), private seed producers (operating at a regional scale) and seed companies (operating at a national scale). The programme also promotes institutional innovation in the sector through partnership components. In addition, the programme supports services addressing different sectors, including research and studies, sharing experiences and lessons learnt, and capacity development. Furthermore, the implementation of enabling policy frameworks is supported (Figure 1) by the programme.

Figure 1: Components of the ISSD Ethiopia programme phase-II
Oromia East ISSD Unit is one of the five implementers of the programme, which is hosted by Haramaya University operating in the East and West Hararghe Zones of Oromia National Regional State. The unit works to promote seed entrepreneurship at local levels, thereby increasing farmers’ access to and availability of quality and quantity seed at affordable prices in the region. In the second phase of the ISSD programme, it was planned to scale up the number of LSBs through local partnership arrangements with different organizations operating in the region. Accordingly, the programme has been supporting SPCs in collaboration with different stakeholders, namely, woreda agricultural development and cooperative promotion offices, research centres, unions, agricultural colleges and NGOs. The stakeholders have been supporting the SPCs in accessing basic seed, strengthening their organisational capacity, infrastructure facilities, like offices, seed stores, office equipment, farm tools, implements, and machinery as well as technical supports, market information, and seed marketing skills. Currently, more than 40 SPCs have been established in the region by the programme (Table 1).

The key partners engaged in LSB scaling up include HU-Research and Extension Office, HU-College of Agro-industry and Land Resource (CAiLR), Fedis and Mechara Agricultural Research Centres, Kombolcha ATVET College, Chercher Oda Bul tum Union and CARE East Hararghe field office. The majority of the established SPCs have started production and marketing of seeds of different crops and varieties. Volume of seed produced by the SPCs are also increasing from year to year and contributing significantly to meeting the region’s seed demand (Figure 2).

Table 1: Summary of established SPCs in East and West Hararghe Zones

<table>
<thead>
<tr>
<th>Implementers</th>
<th>No of LSB site</th>
<th>No of woreda</th>
<th>No of farmers in the SPCs</th>
<th>Crop</th>
<th>*No of variety</th>
</tr>
</thead>
<tbody>
<tr>
<td>HU- ISSD Unit</td>
<td>5</td>
<td>5</td>
<td>401 353 48 11.97</td>
<td>Maize, Groundnut, Potato, Wheat, Common bean, Onion</td>
<td>12</td>
</tr>
<tr>
<td>HU-Research</td>
<td>9</td>
<td>6</td>
<td>408 312 96 23.53</td>
<td>Potato, Wheat, Groundnut</td>
<td>5</td>
</tr>
<tr>
<td>HU-CAiLR</td>
<td>8</td>
<td>5</td>
<td>1176 1064 112 9.53</td>
<td>Teff, Maize, Common bean, Wheat, Potato</td>
<td>8</td>
</tr>
<tr>
<td>FARC</td>
<td>8</td>
<td>3</td>
<td>935 718 217 23.21</td>
<td>Groundnut, Sorghum, Maize, Potato</td>
<td>5</td>
</tr>
<tr>
<td>McARC</td>
<td>3</td>
<td>3</td>
<td>120 119 1 0.83</td>
<td>Sorghum, Wheat, Finger Millet, Teff</td>
<td>2</td>
</tr>
<tr>
<td>KATVET College</td>
<td>3</td>
<td>2</td>
<td>375 350 25 6.67</td>
<td>Potato, Wheat</td>
<td>4</td>
</tr>
<tr>
<td>Chercher Oda Bul tum Union</td>
<td>5</td>
<td>2</td>
<td>763 657 106 13.89</td>
<td>Common bean, Teff, Maize</td>
<td>4</td>
</tr>
<tr>
<td>CARE-East Hararghe Office</td>
<td>3</td>
<td>1</td>
<td>176 111 65 36.9</td>
<td>Maize, Wheat, Sorghum</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>19</td>
<td>4354 3684 670 15.38</td>
<td>9</td>
<td>32</td>
</tr>
</tbody>
</table>

*There are overlapping of woredas and crop varieties*
The ISSD programme aims also at strengthening small and medium-scale private seed producers, supporting their establishment and operations, and enhancing capacity building through promoting public-private partnerships. However, the involvement of the private sector in seed business in the region is in its infancy. Nevertheless, on the basis of assessment of the potential agribusiness firms, two private seed producers, which were supposed to be competent and having the capacity to grow and diversify seed businesses, have been selected. They have started seed businesses through technical supports provided by the programme. The key problem associated with the private seed producers entering to the seed business is lack of the necessary quality control mechanism, which depends on outside support for production techniques, start up support, quality assurance body, market linkage, etc. Therefore, newly established private seed producers often need reassurances and support in the early stages by both technical and seed policy related issues.

Under the partnership and innovation project component, the ISSD programme aims at developing a mechanism with institutionalised regional coordinating bodies to facilitate innovations and learning in the seed sector related challenges beyond the local level. The process itself develops and consolidates clear roles, responsibilities, and task divisions among seed sector stakeholders. Major innovative projects currently under implementation include: experimentation with post-harvest seed processing technologies for enhancing quality seed production; institutionalisation of seed quality advisory services at Haramaya University; establishing cooperative-based seed education and extension system; enhancing availability of Hararghe specialty coffee seedlings through farmer-participatory variety selection (PVS); and production of early generation seeds (EGS). The leading partners for the implementation of these projects are Fedis Agricultural Research Centre (FARC), Mechara Agricultural Research Centre (McARC), Haramaya University, Kombolcha AT-VET College, and Unions in East and West Hararghe Zones.

The Knowledge Sharing and Capacity Development component (KSCD) has been tasked with the role of facilitating the sharing of knowledge and lessons learnt through different communication strategies among partners and stakeholders at local, regional and, national levels. Accordingly, activities of the ISSD programme especially those associated with SPCs in seed business have been intensively promoted through diverse communication channels including publications, radio and television, seed exhibitions, mini-media, farmers’ field days, travel visits, website, social media and others.

To generate evidence-based solutions to the challenges facing the seed sector, the programme has been also conducting research through funding MSc and BSc students at LSBs sites in the region. The themes of research underway include but are not limited to seed marketing and organizational performances of seed producers, participatory variety selection, impact of quality seed on production, productivity and livelihoods of farmers, demand assessment of improved seed, and financial performance and technical efficiency of SPCs and related topics.
For the last six months, the ISSD Oromia East Unit has conducted a number of activities in all seed sector components of the programme. Under the LSB component, extensive capacity building activities were done through training farmers, development agents (DA), experts, and other stakeholders. The training was conducted aimed at both consolidation and scaling up of LSB sites.

With regard to the consolidation component, training was given to members of four SPCs. A total of 56 SPC members, 21 experts and DAs received the training on post-harvest seed processing and value addition, organizational management and record keeping skills as well as seed promotion and marketing principles.

Under the scaling up component, 74 SPC members and 47 experts and DAs drawn from partner organisations were given training by the ISSD programme in collaboration with FARC and HU-CAiLR. The training focused on theories and practices of quality seed production, post-harvest seed handling and value addition, organisational management and record keeping, as well as seed marketing and promotion principles. On the other hand, seed samples were collected from SPCs and checked for quality in the seed science laboratory of Haramaya University. The results of the laboratory seed analysis were shared with the SPC representatives and experts to caution farmers against seed quality related problems (seed admixtures, mechanical damage, disease, etc). This was intended to strengthen the capacity of the farmers to exercise seed quality control and storage management.

A study on a comparative profitability analysis of seed versus grain production was another activity conducted under this component. The result of the study revealed that seed business leads to a higher economic return for smallholder farmers than a grain enterprise. The findings of the study were presented on regional ISSD workshop of 2014.

Facilitating financial resources for the SPCs is another activity of this component. Accordingly, a workshop was organised with Raree Horaa SPCs with the objective of discussing on collaboration between the commercial bank of Ethiopia-Haramaya branch with members of the SPC. More than 50 members and seed out-growers of the SPCs participated in the workshop. The participants learned the mechanism of linking themselves with financial sources.

Under the partnership and innovation component, training was conducted for regional regulatory functionaries to enhance the seed quality assurance capacity of Oromia Region’s Bureau of Agriculture (BoA). The training focused on seed production techniques, seed health analysis, legal and ethical issues in seed certification and inspection, seed certification procedures and policy frameworks, and seed quality analysis techniques. A total of 15 participants, out of whom three were women, participated in the training. The participants were drawn from zone and regional Bureaus of Agriculture (BOA). The training included both theoretical and practical aspects. It was conducted for ten days on the main campus of the university.

The other accomplishment under this component is the launching of a ‘seed quality control advisory service’ at Haramaya University. This was aimed at institutionalising seed quality control and certification at the University in the future. The advisory service was established by setting up a seed quality advisory council constituting a plant breeder, and seed quality experts drawn from the University as well as from BOAs of East and West Hararghe Zones. The group has already started the field inspection for seed quality assurance in the region, and will continue with seed quality tests in...
In addition, seed fairs were organised by Afran Qallo and Chercher Oda Bultum farmers’ unions at open markets of Kersa and Bedasa towns, respectively. The objectives of the events were to promote seed businesses among the actors and stakeholders as well as to create linkages between SPCs and local farmers for seed marketing. More than 1000 participants from rural, urban and peri-urban areas took part in the seed fair events.

Under the Knowledge Sharing and Capacity Development Component, four key results were achieved: 1) a seed exhibition was conducted during the 7th Ethiopian public Universities Intercollegiate Sports Competition that was hosted by the University. A number of officials and dignitaries, including the President of the Federal Democratic Republic of Ethiopia, Dr. Mulatu Teshome, the Minister of Education, Mr. Shiferaw Shigute and presidents from 31 public universities in Ethiopia, regional government officials, NGOs, local stakeholders, and members of the University’s community viewed the ISSD activities and success stories exhibited during the occasion. More than 3000 people visited the exhibition for seven days. 2) ISSD Oromia East team arranged an experience-sharing event with experts from MercyCorps and officials from the Somali Regional State. The objective of the event was to share experiences of the LSB model and success stories with the visitors. A total of 15 persons from MercyCorps and representative of higher officials and farmers from Somali Regional State participated in the event.

3) Results of MSc thesis research work conducted through ISSD grants on seed sector-related problems were compiled in a bulletin aimed at disseminating the evidence-based findings for the scientific community and policy makers for further interventions to improve the seed sector in Ethiopia.

4) A nine-day experience sharing tour was organized to Hawassa ISSD Unit, including Selam Hawassa Business Group PLC, Asela Seed Laboratory, Ethiopian Seed enterprise, Maqi Batu Farmers’ Union and Holeta Research Centre for LSB partners and innovators. The programme was organized to enlighten the participants on the practices and challenges of LSB seed business marketing (direct seed marketing, seed certification and quality issues, seed value addition and post harvest handling etc). In the wake of the tour, the participants were enthused to incorporate the lessons learned from the tour into their 2014 LSB action plan.
Raree Horaa SPC is one of the seed producers’ cooperatives consolidated through the support of the Oromia East ISSD programme. The SPC became legally registered and acquired this name in early 2010 through facilitation by the ISSD Oromia East Programme. The SPC is located at Tinike kebele of Haramaya woreda. Currently, it has 41 active members, with a capital of more than 376,000 Birr. In 2013, the SPC produced more than 765 tonnes of potato seed tubers of both improved and local varieties, namely, Bubu, Zemen, Bate and Daddefa. The SPC sold the tuber seeds to local farmers, government organizations, research centres and NGOs.

Through the technical backstopping acquired from the ISSD Oromia East programme, the SPC was able to gradually increase the market price and customer diversity. For example, according to the price data recorded in different years, the average prices of 100 kg potato seed tubers in 2011, 2012 and 2013 were 430, 530 and 600 Birr, respectively. The integrated capacity building intervention conducted by the ISSD programme with local partners strengthened the position of SPCs in such away that they were able to double their average income from seed business to 35,000 Birr in 2014 as compared to the income they had earned in 2011, which had amounted to less than 15,000 Birr.

The intervention

The ISSD Oromia East Unit started implementing the ISSD model with Raree Horaa SPCs in the cropping year of 2010. The objective of the implementation was to enable the SPC to become technically well equipped, better organized, and entrepreneurial business entities in seed production and marketing.

Though significant successes have been recorded in the last few years, experiences gained from the intervention have revealed a number of challenges that constrain seed business of the SPC. The challenges have been identified by the programme through a baseline survey. The specific challenges identified include: weak knowledge and information at the demand side (on the use and adoption of improved seeds), lack of seed promotion and weak market information, and weak coordination and networking with customers and stakeholders. These challenges significantly constrain adoption and dissemination of seed knowledge and information as well as the viability of seed businesses. The ISSD Oromia East programme realised that these challenges need to be tackled.

Agenda and idea positioning

To improve the challenges and ensure the viability of seed business of the SPC, the ISSD Oromia East has identified innovative solutions by creating awareness and facilitating information dissemination among stakeholders and customers. After a lot of analysis and idea positioning, the LSB project came up with the idea of creating communication channels as a strategy to tackle the constraints. This is because communication is an important tool to accelerate social leaning, network building and improve negotiation skills especially in a group of people with similar goals (Leeuwiis, 2011). However, today’s many national and international organisations engaging in rural development projects have seen much pronounced fashionable communication concepts like ICTs and hybrid media (internet). These channels are unthinkable in the context of the ISSD Oromia East where the majority of the farmers cannot read and write. Thus, the project started scanning and revisiting the environment to identify available communication resources. Accordingly, FM radio and mini-media were identified.

Innovation application

The mini-media and HU FM radio programmes have been promoting seed knowledge and information particularly on advantages derived by farmers from using quality seeds for planting. The programmes have been disseminating also information on the benefit of using quality seed to increase productivity, as well as sources of quality seeds, agronomic
aspect, seed marketing aspect (in credit, in cash, pricing strategy, etc) for the farmers, stakeholders, and other customers.

The seed knowledge and information has been broadcast in the local tongue (Oromo language) by combining entertaining and educative programme segments (speech, seed music songs, drama, poems etc) to effect wider dissemination.

Moreover, on top of catalysing innovation, the mini-media and HU FM radio were also tasked with creating awareness on organizational structure of the SPC, improvement on the livelihood of members of the SPC, mobilising membership, increasing the momentum of scaling up seed knowledge and information. The other merit of mini-media is to deliver information for resource-poor farmers (especially non-SPC members) who do not afford to own radio or under condition of poor accessibility of radio waves due to rugged topography and remoteness. For instance, farmers who are unable to tune to HU FM community radio broadcasting programme (FM 91.5) can have the alternative to listen to the programme through the mini-media.

A recent impact assessment of these channels (HU FM 91.5 Radio and mini-media) conducted with Raree Horaa SPC confirmed that 100% of the respondents preferred information they were accessing on this broadcasting channel and the local mini-media installed at the SPC’s office.
By providing technical backstopping and necessary accessories for media, the ISSD Oromia East Unit, established a mini-media transmission facility at SPC offices in three woredas, among which Raree Horaa SPC is one beneficiary. The local mini-media and HU FM 91.5 programme helped the SPCs and farmers to get information on quality seed production, the benefits derived from using quality seed, and seed marketing. This markedly improved community awareness on seed knowledge and information which resulted in increased numbers of SPC customers and out-growers. The information stimulated also non-SPC members to visit SPCs and act as out-growers. Consequently, Raree Horaa SPC has its non-active members swollen by 126, who are producing seed tubers of improved and local potato varieties as out-growers. The non-members obtain inputs and technical supports from the SPC members. Building up on this experience, the SPC has a plan to identify potential members from the out-growers for incorporation into full membership. The innovation has been also being taken up by other SPCs. As a result of the observable successes, several Scaling up LSBs are also demanding the installation of mini-media at their sites.

The establishment and maintenance of diverse, dynamic, and free media is vital for development. The importance of getting the media ‘right’ is high especially at the grass-roots levels where smallholder farmers confront multiple challenges on a daily basis. The media plays an important role in conveying and sharing information and knowledge on quality seeds. This was revealed by farmers using the mini-media in which they commented on problems they face while producing seeds such as disease outbreaks, moisture stress, etc. as well as on the promotion of introduced technologies to the village, scaling up of local innovations such as tillage, soil fertility management, disease control practices, etc.
The idea of land consolidation or clustering emerged in the early 1750s (FAO, 2003) for the purpose of enhancing the quality of rural life in agricultural production, employment, infrastructure, housing and the protection of natural resources. In reality, land clustering was associated with broader social and economic reforms at the time of its earliest applications in Western Europe (FAO, 2003). The first clustering initiatives of Denmark in the 1750s were part of a profound social reform to free people from obligations to noble landlords by establishing privately-owned family farms.

In addition to facilitating basic infrastructure and improved livelihood of rural life, land clustering plays a vital role in improving agriculture and natural resource management (FAO, 2003). This is because land clustering can facilitate the creation of competitive agricultural production arrangements by enabling farmers to have farms with fewer parcels that are larger and better shaped, and to expand the size of their holdings. In the agricultural sector development, field clustering is the practice of facilitating production of the same crop or variety on adjacent plots in wider areas. The main target of the approach is to ensure production of the same crop and variety under uniform management practices and production calendar to allow the development of a tract entirely instead of lot by lot. Ethiopia’s agricultural extension systems have been enjoying a rapid resurgence due to the government’s favourable agricultural sector development plan. Specially networking farmers in a one-to-five cluster approach and the extensive support programme accompanying it is a key component for the transformation of the agriculture sector. Production of seed or grains through the clustering approach is a tool that can ensure quality product and uniformly increase production and productivity of a large number of smallholder farmers, which are characterised by fragmented land holding systems. In the LSB project, under the fragmented farming system, seed quality control is a big challenges especially for crops such as maize, wheat, sorghum, peanut etc. The best way to maintain seed quality is clustering adjacent lands into a larger farm. However, field clustering is not an easy task. This is because farmers with fragmented land holdings have varied interests and would like to grow different crops and adopt different management practices on the same plot of land. This is because fragmentation is beneficial to farmers as it reduces the risk of crop failures by providing them a greater variety of growing conditions, especially in mountainous areas.

In the Ethiopian agriculture, the presence of a large number of farmers with low skills and knowledge gaps has impeded the practices of good land preparation, row planting, crop fertilization and pest management. In the face of such problems, land clustering could be a good remedy for improving agricultural production and attaining quality seeds. In line with this, the ISSD Oromia East Unit has been imparting knowledge and experiences of land clustering through training and awareness creation in the region (East and west Hararghe Zones) for the past two years. Owing to its successes, the Local Seed Business (LSB) project is being scaled up
by partners in a number of woredas of East and West Hararghe zones. Many reports and observations indicated that, using improved crop varieties combined with improved agronomic practices resulted two to three-fold increases in productivity. A good example of producing maize seed through the land clustering approach was started in Babile, Fedis, Oda Bultum, Gemechis, and Meiso woredas. In this woredas, 50 to 100 ha of land was planted to improved varieties of maize and/or common bean with recommended agronomic packages. In this connections, LSB farmers in Gemaichis and Meiso woredas reported that their productivity increased by three-fold compared to the productivity obtained through the traditional methods of production. Farmers with adjoining plots of land were able to adopt similar agricultural management practices. This practice markedly improved the productivity of the land. In addition, significant yield gaps that used to occur among farmers with differing economic status (low, middle and better class) in the previous times were markedly narrowed. The approach also synergised the one-to-five farmers networking established by the government and enhanced their opportunity to discuss production plans, common challenges, and mitigation strategies. The clustering also increased experience sharing among farmers in the networks and the use of knowledge and improved production technologies in agricultural production. As a result, farmers began obtaining higher crop yields, which would enhance food and nutrition security in the region. What is more, the skill and knowledge gaps as well as the reluctance of farmers to adopt improved technologies have been minimized. In addition, a large number of farmers adopted improved technologies in a relatively short span of time. This approach also plays a significant role in commercialization of agricultural commodities, thereby contributing to the country’s economic growth and development. The cluster approach has become an important tool that has to be adopted at a wider scale for increased productivity and seed quality. In general, land clustering:

- Improves the agricultural sector by enabling farms to become more efficient and competitive, and better integrated in agricultural chains.
- Eases the task of seed quality inspection, control, and monitor-
Field clustering in local seed business............ cont.d

Clustered maize seed production by the support of West Hararghe BoA on more than 100 ha of land in Gemachis woreda

ing (LSB, 2011).
- Generates advantages for marketing of products since it is easier to find common clients.
- Encourages alternative ways of agricultural production such as the implementation of Agri-environmental measures and good agricultural practices.

Lalisa Ifadin Women SPC Maize seed production at Babile woreda in 2014
Towards Participatory Communication for Social Change: Integrating Different Communication Strategies to Effect Wider Dissemination of Seed Knowledge and Information

By Kemal Kasim, KSCD Innovator

Lack of farmers’ awareness on the benefit of using improved seed and weak coordination and networking along seed value chains are the most important factors afflicting the adoption and dissemination of improved technologies in general and quality seeds in particular. To fill this gap, the KSCD innovator, in tandem with the work of other innovators of the ISSD Oromia East Unit, designed and implemented participatory communication strategies as a key process for innovation, social learning, and networking seed actors. The purposes of the activities were to facilitate seed knowledge circulation and improve adoption among the seed value chain actors. Accordingly, a combination of different communication strategies (media, newsletter, posters, seed fairs, exhibitions, farmers’ field days, and community gatherings) was used. These strategies helped farmers, farmers’ organisations, and extension workers to improve the intake, quality and outreach of their programmes along the seed value chains. Finally, the dynamics of the activities and the aftermath of the situations and contexts brought impact on the development of the seed sector.
Towards Participatory Communication....Cont.d

Farmer Organizations’ radio broadcasting programme

Multi-purpose radio used for seed promotion by SPC

Raree Horaa SPC deputy chairman
Shares Organizational and seed production messages on radio

Farmers inspecting tuber bulking of an improved potato variety

Row-planting of the improved kuncho Teff variety enhances productivity and seed quality

Sharing best practices on seed production in Mieso woreda

My income was improved
Music band performing seed promotion

Drama performed to create awareness on the benefits of using quality seeds

Songs and dramas for breaking resistance and reluctance against using quality seeds

Entertaining through poems to create awareness

Awareness creation through traditional songs and dances

Seed fair and exhibition

Discussion among scientists, innovators, and farmers
(Professor Gebissa Ejeta, World Food Laureate, near right)
Radio broadcasting brought about a significant improvement in the awareness of the community on seed knowledge and information.

Through technical backstopping, local mini-media were installed for farmers’ organizations.

The local mini-media radio installation helped resource-poor farmers who cannot afford to buy radio sets to get knowledge and information on seeds.

Farmers’ success stories were disseminated to the community on radio and publications.

During the seed exhibition organized at different events, innovators, farmers, and scientists shared experiences and knowledge.

Field days and community gatherings enhanced knowledge circulation and networking among actors and innovation sites.

Different knowledge sharing tools (songs, dramas, newsletters, poetry, etc) promoted social learning for seed production.
Multi-stakeholder partnership (MSP) is about working relations that are greater than the sum of their parts and about creating lasting and meaningful impact at all levels of action (Huijstee, 2012). It is meant to promote a more holistic approach towards development and better governance. The concept of MSP as an instrument for achieving development goals is sound, particularly when stakeholders with unique complementary strengths or core competencies add value to development efforts and pool their resources and assets in solving problems in the particular sector. This implies that strategic alliances between farmers, government, and civil societies are a growing feature of both developed and emerging economies (Global Knowledge Partnership Secretariat, 2003). Such multi-stakeholder partnerships are necessary because it is increasingly clear that no one sector in a society can deliver the complexities of sustainable development alone.

In its second phase, as a part of its programme, the ISSD considered a regional multi-stakeholder process as a mechanism for solving institutional and policy issues that hamper the development of an integrated seed sector in Ethiopia. The rationale of setting up a seed sector partnership process in East Oromia is to enable actors, who would otherwise remain isolated, to come together with policy makers, academics, experienced practitioners, and research centres to work on practical challenges, capture and share lessons, enhance capacities towards better seed quality, availability and affordability. The ISSD Oromia East multi-stakeholder partnership process focuses on adding value to the work of the individual members of the organizations and share its lessons learned with the wider public, thereby contributing to improved productivity and market functioning of the seed sector. The ISSD Oromia East ensures its partners that activities generated through the multi-stakeholder seed sector partnership are demand-driven and outputs would be sustainable.

### Setting Basic Principles of Seed Sector Partnership Engagement

**Principle 1:** Knowing critical issues leading to institutional and systemic impact. Development organizations engaging in multi-sector partnerships in the seed sector should consider key issues such as the following:

- Those aspects of institutional bottlenecks hampering development of the seed sector;
- The positioning of innovative partnership intervention contributes to the development of sustainable seed system; and
- Persistent seed system challenges, because of their complexity, require the strategic alignment of resources and competencies across multitudes of partners, namely, higher learning institutions, research, the government,
and NGOs etc.

**Principle 2**: Before agreeing to enter a partnership, its value in satisfying the main motive for participation should be objectively weighed against the available alternatives and risks.

**Principle 3**: A multi-stakeholder seed sector partnership will work best when it is in the self-interest of each party to pro-actively seek solutions that satisfy the interests of the other parties, i.e. when the partnership is mutually reinforcing.

**Principle 4**: Successful partnerships are built on complementary competencies and resources that, in combination, meet the parameters of some strategic goals.

**Principle 5**: Partnership innovations are planned to work on needs to be linked to the core ‘business’ of the respective partner organizations, in order to both retain the relevance of the partnership to the objectives and day-to-day activities of the organization, and to exploit the efficiencies of the partners contributing from their existing costs.

**Principle 6**: Regardless of the type of seed sector partnership innovations, prior consensus should be sought for some form of a written document identifying, at a minimum: the shared vision of the partnership; the objectives of each partner for the partnership, and the division of roles and responsibilities.

### Possible Strategies for partnerships in the seed sector

#### Stage one: exploring and building the partnership

- **Explore the relevant stakeholders and identify opportunities for partnering.** At an early stage of a partnership, it is critical to:
  - Identify what types of partner organizations would add value. Therefore, prior to formalizing a partnership, it is important to explore the range of options available and what resources and capacities each potential partner are endowed with.
  - **Select the most appropriate partners and secure their active involvement.** It is worth taking time over this and locating as much information as possible in order to arrive at an appropriate decision, including undertaking research to confirm the organization’s ‘track record’.
  - **Assessing risks and rewards:** each partner will need to understand the potential risks and rewards of their fellow partner organizations almost as deeply as their own if they are to really commit themselves to genuine collaboration and the principle of ‘mutual benefit’.

As in any partnership engagement, possible risks of partnership projects in the seed sector development may arise in any of the following areas:

- **Reputation impact**: all organizations and institutions value their reputation and will rightly be concerned about whether that reputation can be damaged either by the fact of the partnership itself or by any fall-out in the future should the partnership fail;
- **Conflicts of interest**: whether at strategic or operational levels, partnership commitments can give rise to split loyalties and/or to the feeling pushed to settle for uncomfortable compromises;
- **Drain on resources**: partnerships typically require investment especially human power and time which could lead to unexpected drainage towards the partnership project;
- **Implementation challenges**: once a partnership is established and resources procured, there will be a fresh set of commitment and other challenges for each partner organization as the partnership moves into project implementation;
- **Build the partnership**: Develop a shared purpose.
Shared aims, purposes, goals and strategies for the partnership, underpinned by Memoranda of Understanding (MoU) between partners where necessary, help to build trusting relationships and provide a framework for action. Be clear about the roles and relationships between partners. Here, partners should take joint responsibility for outcomes, good and bad.

**Stage Two: As the partnership develops, other factors become important**

Bring in new partners as necessary. Stakeholders and sometimes partners will change as the partnership matures and the operation becomes established and scales up. Building relationships with new partners and stakeholders is a cornerstone of success.

- **Build trust and respect.** Different partners will have different priorities. Respecting these and investing in building good personal contacts with that partners will help to build mutual trust and enthusiasm for continued collaboration. Regular partnership and team-building meetings should be held, and constructive feedback between partners encouraged.

- **Evaluate performance regularly.** Working with partners to identify and manage risks, to priorities activities, to share successes and address shortcomings, are all important factors in successful partnership management.

**Stage Three: As the partnership matures further**

- **Seek institutionalised relationships and changes.** As the partnership matures, there is a need for consolidation and establishment of common understanding between partners. In this connection, appropriate institutional changes, functional and a systematic impact should be ensured.

- **Recognize that partnerships need time.** A partnership timeframe is often short whereas partnership engagements need trust, and the capacity for implementation of the partnership would take time to build. A careful balance, acceptable to all, is needed.

- **Handle conflicts constructively.** Conflicts in partnerships are inevitable but can be managed. A clear allocation of roles and a high degree of transparency, for example through regular information, progress meetings, etc. helps to reduce conflicts. On occasions, an external person or body can help to draw out the various interests which have led to any conflict, and to point to options for solutions.

**Stage Four: Finally, sustaining Partnership**

- **Consider long term engagement.** There can be instances in which a partnership fails or a project turns out to be non-viable. In such cases, partners need a clear idea of how to close down the partnership. The time to develop such a plan is during the establishment of a partnership.

Institutional reform may be the most important outcome of the partnership. In other words, partnership projects lead to a government department functioning more creatively or efficiently and contributing more rigorously and systematically to sustainable seed sector development in all aspects of its operations.

**Other Factors to keep in mind**

- **A true partnership involves a shared definition of problems and joint design of solutions.**

No single partner has all the answers. To maximize the potential for success, all partners (non-governmental organizations, private firms, overseas stakeholders etc) should participate in designing the partnership project and setting its goals. Clearly establishing the respective roles and responsibilities of each partner is a key to developing a realistic plan.
Flexibility: There is no one approach that works for all partners in all circumstances. Nonetheless, it is crucial for each partnership to define clearly and record mutual expectations and individual roles and responsibilities, determine how progress will be measured and problems solved.

Preparedness to change: Even with meticulous planning, circumstances are likely to change. Therefore, it is important to consider the possibilities of negative impacts, both environmental and social, and how better to measure and value non-monetary contributions and community inputs. New partners need to be chosen carefully, and formal agreements and MoU revisited if necessary.

Influence government policy: Partnership initiatives should be in a position to provide evidence for policy makers which may help them to persuade policy changes, and help to create a more supportive policy framework for action.

Multi-stakeholder Partnership Activities of the Seed Sector in Oromia East

By Ashebir Demie, Partnership and Private Sector Innovator

The partnership component of ISSD Oromia East Unit has managed to engage diverse multi-stakeholder actions with multiple actors. The thematic areas for partnership engagements set by the ISSD Oromia East seed sector partnership platform were geared in such a way that partnership interventions could impact on ensuring quality of seed, improved availability of early generation seed, expanding demand for improved seed through extending knowledge and information on seed related issues among smallholder farmers. To this effect the partnership projects that are under implementation in Oromia East are described as follows:

1. Supporting Development of Seed Processing Technologies

The success of small scale seed production and marketing efforts, among other factors, is determined by availability of appropriate post harvest seed processing technologies.

The partnership actors in East Oromia recognises that seed producers in the intermediate and informal seed systems are not competent enough to meet the expected quality of seeds for planting in the seed chain. This is mainly due to limited seed cleaning technologies and insufficient technical capacity to meet seed quality requirements.

On account of this rationale, the partnership intervention is designed with the following objectives:

1. To experiment with seed cleaning and grading technology innovations with the view to enhance the competitiveness of small scale seed producers
2. To improve farmers’ techniques, efforts, and conditions required to harvest, clean, and grade seed, hence, improving quality

The partnership activity has managed to facilitate the making, adaptation, and evaluation of the following technologies:

i. Manual and motorized groundnut decorticator machine
ii. Multi-purpose seed threshing machine
iii. Maize shelling machine
iv. Seed cleaning machine

This project is a joint effort of FARC and ISSD Oromia East Unit.
2. Enhancing Demand for improved seed through knowledge dissemination

The complexities in the seed system are two-sided: demand side and supply side problems. Along with poor seed market orientation, limitations in seed demand creation and promotion of technologies has resulted in limited demand for improved seeds. Therefore, this project has been launched with the following objectives:

i. To facilitate active learning processes with farmers and enhance seed knowledge and information sharing in a cooperative-based seed extension approach.

ii. To enhance the effective demand for improved seed and contribute to the food security endeavour of the region.

The seed extensions methods employed include: Farmers’ field school (FFS) approach, Farmer-to-farmer community conversation (CC), printed media (leaflets and poster), entertainment events, seed fair and other innovative knowledge transfer tools. The activity is currently implemented by three unions: Afran Qallo, Chercher Oda Bultum, and Burqa Galeti farmers’ cooperative unions in six woredas of East and West Hararghe Zones.

3. Improving availability of potato seed supply in the region

The lack of improved varieties, diseases outbreaks, poor crop management practices, use of inferior quality seed tubers of unknown origins, inappropriate storage structure, and poor seed value chain systems are among the key factors contributing to low yield of potato in Ethiopia in general and Oromia East in particular.

As part of its efforts to address this problem, ISSD-Oromia East Unit has been engaged in increasing the availability of high quality potato seed tubers at affordable prices in partnership with Kombolcha ATVET college. The initiative addressed the institutional problems faced by the college in a manner that would support the capacity development through construction of DLS potato storage and developing water boreholes for irrigation. This was meant to enable the institution to supply potato seed tubers of demanded varieties in the area. As a result, the project has resulted in enhanced access to quality potato seed tubers in the locality.
4. Enhancing Availability and Quality of Improved Hararghe Specialty Coffee seeds and seedlings in West Hararghe Zone

Coffee farmers in Ethiopia have been facing complex challenges such as weak market, weak research and extension linkage, limited infrastructure, limited policy supports, inadequate knowledge and knowledge sharing among actors, absence of institutional learning and partnership, poor development of innovations, etc. Biotic factors that pose serious challenges to coffee farmers include Coffee Berry Disease (CBD), and Coffee Wilt Disease (CWD) (Rahmato et al., 2005).

Hararghe is one of the potential coffee producing areas of the country and known for the production of high quality coffee with unique flavour. Coffee produced in this region is known for its unique quality in both national and international markets. Despite the presence of favourable environmental and climate conditions for coffee production in the Zone, farmers are confronted with a number of constraints in coffee production, processing, and marketing. To improve this situation, ISSD Oromia East Unit has initiated a joint partnership project with McARC. The project has been initiated aimed at enhancing availability of quality seeds and seedlings for smallholder farmers. Thus, 60,000 seedlings of improved coffee varieties released recently by McARC have been raised in two woredas and distributed to smallholder farmers.

5. Strengthening seed quality inspection capacity of regional regulatory system

Following decentralization of the seed quality control function at regional levels, Oromia Regional Bureau of Agriculture was bestowed with the mandate of seed licensing, quality control, and certification. However, the capacity limitation in terms of trained human power has afflicted quality assurance activity in the region. Strengthening the capacity of human power working in the region’s seed laboratories is required to realise an effective seed quality control and maintenance mechanism.

In this regard ISSD Oromia East Unit has tasked itself with the provision of tailor-made training on seed inspection and certification for staff drawn from seed laboratories and regulatory offices in Oromia region. The initiative was taken jointly by ISSD Oromia East Unit and the Office of the Vice-President for Research Affairs of HU.
The imperative of national food security and economic development demands a focused and resolute approach to raise productivity and production in agriculture. Thus, in a country like Ethiopia, where agriculture is the major source of income for the population and a major export earner, seed acts as an important component for food security and is an important driver for economic growth. Furthermore, seed has been described as an essential, strategic, and relatively inexpensive input that often determines the upper limit of crop yields and the use of all other agricultural inputs. Many reports indicate that it is possible to increase yield by 30 to 50 percent by using good quality seed as compared to poor quality seed (Wang, 2008). Governments and donors recognised the critical role of seed in agricultural transformation and began providing substantial support for the seed system development. In line with this, the ISSD programme is making consistent efforts to promote a local level seed production that contributes to the availability of affordable quality seed at local levels; at the same time, it is aiming at promoting local entrepreneurship and rural economic development.

In this connection, a key question is how to sustain the long-term commercial viability of the LSBs that are capable of generating, producing, and leading to a wider distribution of new seed varieties that meet the needs of all farmers, in a cost-effective way. Seed businesses must be based on local ownership and profitability (in either monetary terms or by other socio-economic measures) if they are to develop and grow sustainably.

Therefore, this study was intended to examine the profitability of potato seed businesses of smallholder farmers in Haramaya and Chiro woredas of East and West Hararghe Zones. To achieve the objectives, the study followed the scientific procedure and used a combination of profitability analysis tools such as cost components of seed production, Gross margin (GMA), net profit analysis, and return on investment (ROI) in determining the level of profitability of smallholder farmers. The preliminary output of the study is presented as follows:

Results of the Study
Seed business and Productivity

Potato is produced two times a year in both Haramaya and Chiro districts (woredas) using rainfall and irrigation. The average yields of seed and ware potato tubers obatained by smallholder farmers were computed over a one-year period (Figure 3). The average yields of seed and ware potato tubers for Haramaya woreda was 571 and 494 Qt/ha/year, respectively. The average yields seed and ware potato tubers for Chiro woreda were about 278 and 213 Qt/ha/year, respectively. However, the overall average production computed for both woredas revealed that the average seed potato tuber yield was 424 Qt/ha/yr and the average ware potato tuber yield was 353 Qt/ha/year. This clearly shows that, in both woredas, smallholder farmers that produced potato seed tubers were more productive than those that produced ware potato tubers. This indicates that production of seed potato tubers was a profitable business compared to production of ware potato tubers in both woredas. However, potato seed tuber production per hectare was higher in Haramaya woreda than in Chiro woreda (Figure 3).
Cost of potato production
The estimated costs incurred by smallholder farmers to produce seed and ware potato tubers in Haramaya and Chiro woredas are indicated in Figure 4. All production, marketing, and material costs such as expenditures on human labour, seed, fertilizer, pesticides, irrigation, interest on operating capital and land use cost, etc were calculated on a hectare basis. The gross cost mainly included total fixed cost and total variable cost. The average total costs incurred by smallholder farmers to produce seed and ware potato tubers amounted to 10,0584 and 81,848 Birr/ha/year, respectively (Figure 4).

The main share in the gross cost for potato seed tuber production was labour cost and input cost, each sharing 39%. Labour cost comprises family labour and oxen use, while input costs include expenditures on seed, fertilizer, and fuel. Similarly, the major share in the gross cost of ware potato seed production were material cost (41%), labour cost (39%), and other costs (20%).

Profitability of potato production
To get the full picture, we used the most common economic measurements to examine the limiting factors and the profitability of seed businesses and crop enterprises: Gross margin analysis (GMA), net profit (NP) and return on investments (ROI) were computed (Figure 6). The average gross margin and net profit obtained from potato seed tuber production in Chiro woreda were 84,849 and 77,884 Birr/ha/year, respectively. However, the gross margin and net profit obtained from ware potato production in the same woreda were 35,466 and 30,115 Birr/ha/year, respectively. But, the average gross margin and net profit from potato seed tuber in Haramaya woreda were 18,1969 and 165,210 Birr/ha/year, respectively. Similarly, the gross margin and net profit from ware potato production in Haramaya woreda were 132,118 and 118,858 Birr/ha/year, respectively. On the other hand, the overall average gross income and net profit computed for both woredas from potato seed tuber production were 133,409 and 121,546 Birr/ha/year, respectively. But, the values from ware potato production in both woredas were 83,791 and 74,486 Birr/ha/year, in the order listed here.

Furthermore, the return on capital investment (ROI) was also estimated to analyse the viability of seed and ware potato enterprises. The overall average ROI computed for both woredas from seed tuber production was 130% whereas that of ware potato tuber production was 95%.
In all economic measurements, potato seed tuber production was found to be more profitable than ware potato production. This clearly shows that the seed business for potato is more profitable as compared to ware potato businesses in both woreda. However, the seed business is more profitable in Haramaya than Chiro woreda. This is probably due to the fact that smallholder farmers in Haramya cultivated high yielding potato varieties. The other reason could be that potato farmers in Haramaya woreda have easier access to market and market information than those in Chiro woreda.

**Conclusion**

The study has revealed that the major share in gross costs of seed and ware potato production were labour cost, material cost, and other costs. The profitability analysis indicated that potato seed business costs more than grain (ware potato) enterprise. However, potato seed business was found to be more profitable than ware potato businesses in both woredas. The result of this study has demonstrated that increased yields enhance profitability of seed business of smallholders farmers. Therefore, the use of high yielding improved potato varieties should be promoted for enhanced profitability of seed businesses in the region. The result of comparative profitability analysis revealed that a seed business leads to a higher economic return for smallholder farmers than a grain (ware potato) businesses. The result also clearly shows that the income of potato seed producing smallholder farmers was lifted up as compared to ware potato producers. This implies that smallholder potato farmers that engaged in potato seed business are moving from subsistence farming to profit-oriented farming. Therefore, policy makers, Government Organizations, NGO, SPCs and other local partners should work towards building the capacity of smallholder farmers to transform the seed sector of the country.

![Figure 6: Average profitability of seed and ware potato production](image-url)
Seed quality control/assurance, which is vital at every segment of the activity, is invariably neglected by most of the stakeholders in the seed sector. It is well known that the seed quality control is among the first considerations in the Ethiopian seed system. Some records show that the seed quality concept and rudimentary activities in seed quality aspects were introduced to the seed system even before the present formal seed production and distribution got its current shape some 30 years ago. Since then, especially after the enforcement of the Ethiopian seed law No. 206/2000, seed quality control has shown some progresses but it has gradually weakened to its current alarming status (Dawit et.al, 2004).

Regional seed quality control bodies are striving to reach the production premises of several private and public seed production farms. The regional seed quality control bodies are also expected to inspect and verify the seed production plots of their regional seed enterprises. Since both the regional seed enterprises and the seed regulatory bodies are mostly affiliated to the regional bureaus of agriculture, compromise in quality would not be unexpected under these situations. The organizational set-up and the trans-regional seed movements are becoming areas of debate. While all of the regional seed quality control bodies have remained weak, some of them demand certificates for any seed lot coming from other regions. This will seriously affect availability of seeds of crop varieties which are not produced by the certificate-demanding region (Dawit et.al, 2004).

Ethiopia’s current seed certification system is not functioning as expected with an immense gap between the “rules on paper” and “practice in the field”. For example, although most seed sold to farmers (including seed from Farmer-Based Seed Multiplication (FBSM)) is “certified”, in fact most seed production plots are visited less often than the current regulations stipulate and certification tags are rarely attached to seed bags in the presence of certifying agents (IFPRI, 2010). As the seed system diversifies and seed production and conditioning increasingly take place at smaller and more dispersed locations, the management of seed certification will become more complex.

Similarly, lack of seed quality control and certification, weak seed law and regulation, shortage of seed analyst expertise in the seed value chain are the most serious gaps affecting seed business marketing of Local Seed Businesses (LSBs) of ISSD Oromia East in particular. Hence, capacity building in seed experts and establishment of an effective seed quality inspection is indispensable.

As the experience of some countries like India shows, quality control problems have been addressed and solved by allowing voluntary certification and true labelling. Nowadays, in Ethiopia, though smallholder buyers may assess the quality of seed by themselves, it is high time that farmers’ seed producer cooperatives, micro level private seed producers, etc., accessed an alternative seed quality assurance mechanism.

However, in the present situation, the public seed regulatory organs or any government agency alone cannot meet the regulatory and advisory service functions for enhancement of seed quality, which calls for knowledge institutions like Haramaya University to provide quality advisory support for intermediate and informal seed producers.

In view of the above facts, the ISSD Oromia East Unit has set up an institutional mechanism under the auspices of the Office of Research Affairs with the objective of rendering seed quality advisory services to smallholder farmers and other stakeholders.

The Seed Quality Advisory Service/Facility will contribute to the ongoing household and the national food security endeavours through improving access to tech-
Towards a Seed Quality ...cont’d

Accordingly, ISSD Oromia East Unit has been striving to build the capacity of experts drawn from public institutions and NGOs in order to launch a seed quality advisory service as well as support the regional body to enhance the implementation of seed law and regulatory framework.

By doing so, two major tasks have been already accomplished. First, tailor-made training was given to experts drawn from local and regional public institutions on seed quality inspection and certification in February 2014. The objective of the training was to enhance the seed quality assurance capacity of the regional regulatory body/functionaries; The training themes were focused on seed production techniques, legal and ethical issues in seed certification and inspection, seed certification procedures, legal and policy frameworks, seed quality analysis techniques and seed health testing. By using senior lecturers and scientist from the HU, the biological and social aspects of major crops grown in Ethiopia (cereals, pulses, and oil and horticultural crops) were covered. This training gave the trainees the opportunity to have in-depth theoretical knowledge as well as practical skills concerning seed quality analysis. Emphasis was also given to the topic on ‘legal, ethical and policy frameworks’. Going beyond the seed sector, legal issues of genetic land race and species were also dealt with. In a nutshell, during this training, ‘lack of regulation and institutional innovation’ on genetic resources and species were identified as a major challenge to the seed sector innovation. Second, a seed quality monitoring working group was set up constituting experts from HU and Bureaus of Agriculture from East and West Hararghe Zones. This working group has already begun inspections of crop fields in both zones at the start of the cropping season in July 2014. The field inspections stared at planting and will continue until harvest.
Towards a Seed Quality ...cont’d

A Photo Story: The Journey of ISSD Oromia East in 2014

By Kemal Kasim, KSCD Innovator

- On site coaching of SPC members and DAs on seed quality monitoring at Jalala Bishan Babile SPC in 2014

- On-site monitoring and evaluation of LSB scaling up at CAiLR, Chiro Woreda

- Workshop for partners scaling up LSBs on key performance assessment

- The top three best performing partners scaling up LSBs in Oromia East were awarded a trophy in mid-2014

- Capacity building for partners scaling up LSBs on identified key gaps in Haramaya woreda

- Capacity building for consolidation SPCs, Haramaya woreda

- Seed community gathering day at Guba Koricha woreda
A Photo Story: The Journey of ISSD Oromia East in 2014

- Awareness creation for Raree Horaa SPCs on access to finance, Haramaya woreda
- Enhancing quality seed through introduction of post-harvest seed processing technologies, Kersa woreda
- Facilitating knowledge dissemination through national radio programmes, Kersa woreda
- LSB Scaling up partner investment in DLS construction, Bilisa SPC at Gemechis woreda
- Enhancing knowledge dissemination through success story development at Abdi Jalala SPCs, Chiro woreda
- Facilitating knowledge dissemination through sharing success stories at Bilisa SPC, Gemechis woreda
- Regional quality seed experts visit a private seed producer’s field in Haramaya woreda
- An experience sharing event for innovators and scaling up partners at the Ethiopian seed enterprise, Asella Branch

Integrated Seed Sector Development (ISSD) Ethiopia Programme, Annual Magazine 2014, Haramaya University
MSc research study on effect of wheat seed quality on productivity at Kersa LSB site being visited by stakeholders

ISSD Oromia East team and scaling up partners’ focal persons during a regional reflection workshop held at Haramaya University in mid 2014
HARAMAYA UNIVERSITY
ISSD Programme Staff Members

Girma Amente (PhD)
HU President and ISSD Institutional advisor
Email: girma_am@yahoo.com
Mobile: +251-930074541

Nigussie Dechassa (PhD)
Vice President for Research Affairs and HU-ISSD scientific coordinator
Email: nigussiedachassa@gmail.com
Mobile: +251-915321046

Meried Shbru
HU-ISSD Programme Management Facilitator
Email: mshbru@ymail.com
Mobile: +251-911771881

Dandena Gelmesa
HU-ISSD Seed innovator and PhD student
Email: dandenagalmesa@gmail.com
Mobile: +251-920446517

Alemayehu Assefa
HU-ISSD Farmer organization innovator
Email: asefa.alemayehu@gmail.com
Mobile: +251-913999317

Reta Wagery
HU-ISSD Agri-business innovator
Email: rwgissa@yahoo.com
Mobile: +251-911957585

Kemal Kasim
HU-ISSD Knowledge sharing and capacity development innovator
Email: kemalkasim@yahoo.com
Mobile: +251-913179853

Ashebir Demie
HU-ISSD Partnership and Private sector innovator
Email: myashebir@yahoo.com
Mobile: +251-910547719

Asefa Teshoma
HU-ISSD Driver
Mobile: 251-928174849

Gizachew Adera
HU-ISSD Driver
Mobile: +251-922379698
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Regional Workshop, 2014, Haramaya University

Experience Sharing Event for Second Generation LSBs, 2014

ISSD Oromia East Working in Knowledge Brokering and Facilitation
Diverse Communication Strategies Enhances Knowledge Circulation and Adoption

Seed Community Gathering Day at Mieso woreda, CAiLR, 2014

Awareness Creation through Entertainment Education, 2014

Seed Fair Event Organized at Kersa woreda, 2014
Monitoring a common bean seed production field in Guba Koricha woreda

Farmers observing the performance of the Kuncho Teff Variety at Wal-argi Site in Gemechis woreda during a field day

Potato seed tuber production field at Haqan Gudina SPC Site, Kersa woreda