



Programme on Integrated Seed Sector Development in Ethiopia 2012 - 2015

End of programme report



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Programme on Integrated Seed Sector Development in Ethiopia 2011 - 2015

End of programme report

Wageningen Centre for Development Innovation, Wageningen University & Research
Bahir Dar University, Hawassa University, Haramaya University, Mekelle University and Oromia Seed Enterprise.

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The programme on Integrated Seed Sector Development in Ethiopia aims to strengthen the development of a vibrant, market-oriented and pluralistic seed sector in the country, where quality seed of superior varieties is available and affordable for a larger number of farmers, thereby contributing to food security and economic development in Ethiopia. The programme is a joint effort of Bahir Dar University, Haramaya University, Hawassa University, Mekelle University, Oromia Seed Enterprise, the Ethiopian Seed Association and Wageningen Centre for Development Innovation of Wageningen University & Research. Partners include governmental organizations at federal, regional and local level, non-governmental organizations, development organizations, and seed businesses operating at different scales. The programme is funded by the Directorate General for International Cooperation through the Embassy of the Kingdom of the Netherlands in Addis Ababa.

Keywords: Ethiopia, seed sector, entrepreneurship

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Report CDI-16-037



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ETHIOPIAN SEED
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Preface

We are pleased to share with you the end of programme report of the Programme on Integrated Seed Sector Development in Ethiopia. The programme is a joint effort of Bahir Dar University, Haramaya University, Hawassa University, Mekelle University, Oromia Seed Enterprise, the Ethiopian Seed Association and Wageningen Centre for Development Innovation of Wageningen University & Research in the Netherlands.

Enhancing farmers' access to quality seed is key for promoting agricultural growth, food security and economic development. Seed sector development is high on the agenda of the Ethiopian Government. The Ethiopian Government, but also regional and local governments, as well as other seed sector stakeholders like research institutes, universities, development organizations, seed enterprises and farmer organizations recognize ISSD Ethiopia as a trustworthy partner in the development of the sector. Together we have worked on increasing the quality, quantity and diversity of seed available to Ethiopian farmers. In addition we worked jointly on creating a more enabling environment for the seed sector to flourish.

We greatly acknowledge the contributions of all our partners in their collaboration with our programme. We highly appreciate the financial support of the Directorate General for International Cooperation through the Embassy of the Kingdom of the Netherlands in Addis Ababa, which allowed the implementation of this strategically important programme and is funding a follow up programme through the BENEFIT Partnership.

ISSD Ethiopia PMU and CDI team

List of abbreviations and acronyms

AGP	Agricultural Growth Programme
ATA	Agricultural Transformation Agency
AUC	African Union Commission
BDU	Bahir Dar University
BENEFIT	Ethiopian Netherlands Effort for Food, Income and Trade
BoA	Bureau of Agriculture
CoC	Certificate of Competence
CDI	Wageningen UR, Centre for Development Innovation
CPA	Cooperative Promotion Agency
DA	Development Agent
DGIS	Directorate General for International Cooperation
DSM	Direct Seed Marketing
EGS	Early Generation Seed
EIAR	Ethiopian Institute of Agricultural Research
EKN	Embassy of the Kingdom of the Netherlands
ESE	Ethiopian Seed Enterprise
ESA	Ethiopian Seed Association
HU	Haramaya University
HwU	Hawassa University
ISSD	Integrated Seed Sector Development
KPA	Key Performance Area
KPI	Key Performance Indicator
LSB	Local Seed Business
M&E	Monitoring and Evaluation
MoA	Ministry of Agriculture
MoU	Memorandum of Understanding
MSc	Master of Science
MSP	Multi-Stakeholder Processes
MU	Mekelle University
NGO	Non-Government Organization
OSE	Oromia Seed Enterprise
PSNP	Productive Safety Net Program
PMU	Programme Management Unit
PBR	Plant Breeder's Rights
R&D	Research and Development
RARI	Regional Agricultural Research Institute
RSE	Regional Seed Enterprise
SPC	Seed Producers' Cooperative
SNNPR	Southern Nations, Nationalities, and Peoples Region
SVC	Seed Value Chain
WUR	Wageningen University & Research
WoA	Woreda office of Agriculture
WoCP	Woreda office of Cooperative Promotion

Summary

The programme on Integrated Seed Sector Development in Ethiopia (ISSD Ethiopia) Phase II (2011 – 2015) aimed to strengthen the development of a vibrant, market-oriented and pluralistic seed sector in the country, where quality seed of superior varieties is available and affordable to a larger number of farmers. This will contribute to agriculture for food security and economic development in Ethiopia. This was the vision of ISSD Ethiopia. The programme facilitated targeted interventions in a range of seed systems, and contributed to strengthening seed sector coordination, governance, and performance.

ISSD Ethiopia consolidated the development of 33 seed producer cooperatives (SPCs) into local seed businesses (LSBs). The programme developed an evidence based model with key performance areas (KPA) and key performance indicators (KPIs) which can be used for supporting LSB development in a diversity of conditions and settings. LSBs produce and market quality seed which is sold to farmers directly, to institutional buyers, or to the government on contract. LSBs have improved their capacity in seed production and management and are producing seed which is high in demand. While LSB's supported by ISSD Ethiopia have enjoyed success, additional attention needs to be given to strengthening LSB capacity in marketing and seed value addition. The LSBs supported by ISSD Ethiopia generally are profitable in producing seed as a business; they have been able to negotiate better prices for their seed over the years; and have increased the level of investment in their business. LSBs have continued to demonstrate progress in producing and selling seed outside of government contracts.

Through strategic partnerships with 50 partners, ISSD Ethiopia scaled up the number of LSBs with 244 additional LSBs. Partners included the Bureaus of Agriculture (BoA), Woreda offices of Agriculture (WoA), public seed enterprises, research institutes, universities and colleges, farmers unions and NGOs. Both the Agricultural Transformation Agency (ATA) and the Agricultural Growth Programme (AGP) have recognized the value of LSBs and their contribution to seed production in Ethiopia and have been important partners in supporting LSB development. Scaled up LSBs are located in high and lower potential agro-ecologies and were supported through using the LSB approach of key performance areas and key performance indicators. The average LSB under these partnerships scored a 3 (satisfactory) on a scale of 0-5 (poor-excellent) and demonstrated improvement over time in all performance areas. LSBs scored lower on capacity to add value to seed, seed marketing, and financial management. This indicates that there is ample opportunity for improvement in these areas.

Collectively, the ISSD Ethiopia supported LSBs produced 63,135 tons of quality seed and 24,195 tons of quality seed potatoes. The LSBs produced seed of 29 different crops encompassing 200 varieties. The 50 partners involved in LSB scaling differed in the extent, intensity, and capacity to support SPCs to become autonomous and professional. Seed core groups at woreda level provided a locally embedded structure to promote the sustainability of LSB's and to facilitate the coordination of LSB support among partners.

ISSD Ethiopia had the objective to support private small and medium scale seed producers to professionalize and expand their orientations to better meet the seed needs of Ethiopian farmers. Private seed producers continued to work closely as out growers to the public seed enterprises, but also increased the amount of seed marketed directly to farmers (from 4% in 2012 to 45% in 2015). The latter was supported by the introduction of the direct seed marketing (DSM) approach. The percentage of seed producers with a sole focus on hybrid maize has reduced to 30%. A selected number of these private investors were able to obtain a certificate of competence which enables them to become more autonomous in their business. ISSD Ethiopia was instrumental in helping private seed producers to extend their crop and variety portfolio beyond hybrid maize, find new markets, and become more business oriented and customers focused seed producers. Many of these private seed producers became members of the Ethiopian Seed Association (ESA).

Ethiopia has an emerging private seed sector and the objective of ISSD Ethiopia was to facilitate and promote investments in seed production and marketing by national and international seed companies. The programme supported the ESA to become a viable and professional body capable of representing the interests of the commercial seed producers in Ethiopia. ESA increased its membership to 31 members in 2015. It strengthened the management and planning of its secretariat, strengthened its

lobbying capacity, developed guidelines for internal seed quality testing, developed a website which was launched in April 2015, and published a membership directory of all ESA members. Company profiles of Ethiopian seed companies are now available at the ESA website. ISSD Ethiopia and ESA trained Ethiopian seed companies in many aspects related to seed business.

ISSD Ethiopia worked with a number of Dutch companies to explore opportunities for investment and for product development. Partnerships were established with companies like INCOTEC and Koppert, working on seed coating; with Rhea Composites, working on the development of a row planter for teff and sesame seeds; and with ENZA, facilitating variety trials. The project supported the Seed2Feed consortium led by INCOTEC in the development of a proposal under the FDOV facility.

Under the partnerships and innovation component of ISSD Ethiopia, the programme has developed functioning regional seed sector platforms steered by core groups which represent the major seed sector stakeholders of the region. These core groups facilitated successful studies and pilots, which created an evidence base for scaling innovations in the seed sector. Key innovations initiated by ISSD Ethiopia, which have been institutionalized with the support of the programme, include direct seed marketing (DSM), new modalities for early generation seed (EGS) production, and establishment of seed regulatory authorities and improvement of the seed certification system. DSM has incentivized seed companies to strengthen their competitive position in the seed market and ultimately encouraged them to invest more in seed quality. Other topics addressed through partnerships include but are not limited to methodologies for seed demand assessment, establishment of SPC unions, organization of finance fairs for seed producers, and development of BSc and MSc curricula on seed science.

Over the past years, ISSD Ethiopia has demonstrated a capacity to put important issues on the policy agenda at both regional and federal levels. ISSD Ethiopia demonstrated the ability to effectively manage and support strategically important partnerships with policy makers at MoA, ATA and the regional BoAs, which foster a culture of collaboration and learning. Through these partnerships and with the guidance and technical support of ISSD staff in the regions and the programme management unit in Addis, ISSD Ethiopia has made profound national seed policy contributions as reflected by the Seed Proclamation, the Plant Breeders Rights Proclamation (draft), and the Seed Systems Development Strategy. ISSD Ethiopia regional units provided consistent and relevant inputs to operationalizing policy directives on DSM, improving the effectiveness of EGS production, and establishing seed regulatory agencies.

ISSD Ethiopia aimed to promote the innovation in the seed sector through research and studies. Through BSc, MSc and PhD studies the capacity of ISSD staff and ISSD partners has been strengthened. But also the future generation of scientists, practitioners and potential decision makers in agriculture and seeds, have been sensitized towards the principles and approach of ISSD, and supported in their academic and professional development. The MSc research studies provided ISSD Ethiopia input for the future directions of seed sector development.

Using a diverse range of documentation tools and a variety of communication channels, ISSD Ethiopia has been fostering continuous sharing of experiences and lessons learnt, within the programme and beyond. The programme is now well known by Ethiopian seed sector stakeholders. This supports the wider application of ISSD concepts and approaches, and attracts more parties expressing the interest to collaborate with ISSD Ethiopia.

Capacities of ISSD staff, ISSD partners and other seed sector stakeholders have been strengthened through the various trainings as organized by ISSD Ethiopia. Training has been organized based upon specific demands, and designed as such that it immediately benefited the programme, i.e. supporting that the new knowledge and skills could be immediately applied in the actual work of the trainees. Development of this capacity contributes to strengthening the seed sector in Ethiopia.

ISSD Ethiopia is coordinated by a consortium of Bahir Dar University, Haramaya University, Hawassa University, Mekelle University, Oromia Seed Enterprise and the Ethiopian Seed Association in Ethiopia, and Wageningen Centre for Development Innovation of Wageningen University & Research in the Netherlands. The Ethiopian universities and Oromia Seed Enterprise each host a regional ISSD unit. A programme management unit in Addis Ababa, hosted by Haramaya University, and Wageningen Centre for Development Innovation support these regional units. Partners include governmental organizations at federal, regional and local level, non-governmental organizations, development organizations, and seed businesses operating at different scales. The programme is funded by the Directorate General for International Cooperation through the Embassy of the Kingdom of the Netherlands in Addis Ababa.

1 Programme structure and organization

1.1 This report

This is the end of programme report of the Programme on Integrated Seed Sector Development in Ethiopia Phase II. The programme was implemented in the period November 2011 – December 2015. The report explains the programme organization and the programme structure, and focusses on the achievements for each programme component. It also refers to the 2015 external evaluation of the programme. For each programme component we give the vision as elaborated in the project proposal, the major activities, a comparison of the envisaged outputs versus the actual achievements and a summary of the remarks of the programme evaluation team. Each chapter ends with conclusions and lessons learnt. The report strongly builds upon the annual reports of 2012 to 2015.

Find a finance summary of ISSD Ethiopia Phase II in Annex 1. A complete finance report is attached as a separate annex. This report is based upon the annual audited reports of all partners for the period November 2011 – December 2015.

1.2 Integrated seed sector development

Vision of ISSD Ethiopia programme

“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”.

Source: Approved project proposal Integrated Seed Sector Development in Ethiopia Phase II, page 15.

Seed sector development is a priority

The Government of Ethiopia prioritizes agricultural development as key to accelerating growth, overcoming poverty and enhancing food security. Increased agricultural productivity is vital for stimulating growth in other parts of the economy. Improving farmers’ access to quality seed of preferred varieties is crucial for increasing agricultural productivity and production, thereby contributing to food security and economic development in the country.

ISSD approach

ISSD is an inclusive approach that recognizes and builds upon a diversity of seed systems. ISSD recognizes the relevance of informal and formal seed systems, as well as the complementary roles of the private and public sectors. The ISSD approach promotes entrepreneurship and market orientation, and facilitates the development and implementation of enabling and evolving policies, for establishing a dynamic seed sector. Building upon a diversity of seed systems, programmes guided by the ISSD approach foster pluralism in the interests of food and nutritional security, economic development, entrepreneurship and the conservation of genetic resources.¹ The guiding principles of ISSD, listed in Box 1, help practitioners to deal with the complexities of the seed sector in the design and implementation of seed sector interventions.

¹ Louwaars, N.P. and De Boef, W.S. 2012. Integrated Seed Sector Development in Africa: a conceptual framework for creating coherence between practices, programs, and policies. *Journal of Crop Improvement*, 26: 39–59.

Box 1. ISSD guiding principles²

1. Foster pluralism and build programmes upon a diversity of seed systems
2. Work according to the structure of the seed value chain
3. Promote entrepreneurship and market orientation
4. Recognize the relevance of informal seed systems
5. Facilitate interactions between informal and formal seed systems
6. Recognize complementary roles of the public and private sectors
7. Support enabling and evolving policies for a dynamic sector
8. Promote evidence-based seed sector innovation

Note: see also the animation explaining ISSD and its guiding principles at:
<http://www.issdseed.org/topic/issd-guiding-principles>

Important definitions

ISSD supports the development of informal, intermediary and formal seed systems, and it promotes farmers' access to quality seed of superior varieties. Find our definitions of the different seed systems, quality seed and superior varieties in Box 2.

Box 2. Important definitions

Formal seed systems: These seed systems involve specialised activities of the seed value chain governed by an official regulatory environment. Seed in formal systems predominantly carries the label of full certification, and activities along the seed value chain are to a large extent commercialised.

Informal seed systems: These seed systems include the activities of farmers, rural communities and other stakeholders saving, exchanging, bartering, gifting, and selling seed without formal regulatory involvement and varying degrees of commercial orientation.

Intermediary seed systems: These seed systems involve individual seed entrepreneurs and varying degrees of organised groups of seed producers and entrepreneurs and/or their associations that are engaged in commercial seed production and marketing with facilitated loose or temporary linkages to formal organisations including research, extension, markets, financial services, and regulation.

Quality seed: Quality seed is viable seed that germinates well and is free from seed-borne pests and diseases. In the informal seed systems quality seed has only been subjected to the seed producers' internal procedures of quality control. In the intermediary and the formal seed systems internal quality control procedures of the seed producers are supplemented with external quality assurance, including decentralized mechanisms like quality declared seed, and the centralized mechanism of seed certification.

Superior varieties: Superior varieties are varieties that fit with specific farmer demands, including improved varieties that have been formally released and accessed through a diversity of sources; improved varieties that have been released and recycled through informal and intermediary seed systems; and local varieties.

The African Union Commission (AUC) has endorsed the ISSD approach in support of its African Seed and Biotechnology Programme for seed sector development in Africa³. In February 2009, the Ethiopian Ministry of Agriculture (MoA), together with key public, private and civil society stakeholders in the seed sector, endorsed a concept note on integrated seed sector development in Ethiopia, thereby

² ISSD 2013: Introduction to Integrated Seed Sector Development and its guiding principles. Integrated Seed Sector Development in Africa, Centre for Development Innovation, Wageningen UR, Wageningen, the Netherlands. Available at <http://www.wageningenur.nl/en/show/Integrated-seed-sector-development-in-Africa.htm>

³ Find two AUC Communiqués on Integrated Seed Sector Development at <http://www.wageningenur.nl/en/show/Integrated-seed-sector-development-in-Africa.htm>

recognizing the ISSD approach for strengthening the Ethiopian seed sector through interventions in different seed systems. This provided the basis for ISSD Ethiopia programme.

Endorsement of the ISSD approach

The African Union Commission (AUC) has endorsed the ISSD approach in support of its African Seed and Biotechnology Programme for seed sector development in Africa⁴. In February 2009, the Ethiopian Ministry of Agriculture (MoA), together with key public, private and civil society stakeholders in the seed sector, endorsed a concept note on integrated seed sector development in Ethiopia, thereby recognizing the ISSD approach for strengthening the Ethiopian seed sector through interventions in different seed systems. This provided the basis for ISSD Ethiopia programme.

1.3 Programme organization

Coordinating partners

ISSD Ethiopia was implemented in Amhara; Oromia; the Southern Nations, Nationalities, and Peoples Region (SNNPR); and Tigray. It was coordinated by a consortium of partners, comprising Bahir Dar University (BDU), Haramaya University (HU), Hawassa University (HwU), Mekelle University (MU), Oromia Seed Enterprise (OSE), and the Ethiopian Seed Association (ESA), in Ethiopia; and the Wageningen Centre for Development Innovation (CDI) of Wageningen University & Research (WUR), in The Netherlands. Ethiopian universities and OSE hosted regional ISSD units; HU also hosted the Programme Management Unit (PMU), which was located in Addis Ababa. ESA specifically worked on strengthening the private seed sector. ISSD Ethiopia was supported by the Directorate General for International Cooperation (DGIS) of The Netherlands, through the Embassy of the Kingdom of The Netherlands (EKN) in Addis Ababa.

Key partners in programme implementation

National ISSD Ethiopia partners included organizations within federal and regional state government, including the Federal Ministry of Agriculture (MoA), the Ethiopian Agricultural Transformation Agency (ATA), the regional state Bureaus of Agriculture (BoA), offices of the Cooperative Promotion Agency (CPA), and Research Institutes. The programme also collaborated with non-governmental organizations (NGOs), small and medium scale seed enterprises as well as Seed Producer Cooperatives (SPCs) and their local partners.

Embedding in the Ethiopian context

The programme organization and implementation structure was designed to promote stakeholder ownership, and support embedding of ISSD Ethiopia in national and regional contexts. The PMU and the five regional ISSD units were responsible for project coordination and implementation at national and regional levels. The executive coordination committee was the decision-making body for programmatic issues; all coordinating organizations were represented in this committee. The national PMU closely collaborated with the five ISSD units which worked on project implementation with regional and local partners. Each ISSD unit hosted a coordinator and institutional adviser (both on part-time basis); technical experts on seed, farmer organizations, agribusiness, partnerships, private sector development, and knowledge management; as well as support staff like drivers and a finance officer.

Support from CDI

CDI has been contracted by the donor; CDI contracted Ethiopian partners and advisors. The CDI coordinator worked closely with the PMU programme director in the coordination of ISSD Ethiopia. Together with PMU, CDI designed the programme's process. A team of CDI staff was associated to the programme providing different types of expertise. These staff organized trainings, supported workshops and organized coaching sessions for the regional ISSD units.

⁴ Find two AUC Communiqués on Integrated Seed Sector Development at <http://www.wageningenur.nl/en/show/Integrated-seed-sector-development-in-Africa.htm>

1.4 Programme structure

General programme structure

The different components of the programme are illustrated in Figure 1. ISSD Ethiopia supported the strengthening of seed producers in different seed systems (left side of the figure), including local seed businesses, private seed producers and national seed companies. It also tried to establish linkages with international companies with an interest in seed in Ethiopia. Working with a wide range of stakeholders, regional seed platforms facilitated innovation and learning for supporting seed sector coordination and governance (centre of the figure). Experiences of the programme were fed into policy development; and the programme also supported policy implementation (right side of the figure). The programme strongly incorporated research, the sharing of experiences, and learning into its different programme components, thereby taking an evidence-based approach to intervention and capacity building (bottom of the figure). Below the different programme components are explained in more detail.

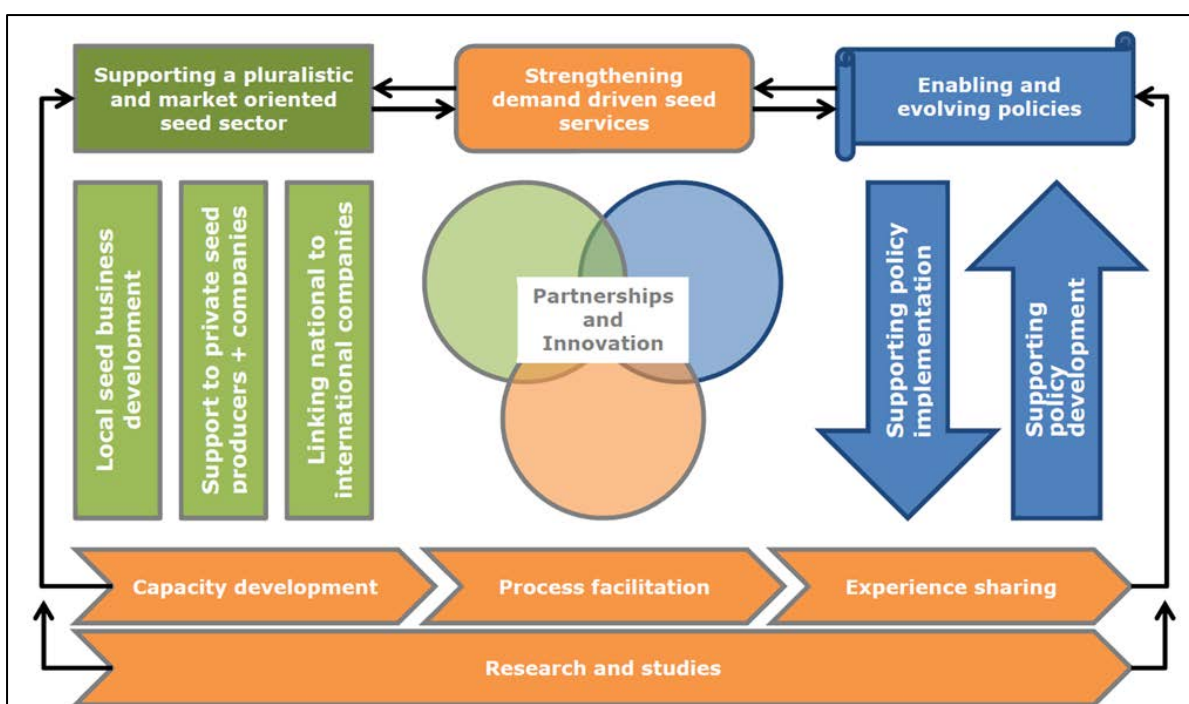


Figure 1 Structure of ISSD Ethiopia

Local seed business development – consolidation

The objectives of this programme component were to support 34 Local Seed Businesses (LSBs) in their professionalism, autonomy and entrepreneurship; and to study and accompany their development ensuring innovation of the LSB process supporting scaling up of LSBs with partners. A good performing LSB should be technically well-equipped, market oriented, professionally organized, and strategically linked to those stakeholders that make the organization self-reliant in its control over its seed business. LSBs consolidated in their development serve as examples for scaling up LSBs and their partners.

Local seed business development – scaling up

The objectives of this programme component were to promote the support and establishment of 165 – 340 LSB groups in such a manner that they get a significant share at local seed markets for food and semi-commercial crops; and to share the LSB approach and promote its use for commercial local seed supply in at least 20 organizations. ISSD Ethiopia has been scaling LSBs through strategic partnerships with universities, public sector research, and government and non-governmental seed programmes, and in this way leveraged the LSB development approach to a diversity of organizations. Instead of working directly with LSBs, the ISSD Ethiopia LSB experts provided indirect support

through facilitating exposure visits and trainings, coaching partner staff, and linking partner supported LSBs into the ISSD network.

Private small and medium scale seed producers

The objectives of this programme component were to promote and support the system of small and medium-scale seed producers; and to facilitate their collaboration with other companies and research. Private small and medium scale seed producers in Ethiopia often operate as out-growers to BoA. They produce mainly certified hybrid maize seed, which used to be distributed through the government seed distribution system. These seed producers generally had basic skills on quality seed production but had poor marketing, business orientation, and entrepreneurial capacity. ISSD Ethiopia worked with professional seed producers in strengthening their seed business skills, to enable them to supply a significant quantity of quality seed to markets in Amhara, Oromia, SNNPR and Tigray.

Seed companies

The objective of this programme component was to facilitate and promote investment in seed production and marketing by national and international seed companies. ISSD Ethiopia strengthened the position of private seed companies and facilitated partnerships with Dutch/international seed companies. The programme further built the capacity of ESA, through professionalizing the association and its services, and strengthening its member base.

Partnerships and innovation

The objectives of this programme component were to institutionalize an approach allowing seed sector stakeholders to work in partnership on solving key bottlenecks in the seed sector; and to develop and consolidate clear roles and responsibilities, and task division among seed sector stakeholders. ISSD Ethiopia facilitated collaboration in regional partnerships. Regional partnership platforms united stakeholders in discussions on local and regional issues. Regional core groups, comprising eight to ten members representing the key stakeholder groups in the region, formed the decision-making bodies of the regional partnership platforms. Through innovation projects stakeholders jointly experimented with innovative approaches towards resolving complex institutional bottlenecks on issues like Early Generation Seed (EGS) production, seed quality assurance and Direct Seed Marketing (DSM).

Seed policies

The objectives of this programme component were to strengthen the development and implementation of enabling policy frameworks, guidelines and implementing capacity, recognizing the pluralistic nature and dynamics of the seed sector; and to support the development of policies, regulations, directives, standards, as well as guidelines and manuals for quality assurance, marketing, crop variety release and registration, and Plant Breeder's Rights (PBR). ISSD Ethiopia encouraged policy makers to take the realities of different seed systems into consideration in the development of seed policy frameworks, and brought an ISSD perspective into discussions on the Seed Proclamation (2013), the Plant Breeders Rights Proclamation (draft in 2014), and the Seed Systems Development Strategy (2014). Linked to the component on partnerships and innovation, it supported the implementation of policy guidelines on EGS, DSM and seed quality assurance.

Research and studies

The objectives of this programme component were to enhance the capacity of own staff and associated partners through supporting BSc and MSc studies; and to promote innovation in the seed sector, and evidence based documentation through supporting MSc and PhD research and studies. ISSD Ethiopia supported MSc research studies on topics considered important for the development of the seed sector. Selected ISSD staff were supported to obtain their MSc degree or PhD degree. Moreover, in each region, development agents (DAs) who have been working closely with the LSBs in the consolidation programme, were supported in obtaining their BSc degree.

Sharing experiences and lessons learnt

The objectives of this programme component were to foster the continuous sharing of experiences and lessons learnt, within the programme and beyond, using a diverse range of documentation materials and tools, and variety of communication channels; and to foster the use of new concepts, methodologies, insights and practices among partners and stakeholders in various domains and at

various levels. ISSD Ethiopia used a wide range of instruments for sharing the programme's lessons learnt with stakeholders at local, regional, national and international level, including printed materials, websites and social media, radio and television, and face-to-face meetings.

Capacity development

The objective of this programme component was to develop modalities for capacity development at national and international level, for all sector components for ISSD Ethiopia staff and partners. Capacity building activities were always needs based, and were designed in such a way that new knowledge and skills could be immediately applied to support the development of the seed sector in Ethiopia.

1.5 Programme evaluation

2015 ISSD Ethiopia evaluation

In 2015 the ISSD Ethiopia programme has been evaluated to assess the efficiency, effectiveness, relevance and sustainability of the different project components; and to assess the effectiveness of the institutional implementation framework through CDI, PMU and regional ISSD units⁵.

A team of international and Ethiopian consultants, i.e. Ben Haagsma, Bezabih Emana, Belay Simani, Legesse Dadi visited Addis and the five project regions. The team engaged with the donor, with ISSD staff and with Ethiopian key seed sector stakeholders in workshops and in the field between 16 and 27 March 2015. They debriefed the ISSD Ethiopia executive coordination and the donor on 27 March. After that, the ISSD Ethiopia executive coordination committee reflected on the evaluation on 19 May and shared the observations with the donor. Find below the strong and critical points from the evaluation for the relevance and effectiveness of ISSD Ethiopia, and for the institutional set-up.

Relevance of ISSD Ethiopia

The main strong points in relation to the relevance of ISSD Ethiopia indicated in the evaluation are:

- Its components support the development of a pluralistic seed sector; all components are relevant;
- It is consistent with national seed sector and agricultural policies;
- It recognizes the importance of the private sector (LSBs, seed producers, seed companies);
- It shortens the public seed production and distribution chain (direct seed marketing);
- Its software approach induces systemic change and business mind-set, and compliments hardware approach of other projects;
- It supports increased productivity, food security and economic development.

The main critical points in relation to the relevance of ISSD Ethiopia indicated in the evaluation are:

- No attention to informal seed systems;
- With exclusive focus on seed producers, lack of integrated seed value chain approach;
- LSBs insufficiently linked to other value chains and businesses;
- Insufficient recognition of importance of research institutes as first actor in the seed value chain (SVC);
- Mismatch between allocation of resources to different components and envisaged results;
- Cross cutting issues like gender not adequately considered.

⁵ Haagsma, B., B. Emana, L. Dadi and B. Semane. 2015. Programme evaluation of Integrated Seed Sector Development in Ethiopia. The complete evaluation report can be obtained upon request from Dr. Amsalu Ayana or Dr. Marja Thijssen.

Effectiveness of ISSD Ethiopia

The main strong points in relation to the effectiveness of ISSD Ethiopia indicated in the evaluation are:

- The availability of affordable quality seed has increased;
- Farmers recognize greatly, the importance of quality seed for increasing productivity;
- ISSD Ethiopia has started moving the seed sector, involving key stakeholders at all levels;
- The bottom up approach has generated an evidence basis for influencing decision makers.

The main critical points in relation to the effectiveness of ISSD Ethiopia indicated in the evaluation are:

- Too much emphasis on pre-determined targets and too little on quality of performance;
- Concerns to reach the maximum number of farmers as quickly as possible may deteriorate quality of effectiveness;
- Specific dimensions of equality in access to quality seed, such as gender and wealth, are not made explicit and are not addressed.

Institutional set-up of ISSD Ethiopia

The main strong points in relation to the institutional set-up of ISSD Ethiopia indicated in the evaluation are:

- Universities as hosting organizations being not directly involved in the SVC and accepted by SVC actors in the neutral role of facilitator;
- Project strengthens role and mandate of universities in: research for knowledge generation, and becoming more functional and practical in outreach;
- Essential role of PMU in implementation, and PMU support to regions upon their request;
- Direct support of CDI to ISSD regional teams.

The main critical points in relation to the institutional set-up of ISSD Ethiopia indicated in the evaluation are:

- PMU lacks power for playing its role in influencing policy;
- PMU lacks power in project coordination, management and planning, and functions merely as a liaison office;
- Direct linkage between universities and CDI, without involvement of PMU;
- University procurement rules may delay implementation;
- Regional teams are too independent; they do not report to PMU but to CDI; this hinders sustainability.

Use of the evaluation

In addition the team evaluated each and every project component; find the points on the individual components in the next chapter. All details can be found in the evaluation report. We have high appreciation for evaluation team for capturing all different dimensions of the ISSD Ethiopia programme within the short time available for the evaluation. The evaluation has been very helpful in supporting the formulation of the next phase of ISSD Ethiopia, in what to maintain in the new project and where to adapt. Some of the recommendations have been immediately implemented in the third quarter of 2015, like strengthening the role of the PMU. Other recommendations have been used in the formulation of the next phase of ISSD Ethiopia, like development of a new component on informal seed systems.

2 Achievements for different project components

2.1 Local seed business development – consolidation

2.1.1 Vision

“In four years, the ISSD Programme foresees that the 34 LSB groups are autonomous professional seed entrepreneurs serving as reference for providing inputs for models in which local seed businesses play a significant role ensuring availability of affordable quality seed of superior improved and local varieties at woreda and kebele level.”

Source: Approved project proposal Integrated Seed Sector Development in Ethiopia Phase II, page 20.

2.1.2 Major activities

KPA and KPI framework for LSBs

Between 2011 and 2015 ISSD Ethiopia supported 33 Seed Producer Cooperatives (SPCs) in the consolidation process towards LSBs (one cooperative in Oromia East decided to leave seed as a business in 2014). The LSBs were strengthened in four key performance areas (KPAs), i.e. to become (1) technically well equipped, (2) market oriented, (3) professionally organized, and (4) strategically linked. Key performance indicators (KPIs) were developed to measure progress of the LSBs over the years for each KPA; see Table 1. ISSD Ethiopia used the framework of KPAs and KPIs to design its interventions together with the LSBs, and to steer the LSBs towards sustainable local businesses. Support to LSBs included training, coaching, advice, facilitation of access to inputs and services, facilitation of peer to peer exchange, and the provision of small co-funding grants.

Table 1

Key performance areas and key performance indicators for successful LSBs

Key performance area		Key performance indicator	
1	Technically well equipped	1	LSB has the capacity required to produce quality seed products
		2	LSB has the capacity required to add value to its seed products
2	Market oriented	3	LSB has the capacity and strategy required for marketing its products
		4	LSB products are in demand
3	Professionally organized	5	LSB is well managed in general
		6	LSB is financially well managed
		7	LSB has the required infrastructure
4	Strategically linked	8	LSB is linked to all required input and service providers

Technically well equipped

Activities supporting LSBs to become technically well-equipped were, for example: training and coaching of SPC members and their partners on quality seed production, post-harvest management and seed value addition; establishment, training and coaching of internal quality control committees; facilitation of external field inspection; and supporting the best performing LSBs to produce basic seed themselves, under close supervision of experts (WoA, research).

Market oriented

The following activities are examples of interventions that supported LSBs to become market-oriented: identification of crops and varieties to produce seed with high demand; introduction of new germplasm at LSB premises; establishment of crop and variety demonstration trials; support to seed promotion

activities like farmers' field days, seed fairs and radio programmes; seed profitability studies; development of business plans and business model canvasses; and training of LSBs and DAs on seed marketing.

Professionally organized

In order to become professionally organized, ISSD Ethiopia supported the LSBs through activities like: training of SPC executive committee members and partners on cooperative governance, seed business management, and financial management; working on SPCs' internal bylaws; supporting SPCs to get a seed production and marketing competence license; study, awareness raising and training on gender and SPCs; a feasibility study and workshop on the establishment of seed unions; and provision of a small co-funding grant for seed production and processing infrastructure facilities.

Strategically linked

Activities supporting LSBs to become strategically linked included: strengthening seed core groups at woreda levels, uniting all partners in supporting the SPC in LSB development; linking LSBs to research institutes and universities for access to new varieties and the provision of basic seed; linking LSBs to seed buyers; linking LSBs to development partners like ATA; organization of field days with participation of BoA and research institutes; exposure visits to research and technology centres; and supporting LSBs in getting access to credit through the organization of finance fairs and setting up meetings linking LSBs with credit providers.

2.1.3 Expected outputs versus achievements

Table 2 shows the expected outputs, as elaborated in the ISSD Ethiopia Phase II programme proposal, and the achievements of the programme in the 2012 – 2015 implementation period. The table also gives additional information to explain the achievements and possible deviations from the earlier envisaged outputs.

Table 2
Expected outputs versus achievements for consolidation LSBs

Expected outputs ¹	Achievements	Explanations
Farmers groups in the 34 sites are autonomous and professional in their seed entrepreneurship	Farmers groups in 33 sites are autonomous and professional in their seed entrepreneurship	One farmer group left seed business in 2014
An evidence based models of LSB development, using the 34 LSB groups as reference group, which can be used in other conditions and settings	An evidence based model of LSB development, using the 33 LSB groups as reference group, which can be used in other conditions and settings	The KPA and KPI framework supports internal evaluation of the LSBs and identification of key areas that need support to improve business performance
The process for LSB business development and planning is well established; it is used in scaling up	The process for LSB business development and planning is well established	The business model canvas has been introduced as a simple tool for business planning; business planning in scaling up LSBs is still weak
Partners in LSB development (WoARD, RSEs, RARIs, EIAR institutes, Cooperative Promotion Agencies, NGOs and projects) have a strong capacity and have changed their responsibilities working in a sustainable manner with the 34 LSB sites (learning)	Partners in LSB development (WoA, RSEs, RARIs, EIAR institutes, CPA, NGOs and projects) have been united in local core groups to jointly and sustainably support the 33 LSBs in their development	Woreda seed core groups are important new structures that promote sustainable and locally embedded support to LSBs

¹ Expected outputs are copied from the approved project proposal Integrated Seed Sector Development in Ethiopia 2011 - 2015

Key performance indicators

In 2012, the LSB performance measurement framework with over 50 critical success factors for LSB development was transformed into a new KPA and KPI framework. We consider the framework as a simple and valuable tool to assess the status of the LSBs and define the interventions needed to improve their performance. It has been used for LSBs in the consolidation programme and in the scaling up programme. We realize that since this is an internal assessment, even if the scores (1 – 5) are well described, KPIs may exaggerate real business performance. Figure 2 shows the KPI scores from 2013 to 2015. The LSBs score above good (score 4) for six of the eight KPI; for capacity to add value, and capacity for marketing they score between satisfactory and good (score between 3 and 4).

These latter two areas need high attention in future follow up activities, with the remark they these issues are less important if LSBs are just seed contract growers for the government.

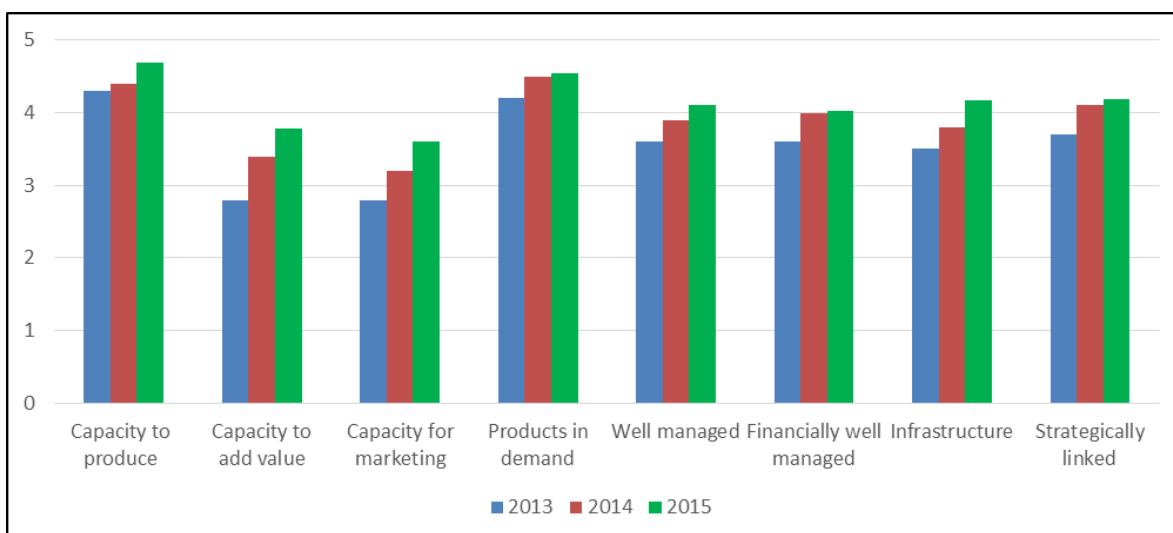


Figure 2 KPI Scores for LSBs in the consolidation programme in 2013, 2014, and 2015. Scoring: 1 = poor; 2 = weak; 3 = satisfactory; 4 = good; 5 = excellent.

Seed price versus grain price

Seed price related to grain price is a good indicator for success of the LSBs in terms of getting a price differential and adding value, and which is higher than the general 115% of the grain price. The average sales prices of LSB seed was consistently higher than grain prices, see Table 3, which illustrates the business case for LSBs and the LSB capacity at value addition. The table shows that for all crops, except for wheat (with high percentage of contract growing), the 30% target was achieved.

Table 3
Seed price versus grain price for a number of indicator crops

Crop	Maximum seed price gotten by LSBs*	Minimum seed price gotten by LSBs	Average seed price gotten by LSBs	Grain price at harvest time	Ratio seed price/grain price
Barley	1,014	806	880	676	1.30
Chickpea	1,434	820	1,035	788	1.31
Common bean	1,445	900	1,186	633	1.87
Sorghum	875	650	689	513	1.34
Teff	2,210	1,115	1,640	1,230	1.33
Wheat	1,165	738	856	695	1.23
Potato	915	328	607	326	1.86

*Note: all prices are in ETB/quintal

Investment of profit in the LSB

Profit re-investment by LSBs in their seed business is considered a measure of success. The target for LSB's was 10% of profit reinvested, which was achieved by all regions. This reinvestment is also encouraged by the increased trend of development partners supporting infrastructure investment and encouraging members of recipient SPCs to cost share.

Diversification of sales channels

Diversifying sales channels by selling to different customers helps seed businesses to diversify revenue streams and become more sustainable. During the course of ISSD Ethiopia, many SPCs have evolved from being reliant on contractual seed growing of one crop for a public seed enterprise to selling to different institutional seed buyers (WoA, NGO's) and increasing direct seed sales to farmers. The target for LSBs for direct seed sales (as compared to contract growing) is 50%. In 2015 SPCs were

selling 45% of their seed on contract, 24% to institutional buyers, and 31% directly to farmers; see Figure 3. This figure shows, however, that seed produced on contract has been increased as compared to 2014, whereas direct seed sales to farmers have decreased. This may be due to the bad cropping season of 2015, with LSBs complying to contractual agreements first, before using other sales channels for their seed. Seed grown on contract and distributed by the Government reaches and benefits both farmers in high potential areas and marginal areas of Ethiopia.

Our data do not include the volumes of seed sold from farmer to farmer, without the interference of the LSB, i.e. back door selling. Farmers are very reluctant to provide data on this sales channel. Experts estimate that the percentage of seed back door selling is 10%.

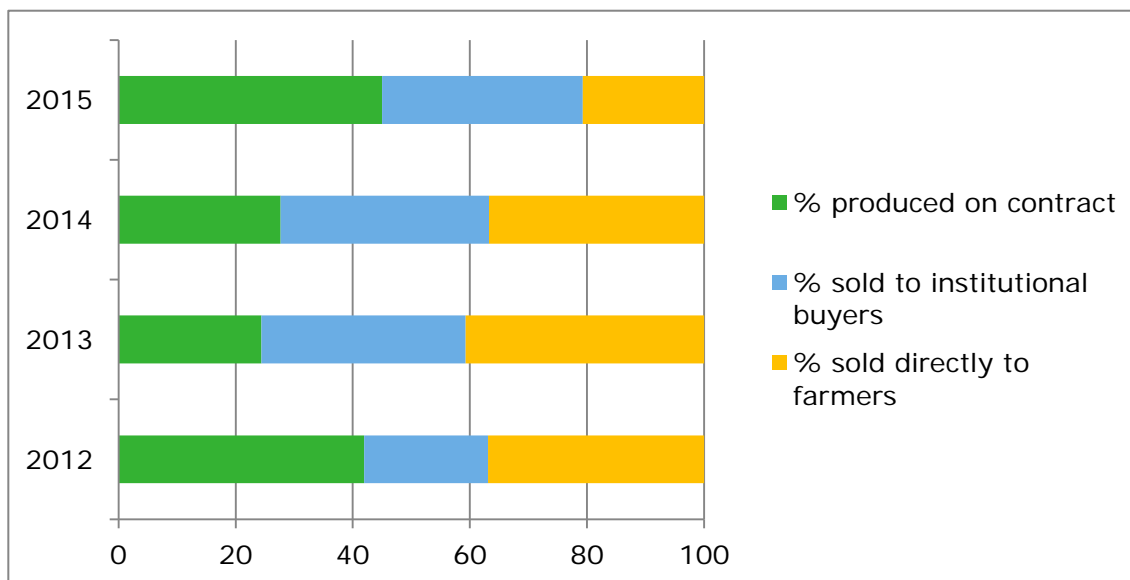


Figure 3 Sales channels of consolidated LSBs by volume of seed sold in Amhara, Oromia, SNNPR and Tigray. Different channels indicated by percentage of total sales

2.1.4 ISSD Ethiopia programme evaluation

In summary the 2015 external programme evaluation indicated the following issues about LSB consolidation:

Strong points: LSB recognition; business orientation; seed quality control; linkages for access to credit, hardware, subsidies; DSM; reinvestment in business; focus on local seed needs; strong leadership.

Critical points: KPIs exaggerate real business performance; poor ToT approach; remaining problems with working capital; risk of over-granting LSBs by other projects; insufficient marketing skills; no context monitoring; LSBs not sustainable yet.

Actions recommended: Revise KPIs; elaborate marketing strategies; calculate prices along SVC; develop framework for context monitoring (markets, projects, policies); diversify crop/variety portfolio; improve ToT approach.

2.1.5 Conclusions and lessons learned

- The SPCs in the LSB consolidation plan have understood seed as a business;
- The SPCs are considered to be 'graduated', and will receive no further support from the programme in its next phase;
- A number of SPCs have now obtained a certificate of competence (CoC), which allows them to market seed by themselves; this is an important step towards an autonomous and sustainable seed business;
- Woreda seed core groups are important locally embedded structures for coordinating services to SPCs and backstopping of SPCs, creating independence from ISSD Ethiopia;
- Our data show that LSBs are able to negotiate a better price for seed; that they reinvest profit into their business; and that the majority of seed is sold outside the contract arrangement with the government; these are important indicators for sustainability in business;

- For LSBs to keep interest in seed contract growing of crops like hybrid maize and wheat, the seed pricing mechanism should be revised;
- Consolidated SPC may serve as important examples for farmer groups and their partners who want to sustainably support seed production for a local market.

2.2 Local seed business development – scaling up

2.2.1 Vision

“In four years, the ISSD Programme expects that through strategic partnerships with other universities, public research and seed entities, NGOs and programmes, 165-330 groups of organized farmers are engaged in commercial seed production in a sustainable manner; local seed business are leading seed providers in between 165-330 localities; more than 20 organizations and/or projects work with the LSB process supporting the groups of farmers; and local seed businesses produce a significant part of the quality seed of superior improved and local varieties in Amhara, Oromia, SNNPR and Tigray.

Source: Approved project proposal Integrated Seed Sector Development in Ethiopia Phase II, page 22.

2.2.2 Major activities

Indirect support to LSBs

In the programme component on LSB scaling up ISSD Ethiopia experts did not support the LSBs directly, but supported the LSB partners through trainings, coaching sessions and the facilitation of exposure visits of partners and LSBs. Partners signed MoUs with ISSD Ethiopia specifying roles and responsibilities, and including a co-funding target of 75%. The 33 consolidated LSBs served as references to partners and scaling LSBs.

Partnerships

By the end of 2015, ISSD Ethiopia worked with 50 partners to support a total of 244 LSBs via the scaling up component. These LSBs are spread over 34 zones and 141 woredas; see the location of the LSBs in Figure 4. Partners include government agencies, seed enterprises, research institutes, universities, AGP, farmers unions and NGOs; see Table 4 for a breakdown of scaling up LSB by region and by partner.

KPA and KPA framework

Partners were expected to use the LSB key performance indicators to assess performance of new farmer groups and identify where support was most needed. They were trained on the ISSD approach, the LSB development approach, and the KPA and KPI assessment framework.

Technically well equipped

Activities supporting LSBs to become technically well-equipped were, for example: training of strategic and local partners (woreda focal persons, DAs) on quality seed production and the importance of an internal seed quality control committees; the facilitation of field inspection; and the support of partners in basic seed production.

Market oriented

The following activities are examples of interventions that supported LSBs to become market-oriented: training of strategic and local partners (woreda focal persons, DAs) on seed marketing and business management; and support to seed promotion through the facilitation of field days and the organization of agribusiness fairs.

Professionally organized

In order to become professionally organized, ISSD Ethiopia supported the LSBs through activities like: training of strategic and local partners (woreda focal persons, DAs) on cooperative governance and seed business planning; and the facilitation of repairing of/access to seed processing machinery for seed value addition of scaling up LSBs.

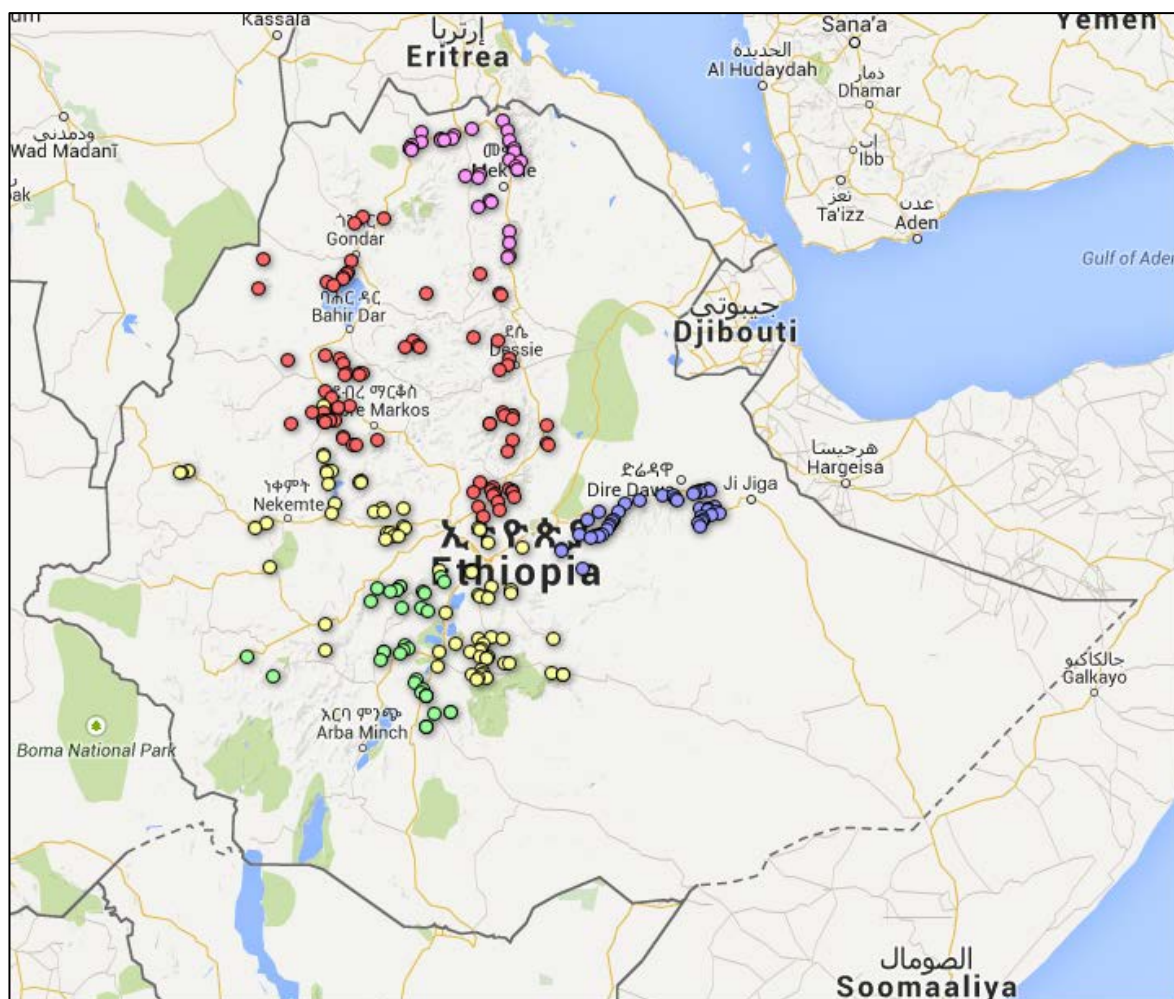


Figure 4 Location of all LSBs as supported directly (consolidation) or indirectly (scaling up) through ISSD Ethiopia in Tigray (pink dots), Amhara (red dots), Oromia South and West (yellow dots), Oromia East (blue dots) and SNNPR (green dots).

Table 4

LSB scaling up partners and numbers of associated LSBs

Partners	Amhara	Oromia East	Oromia South & West	SNNPR	Tigray	Total
Number of LSBs						
BoA, Zonal & Woreda office of Agriculture				8	28	36
WoCP	18		20			38
Public seed enterprises			10			10
Research institutes	18	11	14		3	46
Universities and colleges	27	19	11	5	11	73
AGP			5		3	8
Farmers unions		6		10		16
NGOs		3	5	6	3	17
<i>Total # SPCs</i>	<i>63</i>	<i>39</i>	<i>65</i>	<i>29</i>	<i>48</i>	<i>244</i>
Number of partners						
<i>Total # partners</i>	<i>14</i>	<i>7</i>	<i>14</i>	<i>7</i>	<i>8</i>	<i>50</i>

Strategically linked

Activities supporting LSBs to become strategically linked included: organization of discussion fora at woreda and zonal levels for local partners to create awareness and improve local embedding of LSBs; linkage of partners and their LSBs to research and knowledge institutes for access to new varieties as well as technical support; and facilitation of access to basic seed for LSBs and partners.

2.2.3 Expected outputs versus achievements

Table 5 shows the expected outputs, as elaborated in the ISSD Ethiopia Phase II programme proposal, and the achievements of the programme in the 2012 – 2015 implementation period. The table also gives additional information to explain the achievements and possible deviations from the earlier envisaged outputs.

Table 5

Expected outputs versus achievements for scaling up of LSBs

Expected outputs ¹	Achievements	Explanations
165-330 farmer groups have been established and are operational as LSB, and are becoming autonomous and professional in their seed entrepreneurship	277 farmer groups have been established and are operational as LSBs, and are becoming professional in their seed entrepreneurship	33 plus 244 farmer groups have been supported directly and indirectly; these groups are not autonomous yet. Two years of partner support is insufficient for the development of sustainable LSBs.
Through strategic partnerships, the LSB models are used, verified and adapted to local conditions for at least three years, supporting and accelerating LSB development in 20 areas, including at least 20 projects organizations/ programmes, working with 165-330 LSB groups	Through strategic partnerships the LSB model is used, verified and adapted to local conditions for at least three years, supporting and accelerating LSB development in more than 20 areas, including 50 organizations/projects/programmes, working with 244 LSB groups	LSBs have been established in 34 zones and 141 woredas, including AGP woredas and PSNP woredas
ISSD has concluded the partnership with the 20 other programmes, NGOs, Universities and Public Research and Seed Entities; several have mainstreamed the LSB modality	ISSD has concluded the partnership with 50 other organizations; several have mainstreamed the LSB modality	In its next phase ISSD Ethiopia will continue to work with selected organizations and scaling up LSBs for LSB consolidation
Groups of partners in at least 20 areas are on a sustainable manner engaged in LSB development	Groups of partners in 34 zones are engaged in LSB development	It is difficult to assess how sustainable partners engagement is. The Ethiopian Government prioritizes community based seed production and LSB development; ATA supports partners in AGP woredas on LSB development; ISSD Ethiopia collaborates with ATA in this effort

¹ Expected outputs are copied from the approved project proposal Integrated Seed Sector Development in Ethiopia 2011 – 2015

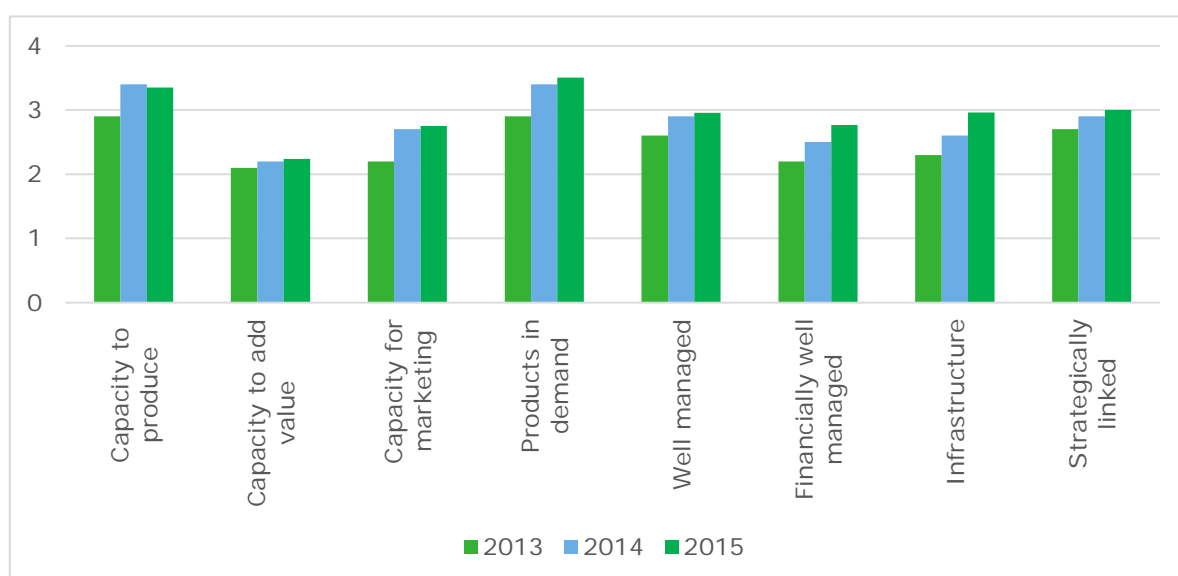


Figure 5 KPI Scores for scaling up LSBs in 2013, 2014, and 2015.

Scoring: 1 = poor; 2 = weak; 3 = satisfactory; 4 = good; 5 = excellent.

Key performance indicators

Scaling up LSBs show lower KPI scores than the LSBs in the consolidation programme, however, still show an improvement in KPI scores for seven of eight indicators in 2015; see Figure 5. These results are particularly impressive considering that this involved 244 scaled up LSBs and 50 partners. On average, the LSBs scored just above satisfactory for capacity to produce seed and capacity to produce products in demand; this is the first basis for a successful LSB. For all other indicators LSBs scored between satisfactory and good; this means that the SPCs are still highly dependent on external support and that partners need to continue to support the SPCs in the future to become sustainable LSBs.

Differences between partners in scoring

LSB performance varied considerably by partners. Consistently low scores with a partner indicates that the partner was not performing. When the partner has LSBs where performance varied greatly, this signalled the need to reconsider how LSBs were identified. Scaling up partners were more successful in supporting LSBs when coaching and support to LSBs was part of their annual planning and budgeting. This resulted in more systematic support to LSBs which was an outcome of better planning by partners.

Differences between partners in support

Different type of partners focus support where they have a comparative advantage. So for example, universities focused on capacity development; research institutes on basic seed access and field days; WoCP's on legalization of the group, auditing, administration, and infrastructure investments like stores; cooperative unions and seed enterprises intervened with basic seed, seed production training, and purchase of certified seed. AGP helped LSBs to access basic seed, construct offices and stores, develop market linkages, and auditing. This understanding enabled ISSD Ethiopia and partners to tailor support so that the comparative advantage of scaling partners can most effectively be leveraged to support LSBs. Woreda seed core groups were extremely useful to facilitate better linkages between SPCs and a diversity of partners.

Volume of seed produced

Some of the key metrics associated with the successful performance of scaling local seed businesses include the assessment of the quantity of seed produced by the scaled LSBs. Figure 6 shows the total amount of seed produced in the four regions from 2012 to 2015. Seed production in 2015 was lower as compared to 2014 because of different climatic calamities (too wet in some areas, too dry in others).

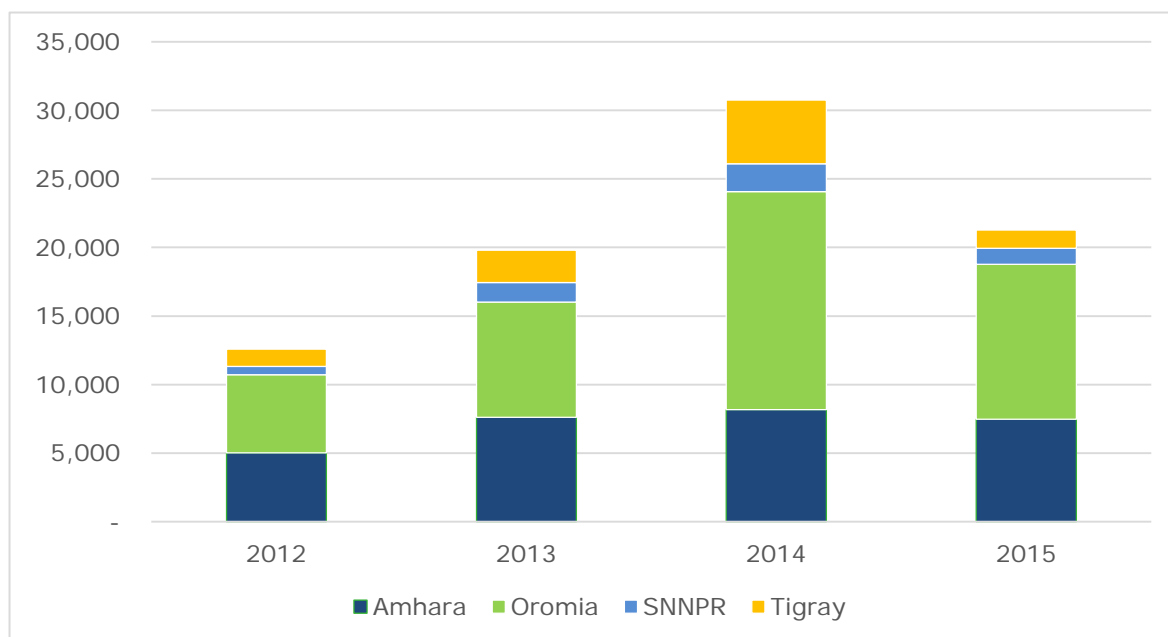


Figure 6 Total seed production in tonnes from 2012 to 2015.

Note: potato and coffee are excluded.

LSB crops and varieties

Table 6 illustrates the significant diversity of crops and varieties produced by LSBs since 2010. The last column 'grand total' shows the total number of varieties produced by LSBs over the years. When the grand total is lower than the sum of all varieties for all years for a given crop, this means that some varieties were no longer grown which reflect the fact that LSBs are responding to market demand. What can be clearly observed from this table is that LSBs produce quality seed of a large number of varieties, which cannot be produced through the public seed enterprises. In this respect, LSBs cater for a specific local seed demand.

Table 6

Number of varieties for each crop grown by LSBs from 2010 to 2015

Crop	Number of Varieties						Grand Total
	2010	2011	2012	2013	2014	2015	
Barley – food		1	5	9	7	4	11
Barley – malt	2	1	3	9	7	11	11
Black cumin			2	1	1	1	3
Chickpea		1	2	3	4	2	5
Coffee				1	1	1	1
Coriander						1	1
Faba bean			3	8	8	9	10
Fenugreek					1	2	2
Field pea		1	1	4	7	8	8
Finger millet			1	2	6	1	6
Groundnut	2	2	4	2	4	3	6
Haricot bean	2	3	3	5	8	5	9
Lentil		1	1	2	1	2	2
Linseed			3	3	3	2	4
Maize – hybrid	2	2	4	4	4	3	5
Maize – OPV	4	3	4	5	5	4	8
Noug						1	1
Onion		1	2		1		2
Pea			1				1
Potato	7	8	12	12	13	9	21
Rape seed						1	1
Rhode					1		1
Rice	3	2	1	2	4	2	4
Sesame			1	2	5	3	6
Sorghum			5	4	4	1	8
Soybean			1	2	5	1	6
Teff	1	1	5	11	9	8	16
Wheat – bread	7	10	16	19	24	35	35
Wheat – durum			2	5	5	3	6
Grand Total	30	37	81	112	131	123	200

2.2.4 ISSD Ethiopia programme evaluation

In summary the 2015 external programme evaluation indicated the following issues about LSB consolidation:

Strong points: careful assessment of partners; diversity of partners; collaboration with partners and ownership; LSBs addressing local needs; consolidated LSBs examples for new LSBs

Critical points: goals too ambitious; poor assessment of partners and scaling LSBs; insufficient capacity building of partners; varied performance of partners; partners support in own mandate areas only; co-funding model is hypothetical; problems with seed quality control

Actions recommended: train partners in ISSD approach, including quality seed production; revisit co-funding modality; M&E of knowledge transfer and action plans; joint development of implementation road map; further consolidation of LSBs.

2.2.5 Conclusions and lessons learned

- LSBs provide a significant seed contribution to the four regions in which ISSD Ethiopia operates, which aligns with government policy;
- Scaling up LSBs have increased their performance in all four performance areas, however are not sustainable yet;
- In the next phase of ISSD Ethiopia emphasis has to be on the quality of the LSBs supported instead of the quantity of LSBs supported;
- Engagement of partners with the LSBs differs greatly among partners. The LSB performance was usually stronger where partners provide more training and visits and where the performance framework is used as a baseline to improve LSB performance;
- Partners differ in the expertise they can provide to the LSBs, and additional capacity building is necessary to be able to provide a more complete package of services and support for LSB development;
- The establishment of local seed core groups, bringing together different areas of expertise for LSB support, is extremely important to increase the sustainability of development efforts;
- Close collaboration with Cooperative Promotion at all levels (national, regional, local) is necessary to ensure that related to SPC organization are solved;
- Support to informal seed systems next to LSB support will support less resource endowed farmers to access quality seed of crops and varieties with low profit margins; this will be addressed in the next phase of ISSD Ethiopia.

2.3 Private small and medium scale seed producers

2.3.1 Vision

"In four years, the ISSD Programme foresees that the number of professional, small and medium-scale private seed producers has increased and that they produce a significant part of the quality seed of superior varieties in Amhara, Oromia, SNNPR and Tigray region."

Source: Approved project proposal Integrated Seed Sector Development in Ethiopia Phase II, page 18.

2.3.2 Major activities

Private small and medium scale seed producers in Ethiopia generally had basic skills on quality seed production but had poor marketing, business orientation, and entrepreneurial capacity. They used to solely operate as out growers of hybrid maize seed to BoA, which was distributed through the government seed distribution system. ISSD Ethiopia increased the number of professional seed producers and strengthened their seed business skills and linked them to other organizations. While maize continued to be the most important seed crop for private seed producers there was a great deal of regional variation; see Table 7. From 2014 to 2015 the number of supported seed producing private seed companies reduced from 51 to 47; in that same year the companies with a sole focus on hybrid maize reduced from 31 to 14 (30% of the total). In SNNPR, private seed producers are still usually out-growers to the public Southern Seed Enterprise. In Tigray and Oromia East, private seed producers are mostly investors and agro-enterprises which moved to seed as a new business. Find the location of seed producers supported through ISSD Ethiopia in Figure 7.

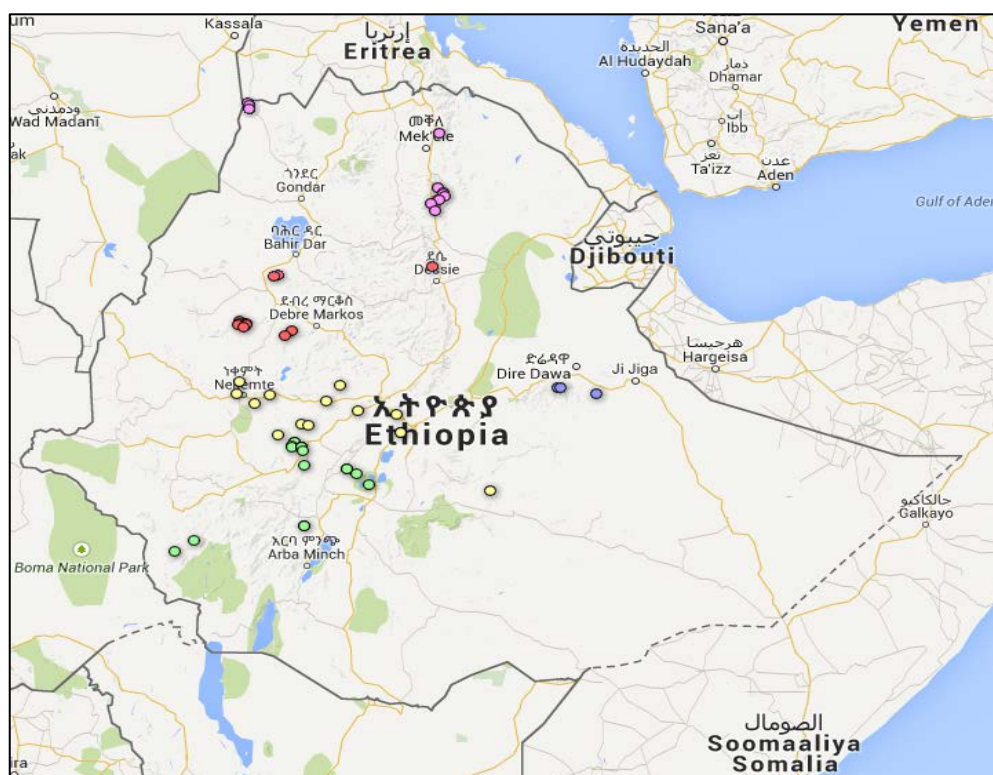


Figure 7 Location of private seed producers and companies in Tigray (pink dots), Amhara (red dots), Oromia South and West (yellow dots), Oromia East (blue dots) and SNNPR (green dots).

Table 7

Private seed producers supported in four regions in Ethiopia in 2015

	Number of PSPs				
	Amhara	Oromia East	Oromia South & West	SNNPR	Tigray
Number of companies ¹	15	2	12	8	10
Number of companies producing maize ²	9	0	3	1	1
Seed crops	Maize, onion, pigeon pea, field pea, teff, wheat	Potato, onion	Maize, black cumin, chickpea, haricot bean, onion, potato, soya bean, teff, wheat	Maize, haricot bean, teff, wheat	Maize, chickpea, forage, sesame, teff, wheat

¹ Only companies that have produced seed in 2015 have been counted; ² These companies produce maize seed solely, or maize seed as part of their seed crop portfolio; Acreage of seed production includes out-growers.

KPA and KPI framework for private seed producers

Similar to LSBs, ISSD Ethiopia also used a KPA and KPI framework to assess private seed producer performance. But whereas KPAs are the same as for LSBs (i.e. technically well equipped, market oriented, professionally organized, and strategically linked) the KPIs are slightly different and adapted to the specific character of private seed producers (see Figure 8).

Technically well equipped

Activities in this key performance area included; training of seed producers in the quality aspects of certified seed production but also basic seed production; facilitating access to basic seed; training and support to address post-harvest seed handling and storage issues.

Market oriented

Activities in this key performance area included: support private seed producers to be involved in DSM; training on critical success factors for seed business and seed entrepreneurship; support of seed promotion activities.

Professionally organized

Activities in this key performance area included: through a grant (with requested co-funding) improve the infrastructure of the private seed producers and help these producers to acquire equipment; training on seed business management, financial management, business planning; coaching and monitoring on organization and management.

Strategically linked

Activities in this key performance area included: linking private seed producers to successful larger companies for experience sharing and niche market opportunities; identifying investors in seed business for high value crops such as forage, fruits, haricot bean, rice, sesame and vegetables; linking private seed producers to ESA for services and support; linking private seed producers to other seed value chain actors, including other private seed producers and companies, public seed enterprises, BoA and research; lobby and advocacy with policy and decision makers to create a more enabling environment for private seed producers with more competitive seed price setting, more enabling seed standards, guidelines, and licensing arrangements.

2.3.3 Expected outputs versus achievements

Table 8 shows the expected outputs, as elaborated in the ISSD Ethiopia Phase II programme proposal, and the achievements of the programme in the 2012 – 2015 implementation period. The table also gives additional information to explain the achievements and possible deviations from the earlier envisaged outputs.

Table 8

Expected outputs versus achievements for private small and medium scale seed producers

Expected outputs	Achievements	Explanations
Several farmers/entrepreneurs are established as professional and market oriented seed producers	Several entrepreneurs are established as professional and market oriented seed producers	New investors in the different regions have taken up seed as a business
Private seed producers are actively involved in the production of certified and possibly basic seed (with ESE & RSEs) of superior varieties	Private seed producers are actively involved in the production of certified seed of superior varieties	Private seed producers obtain their basic seed from ESE, RSEs and research centres
Private seed producers in collaboration with Research Centres identify varieties with a market potential	Private seed producers have been linked with Research Centres to identify varieties with a market potential	Private seed producers have been linked to research, however, access to new varieties and basic seed remains problematic
More than 100 producers receive training on seed quality issues, business and/or marketing issues	More than 75 seed producers received various trainings on seed quality issues, business and/or marketing issues	In 2012 analysed all private seed producers known in the four regions and invited them to work with our programme
80 public-private partnerships have been implemented that have supported farmer/ entrepreneurs to move into seed business, facilitated innovation, and promoted other farmers/entrepreneurs entering into the seed business	55 incentive grants have been rewarded to allow the establishment and professionalization of private seed producers	14, 18, 16 and 7 grants from 2012 to 2015. Based on advise of regional ISSD units, the number of incentive grants has been reduced by half after one year, and the amount per grant has been doubled to from 2,000 to 4,000 Euro.
Public entities, NGO's, other organizations and agro-dealers for a significant part source quality seed and are constant clients of private seed producers	Public entities, NGO's, other organizations and seed dealers for a significant part source quality seed and are constant clients of private seed producers	Private seed producers provide seed clients with quality seed through DSM
Private seed producers cover a significant part of the market for quality seed	Private seed producers cover a significant part of the market for quality seed	

¹ Expected outputs are copied from the approved project proposal Integrated Seed Sector Development in Ethiopia 2011 – 2015

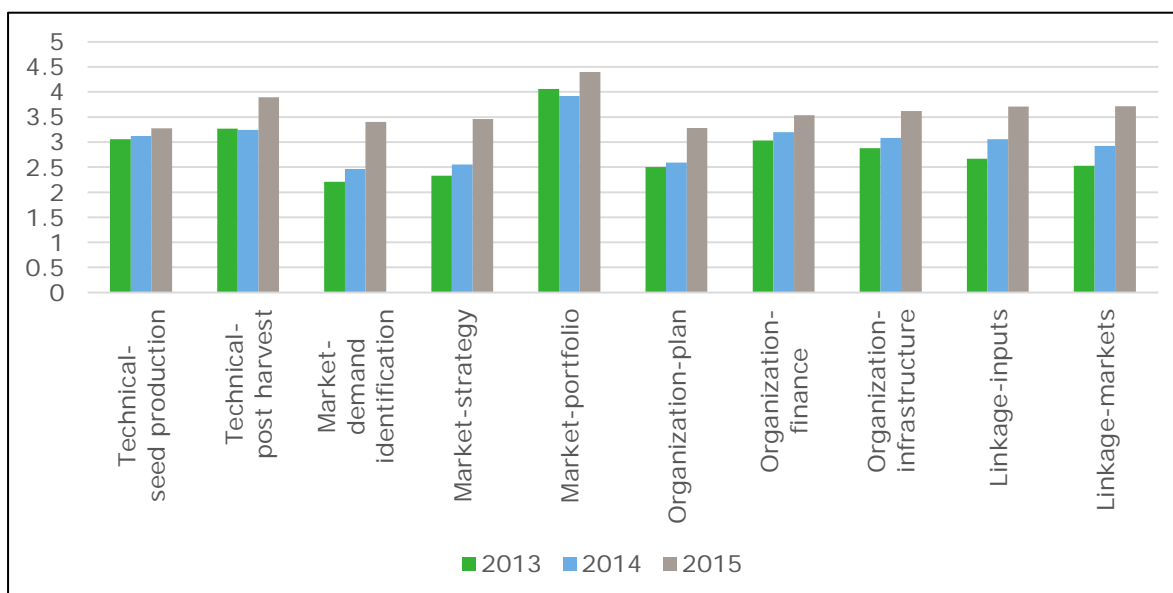


Figure 8 KPI Scores for PSPs in ISSD Ethiopia: 2013, 2014, and 2015.

Scoring: 1 = poor; 2 = weak; 3 = satisfactory; 4 = good; 5 = excellent.

Key performance indicators

Private seed producers demonstrated clear improvement in KPI scores for all ten indicators over the years; see Figure 8. They scored above good (score 4) for market portfolio; for all other indicators they scored between satisfactory and good (score 3 – 4). Private seed producers needed to improve their capacity to assess market opportunities and market seed. This was a common challenge as many private seed producers started as out-growers for public enterprises. Across all regions, private seed producers demonstrated low capacity in business planning, access to finance, and access to basic seed.

Challenges and opportunities

DSM encouraged many private seed producers to stay in the seed business. Many private seed producers focus on the same varieties of maize, and only through the quality of their seed they could differentiate themselves from competitors, which they increasingly are able to do through DSM and in identifying niche market opportunities. Certificate of competence (CoC) is increasingly being requested by seed quality and quarantine authorities in order for private seed producers to market seed commercially, and a number of them have obtained such a certificate now. Across all regions private seed producers have improved their linkages with other seed value chain actors but this continued to be an area where they can improve significantly. More effort needs to be put on management as the scores for organizational management and financial management indicate a great opportunity for performance enhancement in these areas.

Volume of seed produced by private seed producers

Private seed production has gone up over the years due to increase in production capacity but also a more enabling environment for private producers and companies as reflected in DSM. However, 2015 appeared to be an exceptionally bad growing season. In some areas private seed production has remained stagnant or reduced due to unfavourable price setting where producers are not able to recover the costs of seed production. The amounts of quality seed produced and sold in the different regions and their profitability are indicators of private seed producer success. Figure 8 shows the amount of seed produced by private seed producers from 2012 to 2015; the amount varied considerably among regions.

Profitability of private seed producers

Table 11 illustrates the profitability of private seed producers in 2015. All except one company appeared to make profit; data from Tigray were not available.

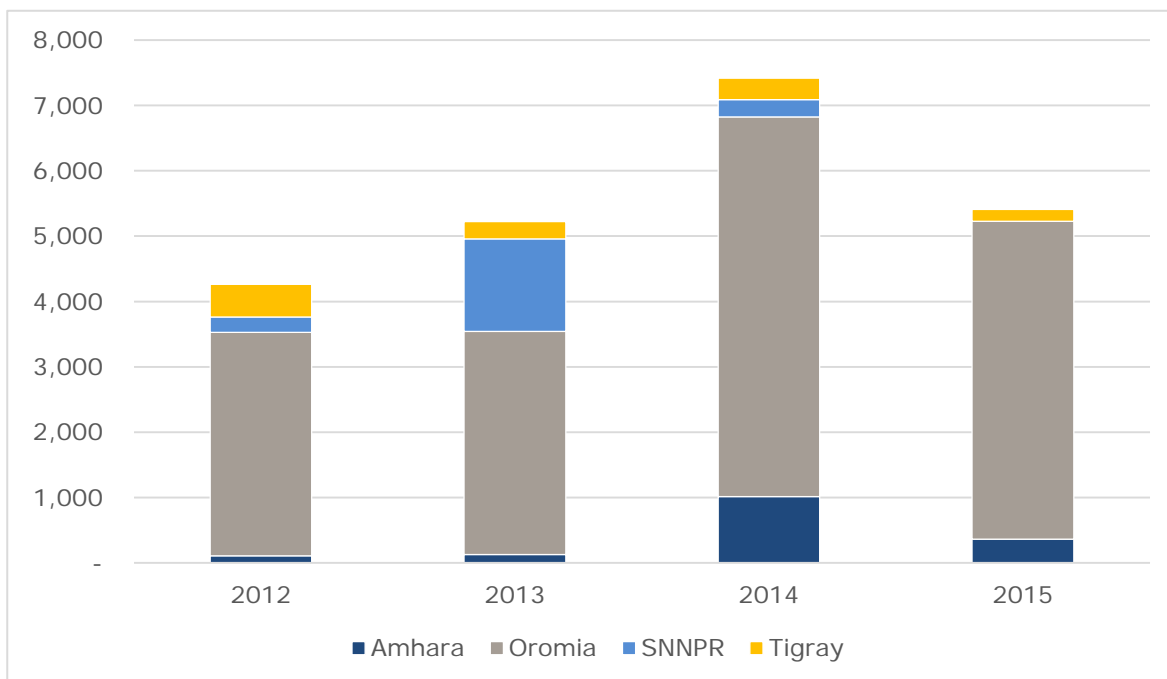


Figure 9 Seed production by private seed producers from 2012-2015.
Note: potato and coffee are excluded.

Table 9

Profitability of private seed producers and seed companies per region in 2015

Region	Profitable	Not profitable	Unknown	Total
Amhara	13	2	0	15
Oromia	14	0	0	14
SNNPR	8	1	0	9
Tigray	10	0	10	10

2.3.4 ISSD Ethiopia programme evaluation

In summary the 2015 external programme evaluation indicated the following issues about private small and medium scale seed producers:

Strong points: Software approach, with focus on sharing knowledge and experiences, and innovation; investment grants; awareness on seed quality; DSM possible through CoCs; specialization on marketable commodities; mixed business (not only seed).

Critical points: Lack of own varieties; lack of skills in quality seed producing, processing and marketing; lack of appropriate facilities and equipment; lack of sound business plan and marketing strategy; limited incentive packages (credit, land).

Actions recommended: Support capacity building on wide range of issues; strategic support on specific gaps; link to variety providers; link with ESA; link to business development services.

2.3.5 Conclusions and lessons learned

- The increased recognition of private seed producers by the regional governments is visible through an increased number of CoCs provided to private seed producers in SNNPR, allowing them to market their own seed (and not being forced to remain out-growers to public enterprises);
- Also other actors, like research, have increased trust in the private sector;
- Private seed producers have improved their performance over the past years, however, a lot remains to be done in professionalizing their business;
- Performance of the private seed producers varies greatly among regions;
- Seed can be highly profitable, however, mechanisms of seed price setting have to be reconsidered to keep private investors interested in seed business;
- Direct seed marketing improved opportunities in business for private seed producers;

- Facing competition in direct seed marketing, private seed producers also started to invest in seed value addition, for example, selling seed in small packages;
- In relation to market orientation, a lot still remains to be done on issues like new product development (crop and variety diversification), opening local retail outlets, organizing customer feedback, product promotion, etc. These issues will be picked up in the next phase of the programme.

2.4 Seed companies

2.4.1 Vision

"In four years, the ISSD programme envisages with this component to contribute to several foreign and national seed companies becoming operational and selling seed in Ethiopia."

Source: approved project proposal Integrated Seed Sector Development in Ethiopia Phase II, page 16.

2.4.2 Major activities

This component facilitated and promoted investment in seed production and marketing of seed companies in Ethiopia by both national and international seed companies. It strengthened Ethiopian seed enterprises in their business orientation and facilitated investment of international companies in the seed sector. This programme component included support to strengthen the role and capacity of the ESA and its member base. Many activities for the Ethiopian seed enterprises have been implemented through ESA.

Strengthening ESA and Ethiopian seed enterprises

ISSD Ethiopia supported ESA in a number of activities: ESA revised its name (formerly ESGPA), logo and bylaws. It developed a new organizational chart and strategic plan, and strengthened planning and daily duties of the association. It developed a website (see: <https://ethiopianseedassociation.wordpress.com>) and a membership directory. The association built a database of seed entities in Ethiopia and published company profiles of ESA members at the website. ESA conducted several awareness raising workshops to raise the profile of ESA among different seed entities: input suppliers, CGIAR, vegetable producers, etc. It organized several training programmes and workshops for members. ESA developed a number of guides, including one on hybrid maize seed production and one on seed quality testing. The association also developed a business plan template and provided training to members on the use of the template. ESA increased its lobbying for a more enabling seed business environment, addressing topics like Plant Variety Protection, pricing, royalty regimes, and the expansion of DSM. ESA executed annual general assemblies of the association. In the 2015 meeting a draft code of conduct for seed businesses was presented. ESA represented itself at relevant forums for the development of seed business in Africa (for example, the AFSTA congress in Zimbabwe in 2015). ESA members have been visiting the Netherlands (2012) as well as India (2014) to explore opportunities for business partnerships.

Promoting foreign investment in the seed sector

Dutch companies have visited Ethiopia in 2011; and Ethiopian companies have visited the Netherlands in 2012. In 2015, ISSD Ethiopia supported a seed session for Dutch companies at the Netherlands-Ethiopia Business event for the Dutch private sector. Partnership agreements have been elaborated with ENZA, for the testing and registration of onion varieties in Ethiopia; Koppert, for looking into business opportunities in Ethiopia; INCOTEC, for introduction and testing of seed coating technologies; and Rhea Composites, for development, testing (in Ethiopia), and the subsequent adaptation of a row planter, plus investment in market development and finding business partners in Ethiopia. The latter company aims to set-up a manufacturing and distribution network in Ethiopia. Also, ISSD Ethiopia has provided support of the INCOTEC, Koppert, TradeCorp and Rea Composites consortium for the formulation of a successful proposal under the FDOV facility.

2.4.3 Expected outputs versus achievements

Table 10 shows the expected outputs, as elaborated in the ISSD Ethiopia Phase II programme proposal, and the achievements of the programme in the 2012 – 2015 implementation period. The

table also gives additional information to explain the achievements and possible deviations from the earlier envisaged outputs.

Table 10

Expected outputs versus achievements for seed companies and ESA

Expected outputs	Achievements	Explanations
7 consultancy, studies and advices activities have been conducted that support and facilitate seed companies	Over 10 consultancies, studies and advices activities have been conducted that support and facilitate seed companies	In 2014 – 2015 we worked with two international private sector consultants to support ESA and private seed companies; moreover, we provided advisory support directly from PMU
Several national and foreign maize, vegetable and other cash crop seed companies are testing materials in collaboration with EIAR and RARIs	Several national and foreign maize, vegetable and other cash crop seed companies are testing materials in collaboration with EIAR and RARIs	Several companies are testing materials; we supported ENZA directly
EIAR and RARIs on a market basis conduct variety trials for national and foreign seed companies	EIAR and RARIs conduct variety trials for national and foreign seed companies (ENZA)	RARIs also conducted seed coating trials for INCOTEC
Trade mission to other African countries has been conducted to support seed business	One trade mission of Ethiopian seed companies to the Netherlands and one trade mission to India has been conducted	ESA members requested for a trade mission to India because of similarities of the seed sector
Seed companies are able to recruit staff with relevant business, technical or marketing capacities	Seed companies are able to recruit staff with relevant business, technical or marketing capacities	ISSD Ethiopia and ESA have invested a lot in training of staff of seed companies on business, technical or marketing aspects of seed business
Public private partnerships promote the investment, facilitate innovation and support establishment of national and foreign seed companies (35 partnerships)	Investment grants promoted the investment, facilitated innovation and support establishment of national and foreign seed companies	11 investment grants for Ethiopian companies and 6 investment grants for Dutch companies; investment grants of Ethiopian companies only targeted infrastructure, which we considered not the best option for the relatively small grants, so we decided to leave that mechanism after two years
Regional (public) seed companies have gradually evolved into shareholder companies		We were not able to facilitate changes into this direction
Several national and foreign seed companies are operational selling seed in Ethiopia	Several national and foreign seed companies are operational selling seed in Ethiopia	Dutch companies active in seed business: Enza, Bejo, East West, RijkZwaan, Syngenta, Pop Vriend, Bakker Brothers and Nunhems

¹ Expected outputs are copied from the approved project proposal Integrated Seed Sector Development in Ethiopia 2011 - 2015

Ethiopian Seed Association

The Ethiopian Seed Association has taken great strides in improving its visibility in Ethiopia and in its internal managements, planning, and daily operations. The membership directory and data base of seed entities operating in Ethiopia should be a formidable tool for ESA in the future in terms of promoting networking opportunities for its members and developing new business linkages. The publication of ESA bylaws and registration of new logo and name by the Ethiopian Ministry of Trade were important steps for ESA members to recognize the changes in ESA. ESA has increased its role in the Ethiopian seed sector in terms of its capacity to promote the production of quality seed and to participate in forums in order to further the aims of the seed sector in Ethiopia. Its number of members increased to 31; see Table 11.

Dutch/international seed companies

The Dutch seed sector is recognizing Ethiopia as an interesting market for their products. However, it is not yet the most conducive environment for seed production. The Netherlands-Ethiopia Business event provided insight into the needs of the Dutch sector for investment in Ethiopia. The Dutch seed sector indicated the need for an exception to the Seed Proclamation, for permitting the production of seed for export without going through all the variety registration procedures. Currently, upon specific request of the Minister of Agriculture, in its next phase, ISSD Ethiopia is formulating a directive to make this possible.

Table 11

Members of the Ethiopian Seed Association from 2012 - 2015

Year	Registered members	Number paid members *
2012	17	14
2013	22 ²	12
2014	22	18
2015	31	27

* 'Paid' members refers to members who paid their annual membership fee.

2.4.4 ISSD Ethiopia programme evaluation

In summary the 2015 external programme evaluation indicated the following issues about the component on seed companies and ESA:

Strong points: support to ESA as national platform for companies; increased membership base of ESA; awareness of ESA on importance of, and start with, development of support services for members (business plan template); integration of seed and grain value chain

Critical points: real added value of ESA not yet clear for members; disincentive to pay membership fee; lack of human resources and office space

Actions recommended: develop a code of conduct for seed companies; focus ISSD support on development of services before attracting more members; facilitate business linkages between LSBs and seed companies

2.4.5 Conclusions and lessons learned

- Many of the private seed companies need support in further professionalization;
- Not all companies are serious in their seed production and marketing efforts; for some of them it is only a small part of their business;
- As a consequence, ISSD Ethiopia should be selective in which companies to support;
- Direct seed marketing provides an incentive for companies to invest in seed quality and in seed marketing;
- Partnership grants can be a nice tool to provide seed money for sharing the risk of initial investments in a new country, and gain knowledge and experience on the seed sector;
- Grants as provided during the first two years of the programme, were not always spent, and alternative mechanisms were looked into as useful business investments;
- ESA has made big steps in its professionalization over the past years; AGRA will continue to support ESA from 2016 onwards;
- Strong private sector development is crucial for the emergence of a more sustainable, efficient, and customer oriented seed sector in Ethiopia;
- The Dutch seed sector specifically asks for information on the agricultural, seed sector and business environment in Ethiopia; and for clear and transparent laws, regulations and guidelines on issues like variety release, plant variety protection, quality control and seed exports. This needs to be taken up in the next phase of the programme.

2.5 Partnerships and innovation

2.5.1 Vision

"In four years, several issues that are key for the commercial development of the seed sectors (private seed companies, private seed producers, and local seed businesses) are identified, addressed through innovations and embedded in a larger policy and institutional framework and a vibrant seed system is established; In four years, strong coordination and network mechanisms are established to on the one hand to facilitate innovation and learning in seed production sectors and among the actors (breeders, basic and certified/quality declared seed) in the chain, and on the other hand have strong support networks in place that assist in the enabling environment and technical assistance for new and existing entrants in the chain. To this end the coordination of policy and implementation partnerships, innovation and learning processes are institutionalized in regional seed bodies and networks; Seed policies and accompanying guidelines and regulations at federal and regional levels respond

adequately to specific demands as expressed in society in order to foster the development of a vibrant and pluralistic seed sector.”

Source: Approved project proposal Integrated Seed Sector Development in Ethiopia Phase II, page 24.

2.5.2 Major activities

Partnerships modality

The partnerships and innovation component developed a mechanism for facilitating innovation and learning in the seed sector. A regional core group of key seed sector stakeholders in the region steered the partnership and innovation process. The seed sector platform was the mechanism at regional level to bring stakeholders together to discuss and prioritize seed sector challenges and suggest possible solutions. Partnership and innovation projects in the region were identified through the core groups and regional seed sector platforms. Partnership and innovation grants allowed for experimental and innovative solutions. This component strengthened seed sector coordination and governance by bringing together stakeholders to work in partnership on solving key bottlenecks in the seed sector. Through the regional core group, each region made investments into different projects to address bottlenecks which they have identified in their respective regions. These partnership and innovation projects varied by region as a reflection of the context and interests of the different regional core groups and seed sector stakeholders. Partnership projects/activities focussed around four key areas, which are described below.

Direct seed marketing

DSM activities included: lobby and advocacy for DSM; awareness creation and training workshops; support to the first few DSM pilots in one region in 2012 as well as to the wide scaling of DSM in the four regions; monitoring and evaluation of DSM implementation; strengthening of implementation of DSM through multi-stakeholder performance assessment; training and certification of seed dealers, and development of seed dealer network.

Early generation seed production

Activities related to EGS included: establishment of seed units in research centers; consultation and planning workshops at regional and national level; development of an EGS strategy and EGS guidelines; monitoring of EGS production; quality assurance for EGS; collaboration with ATA in EGS studies.

Seed regulatory authorities/ quality advisory services

Activities related to seed quality assurance included: lobby and advocacy for seed quality assurance independent from support to seed production; establishment of a seed unit at regional level; support the functioning of seed regulatory authorities; development of guidelines and manuals; assessment of capacity needs; capacity building of staff of the seed regulatory authorities; awareness raising with other stakeholders; support of experience sharing.

Improve awareness and capacity of regional core groups

Activities related to the functioning of the core group included: development of working modalities and guidelines; analysis of the seed systems strategy and alignment with seed targets in the regions; support of training and experience sharing for the core group; involvement of core group in strategic ISSD Ethiopia processes like the EGS study, ISSD Ethiopia evaluation, DSM promotion, and establishing seed units at regional level. Regional seed core groups meeting once a year to exchange lessons learned on the partnership projects in the different regions, and provide the strategic directions for ISSD Ethiopia support needed in the following year.

Other activities

Other activities included: development of tools for seed demand assessment; development of seed storage infrastructure; farm machinery performance assessment; establishment of an SPC union; support to access to land for private agricultural investment in seed; organization of finance fairs; facilitating bilateral discussions for linking seed producers to credit providers; development of BSc and MSc seed curricula; identification of marketable crops and varieties for seed business; strengthen seed advisory services; development of regional seed import regulations.

2.5.3 Key outcomes of main activities

Table 12 shows the expected outputs, as elaborated in the ISSD Ethiopia Phase II programme proposal, and the achievements of the programme in the 2012 – 2015 implementation period. The table also gives additional information to explain the achievements and possible deviations from the earlier envisaged outputs.

Table 12

Expected outputs versus achievements for partnerships and innovation

Expected outputs ¹	Achievements	Explanations
Core teams have been transformed into regional coordinating bodies that oversee seed sector development in the four regions	Core teams have been transformed into regional coordinating bodies that oversee seed sector development in the four regions	BoA hosts the core groups; ISSD Ethiopia hosts the secretariat. Additional work needs to be done to further institutionalize this structure
Mechanisms are institutionalized that guarantee the structured identification of key issues to be addressed in partnership projects, thereby contributing to the innovation and learning capacity in the seed sector	Mechanisms are institutionalized that guarantee the structured identification of key issues to be addressed in partnership projects, thereby contributing to the innovation and learning capacity in the seed sector	The modality of seed core groups, platforms and innovation projects has been well established and proven its value for innovation and learning capacity of the seed sector
77 partnership projects have been implemented with a clear effect on seed sector development and enhancing the innovation and learning capacity in the seed sector	81 partnership projects have been implemented with a clear effect on seed sector development and enhancing the innovation and learning capacity in the seed sector	19, 23, 25 and 23 projects in the period 2012 – 2015 respectively; project extensions towards the next year are counted as separate projects

¹ Expected outputs are copied from the approved project proposal Integrated Seed Sector Development in Ethiopia 2011 - 2015

Promoting coordination and collaboration in the seed sector

Strong coordination and network building and the seed sector was promoted as result of the core group meetings and regular engagement of the core group with respect to making decisions and following the implementation of partnership and innovation grants. Direct seed marketing and recognition of the role of the private sector was greatly enhanced in a number of regions as a result of partnership and innovation grants. EGS production improved in several regions as a direct result of the of partnership and innovation grants due to improved technical capacity of seed units, improved linkages between EGS producers and buyers, and the increased coordination at regional level through the core group which improved linkages and put key EGS bottlenecks under direct discussion and reflection by the core group and regional seed sector stakeholders. Seed regulatory authorities at regional level saw improved capacity in a number of regions as result of the support provided by the partnership and innovation grants.

Direct seed marketing

Increased use of DSM has reduced the complicated seed distribution chain which was the conventional approach, this has led to an attitude change by suppliers who are now more customer focused and by farmers who follow up with suppliers if there are issues related to quality. The new market oriented system has resulted in producers proving poor quality seed being more easily identified, and much less left over seed as supply and demand are better linked as a result of the direct marketing. Farmers experiencing DSM universally indicate that it is a better approach and they do not want to go back to the old way of government led purchase and distribution. The collaboration between ATA, AGP, BoA, and ISSD Ethiopia on DSM implementation was enhanced and that has resulted in improved understanding of the optimal roles of different actors in supporting DSM.

Early generation seed

There is now a better understanding of the bottlenecks to EGS production and the role differentiation among different actors when it comes to EGS. An overarching analytic framework for looking at EGS has been instrumental in developing improved collective understanding of the issues and opportunities in EGS. BoA commitment to address EGS production issues has increased. Research centres have placed more emphasis on EGS production and more budget allocation to EGS activities and more leadership and initiative on solving EGS challenges.

Seed regulatory authorities

Through the advisory role of the regional core seed teams, detailed analysis of the structural arrangements necessary for the establishment of independent regional seed regulatory authorities has been made and shared with regional technical committees. The BoAs has given more attention to this issue and to this end has been supported by both ISSD Ethiopia and ATA. As a result of tailor made ISSD Ethiopia training on seed health, seed laboratory staff at regional level have increased their capacity. Working modalities for quality assurance and certification have been implemented by seed regulatory authorities through the active support of ISSD Ethiopia partners. Core group members benefitted from exposure visits to look at seed testing and regulatory regimes in other contexts.

2.5.4 ISSD Ethiopia programme evaluation

In summary the 2015 external programme evaluation indicated the following issues about the component on partnerships and innovation:

Strong points: Strategic role regional core groups; inclusive with high level stakeholders; technical team next to core group (Tigray); platform meetings; experiences guiding agenda setting; appointment of institutional advisors; local core groups.

Critical points: Core groups not always inclusive; inability to influence policies; turnover of members; sometimes weak follow up on decisions; lack of national core group; lack of linkage local and regional core groups.

Actions recommended: Involve core group in strategic ISSD Ethiopia planning; with bigger role in supporting coherence, alignment and harmonization of development actors; sharing of regional core group performance; improve core group composition where necessary.

2.5.5 Conclusions and lessons learned

- The regional seed core groups are effective in steering innovation in the seed sector in their region;
- Partnerships and innovation projects are an effective mechanism to pilot innovations;
- Stakeholders involvement in experimenting with solutions to seed sector bottlenecks enhances scaling of new practices;
- For successful scaling it is important to share experiences and lessons learnt; exposure visits may be an important tool;
- Based on results partnership projects may be adapted to reach towards institutionalization;
- Institutional change needs involvement of stakeholders at all levels, including decision makers outside of the seed core group;
- Even with new implementation structures operational, ISSD Ethiopia may still play a key role in capacity building of associated professionals;
- The annual meetings which supported the exchange of experiences between the regional seed core groups has been very strategic in scaling innovations like DSM, EGS and quality assurance;
- Regional specific seed sector development strategies can be supported more effectively with a strong core group and well-functioning regional stakeholder platform. This will enable regions to be more effective in contributing to the AGP plans and targets and speed the development of the seed sector in the region;
- The next phase of the programme will invest in seed value chain analysis to assist the regional seed core group in making strategic investment decisions for partnerships for innovation.

2.6 Enabling and evolving policies

2.6.1 Vision

"In four years, seed policies take an integrated approach to seed sector development, and they are accompanied with proclamations, regulations, directives and manuals, and implementing capacity that foster the pluralistic nature of seed sector development. Policy makers at federal and regional levels have the capabilities for adaptation of policy frameworks to changing circumstances and adaptation to variations in situations. Seed stakeholders are well informed and have the capabilities to implement seed policies. Seed policies and accompanying regulations, directives and manuals, at federal and

regional levels respond adequately to specific demands as expressed in society in order to foster the development of a vibrant and pluralistic seed sector.”

Source: Approved project proposal Integrated Seed Sector Development in Ethiopia Phase II, page 26

2.6.2 Major activities

This component supported and facilitated the development and promotion of enabling and evolving seed policies. ISSD Ethiopia wished to contribute to the policy dialogue with strategies which are evidence based, and to strengthen the development and implementation of the policy frameworks and guidelines, as well as improve the capacity for implementation. ISSD Ethiopia has been involved in the development of the seed related policies and strategies like the 2013 Seed Proclamation and the 2014 Seed Systems Strategy. The ISSD Ethiopia director served on a task force to advise MoA to implement PVP. ISSD Ethiopia has worked on new directions and approaches for EGS production with the regional BoAs, in close collaboration with ATA and the Scaling Seeds Technologies Partnership in Africa (SSTP) project; and on structures and approaches for seed quality assurance with the regional governments. The programme supported the development of seed regulatory authorities in Amhara and SNNPR, and the embedding of separate quality assurance units in BoA in Oromia and Tigray. Moreover, bringing together national policy makers, ISSD Ethiopia facilitated the alignment of the CAADP framework with seed related strategies. ISSD Ethiopia presented the policy experiences also in international workshops in, for example, South Africa (PVP, 2014) and Uganda (CAADP and EGS, 2015).

2.6.3 Expected outputs versus achievements

Table 13 shows the expected outputs, as elaborated in the ISSD Ethiopia Phase II programme proposal, and the achievements of the programme in the 2012 – 2015 implementation period. The table also gives additional information to explain the achievements and possible deviations from the earlier envisaged outputs.

Table 13

Expected outputs versus achievements for research and studies

Expected outputs ¹	Achievements	Explanations
Guidelines and regulations, and institutional capacities for these seed policies are operational, and if required monitored and reviewed for their effectiveness in fostering seed sector development	Guidelines/regulations/ institutional capacities for a number of seed related policies are operational: EGS production and supply, DSM, seed quality assurance. They have been reviewed and monitored for their effectiveness in fostering seed sector development.	Plant Breeders Rights Proclamation not officially approved yet.
Policy makers, implementing agencies and relevant stakeholders are capable to adequately implement and adapt policies, regulations and guidelines	Policy makers, implementing agencies and relevant stakeholders are capable to adequately implement and adapt policies/regulations/guidelines related to Seed Proclamation, seed demand assessment, EGS production and supply, DSM, seed quality assurance, direct seed marketing	
Awareness and capacities related to the seed policies among stakeholders at several levels ensure their implementation and if required capacities for adaptation	Awareness and capacities related to the seed policies among stakeholders at several levels ensure their implementation and if required capacities for adaptation	ISSD Ethiopia has supported implementing agencies with trainings and advice

¹ Expected outputs are copied from the approved project proposal Integrated Seed Sector Development in Ethiopia 2011 - 2015

ISSD perspective in policy frameworks

ISSD Ethiopia has contributed to the recognition of different seed systems and seed sector realities in a number of policy frameworks. At national level ISSD Ethiopia has directly contributed to the design of the Seed Proclamation, the PBR proclamation and the Seed Systems Strategy. The Ethiopian Seed Systems Strategy recognizes the value of the ‘intermediary seed system’, which is in fact a recognition of the LSBs and their contribution to the seed sector in Ethiopia, giving farmers access to quality seed of a range of crops and varieties which are not addressed by the formal sector. ISSD Ethiopia is a serious partner for MoA and ATA because of its knowledge on and direct engagement with the seed

sector in Ethiopia, and for the innovations it works on towards the development of a more efficient and market-oriented sector. It also facilitated policy makers to discuss increased alignment of the CAADP investments in the agricultural sector and seed related strategies and programmes.

Adaptation of policy guidelines

At regional level ISSD Ethiopia has contributed to the design and the adaptation of a range of policy guidelines like for example on EGS, DSM and the Certificate of Competence for seed producers (the latter has been adapted specifically for Tigray). Within the regions ISSD Ethiopia is a recognized partner of BoA. Through the partnerships programme and the regional core groups ISSD Ethiopia works closely with regional policy makers and is able to put successful evidence-based innovations on the policy agenda. Another important achievement initiated and facilitated by ISSD Ethiopia is the establishment of regional seed and inputs regulatory bodies.

National advisory body

To increase influence at national level, ISSD Ethiopia has tried to facilitate the establishment of a national advisory body on seed issues, comparable to the model of the regional core groups. After a first meeting as organized by ISSD Ethiopia in 2013, it was decided that ATA has the responsibility to pull this forward. The body has not been established yet. The regional seed core groups have been meeting once a year at national level to exchange experiences.

2.6.4 ISSD Ethiopia programme evaluation

In summary the 2015 external programme evaluation indicated the following issues about the component on seed policies:

Strong points: policy influencing component is well implemented; ISSD is well recognized by policy makers at regional level; great contribution of ISSD Ethiopia in the introduction of DSM

Critical points: institutional setting of quality assurance still needs attention; policy focus needs to shift from regional to national levels; more focus on the seed value chain beyond the operations related to seed production is needed (e.g. research).

Actions recommended: establish a national seed core group similar to regional seed core groups; link local, regional and national seed core groups; give a more important role to the regional seed core group in harmonization of seed sector actors.

2.6.5 Conclusions and lessons learned

- In working with stakeholders on policy interventions conducive conditions are important to start the intervention. A number of activities could not be implemented because the programme was dependent on activities from other bodies like MoA to be implemented first;
- The PVP Proclamation has not been officially approved yet, and still more awareness creation is necessary to convince the decision markers on the need of PVP and its implementation;
- To change the system, collaboration with other supporting institutions is necessary; ISSD Ethiopia collaborates well with stakeholders like MoA and ATA, but also CIMMYT on policy related issues. ISSD Ethiopia is recognized by other stakeholders in the sector for its work on institutional change processes;
- ISSD Ethiopia effectively organized a number of national forums to facilitate exchange of ideas and discuss opportunities for interventions on key seed sector bottlenecks in Ethiopia. The project aims to continue doing that and establish a 'national seed core group' in its next phase.

2.7 Research and studies

2.7.1 Vision

"In four years, the ISSD programme facilitates that interventions and innovations that aim at integrated seed sector development are evidence based; Universities contribute in a sustainable manner to innovations and in particular through 'master' research programme that guide their research contribution to seed sector development; DA of partner woredas in LSB sites have enhanced their capacity through their graduate training; All staff directly working in the ISSD project has formal

education at least at masters level; Students in their MSc/MA/MBA research contribute to such innovations; ISSD staff and ISSD partner staff conduct their PhD research contributing to ISSD development and innovation.”

Source: Approved project proposal Integrated Seed Sector Development in Ethiopia Phase II, page 27-28.

2.7.2 Major activities

ISSD Ethiopia emphasized research and studies across its components to improve the evidence base and to guide seed sector interventions. To this end, the programme supported MSc research studies on topics considered important for the development of the seed sector and staff are supported to obtain their MSc degree. Three PhD students are finalizing their PhD with Wageningen University; one student is finalizing his PhD with Haramaya University. Moreover, in each region, development agents (DAs) who have been working closely with the LSBs in the consolidation programme, were supported in obtaining their BSc degree. The BSc, MSc and PhD grants serve two objectives: contribute to capacity building in the seed sector; and providing methodologies/approaches for addressing a particular and challenge, generating evidence for innovation.

2.7.3 Expected outputs versus achievements

Table 14 shows the expected outputs, as elaborated in the ISSD Ethiopia Phase II programme proposal, and the achievements of the programme in the 2012 – 2015 implementation period. The table also gives additional information to explain the achievements and possible deviations from the earlier envisaged outputs.

Table 14

Expected outputs versus achievements for research and studies

Expected outputs ¹	Achievements	Explanations
84 students of BDU, HU, HwU and MU, and other relevant universities have concluded their MSc/MA/MBA thesis on relevant topics as identified in the programme, and thereby contribute to integrated seed sector development	41 students of BDU, HU, HwU and MU have concluded their MSc thesis on relevant topics as identified in the programme, and thereby contributed to integrated seed sector development	We have advertised calls for MSc proposals at other universities like Jima University, however, did not receive applications; The ISSD Ethiopia budget provided for 42 grants; 41 grants have been used.
33 DAs or other partner staff of LSB site woredas have completed their graduate training (BSc/BA) in an area relevant to the ISSD project	34 DAs of LSB site woredas have completed their graduate training (BSc) in an area relevant to the ISSD project	One DA who already had BSc was supported with MSc training
All ISSD staff members have completed master higher education.	All ISSD staff members have completed master higher education	6 staff members have been supported in their MSc studies
4 staff members of ISSD and/or ISSD partners are about to defend their PhD thesis at Wageningen University	4 staff members of ISSD Ethiopia are completing their PhD studies at Wageningen University and Haramaya University	Through an open call for applications 4 ISSD staff members were selected for PhD studies with Wageningen University; one student was forced to stop after 1.5 years. One additional staff member has been supported in his PhD studies with Haramaya University
The ISSD programme has contributed to a multidisciplinary cadre of 84 experts with knowledge of ISSD and related concepts and methods; through the ISSD programme they contribute to scientific basis of ISSD	ISSD Ethiopia has contributed to a multidisciplinary cadre of 41 experts with knowledge of ISSD and related concepts and methods; through the ISSD programme they contribute to scientific basis of ISSD	See the number of trained MSc students above; some have now strategic positions in MoA, ATA, BoA and other organizations working in the seed sector
The ISSD programme based on studies conducted publishes several scientific and popular publications, and books on ISSD, and thereby contribute to the body of knowledge that fosters innovation and learning in seed sector development	The ISSD programme based on studies conducted publishes several scientific and popular publications on ISSD, and thereby contribute to the body of knowledge that fosters innovation and learning in seed sector development	Publications include articles in scientific journals and written materials in newsletters, leaflets, case studies published at websites, etc.

¹ Expected outputs are copied from the approved project proposal Integrated Seed Sector Development in Ethiopia 2011 - 2015

34 BSc students and 41 MSc students completed their studies; and four PhDs are well on their way for completing their studies in 2016. The diversity of MSc and PhD studies has given new insights into a range of issues that can improve seed production and seed use. Examples are recommendations on

appropriate seed rates, insights into the effect of seed treatment, insight into the profitability of seed as a business, relation between seed source and the performance of the seed, etc.

2.7.4 ISSD Ethiopia programme evaluation

In summary the 2015 external programme evaluation indicated the following issues about the component on research and studies:

Critical points: the research component needs to be redesigned to really contribute to achievements of ISSD Ethiopia objectives

Actions recommended: ISSD Ethiopia teams need to be stronger involved in the identification of research themes; research should address topics like gender, economic dynamics, and farm system changes; ISSD Ethiopia should establish a team to evaluate MSc thesis results and extract findings for implementation; next to MSc students, also experienced researchers should be involved in the programme; more rigorous research procedures have to be developed.

2.7.5 Conclusions and lessons learned

- Providing DAs with BSc grants appeared to be a strong incentive mechanism for the DAs to continue supporting SPCs towards sustainable local businesses;
- It is important to ensure that recommendations from MSc studies will be used in practice. Additional effort has to be put to translate the scientifically written theses into practical field recommendations;
- MSc research projects were formulated to address a gap in the seed sector which is important for integrated seed sector development. However, it takes at least a year before study results become available, which is a long time. In specific cases it may be more efficient to do research through ISSD staff or consultants hired for a short time period.

2.8 Sharing experiences and lessons learned

2.8.1 Vision

“During the four years of its operation, the diversity of advances and outputs of the ISSD programme are known by partners and stakeholders at kebele, woreda, regional, national and international levels; thereby the programme has made a significant input to seed sector development in Ethiopia, and beyond.”

Source: Approved project proposal Integrated Seed Sector Development in Ethiopia Phase II, page 30.

2.8.2 Major activities

ISSD Ethiopia aimed to share experiences to promote the use of new concepts, methodologies, insights and practices among partners and stakeholders in various domains and at various levels. ISSD Ethiopia used a variety of communication materials and distribution channels to reach its different audiences for sharing experiences and lessons learnt. For example farmers and local partners are reached through local radio and leaflets published in local languages; also face-to-face tools are used like twinning of LSB sites, in which farmers learn from their peers. Regional stakeholders are reached for example through glossy magazines, books (e.g. DSM study in Amhara) and national and regional websites, but also through e.g. regional workshop events. National level actors are reached through national and regional ISSD Ethiopia websites, workshops, seminars and policy dialogues on specific topics.

2.8.3 Expected outputs versus achievements

Table 15 shows the expected outputs, as elaborated in the ISSD Ethiopia Phase II programme proposal, and the achievements of the programme in the 2012 – 2015 implementation period. The table also gives additional information to explain the achievements and possible deviations from the earlier envisaged outputs.

Table 15

Expected outputs versus achievements for sharing experiences and lessons learned

Expected outputs ¹	Achievements	Explanations
4 ISSD Newsletters and 2 ISSD Magazines (4 versions) published per year	2 national ISSD newsletters, 1 regional ISSD magazine (5 versions) and occasional regional newsletters published per year	Number of issues have been adapted based on practicalities and availability of resource materials
Two books published	More than 10 booklets and manuals published, including booklets with case descriptions, manuals on local seed business and the key performance indicators in planning	A comprehensive book reporting on the achievements and lessons learnt is currently being edited
30 scientific papers published	PhD papers and other articles submitted for publication. Keynote speeches have been given for experts, researchers, practitioners and policy makers in seed sector development in various international and national seminars and workshops. Five briefs on key elements of ISSD Ethiopia (ISSD @ a glance) published.	
Campaigns for quality seed of superior varieties are commonly used by partners, contributing to customer knowledge and attitudes	Campaigns for quality seed of superior varieties are commonly used by partners, contributing to customer knowledge and attitudes	Partners use different promotional activities to promote the use of quality seed of superior varieties
40 regional and national travelling seminars are organized for key policy, decision makers and stakeholders	Over 40 regional and national seminars, exchange visits within and between regions, international exchange visits, specific regional workshops and trainings, seed fairs and finance fairs have been organized for key policy, decision makers and stakeholders	Variety of activities based upon specific needs
More than 300 woreda/zone travelling seminars are organized for local decision makers and stakeholders	Over 160 field days, exchange visits, experience sharing events, seed exhibitions, demonstrations, seed fairs, finance fairs have been organized at woreda and zone level for local decision makers and stakeholders	Knowledge sharing at woreda and zone level has been facilitated following specific entry points and needs
20 regional and 5 national ISSD workshops organized	Over 25 regional and national ISSD workshops (including Launch meeting) organized	
Staff of ISSD and partners has the ability to use social networking tools in their professionalism	Staff of ISSD and partners has the ability to use social networking tools in their professionalism	Social networking tools used at PMU and at regional ISSD unit level
4 short documentaries on a relevant topics are produced and made widely available (preferably 4 languages)	3 short documentaries on a relevant topics were produced and made widely available. Regular radio shows have been broadcasted through local FM or through mini-media. Four seed related episodes of a national radio programme have been broadcasted.	2 international documentaries in English (of each documentary a long and as short version) and one documentary in Amharic.
ISSD website operational with background information, documentation and agenda, and facilitating communication among partners and others	ISSD Ethiopia website operational with background information, documentation and agenda, and facilitating communication among partners and others	See: www.issdethiopia.org

¹ Expected outputs are copied from the approved project proposal Integrated Seed Sector Development in Ethiopia 2011 - 2015

Reaching the different audiences

ISSD Ethiopia has high visibility within the country, especially at regional and local levels. ISSD Ethiopia staff was often invited to share ISSD experiences in key seed events organized by other stakeholders at regional, national and international level, which shows that these audiences were effectively reached. Different types of stakeholders, including farmers, have indicated that they have changed their daily practices based upon experiences and lessons as shared by ISSD Ethiopia. An example from Oromia East is that the weekly radio programme has motivated smallholder farmers to apply for SPC membership and some SPCs operating in marginal and drought prone areas who heard about the success of other SPCs got involved in seed business.

2.8.4 ISSD Ethiopia programme evaluation

In summary the 2015 external programme evaluation indicated the following issues about the component on sharing experiences and lessons learned:

Strong points: different mechanisms used for sharing knowledge, generally well attuned to the different target groups; knowledge sharing is expected to have contributed to policy change.

Critical point: lack of proper feedback mechanisms on tools used for knowledge sharing.

2.8.5 Conclusions and lessons learned

- Media diversification is important to keep in touch with different target groups;
- Local media, particularly radio, remains vital to communicate with farmers;
- Concise, simple and vivid content messages are necessary to attract audiences and readers;
- Updating social media is enabling easy access of information;
- Experience sharing visits support strategizing future actions;
- Policy briefs attracted policy makers and other partners to read them immediately after sharing, e.g. immediately after meetings;
- Translation in local language (magazines, social media pages) is important to attract more readers.

2.9 Capacity development

2.9.1 Vision

"Ethiopia has a cadre of seed professionals working in public, private and NGO entities at different levels, knowledgeable and experienced with technical, marketing, commercial and organizational aspects of integrated seed sector development and its components."

Source: Approved project proposal Integrated Seed Sector Development in Ethiopia Phase II, page 32.

2.9.2 Major activities

Within all programme components, different modalities were developed for strengthening the capacity of ISSD Ethiopia staff and partners. Partners included LSB members, partners in LSB scaling up, private seed producers and seed companies, and staff of NGOs, BoA, MoA and ATA. Capacity building activities were always needs based. Over the past years the programme organized a variety of tailor-made trainings for programme staff and partners, for example on seed entrepreneurship (2012); cooperative management (2013); project management (2015). Staff and partners participated in different international training courses organized in Wageningen and other countries, for example in the ISSD course; and the course on monitoring and evaluation. Trainings at regional level for example included a training on seed dealership and management for 40 seed sales agents in SNNPR in 2015. LSBs and LSB supporting partners have been intensively trained on the technical, organizational and commercial aspects of local seed business.

2.9.3 Expected outputs versus achievements

Table 13 shows the expected outputs, as elaborated in the ISSD Ethiopia Phase II programme proposal, and the achievements of the programme in the 2012 – 2015 implementation period. The table also gives additional information to explain the achievements and possible deviations from the earlier envisaged outputs.

Table 16

Expected outputs versus achievements for capacity development

Expected outputs ¹	Achievements	Explanations
Partners capacities have been strengthened through participation in ISSD training programmes organized at various levels	Partners capacities have been strengthened through participation in ISSD training programmes organized at various levels	Many trainings have been organized for partners at kebele, woreda, regional and national level
4 tailor-made national training workshops are organized	More than 10 tailor made workshops have been organized	Workshops differed in topic, duration and location to meet the demand of staff and partners
48 staff members of ISSD and/or partners participated in CDI international training programmes	48 staff members of ISSD and/or partners participated in CDI international training programmes	Interestingly it has been exactly this number: 7, 5, 22 and 14 respectively in the period 2012 – 2015.

¹ Expected outputs are copied from the approved project proposal Integrated Seed Sector Development in Ethiopia 2011 - 2015

Capacity development as a strategic supporting component

The capacity development component of ISSD Ethiopia is an important support component. Trainings have been developed based on a specific demand, and designed as such that new knowledge and skills could be immediately brought into practice in ISSD Ethiopia specifically, and the seed sector in general. The trainings not only supported programme implementation, but also strengthened relationships with important partners like MoA, ATA and the regional BoAs.

2.9.4 ISSD Ethiopia programme evaluation

No specific remarks on this component from the evaluation team.

2.9.5 Conclusions and lessons learned

- Tailor-made trainings of ISSD Ethiopia staff has built their capacity as well as confidence, and improved their efficiency as well as motivation; as such these trainings benefited the realization of targets of ISSD Ethiopia;
- Innovations in the seed sector require capacity building of seed sector stakeholders who have to implement the innovation. The capacity building component of ISSD Ethiopia has been a key factor in the implementation of innovations like DSM and the operationalization of the new approaches in seed quality control through the newly established regional seed regulatory authorities;
- International training of strategic partners improved the collaboration with ISSD Ethiopia. The same is true for regional and local partners considering training in Ethiopia;
- Trainings should be organized as such that the real needs of the trainees are addressed and the training is delivered at an appropriate time so knowledge can immediately be brought into practice.

Appendix 1 Financial overview

	Budget 2011 - 2015	Realization 2011 -2015	
Sector components	Total	Total	% share
Private seed companies	414,500	142,981	2%
Private seed producers	324,000	260,015	3%
Local seed business – consolidation	278,800	269,374	3%
Local seed business - scaling up	1,160,000	1,147,237	13%
Regional partnership	891,000	794,732	9%
Farmer and Community based Seed System	0	109,635	1%
Sector subtotal	3,068,300	2,723,973	30%
Policy and service components			
Enabling and evolving policies	284,000	182,419	2%
Sharing experiences and lessons learnt	527,250	506,293	6%
Capacity development	60,000	75,732	1%
Grants/studies	170,900	137,066	2%
Policy and services subtotal	1,042,150	901,510	10%
HR, investments and running costs			
Human resources : ISSD Coordination Unit - Ethiopia	0	89,875	1%
Investments and running costs : ISSD Coordination Unit - Ethiopia	0	36,340	0%
Human resources (ISSD units)	1,070,230	1,428,351	16%
Investments and running costs (ISSD Units)	948,300	1,041,754	12%
HR, investments and running costs subtotal	2,018,530	2,596,320	29%
Total (ISSD partners)	6,128,980	6,221,803	69%
Overhead ISSD partners (10%)	612,898	572,542	6%
Grand total (ISSD partners)	6,741,878	6,794,345	75%
Coordination, institutional and technical assistance			
Human resources : ISSD Coordination Unit - Ethiopia	283,082	12,800	0%
Investments and running costs : ISSD Coordination Unit - Ethiopia	178,650	45,860	1%
CDI/Human resources : ISSD coordination, institutional & technical assistance	1,006,000	1,114,624	12%
Project management support	439,335	292,259	3%
CDI/Running costs (travel and other coordination)	335,550	238,827	3%
CDI/Sharing experiences and lessons learnt	116,000	87,778	1%
CDI/Capacity development (International training programmes)	338,000	291,795	3%
WUR/Capacity development (PhD grants)	250,000	129,125	1%
Coordination, institutional and technical assistance subtotal	2,946,617	2,213,069	25%
Total (ISSD partners & Wageningen UR/CDI)	9,688,495	9,007,414	
Miscellaneous	484,424	0	0%
Grand total (ISSD partners & Wageningen UR/CDI)	10,172,919	9,007,414	100%

To explore
the potential
of nature to
improve the
quality of life



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The mission of Wageningen UR (University & Research) is 'To explore the potential of nature to improve the quality of life'. Within Wageningen UR, nine specialised research institutes of the Wageningen Research have joined forces with Wageningen University to help answer the most important questions in the domain of healthy food and living environment. With approximately 30 locations, 6,000 members of staff and 9,000 students, Wageningen UR is one of the leading organisations in its domain worldwide. The integral approach to problems and the cooperation between the various disciplines are at the heart of the unique Wageningen Approach.

