

---

# Programme on Integrated Seed Sector Development in Ethiopia

2014 Annual report

Centre for Development Innovation, Wageningen UR

Bahir Dar University, Hawassa University, Haramaya University, Mekelle University and Oromia Seed Enterprise

Centre for Development Innovation  
Wageningen, May 2015



---

Report CDI-15-094

---

*Programme on Integrated Seed Sector Development in Ethiopia; 2014 Annual Report.* Centre for Development Innovation, Wageningen UR (University & Research centre), Bahir Dar University, Hawassa University, Haramaya University, Mekelle University and Oromia Seed Enterprise. Report CDI-15-094. Wageningen.

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 Centre for Development Innovation of Wageningen UR. 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

This report can be downloaded free of charge from [www.wageningenUR.nl/cdi](http://www.wageningenUR.nl/cdi) ("publications").



© 2015 Centre for Development Innovation, part of the Dienst Landbouwkundig Onderzoek foundation. P.O. Box 88, 6700 AB Wageningen, The Netherlands. T + 31 (0)317 48 68 00, E [info.cdi@wur.nl](mailto:info.cdi@wur.nl), [www.wageningenUR.nl/cdi](http://www.wageningenUR.nl/cdi).



The Centre for Development Innovation uses a Creative Commons Attribution 3.0 (Netherlands) licence for its reports.

The user may copy, distribute and transmit the work and create derivative works. Third-party material that has been used in the work and to which intellectual property rights apply may not be used without prior permission of the third party concerned. The user must specify the name as stated by the author or licence holder of the work, but not in such a way as to give the impression that the work of the user or the way in which the work has been used are being endorsed. The user may not use this work for commercial purposes.

The Centre for Development Innovation accepts no liability for any damage arising from the use of the results of this research or the application of the recommendations.

Report CDI-15-094 |



ኢትዮጵያን ሲድ ክሶሲን  
**ETHIOPIAN SEED**  
ASSOCIATION

---

# Contents

<b>Preface</b>	<b>5</b>
<b>List of abbreviations and acronyms</b>	<b>6</b>
<b>Summary</b>	<b>7</b>
<b>1 Introduction</b>	<b>9</b>
1.1 The concept of Integrated Seed Sector Development	9
1.2 The ISSD Ethiopia Programme	10
<b>2 Programme coordination</b>	<b>11</b>
2.1 Programme partners	11
2.2 Programme management	11
<b>3 Programme components</b>	<b>14</b>
3.1 Local seed business development – consolidation	14
3.1.1 Introduction	14
3.1.2 Activities and outputs	15
3.1.3 Outcomes	17
3.1.4 Case studies	20
3.1.5 Lessons learnt and way forward	20
3.2 Local seed business development – scaling up	21
3.2.1 Introduction	21
3.2.2 Activities and outputs	23
3.2.3 Outcomes	24
3.2.4 Case studies	27
3.2.5 Lessons learnt and way forward	27
3.3 Private small and medium-scale seed producers	28
3.3.1 Introduction	28
3.3.2 Activities and outputs	30
3.3.3 Outcomes	32
3.3.4 Case studies	33
3.3.5 Lessons learnt and way forward	34
3.4 Seed companies	34
3.4.1 Introduction	34
3.4.2 Activities and outputs	35
3.4.3 Outcomes	35
3.4.4 Case studies	39
3.4.5 Lessons learnt and way forward	39
3.5 Partnerships and innovation	39
3.5.1 Introduction	39
3.5.2 Activities and outputs	40
3.5.3 Outcomes	41
3.5.4 Case studies	42
3.5.5 Lessons learnt and way forward	42
3.6 Enabling and evolving seed policies	43
3.6.1 Introduction	43
3.6.2 Activities and outputs	43

---

3.6.3	Outcomes	45
3.6.4	Case studies	46
3.6.5	Lessons learnt and way forward	46
3.7	Research and studies	47
3.7.1	Introduction	47
3.7.2	Activities and outputs	47
3.7.3	Outcomes	48
3.7.4	Case studies	49
3.7.5	Lessons learnt and way forward	49
3.8	Sharing experiences and lessons learnt	50
3.8.1	Introduction	50
3.8.2	Activities and outputs	50
3.8.3	Outcomes	51
3.8.4	Case studies	51
3.8.5	Lessons learnt and way forward	51
3.9	Capacity development	52
3.9.1	Introduction	52
3.9.2	Activities and outputs	52
3.9.3	Outcomes	53
3.9.4	Case studies	53
3.9.5	Lessons learnt and way forward	53
<b>4</b>	<b>Collaboration with other partners</b>	<b>54</b>
	<b>Appendix 1 Regional annual reports 2014</b>	<b>56</b>

# Preface

We are pleased to share with you the 2014 annual 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 Centre for Development Innovation of Wageningen UR in the Netherlands.

Enhancing farmers' access to quality seed is key for promoting agricultural growth, food security and economic development. As such 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 work on increasing the quality, quantity and diversity of seed available to Ethiopian farmers. In addition we work 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 greatly acknowledge the financial support of the Directorate General for International Cooperation through the Embassy of the Kingdom of the Netherlands in Addis Ababa, which allows the implementation of this strategically important programme.

Amsalu Ayana and Marja Thijssen  
ISSD Ethiopia Programme Director and Wageningen UR ISSD Ethiopia Coordinator

---

# List of abbreviations and acronyms

ATA	Agricultural Transformation Agency
BDU	Bahir Dar University
BoA	Bureau of Agriculture
CDI	Centre for Development Innovation, Wageningen UR
CPA	Cooperative Promotion Agency
DA	Development Agents
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
FCB seed systems	Farmer and Community Based seed systems
HU	Haramaya University
HwU	Hawassa University
ISSD	Integrated Seed Sector Development
KPA	Key Performance Area
KPI	Key Performance Indicator
LSB	Local Seed Business
MoA	Ministry of Agriculture
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
PMU	Programme Management Unit
PBR	Plant Breeder's Rights
R&D	Research and Development
RARI	Regional Agricultural Research Institute
RSE	Regional Seed Enterprise
SNNPR	Southern Nations, Nationalities, and Peoples Region
SPC	Seed Producers' Cooperative
Wageningen UR	Wageningen University & Research centre
WoA	Woreda office of Agriculture
WoCP	Woreda office of Cooperative Promotion

---

# Summary

The programme on Integrated Seed Sector Development in Ethiopia (ISSD 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 to a larger number of farmers. This will contribute to agriculture for food security and economic development in Ethiopia. That is the vision of the ISSD programme in Ethiopia. The programme facilitates targeted interventions in a range of seed systems, and contributes to strengthening seed sector coordination and governance.

ISSD Ethiopia aims to consolidate the development of 34 seed producer cooperatives (SPCs) into local seed businesses (LSBs), which produce and market quality seed of farmer demanded crops and varieties for a local market. Whereas most of the LSBs have been consolidated in 2014 in their seed production and management capacities, and are producing seed products that are high in demand, additional attention needs to be given to strengthen their capacities in marketing, and their infrastructure for seed value addition. Both the Agricultural Transformation Agency (ATA) and the Agricultural Growth Programme (AGP) recognize the value of LSBs and their contribution to seed production in Ethiopia, and have supported selected ones to strengthen their seed infrastructure. Most of the LSBs are profitable in seed business, are now able to negotiate better prices for their seed, have increased investment in their business, and are increasingly focusing on selling their seed beyond government contracts.

Through strategic partnerships with at least 20 partners, ISSD Ethiopia aims to scale up the number of LSBs by a factor five to ten (170 – 340). The aim is, with these LSBs, to generate a significant share of the seed of food and semi-commercial crops made available at local seed markets. In 2014 ISSD Ethiopia has supported 247 LSBs through partnerships with 51 different partners. Current partners are the Bureaus of Agriculture (BoA), Woreda offices of Agriculture (WoA), public seed enterprises, research institutes, universities and colleges, AGP, farmers unions and NGOs. LSBs are located in both high and low potential agro-ecologies, producing seed of 25 different crops and 117 different varieties. Looking at the performance of the individual LSBs, there is still ample room of improvement. On average they perform weak to satisfactory, however, some LSBs can be compared in performance to LSBs in the consolidation programme. It is obvious that partners differ in intensity as well as capacity to support SPCs in the development towards autonomous and professional LSBs. ISSD Ethiopia needs to put emphasis on continuing its partnership with those partners and LSBs that are serious in their efforts, and have potential to succeed. Additional partnerships need to be formed to provide LSBs with support which is beyond the capacity of the direct partners.

Private small and medium-scale seed producers often operate as out-growers to BoA. The objective of ISSD Ethiopia is to promote and support the system of these seed producers, and facilitate their collaboration with companies and research. ISSD Ethiopia has supported these seed producers, including new investors in seed production in the professionalization process. Looking at average performance, they score satisfactory. However, they do produce seed that is high in demand; on the other hand they are weak in the identification of new markets and lack capacities to develop a marketing strategy. Many of them focus on hybrid maize. Joining the pilots on direct seed marketing for this crop, created new business opportunities. ISSD Ethiopia has to support private seed producers in extending their crop and variety portfolio, and finding new markets, i.e. in becoming more competitive in the seed market.

Ethiopia has an emerging sector of private seed companies. The objective of ISSD Ethiopia is to facilitate and promote the investment of these public and private companies, as well as international companies in seed business. In 2014 ISSD Ethiopia has not only supported individual companies, but also intensively supported the Ethiopian Seed Association (ESA) in its professionalizing through a well elaborated strategic plan. ISSD Ethiopia considers ESA as an entry point to work with the individual companies. For the companies emphasis has been put on capacity building in business planning,

ISSD Ethiopia facilitates collaboration in regional partnerships to solve key bottlenecks in the seed sector. The programme works through regional seed sector platforms steered by core groups, in which the major seed sector stakeholders of the region are represented; and with innovation projects allowing experimentation with innovative approaches towards resolving complex institutional bottlenecks. In 2011, ISSD Ethiopia started with its first small controversial experiments on direct

---

seed marketing; in 2013 the Ministry of Agriculture endorsed national scaling up of the direct seed marketing approach. In close collaboration with the Agricultural Transformation Agency and regional stakeholders, ISSD Ethiopia has facilitated wide scale implementation in Amhara, Oromia and SNNPR. In 2013 the Input and Quarantine Regulatory Authority in Amhara was established; also SNNPR has started the process of establishing a regional seed quality regulatory body. Haramaya University has established a Seed Quality Advisory Service at the university, taking up a lead role in seed quality control in the eastern part of Oromia region. Another main bottleneck addressed through the ISSD Ethiopia partnerships programme is the access to basic seed for the different seed producers. TARI in Tigray has now established a functional seed unit; OARI (Oromia), ARARI (Amhara) and SARI (SNNPR) are on their way to do so. Through successful partnership projects, ISSD Ethiopia contributes to institutional development, including the design and endorsement of new policies.

ISSD Ethiopia aims to promote to 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 both sensitized towards the principles and approach of ISSD, and supported in their academic and professional development. The MSc research studies provide 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 the programme's concepts and approaches, and attracts more parties expressing the interest to collaborate with the programme.

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 ISSD 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 Growers and Processors Association in Ethiopia, and Wageningen UR Centre for Development Innovation 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 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 Introduction

## 1.1 The concept of Integrated Seed Sector Development

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.

Integrated seed sector development (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.<sup>1</sup> The guiding principles of ISSD, listed below in Box 1, help practitioners to deal with the complexities of the seed sector in the design and implementation of seed sector interventions.

### Box 1. ISSD guiding principles<sup>2</sup>

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

The African Union Commission has endorsed the ISSD approach in support of its African Seed and Biotechnology Programme for seed sector development in Africa<sup>3</sup>. In February 2009, the Ethiopian Ministry of Agriculture, 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.

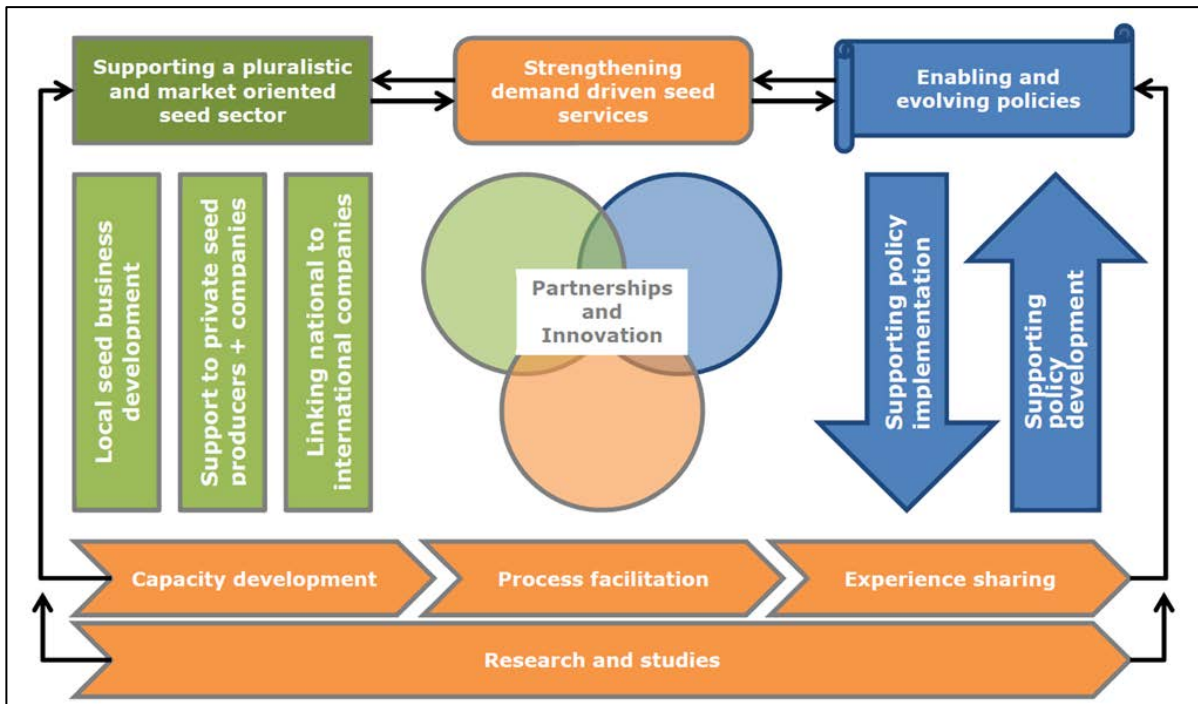
---

<sup>1</sup> 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.

<sup>2</sup> 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>

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

## 1.2 The ISSD Ethiopia Programme



**Figure 1** Components of ISSD Ethiopia

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. This is the vision of the ISSD programme in Ethiopia.

The different components of the programme are illustrated in Figure 1. ISSD Ethiopia supports 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 tries to establish linkages with international companies with an interest in seed in Ethiopia. Working with a wide range of stakeholders, regional seed platforms facilitate innovation and learning for supporting seed sector coordination and governance (*centre of the figure*). Experiences of the programme are fed into policy development; but the programme also supports policy implementation (*right side of the figure*). The programme strongly incorporates 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*).

Chapter 2 of the report explains the structures of programme coordination and chapter 3 of the report elaborates the approach, activities, results and main achievement for each programme component in 2014.

---

## 2 Programme coordination

### 2.1 Programme partners

ISSD Ethiopia is implemented in Amhara, Oromia, the Southern Nations, Nationalities, and Peoples Region (SNNPR), and Tigray. It is 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 Centre for Development Innovation (CDI) of Wageningen University and Research centre (Wageningen UR), in The Netherlands. Ethiopian universities and OSE host regional ISSD Units; HU also hosts the Programme Management Unit (PMU), which is located in Addis Ababa. ESA specifically works on strengthening the private seed sector. ISSD Ethiopia is 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. Find in the Table 1 below the contact details of the Ethiopian and Dutch coordinating partners.

National ISSD Ethiopia partners include 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 collaborates with non-governmental organizations (NGOs), small and medium scale seed enterprises as well as Seed Producer Cooperatives (SPCs) and their local partners.

---

**Table 1**  
*Coordinating partners of ISSD Ethiopia*

Organization	Contact person	Position	Contact details
ISSD PMU – HU	Dr Amsalu Ayana	ISSD Ethiopia Programme Director	aga.amsaluayana@gmail.com
BDU	Dr Dereje Ayalew	Amhara regional coordinator	derejeayal@yahoo.com
HU	Dr Nigussie Dechassa	Oromia East regional coordinator	nigussiedachassa@gmail.com
HwU	Dr Hussein Mohammed	SNNPR regional coordinator	aaminaa68@yahoo.com
MU	Dr Fetien Abay	Tigray regional coordinator	fetien.abay@yahoo.com
OSE	Mr Kedir Nefo	Oromia South and West coordinator	kedirnefob@yahoo.com
ESA	Mr Melaku Admassu	Chairperson ESA Board	melaku.admassu@pioneer.com
CDI	Dr Marja Thijssen	Wageningen UR project coordinator	marja.thijssen@wur.nl
CDI	Mr Gareth Borman	Wageningen UR assistant coordinator	gareth.borman@wur.nl

### 2.2 Programme management

The programme follows a learning-oriented monitoring and evaluation approach to strategically guide the programme towards its objectives. In the strategic guidance, the programme works at different levels with the following units:

- National executive coordination committee;
- National PMU;
- CDI;
- Regional ISSD units.

Find more details on the different structures below.

### National executive coordination committee

The programme governing and decision making body is the executive committee, which consists of representatives of the six Ethiopian coordinating partners, i.e. BDU, HU, HwU, MU, OSE, ESA; Wageningen UR; and the ISSD Ethiopia Programme director. The executive coordination committee meets three to four times per year to discuss issues that need joint decision in relation to programme coordination and planning. The contracts between CDI and the coordinating organizations form the basis for cooperation; notes of the executive committee meetings are considered annexes to these contracts.

### National Programme Management Unit

The PMU in Addis Ababa hosts the ISSD Ethiopia Programme director, the National partnerships coordinator, the National knowledge sharing and capacity development facilitator, a Programme management assistant, a Finance officer, and a Driver. The PMU supports the regional ISSD units in the implementation of the programme, and is responsible for activities at national level. The PMU is hosted by HU. Find in table 2 the details of PMU staff.

Table 2

*ISSD Ethiopia Programme Management Unit*

Name	Position	Contact details
Dr Amsalu Ayana	ISSD Ethiopia Programme director	aga.amsaluayana@gmail.com
Mohammed Hassena	National partnerships coordinator	mohammed.hassenabeko@wur.nl
Temesgen Woyessa	National knowledge sharing and capacity building facilitator	wtemesgen2005@gmail.com
Johannes Tesfaye	Programme management assistant	Resigned 1 December 2014
Meseret Asfaw Haile	Finance officer	meseret170@gmail.com

Table 3

*CDI staff associated to ISSD Ethiopia*

Name	Position in programme	Expertise/support area	Contact details
Dr Marja Thijssen	Wageningen UR project coordinator	Plant genetic resources and seed systems; general coordination and coaching	marja.thijssen@wur.nl
Gareth Borman	Wageningen UR assistant coordinator	LSBs and partnerships & innovation	gareth.borman@wur.nl
Dr Abishkar Subedi	Advisor	LSBs, FCB seed systems and policy related issues	abishkar.subedi@wur.nl
Mirjam Schaap	Advisor	Knowledge management	mirjam.schaap@wur.nl
Karen Verhoosel	Advisor	MSP and M&E	karen.verhoosel@wur.nl
Rutger Persson (associate consultant)	Advisor	Private sector development	svalofconsulting@gmail.com
Harry Vloet	Finance coordinator	Financial management	harry.vloet@wur.nl
Rene Mulder	Finance officer	Financial management	rene.mulder@wur.nl
Cynthia Vitalis	Programme support	General programme support	cynthia.vitalis@wur.nl

### Centre for Development Innovation

The CDI coordinator works closely with the PMU Programme director in the coordination of ISSD Ethiopia. Together with PMU, CDI designs the programme process. A team of CDI staff is associated to the programme providing different types of expertise. These staff organize trainings, support workshops and organize coaching sessions for the regional ISSD units. Find in Table 3 the details on the CDI staff working in the ISSD project, and their area of expertise.

---

## **Regional ISSD units**

The regional Scientific coordinators have the responsibility to guide the regional units in the implementation of programme activities; in this task they are assisted by the Programme assistants. In addition each unit has the following positions: Institutional advisor, LSB seed expert, LSB farmer organization expert, LSB agribusiness expert, Partnership facilitator, Private sector expert, Knowledge management and capacity development expert, Finance officer, and two Drivers. Find in the attached regional reports the details on the project staff in the regions. The project Scientific coordinators and Institutional advisors are only part-time employed by the programme.

The executive coordination committee jointly designs the programme process to steer the programme towards its objectives. As such, the general programme process for the programme and its components is the same in the five regions. Common Terms of Reference (which are the same for all regions) guide the programme staff in their work. However, the contexts of the regions in relation to agricultural production and seed systems varies significantly. This means that also activities may be different and achievements will differ between regions. The PMU directly supports the regional units in their activities. Activities at the national level (national workshops and meetings) and the executive committee meetings ensure that the regional units keep track of the process in the different regions and localities.

## **Financial management**

Centre for Development Innovation has final responsibility for the programme budget. The budget related to Wageningen UR staff (staff time, travel and staying costs) as well as specific general costs (international training, documentaries, publications, etc.) are managed directly by CDI. CDI elaborated contracts with the regional coordinating partners (BDU, HU, HwU, MU and OSE) to manage regional programme activities. An additional contract was elaborated with HU for the PMU in Addis Ababa.

The contracts cover the budgets for the coordination of each programme components, human resources, and investment and running costs. For the different programme components Terms of Reference were either attached to the contract, or elaborated at a later stage. Budgets were made available to the partners in two advance payments for half-year periods.

The contracts also include guidelines for financial reporting. Each unit has dedicated a financial officer to the project. CDI has developed and provided a set of formats for financial administration, and has provided training to the finance officers and project management facilitators in managing the financial administration system. Financial and auditing reports of 2014 are available as separate reports.

---

## 3 Programme components

This chapter highlights the outputs and outcomes of the ISSD Ethiopia programme in 2014, organized according to the programme components as outlined in the approved project proposal. For each programme component we give: (1) a short introduction, including its objectives (according to the programme proposal); (2) the main activities and outputs; (3) the outcomes; (4) we refer to some highlights (case studies); and (5) we extract lessons learnt and give the way forward. More detailed information on the programme components can be found in the five regional annual reports; see the five annexes attached to this report.

The different ISSD Ethiopia programme components are:

1. Local seed business development – consolidation
2. Local seed business development – scaling up
3. Private small and medium scale seed producers
4. Seed companies
5. Partnerships and innovation
6. Seed policies
7. Research and studies
8. Sharing experiences and lessons learnt
9. Capacity development

### 3.1 Local seed business development – consolidation

#### 3.1.1 Introduction

In 2014 ISSD Ethiopia continued to work with 33 of the 34 LSBs it has been supporting since 2010 and 2011 (one cooperative in Oromia East decided to leave seed as a business). The aim is to further consolidate Seed Producer Cooperatives (SPCs) in becoming autonomous and professional seed entrepreneurs or local seed businesses, i.e. LSBs. 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. Such LSBs, consolidated in their development, are examples for the scaling up of the LSB model with other partners. Please note that in this section we use the terms SPC and LSB interchangeably.

#### **Objectives**

- Support and consolidate 34 LSBs in their professionalism, autonomy and seed entrepreneurship;
- Study and accompany their development ensuring innovation of the LSB process supporting LSB scaling up and partnerships.

#### **Key performance areas**

SPCs are strengthened in four key performance areas (KPA) to become sustainable local businesses. They are supported to become (1) technically well equipped, (2) market oriented, (3) professionally organized, and (4) strategically linked. Key performance indicators (KPIs) have been developed to measure progress of the LSBs over the years for each KPA; see Table 4. ISSD Ethiopia uses the framework of KPAs and KPIs to design its interventions, and steer the LSBs towards sustainable local businesses.

#### **Staff involved in the programme component**

All five regional ISSD units have a team of agribusiness, farmer organization and seed experts supporting the farmer groups in the consolidation of their local businesses. They train and coach LSB executive committees and members, as well as the partners, and they facilitate strategic linkages.

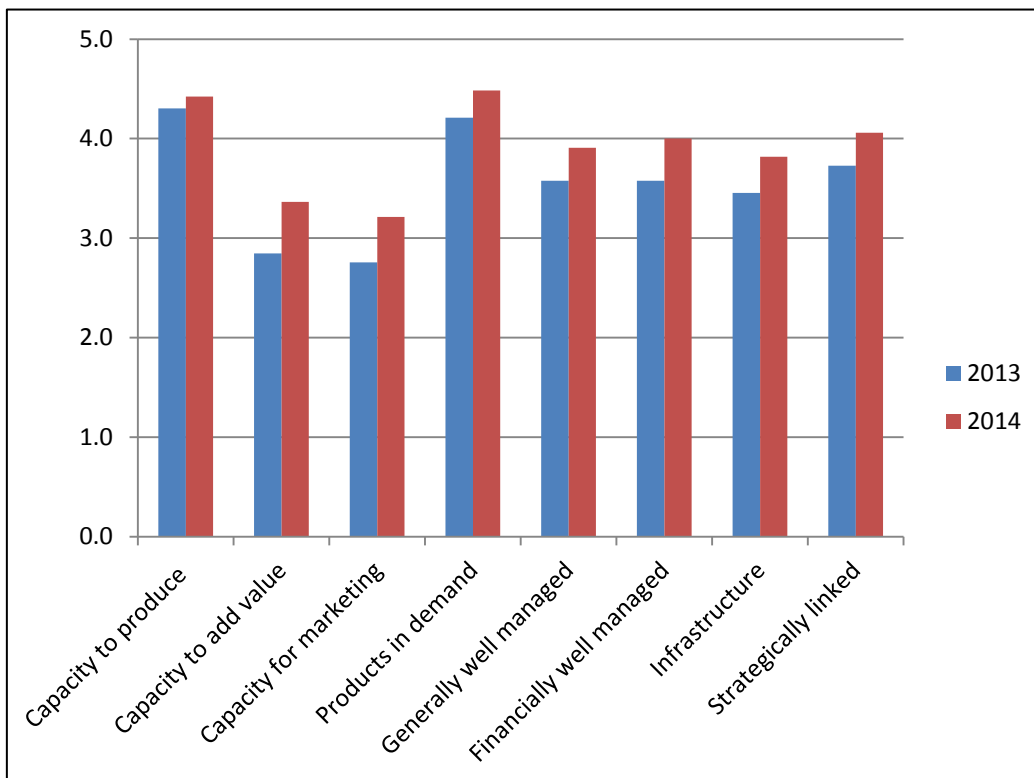
Table 4

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

### 3.1.2 Activities and outputs

See below the main activities and outputs in LSB support in the four key performance areas. Find more detailed descriptions in the regional annual reports (see annexes). Please note that every region had its own 2014 activity plan, based upon the needs of the LSBs in their region; this means that not all activities have been implemented in each region. See in Figure 2 the average scores of the LSBs for the KPIs in 2013 and 2014; LSB performance is measured as an output indicator for LSB development (see ISSD Ethiopia M&E framework, indicator 3.1).



**Figure 2** Average scores of 33 consolidated LSBs in relation to eight key performance indicators in 2013 and 2014. Scoring: 1 = poor, 2 = weak, 3 = satisfactory, 4 = good, 5 = excellent

---

## Supporting LSBs to become technically well equipped

### Activities:

- Training of SPC members and their partners on quality seed production, post-harvest management and seed value addition;
- Technical coaching of LSB members on quality seed production at field level;
- Peer to peer exchange of LSBs in quality seed production, within and outside the region, using the best performing LSBs as an example;
- Supporting LSBs, or model farmers of LSBs, to produce basic seed themselves, under close supervision of experts (WoA, research);
- Development of seed value addition manual for LSBs in local language;
- Facilitation of external field inspection.

### Outputs:

- Average score of the LSBs for capacity to produce seed is good to excellent (score: 4.4), which is almost similar to the 2013 score for this indicator (score: 4.3). The conclusion is that the LSBs are well equipped to produce quality seed with well-functioning internal seed quality control committees.
- The capacity to add value to seed scores satisfactory to good (score: 3.4), but varies considerably among LSBs. ISSD Ethiopia is now facilitating purchase of equipment and infrastructural facilities for seed value addition through ACDI/VOCA and ATA. The performance in this area improved as compared to 2013 (score: 2.8). Value addition only makes sense if the effort is paid back through an increased seed price, which is not the case for raw seed produced on contract for the government. This area needs further attention in 2015.

## Supporting LSBs to become market-oriented

### Activities:

- Facilitation of the selection of seed crops and varieties demanded in the woreda, zone and region through discussions and the establishment of crop and variety demonstration trials, introducing new germplasm at LSB premises;
- LSB seed promotion through the facilitation of the organization of farmers' field days, the organization of seed fairs, announcements at markets, and communication through radio and mini-media;
- Seed profitability studies to advise LSBs on their seed crop portfolio;
- Improvement and update of business plans, making use of the business model canvas tool;
- Training of SPC executive committee members and partners like DAs in seed marketing;
- Peer to peer exchange of LSBs in marketing, using the best performing LSBs as an example;
- Together with LSBs explore new local seed markets as well as opportunities for generating other income streams through for example input marketing.

### Outputs:

- *Capacity for marketing* scores on average satisfactory to good (score: 3.2), but is highly variable among regions. This is related to the seed market for the LSBs, for example mainly contractual seed growing in Amhara (average score: 2) and direct seed marketing for all LSBs in Oromia East (average score: 4). LSBs have improved in this area as compared to 2013 (score: 2.8); however, this area needs further attention in 2015;
- On the other hand, capacity to produce *products in demand* scores good to excellent (score: 4.5), which is slightly higher than in 2013 (score: 4.2). Generally LSBs do not face problems in selling their seed, which is related to the selected crop varieties, as well as to the quality of the seed produced.

## Supporting LSBs to become professionally organized

### Activities:

- Training of SPC executive committee members and partners on cooperative governance, seed business management, and financial management;
- Upgrade the SPCs' internal bylaw;
- Support SPCs to get a seed production and marketing competence license;



- Support SPCs in getting access to credit through the organization of finance fairs and meetings linking them with credit providers;
- Peer to peer exchange of LSBs in seed business management using the best performing LSBs as examples;
- Encourage SPCs to hire professional managers;
- Study, awareness raising and training on gender and SPCs;
- ISSD-LSB grant to support professionalization of the business;
- Support LSBs in securing grants from ACDI/VOCA for infrastructure;
- Feasibility study and workshop on the establishment of seed unions.

#### Outputs:

- LSBs score good in relation to *general management* (generally well managed; score: 3.9); this score has been improved as compared to 2013 (score: 3.6). Business thinking has now been internalized. Turn-over of members of the executive committee is an issue negatively affecting management with some of the LSBs;
- LSBs also score good on *financial management* (financially well managed; score 4.0), which is also improved as compared to last year (score: 3.6). Many SPCs now hire accountants and cashiers. Members contribute more to the SPCs in terms of shares, service charge payment, etc;
- In relation to *infrastructure* SPCs score satisfactory to good (score: 3.8); which is an improvement as compared to 2013 (score: 3.5). Many members contribute to strategic investment for improving the LSB infrastructure. ISSD Ethiopia is also facilitating linkage to development partners for infrastructural investments.

### **Supporting LSBs to become strategically linked**

#### Activities:

- Strengthening seed core groups at woreda levels, uniting all partners in supporting the SPC towards 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 centers;
- Support LSBs in getting access to credit through the organization of finance fairs and setting up meetings linking LSBs with credit providers.

#### Outputs:

- LSBs generally score good for *strategic linkage* (score: 4.1). Most of them have established woreda seed core groups uniting all local partners supporting a specific LSB. LSBs get good support from WoA and WoCP, and increasingly support from strategic partners like ATA. Access to basic seed remains problematic. A number of SPCs have now access to credit; others are in the process of getting access.

### **Comparing results to action plans**

With only some minor deviations, activities have been implemented according to the regional action plans. On average LSBs have improved their performance and perform well for all KPIs, with the exception of capacity to add value to the seed, and capacity for marketing. This needs further attention in 2015.

#### 3.1.3 Outcomes

##### **LSBs and seed as a profitable business**

One indicator for measuring the success of SPCs in their business, is their profitability (see M&E framework indicator 2.1). SNNPR reported that three out of five LSBs were profitable in the 2013/2014 cropping season. Amhara, Oromia East and Tigray reported that all of their LSBs (total of 18) were profitable. Data of Oromia South West are not available yet (total of 10 LSBs).

Profitability of the LSB depends on a number of issues, including crop types, management practices, marketing skills and sales models. Recognizing the dependence of profitability on the crop type, ISSD Ethiopia implemented a large scale study, comparing LSB profitability of seed and grain for a number of indicator crops. See in Table 5 some of the results.

**Table 5**

*Return on capital investment for grain versus seed of selected LSBs*

Region	Crop	Return on Investment (%)	
		Seed	Grain
<b>Amhara</b>	Tef	<b>94</b>	32
	Wheat	<b>39</b>	-3
	Hb-Maize	-1	<b>4</b>
<b>Oromia S&amp;W</b>	Wheat	155	<b>159</b>
<b>Oromia E</b>	Potato	<b>130</b>	94
	Wheat	<b>51</b>	34
	Groundnut	<b>78</b>	31
<b>SNNPR</b>	Haricot bean	<b>142</b>	21
	Tef	<b>69</b>	32
	Wheat	64	<b>64</b>
<b>Tigray</b>	Tef	<b>68</b>	37
	Potato	<b>73</b>	40
	Wheat	<b>93</b>	65
	Barley	<b>105</b>	67
	Maize	<b>103</b>	68

Table 5 shows high variability between crops and between regions. LSBs in Amhara are not interested anymore to grow hybrid maize as a seed crop on contract basis, because it is not profitable; in Tigray hybrid maize is a profitable seed crop. Whereas in some regions growing wheat seed and grain appears equally profitable (Oromia South and West, and SNNPR), in other regions growing seed appears more profitable than grain (Tigray). Study results are currently consolidated and used in different regions to negotiate better contracts between LSBs and public enterprises.

#### **Fair price for LSB seed**

Another indicator for success of the LSBs is the ability of getting a good price for their seed (see M&E framework indicator 2.2). This relates to improvement of the seed price for seed grown on contract, which is generally 15% higher than the grain price. For all LSBs and seed crops seed prices are higher than grain prices, which is also required because of the additional investment in seed production as compared to grain production. See in Table 6 information on seed and grain prices of some important food crops.

**Table 6**

*Seed price versus grain price for a number of indicator crops in 2014*

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
Tef	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

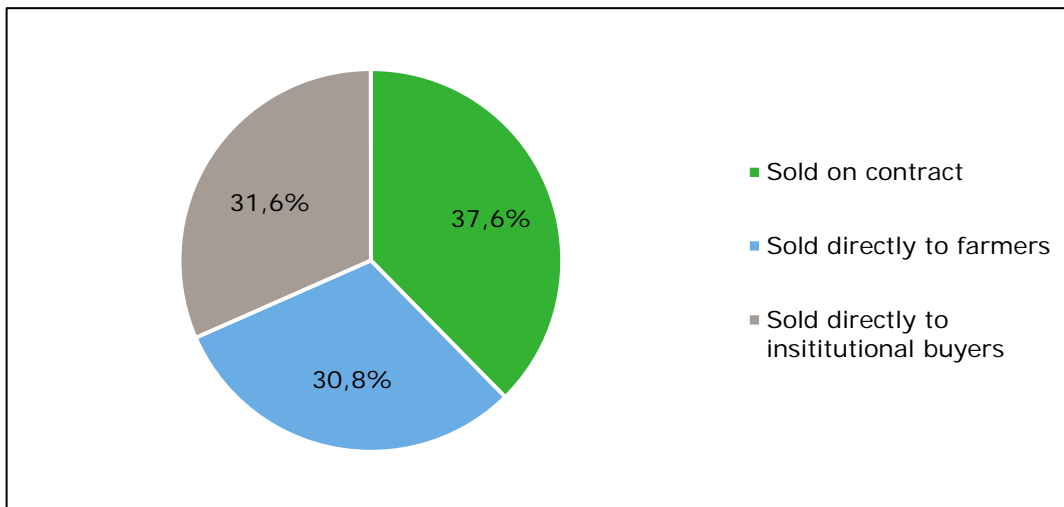
The data in Table 6 show that on average the 30% margin for seed (which is the target) has been reached for all crops, except wheat. However, the table shows the variability among crops, as well as the variability among LSBs. In some regions LSBs have been able to negotiate higher seed prices with contract growers (Tigray), in other regions contract growers stick for seed to the 15% on top of the grain price (Oromia South and West). The above mentioned seed profitability studies, as implemented in 2014 and presented during the regional workshops in June, created awareness with key stakeholders that the price setting mechanism for seed of crops like wheat and hybrid maize should be revised, considering actual seed production costs and demand. Our teams consistently report lower prices for seed sold on contract as compared to other markets. When LSBs are able to bring a new variety to the market, customers are willing to pay a high seed price; this is reported by the Amhara team in relation to the introduction of a new potato variety.

### Investment of LSB in its business

In addition, investment of LSBs in their seed business is considered an indicator measuring success (target is 10% of profit reinvested; see M&E framework indicator 2.3). All SPCs reinvest in their business, the amounts however vary per region and per SPC. Reported reinvestment percentages of the profit are on average 10% in Oromia South and West, 20% in Tigray, 25% in SNNPR, 30% in SNNPR and 40% in Amhara. The LSBs have also increased their investments in 2014 as compared to 2013; the Amhara team reports an average 60% increase in investment for this year as compared to 2013.

### Different sales models for LSBs

Many SPCs started with contractual seed growing of one crop for a public seed enterprise. Selling to other type of customers, such as WoA, NGOs and directly to fellow farmers will contribute to the profitability and sustainability of the business. Having different sales models is considered a success factor for LSBs (target is 50% sales directly; see M&E framework indicator 2.4).



**Figure 3** Relative importance of different marketing channels, based on seed volume sold in 2013 in Amhara, Oromia, SNNPR, and Tigray

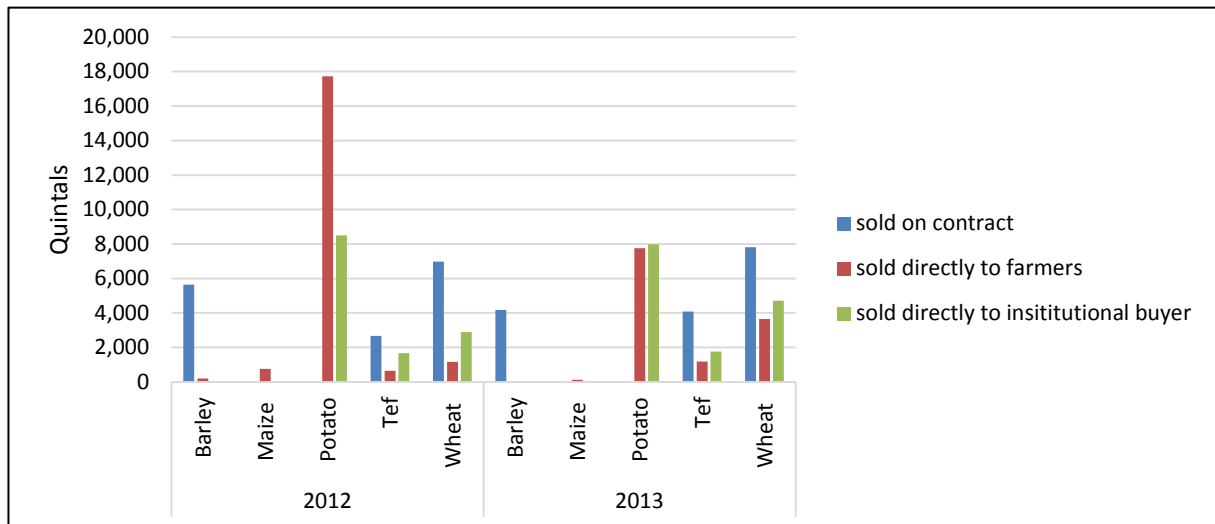
Sales figures for 2014 are not complete for all regions yet (all crops are harvested but not yet threshed and sold). In 2013 the fractions for contractual and direct sales amount to 37,6% and 62,4% respectively; of the 62,4% direct sales 31,6% is sold to institutional buyers and 30,8% is sold to farmers (see Figure 3). In 2014, direct seed sales figures vary among regions from 100% in Oromia East (highest) to 53% in Amhara (lowest). However, the Amhara ISSD unit still reports an increase in direct seed sales as compared to 2013 (+30%). Large investment in seed promotion in Oromia East created a strong local demand, and now 85% of the seed is directly sold to farmers; the remaining 15% is sold to institutional buyers.

Figure 4 shows that marketing channels largely vary for crops. Generally, crops like hybrid maize are only allowed for SPCs to be grown on contract; also malting barley is often grown on contract. Other

crops like wheat and tef, may be either grown on contract, or be marketed directly. Crops like potato are always marketed directly. Comparing the data for 2012 and 2013 it is obvious that for barley, tef and wheat the amount of seed sold has increased, but also the percentages of seed directly marketed have increased.

A comparison between the data of 2012 and 2013 in Figure 4 makes clear that less potatoes are sold in 2013. An explanation of the difference can be found in the left overs of the produced potatoes; the production over 2012 and 2013 is more or less the same, but the sales in 2013 were much lower.

The production and sales of barley, maize and tef were stable over 2012 and 2013. Also for sales methods of these crops no big changes can be recognized. The production data makes clear that production of wheat has increased a lot in 2013. When you look at the sales data you see also more sales for wheat. The increase in direct sales is bigger than the increase in sales on contract.



**Figure 4** Sales of key crops through different marketing channels in 2012 and 2013

### 3.1.4 Case studies

Find in the annexed regional annual reports a number of highlights elaborated of our work in LSB development; they address:

- *Amhara*: Profitability analysis of seed versus grain production – supporting business orientation of SPCs;
- *Oromia East*: Agribusiness and finance fairs – facilitating business to business linkages for LSBs;
- *Oromia South and West*: Biftu SPC – from credit seeker to profit maker;
- *SNNPR*: Kayo SPC – professional local entrepreneurs with a win-win business relationship with the union;
- *Tigray*: Shewit SPC – a Certificate of Competence and recognition as producer of quality seed and seed potatoes.

### 3.1.5 Lessons learnt and way forward

#### Main lessons learnt

The main lessons learnt include:

- SPCs now practically understand seed as a business;
- A strong crop/variety portfolio, as well as investment in seed value addition is key for increasing seed profitability and for being successful in seed business;
- Shortage of basic seed remains a major bottlenecks for sustainable LSBs development; LSBs have shown their capacity in serving as reliable Early Generation Seed (EGS) producers;
- Improved financial capacity of LSBs strengthened their organizations, increased the amount of seed produced, generated more profit and increased the business' autonomy;

- Organization of business events like agri-business and finance fairs facilitates strategic linkages of LSBs in relation to access to information, inputs, services and markets;
- Seed core groups at local level facilitate effective service provision to LSBs;
- Collaboration with woreda and zonal partners is key for sustainable LSB development; collaboration with other development partners like ATA further strengthens LSBs;
- For LSBs to keep interest in seed contract growing of crops like hybrid maize and wheat, the seed pricing mechanism should be revised.

### **Way forward**

Even though LSBs have shown improvement in the four key performance areas, there are a number of topics that need attention in 2015 towards increasing their capacities for becoming autonomous, professional entrepreneurs. These include:

- Post-harvest technologies and seed value addition;
- Certificates of Competence and hiring of professionals;
- Support in direct seed marketing;
- Internal capital mobilization and access to finance;
- Secure and sustainable access to basic seed;
- Local embedding through strengthening the local seed core group promoting synergy among partners;
- Seed pricing mechanism for contract growing.

### **Sustainability**

The interventions of ISSD Ethiopia are guided by the framework of key performance areas and indicators (outputs), as well as the success factors for local seed business (outcomes). Sustainability is embedded in these indicators and success factors. By the end of 2015 most of the LSBs shall be able to run the business without or with limited support of ISSD Ethiopia.

## **3.2 Local seed business development – scaling up**

### **3.2.1 Introduction**

Through strategic partnerships with a diversity of organizations ISSD Ethiopia aims to scale up the LSB approach as a sustainable and market-oriented approach for local seed production and marketing of locally preferred crops and varieties. The 33 'first generation' LSBs serve as references to the partners and new LSBs. The LSB experts train and coach the partners in the key aspects of the LSB approach.

#### **Objectives**

- Promote the support and establishment of 170 – 340 LSB group in such a manner that they get a significant share at local seed markets for food and semi-commercial crops;
- Share the LSB approach and promote its use for commercial local seed supply in at least 20 organizations.

#### **Scaling up partners and collaboration model**

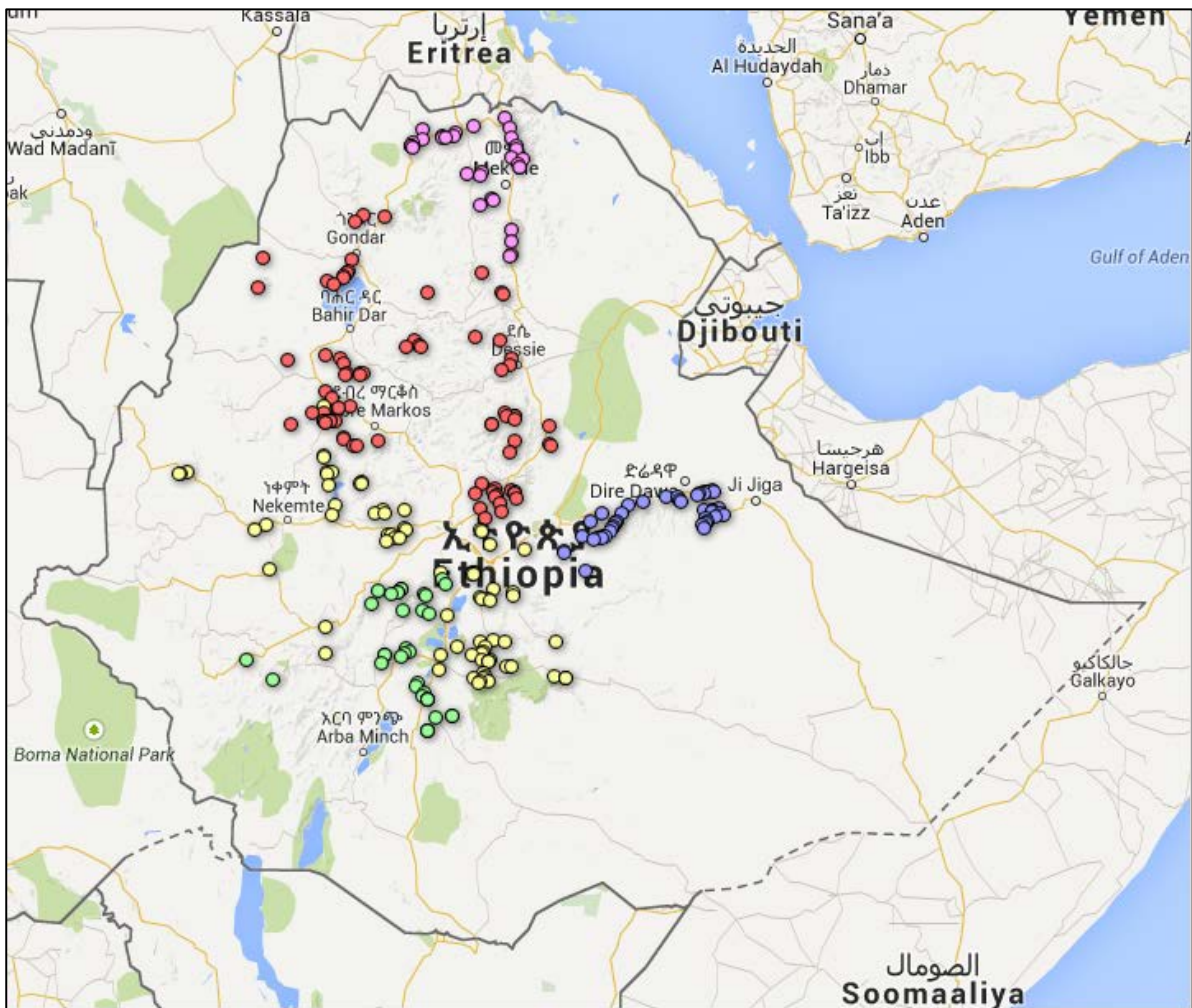
ISSD Ethiopia is now working with 51 partners in LSB scaling up. Partners include government agencies, seed enterprises, research institutes, universities, AGP, farmers unions and NGOs; see Table 7. These partners work with 247 different LSBs which brings the total number of LSBs supported through ISSD Ethiopia to 280; see Figure 5.

The partnerships modality works as such that organizations with an interest in the LSB approach get an extensive introduction, which is followed by the development of a Memorandum of Understanding (MoU) with ISSD Ethiopia for collaboration. The MoU contains a work plan describing who is responsible for which activity, and who pays for what. Partners are requested to contribute 75% co-funding to collaborate with ISSD Ethiopia in LSB scaling up. Also in scaling up the LSB support activities are based on performance assessments using the framework with the four key performance

areas and eight indicators (see Table 4). Partners are requested to use the framework to monitor the progress of the LSBs they work with.

**Table 7**  
*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	5			8	28	41
WoCP	7		20			27
Public seed enterprises			10			10
Research institutes	17	11	19		3	50
Universities and colleges	28	18	11	5	11	73
AGP			5		3	8
Farmers unions		6		10		16
NGOs	5	3	5	6	3	22
<i>Total # SPCs</i>	<i>62</i>	<i>38</i>	<i>70</i>	<i>29</i>	<i>48</i>	<i>247</i>
Number of partners						
<i>Total # partners</i>	<i>15</i>	<i>7</i>	<i>14</i>	<i>7</i>	<i>8</i>	<i>51</i>



**Figure 5** 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).

## Staff involved in the programme component

The same teams of agribusiness, farmer organization and seed experts supporting the SPCs in the consolidation programme, support partners in LSB scaling up. They train and coach partners and monitor their progress.

### 3.2.2 Activities and outputs

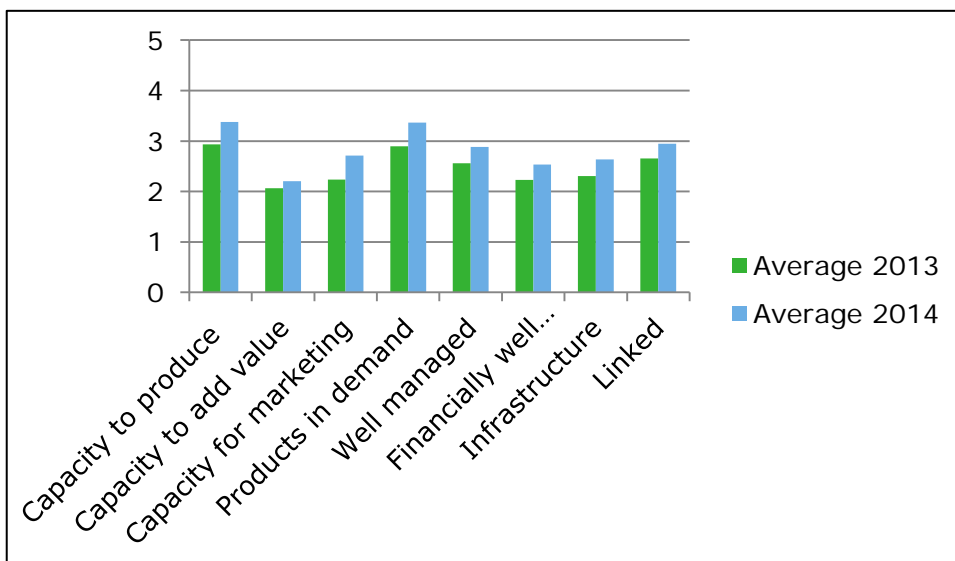
Find below the main activities and outputs of supporting partners in the implementation of the LSB approach. Find more detailed descriptions in the regional annual reports as annexed to this report. Please note that every region had its own activity plan, based upon the needs of its partners; not all activities as mentioned below have been implemented in each region with each partner.

#### Activities

- Supporting the development of MoUs with partners, agreeing on responsibilities, activities and budgets;
- Training of partners on the ISSD and LSB approach and the LSB performance assessment framework;
- Training of strategic partners, local partners (woreda focal persons, DAs) and SPC members on issues like quality seed production, seed value addition, seed marketing and business management;
- Experience sharing visits of partners to consolidated LSBs, and of scaling up LSBs to consolidated LSBs;
- Organization of discussion fora at zonal levels for local partners to create awareness and improve local embedding of LSBs;
- Facilitate the organization of field days and organize agribusiness fairs for product promotion;
- Link LSBs and partners to research and knowledge institutes for access to new varieties as well as technical support;
- Facilitate LSB access to basic seed, and support partners in basic seed production;
- Facilitate repairing of/access to seed processing machinery for seed value addition of scaling up LSBs;
- Facilitate field inspection of selected LSBs;
- Coaching and monitoring of partners and visiting/monitoring of one SPC per partner;
- Performance assessment of partners in LSB scaling up.

#### Outputs

See in Figure 6 the average performance scores of the SPCs as supported by partners in their LSB development process (see ISSD Ethiopia M&E framework, output indicator 5.1).



**Figure 6** Average scores of the scaling up LSBs in relation to eight key performance indicators in 2013 and 2014. Scoring: 1 = poor, 2 = weak, 3 = satisfactory, 4 = good, 5 = excellent.

- LSBs in the scaling up programme score in 2014 on average just above satisfactory for *capacity to produce seed* (score: 3.4) and capacity to produce *products in demand* (score: 3.4). This is the first basis for a successful LSB. However, LSBs still need to improve to become autonomous in these aspects;
- For all other indicators LSBs score below satisfactory: *capacity to add value* (score: 2.2), *capacity for marketing* (score: 2.7), *general management* (score: 2.9), *financial management* (score: 2.5), *infrastructure* (score: 2.6); and *strategic linkages* (score: 2.9). The indicator for value addition has the lowest average. This is logical considering the development pathway of an LSB, where investment in value addition is surely important but not the first priority. The current scoring means that LSBs are still highly dependent on external support, and that the partners will need to invest a lot in the coming year to build the capacity of the LSBs towards sustainable seed business;
- Clear differences are observed in the performance of LSBs supported by different partners, as well as between LSBs supported by the same partner. In Oromia East for example, one of the LSBs attached to Chercher Oda Bultum Farmers Union scored almost equal to consolidated LSBs (with an average score for all indicators of 3.8), whereas another LSB attached to the same union scored very low (average score of all indicators of 1.4);
- The Oromia South and West team observed that different type of partners focus on different type of support. For example universities focused on capacity development and linkages with other stakeholders; research institutes put their attention to basic seed access, the organization of field days, and solving administrative issues; WoCPs prioritized issues like legalization of the group, auditing, support in administrative issues, and office and store construction; cooperative unions and seed enterprises intervened in provision of basic seed, capacity on seed production, and purchase of certified seed. AGP facilitated a wide range of issues including access to basic seed, office and store construction, market linkages, legalization, auditing and training. For ISSD Ethiopia it is important to identify the gaps in support that specific partners will not be able to give to their LSBs, i.e. those areas that need involvement of ISSD Ethiopia or additional partners for further professionalizing LSBs;
- Comparing 2013 and 2014 scores, on average LSBs increased with 0.3 points (from 2.5 average in 2012 to 2.8 average in 2013). Scores almost equally increased for the eight different KPIs.

### **Comparing results to action plans**

Most activities in the 2014 action plan have been completed according to plan; only some have been skipped or are ongoing (see the annexes in the regional annual reports).

### **3.2.3 Outcomes**

#### **Partners adopting the LSB approach**

One indicator for measuring the success of this programme component is the extend through which partners have adopted the LSB approach (see M&E framework, indicator 4.1 and 4.2). Indicators are number and type of support activities (target six engagements per year) and number of SPCs supported beyond the MoU (internalizing the approach beyond the contract). As indicated above, partners support LSBs by training, coaching, organization of experience sharing events, field visits, field days, etc. The intensity of the guidance differs among partners. In general the regional teams report that the intensity of engagement of partners with the LSBs has increased over the past year. The Amhara team reports an average of seven engagements per year; the other teams do not report engagement numbers. Some partners have plans to extend the approach beyond the MoU with ISSD Ethiopia to other farmer seed production groups. Adigrat University in Tigray now actually implements the approach with 3 farmer groups beyond the MoU.

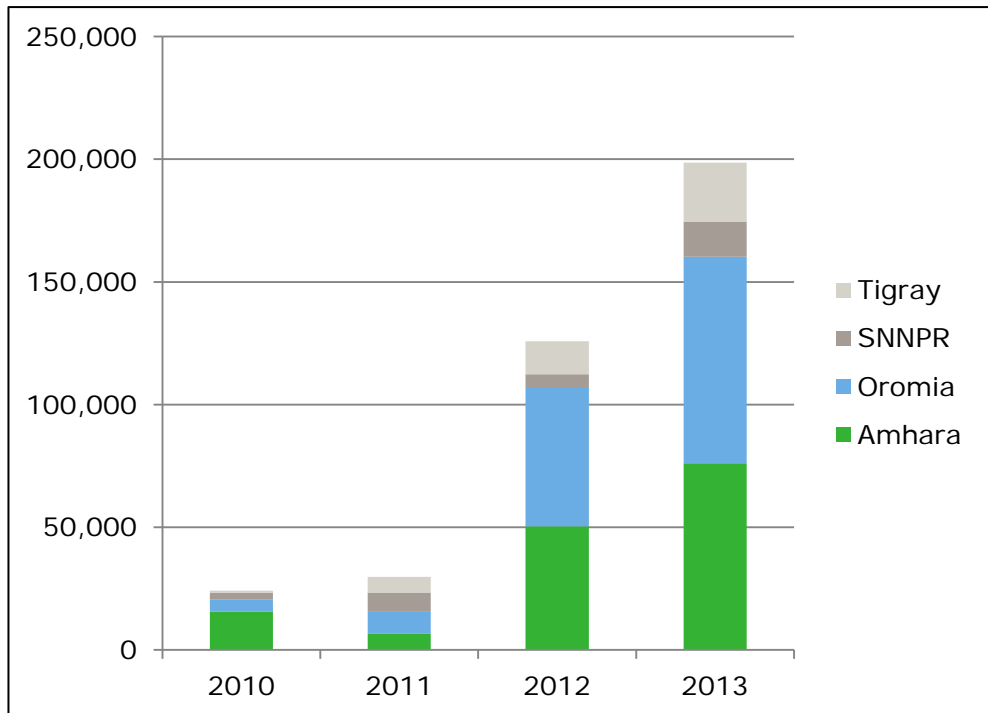
#### **LSB seed production figures**

Another way to measure success of the scaling up approach is looking at the amount of quality seed as produced by LSBs associated to ISSD Ethiopia. Figure 7 shows the total amount of seed produced (coffee and potato excluded) in the four regions from 2010 to 2013; Figure 8 provides more details for selected indicator crops, i.e. common bean, chickpea, barley, sorghum, tef, wheat and potato. Production has increased over the years, in general, but also for the indicator crops. With more LSBs

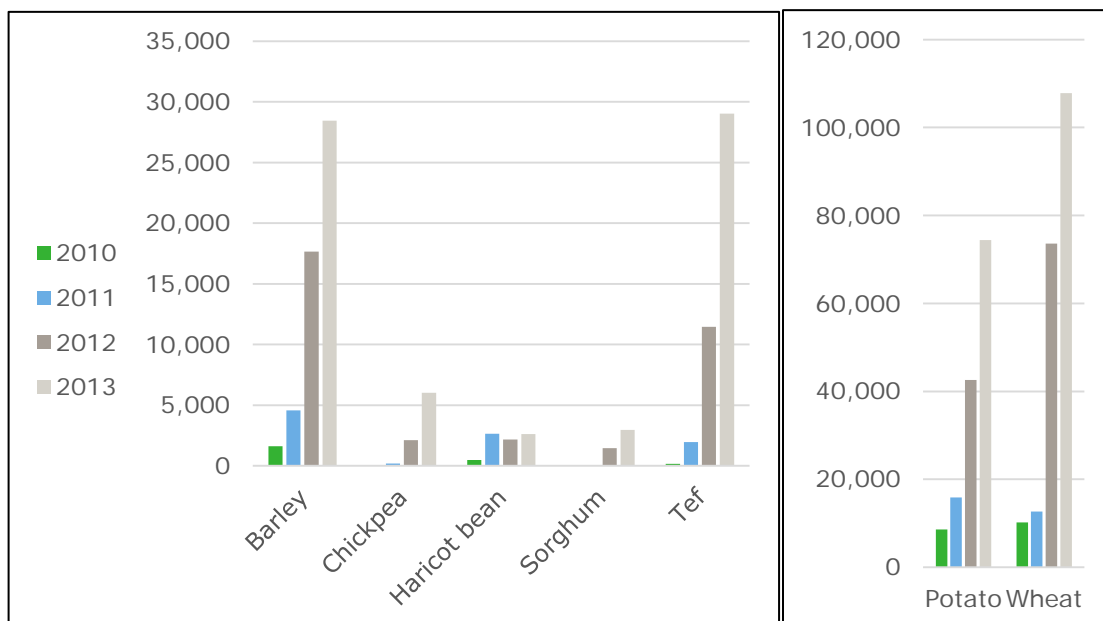


involved this is according to expectation. Seed production data per LSB are highly variable; and seed production per crop per LSB have not increased. This can be explained by the fact that LSBs often start with one seed crop, but extend their seed crop portfolios over the years as a strategy to promote ecological sustainability and business risk management.

Table 8 shows projections on the percentage of the market that can be served with LSB seed over the years 2010 to 2013. These percentages are calculated based on production data of the LSBs, seed replacement rates and the Ethiopian agriculture statistics. It is obvious that in some crops ISSD Ethiopia contributes a lot to the amount of quality seed becoming available to farmers. In for example black cumin and rice, which are relatively small crops, this is almost one third of the seed used by farmers; for important crops like potato and wheat, this is approximately one fifth. This table also shows that there is still ample opportunity for further expanding the LSB approach.



**Figure 7** Total seed production in quintals from 2010 to 2013. Note: potato and coffee are excluded.



**Figure 8** Seed production of key crops in quintals from 2010 to 2013

**Table 8***Percentage of 'seed market' saturated by LSB seed*

Crop	2010	2011	2012	2013
Barley	0.4	1.5	5.5	8.9
Black cumin	NA	NA	25.3	33.1
Chickpea	NA	0.2	2.6	7.8
Coffee seedlings	NA	NA	NA	0.0
Common bean	0.9	3.2	2.4	3.2
Faba bean	NA	NA	0.3	1.0
Field pea	NA	0.4	0.6	0.6
Finger millet	NA	NA	2.6	0.9
Groundnut	1.0	0.7	2.9	5.9
Lentil	NA	0.5	4.6	16.0
Linseed	NA	NA	0.7	1.8
Maize	2.1	0.5	1.9	1.7
Potato	3.1	5.3	11.4	22.3
Rice	7.5	72.4	44.1	31.7
Sesame	NA	NA	0.2	1.1
Sorghum	NA	NA	6.8	14.1
Soybean	NA	NA	10.4	3.7
Tef	0.07	1.0	5.6	12.8
Wheat	1.8	2.4	12.1	18.2

Percentages are based on the cropping areas as provided by the Statistics Authority. We take into consideration average seed replacement rates of once every four years, with the exception of hybrid maize, of which farmers purchase new seed purchased every year.

### **LSB crops and varieties**

Table 9 shows for each crop the number of varieties used by LSBs in that specific year. In the last column the total number of varieties that is used over the years is shown. When this number is higher than the number of varieties used in 2013 this means that not only new varieties are introduced, but that also some varieties have disappeared. What can be clearly observed from this table is that LSBs produce quality seed of a large number of varieties, which can never be produced through the public seed enterprises. In that sense LSBs are able to cater for a specific local seed demand.

**Table 9**

*Number of varieties for each crop grown by LSBs from 2010 to 2013*

Crop	Number of Varieties				Grand Total
	2010	2011	2012	2013	
Barley - food		1	5	11	12
Barley - malt	2	1	3	9	9
Black cumin			2	1	3
Bread Wheat				1	1
Chickpea		1	2	3	3
Coffee				1	1
Faba bean			3	8	9
Field pea		1	1	4	4
Finger millet			1	2	2
Groundnut	2	2	4	2	4
Haricot bean	2	3	3	5	6
Lentil		1	1	2	2
Linseed			3	3	3
Maize - hybrid	2	2	3	8	8
Maize - OPV	4	3	4	5	7
Onion		1	1		1
Pea			1		1
Potato	7	8	12	11	17
Rice	3	2	1	1	5
Sesame			1	2	3
Sorghum			5	4	7
Soybean			1	2	2
Tef	1	1	5	11	13
Wheat - bread	7	10	17	19	27
Wheat - durum			2	5	5
<b>Grand Total</b>	<b>30</b>	<b>37</b>	<b>81</b>	<b>117</b>	<b>148</b>

### 3.2.4 Case studies

Find in the attached regional annual reports a number of highlights of our work elaborated, in scaling LSB development; they address:

- *Amhara*: Debre Brehan University filling the early generation seed gap in malt barley;
- *Oromia East*: Farmers field days as a tool to stimulate the use of quality seed;
- *Oromia South and West*: LSBs mobilizing internal finance;
- *SNNPR*: Local core groups for SPC ownership, institutionalization and sustainability;
- *Tigray*: Adigrat University scaling LSBs beyond the Memorandum of Understanding.

### 3.2.5 Lessons learnt and way forward

#### **Main lessons learnt**

The main lessons learnt include:

- Scaling up LSBs have increased their performance as compared to the year before; however, they are not 'consolidated' yet;
- The scaling up LSBs see seed as an interesting business; most of them continue their efforts;
- Scaling up LSBs contribute a considerable amount of quality seed to the market;
- Direct intervention of ISSD staff in M&E, and use of the KPI framework, enhances LSB performance;

- Partners differ greatly in the support they provide to LSBs; they either need additional capacity building to provide ‘a whole package’ in development support needed for LSB development, or we need to link additional partners to the LSBs to fill this gap;
- Universities are competent early generation seed producers and can play a significant role in this aspect;
- The LSB scaling up programme united universities in Amhara to collaborate also on other issues.

### **Way forward**

SPCs have improved in the four key performance areas, however, they are not yet at the level of the consolidated SPCs. ISSD Ethiopia has to support partners in 2015 towards being able to appropriately support LSBs they have a partnership with.

Support should address:

- Continued capacity building of partners in the scaling process;
- Supporting local seed core groups with local partnerships to increase the sustainability of development efforts;
- Experience sharing for scaling up LSBs is needed, as well as experience sharing of scaling up partners;
- Encourage partners to strategically link to other partners for support they cannot provide themselves;
- Working with a diversity of partners makes it easier to fill capacity gaps (partners supporting each other);
- Focus on sustainability of LSBs, i.e. more on quality than on quantity;
- LSB autonomy in access to basic seed needs special attention;
- LSB infrastructure for value addition needs to be improved to get out of the seed contract mode.

### **Sustainability**

Similar to the consolidation programme, the interventions of this programme component are guided by the framework of key performance areas and indicators (outputs). Looking at the scores still a way to go for LSBs to become sustainable in their business efforts.

## **3.3 Private small and medium-scale seed producers**

### **3.3.1 Introduction**

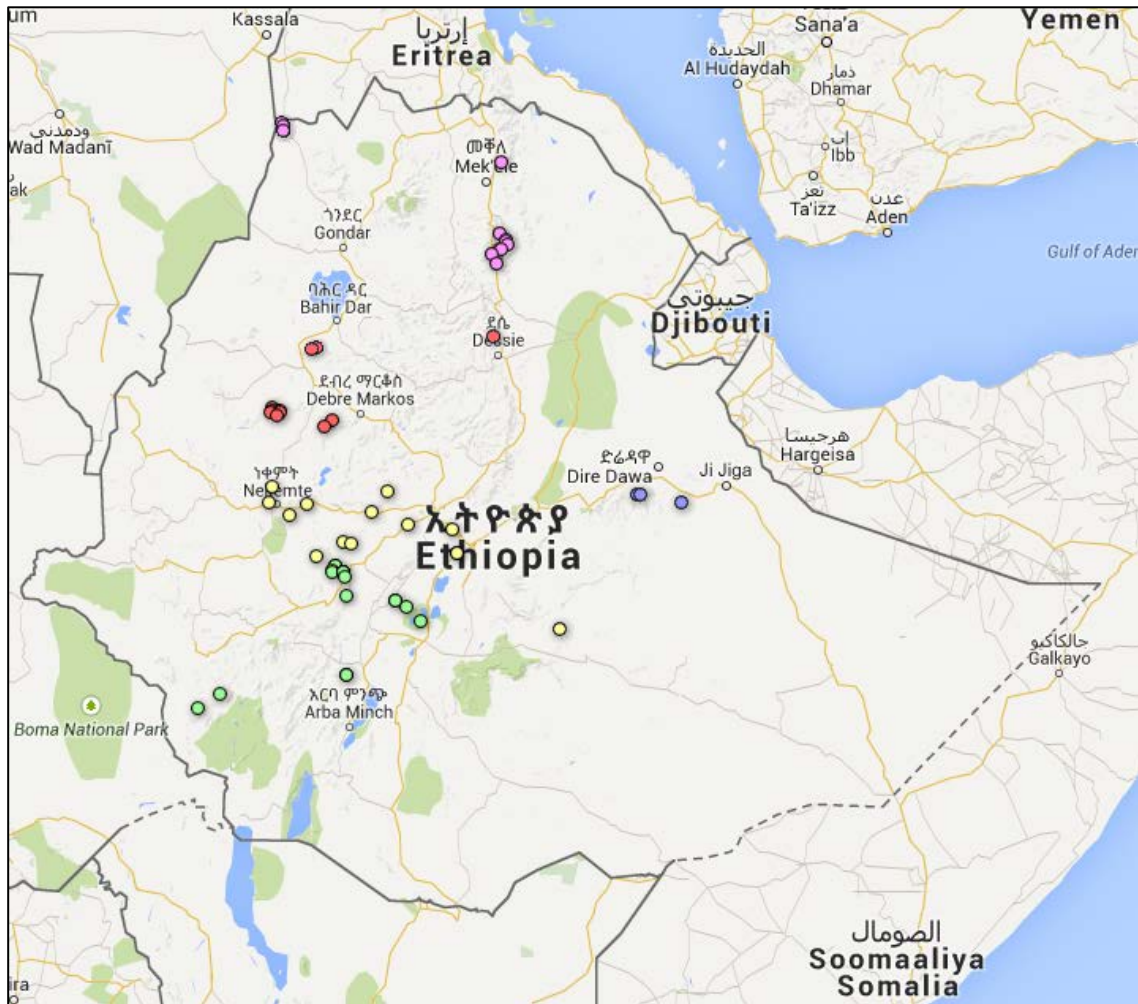
Currently, private small and medium-scale seed producers in Ethiopia often operate as out-growers to BoA. They produce mainly certified hybrid maize seed, which is distributed through the government seed distribution system. They generally have basic skills on quality seed production, but lack capacities related to entrepreneurship. The programme aims to increase the number of professional seed producers and strengthen their seed business skills, to enable them to supply a significant quantity of quality seed to markets in Amhara, Oromia, SNNPR and Tigray.

### **Objectives**

- Promote and support the system of small and medium-scale seed producers; and
- Facilitate their collaboration with other companies and research.

### **Private seed producers**

Find in Figure 9 an overview of private seed producers in the supported regions; Table 10 provides some general details. It is obvious that maize is an important seed crop for private seed producers. But some of them focus on specific niche crops like forage. In Tigray sesame is also an important seed crop. Whereas Amhara and Oromia South and West host most of the larger seed companies (difficult to distinguish in this case between PSPs and private seed companies), in SNNPR most PSPs serve as out-growers to the public Southern Seed Enterprise. In Tigray and Oromia East, PSPs are mostly investors and agro-enterprises which move to seed as a business.



**Figure 9** 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)

### Key performance areas

In supporting the professionalism of PSPs, ISSD Ethiopia takes a similar approach as for the development of LSBs. Key Performance Indicators (KPIs) and associated descriptions for scoring (from weak to excellent) have been developed for four key performance areas (KPA): technically well-equipped, market oriented, professionally organized, and strategically linked. Please note that whereas the KPAs for LSBs and PSPs are the same, the KPIs are slightly different and adapted to the specific character of PSPs. Find in Table 11 the KPIs, which are used as a tool to measure business performance and guide the ISSD Ethiopia programme interventions based on identified performance gaps.

### Staff supporting this component

Each regional ISSD unit has a private sector expert to support small and medium-scale seed producers and seed companies.

Table 10

*Private seed producers and companies in four regions in Ethiopia in 2014*

	Number of PSPs					
	Amhara	Oromia East	Oromia South & West	SNNPR	Tigray	Total
Number of companies <sup>1</sup>	11	3	12	14	11	51
Number of companies producing maize <sup>2</sup>	9	1	7	10	4	31
Seed crops	Maize, forage, onion, pigeon pea, tef, wheat	Maize, carrot, potato	Maize, black cumin, chickpea, forage, onion, potato, tef, wheat	Maize, haricot bean, rice, tef, wheat	Maize, chickpea, forage, onion, sesame, tef, wheat	
Acreage for seed production (ha) <sup>3</sup>	1,279	10	977	2,322	148	4,735

<sup>1</sup> Only companies that have produced seed in 2014 have been counted; <sup>2</sup> These companies produce maize seed solely, or maize seed as part of their seed crop portfolio; Acreage of seed production includes out-growers

Table 11

*Key performance areas and key performance indicators for successful private seed producers*

Key performance area	Key performance indicator
1 Technically well equipped	1 PSP has the necessary knowledge and skills for quality seed production (pre-harvest)
	2 PSP has the necessary knowledge and skills in post-harvest seed handling techniques
2 Market oriented	3 PSP has the capacity to evaluate potential markets and their needs, to identify what is in demand
	4 PSP has a strategy to develop unique superior product/ diversify towards market needs, plus product promotion
	5 PSP has a profitable product portfolio with a growing market share
3 Professionally organized	6 PSP has a well-articulated plan for its organizational management
	7 PSP has the required financial management and control system
	8 PSP can access or has the required infrastructure for seed business operation
4 Strategically linked	9 PSP has linkages with supporting organizations to access inputs and services
	10 PSP has functional partnerships for market facilitation and business to business integration

### 3.3.2 Activities and outputs

Find below the main activities and outputs of the support to SPCs organized according to the four key performance areas. The regional annual reports provide more detailed descriptions, based on the regional activity plans. Not all activities as mentioned below have not been implemented in each region. See Figure X for the average scores of the PSPs for the KPIs in 2013 and 2014 (see M&E framework output indicator 7.1).

#### Supporting PSPs to become technically well equipped

- Activities:
  - Training on seed production technology and seed coating;
  - Facilitate access to basic seed;
  - Coaching and monitoring on pre- and post-harvest issues.

- 
- Outputs:
    - o Both the average score of the PSPs on *technical seed production capacities* and *technical post-harvest capacities* are satisfactory (scores: 3.1 and 3.2 respectively), which is the same as compared to 2013 (scores: 3.1 and 3.3 respectively). Recognizing differences between PSPs (scores ranging between weak and excellent), the general conclusion is that PSPs need to be further strengthened in both areas.

#### **Supporting PSPs to become market oriented**

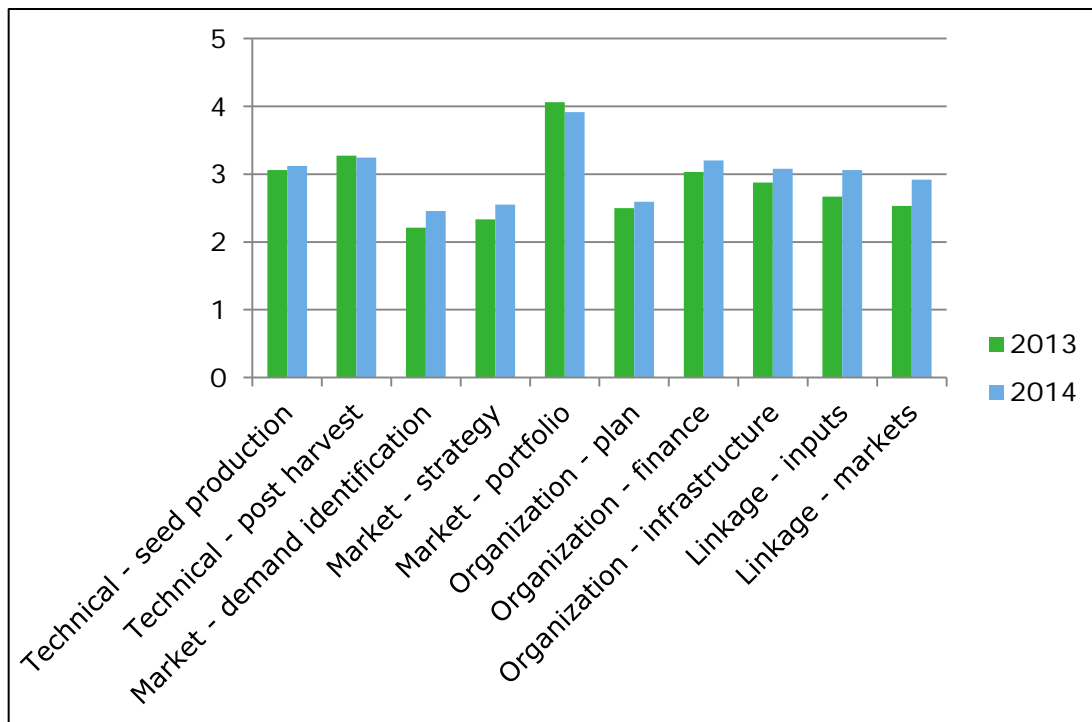
- Activities:
  - o Study on niche markets for PSPs;
  - o Attract additional investors in seed business for high value crops such as forage, fruits, haricot bean, rice, sesame and vegetables;
  - o Link PSPs to strategic partners in niche markets (with ILRI for forage crops, with the Sesame Business Network for sesame);
  - o Training on critical success factors for seed business, seed entrepreneurship and business management;
  - o Facilitate the creation of joint ventures among seed producers;
  - o Support of seed promotion activities;
  - o Involve PSPs in direct seed marketing;
  - o Negotiate with policy makers on competitive seed price setting;
  - o Coaching and monitoring on marketing related issues.
- Outputs:
  - o In relation to *Market-demand identification* and to *Marketing strategy* PSPs score between weak and satisfactory (scores: 2.5 and 2.6 respectively). PSPs only slightly improved as compared to 2013 (scores: 2.2 and 2.3 respectively). Many PSPs started as out-growers for public enterprises, without a need to strengthen capacities related to market assessment and marketing. PSPs need to strengthen their position in this respect;
  - o In relation to *Market-seed crop portfolio* PSPs score good, both in 2014 and 2013 (scores: 3.9 and 4.1 respectively). However, many PSPs focus on the same varieties of maize, and only through the quality of their seed they can differentiate themselves from competitors. They were able to do so in 2014 through the direct seed marketing pilots. Focus on niche crops and varieties and niche markets will further strengthen their competitive position.

#### **Supporting PSPs to become professionally organized**

- Activities:
  - o Assess PSPs through the KPI framework;
  - o Training on seed business management, including financial management;
  - o Support the preparation of business plans;
  - o Link PSPs to successful larger companies for experience sharing;
  - o Coaching and monitoring on organization and management;
  - o Through a grant (with requested co-funding) improve the infrastructure of the PSPs.
- Outputs:
  - o In relation to their *Organizational management plan*, PSPs score weak to satisfactory (score: 2.6); the score has not been improved as compared to 2013 (score: 2.5). This means that much more effort needs to be put on business planning;
  - o In relation to their *Financial management* and their *Infrastructure*, PSPs score satisfactory (scores: 3.2 and 3.1 respectively); also in this aspect there is not much improvement as compared to 2013 (scores: 3.0 and 2.9 respectively). Again, these scores need to improve to strengthen their seed businesses and make them future proof.

## Supporting PSPs to become strategically linked

- Activities:
  - o Link PSPs to the Ethiopian Seed Association;
  - o Link PSPs to other seed value chain actors, including other private seed producers and companies, public seed enterprises, BoA and research;
  - o Facilitate linkage to credit providers;
  - o Lobby and advocacy with decision makers to create a more enabling environment for private seed producers, including seed licensing issues;
  - o Awareness raising on the new Seed Proclamation, and related standards and guidelines.
- Outputs:
  - o In relation to strategic linkages, both for Access to inputs and services and for Access to markets, PSPs score satisfactory (scores: 3.1 and 2.9 respectively). Scores have slightly improved as compared to 2013 (scores: 2.7 and 2.5 respectively). In every region specific activities have focused on linking PSPs to other value chain actors; however, it seems that on average PSPs are not doing very well.



**Figure 10** Average scores of the SPCs in relation to eight key performance indicators in 2013 and 2014. Scoring: 1 = poor, 2 = weak, 3 = satisfactory, 4 = good, 5 = excellent.

### Comparing results to action plans

Activities have been generally implemented according to action plans; see for details the annexed regional annual reports.

#### 3.3.3 Outcomes

##### Seed production and sales of private seed producers

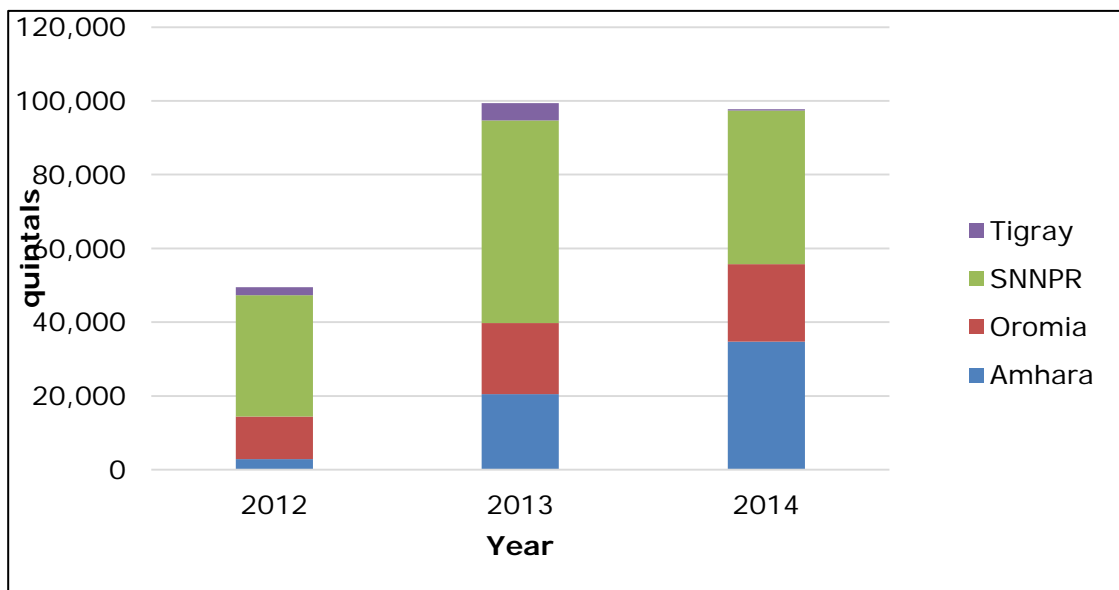
The performance of PSPs is measured based on the key performance framework as explained before. To get another indication on PSP performance we look at the amounts of quality seed produced and sold in the different regions (M&E framework indicator 6.1) and their profitability (M&E framework indicator 6.2). See in Figure 11 the amount of seed produced by PSPs and seed companies from 2012 to 2014; it is difficult to distinguish between seed companies and private seed producers. In Amhara seed production by private seed producers and companies has gone up over the years; this increase is due to increase in production capacity, but also a more enabling environment for private producers and companies, including opportunities for direct seed marketing. In Oromia, seed production stayed



equal, whereas in SNNPR and Tigray it has gone down. In SNNPR this has been caused by reduced interest of PSPs because of the unfavorable price setting mechanism, which does not reflect costs of seed production, and makes PSPs move from seed to grain production.

### Seed as a profit making business for private seed producers

In Amhara and Tigray all PSPs and seed companies in 2013 have been profitable (data of 2014 not complete yet). In Amhara profit on average almost increased by fourfold as compared to 2012. In Oromia and SNNPR a total of eight PSPs/companies reported not to be profitable. The non-profitable enterprises totally restricted to hybrid maize. However, other enterprises restricted to hybrid maize in the same region appeared to be profitable. It appeared that non-profitable PSPs suffered from bad weather conditions, which resulted in a rejection of the seed because of its inferior quality. Part of this seed could still be sold as grain.



**Figure 11** Seed production by PSPs and seed companies from 2012 to 2014 segregated per region

**Table 12**

*Profitability of private seed producers and seed companies per region in 2013*

Region	Profitable	Not profitable	Unknown	Total
Amhara	11	0	2	13
Oromia	10	4	1	15
SNNPR	11	4	4	19
Tigray	9	0	0	9

### 3.3.4 Case studies

Find in the attached regional annual reports a number of highlights of our work in supporting PSPs elaborated; they address:

- Amhara: Forage seed production as a new business venture;
- Oromia East: Agro entrepreneur investing in carrot seed production as a new business opportunity;
- Oromia South and West: Onion seed business in Oromia;
- SNNPR: An emerging sector of small and medium private seed enterprises for alternative seed supply;
- Tigray: Professionalizing PSPs through certificates of competency.

---

### 3.3.5 Lessons learnt and way forward

#### **Main lessons learnt**

The main lessons learnt include:

- The position of PSPs highly varies between regions;
- Seed can be a highly profitable business for PSPs;
- PSPs are willing to diversify their business in crops and varieties;
- Training of PSPs is not enough; it needs to be followed by coaching;
- The key performance framework helps PSPs to get insight into the status of their business;
- With thrust created among seed sector stakeholders PSPs are willing to invest in seed quality;
- Certificates of competency motivate PSPs to fully engage in business;
- Capacity building of PSPs results in increased amounts of seed produced;
- Value addition needs investment;
- Government thrust in PSPs over the past year has increased;
- PSPs are interested to become members of ESA;
- Change of the unfavorable price setting mechanism is needed to keep PSPs in hybrid maize seed business;
- PSPs can be successfully linked to commodity value chains (e.g. sesame).

#### **Way forward**

Even though PSPs have shown great improvement in the four key performance areas, there are a number topics that need attention in 2015 towards increasing their capacities towards becoming autonomous, professional entrepreneurs. These include:

- Establishment of business to business linkages;
- Facilitation of crop diversification, also through strategic linkages with CG centres;
- Capacity strengthening of PSPs in business planning, value addition and finance;
- Increase capacity on seed marketing and improve market orientation;
- Facilitate access to basic seed;
- Facilitate access to credit;
- Facilitate a fair price setting mechanism.

#### **Sustainability**

Also for PSPs the interventions of ISSD Ethiopia are guided by the framework of key performance areas and indicators (outputs). Sustainability is embedded in these indicators and success factors. It is important to strategically invest in those PSPs that have scope for sustainable business in the future.

## 3.4 Seed companies

### 3.4.1 Introduction

This programme component aims to facilitate and promote investment in seed production and marketing of seed companies in Ethiopia. It focusses on strengthening the position of the public seed enterprises and private seed companies, but also aims to facilitate investment of international seed companies. The programme aims to further strengthen the position of the Ethiopian Seed Association (ESA), in professionalizing the association and strengthening its member base.

#### **Objectives**

- Facilitate and promote investment in seed production and marketing by national and international seed companies.

#### **Staff supporting this component**

This programme is supported at national level through the ISSD Ethiopia PMU, in close collaboration with ESA. One international consultant, Mr Rutger Persson, and a national consultant Dr Lemma Dessalegn are pulling this programme component. In addition on PMU agribusiness expert is supporting ESA on part-time basis. These three professionals are (1) supporting ESA to become a

---

professional seed association and (2) support private seed companies professionalizing their business efforts.

### 3.4.2 Activities and outputs

#### Activities

- Revision of the name, logo and bylaws of ESPGA; now named ESA;
- Development of an organization chart and description of duties of positions within ESA;
- Together with FAO, support ESA in organization of the Annual Meeting and Seed Conference (4 & 5 April);
- Development of a database of all research and plant breeding institutes, seed companies, seed producers, processors, outlets operating in Ethiopia is being accomplished;
- Assessment of training needs of ESA members;
- Training on seed coating as organized by the company INCOTEC (18-19 March);
- Conduct training on how to use the business planning template as a management tool (5 April);
- Development on hybrid maize seed production guidelines (published second half of 2014);
- Final revision of the bylaws of the ESA;
- Finalization of the organization chart of ESA with duties of key positions;
- Backstopping of ESA staff in daily duties of the Association;
- Organization of awareness creation workshop for Association members on seed law and regulation (29 July);
- Completion of membership directory and company profiles;
- Survey on needs of future potential ESA members;
- Strategy for attracting new members developed;
- Awareness creation for non-ESA members workshop on (22 November);
- Development of business plan template for ESA members, and elaboration of business plan case study (based on actual company, but made general to hide specific business information);
- Several Dutch companies have indicated interests in partnerships with ISSD Ethiopia for investment in seed business ;
- Support given to FDOV proposal development on seed related services to improve productivity in Ethiopia.

#### Outputs

- New name and logo of the Ethiopian Seed Association;
- Revised bylaw of the Association;
- Revised organizational chart of with description of duties and responsibilities of key positions in ESA management;
- Planning, organizational management, and daily operations of ESA have been strengthened;
- New members have signed up for ESA membership (16 in total);
- Membership directory reorganized (now a total of 40 members);
- Trainings conducted on seed treatment, internal quality control, seed marketing, seed business planning;
- Hybrid maize seed production guidelines published;
- Partnership agreements for collaboration signed with Enza, INCOTEC, Koppert, Rhea Composites;
- FDOV proposal submitted with support from ISSD Ethiopia.

#### Comparing results to action plans

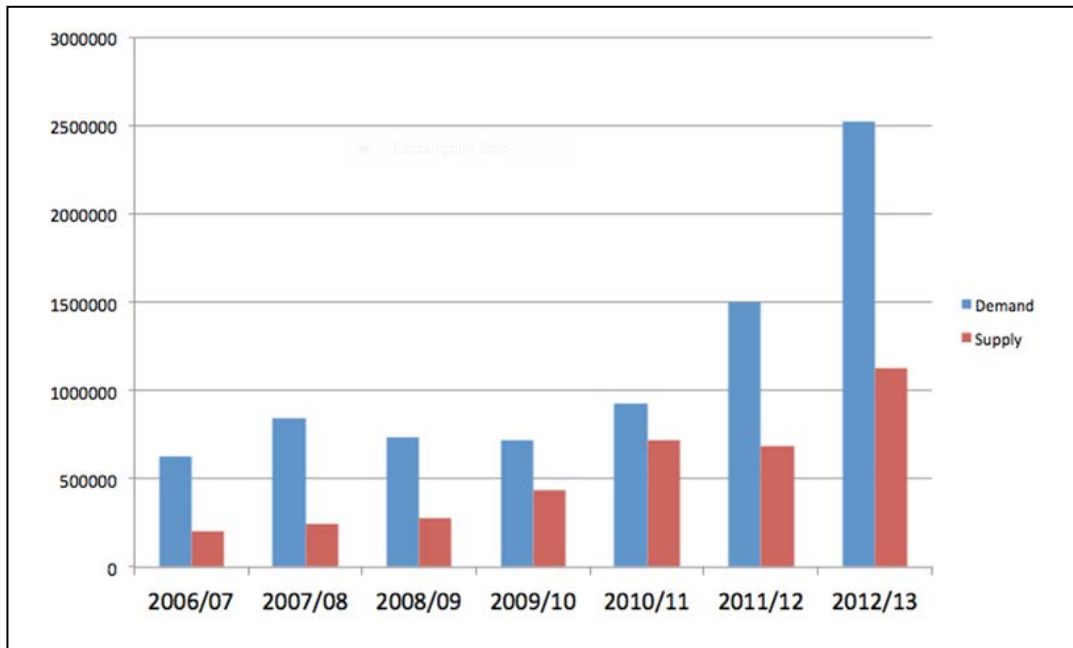
The activities have been generally implemented according to action plans. However, one exception is the grant facility for private seed companies. Grant agreements with international companies have been elaborated, but activities have been delayed.

### 3.4.3 Outcomes

#### Increased investment of national and international seed companies

One of the outcomes for this program component that we would like to see is an increased investment of national and international seed companies in Ethiopia (M&E framework indicator 8.1). Information

that we got from MoA is that seed demand and seed supply have been steadily increasing over the years, and that seed demand does not meet seed supply (see Figure 12 as presented by MoA at the annual ESA meeting).



**Figure 12** Demand and supply of hybrid maize in quintals from 2006/07 to 2012/13. Figure presented by Ministry of Agriculture at ESA’s General Assembly in 2014.

The seed production and sales data as collected by the ISSD Ethiopia private sector experts also show an increase in the volume of seed produced and sold (see also Figure 11 in the previous chapter), particularly in the Amhara region where DSM has been practiced by the private seed producers and seed companies on a larger scale. See in Table X some details for two seed companies in Oromia (Anno Agro-industry and Gadissa Gobena farm) and another two companies in Amhara (Avalo International and Yimam Tesema). They have all increased their seed operations over the last years, showing a substantial increase in seed production and sales from 2012 to 2013. The figures for 2014 are not yet complete although the positive trend (particularly in hybrid maize) has continued.

**Table 13**

*Selected private seed producers and seed companies and sales volumes 2012 – 2014*

Company	2012	2013	2014	Crops in 2014
Anno Agro-industry	1,400	1,507		Hybrid maize and tef
Avalo International R&D P.	330	3,931	1,382	Hybrid maize and tef
Gadissa Gobena Farm	355	1,245		Hybrid maize, oat, tef, bread wheat
Yimam Tesema	666	2,358	5,595	Hybrid maize and bread wheat

One of the indicators of growth of the private sector and an improved business climate is a growing number of new companies, both domestic and foreign that start investment in the agricultural sector (M&E framework indicator 36.1). By looking at the Crop Variety Register, as published by MoA, we get information on newly released varieties in Ethiopia. An increasing number of foreign seed companies, including Dutch companies, have had their varieties released and published in the Crop Variety Register, issue number 17, 2014 (see Table X below) The majority of these foreign seed companies aims to commercialize these varieties through partners and agents in Ethiopia. ISSD Ethiopia has been in contact with Syngenta Seeds, Bejo Zaden and Rijks Zwaan, and is currently exploring partnerships with these companies. An agreement for collaboration with Enza Zaden has been signed; Enza zaden is currently in the variety release process. ISSD Ethiopia also collaborates with Dutch companies doing

business on seed related issues, such INCOTEC, Koppert and Rhea Composites. In addition it works in partnership with Heineken to support quality seed production of malt barley.

Table 14

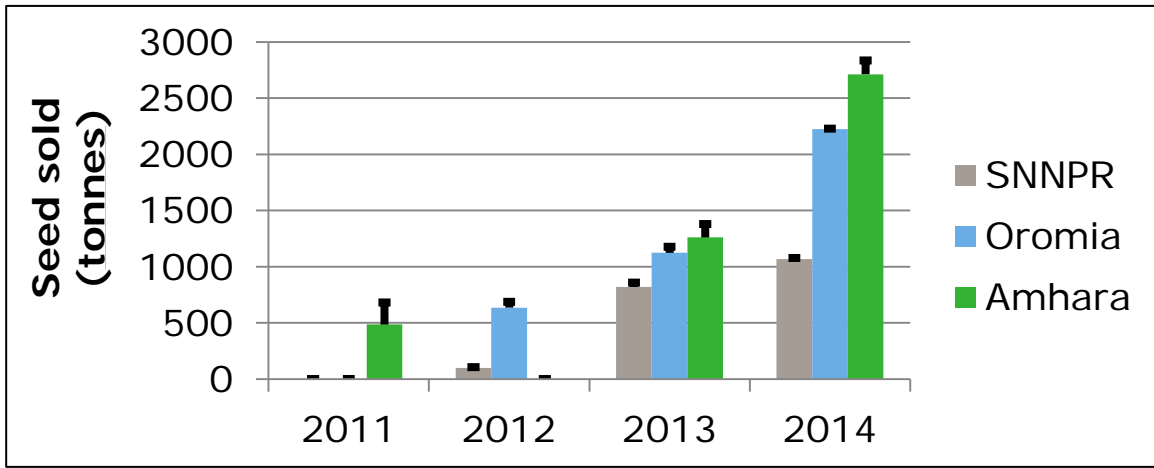
Foreign seed companies releasing new varieties in Ethiopia

Seed Company	2012		2013		2014	
	Crop	Vars <sup>1</sup>	Crop	Vars	Crop	Vars
Vibha Seeds, India	Rice	3				
	Tomato	2				
	Sweet pepper	4				
	Onion	1			Okra	1
Seed Co Ltd, Zimbabwe					Hybrid maize	1
Hazera Genetics Ltd, Israel			Tomato	1	Cabbage	1
			Onion	2		
Impact Mondal Agri. PLC, Ethiopia	Onion	2				
Syngenta Seeds B.V. Netherlands/ Syngenta Agriservice AG Ethiopia Crop Grow PLC, Ethiopia			Sweet Pepper	2	Cabbage	1
			Carrot	3	Cabbage	1
			Green courgette	2		
			Snap pea	2		
			Fine bush bean	4		
			Sweet corn	1		
			Snow pea	2		
			Cauliflower	2		
			Broccoli	1		
	Bejo Zaden B.V. Netherlands					
Rijk Zwaan Netherlands					Carrot	5
<i>Total</i>		<i>12</i>		<i>22</i>		<i>9</i>

Source: Ministry of Agriculture, Crop variety Register, Issue 17, June 2014

Furthermore, MoA registers all companies granted a competence assurance certificate for seed production, processing, import, retail sales or export. Around 100 local and foreign seed companies have been registered and granted a certificate over the last 10 years, to invest in the seed sector in Ethiopia. The number of certificates being granted and renewed are increasing which indicates that the investment climate has gradually become more favourable.

Finally it is interesting to look at the number of seed companies involved in direct seed sales, to get an impression on the improvement of the business climate (M&E framework 37.1). Figure 13 shows the volume of hybrid maize seed directly marketed from 2010 to 2014. You can see that over the past years this volume has steadily increased. ISSD Ethiopia started with very controlled pilots in 2010 in one region; last year 20 seed companies have been involved in DSM, selling certified seed in 41 woredas through 323 outlets. We estimate that through these pilots approximately 350,000 farmers have been served. In 2014 the government in Amhara did not get involved in seed distribution with private companies; all companies were forced to market their seed themselves, which accounted for approximately half of the hybrid maize seed in the region. DSM is now also extending to other crops. Wide scale piloting has been endorsed by the federal government; implementation of DSM is now supported by ATA.



**Figure 13** Volumes of seed directly marketed by private companies over the past years

### Strengthening of ESA

One way to assess the status/position of the Ethiopian Seed Association is the number of paying ESA members (M&E framework, indicator 9.1). Only when members see the added value of ESA and appreciate its services, they will be willing to pay their membership fee; see the numbers in Table 15. You see that the number of members who paid has increased. Based on activities in 2014 to attract new members, we foresee that in 2015 the number of members will further increase.

**Table 15**

*Members of the Ethiopian Seed Association from 2012 - 2014*

Year	No of registered members	Number of 'paid' <sup>1</sup> members
2012	17	14
2013	22 <sup>2</sup>	12
2014	22	18

<sup>1</sup> 'Paid' members means members who paid their annual membership fee;

<sup>2</sup> Four state seed farms merged with regional seed enterprises- reducing the number of members by four

Another indicator for the position of ESA is the satisfaction of its members with its services (M&E indicator 9.2). During its national meeting ESA has implemented a survey on this topic; 15 members indicated their needs.

Twelve members indicated that they were satisfied with the following services provided by the Association:

- Capacity building of its business (in general);
- Training support;
- Experience sharing visits (outside the country);
- New relevant information about the Ethiopian seed sector (while attending the annual conferences);
- Presentation of technical papers (and discussion forums);
- Voicing their problems in the seed business (particularly in seed marketing);
- Awareness creation in the national seed regulations.

The members noted (in the survey) that ESA's services have been particularly useful in enhancing their technical knowledge.

Members requested ESA to continue their support in the following fields:

- Business management;
- Marketing of seed;
- Seed Pricing;
- Post harvest, handling and seed storage.

---

In addition ESA's representation (by the Chairman) voicing their interests, on federal level, in different forums, was acknowledged.

### 3.4.4 Case studies

In this national component of the programme we developed one case study, together with the format of the seed business plan template for seed companies: 'Model business plan for commercial seed companies and producers in Ethiopia, including case study'.

### 3.4.5 Lessons learnt and way forward

#### **Main lessons learnt**

The main lessons learnt include:

- 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;
- Grants as provided over the last years, have not always been spent, and alternative mechanisms have to be looked into to make these grants a useful business investment;
- ESA has made big steps in its professionalization over the past years; ISSD Ethiopia has to continue to support ESA in further professionalization.

#### **Way forward**

To strengthen the seed sector in Ethiopia, room needs to be created for a strong private sector, with a strong Association representing its interests. ISSD Ethiopia needs to continue to support ESA, as well as selected private companies with strong business potential.

#### **Sustainability**

In supporting private companies, ISSD Ethiopia puts strong emphasis on business planning. The latter is an absolute prerequisite for sustainability. All support to ESA is aligned with its strategic plan, which is also a way to contribute to the sustainability of the Association.

## 3.5 Partnerships and innovation

### 3.5.1 Introduction

The ISSD programme facilitates collaboration in regional partnerships to solve key bottlenecks in the seed sector. Stakeholders jointly experiment with innovative approaches towards resolving complex institutional bottlenecks. As a working modality regional partnership platforms have been established; these involve as many stakeholders as are willing to participate in discussions on local and regional issues. In seed platform meetings, challenges are prioritized and strategies are discussed for experimenting with possible innovations to address those challenges. Regional core groups, comprising eight to ten members representing the key stakeholder groups in the region, form the decision-making bodies of the regional partnership platforms. The regional core groups are responsible for identifying and planning regional innovation projects, and following-up on their implementation. The programme aims to strengthen seed sector coordination and governance.

#### **Objectives**

- To institutionalize an approach allowing seed sector stakeholders to work in partnership on solving key bottlenecks in the seed sector;
- Develop and consolidate clear roles and responsibilities, and task division among seed sector stakeholders.

## Staff supporting this component

The ISSD programme employs five regional partnership facilitators and one national partnerships coordinator guide the partnerships processes.

### 3.5.2 Activities and outputs

#### Activities

Find in Table 16 below the topics this programme component focusses on, organized according to region. This table indicates the projects, and gives for each project the type of activities that have been implemented. Please note that not all activities have been implemented in all regions; find more specific details in the annexed annual reports.

**Table 16**  
*Partnerships and innovation projects in each region*

Partnerships projects and activities	Amhara	Oromia East	Oromia South & West	SNNPR	Tigray
Direct seed marketing (DSM):	X		X	X	X
- Awareness creation and training workshops					
- Capacity building on post-harvest technologies					
- Scaling of DSM pilots					
- Monitoring DSM implementation					
- Performance assessment of DSM					
- Selection, training and certification of seed agents					
Early Generation Seed (EGS) production:	X	X	X	X	X
- Establishment of seed units in research centers					
- Consultation and planning workshops					
- Development of EGS strategy and EGS guidelines					
- Monitoring of EGS production					
- Quality assurance for EGS					
Seed regulatory authorities/ quality advisory services:	X	X	X	X	X
- Establishment of a seed regulatory body					
- Support the functioning of the seed regulatory authority					
- Development of guidelines and manuals					
- Assessment of capacity needs					
- Capacity building of staff of the seed regulatory authority					
- Awareness raising with other stakeholders					
- Support the development of seed quality advisory services					
- Support experience sharing					
Access to finance:	X	X			
- Bilateral discussions with finance providers					
- Finance fair					
Development of seed curricula:	X				
- Development of an MSc curriculum on seed science and technology					
Access to seed production infrastructure:	X	X			
- Assessment of performance of post-harvest machineries in the region					
- Development, testing and release of different machineries					
Seed demand assessments and seed promotion:		X	X	X	X
- Develop tools for seed demand assessment					
- Support extension on quality seed use					
- Identification of marketable crops and varieties					
Strengthen seed producers and their organizations:			X		X
- Establishment of an SPC union					
- Support access to land for private agricultural investment in seed					



---

## Outputs

In summary the following outputs have been achieved for this component:

- Direct seed marketing (DSM):
  - o Increased number of companies and also SPCs involved in DSM for maize and wheat
  - o Increased number of farmers access to seed of their preference through DSM; through the 2014 pilots an estimated 350,000 farmers got access to hybrid maize seed.
  - o Seed agents have been capacitated for DSM
  - o DSM endorsed at national level and supported through ATA and MoA
- Early Generation Seed (EGS) production:
  - o Guidelines for EGS production have been developed
  - o Seed units in a number research centers established
  - o Increased amount of EGS produced of various crops and varieties
- Seed regulatory authorities/quality advisory services:
  - o Seed regulatory bodies have been approved/ established/ are becoming operational in various regions
  - o Seed advisory services have been established at Haramaya University
- Access to finance:
  - o Some finance institutions agreed to change prerequisites for credit in Amhara region
  - o Seed producers have been linked to financial service providers in Oromia East
- Development of seed curricula:
  - o MSc curriculum on seed science and technology developed, reviewed and approved at Bahir Dar University
- Access to seed production infrastructure:
  - o Availability and performance of post-harvest machineries in Amhara region known
  - o Different machineries have been developed and tested
- Seed demand assessments and seed promotion:
  - o Awareness on the advantage of using quality seed has been raised through unions
  - o Seed demand assessments have been implemented
  - o Extension on quality seed use has been supported
- Strengthen seed producers and their organizations:
  - o A feasibility study for a seed union has been completed in Oromia South and West

### Comparing results to action plans

Not all activities have been implemented according to action plan. The regional core groups in some cases decided to refocus the plans to more urgent activities during the year. Also some activities have been taken up by other stakeholders, like ATA, which means that ISSD Ethiopia did not have to invest in it.

### 3.5.3 Outcomes

For outcomes in relation to this component ISSD Ethiopia focusses on three issues (1) new responsibilities taken up by seed sector stakeholders (M&E framework, indicator 10.1); (2) new policies endorsed (indicator 10.2) and (3) new implementation structures operational (indicator 10.3). Only in the case one of these three is applicable, true institutional change has been achieved; see Table 17.

Table 17

Type of innovation projects in 2014 and their status in relation to contribution to institutional change

Type of innovation project	Status						
	Problem identification	Study and design			Institutionalization		
	1	2	3	4	5	6	7
Direct seed marketing			X				
EGS seed production				X	X	X	X
Seed regulatory authorities/quality advisory services				X	X	X	X
Access to finance		X					
Development of seed curriculum						X	
Access to seed production infrastructure				X		X	
Seed demand assessments and seed promotion		X					
Strengthening seed producers and their organizations		X					

Key: 1 = challenges analysed and prioritised; 2 = studies and pilots implemented; 3 = implementation scaled up; 4 = new policies/ways of working designed; 5 = new responsibilities taken up; 6 = new policies/ways of working endorsed; 7 = new implementation structures operational. 'x' indicates the status at the end of 2014.

When considering institutional change three of the main topics that the regions have focused their efforts on, we can remark the following:

- *Direct seed marketing:*  
Even though extensively piloted, direct seed marketing is still officially in the piloting phase. With the support of the federal government we expect it to be institutionalized as an official seed supply strategy in 2014.
- *Early generation seed production:*  
Through the establishment of seed units in various regions a new way of working has been endorsed, with new implementation structures for EGS production becoming operational
- *Seed regulatory authorities and quality advisory services:*  
Seed regulatory authorities in Amhara and SNNPR have been endorsed with implementation structures operational; in Tigray a regulatory case team has been established under BoA, whereas at Haramaya University seed quality advisory services have been established. In Oromia the process seems somehow stuck.
- *Development of seed curricula:*  
It is also interesting that at Bahir Dar University a new MSc seed curriculum has been approved/endorsed.

#### 3.5.4 Case studies

Find in the attached regional annual reports a number of highlights of our work in supporting PSPs elaborated; they address:

- Amhara: Seed quality assurance in Amhara region;
- Oromia East: Alternative seed quality assurance service for Oromia East;
- Oromia South and West: A multi-stakeholders platform for supporting systemic change;
- SNNPR: Increasing seed use via direct seed marketing;
- Tigray: Direct seed marketing as an alternative seed marketing mechanism.

#### 3.5.5 Lessons learnt and way forward

##### Main lessons learnt

The main lessons learnt include:

- 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 in new implementation structures are operational, ISSD Ethiopia may still play a key role in capacity building of associated professionals.

### **Way forward**

For 2015 we consider the following:

- We need to focus on the institutionalization of the core groups in the region, as a decision making body on strategic issues in seed sector development;
- In several areas of partnerships interventions ISSD Ethiopia should further invest to ensure true institutionalization of the innovations, including direct seed marketing, early generation seed production, and the seed regulatory bodies.

### **Sustainability**

The partnerships and innovations approach focusses on institutional change in the seed sector. We have dedicated staff to guide these change processes, and have developed a methodology which assesses the results interventions against institutional change criteria. And as such all partnership interventions are also assessed for sustainability.

## **3.6 Enabling and evolving seed policies**

### **3.6.1 Introduction**

One of the principles of the ISSD approach is to support and facilitate enabling and evolving seed policies. The ISSD Ethiopia programme wants to feed the policy dialogue with evidence based intervention strategies. On the one hand policy makers are encouraged to take the realities of different seed systems into consideration in the development of seed policy frameworks; and adapt these frameworks to changing conditions. On the other hand the programme wants to support the implementation of seed related policies, and to contribute to the development of regulations, directives and manuals to this end. In 2013 a new Seed Proclamation has been approved and in 2014 regulations have been drafted and discussed by stakeholders. At the same time, a draft Seed Systems Strategy was discussed in a multi-stakeholder forum and submitted to the Agricultural Transformation Council for approval.

### **Objectives**

- Strengthen the development and implementation of enabling policy frameworks, guidelines and implementing capacity, recognizing the pluralistic nature and dynamics of the seed sector;
- Support the development of policies, regulations, directives, standards, as well as guidelines and manuals for quality assurance, marketing, crop variety release and registration, and PBR.

### **Staff supporting this component**

At regional level, policy related activities are supported by the ISSD Ethiopia scientific coordinators, partnerships facilitators and regional core groups. At national level activities in this component are supported by the ISSD Ethiopia director and the national partnerships coordinator, and to some extent the Ethiopian Seed Association.

### **3.6.2 Activities and outputs**

Find below the main activities and outputs in the policy component of the programme at national and regional levels. Find more detailed descriptions on the regional activities in the regional annual reports as annexed to this report. Please note that regional experiences fed into national activities; but also that regional activities differed per region.

---

### **Regional level activities**

- Analysis of the current seed demand, supply and utilization assessment methodologies with the aim to increase their effectiveness and minimize seed left overs as well as avoid seed shortages (Amhara);
- Joint planning of research centers and seed producers for the production of EGS, and the development of EGS production and supply guidelines (Amhara, Oromia South and West);
- Promotion of DSM as an alternative seed distribution channel (Tigray) and impact assessment of pilots on DSM to further enhance its uptake and institutionalize the new approach (Amhara, Oromia South and West);
- Dialogue on the current seed pricing strategy with the objective to develop a strategy that increases seed recovery for public enterprises (SNNPR);
- Awareness creation of private seed producers, BoA experts and seed laboratory heads on the Seed Proclamation (Oromia South and West);
- Policy lobby to create a more enabling environment for private seed producers, i.e. improving their access to land, credit, EGS and to markets, as well as the issuance of a certificate of competence (Tigray).

### **National level activities**

- Regular discussions with the Directorate for Plant Variety Release, Protection and Seed Quality Control of MoA to push the formulation of the seed regulation and directive to allow implementation of the new Seed Proclamation;
- Various presentations on policy related issues in forums like the AGP annual meeting, Seed Strategy development meetings (organized by ATA), and seed business management training (organized by CIMMYT Ethiopia);
- Organization of a seminar on seed policy making, with inputs from ISSD Ethiopia staff plus Ethiopian and international experts (16 October);
- Participation of ISSD Ethiopia representative in high level international meeting on Plant Variety Protection (PVP) to exchange views and foster mutual understanding and learning on the various issues surrounding PVP in Africa, recognizing the existence of diverse seed systems (27 – 28 November, South Africa);
- Facilitation of roundtable focus group discussion on the draft Plant Breeders Rights (PBR) Proclamation, ensuring that the proclamation meets the national requirements and conditions (10 December);
- PhD research on seed policy making processes in Ethiopia.

### **Outputs regional level**

- Gaps between demand forecasting, supply and utilization of seed have been identified and are put on the regional policy agenda;
- Regional seed sector stakeholders have developed guidelines and endorsed joint planning for EGS production and supply (Amhara, Oromia South and West);
- Innovations like DSM are now accepted by policy makers and are further scaled to new woredas (Amhara, Oromia South and West);
- The current seed pricing strategy, which results in very low seed recovery rates from contract growers for the public enterprises is now on the regional policy agenda;
- Awareness has been created on the new Seed Proclamation with private seed producers as well as public organizations (Oromia South and West);
- 2 Private seed producers and 2 SPCs in Tigray have been licensed for commercial seed production, processing, marketing and distribution; requirements for Certificates of Competence have been changed to more realistic and practical levels.

### **Outputs national level**

- ISSD inputs into various policy related documents like the PBR Proclamation and the Draft Seed Systems Strategy, ensuring these documents take into consideration interests of the various seed sector stakeholders in Ethiopia, ranging from farmers to international companies;
- Draft regulations have been submitted to the Council of Ministers for approval; only upon approval the directive can be finalized;

- Good relationships with national policy makers have been established, allowing further influence of ISSD Ethiopia on the policy making processes;
- National policy makers recognize the value of ISSD Ethiopia initiated interventions like LSB development and DSM as well as the establishment of regional seed and agricultural inputs regulatory authorities;
- National support from government bodies like MoA/AGP and ATA in scaling ISSD innovations like LSB development and direct seed marketing;
- Better understanding of stakeholders on seed policies through the seminars and round table discussions.

### **Comparing results to action plans**

Because the seed regulations are not finalized yet, and the PBR Proclamation is not yet endorsed, some awareness creation trainings in relation to these topics have been postponed. However, ISSD Ethiopia did organize discussion forums/round table discussions on the Seed Proclamation and on PBR. We did not organize a national seed workshop with EIAR; and did not facilitate travel of policy makers and higher officials for exposure on innovative seed regulatory issues outside Ethiopia.

### **3.6.3 Outcomes**

#### **Contribution to ISSD perspective in seed policy frameworks**

ISSD Ethiopia has contributed to the recognition of different seed systems and seed sector realities in a number of policy frameworks (M&E framework, indicator 11.1). 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.

At regional level ISSD Ethiopia has contributed to the design and to 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.

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.

#### **Stakeholder awareness on seed related policies**

Different types of workshops, trainings and experience sharing events have been organized to create awareness on seed related policies (M&E framework, indicator 12.1). At regional level meetings and workshops have been organized on topics like EGS; DSM; seed pricing; certificate of competence for seed production, processing and marketing; and the seed proclamation. Also at national level DSM and seed policy workshops have been organized. Awareness has been created with stakeholders from the public sector (ATA, MoA, BoA, public seed enterprises, research, universities) and the private sector (seed companies, private seed producers, LSBs). This has created space for innovation and dialogue on the need for policy change.

#### **Contribution to regulations, directive and manuals**

Through participation in different policy related discussions, meetings and seminars (M&E framework, indicator 13.2) ISSD Ethiopia has contributed to the development of policy regulations (M&E framework indicator 13.1). ISSD Ethiopia has directly contributed to the regional EGS guidelines in Oromia. All the discussions, meetings and seminars indicated above contribute to development of

---

regulations, directive and, manuals; regional and national policy bodies have to take the lead in the formulation of regulations and directives. In that sense ISSD Ethiopia is dependent on the relation and fruitful collaboration with MoA, ATA and BoA.

### 3.6.4 Case studies

Find in the attached regional annual report of Amhara a highlight of our work related to policy issues; it addresses:

- Research and seed producers endorse joint planning for EGS production and supply.

### 3.6.5 Lessons learnt and way forward

#### **Main lessons learnt**

The main lessons learnt include:

- Further awareness raising on DSM is still necessary, to create a common understanding on this approach as alternative seed supply mechanism;
- Evidence-based documentation and exposure to practices in other countries is necessary to convince policy makers to work on necessary policy changes;
- The facilitation of multi-stakeholder platforms and discussion forums is key to strengthen stakeholder collaboration and work towards policy change;
- Increasing awareness of all seed value chain actors on the seed proclamation is necessary for its implementation and enforcement;
- Strong linkage between regional ISSD Ethiopia units and the national ISSD Ethiopia PMU is necessary to feed innovations into the national seed policy dialogue;
- Planning for interventions in relation to seed related policies is often difficult for a programme like ISSD Ethiopia because of dependency on ministries like MoA and ATA;
- Therefore it is extremely important for senior ISSD Ethiopia staff to be part of seed related policy dialogues, to seize opportunities and open up new avenues towards policy change;
- To influence policy processes, engagement with the direct advisors of top officials is a prerequisite; engagement with medium level officials does often not lead to new breakthroughs.

#### **Way forward**

ISSD Ethiopia will take the following issues forward to 2015:

- Create a fertile ground for seed related policy implementation through continued policy dialogue;
- Support the institutionalization of partnerships projects through assessing their impact and developing guidelines towards the necessary policy change;
- Evaluate the functioning of the regional core groups in the partnerships programme, including their role in seed sector innovation and policy change, and support the institutionalization of these groups;
- Ensure that policy lessons from the region are fed into the national policy dialogue;
- To achieve systems change, engage with high level policy makers at national and regional level;
- Further promote the establishment of a national seed task force with representatives from MoA, ATA, EIAR and ESA, with stakeholders like ISSD Ethiopia and CIMMIT in a technical advisory function;
- At national level, deliberate more with ATA and MoA to institutionalize ISSD interventions like DSM, seed quality control and certification and EGS production differentiation and supply;
- Further increase the awareness of seed sector stakeholders on the Seed Proclamation, and the associated regulation, including their responsibilities in its implementation;
- Once officially approved, create awareness on the PBR proclamation and support the development of its regulation and implementation mechanisms;
- Ensure alignment of the next phase of ISSD Ethiopia with AGP as well as the CAADP Ethiopia national action plans.

---

## Sustainability

The partnerships and innovation component of ISSD Ethiopia is very close to the policy component of the programme. In the end, innovations which have been tested and proven successful through the partnerships and innovation component need to be endorsed by policies and implementation mechanisms to be sustainable. Some successes on innovations that have been endorsed by national and regional policy makers, and in some cases even led to policy change, have been indicated above: EGS, DSM, and regional seed regulatory bodies. ISSD Ethiopia will continue to push for policy change and the right implementation mechanisms in relation to these issues.

## 3.7 Research and studies

### 3.7.1 Introduction

One of the guiding principles of ISSD is to promote evidence based interventions. The programme puts emphasis on research and studies in its different programme components to guide seed sector interventions. ISSD Ethiopia supports MSc research studies on topics considered important for the development of the seed sector. Selected ISSD staff are supported to obtain their MSc degree. In addition, four PhD studies were supported in collaboration with Wageningen University. Moreover, in each region, development agents (DAs) who have been working closely with the LSBs in the consolidation programme, are supported in obtaining their BSc degree.

#### Objectives

- To enhance the capacity of own staff and associated partners through supporting BSc and MSc studies;
- To promote innovation in the seed sector, and evidence based documentation through supporting MSc and PhD research and studies.

#### Staff supporting this component

The ISSD Ethiopia executive coordination committee has been strongly involved in setting research agendas for MSc and PhD studies.

### 3.7.2 Activities and outputs

#### Activities

- *BSc studies:*  
To enhance the capacity of DAs associated to LSB sites, 34 grants have been awarded for BSc studies in rural development and agricultural extension; cooperative management; and plant science
- *ISSD Ethiopia staff pursuing MSc degree:*  
In 2014 two ISSD Ethiopia staff have completed their MSc research: (1) Edeo Mude of Hawassa University, working on demand analysis of hybrid maize seed, using contingent valuation methods; and (2) Arfassa Kiros of OSE, comparing the efficiency of direct hybrid maize seed marketing and the conventional government-led seed distribution mechanism.
- *MSc research studies:*  
For MSc research studies, ISSD Ethiopia follows a process of (1) prioritization of research topics; (2) call for proposals; (3) evaluation of research proposals and selection of candidates; (4) coaching of selected candidates to fine-tune the research proposals towards ISSD Ethiopia demand. Students are supervised by different university staff. In 2014, 15 MSc studies have been supported in the areas of seed treatment (7 grants), seed and varietal replacement (1 grant) and quality seed and crop productivity (7 grants). These topics have been carefully selected by the ISSD Ethiopia executive committee based on the need of evidence to test further business opportunities for seed value addition; increasing the incentive to use quality seed in crop production; and to show the contribution of ISSD interventions to productivity increase (ISSD Ethiopia impact indicator). So far 15 MSc students (who started since 2012) have completed their studies and obtained their degree.

---

– *PhD studies:*

ISSD Ethiopia supported four PhD studies in collaboration with Wageningen University: (1) assessing the performance of market orientation in the Ethiopian seed system – Shimelis Altaye, WU Marketing and Consumer Behaviour Group; (2) Market orientation in the context of LSB in Ethiopia – Dawit Tsegaye, WU Marketing and Consumer Behaviour Group; (3) Unpacking the seed policy process in Ethiopia: identifying opportunities for collaborative governance in seed sector development – Mohammed Hassena, WU Law Group. Very unfortunately the fourth student, Merga Tolla, who looked into system innovations and studied multi-stakeholder platforms (WU Knowledge, Knowledge, Technology and Innovation Group) had to stop with his studies because of insufficient progress. The other three students progress well and have submitted their first papers for publication. They have presented their first research findings in two national ISSD seminars in Addis in October. One additional ISSD Ethiopia staff, Dandena Gelmesa, is currently pursuing his PhD in collaboration with Haramaya University, working on the screening of potato genotypes for drought and heat tolerance, which is an extremely important issue of Oromia East. In addition, one CDI staff, Gareth Borman, is implementing a PhD study linked to the partnerships and innovation component of ISSD Ethiopia.

### **Outputs: capacity developed of ISSD Ethiopia staff and partners**

The output in this area is measured through the number of individuals in the BSc, MSc and PhD studies (M&E framework, indicator (M&E framework, indicator 15.1):

- 34 DAs involved in BSc studies on rural development and agricultural extension; cooperative management; and plant science;
- 15 MSc students have been given a research grant in 2014 and started their MSc research;
- 15 students who have been granted in the past years completed and submitted a copy of their thesis in 2014;
- 2 ISSD staff completed their MSc research studies in 2014;
- 3 PhD students are progressing in their studies in collaboration with Wageningen University; one PhD student is progressing his studies in collaboration with Haramaya University.

### **Comparing results to action plans**

Results are according to action plans. However, one ISSD Ethiopia staff member was forced to stop with his PhD studies due to insufficient progress.

## **3.7.3 Outcomes**

### **Contribution of research and study results to evidence based interventions and innovations in the seed sector**

Outcomes in this area are measured through the number of BSc, MSc and PhD thesis, studies, articles completed (M&E framework, indicator 14.1) and the number of recommendations implemented, practiced based on MSc and PhD studies (M&E framework, indicator 14.2).

In 2014 15 MSc students have completed their studies. Specific MSc study results have been used in widely distributed publications on direct seed marketing, giving recommendations on how to further improve this approach. Studies in the area of seed and gender directly fed into the concept note for a new project component on the role of women farmers in farmer and community-based seed systems, as well as resulted in strategies for increasing women decision making power in LSBs. MSc research studies have linked universities to practical seed related problems in the field and as such strengthened the universities' position in community outreach. Three PhD students have submitted their first articles for publication; they have presented their study results in two national seminars on seed marketing and market orientation and on seed policy making.

The activities mentioned above have contributed to awareness creation on new insights in seed sector development with a wide range of seed sector stakeholders. However, it is hard to indicate how many recommendations based on MSc and PhD studies have been directly implemented or practiced. Nevertheless, BSc, MSc and PhD studies directly contribute to capacity development in the seed sector in terms of professional development in the area of integrated seed sector development, with ISSD



---

Ethiopia partners and stakeholders promoting an ISSD approach for creating a vibrant, pluralistic and market-oriented seed sector in Ethiopia. The grants also have been a synergistic factor for the development of partnerships between ISSD Ethiopia and key seed sector stakeholders.

### 3.7.4 Case studies

Find in the attached regional annual reports a number of highlights on research and studies; they address:

- Amhara: MSc study – The role of women headed households in LSBs;
- Oromia East: MSc study – The effect of seed sources and seed rates on the productivity of bread wheat;
- Oromia South and West: BSc studies – Upgrading the capacities of female DAs as key contributors to improve women participation in SPCs;
- SNNPR: MSc study – How to effectively assess seed demand to rationalize seed production planning;
- Tigray: MSc study – The impact of technology adaption of smallholder farmers on wheat productivity.

### 3.7.5 Lessons learnt and way forward

#### **Main lessons learnt**

The main lessons learnt include:

- Strengthening the capacity of DAs as local seed sector actors contributes directly to the development of the sector;
- Giving grants to female students is a way to contribute to increased women farmers involvement in seed sector development, and to put gender issues on the agenda;
- Staff development through MSc and PhD studies is a way to institutionalize the ISSD approach within Ethiopia;
- The coaching of MSc students has helped to match academic requirements with ISSD Ethiopia objectives and to produce quality proposals;
- However, it is important to involve MSc supervisors in the ISSD Ethiopia coaching event to ensure they understand the programme's objectives and their students align their thesis research with ISSD Ethiopia thematic areas;
- The quality of the MSc research is not always up to the expectations, and there is still room for improvement;
- MSc studies contribute to the evidence-based approach of the ISSD programme, however, lessons learnt have to be fed back into the programme; here there is still room for improvement.

#### **Way forward**

- We are currently studying the employment status of the MSc graduates who have benefited from an MSc grant, since these former students are ISSD ambassadors and as such our future collaborators in strengthening the seed sector in Ethiopia. Examples are graduates currently working for ESE, OARI, World Vision and the Seed Regulatory Directorate of MoA;
- In 2015 we will organize a seminar in which current and former ISSD Ethiopia MSc grantees will present and discuss the results of their studies, including implications for ISSD; we will compile and publish a booklet on these studies and lessons learnt;
- Besides, we will ensure that ISSD Ethiopia has access to all completed studies;
- There are a number of other topics where ISSD Ethiopia would like to have additional insight like effective communication tools for promoting seed management practices; functioning of informal seed networks; seed pricing mechanisms; and effective approaches in private sector development. However, since the ISSD Ethiopia programme concludes by the end of 2015, no new MSc projects will be supported in 2015.

#### **Sustainability**

For sustainability reasons we will ensure that lessons learnt from MSc and PhD studies are captured and fed back into the ISSD Ethiopia programme to support scaling of innovations and informed policy

---

dialogues. The research and studies component of ISSD Ethiopia increases knowledge on ISSD with a cadre of seed sector professionals.

## 3.8 Sharing experiences and lessons learnt

### 3.8.1 Introduction

ISSD Ethiopia aims for continuous sharing of experiences and lessons learnt within the programme components, among components, and with partners at all levels of the Ethiopian seed sector, and beyond. A wide range of instruments is used for sharing experiences and lessons learnt, to foster the use of concepts, methodologies, insights and practices among partners and stakeholders in various domains.

#### **Objectives**

- 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;
- Foster the use of new concepts, methodologies, insights and practices among partners and stakeholders in various domains and at various levels.

#### **Staff supporting this component**

The national and regional knowledge sharing experts work closely together with their colleagues in ISSD Ethiopia in designing and implementing the most appropriate tools for promoting sharing of experiences at all levels.

### 3.8.2 Activities and outputs

#### **Activities**

Please note that the general approach towards sharing of experiences is similar in all regions; however, activities may differ among regions. At national level a number of different activities are coordinated. The main activities of the programme include:

- Broadcasting a weekly radio programme on seed related issues for farmers and their local partners;
- Production of documentary films for broadcasting on television;
- Development of publications like newsletters, magazines, flyers, fact sheets and policy briefs, to share activities, innovations and achievements with partners and key stakeholders;
- Development of specific publications like the DSM regional booklets and the LSB development guide;
- Management of the ISSD Ethiopia website, including blogs to share the programme's activities and achievements with a wider audience;
- Social media management like a Facebook page and twitter, to encourage interaction with interested professionals; including the training of partners in interactive tools;
- LSB twinning, allowing sharing of experiences between LSBs and with partners;
- Regional workshops to share ISSD Ethiopia experiences in relation to seed marketing and seed profitability;
- Other type of experience sharing meetings, seminars and discussion forums for partners at regional level;
- Development of promotional materials like calendars to increase the visibility of the programme.

#### **Outputs: activities and achievements of ISSD Ethiopia known by partners and stakeholders**

ISSD Ethiopia uses a variety of communication materials and distribution channels to reach its different audiences (M&E framework, indicator 16.1). 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 book in SNNPR) and national and regional

---

websites, but also through e.g. regional workshop events. For national level sharing the website, but also documentaries for television are developed, as well as for example a professional guide book on how to support LSB development. National level actors are also reached through workshops, seminars and policy dialogues on specific topics. ISSD Ethiopia staff is also invited to share ISSD experiences in key seed events organized by other stakeholders at regional, national and international level, which shows that these audiences are effectively reached.

Using all these communication channels and tools we often presume that seed sector stakeholders in Ethiopia know about ISSD Ethiopia and its activities and achievement (M&E framework, indicator 16.2). Different type 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 SNNPR is the radio show that advised farmers on how to prevent head smut transmission in wheat and tef seed crops. In for example Amhara a study was done on the use and appreciation of different communication channels (see also their case study), and lessons were fed into the communication strategy.

### **Comparing results to action plans**

Most activities have been implemented according to action plans, with only minor deviations.

#### **3.8.3 Outcomes**

We did not identify outcome indicators for this specific component. It is a support component of the ISSD Ethiopia programme. See above concrete activities and outputs.

#### **3.8.4 Case studies**

Find in the attached regional annual reports a number of highlights of our work in supporting PSPs elaborated; they address:

- Amhara: Listening to farmers who listen to us on the radio;
- Oromia East: The role of mini-media in changing the lives and business of farmers;
- Oromia South and West: From 'zero' to 'hero' – increasing farmer's living standards through seed business;
- SNNPR: Weekly ISSD Ethiopia radio programme: reaching the unreached;
- Tigray: LSB twinning for excelling.

#### **3.8.5 Lessons learnt and way forward**

##### **Main lessons learnt**

The main lessons learnt include:

- Media diversification is necessary to keep in touch with different target groups
- For farmers radio is an important media
- Concise, simple and vivid messages are necessary to attract audiences and readers
- Regular and continuous efforts are needed to keep target audiences connected
- Twinning is an important tool for peer to peer learning of farmers, but also for motivating them in their efforts

##### **Way forward**

- ISSD Ethiopia will assess the use of the different products of this programme component
- We will continue the use of social media
- We will continue to develop research and policy briefs
- We will develop a booklet on all MSc research results
- More emphasis will be put on assessing the effectiveness on of the different communication tools
- In 2015 ISSD Ethiopia aims to publish a book bringing together approaches, experiences and lessons learnt of the programme from 2012 – 2015.

---

## Sustainability

This programme component is a support component of ISSD Ethiopia which is of strategic importance in supporting the sustainability of programme results.

### 3.9 Capacity development

#### 3.9.1 Introduction

Capacity development is one of the key service components of ISSD Ethiopia. To strengthen the seed sector a cadre of professionals needs to be capacitated in the different aspects of the sector's seed value chains, with focus on the functions in seed production, service provision and the enabling environment.

#### Objectives

- Develop modalities for capacity development at national and international level, for all sector components for ISSD-Ethiopia staff and partners

#### Staff supporting this component

This component is supported through CDI staff international level, and a combination of CDI and Ethiopian experts at national level. At regional and local level all ISSD staff are involved in training of partners, key seed sector stakeholders, and farmer groups.

#### 3.9.2 Activities and outputs

##### Activities

- Tailor-made trainings:
  - o Profitability analysis for five ISSD Ethiopia agribusiness experts
  - o Facilitation skills for six ISSD Ethiopia knowledge sharing experts
- International training on integrated seed sector development in Wageningen:
  - o Facilitations skills for five ISSD Ethiopia partnerships facilitators
  - o Monitoring and evaluation for three selected ISSD Ethiopia programme assistants
  - o Integrated seed sector development for six strategic programme partners like ATA, RSEs, BoA
  - o Advanced project management for five scientific ISSD Ethiopia coordinators plus three CDI staff
  - o Financial management for six ISSD Ethiopia finance officers
- In addition many trainings have been organized by ISSD Ethiopia staff at regional and LSB level, for a diverse range of partners; find more information on these trainings in the regional annual reports. This included a training for seed inspectors at Haramaya University.

##### Outputs

Through the trainings mentioned above the capacity of staff and partners have been developed in the respective areas (M&E framework, indicator 17.1); the activities section mentions the trainings topics and number of participants. 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 training on profitability analysis as given by a professor from Haramaya University was immediately used in a large scale study comparing seed profitability with grain profitability in an LSB context.

##### Comparing results to action plans

The aim of this component is to handle emerging training needs and opportunities, to develop capacity of ISSD staff and its partners, and this has been done. Seed inspectors have been trained at Haramaya University, however, less intensive than envisaged.

---

### 3.9.3 Outcomes

We did not identify outcome indicators for this specific component. It is a support component of the ISSD Ethiopia programme. See above concrete activities and outputs.

### 3.9.4 Case studies

Find in the attached regional annual reports a number of highlights on research and studies; they address:

- Amhara: Training of partnership facilitators to strengthen their capacities on multi-stakeholder processes;
- Oromia East: Facilitation skills training for ISSD Ethiopia experts in Wageningen and Ethiopia;
- Oromia South and West: The power of great listening – training on facilitation skills;
- SNNPR: Strengthen the capacities of small and medium private seed producers in business management;
- Tigray: Training to build confidence - training financial officers in financial management and administration.

### 3.9.5 Lessons learnt and way forward

#### **Main lessons learnt**

The main lessons learnt include:

- Tailor-made trainings of ISSD Ethiopia staff build their capacity as well as confidence, and improve their efficiency as well as motivation; as such these trainings benefit the realization of targets in ISSD Ethiopia;
- International training of strategic partners improved the collaboration with ISSD Ethiopia;
- The same is truth for regional and local partners considering training in Ethiopia;
- Brining a mix of experts in a training may be interesting in bringing different perspectives to a certain topic;
- Trainings should be organized as such that the knowledge can immediately be brought into practice.

#### **Way forward**

- Tailor-made training of ISSD Ethiopia staff and partners needs to be continued, a new training needs shall be identified;
- Also at regional and local level the program needs to design trainings to improve the knowledge, skills and implementation capacity of ISSD Ethiopia partners at all levels.

#### **Sustainability**

Building the capacities of ISSD Ethiopia staff and partners on a needs basis benefits not only ISSD Ethiopia in reaching its targets, but also strengthens collaboration towards a common goal. It is an important tool for reaching towards sustainability of ISSD Ethiopia interventions.

---

## 4 Collaboration with other partners

ISSD Ethiopia has collaborated with a range of partners over the past year. These collaborations are extremely important for ensuring that the programme works on interventions that are sustainable on the long run. Many of these collaborations have already been described in the previous chapters, in relation to specific programme components. Because of its importance, we asked the regional ISSD units to highlight collaborations in a separate chapter in their annual reports; these collaborations logically focus on regional level interactions. At national level, the ISSD Ethiopia director is the programme's entry point for collaboration. He discusses issues and explores opportunities for linkages with representatives of a diverse range of Ethiopian and international organizations with an interest in seed. He, as well as other PMU staff, participates in seed related events representing ISSD at national level. Find below some details on collaboration with important partners of ISSD Ethiopia.

### **Collaboration with the Ministry of Agriculture**

ISSD Ethiopia works with the Plant Quarantine and Regulatory Directorate of MoA on seed quality related issues. ISSD Ethiopia has contributed to the formulation of the recently approved Seed Proclamation. However, collaboration is not as strong as we would like it to be; the unit is understaffed and has been completely occupied with formulation of the seed regulations and the establishment of an implementation structure for the new regulations. An important issue still on the agenda is the ongoing amendments to the Plant Breeders' Right Proclamation, which needs to be expedited.

### **Collaboration with the Agricultural Transformation Agency**

ATA is a key partner for ISSD Ethiopia. ATA together with MoA had the lead in the development of the Ethiopian Seed Systems Strategy. This strategy provides a framework and many entry points for strengthening the seed sector. ATA has taken up a number of innovations of ISSD Ethiopia, and supports scaling and institutionalization of these innovations. ATA and ISSD Ethiopia collaborate in Direct Seed Marketing (DSM) and in supporting the seed regulatory agencies of the region. They have also joined efforts in coordinating EGS supply. In 2014 ATA has supported selected LSBs with a grant to strengthen their infrastructure. Find more details in the regional annual reports.

### **Collaboration with the Agricultural Growth Programme**

The Agricultural Growth Programme supports agricultural development in selected high potential woredas in Ethiopia. It recognizes quality seed as an important input to improving agricultural production and productivity. Currently close to 60 LSBs are operating in AGP woredas in the four regions. Thus, for the technical aspect of quality seed production, the regional ISSD units are working close with AGP to solve constraints of seed production in these woredas. Over the past year AGP, through ACDI/VOCA has provided grants to selected LSBs to strengthen their seed production infrastructure. Find more details in the regional annual reports.

### **Collaboration with CASCAPE**

CASCAPE is one of the programmes supported by EKN in Addis. It works on improving agricultural productivity through promoting evidence-based best agricultural practices. The regional annual reports report on collaboration with CASCAPE in the following areas:

- Oromia East: awareness creation on food and nutrition; and promotion of the cultivation of nutrition dense crop varieties;
- Oromia South and West: Support to the development of LSBs;
- SNNPR: Education on nutrition;
- Tigray: Strengthening SPCs.

It is obvious that for improving agricultural productivity, quality seed and good agricultural practices go hand in hand. Collaboration in this area needs to be further strengthened.

---

### **Collaboration with the Sesame Business Network support programme**

Another project supported by EKN Addis is the SBN support programme. This programme focusses on working on sustainable and inclusive sesame value chain development. In 2014 SBN and ISSD Ethiopia collaborated in Amhara on the identification of private seed producers, and Tigray region on actually strengthening sesame seed production. The two programmes shall continue to collaborate in assuring the demand for quality sesame seed is met.

---

# Appendix 1 Regional annual reports 2014

- Amhara
- Oromia East
- Oromia South and West
- SNNPR
- Tigray
- .





---

Centre for Development Innovation  
Wageningen UR  
P.O. Box 88  
6700 AB Wageningen  
The Netherlands  
T +31 (0)317 48 68 00  
[www.wageningenUR.nl/cdi](http://www.wageningenUR.nl/cdi)

Report CDI-15-094



---

The Centre for Development Innovation works on processes of innovation and change in the areas of food and nutrition security, adaptive agriculture, sustainable markets, ecosystem governance, and conflict, disaster and reconstruction. It is an interdisciplinary and internationally focused unit of Wageningen UR within the Social Sciences Group. Our work fosters collaboration between citizens, governments, businesses, NGOs, and the scientific community. Our worldwide network of partners and clients links with us to help facilitate innovation, create capacities for change and broker knowledge.

The mission of Wageningen UR (University & Research centre) is 'To explore the potential of nature to improve the quality of life'. Within Wageningen UR, nine specialised research institutes of the DLO Foundation 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.

---