



ENSP 2021 – 2025

Narrative progress report 2023



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1 Summary Sheet

Programme title	Ethiopia-Netherlands Seed Partnership (ENSP)
Mission	The mission of the Ethiopia-Netherlands Seed Partnership (ENSP) is to enable the private sector in Ethiopia to deliver farming men and women high quality seed of improved varieties much needed for food security and nutrition, and climate resilience.
Goal	ENSP will increase 150,000 farming households' crop productivity and diversity by 50%, create 2,000 jobs and increase the area under sustainable agricultural practices. Furthermore, ENSP will improve women's access to financial services, entrepreneurship opportunities, managerial and leadership roles, and life-long learning.
Country	Ethiopia
Programme duration	4 years (September 10 th , 2021 – August 31 st , 2025)
Grantee	Stichting Wageningen Research, Wageningen University & Research P.O. Box 88, 6700 AB Wageningen, The Netherlands
Main implementing parties	<p>Wageningen Centre for Development Innovation (WCIDI) Wageningen University & Research P.O. Box 88 6700 AB Wageningen The Netherlands</p> <p>Stichting Wageningen Research Ethiopia (SWR Ethiopia) Wageningen University & Research Woreda 9, Bole Sub-City Addis Ababa Ethiopia</p> <p>Resilience BV Bevrijdingsstraat 38 6703 AA Wageningen The Netherlands</p> <p>Ethiopian Seed Association (ESA) Woreda 1, Bole Sub City Addis Ababa Ethiopia</p> <p>Plantum Vossenburchkade 68 2805 PC Gouda The Netherlands</p>
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Budget	€ 6,500,000

2 Executive summary

a. Lessons learned, results, and conclusions

- Progress against Outcome 1 – Private sector strengthened – is now getting up to speed. 10 selected domestic seed businesses increased their production by a quarter in 2023. This spans 25 varieties of seven different cereals, pulses, and oilseeds. However, without doubt, the biggest hurdle to growing their businesses further is their limited access to finance.
- Ethiopia faces a historic banking crisis, with the sector critically low in liquidity and loan availability. We have designed a blended financial product aimed at resolving this issue for seed businesses, which we hope to introduce in 2024.
- Six women entrepreneurs graduated from our female business incubator; the first of its kind offering training, coaching, and experience sharing on the basics for seed business success exclusively to women. The winner of last year's pitching competition walked away with €3,000 to invest in her enterprise. The training programme received an average evaluation of 9/10 by its first batch of participating women.
- We developed a concept business model for ESA. The Association continues to scale its service delivery with support from ENSP but will sustain the core costs of its organization – including additional personnel – within an agreed-upon timeframe of two years. The number of members satisfied with ESA's performance increased two-thirds in 2023.
- Outputs towards Outcome 2 – Uptake of innovations and empowerment of young men and women – are on track. Review of the seed science and technology curricula of Bahir Dar University and Haramaya University has concluded and both are now under revision.
- We are trying to achieve gender-parity in our education and employment activities. Current female participation has reached ~40%. 36 youth enrolled in internships in the seed sector in 2023.
- Seven interns accepted offers of permanent employment and two groups organized themselves in small startups in seed-related enterprise. We had not anticipated entrepreneurship as a spin-off of internship but are delighted to see it in its fledging stage. In 2024, we will establish another facility to incubate youth enterprise in the seed sector in collaboration with the Ministry of Labour and Skills and selected TVETs.
- In 2023, subcontracted international companies and their local distributors/partners reached 9,809 farmers with knowledge and skills of more sustainable practices through demos and trainings.
- Most of our outputs were achieved towards Outcome 3 – Business of the seed sector enabled – but improving seed sector governance remains a stubborn challenge. Conflict and insecurity have drawn government's attention away from agricultural development. Despite this, we facilitated a national workshop leading to the Minister's decision to establish three coordinating structures. It must be noted, however, that his decision to establish the National Seed Sector Steering Committee doesn't align with the advice of the National Seed Advisory Group of which we are a member.
- Last year, we amended three directives and drafted two new ones to regulate seed quality in Ethiopia. We also developed the directive on variety release and registration together with GIZ.
- Countless efforts have been made to strengthen seed regulatory service provision, and results show. Piloting variety testing under the auspices of EAA has been a breakthrough against strong inertia to change. Breeders note that EAA's independent role in variety testing and validation sets the stage for competition among breeders and public breeding institutions. They underline that this will ultimately help the registration of superior varieties and forces public research institutes to think about marketability.

b. Main steering implications for the next reporting period

- The MTR report confirms that we are doing the right things and that – at least in the extent to which ENSP has been implemented so far – stakeholders perceive it to be effective and sustainable as well as relevant.
- The double burden of conflict and drought in Ethiopia disrupts food production, disturbs supply chains, and has displaced millions of people internally, making it difficult for them to access food. In conflict- and drought-affected areas, farmers and agro-pastoralists' continued access to and use of quality seed of diverse crops and varieties is hampered, leading to chronic seed insecurity and vulnerability in livelihoods.
- Emergency seed responses are often hastily thought through, contextually inappropriate, market disrupting, and can risk weakening the performance of seed systems as they recover and develop.
- ENSP proposed plans for programme expansion to new geographic areas affected by conflict and drought. A subsidy amendment is being considered by the Embassy of the Kingdom of the Netherlands.

3 Introduction

c. Description of programme and intervention strategy

The mission of ENSP is to enable the private sector in Ethiopia to deliver farming men and women high quality seed of improved varieties much needed for food security and nutrition, and climate resilience. We will increase 150,000 farming households' crop productivity and diversity by 50%, create 2,000 jobs, and increase the area under sustainable production practices. Furthermore, we will improve women's access to financial services, entrepreneurship opportunities, managerial and leadership roles, and life-long learning.

To achieve this, the following three primary outcomes are pursued: (1) Private sector strengthened in its contribution to food, nutrition, and climate resilience; (2) Uptake of innovations and empowerment of young men and women increased; and (3) Business of the seed sector is enabled.

1. Private sector strengthened: Activities will double the production and diversity in the portfolio of 10 domestic seed businesses and increase their access to finance. An incubator of small- and medium-scale enterprise will improve the inclusion and equity of emerging female entrepreneurs in seed business and seed-related services. We will also work with three or more international companies to start or expand local production of seed in Ethiopia to employ nationals, raise exports, generate foreign currency reserves, and improve Ethiopia's balance of trade. We support ESA in strengthening its organization and value proposition to the sector. Furthermore, collaboration with traders, processors, or wholesalers aims to increase the uptake of quality seed in selected value chains of importance to human nutrition.
2. Uptake of innovations and empowerment increased: By the end of the Partnership, three selected knowledge institutes will perform better and more gender transformatively, and 100 graduates – of which at least half are women – will have enrolled in internships in the seed sector. We believe that skilling young entrepreneurs and graduates entering the labour market is essential for raising seed sector performance. To this end, curricula on seed science and technology, seed business, and seed systems will be improved, and scholarships for postgraduate study and fellowships to short-course trainings will be awarded. Furthermore, 40,000 farmers (50%women) will have been trained on sustainable agricultural practices, and 20,000 of whom will have adopted improved varieties. Led by international companies, we will increase their knowledge of sustainable production practices and on how to get a return on their investment in quality seed.
3. Business of the seed sector is enabled: This will be measured by two improvements to major seed regulations and € 12 m invested by domestic businesses and international companies in seed production in Ethiopia. By improving the coherence of regulation with the practices of businesses, and these businesses' compliance with the rules of the game, increased trade and investment will be leveraged. Five seed regulatory bodies, including the recently established Ethiopian Agricultural Authority (EAA) will be strengthened in their leadership, human resources, cost recovery and provision of quality services. Lastly, solutions to critical systemic problems will be identified and promoted, in part by the programme's participation in ISSD Africa¹ and other regional initiatives.

d. Review of follow-up measures taken since last reporting period

- It is difficult to include women-owned seed businesses applying the same criteria used in the selection of the others. In 2022, we decided to launch an incubator for female-led small- and medium-scale enterprise in seed business and related service provision. The incubator operates in a parallel to our efforts to double and diversify the seed production of 10 domestic seed businesses. In 2023, six women entrepreneurs graduated from the incubator.
- The most challenging of the four value chains selected for investment is leafy vegetables. We planned to promote increased household consumption of leafy vegetables in collaboration with 10 women-run cooperatives in the western part of the country. However, we have yet to reach agreement with our proposed partners for that activity.
- Tracer studies revealed competencies not honed by existing seed science and technology curricula and demand for shorter term competence-based training, yet lecturers at one university reneged on their commitment to implement changes. After intervention with the academic vice president and registrar,

¹ The community of practice on integrated seed sector development in Africa (ISSD Africa) addresses complex seed sector challenges of continental importance through action research and dialogue resulting in better performing seed sectors.

agreement was reached and examples given to host subjects outside traditional mandates and develop the curriculum in two streams: i. seed production and technology; and ii. seed business and policy. In 2023, we tendered for a subcontract award to establish short-term training at one selected university.

- In 2022, the first-round call for applications for postgraduate scholarships and research grants failed to draw sufficient female applicants. To promote their participation, the ENSP research grant has broadened its eligibility to include departments outside seed science and technology. New calls for proposals are extended to students at universities across the country interested in conducting research on seed-related topics aligned with ENSP's learning agenda. Additionally, an exclusive call to female students was made.
- EAA was very reluctant to take on the responsibility of variety testing and registration, especially with few staff members experienced on the subject and no land secured for testing. Nevertheless, we finally reached agreement with the Authority to pilot recent amendments to regulation on variety release and supported them with the organization and subcontracting of services in national performance trial (NPT) management and distinctness, uniformity, and stability (DUS) testing. This is the first time that DUS testing is conducted in the country, which is a breakthrough in the path towards plant breeders' right protection.

e. Relevant contextual changes and their potential impact

- Conflict and insecurity are of increased concern to ENSP and for the mobility of our staff. There is ongoing conflict in multiple parts of the country and regular incidents of kidnapping, violence, and killing. Instability has drawn government's attention away from agricultural development. Annex 2 offers our assessment of the risk of conflict and insecurity, its influence on activity, and mitigating measures taken.
- The double burden of conflict and drought in Ethiopia disrupts food production, disturbs supply chains, and has displaced millions of people internally (IDPs), making it difficult for them to access food. In conflict- and drought-affected areas, farmers and agro-pastoralists' continued access to and use of quality seed of diverse crops and varieties is hampered, leading to chronic seed insecurity and vulnerability in livelihoods.
- Emergency seed responses are often hastily thought through, contextually inappropriate, market disrupting, and can risk weakening the performance of seed systems as they recover and develop.
- ENSP proposed plans for programme expansion to new geographic areas affected by conflict and drought. A subsidy amendment is being considered by the Embassy of the Kingdom of the Netherlands (EKN).
- Amendments to the Seed proclamation were approved by the Peoples' House of Representatives in July 2023 (Proclamation No. 1288/2023). This legitimizes and energizes our agenda to reform seed regulatory service provision and support efforts to develop private sector and enable business in Ethiopia.
- Ethiopia faces a historic banking crisis, with the sector critically low in liquidity and loan availability. Selected domestic seed businesses' limited access to finance is the prevailing reason why further growth in their revenues hasn't been achieved.

4 What we learned and how we learn

- Coupling coaching of individual action plans with group learning, such as the study visit to Uganda (see Table 2), builds the knowledge and ambitions of domestic seed businesses. However, without reliable access to finance, ambitions remain in check. Increasing the businesses' working capital is an absolute must if we are to deliver on the target of doubling their production by 2025.
- We offer the first of its kind; a business incubator exclusively for women covering essentials for seed business success. Providing the training in Amharic is essential for encouraging women to participate. In the next iteration, digital skills should be honed as all participants had limited to no experience using, for e.g., email and PowerPoint.
- Whilst several interns have been offered permanent employment by the hosts of their internships, many decide to work elsewhere, sometimes in better paying positions at NGOs or for themselves. The latter face many challenges, including inaccess to finance, technical problems, and limited experience in marketing. Incubation of their business ambitions is called for.
- Most graduate students are not interested to do their research on topics of ENSP's learning agenda: conflict, disaster, and seed insecurity; seed sector competitiveness; and seed sector governance. We encourage a strong rationale for masters' studies, reasoned from our stakeholder engagement in setting the learning agenda. This requires cross-disciplinary research, which is unconventional.

- New education policy requires students take the National Exam as prerequisite to admission at higher learning institutes. Consequently, the number of admissions has reduced and with it our sponsorship of studies. Supporting studies at agricultural TVETs may be both possible and warranted given the labour market's demand for more applied competencies in the seed sector. This also provides entry points for curriculum review at TVETs and a trajectory for intern identification, selection, and preparation activities.
- Contemporary practices of horticultural producers in market boundaries of local distributors of subcontracted international breeding companies are harmful to both human and environmental health. There are adaptable technologies in the hands of these companies that can promote sustainable agricultural practices (SAPs), which they have agreed to demonstrate and train farmers on.
- Despite the tedium of back-and-forth discussion with EAA and development partners over seed regulatory frameworks, we have successfully drafted and revised multiple directives and regulation in the wake of recent amendments to the Seed Proclamation. Patience pays off, and such legal grounds are important in paving the way towards improved seed service provision.
- Piloting variety testing under the auspices of EAA has been a breakthrough against strong inertia to change. However, EAA's progress in acquiring the human resources and land to directly implement NPT and DUS testing is less encouraging. In the short- to medium-term, subcontracting research centres will remain necessary for service provision. Only EIAR has the breeders knowledgeable as trial analysts and land available for trial design to meet the requirements.
- Breeders noted that EAA's independent role in variety testing and validation sets the stage for competition among breeders and public breeding institutions. Furthermore, they underlined that this competition will ultimately help the registration of superior varieties. The situation forces public research institutes to think about the marketability of their varieties.
- Risks and assumptions of our strategy need refining and monitoring. That was the advice of the mid-term review (MTR) of ENSP. We have taken heed of this advice – also prompted by the Embassy to do so – in updating our detailed risk analysis (Annex 2).
- *How we learn*: aside from the indicators we monitor, we also conduct research and studies to validate assumptions in our theory of change and answer stakeholders' questions on our learning agenda, and regularly engage in dialogue with the sector at meetings, workshops, seminars, and study visits (often abroad). In 2023, we also commissioned the MTR. The MTR report confirms that we are doing the right things and that – at least in the extent to which ENSP has been implemented so far – stakeholders perceive it to be effective and sustainable as well as relevant. We are encouraged by the positive feedback this provides us in reflecting on the programme's theory of change, strategy, and practical programming.

5 Progress towards outcomes

f. Results

Outcome 1: Private sector strengthened in its contribution to food, nutrition, and climate resilience

Output 1.1: Seed production doubled and diversified

A section of activities for 2023 were excised from the multiannual action plans of each of the 10 selected businesses (Table 1), scheduled, and budgeted. All businesses were supported in production planning and procurement of early generation (EGS) seed using the newly developed portal of EIAR. Various trainings were organized and a learning journey to Uganda exposed the businesses to the relatively more liberalized market. Improved packaging, principles of promotion, and innovative marketing channels were among other eye-opening practices there. Lessons were incorporated in revisions to their action plans. Six conducted demonstrations and field days; effective means of promoting products to neighbouring farmers. Sadly, not all demo plots could be visited by potential customers due to the worsening security situation in particular in Amhara. Four businesses purchased small seed packs, which were produced with the facilitation of ENSP recognizing their importance to product accessibility and affordability. This is more inclusive of smallholders.

The importance of product differentiation and superiority was underlined during the visit to Uganda. Having their own or exclusive access to varieties captures great interest among our selected businesses. To this end, we are building partnerships with the University of Illinois' Soybean Innovation Lab and IITA through the Pan-African Soybean Variety Trials and with Mukushi Seeds of Zimbabwe to pilot exclusive use and licensing agreements for varieties of soybean and maize respectively.

Without doubt, the biggest bottleneck in the growth of our selected businesses is their limited access to finance. This was concluded by a consultant we hired who is helping design a blended financial product for seed business. The concept financial product recognizes the lack of collateral these businesses have. The proposed product builds upon cash collateral offered by USAID by investing in collateral-generating assets and infrastructure for selected businesses. We are currently engaged in talks in Ethiopia, looking for a partner with the liquidity and facility to disburse working capital loans to our selected businesses and grants for capital expenditures.

Table 1 *Selected domestic seed businesses, their portfolios, and production (2023)*

Business	Location	Portfolio	Production (MT)
Biniyam Mulat	Amhara	Maize, fava bean	257
Loma	Amhara	Maize, wheat	130
Anatoli	Oromia	Forages	826
ATM	Oromia	Teff, wheat, chickpea	416
Burka	Oromia	Teff, wheat, chickpea	638
Tuqa Katara	Oromia	Maize, wheat, fava bean	106
Gudeta Gonfa	Oromia	Teff, wheat	326
Borer	SNNPR	Maize, teff, haricot bean	236
Hulume	SNNPR	Teff, haricot bean	290
Santen	SNNPR	Wheat, haricot bean, soybean	–
			Total: 3,225

Output 1.2: Private sector organized

Demands of the association were surveyed in 2022 and 20 members interviewed. Most were dissatisfied with the service of ESA. They are, however, willing to pay and pay more for quality services that alleviate their problems. Among them are inaccess to finance and forex. The survey helped gain approval of ESA's board to develop a concept business model for the association. The business model integrates new and improved services of ESA in lobbying and advocacy and training and sees the association break even within limitations on its revenue from membership fees and service provision. ESA continues to scale its service delivery with support from ENSP but will sustain the core costs of its organization – including additional personnel – within an agreed-upon timeframe of two years starting in 2024. More results are reported in Table 2.

Output 1.3: Performance of value chains for nutrition improved

Activities of the animal feed and forages value chain projects have started, and plans proposed for green leafy vegetables.

For animal feed, potential producers of sunflower (seed) have been identified and trials with multiple open-pollinated varieties (OPVs) conducted. Unfortunately, cost-benefit analysis for farmers isn't promising. We anticipate that more income can be generated from higher-yielding hybrid varieties. Whilst some promising hybrids are registered in Ethiopia, their foreign breeders have abandoned efforts to sell them. We plan to facilitate the import of hybrid varieties in 2024 and garner the interests of breeding companies to reevaluate the market given the high price of edible oil domestically.

Good progress was made on the forages value chain. 26 alfalfa varieties were tested, of which 6 show high potential. We plan to test these in two other regions next year. In addition to our partner Anatoli's 205 ha currently under cultivation, agreement was reached with an outgrower to source from 30 more hectares next year, including 3 new varieties for commercialization. Demonstrations to smallholders were successful. Demos raised awareness on the potential of using forages as part of their animal nutrition. Through the proposed extension to SNV's BRIDGE project, we will explore collaboration with dairy farmers.

We are close to reaching agreement with Rijk Zwaan and the woman owned company Damascene on a project for the green leafy vegetables value chain. Provisional plans include leafy vegetable production by 10 predominantly female cooperatives (ca. 3,000 female farmers), with Damascene acting as a nursery for seeds supplied by Rijk Zwaan. Home gardening is proposed, which involves distributing seed starter kits to the cooperatives as well as urban households to raise leafy vegetables consumption.

Table 2 *Progress towards Outcome 1*

Outcome	Private sector strengthened in its contribution to food, nutrition, and climate resilience
Output 1.1	Seed production doubled and diversified
Results	<ul style="list-style-type: none"> Supported an increase in the seed production of selected businesses by more than 25% Implemented support to the action plans of all selected businesses, including: <ul style="list-style-type: none"> Organizing demonstration plots with 6 businesses and field days with 5 Facilitating small packs for 4 businesses Assisting in production planning, EGS requests, and on-the-spot coaching and advice Facilitated trainings and workshops on seed multiplication, post-harvest management, marketing and sales, promotion, access to finance, and gender Shared marketing strategies of the Private Seed Sector Development (PSSD) project in Burundi in collaboration with IFDC Arranged learning journey to Uganda in collaboration with ISSD Uganda Initiated variety pre-selection trials with IITA and Mukushi Seeds Designed concept blended financial instrument for seed business Incubated the businesses of 6 female entrepreneurs (see c. Progress on cross-cutting topics)
Output 1.2	Private sector organized
Results	<ul style="list-style-type: none"> Helped increase the number of members satisfied with the Association's performance by two-thirds Developed concept business model for ESA board approval in 2024 Successfully convened the first National Seed Forum; the envisioned 'place-to-be' for stakeholder networking and dialogue in the seed sector Facilitated sector awareness raising on the amended Seed Proclamation, updates to variety NPTs and DUS testing, and EIAR's digital platform for ordering early generation seed Held collaboration meetings with MoA, EAA, EIAR, FAO, GIZ, and USAID Advised on internal policy development, including HR, financial, and procurement manuals Updated member profiles and shared seed production and sales information template for data collection Published news items on ESA's and ENSP's websites and created a Telegram group for members Distributed 100 copies of a calendar featuring promotion of four members
Output 1.3	Performance of value chains for nutrition improved
Results	<ul style="list-style-type: none"> Business cases developed for seed uptake in 3 value chains: animal feed; forages; and leafy vegetables For animal feed: identified producers of sunflower (seed); and conducted trials with sunflower OPVs For forages: tested 26 alfalfa varieties and selected 6 for scaling; expanded the area under forages seed production from 205 to 235 ha; demonstrated forages to smallholders and raised awareness for producing forages in animal husbandry Proposed plans to produce green leafy vegetables with 10 women's cooperatives and distributed seed starter kits to urban households to raise leafy vegetables consumption
Partners	<ul style="list-style-type: none"> 10 domestic seed businesses, EIAR, IITA, Mukushi Seeds (Pvt) Ltd, 6 women entrepreneurs, ESA, Alema Koudijs Feed PLC, Senselet Food Processing PLC, SNV – BRIDGE, Damascene Essential Oils Processing PLC, Rijk Zwaan With support from IFDC-PSSD Burundi and ISSD Uganda

Outcome 2: Uptake of innovations and empowerment of young men and women increased

Output 2.1: Performance of selected knowledge institutes improved

Review of the seed science and technology curricula of Bahir Dar University (BDU) and Haramaya University (HU), which we initiated in 2022, has concluded. Both universities were commissioned to do tracer studies of previous graduates from these postgraduate studies and labour market needs assessments, which revealed competency gaps and demands from the seed sector. The curricula are now under revision.

The outcome of curricula reviews also led to our decision to financially support competence-based training to seed sector professionals. BDU and HU were invited to compete in this restricted tender. In support of their curricula revisions and proposals for short-course funding, we arranged for professors at Kwame Nkrumah

University of Science and Technology (KNUST) in Ghana and the University of KwaZulu Natal (UKZN) in South Africa to share their experiences in seed-related education. KNUST and UKZN are regarded as the continent's centres of excellence in this regard. We also provided training using the business model canvas to support BDU and HU in proposing their business models for short-course training programme development.

Further, new postgraduate research grants were awarded to three female students and 11 scholarship- and research grantees graduated in 2023, bringing the total number of graduates to 25. More results are reported in Table 3

Output 2.2: Young men and women enrolled in internships

In 2023, we increased the number of host organizations for internships co-sponsored by the programme and placed 36 young graduates at 18 of them. These include local distributors of subcontracted international breeding companies, domestic private and public seed enterprises, and agricultural research centres. Seven interns accepted offers of permanent employment and two groups organized themselves in small startups in seed-related enterprise. We continue to support the youth behind these startups ad hoc – also looking for sources of finance – but are considering how to incubate youth enterprise in the seed sector in collaboration with the Ministry of Labour and Skills (MoLS) and selected TVETs. We look forward to sharing more progress on this in 2024.

Output 2.3: Uptake of sustainable production practices increased

Farmers' horticultural production in marketing locations of local distributors of subcontracted international breeding companies were surveyed, revealing unsustainable practices harming both human and environmental health (e.g., unsanctioned pesticide application). In dialogue with international companies and their local distributors, and with SNV's Horti-LIFE project and government extension services, SAPs have been identified and promoted, e.g.: pest and disease resistant varieties; crop rotation and diversification; and integrated soil fertility management. International companies have agreed to take up these SAPs in their local distributors' demonstration and farmer training exercises. In 2023, demos and trainings reached 9,809 farmers with knowledge and skills of more sustainable practices.

Table 3 *Progress towards Outcome 2*

Outcome	Uptake of innovations and empowerment of young men and women increased
Output 2.1	Performance of selected knowledge institutes improved
Results	<ul style="list-style-type: none"> Supported BDU and HU in conducting seed science and technology graduate tracer studies and identified competency gaps and demands from the labour market Shared experiences of Ghana (KNUST) and South Africa (UKZN) in seed science and technology education Recommended topics, possible courses, and strategies to address gaps in the labour market Facilitated national stakeholders' review of proposed curricula changes at BDU and HU Launched a restricted tender for financial support to seed short course training programme development Provided training on business model generation using the business model canvas to BDU and HU as invited competitors in the restricted tender Awarded research grants to 3 female postgraduate students Supported 11 students graduate from postgraduate programmes at 3 universities in 2023 Raised awareness on the ENSP learning agenda among universities and applicants for grants
Output 2.2	Young men and women enrolled in internships
Results	<ul style="list-style-type: none"> 36 interns placed at 18 host organizations 7 interns accepted offers of permanent employment from host organizations 2 groups of interns organized in self-employment in the seed sector Mentored interns in personal professional development through soft-skills training and coaching Visited interns at their place of work to monitor their professional development
Output 2.3	Uptake of sustainable production practices increased
Results	<ul style="list-style-type: none"> Surveyed horticultural practices of farmers in vegetable-producing areas and those promoted by international breeding companies and their local distributors, SNV – Horti-LIFE, and extension services 2,211 farmers visited demos organized by local distributors of subcontracted international companies 7,598 farmers trained by local distributors/partners of subcontracted international companies on their technologies for potato and vegetable production 9,809 farmers obtained knowledge and skills of more sustainable horticultural practices 6 new varieties released

Outcome	Uptake of innovations and empowerment of young men and women increased
Partners	<ul style="list-style-type: none"> • BDU, HU, Bakker Brothers, EASI Seeds, Enza Zaden, HZPC, Nunhems Ethiopia PLC, Rijk Zwaan, Solynta, EIAR • With support from KNUST and UKZN, and SNV – Hort-LIFE

Outcome 3: Business of the seed sector enabled

Output 3.1: Trade and investment in the seed sector leveraged

Improving seed sector governance remains a stubborn challenge. Through our engagement in the National Seed Advisory Group (NSAG) and other platforms, we try to advance the agendas of collaborative governance, improved coordination, and leveraging trade and investment in the seed sector.

We acknowledge senior experts and activists calls to the Ministry of Agriculture (MoA) as *the* responsible authority for seed sector governance to improve its coordination with stakeholders. Accordingly, we assigned senior expert and consultant Dr Amsalu Ayana as advisor to the Ministry on seed sector governance and strategic leadership. Dr Amsalu helped ascend this topic's priority on MoA's agenda. Upon request, we facilitated a workshop on the subject and to forecast the next three years' seed supply. At the workshop, the Minister announced his decision to establish three coordinating structures: the National Seed Sector Steering Committee; National Technical Committee; and Regional Technical Committees. We must mention that the decision doesn't align with the advice of NSAG. However, we will play our part to implement the decision and support these structures' performance with a dashboard for monitoring and evaluation.

In 2023, we successfully re-established the Ethio-NL Seed Committee and convened two meetings of its 13 members, including: Deputy-Director General of EAA and Chair; Agricultural Counsellor of the Netherlands and Co-Chair; CEO of MoA's horticulture department; EAA directors of variety release, registration & seed quality control and phytosanitary services; vegetable seed companies representatives and their ESA board member; Executive Director Ethiopian Horticulture Producers and Exporters Association (EHPEA); and experts of Horti-LIFE and ENSP. The committee discusses hurdles to doing business in Ethiopia and suggests solutions like directives.

Output 3.2: The provision of seed regulatory services enhanced

Several topics of regulation are addressed as follows.

Seed quality assurance. Various efforts have been made to capacitate EAA and branches of regional seed regulatory authorities: assessing the state of the art in seed health testing; investing in seed lab equipment; revising three existing directives and drafting two new ones; convening the 12th annual national seed quality control (NSQC) platform to harmonize practices across the country; introducing barcoding technology to combat counterfeit seed; identifying gaps in post-control testing; and revising seed certification fees. In 2024, we will introduce barcoding certified seed of maize hybrid varieties.

Seed phytosanitary services. Our staff member, Fikre Markos, is still seconded to EAA as Senior Advisor Phytosanitary Services. He supports the re-establishment of an e-Phyto certification system. As a result of his efforts, TradeMark Africa has signed an agreement with EAA to install e-Phyto certification. Procurement of an IT firm for the system's development is underway.

Senior technical experts of EAA and EIAR-Biotechnology Institute received a one-week training in the Netherlands from Naktuinbouw on PCR rapid testing of tomato brown rugose fruit virus (ToBRFV). This activity is part of a public-private partnership (PPP) between EAA, EIAR, and Nunhems Ethiopia PLC, with support from Naktuinbouw and ENSP.

Variety release. After a lengthy process of frequent and extensive consultations with EAA, breeders, their research institutes, and development partners GIZ and Ethiopian Agricultural Transformation Institute (ATI), piloting NPTs and DUS testing finally got underway under the auspices of EAA. This is in accordance with the amended Seed Proclamation but completely new to the Authority. We support EAA in rolling out systems of variety release by advising standard operating procedures, trial design, and crop protocols, and organizing capacity for NPTs and DUS testing, including subcontracting research centres for assigning breeders as trial

analysts and allocating land for the multilocal trials. In 2023, 14 bread wheat candidate varieties were tested on 22 sites in NPTs at Debre Zeit Agricultural Research Centre (DZARC) and Kulumsa Agricultural Research Centre (KARC) and at KARC for DUS. We have also initiated discussion with EAA to allow selected private companies to conduct adaptation trials for the release of varieties of crops not mandated for NPTs. Agreement was reached to pilot the system in 2024 with GAWT International Business PLC, Greenlife Trading PLC, Nunhems Ethiopia PLC, and Markos PLC as agents for Enza Zaden, Hazera Seeds, BASF Vegetable Seeds, and Bakker Brothers respectively.

Output 3.3: Solutions to systemic problems identified and promoted

Through convening and participating in various dialogues, curating a learning agenda for the seed sector, sponsoring postgraduate research, conducting studies ourselves, and commissioning consultancies, we have identified systemic problems and wherever possible solutions.

Several problems pertain to seed sector governance, both coordination and regulation, and in the provision of seed regulatory services. Already mentioned, our participation in the NSAG and facilitation of a workshop on seed sector governance have contributed to decisions to establish seed sector coordinating structures. To date, we have contributed to the drafting and amendment of 16 regulations and directives. And as summarized in the previous section, our efforts are improving seed regulatory service provision.

We mobilize private sector in our support to government. International breeding companies have hands-on experience of bottlenecks to trade and investment and solutions abroad. Nunhems Ethiopia co-sponsors the establishment of local seed phytosanitary testing services, in collaboration with Naktuinbouw. Bakker Brothers, BASF Vegetable Seeds, Enza Zaden, and Hazera Seeds participate in pilots of recently amended variety release procedures. And Solynta works with us in introducing systems to EAA of hybrid true potato seed (HTPS) testing and registration.

All results tracking our progress towards achieving Outcome 3 are summarized in Table 4.

Table 4 *Progress towards Outcome 3*

Outcome	Business of the seed sector enabled
Output 3.1	Trade and investment in the seed sector leveraged
Results	<ul style="list-style-type: none"> • Participated in NSAG • Assigned consultant and senior advisor seed sector governance to MoA to support the establishment of seed sector coordinating structures and strengthen strategic leadership in the seed sector • Facilitated national workshop leading to the Minister's decision to establish National Seed Sector Steering Committee, National Technical Committee, and Regional Technical Committees • Re-established the Ethio-NL Seed Committee and convened members twice • Helped amend 3 directives: certificate of competence; quality-declared seed, and administration of rejected seed, and draft 2 new ones: self and third-party seed certification; and illegal seed trade, to harmonize seed quality assurance in the country • Developed a directive on variety release and registration together with GIZ's Supporting Sustainable Agricultural Productivity (SSAP) project
Output 3.2	The provision of seed regulatory services enhanced
Results	<ul style="list-style-type: none"> • Identified major gaps in seed laboratory seed health testing, including the lack of: standards; mandatory results reports; basic kits and equipment; decision-making based on health • Reached agreement with EAA and regional seed regulatory authorities to generate evidence of seed health testing before the 13th annual NSQC platform meeting • Updated inventories and equipment needs of 14 seed labs and procured and distributed 5 laminar airflow cabinets, 3 incubators, and 3 biological compound microscopes to 9 of them • Facilitated installation and calibration of a microscope, water distiller, and autoclave at Nekemte seed lab using the services of Ambo Agricultural Research Centre • Convened the 12th annual NSQC platform meeting and facilitated prioritization of 6 subjects for harmonization across seed regulatory authorities: tagging; grow-out-testing; GPS use; field estimation; seed health testing; and combatting counterfeiting • Signed MoU with NSQC platform to pilot barcoding certified seed to combat counterfeiting, identified sources at high risk of selling fake/counterfeit seed, purchased and distributed 3 barcode printers, 3 scanners, and printing paper rolls to Amhara, Central Ethiopia, and Oromia, and trained 12 experts

Outcome	Business of the seed sector enabled
	<ul style="list-style-type: none"> Identified major discrepancies in post-certification grow-out-test (GoT) performance between regulatory authorities of Amhara, Benishangul-Gumuz, Central Ethiopia, Oromia, Sidama, and South West Ethiopia Revised Rate of Fees for Seed Competency and Related Services Regulation (No. 361/2015) for increased cost recovery in consultation with 47 stakeholders including MoA, Ministry of Finance, EAA, Ethiopian Coffee and Tea Authority, ATI, Bayer, Corteva, Greenlife, ESA, EPHEA, and CropLife, and submitted it to the Council of Ministers for approval Presented problem statement and two e-Phyto systems to the Agricultural Counsellor at EKN, the EU delegation, and Trademark Africa for financial support in re-establishing the service Facilitated a visit for Trademark Africa to the Kenya Plant Health Inspectorate Service (KEPHIS) Brokered agreement between Trademark Africa and EAA to establish a similar e-Phyto system to that of KEPHIS, for which procurement of IT services is underway Sponsored 2 experts from EIAR-Biotechnology Institute and 1 from EAA's training in the Netherlands on PCR-RT for ToBRFV by Naktuinbouw and development of protocol for service provision in Ethiopia Supported Nunhems Ethiopia in obtaining ToBRFV certification in Ethiopia, which is more cost effective than sending samples abroad for testing Informed Oriental Seeds of the PPP between Nunhems Ethiopia and EAA and encouraged their use of ToBRFV certification in Ethiopia Facilitated multiple consultations with in total more than 40 stakeholders including EAA, ATI, GIZ, crop directors at EIAR, ARARI, OARI, and SARI, KARC, senior barley and wheat breeders, and Chair of the National Variety Release Committee on amendments to the law on variety testing and registration Developed concept, plan, standard operating procedures, and crop protocols for NPT and DUS testing Subcontracted DZARC and KARC for allocating land and breeders as analysts in NPT and DUS testing Piloted NPTs and DUS testing of 14 bread wheat candidate varieties of 6 ARCs and organized field days for breeders, national crop coordinators for barley, wheat, and sorghum, chickpea and low- and highland pulses, and potato, and other stakeholders to observe the trials Reached agreement with EAA to allow selected companies to pilot adaptation trials of candidate varieties for release of selected crops not mandated for NPTs, namely: onion; pepper; and tomato Developed crop protocols for NPT and DUS testing for sunflower, cassava and potato, and onion, pepper, and tomato for harmonization with international standards
Output 3.3	Solutions to systemic problems identified and promoted
Results	<ul style="list-style-type: none"> Identified and proposed solutions to several systemic problems pertaining to seed sector governance – both coordination and regulation – and in the provision of seed regulatory services Mobilized private sector to participate in variety release and phytosanitary service provision pilots Initiated research for development of new variety testing and registration procedures for HTPS in collaboration with Holleta ARC using a candidate variety of Solynta

g. Unintended positive and negative effects of the intervention

Unintended Positive Effects

- Due to our strategic positioning, institutional history in the seed sector, networks, and reputation, we were asked to explore the potential contribution of the Partnership to communities in conflict- and drought-affected areas. Accordingly, we have proposed plans for expansion in programme scope and geography and a subsidy amendment is being considered by EKN.
- Whilst our internship programme aims at equipping young graduates with on-the-job experience and skills required of professionals in the seed sector, offers of permanent employment were an obvious desired outcome. However, several interns have turned down such offers from employers to pursue their own enterprise. We had not anticipated entrepreneurship as a spin-off of internship but are delighted to see it in its fledging stage. In 2024, we will establish another facility to incubate youth enterprise in the seed sector (see Output 2.2: Young men and women enrolled in internships).

Unintended Negative Effects

Expectations of the subcontracts with international breeding companies have always been difficult to manage. From the start, we were encouraged to drive high ambitions for these projects and enforce strict conditions on their eligibility for subsidy. But what we failed to predict or overcome is chronic shortages in the availability of foreign currency. Without hard currency in the hands of local distributors, vegetable seed imports are stagnating, and this threatens the companies' ability to achieve our inflated targets. We are in the process of reviewing all subcontracts and if necessary, amending plans to avoid issue in the control of these agreements.

h. Progress on cross-cutting topics: gender; youth; nutrition; and climate

Gender and youth

In 2022, we launched the female business incubator to be more inclusive of women entrepreneurs, given that only one out of the 10 domestic seed businesses selected for our accelerator programme is female-led. Six women have now graduated from the incubator after receiving training and coaching on business model development, market access strategies, financial literacy, and business pitching and presentation skills. Through experience sharing with bigger companies, the six women have gotten to know new and innovative technologies from their visits and grown their networks. We organized a competition for the women to pitch their value propositions to a panel of three judges. The winner was awarded €3,000 to invest in her business as a prize for the best pitch. The incubator training programme received an average evaluation of 9/10 by our first batch of participating women. They have also all improved their self-evaluation from 3 to 5/5.

We are trying hard to achieve gender-parity among youth in our education and employment activities. Whilst awarding three research grants exclusively to women and placing 14 female graduates in internships in 2023, current female participation in these activities has reached ~40%. We have not changed our strategy but will intensify efforts to attract women to our calls for scholarship, research grants, and internships, working with universities' gender offices and female alumni of the programme.

Nutrition

Our strategy is nutrition sensitive in that we target diversification in crop and variety portfolios. We assume that increased diversity in production results in increased diversity in consumption, and do not work on behavioural change for nutrition outcomes, apart from what is planned for our projects in selected value chains. To this end, diversity was a criterion in the selection of the 10 domestic seed businesses. Nine of them (the tenth is expected to harvest her first yields in 2024), multiplied seed of 25 varieties of seven different crop types in 2023. Six new vegetable varieties were introduced to the country through collaboration with international breeding companies. And trials were conducted on sunflower and forages to select improved varieties for animal feed. Animal protein is important for human nutrition in Ethiopia.

Climate

Our strategy for climate change adaptation focuses on enhancing plant genetic diversity and expanding the range of crops and varieties for which high-quality seed is available. In addition, subcontracted international companies will reach tens-of-thousands of farmers through demonstrations and farmer training on SAPs. In 2023, we began this effort (see Output 2.3: Uptake of sustainable production practices increased). To date, 9,809 farmers have obtained knowledge and skills of *more* sustainable horticultural practices.

6 Visibility

- Various communication channels, including our website², quarterly newsletter, social media, and other written outputs, are used to provide information to stakeholders, partners, and the public. Both printed and electronic copies are disseminated depending on the purpose.
- The success story of ENSP-supported interns has been captured in a short video³, highlighting the efforts to involve young professionals in the seed sector. The video showcases our support provided to interns and how it has led to employment and entrepreneurship opportunities. The story serves as an inspiration to new interns, demonstrating the impact and value of the internship programme.
- News stories of major activities and lessons learned have been shared via our Facebook, Twitter, and LinkedIn accounts. Electronic copies of all communication items are stored on our website.
- The 3rd, 4th, 5th, and 6th issues of the ENSP newsletter were published and shared with more than 1,100 recipients in our Mailchimp register. Soft copies were posted on our website and social media, and 100 copies of each issue were printed and distributed at face-to-face events.
- Other print media items like brochures, leaflets, banners, roll-ups, and stickers were prepared.

² www.ensp-seed.org

³ <https://ensp-seed.org/2024/01/04/the-ensp-internship-program-progressing-well-with-a-strong-track-record-of-success/>

- Documentation is an integral part of any project, as it allows for the preservation of key information and provides evidence of the efforts made. Pictures and footage from events and activities implemented by ENSP have been documented and archived to provide a historical record of progress. Documents are stored on cloud services and an external hard drive.

Website and social media analytics

The ENSP website has seen a significant rise in traffic, with 5,321 visitors and 10,378 visits over 26 posts until December 31st, 2023. The international reach of the website is evident from visitors coming from various parts of the world, including the Netherlands, USA, Germany, France, and others. This demonstrates the broad appeal and relevance of the content to a diverse global audience.

Similarly, the ENSP LinkedIn page has been successful in attracting attention, with over 2,153 followers. The page has been active in 2023, posting more than 45 pieces of content, including publications, newsletters, images, videos, and updates about ENSP and its partners' activities. The engagement level is impressive, with over 85,000 impressions on these posts, indicating a strong level of interest and interaction from the audience.

7 Sustainability

i. Measures to enhance programme sustainability

Our approach to seed sector development is rooted in food systems thinking, considering the complex interplay of socio-economic and environmental drivers with activities in the seed sector. We recognize the interconnectedness of seed production, value addition and distribution, and utilization, and the importance of creating an enabling environment for the seed sector. Our strategy involves integrated interventions at multiple levels, informed by systems analysis and aimed at addressing systemic problems. By promoting systems action and governance, we seek to build the necessary social capital for impactful and sustainable change. This approach allows us to contribute meaningfully to food security, nutrition, and broader socio-economic and environmental outcomes.

As part of our ongoing efforts to strengthen institutional development in Ethiopia, we aim to enhance the value proposition of ESA to the sector. In this vein, we have focused on strengthening the capacity of the secretariat and helping it generate a sustainable business model. Through these efforts, ESA has been able to identify its members' demands, pilot new services, expand its member base, increase member contributions, and raise its visibility. This serves the Association well in becoming an important voice and service provider in the seed sector and taking over more responsibilities from ENSP in the years to come.

We are committed to supporting EAA in its efforts to serve the seed sector. By enhancing the capabilities of EAA, we aim to facilitate increased trade and investment in the country. As part of our effort, we have assigned experienced professionals to work with EAA, thereby strengthening the organization's human resources capacity to deliver high-quality services to the seed sector, and helped it to roll-out its services in variety testing and registration and phytosanitary control for the first time in its relatively short history.

j. Description of exit strategy (if applicable)

Our strategy relies on the implementation of all activities in collaboration with public institutions and partners in the private sector to ensure continuity and sustainability of initiatives. The approach allows us to leverage expertise and resources of various stakeholders, leading to more impactful and enduring outcomes. Working closely with public institutions, we align our efforts with government policy and priority to incorporate plans in broader development agendas. By engaging private sector, we unleash innovation and the capacity to bring it to scale. Our measures to enhance programme sustainability mentioned above exemplify the strategy.

8 Organizational development and human resources

- ENSP is fully staffed, and all intended partners are subcontracted. Our website provides the list and contact details of all staff members.
- In 2024, based on the needs of our staff expressed at our annual retreat in 2023, we will be facilitating a blended trajectory of face-to-face and online a/synchronous training on systems thinking and adaptive management.

9 Finance

Presented in a separate document.

Annex 1 Indicators and targets

No.	Indicator	FNS / PSD	2021	2022	2023	2024	Baseline	EOP target	Cumulative reach	% Reached	Notes
1	Number (#) of small-scale food producers purchasing quality seed at the end of the project	FNS 1.1	0	0	13,629		0	300,000	13,629	4.5%	By the time of writing, some seed had not yet been collected and processed. This is based on best provisional estimates
	female		0	0			0	100,000	0	0%	
	male		0	0			0	200,000	0	0%	
	<35 (youth)		0	0			0	100,000	0	0%	
2	Number (#) of small-scale food producers that progressively decrease the yield gap	FNS B.1.b	0	0	6,814		0	150,000	6,814	4.5%	provisional estimates
	female		0	0			0	50,000	0	0%	
	male		0	0			0	100,000	0	0%	
	<35 (youth)		0	0			0	50,000	0	0%	
3	Number (#) of jobs created in the seed sector	PSD 1b	0	0	165		0	2,000	165	8.25%	We await some international companies' reports of these data
	female		0	0			0	1,000	0	0%	
	male		0	0			0	1,000	0	0%	
	<35 (youth)		0	0			0	1,000	0	0%	
4	Percentage (%) of women seed entrepreneurs who perceive an increase in their access to financial services, entrepreneurship opportunities, managerial and leadership roles, and life-long learning		0	0	0		0	80	0	0%	Will be measured at end of project
5	Number (#) of improvements in seed policies/ laws/ regulations/ regulatory bodies/ solutions to systemic seed sector problems benefitting at least tens of thousands of small-scale food producers	FNS 4.1	0	8	8		0	12	16	133.33%	Directives including: variety release and registration; CoC; QDS; rejected seed; self and third-party seed certification; and illegal seed
6	Area under sustainable agricultural practices increased (ha)	FNS C.2 PSD 2c	0	0	3,850		0	48,000	3,850	8%	

No.	Indicator	FNS / PSD	2021	2022	2023	2024	Baseline	EOP target	Cumulative reach	% Reached	Notes
Private sector strengthened in its contribution to food, nutrition, and climate resilience											
7	Quantity of seed produced (MT) by domestic seed businesses		0	2,500	3,225		2,500	5,000	3,225	65%	Based on provisional estimates
8	Number (#) of women with improved entrepreneurship skills who have been empowered in starting a business		0	6	6		0	30	6	20%	Female business incubator started in 2022
	<35 (youth)		0	3	3		0	20	3	15%	
9	Number (#) of grants accessed and loan agreements signed by seed companies of a minimum of 10.000 USD		0	0	0		0	10	0	0%	Blended financial product still in design phase
10	Percentage (%) of ESA members that give a rating higher than 70% for satisfaction with ESA performance		0	30	50		0	70	50	71%	
11	Number (#) of value chains important for nutrition supported		0	2	2		0	4	2	50%	Animal feed and forages
Uptake of innovations and empowerment of young men and women increased											
12	Number (#) of FNS-relevant knowledge institutes that perform better and more gender transformatively	FNS 1.2	0	2	2		0	3	2	67%	Bahir Dar and Haramaya universities
13	Number (#) of men and women trained or educated by knowledge institutes in newly developed seed curricula and courses		7	15	3		0	42	25	59.5%	Still awaiting confirmation that all men and women are 35 years of age or younger
	female		0	6	3		0	21	9	43%	
	male		7	9	0		0	21	16	76%	
	<35 (youth)		0	0			0	42			
14	Number (#) of graduates enrolled in seed sector internships	PSD 1.f	0	17	36		0	100	53	53%	
	female		0	5	14		0	50	19	38%	
	male		0	12	22		0	50	34	68%	
	<35 (youth)		0				0	100			

No.	Indicator	FNS / PSD	2021	2022	2023	2024	Baseline	EOP target	Cumulative reach	% Reached	Notes
15	Number (#) of small-scale food producers trained on sustainable agricultural practices	PSD 2b	0	260	9,809		0	40,000	10,069	25%	Gender-disaggregation pending
	female		0	0			0	20,000			
	male		0	0			0	20,000			
	<35 (youth)		0	0			0	20,000			
16	Number (#) trainee farmers have adopted improved varieties	FNS 1.1	0	130	4,905		0	20,000	5,035	25%	
	female		0	0			0	10,000			
	male		0	0			0	10,000			
	<35 (youth)		0	0			0	10,000			
Enabling seed sector transformation											
17	Amount of money (Euro) invested by domestic businesses and international companies in seed production in Ethiopia	PSD 1d	0	11 m	2.8 m		0	23 m	13.8 m	60%	2.8 m in working capital of domestic seed businesses
18	Number (#) of seed regulatory bodies strengthened in capacity		0	4	4		4	5	4	80%	Amhara, Oromia, South, and federal
19	Number (#) of seed regulations improved		0	1	2		1	2	3	150%	

Annex 2 Risks and mitigation measures

Contextual risks

Risk	Risk assessment (Low/Medium/High) + motivation	Influence on outputs of activities	Mitigating measures taken
1. Conflict and incidences of theft, kidnapping, and violence reduces the safety and security of staff and partners to travel to the field	High: <ul style="list-style-type: none"> Armed conflict in certain areas is becoming common Incidences of theft, violence, and kidnappings are increasing This has negative consequences on safety and security of staff and partners The root causes of conflict and violence have not been dealt with 	Medium: <ul style="list-style-type: none"> Because of conflict, field visit to coach businesses in Amhara region was not possible Reduced frequency of EAA experts visit to DUS trial site to closely follow-up and get practical experience In Amhara and some parts of Oromia it was difficult to conduct on-site monitoring and coaching of interns Businesses were supposed to set up demo sites in Amhara but failed to do so In Oromia, businesses couldn't frequently follow-up and monitor their demos Seed field inspection by regulatory authorities in Amhara and some parts of Oromia was difficult It was difficult for some ESA members to travel and attend events organized by ESA and ENSP Planned experience exchange visit for ESA members and other stakeholders was not organized 	<ul style="list-style-type: none"> Remote assistance was provided to businesses through phone calls and other communication means (social media) Coached and monitored interns by phone call and email communication A monthly reporting system was designed, both for host organizations and interns, to assess the status of interns The subsequent batch of interns were assigned to host organizations where there is low security risk Some companies shifted demo sites to other more secure areas Companies assigned local interns or hired agronomists for demo and seed production sites where it was challenging to travel The regulatory authority in Amhara gave full responsibility to businesses to self-certify their seed
2. Lack of political will to implement reforms to encourage private investment in the sector	Low: <ul style="list-style-type: none"> Level of unwillingness depends on personalities of decision makers There is interest to control seed as political commodity There is issue of food sovereignty However, liberalization is enshrined in multiple policies Governance and the economy are trending in this direction for some time now Immense global forces of trade and financing reinforce current trends 	Medium: <ul style="list-style-type: none"> The government focused on implementing three-year production plan instead of reforming the seed sector Delay in finalizing regulation affected materialization of variety release and registration as stipulated in the new seed law 	<ul style="list-style-type: none"> Using the three-year implementation plan as entry point, establishment of national and regional seed committees was suggested to stir reforms Made continuous efforts in collaboration with others to put pressure on EAA finalization of the validated directive (variety release and registration)
3. Turnover of decision makers and allies in government	High: <ul style="list-style-type: none"> Staff turnover occurs frequently in government This has a disruptive effect on continuity The root causes of high turnover rates have not been dealt with 	Low: <p>Fortunately, turnover of decision makers in government institutions was not as high as expected and imposed little impact on our output</p>	N/A

Risk	Risk assessment (Low/Medium/High) + motivation	Influence on outputs of activities	Mitigating measures taken
4. Lack of interest from international companies to invest in Ethiopia	Medium: <ul style="list-style-type: none"> • Safety and security are of great concern to foreign investors • Bureaucracy, inefficiency, and corruption are increasingly discouraging • But Ethiopia has good agro-ecology to produce vegetable seed that will attract more companies 	Low: <ul style="list-style-type: none"> • Despite prevailing conditions, international companies' efforts have not decreased • Domestic seed businesses' investment locally is of even greater importance to the Partnership 	N/A
5. Forex reserves remain seriously constrained	Medium: <ul style="list-style-type: none"> • Ethiopia has a large trade deficit • Ethiopia relies on the importation of many basic food items • However, Ethiopia aims to increase exports and substitute imports with local production 	High: <ul style="list-style-type: none"> • Forex is extremely hard to come by • Local distributors and traders have little alternative than to turn to informal sources of hard currency, which offer high exchange rates and raise the price of imported products • Outputs of international companies have been kept in check by their limited potential to grow sales and distribution at the moment 	<ul style="list-style-type: none"> • Presented evidence to the government to enforce quotas for forex allocation and prioritize vegetable seed importers, but shortages are across the board • Requested permission to use forex earnings of SWR Ethiopia's bank, Bunna International, for allocating letters of credit to local distributors, but national bank regulation isn't flexible enough for this

Programme risks

Risk	Risk assessment (Low/Medium/High) + motivation	Influence on outputs of activity	Mitigating measures
1. Domestic seed businesses cannot access sufficient quality early-generation seed	Medium: <ul style="list-style-type: none"> • Unclear mandates, poor task division, and limited capacity result in shortages of EGS • Priority is given to maintenance and multiplication of widely-adapted varieties sought by public seed enterprises • Private sector is disadvantaged in accessing EGS (public seed enterprises get first pick) 	Low: <ul style="list-style-type: none"> • Some businesses produced C2 from the C1 they had carried over • Some shifted to becoming outgrowers of others 	N/A
2. Formal financial institutes are not convinced to make credit available to domestic seed businesses	Medium: <ul style="list-style-type: none"> • Agriculture is riskier business for credit providers than certain other sectors • Most small-scale seed business do not have collateral to get credit access • But collateral guarantee systems, new financial product development, and political support are expanding access to credit 	Medium: <ul style="list-style-type: none"> • Seed businesses couldn't increase their working capital • Some couldn't collect the seed produced by outgrowers • Some were forced to access credit informally at high interest rates 	Designed a concept blended financial product and are in consultations with commercial banks to collaborate in its implementation

Risk	Risk assessment (Low/Medium/High) + motivation	Influence on outputs of activity	Mitigating measures
3. Sourcing companies and off-takers are unwilling to enter into agreements with seed producers and/or farmers	Medium: <ul style="list-style-type: none"> Contract farming is poorly practiced and enforced as there was no legal framework in the past Default and side selling are common Relationships and trust need building, which takes time Business cases are not always clearly defined and communicated However, demand for products and competition are increasing Moreover, legal framework was also recently developed regarding contract farming 	Medium: <ul style="list-style-type: none"> Neither Alema Koudijs Feed PLC nor Senselet Food Processing PLC agree to contract sunflower producers for their yields at an attractive price Sunflower producers are disappointed in OPVs in terms of costs and benefits The animal feed value chain project is facing difficulties in generating a stronger business case 	<ul style="list-style-type: none"> Conducted cost-benefit analyses on trialled OPVs Approached oil processing company for participation in the project Identified registered hybrid varieties and their owners for inclusion in trials in 2024
4. Human resources capacity development is irrelevant for the seed sector	Medium: <ul style="list-style-type: none"> Skilled human resources are an essential part of a professional seed sector The uptake of sustainable agricultural practices demands skilled labour in agronomy Seed-related curricula and courses are few But universities and ATVETs do offer education and training 	Medium: Change in regulation of higher institution admissions affected number of students that enrolled	Tendered financial support to short-term training programme development to respond competency gaps in the seed sector
5. Employment in the seed sector attracts little interest from youth	Low: <ul style="list-style-type: none"> Arguably, there are other sectors with more attractive incentives for employment Traditionally, employment has focused on seed production, which requires in-depth technical know-how and field experience However, as seed business and marketing develop, private investment and demand for diverse expertise increases 	Low: <ul style="list-style-type: none"> There are sufficient applicants for internship Employers prefer more experienced professionals Fresh graduates have limited chance of being hired in any case 	N/A

Risk	Risk assessment (Low/Medium/High) + motivation	Influence on outputs of activity	Mitigating measures
6. Organizations in the seed sector are not interested to host internships	Low: <ul style="list-style-type: none"> Organizations are in need of capacity and interested to meet young talent International companies have already expressed great interest to host interns With financial support from the programme, local organizations have expressed the same 	Medium: Many organizations face capital constraints in employing new personnel, even at the modest cost of the stipends for interns	Fully subsidized the stipends of interns at local capital-constrained host organizations facing capacity needs
7. Education, training, and employment in the seed sector attracts little interest from women	Low: <ul style="list-style-type: none"> Arguably, agriculture and seed are male dominated disciplines Traditionally, employment has focused on seed production, which requires in-depth technical know-how and field experience However, as seed business and marketing develop, private investment and demand for diverse expertise increases 	Medium: <ul style="list-style-type: none"> Opportunities for education, training, and employment for women are equal (50%) However, a smaller number of women apply and qualify for sponsorship 	<ul style="list-style-type: none"> Targeted women through exclusive call for applications for research grants Accessed female-oriented networks for communication Preference was given for female applicants during placement and permanent employment of interns
8. Promoted sustainable agricultural practices are not gender responsive	Medium: <ul style="list-style-type: none"> Task division in agriculture and seed is gendered It is possible that a trade off exists between environmental and socio-economic outcomes when it comes to agronomy Practices that are environmentally sustainable may be disproportionately hard for women to adopt 	Medium: <ul style="list-style-type: none"> Limited role of women in commercial vegetable production hinders their intended participation The number of female-headed households in most of the intervention areas of the companies is low 	<ul style="list-style-type: none"> Organized couples training sessions to increase women's participation Encouraged female-headed households to host demo sites of possible SAPs

Risk	Risk assessment (Low/Medium/High) + motivation	Influence on outputs of activity	Mitigating measures
9. Possibility for layering seed, gender, nutrition, and climate interventions is low	Medium: <ul style="list-style-type: none">Whilst existence of these interventions is not limited, coordinating with organizations can be challengingDevelopment organizations have strong internal accountability mechanisms that create hurdles to adaptive managementMulti-stakeholder platforms are not always facilitated effectively for increasing collaborationHowever, we will be facilitating a number of these with this specific interest in mind	Low: Efforts to engage gender, nutrition, and climate-focussed interventions in collaboration have been limited to date	N/A

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Wageningen Centre for Development Innovation supports value creation by strengthening capacities for sustainable development. As the international expertise and capacity building institute of Wageningen University & Research we bring knowledge into action, with the aim to explore the potential of nature to improve the quality of life. With approximately 30 locations, 7,200 members (6,400 fte) of staff and 13,200 students, Wageningen University & Research is a world leader in its domain. An integral way of working, and cooperation between the exact sciences and the technological and social disciplines are key to its approach.
