

Resilient Agriculture for Inclusive and Sustainable Ethiopian food systems - RAISE-FS

Resilient, inclusive and sustainable food systems in Ethiopia

Annual report 2021/22

RAISE-FS
Resilient Agriculture for Inclusive and Sustainable Ethiopian Food Systems

WAGENINGEN
UNIVERSITY & RESEARCH

Wageningen Centre for Development Innovation
Wageningen, April 2023
Report WCDI-23-257

Contents

1	Summary Sheet	3
2	Executive summary	3
3	Introduction	5
4	Progress towards outcomes	6
5	What have we learned	13
6	Sustainability	13
7	Institutional/Organizational development and human resources	14
8	Finance	14
Annex 1	**Indicators and targets**	**15**
Annex 2	**Risk & mitigation strategies**	**16**

Photo cover: Andualem Tadesse

This report can be downloaded for free at https://doi.org/10.18174/590821 or at www.wur.eu/wcdi (under knowledge products).

The Wageningen Centre for Development Innovation uses a Creative Commons Attribution 4.0 (Netherlands) license for its reports. To view a copy of this license, visit https://creativecommons.org/licenses/by-nc/4.0/



©2023 Wageningen Centre for Development Innovation, part of the Stichting Wageningen Research. www.wur.eu/cdi

1 Summary Sheet

Programme title	Resilient Agriculture for Inclusive and Sustainable Ethiopian food systems (RAISE-FS).
Vision	The vision of RAISE-FS is more resilient, inclusive and sustainable food systems in Ethiopia.
Impact	The overall impact of RAISE-FS is increased productivity, enhanced value chain performance and improved human nutrition for improved food security while minimizing the impact on the environment and ensuring social inclusion.
Goal	Creating evidence for practices that contribute to transformation of the food system by addressing leverage points in relation to productivity, enhanced value chain performance and improved human nutrition for improved food security while minimizing the impact on the environment and ensuring social inclusion.
Country	Ethiopia
Programme duration	4 years (September 2021–December 2025)
Contract holder	Stichting Wageningen Research, Wageningen University & Research P.O. Box 88, 6700 AB Wageningen, The Netherlands
Main implementing parties	Wageningen Research Wageningen University & Research c/o P.O. Box 88 6700 AB Wageningen The Netherlands
Contact Ethiopia	Dr. Dawit Alemu Stichting Wageningen Research Ethiopia E-mail: dawit.alemu@wur.nl Phone: +251 911629149
Contact Netherlands	Dr. Irene Koomen Wageningen Centre for Development Innovation E-mail: irene.koomen@wur.nl Phone: +31 623204301
Budget	Total budget: € 12,000,000

2 Executive summary

a. Key achievements

For the three food system typologies (food insecure, high potential and commercial) on all regions, Amhara, Oromia and SNNP & Sidama, a baseline and a rapid food system appraisal was done. In addition, scoping studies e.g. gender, youth, nutrition, at national level and testing/validation and demonstration of innovations at regional level were carried out. Together with implementing partners, engagement took place with relevant stakeholders and policy makers including active participation in drafting of proclamation for national pluralistic agricultural extension, preparation of M&E system for the national food system roadmap implementation, coordination system for national seed system, and facilitation of different stakeholder platforms (pulses, spices, oilseeds, poultry, food safety etc). Different communication products were produced including regular updating of the project website, publication of quarterly newsletters, sharing updates through social media, and other written communication outputs.

b. Lessons learned

- Closer collaboration with implementing and scaling partners plays an important role in effective implementation of the planned activities.
- Partner institutions showed strong interest and willingness to learn more about the food system approach being followed by the RAISE-FS project and to incorporate lessons into their research and development agenda. Capacitating the partner institutions in food system approach is therefore important for a better uptake of the approach by the local institutions.
- It was observed that engaging women and youth in income generation activities should be supplemented with activities that can bring mind-set change towards entrepreneurship.
- Family approach (engaging family members in project interventions like trainings, cooking demonstrations etc. can contribute to improve household gender relations.
- An innovation that has a meaningful benefit to the smallholder food producers can easily be taken up. As an example, some of the home garden innovations are being taken up by the non- participating farmers in just the first year of the project.
- There are needs for context specific sustainable practices to close the yield gaps, which still widely exist despite previous many efforts.
- The lessons learned during the review and planning workshops, backstopping and discussion with stakeholders including farmers during baseline study, food system appraisal and implementation.
- Baseline study and rapid food system appraisal was conducted in nine intervention woredas of the project representing commercial, high potential and food insecure food system typologies in the four regions (Amhara, Oromia, Sidama and SNNP) of Ethiopia. The baseline study generated quantitative data to basis for measuring or evaluating performance of the project while rapid food system appraisal generated qualitative information on constraints and opportunities for improvement of food systems, which is useful for bottom-up planning.
- The numbers for reach are low in comparison with the total targets (see Annex) because of the delay in signing project agreement with implementing partners, which resulted in delayed planning and implementation of only limited number of interventions. Budget transfer to partner institutions was also a problem in 2022 due to political instability in the country. In addition, many of the interventions were validation/testing activities that involve by its nature fewer number of food producers. Larger number of beneficiaries/ small scale food producers will be reached with further promotion through the scaling partners.
- The diverse targeted activities for each of the food systems still require refinement to ensure the validation of the similarity or difference in intervention options to transform the three food systems identified.
- The project will engage with implementing partners considering their specific needs, capacity and work culture and capacity building will take into consideration based on priority.

c. Main steering implications for the next reporting period

- Timely work plan preparation and budget transfer to the implementing partners to execute the planned activities.
- Ensuring the refinement of the planned activities considering the specificities of the three food systems and emerging opportunities and challenges.
- Improved data collection and process documentation strategy will be followed.
- Timely monitoring and backstopping will be provided to the experts of implementing partners involved in conducting project activities.
- The project will strengthen working conditions with scaling partners to reach larger number of beneficiaries; in 2022 the project worked more closely with implementing partners.

3 Introduction

a. Description of programme and intervention strategy

The vision of the Resilient Agriculture for Inclusive and Sustainable Ethiopian food systems (RAISE-FS) project is more resilient, inclusive and sustainable food systems in Ethiopia.

- Resilient to biophysical and economic shocks
- Inclusive of women, youth, smallholders, low-income communities and marginalized groups
- Sustainable environmentally, socially and economically

The overall impact of RAISE-FS is increased productivity, enhanced value chain performance and improved human nutrition for improved food security while minimizing the impact on the environment and ensuring social inclusion. An additional impact and a spin-off of the implementation modality is that the research capacity in food system transformation at Universities and ARIs will be strengthened.

The goal of RAISE-FS is creating evidence for practices that contribute to transformation of the food system by addressing leverage points in relation to productivity, enhanced value chain performance and improved human nutrition for improved food security while minimizing the impact on the environment and ensuring social inclusion.

Five outcomes contribute to the above:

i. Social and economic empowerment of women and youth in food systems
ii. Efficient and environmentally sustainable production
iii. Sector performance and value chains
iv. Availability of safe and nutritious foods
v. Enabling environment for systems change

It will do this by generating evidence for scaling up through research for food system transformation (R4FST).

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

Given the main target of the project related with research for food system transformation through demonstration of scalable innovations in the area of policy, practices and institutions, the 2022 implementation faced diverse challenges. These were (i) delayed start of the implementation of the project activities that limited the coverage of potential innovative activities, and (ii) the relationship with implementing partners esp. in the financial management system. Accordingly, different measures were taken to address these challenges, among which the most important ones are (i) detail planning of activities with all implementing partners with due focus on national and regional level potential innovations. Thus, there was further refinement of planned activities for each of the food systems to ensure the demonstration of the similarity or difference of the intervention options to transform the different food systems, (ii) engagement with EKN to re. the financial management system.

c. Relevant contextual changes and their potential impact

- The situation in Tigray is stabilizing, as such it would be opportune to start activities with the partners there in the second half of 2023.
- Instability and violence in some of the intervention areas have resulted in a slow start or abandoning of activities.
- The original arrangement of sub-grant contractual arrangement with implementing partners had to be revised because of the war in Tigray. As such funds for partners became available late and at times were not sufficient to execute all activities as planned.

4 Progress towards outcomes

a. Progress towards our outcomes

There are five outcome areas being addressed, (i) social and economic empowerment of women and youth, (ii) efficient and sustainable agricultural production, (iii) sector performance and value chains, (iv) safe and nutritious food and (v) enabling environment. A baseline and a rapid food system appraisal as well as scoping studies at national level and testing/validation and demonstration of innovations in the three food system typologies (food insecure, high potential and commercial) were undertaken in Amhara, Oromia and SNNP & Sidama. Below a summarized progress of the outcomes is presented, a detailed narrative report is uploaded in IATI and can be found on the RAISE-FS website.

Social and economic empowerment of women and youth in food systems

This outcome consists of two intermediate outcomes: i) Increased women's and youth's decision-making in agriculture and ii) increased income for women and youth in the food system. A scoping study at national level was conducted and existing platforms that focus on gender and youth agenda within the agriculture context have been mapped and gaps identified. Tools and approaches that helped organizations to institutionalize gender in their policies, programs and projects and gender transformative approaches and tools that promote positive gender relations and transform negative social norms and structures contributing to gender inequality in the agriculture sector were identified. The findings from the scoping study were validated through stakeholders' workshop during which it was agreed about the necessity to conduct a further study on existing gender transformative approaches and strengthen the evidence base on the uptake, effectiveness, scalability and impact of gender transformative approaches in the agriculture sector was identified.

The overall progress is summarized in Table 1.

Table 1 Progress Social and economic empowerment of women and youth

Outcome 1	Social and economic empowerment of women and youth increased
Intermediary outcome 1.1	Increased women's and youth's decision-making in agriculture
Results	• A scoping study was conducted to map gender and youth focused initiatives, approaches, platforms and challenges in the agriculture sector; the results were validated during a stakeholder workshop and collaboration modalities identified. • Lessons from the past activities of other stakeholders are identified to inform future actions and interventions. • At the household level, the project employed a family inclusive approach in all its interventions to improve the decision-making role of women. • Women and youth participated as host and learning farmers in all experiments under the project. • In participatory technology evaluation (PTE) process, women were encouraged to select their preferred crop varieties in women only groups.
Intermediary outcome 1.2	Increased income for women and youth in the food system
Results	• Income generating initiatives that benefit women and young people in rural areas were identified through a scoping study • Pilots on poultry and small ruminants (sheep and goat), vegetable (shallot and carrot) seed production, and vegetable production are underway to create income opportunities for women and youth. • Linkage of women and youth with Rural Saving and Credit Cooperatives (RUSACCOs), which involves voluntary saving, is being undertaken for sustainability of the business. • Trainings on gender and social inclusion were provided to teams drawn from partner organizations.

Efficient and environmentally sustainable production

There are three intermediate outcomes under this outcome: i) efficient and sustainable production system enhanced, ii) improved input supply chain systems, and iii) strategic planning for agricultural development improved. Interventions were undertaken across the three food system typologies in the three food system typologies (commercial, high potential and food insecure) in the regions (Amhara, Oromia, SNNPR) in 2022 to address the outcome. Progress is summarized in Table 2.

Table 2 Progress Efficient and environmentally sustainable production

Outcome 2	Efficient and environmentally sustainable production increased
Intermediary outcome 2.1	Efficient and sustainable production system enhanced
Results	• Fifteen sustainable agricultural practices were validated/demonstrated in 2022. • Sesame improved varieties and agronomic practices were validated through participatory technology evaluation (PTE) which resulted in selection of Setit-1 variety with crop management practices. • Legume crops (soya bean, faba bean, common bean & lentil) were validated using sustainable practices (improved varieties, agronomic practices, bio-fertilizers and integrated pest management) and farmers selected varieties with the practices as follows: Afgat for soya bean, Gabalcho and Tumsa for faba bean, SER-125 for common bean and Beredu and Furi for lentil. • Potatoes were validated using improved agronomic practices like timely land preparation, row planting, better field management, integrated pest management including use of clean potato seed. Yield advantage of 90% was obtained (40t ha^{-1} from sustainable practices with 21t ha^{-1} from farmers' practices who used old generation tuber seeds of the same variety). • Integrated soil fertility management (ISFM) with 50% per hectare recommended inorganic fertilizer and 2 t organic fertilizer per hectare showed 37.6% yield advantage over the farmer's practice on potato (Gudene variety). • Intercropping of cereals with legumes (maize with common bean and sorghum with mung bean) was evaluated by farmers as innovation for soil fertility improvement and enhanced household access to nutrition dense food option. • RAISE-FS organized and facilitated a stakeholder's workshop on revitalization of ginger production and two key intervention areas, better production practices including IPM and strategic and policy related bottlenecks, were identified and to be addressed to revitalize ginger production.

Sector performance and value chains

Sector performance and value chains outcome consists of four intermediate outcomes: i) improved sector competitiveness; ii) market linkages created; access to market information improved; iii) innovation and technology transfer in subsectors enhanced; and iv) access to finance enhanced (inclusive to youth and women). The progress made in 2022 is summarized in Table 3.

Table 3 Progress Sector performance and value chains

Outcome 3	Sector performance and value chains enhanced
Intermediary outcome 3.1	Improved sector competitiveness
Results	• An assessment of the effects of the poultry disease outbreak and development of a disease control system was made around Bishoftu area. It was seen that the biggest loss experienced by farms was the forced disposal of eggs, chicks and chickens. o High cost of poultry farm insurance and lack of coordination with public actors were raised as aggravating factors for such outbreaks and poor sub-sector performance as a whole by stakeholders at the validation workshop. o Major recommendations given and validated were: development of farms database; awareness creation to farms; strengthening the quarantine system; continuous dialogue between the private and public sectors; implementation of a disease control strategy by Ministry of Agriculture and regional bureaus; system development on updating upcoming diseases; assessing disease outbreak trend and benchmark management mechanisms and attention should be given on farm waste management systems. • A rapid assessment of the overall status of poultry value chain actors in Amhara, Oromia and South was undertaken involving 81 respondents. The major gaps were identified as disease prevalence, lack of and efficacy of vaccines, access to Day-old chicks for small farms, lack of access to foreign currency for parent stock import, feed price, quality and availability challenge, and lack of regulation on feed standards. • The value chain of sesame and soya bean have been assessed and was found that farmers face challenges such as water logging, high production cost, disease and insects, lack of and high price of inputs (fertilizer, chemicals, improved seeds), wind problem, untimely rain (during harvest), shortage and high cost of tractors and labour, declining productivity and crop demanding attention. The marketing challenges of medium and large-scale farms are poor market linkages for inputs and outputs, lack of alternative market opportunities, regulation on only selling to buyers in the same kebele, only traders setting price and dropping price for soybean. • Private sectors platform meeting were facilitated on spices, herbs and aromatics in collaboration with the Ethiopian Spices Aromatic and Herbs Growers and Processors Association (ESAHGPA) and a multi-stakeholder meeting on pulses and oilseeds and leverage points for interventions were discussed.
Intermediary outcome 3.2	Market linkages created; access to market information improved
Results	• The project facilitated the development of contract farming Directive and guideline in partnership with the Ministry of Agriculture • Conducted business model development for the edible oil sector in Amhara.
Intermediary outcome 3.3	Innovation and technology transfer in subsectors enhanced
Results	• Innovation fund launched and proposals are being screened. • A post-harvest technologies assessment and business model proposition whereby the ground level situation analysis was done in all regions.
Intermediary outcome 3.4	Access to finance enhanced
Results	• An assessment on profiling access to finance available for agriculture actors was conducted. • A business model on availing financial access is being piloted in Angot *woreda* of Amhara region fostering a partnership with Bisrat Rural Savings and Credit Cooperatives Union (RUSACCO Union).

Availability of safe and nutritious foods

Availability of safe and nutritious foods outcome consisted of three intermediate outcomes: i) increased availability of nutrient-dense food, ii) increased utilization of safe and nutrient-dense foods, and iii) the national food safety system is strengthened. A scoping study on nutrition was conducted, stakeholders were mapped and challenges in nutrition were identified, and the findings were validated during stakeholder workshop. Several nutrition sensitive agriculture interventions were piloted. The summary of progress made in 2022 is given in the Table 4.

Table 4 Progress Availability of safe and nutritious foods

Outcome 4	Availability of safe and nutritious foods increased
Intermediary outcome 4.1	Increased availability of nutrient-dense food
Results	• A scoping study was conducted on nutrition showing that interventions on nutrition sensitive agriculture (NSA) help availability of nutrient-dense foods. Experience of BENEFIT projects was also used to design interventions. • Different nutrition dense crops (common bean, mung bean, soya bean, lentil, faba bean, sesame and groundnut) were piloted, focusing on both production for own consumption and for increased incomes, which can be used to improve diets. • Cooking demonstration sessions were organized for newly introduced nutrient dense pulse crops (mung bean and common bean) as a package of innovation. • Year-round production and consumption of nutrient dense vegetable home gardening innovation were piloted for household consumption in food insecure and high potential food systems to improve availability of vegetables and fruits (Amaranths, carrot, Swiss card, head cabbage, Ethiopian kale, Beet root, Chinese cabbage, Pak Choi, squash, broccoli, and papaya). • Production of local vegetable (shallot and carrot) seed is initiated.
Intermediary outcome 4.2	Increased utilization of safe and nutrient-dense foods
Results	• Mixed interpersonal communication and community mobilization approaches were undertaken in areas where home gardening interventions were being promoted. • Nutrition education sessions were organized in three woredas for host home gardeners (both husbands and wives), DAs, health extension workers and woreda agriculture experts. • Field day and cooking demonstration sessions were organized for farmers and other stakeholders in the food insecure and high potential food system. • Barriers and enablers of soya bean consumption were identified in the commercial food system (West Armachiho) through surveying and will be addressed in the coming project years.
Intermediary outcome 4.3	The national food safety system is strengthened
Results	• A food safety system assessment, based on FAO/WHO Guidelines along the five pillars of the food control system, was conducted, focusing on the priority commodities (poultry, pulses potato, oil seeds and spices). the findings were validated during stakeholder workshop. • An assessment of mycotoxin prevalence and possible risk factors for contamination has been started at Bahir Dar University, looking at soya bean, red pepper, and sesame value chains. • Facilitated the establishment and operationalization of a food safety technical working group composed of experts from MoA, AAU, Agriculture Authority, EFDA, EPHI, EAIR, ECX, ECA, ENAO and the private sector. • A five-day training on nutrition sensitive agriculture (NSA) and an overview of Ethiopian food based dietary diversity was given in collaboration with MoA.

Enabling environment for systems change

There are three intermediate outcomes under the enabling environment for systems change outcome. These are: i) Bottlenecks in policy and its implementation addressed, ii) Organizational and institutional capacities strengthened, and iii) Collaboration and alignment among stakeholders enhanced. The progress made in 2022 is summarized in Table 5.

Table 5 Progress Enabling environment for system change

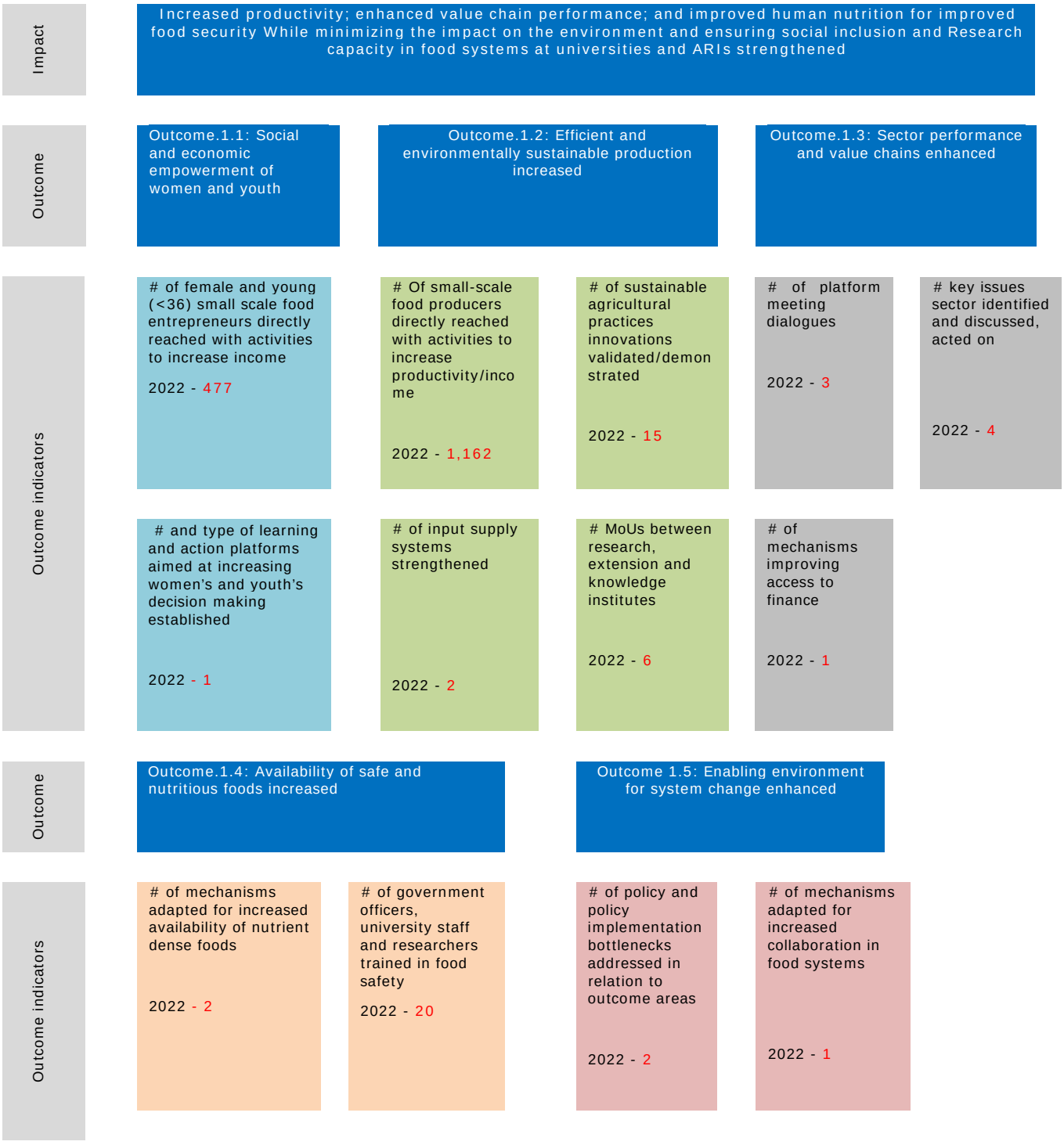
Outcome 5	Enabling environment for system change enhanced
Intermediary outcome 5.1	Bottlenecks in policy and its implementation addressed
Results	• A stakeholder analysis was conducted to position the RAISE-FS project in the agricultural research for the development landscape of Ethiopia. • Supported preparation of pluralistic extension proclamation and directives. • Played a leadership role in the operation of the national seed advisory group of the MoA. • Actively engaged in different Technical committees and Taskforces of the RED&FS. • Stakeholder workshops were organized to strengthen potato seed system and address challenges faced ginger production. • A background paper developed to ensure proper targeting of project participants and promote social inclusion. • Contributed to the design of the draft proclamation and directives on contract farming. • Woreda profiles, with rapid food system appraisal, were developed for the project target woredas. • Contributed to the preparation of Ethiopian food system roadmap (crafted interventions and activities, translated Ethiopian food system roadmap to local language (Amharic).
Intermediary outcome 5.2	Organizational and institutional capacities strengthened
Results	• Organized nutrition-sensitive agriculture (NSA) and gender and social inclusion training workshops for professionals drawn from implementing partner institutions.
Intermediary outcome 5.3	Collaboration and alignment among stakeholders enhanced
Results	• The annual plan validation workshops, data collection activities, and validation meetings brought together various food system stakeholders at different levels and allowed for discussions. • Collaboration initiative made with two stakeholders in the reporting period: The World Vegetable Center and Selco foundation India partner in Ethiopia called PRECISE. • Work modalities put in place to ensure collaboration and alignment with relevant stakeholders mainly with ATI, SNV, GiZ etc.

Monitoring, Evaluation, Learning & Communication

A baseline study was done in 9 woredas, 1 for food insecure, high potential and commercials woreda for each of the regions. The main objective of the baseline study was to collect reliable data that help to estimate the current value of the Key Performance Indicators identified for each of the project outcome areas.

The total reach for 2021/22 (Table 6, Annex 1) was limited due to the delay in starting field-based activities. In addition, many of the interventions were validation or testing activities that involve by its nature fewer number of food producers. Larger number of beneficiaries/ small scale food producers will be reached with further promotion through the scaling partners.

Table 6 Key performance indicators 2022



A number of news items & letters and reports have been published, these can be accessed through the website https://raise-fs.org. A short video has been produced on the most significant change story of soya bean innovation in commercial food system oriented woredas of West Gondar zone. A photo story about home gardening for year-round vegetable production was also produced.

b. Unintended positive and negative effects of the intervention

Unintended Positive Effects

- A request came to support the Ethiopian Food System Roadmap team with developing their M&E framework.
- Parts of the home gardening practices have been replicated by some non-participating farmers in the first year of implementation.
- After looking at the performance of best fit practices tested, some farmers expressed their willingness to pay for the improved seeds and fertilizers.
- Some partner institutions included gender and social inclusion approach in their research agenda. Although this is expected in the process of project implementation, this uptake is observed so quickly.
- Linked with evidence generated and interventions, there was active participation in the drafting of a national proclamation for pluralistic agricultural extension;
- The effort in aligning the project activities has created the opportunity to mainstream some of the evidence generated in different public strategic and policy documents as well as an advisory role by various of the staff.

Unintended Negative Effects

- Innovations tested in Angot woreda were damaged by frost; crops like food oat expected to be resistant to frost were also severely affected.
- Some farmers sold much of the vegetables they produced in search of income rather than diversifying their diets.
- Bottom-up planning through rapid food system, which was appreciated by the local stakeholders, attracted more demand on the project following participatory identification of opportunities and constraints. For example, farmers in drought prone areas of the project implementation areas repeatedly ask support from the project on small scale irrigation development, which is beyond the scope of the project.
- The request by the stakeholders for professional support from the project increased workload on project staff.
- Some partner institutions requested the project to work in more woredas and address more beneficiaries through scaling. However, through discussion role of the project, which is testing and validation of evidence, was made clear.

c. Programme visibility

- Various publications, such as briefs, working papers and reports are shared with stakeholders.
- One staff member spends 50% of his time at the MoA and engages in multiple and relevant trajectories.
- Presence of RAISE-FS staff at relevant meetings and workshop and participation in various technical committees.
- High level representation in different national platforms, executive boards, and advisory groups (RED&FS, Ethiopian Academy of Sciences, National Seed Advisory Group, National Food System Taskforce etc).
- Proactive networking with various government and non-government organizations to share experiences.
- The different stakeholder platforms (commodity specific – oilseed, pulses, poultry, spices, and others like fertilizer, seed, food safety etc) that the project facilitate are playing an important role in the visibility and impact of the project.
- Regular meetings of National Steering Committee and regional advisory boards to guide project activity implementation and possible scaling.
- Participated, together with ENSP, in the Power of Knowledge conference organized by KIT (https://www.kit.nl/the-power-of-knowledge/) and facilitated a dialogue session on multiple dimension of knowledge & power in Ethiopia
- A quarterly newsletter is shared with stakeholders and news posted on the website https://raise-fs.org.

5 What have we learned

- The partner institutions showed strong interest and willingness to learn more about the food system approach being followed by the RAISE-FS project and to incorporate lessons into their research and development agenda. Capacitating the partner institutions in food system approach is therefore important for a better uptake of the approach.
- Smallholder farmers and local government offices were truly engaged in jointly identifying context specific leverage points. However, it has been difficult to address some of the priority leverage points identified by the stakeholders like access to irrigation, as those constraints are beyond the scope of the RAISE-FS project. Consequently, collaborating with other organizations that can address those constraints is important.
- Engaging women and youth in income generation activities should be supplemented with activities that can bring mind-set change towards entrepreneurship.
- Household approach i.e. engaging family members in project interventions like trainings, cooking demonstrations etc. can contribute to improve household gender relations.
- An innovation that has a meaningful benefit to the smallholder food producers can easily be taken up. As an example, some of the home garden innovations are being taken up by the none participating farmers in just the first year of the project.
- Agricultural research and development that follows food system approach considering gender and social inclusion, sustainable agricultural practices and safe and nutritious foods will ensure all citizens benefit from new innovations and development.
- Some implementing partners e.g., Southern Agricultural Research Institute have incorporated gender and social inclusion studies in their regular work plan.
- Despite several efforts made by various GOs, NGOs and projects, there is still a wide yield gap (in crops) that needs to be addressed. There are best/improved practices available in the country but evidence is lacking whether those practices are adaptable to local circumstances and are not also accessible to many of the smallholder farmers.
- Through better coordination and collaboration, it is possible to contribute to the improvement of the fragmented national food safety control system. This was discussed with stakeholders during validation of scoping study on nutrition and food safety made by the project.
- Behavioural change needs to be promoted to enhance the diversified consumption of nutritious vegetables at household level in high potential areas that is characterized by high productivity but less diversified production system.

6 Sustainability

a. Measures to enhance programme sustainability

The RAISE-FS project is working with local organizations to capacitate and later on to institutionalize proven approaches and practices that will be generated by the project. The project needs to enhance capacity building of partner institutions both implementing and scaling partners. Documentation of the processes in the implementation of project innovations will receive attention to finally handover to the partners to mainstream into their regular interventions.

b. Description of exit strategy (if applicable)

- NA –

7 Institutional/Organizational development and human resources

The project is implemented through an organizational structure that covers national team, regional liaison office teams and implementing partner (Universities and Agricultural Research Institutes) teams. This followed with legalization of the SWR Ethiopia as an iNGO and signing of collaboration agreements between SWR Ethiopia, the relevant ARI and University in each region as implementing partners:

- The national team is composed of the project manager and deputy manager and six outcome advisors, as well as a MEL and a communication advisor.
- The regional liaison office teams are currently in Amhara, Oromia and South; in each region the team is composed of regional liaison office team leader, assistant team leader and finance officer.
- The implementing partner teams are two in each region, a team with university and another team with regional research institute. In each partner organization, the team is composed of a focal person and 4 to 5 team members depending on the required expertise.

8 Finance

Presented in a separate document.

Annex 1 Indicators and targets

#	Indicator description	Reach 2021/22	End of project target
	FNS indicators		
1	# of small-scale food producers directly reached with activities to increase productivity/income	1162	105,000
	of which women	338	31,500
	of which youth (<35 years of age)	422	42,000
2	# of small-scale food producers that adopted new knowledge and/or technologies	872	90,000
	of which women	254	27,000
	of which youth (<35 years of age)	317	36,000
3	# of FNS- relevant knowledge institutions that perform better	6	9
	Social and economic empowerment of women and youth in food systems		
4	# and type of learning and action platforms aimed at increasing women's and youth's decision making established	1	3
5	# of female and youth (<36) small scale food entrepreneurs directly reached with activities to increase income	477	25,000
	of which women	281	15,000
	of which youth (<35 years of age)	287	18,750
	Efficient and environmentally sustainable production		
6	# of sustainable agricultural practices innovations validated	1	4
7	# of input supply systems strengthened	2	8
8	# MoUs between research, extension and knowledge institutes (national, regional, zonal level)	6	8
9	# of woreda's which are supported in scenario planning through recommendation mapping		40
	Sector performance and value chains		
10	# of platform meeting dialogues	3	3 per sector/year
11	# key issues sector identified and discussed, acted on	2	2 per sector
12	# of market linkages materialized		40
13	# market opportunity report updates developed;	2	8
14	# of innovations for improved productivity & quality	3	3 per sector
15	# innovation proposals approved and implemented;		30
16	# of mechanisms improving access to finance		3
17	# of direct beneficiaries with improved access to finance		1,000
	of which women		500
	of which youth (<35 years of age)		500
	Availability of safe and nutritious foods		
18	# of mechanisms adapted for increased availability of nutrient dense foods	2	5
19	# of trainings for food handlers piloted		10
20	# of government officers, university staff and researchers trained in food safety	20	50
21	# of food safety mechanisms developed and/or strengthened		4
	Enabling environment for systems change		
22	# of policy and policy implementation bottlenecks addressed in relation to women's and youth empowerment, sustainable production, sector and value chain performance and safe and nutritious food	2	4
23	# of sustainable mechanism for collaboration and alignment among stakeholders established	1	2
24	# of mechanisms adapted for increased collaboration in food systems	1	3

Annex 2 Risk & mitigation strategies

Assumption	Risk	Probability	Impact	Motivation	Mitigation (*)	Adjustment 2023
A stable political and economic climate will prevail	Political and/or economic disturbances will affect the programme to be able to execute the activities according to plan	medium	high	The political as well as the economic climate in Ethiopia has been relatively unstable over the last decade. It is expected to remain so for the foreseeable future	Outside the scope of the project	The situation in the country is still quite volatile, however the peace process in Tigray opens up opportunities to start engagement there.
The agriculture sector is not affected by fraud and corruption	Corruption and fraud will reduce the willingness of stakeholders to collaborate	low	medium	Even though fraud and corruption is present in Ethiopia, it is not rampant. When it does occur it will affect the effectiveness of the programme	Strict procedures and checks on financial reports. (EKN to alert the programme on any suspicion and vice versa)	--
RAISE-FS will be able to operate in a stable environment	Emerging shocks such as the COVID-19 pandemic severely disrupts execution of the programme	medium	medium	COVID-19 has made us all realise that as a global community we are not prepared for major shocks. Currently it is not possible to foresee what the next shock will be but experience shows that it can be a major disruptor	Agile planning and establishing strong partnerships so even as eg travel is restricted local activities can still proceed (EKN to provide timely and up to date information in case of emerging shocks)	The security environment is unstable, at times activities had to eb abandoned or follow-ups could not be made.
The reputation and trust generated by BENEFIT and its predecessors as a neutral facilitator are maintained and will reinforce the role of RAISE-FS	Rebuilding the network will slow down project results	low	low	With the no-cost extension of BENEFIT bridging the period between end of one programme and the start of the next we are able to maintain good relations with the major partner at federal, however not at regional level	Continuous engagement with relevant stakeholders engaging them in workshops, learning and planning sessions (EKN as an ambassador of the programme)	--

Assumption	Risk	Probability	Impact	Motivation	Mitigation (*)	Adjustment 2023
Information & data will be made available by al project partners for monitoring evaluation and reporting	Incomplete overview of programme achievement and outputs	low	medium	Experience from the BENEFIT programme has shown that collection of information for MEL purposes can be arduous at times. While it occurs rarely, lack of relevant information ill affect the programme outcomes	Increase collaboration and contact moments with partners. Awareness creation about the importance of data collection, provide easy to use tools and templates (in case required EKN to provide official letter)	Due to the slow release of funds there is hesitation with the partners to share all detailed results. This is being worked on through clear data formats as well as joint intellectual property rights.
Stakeholders are willing to collaborate and share information	The innovation system will not function optimally	low	medium	Experience from the BENEFIT programme has shown that it is of utmost importance to have a good data management system. While most partners are willing to share data at times scientist keep back data to be able to publish – a requirement for promotions especially at universities	Joint planning and sharing sessions with relevant stakeholders both at federal as well as regional level (attendance of EKN at events)	This has been outstanding especially in the regions stakeholders have been very active in engaging with the project
The relevant ministries and ministerial departments engage with the programme and incorporate outcomes in their policies	Relevant departments and/or individuals do not engage with the programme and its outcomes	low	high	The experience in BENEFIT has shown that the ministries have trust in what BENEFIT has generated. However, a political change of personnel can potentially change this. If the various ministries do not take up the programme outcomes scaling will not be done	Regular engagement with high level public stakeholders. Engagement of the Steering cie. and regional advisors (EKN to support the efforts of the programme in its engagements with high level stakeholders)	At time this has been more difficult, partly because a new minister has recently been appointed.
Strong team at implementing organizations and stability of officials at respective public organization ensure effective implementation of planned activities and their mainstreaming	Frequent turnover of staff and officials/policy makers reduce the efficient implementation and mainstreaming of evidences	medium	high	This has been a continuous issue during BENEFIT, staff get promoted or functions in other areas or organisations this requires new staff to become familiar with the programme	Build on our experiences in team building not only at partner level but also at region and national levels; diversifying engaged policy makers and officials at regional and national level	The team is a good combination of experienced and younger staff. All are extremely dedicated.
Information is available that can drive transformation	Transformation in the food systems will not take place	low	high	In Ethiopia, there is plenty information available, however the step from ‘knowledge on the shelf’ to ‘knowledge in action’ requires effort by all involved stakeholders	Promote innovative research as well as investments; make knowledge about innovations available to the stakeholders, use effective communication methods	--

Assumption	Risk	Probability	Impact	Motivation	Mitigation (*)	Adjustment 2023
A demand driven R4FST agenda will result in a competitive and innovative sector	Generated evidences are not taken up by the sector	low	high	In Ethiopia there is plenty knowledge available, however the step from 'knowledge on the shelf' to 'knowledge in action' requires effort by all involved stakeholders	Design a process for joint agenda setting, implementing agile and flexible approach, organisation of learning events, seconded staff to MoA for timely capturing of emerging opportunities	--
Access to the innovation fund will enhance and expand investments in the sector	Business opportunity funds will be underutilized	medium	medium	The current uncertain climate (political stability, the pandemic etc.) might be a hurdle for companies to invest in businesses related to agro-food systems	Awareness creation about the fund; coaching of potential grantees during the development of a proposal; development of a scaling strategy	--
The activities will be able to involve both women and youth in a sustainable way	Women and youth do not benefit from the programme	low	high	Truly involving women and youth is beyond counting their attendance. It will need concerted effort to engage them	Go beyond counting numbers; setting of concrete outcome targets for women and youth; involve women and youth in design of activities, target systemic issues and mainstreaming	--
Increase production, marketing and income will lead to an improved and diversified diet	The project activities do not lead to a diversified diet	low	medium	There is ample evidence that diversification at farm level does not result in a more diverse diet. This needs to eb accompanied by nutrition education and campaigns	Awareness raising amongst the programme partners on the importance of nutrition. Engagement with the appropriate stakeholders in the field of nutrition sensitive agriculture, focus on systemic issues and mainstreaming	--
Both the public and private sector are willing to invest in safe food and environmentally sound production systems	Unsafe food enters the market and the environment is negatively affected by the (intensified) production methods	medium	high	Food security receives more attention than food safety as most governments deem this to be a top-priority, and without a functional food safety control system the private sector will find it difficult to comply	Provide support to project partners; awareness on the issues of sustainable production; Support GAP programmes; strengthen both public and private institutes	--

Wageningen Centre for Development Innovation
Wageningen University & Research
P.O. Box 88
6700 AB Wageningen
The Netherlands
T +31 (0)317 48 68 00
wur.eu/wcdi

Report WCDI-23-257

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.