Soybean and Sunflower Production, Regenerative Agriculture and Gender and Social Inclusive Training of Trainers (ToT) Workshop, Bahir Dar, Ethiopia

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Summary

A five-day Training of Trainers (ToT) workshop was conducted from 27–31 October 2025 in Bahir Dar, Ethiopia, focusing on strengthening the technical capacity and facilitation skills of experts working along the soybean and sunflower value chains. The workshop aimed to enhance participants' understanding of good agricultural practices, quality management, postharvest handling, gender and social inclusion, regenerative and climate-smart agriculture, and the use of digital tools to improve oilseed productivity and sustainability. A total of 39 participants drawn from Zenal Department of Agriculture, research institutions, cooperatives and union organizations took part in the training. The training combined presentations, group discussions, and practical demonstrations, using a participatory approach to ensure active engagement and experience sharing. By the end of the training, participants developed action plans to cascade the knowledge and skills gained to benefit extension agents and farmers within their respective institutions and project areas.

Background and Rationale

Ethiopia's oilseed sector is one of the country's most important agricultural sub-sectors, contributing significantly to rural livelihoods, national income, and agro-industrial development. Oilseeds such as soybean and sunflower play a vital role in supporting household food security, creating employment, and supplying raw materials to the growing edible oil processing industry such as PhiBela. Moreover, the sector also contributes to export earnings, making it a strategic commodity group within Ethiopia's agricultural transformation agenda.

Despite its potential, the sector's performance has been constrained by a combination of technical, institutional, and environmental challenges. Productivity remains below potential due to limited access to improved seed varieties, inadequate agronomic and crop management practices, and insufficient extension support. Moreover, postharvest losses and quality deterioration continue to affect the value and competitiveness of oilseeds in both domestic and export markets. Climate-related risks—such as erratic rainfall, droughts, and pest infestations—further compound these challenges, reducing the reliability and sustainability of production systems.

The Alliance has secured a five-year (2024-2028) project from NORAD, funded through IDH, namely the Grow Together programme, working in Tanzania and Ethiopia. The program vision is to contribute to transforming local food markets and improving food security and local economies by increasing the incomes of small-scale food producers and scaling operations of food SMEs to become large and reliable food companies in Africa, with Ethiopia and Tanzania being target countries. Alliance of Bioversity and CIAT (ABC) is supporting the Growing Together Program for the use and adoption of climate-smart and regenerative agriculture practices for three value chains, including maize, soybean and sunflower.

In response to these challenges, a Training of Trainers (ToT) workshop was organized to strengthen the capacity of key value chain actors—extension workers, cooperative, unions and development partners—on improved soybean and sunflower production techniques, quality management, gender and social inclusion and climate-smart and regenerative agricultural practices. The ToT emphasized both technical competence and facilitation skills, enabling participants to effectively cascade the training to farmers and local institutions.

Furthermore, the ToT integrated critical cross-cutting themes such as gender equality, digital innovation, and environmental sustainability to ensure a holistic approach to oilseed value chain development. By mainstreaming these themes, the training sought to empower women and youth, promote the use of digital tools for agricultural decision-making, and encourage practices that restore soil health and enhance climate resilience. Ultimately, the ToT aimed to create a cadre of well-equipped trainers capable of driving sustainable productivity, resilience, and market competitiveness across Ethiopia's oilseed sector.

Objectives of the Training

General Objective

To build the technical and facilitation capacity of trainers to support farmers and stakeholders in implementing improved, climate-resilient, and regenerative production of soybean and sunflower while ensuring gender and social inclusion in Amhara Region.

Specific Objectives

- Strengthen understanding of good practices for soybean and sunflower production.
- Enhance knowledge on postharvest handling, storage, and quality management.
- Promote regenerative and climate-smart agricultural approaches for oilseeds.
- Improve awareness of gender equality and women's empowerment in the project context.
- Introduce and demonstrate the use of digital tools supporting oilseed value chains.

Training approach

The Training of Trainers (ToT) workshop employed a participatory approach that emphasized active engagement and peer-to-peer knowledge exchange. Various training methods were used to enhance learning and interaction among participants, including technical presentations and discussions, group work and plenary sessions, experience sharing, and a field visit to processors in Bahir Dar. Training materials included PowerPoint presentations, printed guides, and reference resources on soybean and sunflower production, quality control, regenerative, climate-smart agriculture and gender and social inclusion.

Plenary session and group work during the training

Participants' Profile

The participants represented a diverse group of stakeholders from various organizations involved in the oilseeds sector. A total of 39 participants (32 male and 7 female) attended the training (Table 1). They included experts and practitioners from zonal and district agricultural offices (Awi Zone, Jawi District, North Gojam Zone, and Debub Achefer District), cooperative unions (Admass and Merkeb Unions), private sector companies (PhiBela and BK Farm), and the Amhara Regional Agricultural Research Institute (ARARI). This mix of participants ensured broad representation across public institutions, farmer organizations, and private enterprises, fostering knowledge sharing and collaboration along the oilseeds value chain. The workshop was attended by Hailemariam Kibret, the IDH Growing Together Country representative.

Table 1: Profile of the participants at the workshop

Organizations	Male	Female	Total
Awi Zone	1	1	2
Jawi district	7	2	9
North Gojam Zone	1	1	2
Debub Achefer district	11	1	12
Admass Union	1	1	2
Merkeb Union	1		1
PhiBela	8	1	9
BK Farm	1		1
ARARI	1		1
Total	**32**	**7**	**39**


Participants at the ToT workshop

Facilitators at the ToT training

Ther training was facilitated by diverse experts from the Alliance Bioversity and CIAT and private sector.

Table 2: List of facilitators at the ToT workshop

Name	Organization
Dr. Zenebe Adimassu	Alliance of Bioversity International and CIAT
Dr. Degefie Tibebe	Alliance of Bioversity International and CIAT
Dr. Dessalegn Molla	Alliance of Bioversity International and CIAT
Dr. Getinet Alemaw	PhiBela
Gobeze Chakelie	Gonder Research Centre
Belsty Atnafu	BK Farm

Training Content and Sessions

The following technical sessions were delivered during the five-day training

Table 3. Summary of training sessions

Session No.	Sessions	Key Focus Areas
1	Overview of Oilseeds Production and Supplytraining	Trends, value chain overview, and challenges in Ethiopia's oilseed sector
2	Good Practices of Soybean Production	Land preparation, seed selection, planting, fertilization, pest and disease management
3	Good Practices of Sunflower Production	Varietal selection, agronomic practices, and yield improvement strategies
4	Quality Management of Soybean and Sunflower from Harvest to Crushing	Quality standards, grading, contamination control, and value addition
5	Postharvest Handling, Storage, and Quality Control	Proper drying, storage conditions, handling techniques, and warehouse management
6	Regenerative and Climate-Smart Agriculture	Concepts of RA, including definitions and key principles, practices, mechanisms, outcomes, benefits and enabling conditions of adopting RA

Session No.	Sessions	Key Focus Areas
7	Climate and Climate-Smart Agriculture	Concepts in weather, climate, climate variability/change, climate risks, climate resilience innovations and strategies
8	Gender Equality and Women's Empowerment in the Project	Gender inclusion, women's roles in oilseed value chains, and empowerment tools
9	Understanding Agricultural Digital Tools	Introduction to digital solutions for improved decision-making mainly Fertilizer Advisory, Ethio-Seed System and CSA Knowledge Hub

Session 1: Introduction and opening ceremony

The training began with a warm welcome address from Dr. Anteneh Abawa from PhiBela, who emphasized the importance of capacity building in strengthening the oilseed value chain. He appreciated the collaboration among partners and encouraged participants to actively engage and share their experiences throughout the training to maximize learning and impact.

The training was opened by Dr. Asmare Dejen, Director General (DG) of the Amhara Regional Agricultural Research Institute (ARARI). He highlighted the critical role of research and knowledge transfer in improving oilseed productivity and quality, urging participants to apply the skills gained to support farmers and contribute to the region's agricultural development.

Dr. Anteneh Abawa, welcoming the trainees

Dr. Asmare Dejen, Director General (DG) of the Amhara Regional Agricultural Research Institute (ARARI) addressing the participants

Hailemariam Kibret from the IDH-Ethiopia office introduced the objectives of the Growing Together Program. He explained how the program aims to enhance smallholder livelihoods through sustainable production systems, market linkages, and the promotion of regenerative agricultural practices across Ethiopia's oilseed-producing areas.

Hailemariam Kibret of IDH addressing the participants

Session 2: Overview of Oilseeds Production and Supply

This session provided participants with a broad understanding of the oilseed sector in Ethiopia, focusing on the trends, value chain structure, and major challenges affecting soybean and sunflower production. Participants were introduced to the importance of oilseeds in supporting livelihoods, agro-industrial development, and export earnings. The content highlighted production and productivity trends, market structures, and the role of different actors, including farmers, cooperatives, processors, and traders. It also explored critical bottlenecks such as low yields, weak input systems, and limited processing capacity, as well as emerging opportunities in policy and private investment. The session used PowerPoint presentations, participatory discussions, and value chain mapping exercises to stimulate learning. Over a duration of about one and a half hours, participants analyzed real data and case examples using visual aids such as charts and flipcharts. By the end of the session, they were expected to have a solid grasp of the oilseed sector's dynamics and be able to identify leverage points for enhancing productivity, quality, and competitiveness.

Session 3: Good Practices of Soybean Production

This session was facilitated by Zenebe Adimassu was designed to strengthen participants' technical knowledge of improved soybean production practices and enable them to effectively train others at the farmer level. The content covered all stages of the production cycle, including site and land preparation, seed selection and inoculation, planting methods, fertiliser and nutrient management, and integrated pest and disease management. Emphasis was placed on practical, field-tested approaches that improve yield and quality while reducing costs and risks. Training methods included interactive lectures, demonstrations, and small group discussions that allow participants to share local experiences. The session used seeds, fertilizers, inoculants, and visual field guides as instructional materials. By the end of the session, the trainees were expected to understand and apply improved agronomic techniques and be capable of guiding farmers in achieving higher productivity and profitability.

Session 4: Good Practices of Sunflower Production

This session aimed to equip participants with sound technical and practical knowledge on sunflower production, focusing on variety selection, agronomic management, and yield improvement strategies. The session began by exploring suitable agroecological zones and high-yielding varieties adapted to local conditions. It then discussed land preparation, planting, fertilizer application, pest and disease control, and harvest management. The session combined short lectures with practical demonstrations and interactive group exercises where participants identified local production challenges and proposed context- based solutions. Conducted over one and a half hours, the training used seed samples, fertilizer recommendations, and illustrated guides. By the end, participants were able to guide farmers on improved sunflower agronomic practices that enhance yield, quality, and profitability.

Session 5: Quality Management of Soybean and Sunflower from Harvest to Crushing

This session focused on the importance of maintaining product quality across all postharvest stages—from harvesting through to crushing and processing. It provided an overview of national and international quality standards, grading systems, and contamination control measures. Participants learnt about proper drying, handling, and transportation methods that ensure product integrity. Using case studies, demonstrations, and group exercises, the training emphasized practical steps for establishing quality control systems and exploring value-added opportunities. The session took approximately one and a half hours and required materials such as grading tools, moisture meters, and quality charts. By the end, participants were expected to understand how quality management directly affects market value and competitiveness, and how to integrate simple but effective quality assurance measures into daily operations.

Session 6: Postharvest Handling, Storage, and Quality Control

This session aimed to enhance participants' capacity to manage postharvest processes effectively, minimizing losses and maintaining product quality. The content covered essential practices such as proper drying, cleaning, sorting, packaging, and safe storage. It also explored warehouse management, pest control, and the use of moisture testing equipment. The session involved practical demonstrations, role-play exercises comparing poor versus good handling practices, and group discussions to develop postharvest checklists. The training ran for about two hours and used sample bags, storage models, and flipcharts. By the end, participants acquired practical skills in effective postharvest handling and quality control, enabling them to train farmers and cooperatives to reduce spoilage and improve returns.

Session 7: Regenerative Agriculture

This session on regenerative agriculture was facilitated by Zenebe Adimassu and sort to introduce participants to the key principles and practices of regenerative agriculture and how the approach contributes to sustainable oilseed production. The session explained the definitions, objectives, and core principles of RegenAg, including maintaining soil cover, minimizing soil disturbance, diversifying cropping systems, managing soil nutrients, applying integrated pest management, and improving water management. It further explored how these practices enhance soil carbon sequestration, biodiversity, and farm resilience to climate change. The training used participatory lectures, group exercises to identify locally relevant practices, and short case studies that demonstrate successful implementation.

Session 8: Climate and Climate-Smart Agriculture

This session was facilitated by Zenebe Adimassu deepened participants' understanding of climate-related concepts and their relationship to agricultural production. It began by clarifying the difference between weather and climate, followed by discussions on climate variability, climate change, and associated risks to farming systems. Participants were introduced to climate risk assessment tools, adaptation measures, and CSA principles that simultaneously increase productivity, build resilience, and reduce emissions. The session applied an interactive lecture format complemented by group discussions and short simulations that demonstrate how to interpret weather data for farm-level decisions. Conducted over one and a half hours, it used charts, case examples, and CSA framework posters as training aids. By the end, participants were expected to have a strong grasp of climate dynamics, be able to assess risks, and integrate CSA strategies into their extension and training activities.

Zenebe Adimassu explaining about climate variability

Session 9: Gender Equality and Women's Empowerment in the Project

Dessalegn Molla took participants through a practical and reflective journey on how gender equality strengthens the oilseed value chain and improves overall project outcomes. The focus was on helping trainers and practitioners understand how gender dynamics shape who participates, who benefits, and who holds decision-making power across soybean and sunflower production, processing, and marketing.

The session built on the Gender Equality and Women's Empowerment ToT delivered earlier in the program. Participants revisited key concepts-gender equality, gender equity, and gender transformation and discussed why these ideas matter for the Growing Together Program in Ethiopia and across East Africa. The discussion highlighted the everyday realities of women working in SMEs and value chains: limited access to inputs and finance, unequal workloads, restricted mobility, and low representation in leadership. These issues were linked to broader patterns of norms, roles, and expectations that influence business performance and resilience.

A mix of tools and exercises was used to keep the session grounded in real-life situations. Gender role analysis helped the group map who does what along the soybean and sunflower chain. Case studies illustrated how gender gaps show up in enterprises and farmer networks. Group discussions allowed participants to reflect on barriers women face and to identify practical entry points for change.

Throughout the session, the Reach–Benefit–Empower–Transform (RBET) framework guided the conversation. Participants explored how the project can move beyond simply involving women to genuinely strengthening their voice, agency, and leadership. This include looking at how SMEs can create more inclusive workplaces, how trainers can cascade gender- transformative practices within their teams and supplier networks, and how men and women can be engaged as allies in promoting fairness.

By the end of the session, participants developed a set of context-specific actions to close gender gaps-ranging from improving access to finance and services, to creating safer and more equitable work environments, to supporting women's leadership in producer groups and SMEs. The session reinforced that gender equality is not an add-on but a central part of building a competitive, resilient, and inclusive oilseed value chain.

Dessalegn Molla facilitating on gender equality and women's empowerment

Session 10: Understanding Agricultural Digital Tools

Degefie Tibebe introduced participants to digital tools and technologies that support data- driven decision-making in oilseed production. The content highlighted the use and benefits of tools such as the Fertilizer Advisory Tool, the Ethio-Seed System, and the Climate-Smart Agriculture Knowledge Hub. Participants learnt how digital innovations enhance access to information, improve efficiency, and strengthen coordination among value chain actors. Training methods included live demonstrations, group exercises, mapping digital tool applications, and Q&A sessions. The session took about one and a half hours and required laptops, internet access, and printed user guides. By the end, participants were familiarized on key agricultural digital platforms and understood how to integrate them into their work to improve extension delivery and farm productivity.

Degefie Tibebe facilitating digital tools and technologies

Key Discussions and Outputs

During the training, participants actively discussed key issues related to the oilseed sector. The discussions focused on identifying the major challenges and opportunities for improving oilseed productivity and quality, particularly enhancing farming practices and postharvest handling. Participants also emphasized the importance of linking production systems with regenerative agriculture practices and market opportunities, ensuring sustainability and profitability across the value chain. Another important area of discussion was the integration of gender and digital tools to strengthen extension services, facilitate knowledge sharing, and improve decision-making at both institutional and farm levels.

As a result of these deliberations, several important outputs were achieved. Participants developed draft cascading training plans aimed at extending the knowledge and skills gained to local extension agents and farmers. They also made commitments to promote regenerative agricultural practices at the farm level, contributing to soil health, climate resilience, and sustainable productivity. Furthermore, the training fostered stronger collaboration among public institutions, private sector actors, and cooperatives, reinforcing partnerships to support the growth and competitiveness of the oilseed value chain in Ethiopia.

The training highlighted several key lessons learned that will guide future capacity-building efforts. Integrating production, quality, and regenerative agriculture practices proved highly effective, as it provided participants with a comprehensive understanding of the entire value chain—from farm management to market systems. This holistic approach helped participants appreciate the interconnections between productivity, sustainability, and profitability.

The use of peer learning and group discussions was also found to enhance engagement and knowledge retention, allowing participants to exchange experiences and learn from one another's practical insights. Additionally, incorporating gender and digital topics added significant value by promoting inclusiveness and supporting the integration of innovative tools for better decision-making and communication in extension services. However, participants noted that more time should be allocated for practical demonstrations and field exercises in future training. Hands-on sessions were considered particularly valuable for reinforcing technical concepts and building confidence in applying regenerative and quality management practices at the field level.

Follow-up Actions and Recommendations

Following the Training of Trainers, participants identified several key follow-up actions to ensure effective knowledge transfer and sustained impact. They agreed to conduct cascading trainings targeting development agents and farmer groups, enabling wider dissemination of improved oilseed production and management practices at the grassroots level. To maintain the quality and consistency of these efforts, it was recommended to strengthen mentorship and provide technical backstopping for trainers as they implement the cascading sessions.

In addition, participants committed to promote the adoption of regenerative and climate- smart agricultural practices within their respective project areas, contributing to soil health, resilience, and sustainable productivity. Efforts will also be made to mainstream gender and integrate digital tools in extension services to enhance inclusiveness and decision-making efficiency. Finally, participants highlighted the importance of documenting and sharing best practices and success stories from the trainees' field-level implementation, ensuring that valuable lessons and innovations

Acknowledgement

We extend our sincere appreciation to the Norwegian Agency for Development Cooperation (NORAD) for providing financial support through the IDH Growing Together (GT) Program in Ethiopia. This funding enables the design and implementation of the research, including field activities, data analysis, and stakeholder engagement of SME in Ethiopia. We also acknowledge the program's broader commitment to strengthening sustainable agriculture and rural livelihoods, which has been instrumental in advancing our study and fostering collaboration among farmers, researchers, and local institutions.

11. Annexes

Annex 1: List and profile of participants

No	Name of participants	Organization	Position	Sex
1	Habetamu Alemneh	Jawi Woreda Agricultural Office	Crop Team Leader	Male
2	Ayenew Tiruneh	Jawi Woreda Trade Office	Marketing Team Leader	Male
3	Yazachew Aragaw	Jawi Woreda Agricultural Office	Input Team Leader	Male
4	Mulate Tadesse	Jawi Woreda Agricultural Office	Agronomist	Male
5	Birhanu Workineh	Jawi Woreda Agricultural Office	Head of Agricultural Office	Male
6	Aberach Asemare	Awi Zone Agricultural Department	Input Team Leader	Female
7	Minisha Bitew	Admas Union	Marketing Team Leader	Male
8	Henok Lenchamo	Jawi Woreda Cooperative Office	Crop Marketing Team Leader	Male
9	Menegstu Delele	Jawi Woreda Agricultural Office	Extension Team Leader	Male
10	Andualem Ayalew	Awi Zone Agricultural Department	Crop Team Leader	Male
11	Emeytnat Mitiku	Jawi Woreda Primary Cooperative	Store	Female
12	Tegegnech Zerihun	Jawi Woreda Primary Cooperative	Store	Female
13	Worku Abebe	Debub Achefer Woreda Agri Office	Agronomist	Male
14	Mulu Babech	Debub Achefer Woreda Primary Coop	Store	Female
15	Mastewal Yalew	Debub Achefer Woreda Agri Office	Input Team Leader	Male
16	Belete Melaku	Debub Achefer Woreda Primary Coop	Coop Chairman	Male
17	Amdework Liyew	Semen Gojjam Zone Agri Department	Input Team Leader	Male
18	Desalegne Alem	Debub Achefer Woreda Cooperative Office	Input Team Leader	Male
19	Anteneh Mekonnen	Debub Achefer Woreda Agri Office	Extension Team Leader	Male
20	Abebe Tiruneh	Debub Achefer Woreda Agri Office	Crop Team Leader	Male
21	Aragaw Alem	Debub Achefer Woreda Agri Office	Agronomist (Idh PhibelaProject)	Male
22	Mekuanent Kassie	Debub Achefer Woreda Agri Office	Expert	Male
23	Muluken Gedif	Merkeb Union	Agri input Marketing Expert	Male
24	Agumas Shitaye	Debub Achefer Woreda Primary Coop	Store	Male
25	Miwodew Tamir	Debub Achefer Woreda Primary Coop	Store	Male
26	Gizenew Degu	Debub Achefer Woreda Trade Office	Marketing Team Leader	Male
27	Yeshewarka Yemenu	Semen Gojjam Zone Agri Department	Input Team Lead	Female
28	Yeshi Sema	Admas Union	Export Marketing Expert	Female
29	Tariku Getachew	Phibela	Raw material Sore Head	Male
30	Mengestu Yimer	Phibela	Store	Male
31	Mulunesh Tilaye	Phibela	Store	Female
32	Tinasae Tesfaw	Phibela	Factory Division Head	Male
33	Yohannes Alemayehu	Phibela	Factory Manger	Male
34	Mulugeta Tesfe	Phibela	Factory Division Head	Male
35	Alamiraw Kassahun	Phibela	Finance Head/Project Finance	Male
36	Belsty Atenafu	Phibela	QC Manger/Project Team Member	Male
37	Dr Getenet Alemawu	Phibela	Project Coordinator	Male
38	Dr Anetenh Abawa	BK Farm	CEO	Male
39	Ayana Denberu	Amhara Agricultural Research Institute (ARARI)	Communication Expert	Male


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