EOA ANNUAL REPORT _2022

Ecological Organic Agriculture initiative for Africa Supported by SDC-BvAT (EOA-Phase II)

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JANUARY 2022

Addis Ababa

ANNUAL REPORT THE YEAR 2022	PILLAR _ I (APRIL _DECEMBER 2022)
RESERCH AND APPLIED KNOWLEDGED	
Project Title: Mainstreaming Ecological Organic Agriculture (EOA) into Agriculture Systems in Africa	
Outcome 1: 1: Knowledge needed by EOA actors in various value chains availed in accessible repositories for dissemination	
Activity Implementation under Output 1.1: Information and knowledge needed by EOA actors along value chains generated and collated for dissemination	
	Activity 1.1.1 Undertake value chain analysis to identify knowledge gaps, needs and priorities of various actors with special focus on women, youth and marginalized groups along selected value chains
Planned Activities for the period (refer to your work plan for the reporting period)	(i)Undertake pilot study in EOA project areas (ii) Explore the market status for organic vegetables around EOA project areas (iii) Review the carrot and potato value chain analysis results and update them with current value chain information and needs (iv) Conduct interviews, FGDs and Key informant interviews to indentify gaps, needs and priorities
Target Activities for the period	4major value chain gaps identified on the selected value chain commodities (Input supply, production, Marketing and consumption)
Actual Activities for the period	**Meeting agriculture office people from Tehuledere District** Total 10 participants (4 from Tehuledere district agriculture office, 4 from Wollo University, 1 from ISD Dessie office, 1 from PAN-Ethiopia) **Discussion points** **I. Setting up Vermicompost Units and Trial on the use of Vermicompost for vegetables**

	production **(1). Status of Vermicomposting in Tehuedere District** ✓ The technology has now reached **6 village**s with a total of **139** farmers producing and using Vermicompost. ✓ **3** farmers produce Vermiculture and sell the other farmers. **2) Trial on the use of Vermicompost in Tehuledere District** District agriculture office agreed that they will avail the following for the trial: • Trial plot in the Farmer Training Centre (FTC) in Gobeya Village • Vermicompost • Conventional compost **II. Discussion on vegetable production in Tehuledere District** **Four(4) gaps identified such as :-** **Inputs** - Rate of Vermicompost - Date /time of application of convectional compost -Lack of access to better seeds for different vegetables **Production** – Insect pests and diseases are the main plant protection challenges for vegetables. -Plant extract formulation and ratios - Continuous supply of vegetables: this needs research and extension work on farm budgeting and growing vegetables on rotation basis. -Shortage of irrigation water make most framers stop vegetable production **Market** access and linkage is still a challenge in Tehuledre district **Consumers**: buy vegetables not because they were organic showing that consumer awareness on organic products low ➢ Meeting and discussion to agriculture office people from Tehuledere District ➢ Assessment of the status of vermicomposting in Tehuedere District: ➢ Trial on the use of Vermicompost ➢ Discussion on how vegetable grower farmers operate from land preparation up to marketing vegetable production

Visit to a vermicomposting unit in Gobeya

- Visit to a Vermicomposting unit in Gobeya the uses of Vermicompost, Selling Vermicompost ,and Vermiculture , Expansion of Vermicomposting and Water harvesting

- Assess and discussed with farmers in Gobeya, Estena, and Passomille (Jare) Kebeles the commonly grown vegetables, land preparation , seed source, agronomic practices, Plant protection and market status.

F**armer groups members Estena**

No	Name of the farming group	Number of member farmers
1	EstenaKuter 1	10
2	EstenaKuter 2	8
3	EstenaKuter 3	14
4	EstenaKuter 4	20
5	EstenaKuter 5	25
6	EstenaKuter 6	25
7	EstenalKuter 7	25
	Total	127

	• 21 IPM group members of Baso-milla Kebele ,(M=17, F=4) ➢ Field visit and discussions to experts, farmers in Holeta and welemera districts annex 1;Identifing Knowledg gaps.docx
Progress between reporting Periods	Pilot study assessment on previous and current status of EOA technologies and practices works at Tehuledere and Holeta project areas • meetings and discussed held with district agriculture offices on different agendas(status of Vermin composting, setting up demo plots at two FTC(Gobeya and Haike Estifanos) • Assessment of the status of vegetables production at Gobeya, Estina kebele and passomille jare (identified the gaps) • Meet and discussed with farmers in Tehuldere,Holeta and Welemera districts to indentify gaps, needs and priorities • Marketing and consumption status the two reaming study to identify gaps, needs and priorities in project areas we will cover in quarter three
Analysis and Remarks	• Insect pests and disease are the main plant protection challenges for vegetables. Farmers use plant extracts trialed by farmers which they say have found them effective to manage specific pest and diseases but it was a challenge for agriculture office to include them as part of the extension to recommend for their use. This was due to lack of scientific backups on formulations, spray dose, spray time etc. WU can do researches on documenting indigenous knowledge, testing effectiveness and preparing formulations. • Selling Vermicompost and Vermiculture Vermicomposting has become an additional income generating mechanism for Mr Mohammed. He sells 1 quintal (equivalent to 100 kg) of Vermicompost of 1500 Birr (equivalent to 29 USD) and 1 Kilogram of Vermiculture for 500 Birr (

	about 10 USD). • Expansion of vermicomposting . Mr Mohammed is one of the farmers who are providing free training services to his fellow farmers both in his village Gobey and in other villages via the agriculture offices. He is also providing Vermiculture free of charge and playing a vital role in expanding the technology. "So far, I gave 12 kilogram of Vermiculture for two districts for free and that is worth 6000 Birr (about 117 USD). I am doing this because I want the technology to reach more farmers in other areas too" – said Mr Mohammed. • Rickech association is one of the farmer groups in Holeta which is involved in the production and sale of organic vegetables. They have 7750 m^2 plot which they use for vegetable production. They grow a number of vegetables in their farm. Their farm was divided and planted with vegetables including Beetroot, potato, Swiss Chard and HabeshaGomen during our visit. • **After pilot study assessment the research thematic areas identified as follow**: - Assessment of indigenous technical Knowledge on plant protection - Application of different types of fertilizers for carrot production in Tehuledere District - Time of application of organic fertilizers for carrot production - Market potential assessment in Dessie, Haike and Kombolcha towns - Validation of selected botanical pesticides for management pests
	Activity 1.1.2 Undertake research to generate information and knowledge to address the identified gaps, needs and priorities.
Planned Activities for the period (refer to your work plan for the reporting period)	**(**i). Conduct consultative meetings with key value chain actors to design ways of developing EOA products value chain (ii) Assess existing indigenous technical Knowledge on plant protection (iii) Conduct research on Application of different types of fertilizers for carrot production in Tehuledere district (iv) Conduct research to determine the appropriate time for the application of compost fertilizer for carrot production
Target Activities for the period (refer to your work plan for the reporting period)	• 1 consultative meeting conducted, • 1 assessment result showing a list of local plant protection innovations developed • 4 researches on EOA technologies conducted

Actual Activities for the period xplain what you implemented during this eriod you are reporting) lease include Annexes of the work. Annexes efers to activity reports/research ports/workshop reports and must be attached to ach activity to support/give evidence of work one)	➢ **1 Assessment was conducted on indigenous technical Knowledge on plant protection at Passomille village in Tehuledere district** The following points assessed :- ● Major crops grown recorded ● Major crop production constraints identified ● Major crop insect pests and diseases problems identified ● Common management practices for insect pest and diseases recorded/documented ● Indigenous Technical Knowledge (ITK) (Farmers' knowledge and practice) for plant protection identified ✓ **20** different botanical plants were documented used for insect pests and diseases management on different crops. ✓ Major crops grown are Sorghum, Tef, and Maize, Faba bean, Chickpea, Grass Pea,Haricot bean,Orange, Mango, Papaya, Onion and chilies cultivated under rainfall and irrigated condition.  annex 2; farmers indegenous technical **3 Field experimental researches we**re conducted at Tehuledere district and Dessie administrative city : ● **Experiment one:** Application of different types of fertilizers for Carrot production in Tehuledere district ✓ To evaluated the type of organic fertilizer which can be effective for carrot production ✓ Three types of fertilizers such as Vermicompost , conventional compost and NPSB were used

	✓ Lands and plots were prepared ✓ Experimental materials,treatments, Design and layout were prepared ✓ Application of treatments and sowing of carrot were conducted ✓ All field management practices were conducted ✓ Different data of Carrot phonological, vegetative growth and yield parameters were collected  Annex 3; Application of different organic fe ● **Experiment tw**o: Application of different time (date) of conventional compost fertilizer for Carrot production at Tehuledere District ✓ To evaluated different time /date of conventional compost application for carrot production ✓ Four different date/time of application of conversational compost (at planting date, six days before planting date , twelve days before planting date , eighteen days before planting date) were used and applied ✓ Lands and plots were prepared ✓ Experimental materials,treatments, Design and layout were prepared ✓ Application of treatments and sowing of carrot were conducted ✓ All field management practices were conducted ✓ All different Carrot parameters of phonological, vegetative growth and yield were collected

	 Annex 4;time of compost application p **Experiment three** :- Effect of the rates of Vermicompost and NPSB Fertilizers on Yield and Yield Components of Carrot (*Daucuscarota* L.), at Dessie by MSc Horticulture student, Plant science department, Wollo University □ • To evaluate the effect of vermicompost and NPSB fertilizers on carrot yield and yield components at Dessie, South wollo, Ethiopia. • Different rate of vermicompost (3,6 and 9 ton/ha) were used and applied • Lands and plots were prepared • Experimental materials,treatments, Design and layout were prepared • Application of treatments and sowing of carrot were conducted • All field management practices were conducted • All different data of Carrot phonological, vegetative growth and yield parameters were collected **Note:** All three research works under analyzed data, writing draft papers for validation and publications.  Annex 5' rate of Vermicompost.docx  Annex 6 progress rate of Vermicompost  Annex6.1 Carrot Data Frame SHM.xlsx  EOA project progress report 2022
Progress between reporting Periods ✓ Explain the progress you have made towards attaining your project	• 3 experimental researches were under analysis data and write up the full papers for validation and publication

targets/objectives)	  During data collection
Analysis and Remarks ✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity ✓ Explain why you did not hit the target you set	• Consultative meetings with key value chain actors to design ways of developing EOA products value chain not conducted because as pillar one implementer we are focus on and conducted on demand driven research's needs. • Some plant extracts and natural substances to manage pre- and postharvest crop pests. • Organic pesticides extracted from Sisal, Azo-harege and Endod and Fermented Cow Urine have insecticidal nature towards protecting their products from field and storage insect pests. • Use of indigenous pest management practice is age old practice and acceptable by the community in the area. • Farmers indicated that most of aged people have rich knowledge to treat both human and animal's diseases and pests. These practices have also practically applicable and used to manage different crop pests • Preparation of botanicals for pest control • IPM group using indigenous pest management practice have been widely used by farmers and neighboring communities. • Purchase and distributed Carrot Nantes seed for EOA farmers at Gobeya

	• Equipments were purchased and distributed for IPM group for preparation of plant extracts for pest managements at Passomille,
	1.1.3: Assemble information and knowledge from various sources to address the identified knowledge gaps needs and priorities
Planned Activities for the period (refer to your workplan for the reporting period)	(i) Assemble the information gathered from the research and value chain actors meeting and develop EOA products value chain (ii) Select best indigenous knowledge practices on pest management (iii) Organize consumer awareness workshop in collaboration with pillar 3
Target Activities for the period (refer to your workplan for the reporting period)	EOA information and knowledge assembled (1 assessment, 2 research results and 1 value chain actors meeting)
Actual Activities for the period xplain what you implemented during this eriod you are reporting) lease include Annexes of the work. Annexes efers to activity reports/research ports/workshop reports and must be attached to ach activity to support/give evidence of work one)	- One(1) assessment was conducted on best indigenous knowledge practices was selected for disease management in carrot - 2 guides prepared for potato and carrot productions  Carrot Guideline EOA.docx  Potato Guideline EOA.docx
Progress between reporting Periods Explain the progress you have made towards attaining your project targets/objectives)	• One assessment was conducted on indigenous knowledge practices on pest managements in passomille And selected botanical for powdery mildew control in carrot experiment at Gobeya • Two Guidelines prepared for Potato and Carrot major pests, diseases and their organic management options
Analysis and Remarks	• 2 guides prepared for potato and carrot productions

✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity Explain why you did not hit the target you set	• Researches results under write up • Organize consumer awareness workshop was conducted
ACTIVITY IMPLEMENTATIONUNDER OUTPUT 1.2 EOA research information and knowledge validated and processed for dissemination	
	1.2. 1. Validate information and knowledge from research findings using appropriate strategies
Planned Activities for the period (refer to your work plan for the reporting period)	(i)Arrange demonstrations (ii)Organize validation workshop to validate research findings (iii) Organize a seminar in Wollo University with instructors and MSc students to share the EOA research findings
Target Activities for the period (refer to your work plan for the reporting period)	• 2 demonstration plots set up • 2 research findings validated via validation workshops
Actual Activities for the period xplain what you implemented during this period you e reporting) lease include Annexes of the work. Annexes refers activity reports/research reports/workshop reports nd must be attached to each activity to support/give vidence of work done)	**Four(4)** demo plots se **Gobeya and Haike Estifanos FTCs) at Tehuledere:-** - Different time of application compost for carrot - To evaluate different types of fertilizers for carrot - To evaluate selected botanical on different rates for disease management in Carrot production **At Gerado FTC ,Dessie** Rate of vermicompost application on different levels for carrot production Annex 7;organic fertilizer expermental **Plot layout** for time of application compost fertilizers for carrot production in Tehuledere district Annex 8;time of compost application p Plot layout for Effect of Vermicompost & NPSB Fertilizers on Yield and Yield Components of Carrot, Dessie

	Annex 9;Layout of expermental plot for t Plot layout for Evaluate the selected botanical application on different rates for annex 10.doc powde mildew in Carrot at GobeyaFTC,Tehuledere district • validation workshop not conducted
Progress between reporting Periods Explain the progress you have made towards attaining your project targets/objectives)	**Four(4)** demo plots set up for four (4) experiments in Tehuldere and Dessie districts • Experimental lands were leveled at Gobeya FTC • Experimental plots layout prepared • Planting of carrot seeds at Gobeya FTC • Data collection frame was developed • • Crop management practices were conducted (weeding, thinning, application of irrigation) • Botanical was prepared and ready for application • Botanical application for cutworm control • Field follow up (M& E)
Analysis and Remarks ✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity ✓ Explain why you did not hit the target you set	• 3research findings not validated via workshops • Additional activities :WU has shared the EOA approach with its Academic staff(270) members to support further research and up scaling of the initiative, June, 4/2022 • Four BSc students (two Horticulture and two plant science departments) from Jimma University attached on botanical extraction and preparations for pest managements by IPM groups and also students involved on carrot experiments at Gobeya and Hayk Estefans to full fill the course of Practical Attachment (F =3, M=1)

	 
	1.2. 2: Process and avail the validated information and knowledge in various repositories e.g. knowledge banks, data bases, print
Planned Activities for the period (refer to your work plan for the reporting period)	(i) Share the results via a webpage dedicated for EOA - on the University website **(ii)** Draw recommendations on market outlets, linkages, organic fertilizer application timing and best indigenous knowledge practices on pest management
Target Activities for the period (refer to your work plan for the reporting period)	• Information on 2 research results availed for extension use and further sharing
Actual Activities for the period xplain what you implemented during this period you 're reporting) lease include Annexes of the work. Annexes refers activity reports/research reports/workshop reports nd must be attached to each activity to support/give vidence of work done)	• Data base for EOA developed at Wollo University(eoa.wu.edu.et) - Photos shared - Linked to Wollo University page - Linked to eoai-africa.org page - Face book page created - Ecological Organic Agriculture Initiative Ethiopia
Progress between reporting Periods Explain the progress you have made towards attaining your project targets/objectives)	• 3 research results not availed for extension use and further sharing because the research results

Analysis and Remarks ✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity ✓ Explain why you did not hit the target you set	It the results will be availed in end of January 2023
Conduct M& E	➢ During M& E, Biovision Africa trust team meet with Wollo University Management team on17th May 2022 Dessie , the University president his remarks underscored that the EOA-I project is good, timely and in line with the University goals and strategies. He stated and promised that to support and ensure that the initiative is sustained even after donors exit. He also thanked BvAT for partnering with them and giving Wollo the opportunity to implement pillar one activities research and applied knowledge. 

	➢ Wollo University has a research and community engagement program which can support such projects to ensure sustainability. Being a pillar implementer and having a strong base in implementing research and development programs with the community are strong holds to continue supporting the project. ➢  Figure 1 Bio vision Africa trust team during M& E on17th May 2022 Wollo University, Dessie Ethiopia
	➢ On November 2022 M&E , by NSC, ISD , PAN Ethiopia , Wollo University and Tehuledere agriculture office field visited and evaluated EOA Pillar one (WU) researches works at Gobeya and Hilk estifanos FTCs Tehuledere district ➢ 16 participants visited the fields M= 15 and F=1

✓	The image part with relationship ID rId27 was not found in the file.  **Joint field visit (NSCand PIPs)to carrot experiment site in Dessie made by pillar I**

INFORMATION, COMMUNICATION AND EXTENSION	
Outcome 2: Adoption of EOA practices by EOA value chain actors enhanced	
ACTIVITY IMPLEMENTATION UNDER OUTPUT 2.1. EOA knowledge and practices disseminated through various pathways	
	2.1.1: Repackage and translate information and knowledge in formats appropriate for disseminating to various target groups with special focus on women, youth and marginalized groups
Planned Activities for the period (refer to your work plan for the reporting period)	• Collect EOA information and knowledge in EOA project areas in Ethiopia – in Oromia, Southern Ethiopia and Amhara regions and Prepare the information for dissemination and translate it to local languages [Amharic, Afan Oromo]
Target Activities for the period (refer to your work plan for the reporting period)	• EOA information and knowledge on three thematic areas prepared for dissemination [Soil fertility enhancement, Plant protection, PGS and third party certification]
Actual Activities for the period ✓ Explain what you implemented during this period you are reporting) Please include Annexes of the work. Annexes refers to activity reports/research reports/workshop reports and must be attached to each activity to support/give evidence of work done)	In the year 2022, EOA information and knowledge in three areas were repackaged and out of which 3 were translated to Amharic – prepared for further dissemination via different pathways. EOA information and knowledge repackaged in three major areas including Pest management weed management and intercropping - soil fertility enhancement and monitoring – a total of 7 guidance notes prepared. All the repackaged knowledge are guidance tools that will be used by farmers, extension officers and agriculture experts. The repackaged materials are practical guides that can be used to implement EOA practices at the farm level. They can also be used by extension offices during trainings and extension support. One of the repackaged EOA materials – on tomato pest and disease management for organic famers was translated to Amharic and used to prepare a brochure and the brochure was printed in 2000 copies. Apart from repackaging, dissemination of the already repackaged and printed IEC materials was another activity accomplished this year. The IEC materials were distributed during trainings, workshops and monitoring field visits (See the distribution Log sheet for details – annexed below in activity 2.1.2). Annexed below are some the materials prepared to be used for training and extension support.  Annex 1_Manipulating crop  Annex 2_Weeds and weed management.d  Annex 3_Amharic_Tomato In
Progress between reporting Periods Explain the progress you have made towards attaining your project targets/objectives)	• Information and Knowledge compiled from three thematic areas (Soil fertility enhancement and monitoring, Plant Protection and weed management): in terms of targets, the number was attained that EOA information from three thematic areas was repackaged. One of the focus areas planned was to prepare a repackaged information on PGS and third-party certifications. This was changed with the production level organic farming challenge – weed management. PGS and third party certification will be covered in the years 2023 as the EOA farmer groups are also believed to attain formal PGS groups and processing for the certification.

Analysis and Remarks ✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity ✓ Explain why you did not hit the target you set	The repackaged materials are simple guidance notes that can be used by farmers (the translated ones) and ToToFs in the different areas. These practical notes can help farmers tackle some of the challenges they when implementing organic farming. Habitat manipulation for an efficient use of natural enemies (mainly predatory insects) by increasing crop diversity, hedgerow management and growing flowering plants in and around the organically managed plots. Tomato is a crop which gets highly attacked by a wide range of pests and disease. EOA farmers growing tomato face the challenge of protecting their crop without using chemical pesticides. The guidance note which is prepared in English and Amharic puts management approaches for different pests and disease that can occur following the crop life cycle. This guidance note included a range of preventive and curative approaches that can be used for organic farming. Some of the approaches can be used for pest and disease management in other crops as well.
	2.1.2: Facilitate access to information and knowledge formats by various target groups with special focus on women, youth and marginalized groups using various strategies e.g. Videos, Social media tools, Print media, e.t.c
Planned Activities for the period (refer to your work plan for the reporting period)	• Collection of success stories, best practices, and experiences on EOA across the value chains of vegetables, fruits and widely grown cereal crops, Production and distribution of short informative brochures, newsletters and posters and Share EOA information via social media outlets [Facebook, Twitter, WhatsApp, Telegrma and Blog site). Prepare short videos on EOA technologies and practices
Target Activities for the period (refer to your work plan for the reporting period)	• 18 stories collected • 4 newsletters prepared and printed with a total of 4000 copies • 250 social media posts • 4 short videos • 10 stories shared via on the EOA blogpost: https://wwwagroecology.blogspot.com/
Actual Activities for the period ✓ Explain what you implemented during this period you are reporting) Please include Annexes of the work. Annexes refers to activity reports/research reports/workshop reports and must be attached to each activity to support/give evidence of work done)	Success stories of EOA farmers on the use of EOA practices and technologies were collected in the project areas (Holeta, Haike, Ziway and Arba Minch where the EOA extension is being supported). The stories included how farmers integrate crop production with livestock and poultry management, outputs of the crop production being used as animal feeds and farmyard manure from animals added back to the farm to recycle nutrients. They also included the market linkages mainly for those in Holeta who are using the market opportunity in Addis Ababa – Organic market and Sunday market days. The collected stories were shared via different pathways including social medial, IEC materials and during trainings to different EOA actors. Social media including Twitter, Telegram, Facebook, YouTube and EcoAgtube were used to share stories and short informative messages for EOA value chain actors. Generally, information and knowledge on EOA were disseminated through IEC, Social Media, Trainings, Extension support, Website.

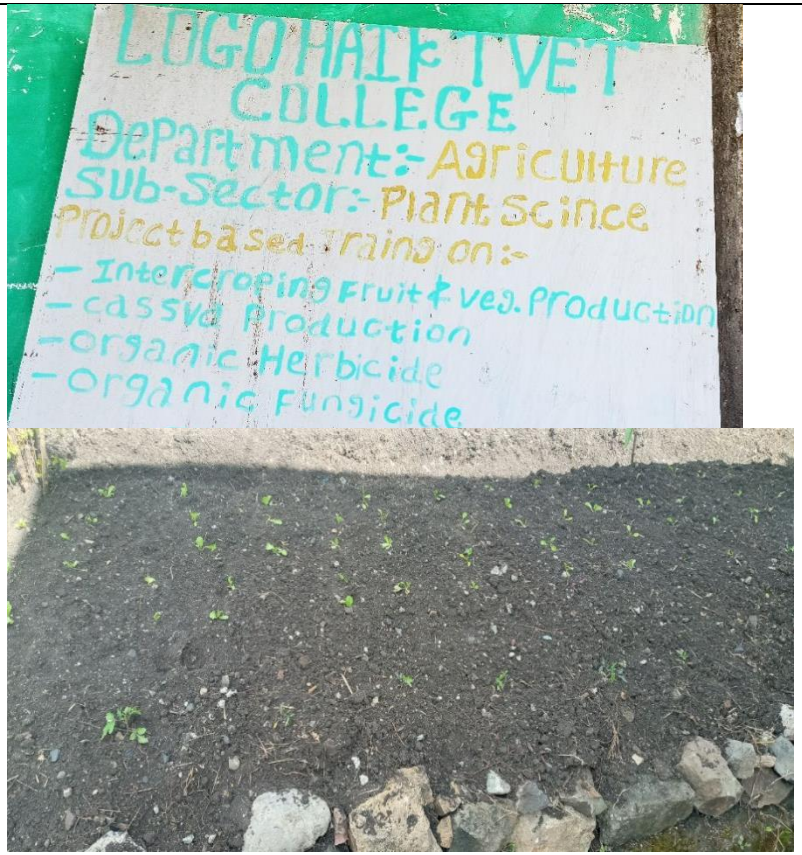
	Annex 4_Pest & Disease mgt_Tomato Annex 5_Distributed log sheet 2018-2022.x Annex 6_Mizan Newsletter Number 9

Progress between reporting Periods
Explain the progress you have made towards attaining your project targets/objectives)
	• 6 stories collected
	• 1 Newsletters printed: 1000 copies
	• 1 Brochure printed: 2000 copies
	• 53 Social media posts (Tweeter and Telegram)
	• 2 videos shared:
	  ○ 1 via YouTube: https://www.youtube.com/watch?v=b_qGl1XNOaQ
	  ○ 1 via EcoAgtube: https://www.ecoagtube.org/content/using-food-supplements-attract-natural-enemies-pest-insects
	• 2 EOA Knowledge shared via Blogpost: https://wwwagroecology.blogspot.com/

Analysis and Remarks ✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity ✓ Explain why you did not hit the target you set	In the year 2020, a pest and natural enemies identification booklet was prepared. The plan was to properly design it and print it out so that it can be used by farmers and extension officers as a pocket guide. Evidences from the Amharic version of the same document showed how important it was for farmers. With the limited budget we have, it was not possible to do the designing and print it for further distribution – especially for farmers. The newsletters printed and distributed were so useful that it helped most farmers get motivated to adopt EOA technologies and practices when they see stories of their fellow farmers were written and shared (see photo below – when a farmer speaks about how his success story was written and published – motivating other farmers that they can do even more than what he did.)   Most of the targets are not reached mainly because of financial limitations as the actives required more budget for print outs, video documenting, editing and needed travel and field visits to get out more stories.
ACTIVITY IMPLEMENTATION UNDER OUTPUT 2.2: EOA PRACTICES DISSEMINATED THROUGH TRAINING (FORMAL AND INFORMAL) OF VARIOUS TARGET GROUPS	

	2.2.1 Undertake training of actors along the value chain with appropriate training materials (using the ToToF approach, BDS and other strategies).
Planned Activities for the period (refer to your work plan for the reporting period)	• Training for value chain actors (producers, consumers, input suppliers, transporters, processors, distributors) on EOA practices • Conduct refresher training to ToToFs in the EOA project areas
Target Activities for the period (refer to your work plan for the reporting period)	• 2 training events conducted for value chain actors • 2 training events conducted for ToToFs
Actual Activities for the period ✓ Explain what you implemented during this period you are reporting) Please include Annexes of the work. Annexes refers to activity reports/research reports/workshop reports and must be attached to each activity to support/give evidence of work done)	Two sets of trainings for organic cotton farmers given by ToToFs in Arba Minch. The farmers received land preparation, planting in rows with appropriate spacing between plants and rows, and the use of farm record books so that farmer can make use of the farmer record book for farm level activities. A total of 111 (6 women, 47 youth) have taken the training. The training was given by 4 ToToFs who are based in the project area and are providing extension support apart from set training events. In Haike, refresher training was organised for EOA farmers in November 2022. The training was focused on plan plant protection for organic crop management and on soil fertility enhancement – on vermicomposting technology. Following the theoretical hall based training; farmers were taken through practical sessions (Annex, 7). Two training events conducted for ToToFs in Arba Minch and Dessie. The training included new ToToFs and previously trained ones. The training for the later ones was a refresher. A total of 68 ToToFs were trained out of which 40 were new ToToFs (Annexes, 8&9). Annex 7_Training for organic farmers and [Annex 8_ToToFs traning report March Annex 9_ToToFs traning report May 1(
Progress between reporting Periods Explain the progress you have made towards attaining your project targets/objectives)	• 2 training events conducted for producers (EOA farmers) • 2 ToToF training events conducted
Analysis and Remarks ✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity ✓ Explain why you did not hit the target you set	Training of value chain actors was given for farmers and extension supporters at village level. The training could have been given to EOA product consumers in Addis Ababa but outreach materials were produced to them as it was challenging to organize a training event for a very busy city dwellers. On another note, during the refresher trainings, the human health and nutritional benefits of consuming organic was covered and this concerns producers as they are consumers of their own produces. One of the input suppliers for EOA farmers in Haike area are the farmer groups who produce plant extract and distribute to the farmers. The farmers from these plan extractor groups were involved in the refresher training for the EOA farmers. It

	was believed that the plan protection input suppliers were playing a role (though minimal) in the plan protection aspect so the event helped bring the suppliers and the farmers together. With regards to the number of training events, the target was reached but the audiences were only farmers both as producers and consumers, input suppliers and extension supporters.
	2.2.2 Develop/ review EOA curricula for integration into the national formal education programs.
Planned Activities for the period (refer to your work plan for the reporting period)	• Curriculum review workshop with Bishoftu and Holeta TVET Colleges, Curriculum introduction workshop with Hiake TVET College to integrate EOA into their courses
Target Activities for the period (refer to your work plan for the reporting period)	• 4 workshops conducted
Actual Activities for the period ✓ Explain what you implemented during this period you are reporting) Please include Annexes of the work. Annexes refers to activity reports/research reports/workshop reports and must be attached to each activity to support/give evidence of work done)	One workshop conducted on curriculum introduction to TVET colleges in South Wollo Zone. Two TVET colleges, Haike and Kombolcha TVET colleges took part in the workshop. Instructors from Wollo University also took part in the workshop (Annex 10). The two TVET colleges agreed that they will add EOA courses to their curriculum. The university also agreed that MSc and undergraduate student can be given guest lecture courses on EOA. The research being conducted by Wollo University has engaged students and instructors which further helps the gradual introduction of EOA in to the courses and be part of their research area. In a training curriculum published by the Ethiopian Ministry of Agriculture and Ministry of Labour and Skills in December 2021, Organic farming is included as part of the agriculture department training courses. This is an important news for the EOA initiative and other stakeholders who have been striving to introduce EOA into the formal training systems. With this, TVET colleges which are working with EOA project are easily introducing the organic farming in to the training. And yet, they need capacity building trainings which can be done by the different pillars. Haike TVET college has become an important partner in this regard which already started training and practical implementation of the EOA principles and practices in their compound.  Annex 10_EOA_Curriculum_li

	 Figure 1. A billboard sign for organic farming and transplanted vegetables in Logo Haike TVET College
Progress between reporting Periods Explain the progress you have made towards attaining your project targets/objectives)	• 1 workshop was conducted

Analysis and Remarks ✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity ✓ Explain why you did not hit the target you set	After the start of the trainings and practical work with Logo Haike TVET college, conducting one workshop with the involvement of other TVET colleges in South Wollo Zone and Wollo University would have been an important milestone to show the other institutions on how Logo Haike TVET college is taking up the EOA both in theoretical and practical trainings. The experiences gained in Logo Haike TVET college after that starting workshop and close follow up will be used as good examples to bring in more training institutes. The planned target was not attained mainly due to budget limitation.
	2.2.3 Create awareness on EOA curriculum programs among learning institutions (Tertiary) for adaptation through seminars, strategic meetings, talks, etc
Planned Activities for the period (refer to your workplan for the reporting period)	• Provide presentations on EOA curriculum to TVET colleges in Amhara, Oromia and Southern Nations • Organize meetings with agriculture colleges and discuss on how to integrate the EOA curriculum to their courses and motivate for adoption • Demonstrate EOA technologies and practices with College students
Target Activities for the period (refer to your workplan for the reporting period)	• 3 Presentations • 3 meetings conducted with TVET colleges • Demonstrations set up in 2 colleges
Actual Activities for the period ✓ Explain what you implemented during this period you are reporting) Please include Annexes of the work. Annexes refers to activity reports/research reports/workshop reports and must be attached to each activity to support/give evidence of work done)	Preliminary discussions with Wollo University conducted and agreed for the agriculture college to invite PIPs to provide guest lectures on organic farming. On the other hand, Pillar 2 will be invited to present seminar presentations when MSc students organise seminar presentation events. The two TVET colleges are found in South Wollo Zone – one of the EOA project areas. The colleges have agriculture departments. The students graduating from the college will serve as agriculture extension agents. Hence, providing training course on organic agriculture will be an opportunity for further extension of the EOA work to the farmers. The two colleges agreed that they will include EOA courses in their curriculum – provided that further details on how to implement the curriculum revision will be done in the next meetings (Annex 11).  Annex 11_Discussions with H

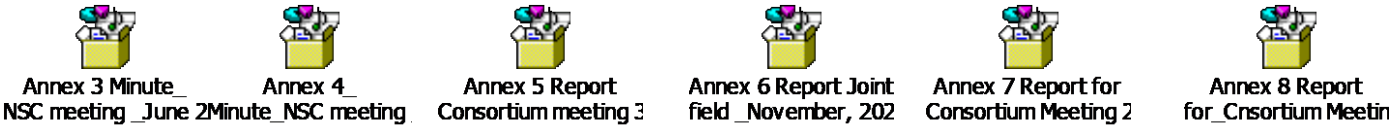
Progress between reporting Periods Explain the progress you have made towards attaining your project targets/objectives)	• 0 Presentations • 3 meetings conducted with TVET colleges out of which 1 meeting was with the Logo Haike TVET college Board Members) • Demonstrations set up in 1 college both on organic vegetables production and Vermiculture production
Analysis and Remarks ✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity ✓ Explain why you did not hit the target you set	The meetings conducted with the board members of the TVET College has helped the college dean make a simple decision to host organic farming training and demonstration plots in the college. The TVET college has a training facility which can be used for farmers trainings as well and the college has allowed the EOA project to use the facility. In collaboration with the TVET college, the EOA project has set up learning (demo plots) for organic vegetable production in the TVET college compound. TVET college students were involved in the demo plot preparation, seedling preparation, designing and bed preparation. These were used as practical sessions for the agriculture college students – which the college dean said will be engaged in their own business of vegetable production. Discussion with Haike TVET college was held on September 2022 to discuss on how to start integrating EOA into their formal education. The following were the agreed meeting outputs: • The college agreed to provide the courses for the students • The college allocated/provided a plot of land for PAN-Ethiopia to demonstrate EOA technologies and practices for the students and college instructors • Setting up a vermicomposting unit in the college for learning purposes was agreed • The college also agreed that trainings and demonstrations for EOA farmers in the surrounding villages can be hosted in the college. • A plan of making the college an information hub for EOA is agreed and for that EOA will facilitate the set up As part of the training, students and college teachers were taken to Bishoftu Polytechnic college (BPC) in December 2022 (Annex 13). BPC has well adopted organic farming training and has 36 student who graduated from the college a started their own business in organic farming. The exchange visit was held with the aim to help the Logo Haike students and teachers: • To learn how BPC linked the organic curriculum with production of vegetables • To learn how the students became entrepreneurs – in organic farming • To learn how GFF is working with BPC in training students on organic farming Vermicomposting is one of the EOA technologies widely adopted by EOA farmers in the villages around Haike. One of the challenges for farmers was access to the Vermiculture. Hence, vermicomposting unit was set up in the college which will be used for Vermiculture production and distribution. As agreed between the EOA project and the TVET college, the Vermiculture will be distributed for free until farmers are able to produce their own culture for further expansion. This will help the learning process and exchange between incoming trainee farmers and the agriculture college students. Demonstration plots for organic farming are set up in the college where farmers can do the theoretical and practical

	trainings in the compound. Logo Haike allowing the EOA project to establish a farmers training and resource center in their compound is one of the outstanding benefits for the project to create the link between farmers and training institutions.  Annex 13_Exchange visit between Logo Ha
	2.2.4 Document the best experiences and results on use of EOA research information and knowledge by the farmers (women, youth)
Planned Activities for the period (refer to your workplan for the reporting period)	• Field visits to EOA initiative areas to meet successful EOA farmers and document their success, Meet farmers from Holeta, Bishoftu, Arba Minch, Dessie and Woliso areas; Disseminate the results they get from using EOA research information
Target Activities for the period (refer to your workplan for the reporting period)	• 5 best experiences documented on the use of EOA research Knowledge
Actual Activities for the period ✓ Explain what you implemented during this period you are reporting) Please include Annexes of the work. Annexes refers to activity reports/research reports/workshop reports and must be attached to each activity to support/give evidence of work done)	Four experiences documented – two in Holeta, one in Haike and one in Ziway areas. Three of the documented experiences were published as part of Mizan Newsletter number 9 (annexed above) and the third one is being processed. The two experience were shared to farmers, field officers and agriculture people during trainings and field visits.
Progress between reporting Periods Explain the progress you have made towards attaining your project targets/objectives)	• 3 experiences documented, 1 on the use of Vermicompost for onion production and 2 on integrated organic farming and marketing, 1 on Vermicompost production and sale
Analysis and Remarks ✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity ✓ Explain why you did not hit the	The trial on the use of vermicomposting for onion production has data collected from land preparation up to harvest with all the costs and profits. The collected data need simple statistical analysis which we couldn't manage to get technical persons to do it. Once, completed the results will be shared via different pathways and are believed to be used as evidences to be communicated in trainings, workshops and other events. As mentioned in activity 2.1.2 above, the documented experiences are being used to motivate farmers to adopt more organic technologies and practices. Testimonies of those farmers showing economic benefits was a motivation for most farmers in Holeta and Haike. In 2.1.2 above, Mr Mohammed Ali was testifying on how he cut the use of agrochemical

target you set	inputs both for soil fertility enhancement and plant protection. This was an event where a man whose experience was documented coming in front of farmers to witness the benefits. Such things help initiate a peer to peer learning – where farmers can hear from the horse's mouth.
OTHER PILLAR SUPPORT COSTS	
	2.2 Conduct M&E
Planned Activities for the period (refer to your work plan for the reporting period)	Monitor project activities
Target Activities for the period (refer to your work plan for the reporting period)	• 2 monitoring visits conducted
Actual Activities for the period ✓ Explain what you implemented during this period you are reporting) Please include Annexes of the work. Annexes refers to activity reports/research reports/workshop reports and must be attached to each activity to support/give evidence of work done)	Monitoring visits were conducted as part of training events and documentation of best practices in organic farming. To conduct a separate monitoring visit was found to be costly.
Progress between reporting Periods Explain the progress you have made towards attaining your project targets/objectives)	• More than two monitoring visits conducted (April, September, October, and November); the visits were conducted as part of the trainings and other tasks – as mentioned above.
Analysis and Remarks ✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity ✓ Explain why you did not hit the target you se	

Outcome 4:	
Activity Implementation under Output 4.1: Synergies amongst governance, coordinating and implementing institutions strengthened	
	4.1.1 Facilitate capacity building events for EOA partner organizations to ensure coordination, networking and partnership that facilitate sharing of experiences, results and lessons among country stakeholders.
Planed activity for the period	Knowledge exchange field visit (Revised)
Target activity for the period	2 Knowledge exchange field visit ,one national and one regional
Actual activity for the period Explain what you implemented during this period you are reporting) Please include Annexes of the work. Annexes refers to activity reports/research reports/workshop reports and must be attached to each activity to support/give evidence of work done)	• Initially the plan was to conduct two stakeholder workshops in which one was carry over activity from 2021 and one was already planned on 2022. Because of other national level EOA advocacy workshop plan under activity 4.2.1, we decided to revise the initial plan in to Knowledge exchange field visit at national and regional level in order to diversify activities and to avoid repeated workshops. • Now based on the revised plan Knowledge exchange field visits are conducted on December. The visits were at national and regional levels. The regional filed visit has conducted in partnership with pillar I implementers Wollo University in South Wollo and the national experience sharing was conducted in near distance of Addis Ababa (Debre zeyit).  Annex1_Field visit at Haik.docx  Annex2_Field visit at Debre zeyit.docx
Progress between reporting Periods	• Both revised planned activities are done ,and no progress during this reporting period

Explain the progress you have made towards attaining your project targets/objectives**)**	
Analysis and Remarks ✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity ✓ Explain why you did not hit the target you set	The regional field visit was mainly focused on bee keeping association and forestry sites. The following lessons are taken here. • Based on participant's observation the beekeeping groups are doing the business in a skillful manner and their practice can easily be scaled out to have similar groups in appropriate agrology zones to benefit from beekeeping and conservation of biodiversity. The Yesemanegus beekeeping groups are the living examples to attract rural area entrepreneurs particularly unemployed youth farmers as they are demonstrating exemplary work in supplying quality wax for the market. • The agroforestry practice is also best in increasing farmers' resilience to climate change as it gives an option to diversify production and also supports in improving farm condition. Intercropping as an agronomic practice has multiple benefits for smallholder farmers to intensify the quantity of harvest from small plot of farm land. Farmer Hussein's seasonal harvest is better as compared to other farmers who apply mono-cropping. Detail information are included in the annex 1 above The national field visit was conducted aiming at sharing experience of using Effective microorganism technology which is agro ecology friendly. • Effective microorganism technology is a good technology for organic crop production (composting), animal food production (crop residue), having health environment (avoid odder). • Taking EOA implementer farmers was beneficial in getting awareness through evidence and to make networking with suppliers. The farmers have high demand of compost and vermicomposting so this EMT will help them by decomposing in short period of time.

	4.1.2 Organize multi-stakeholder national platforms for joint project planning, implementation and monitoring activities and sharing of experiences, results etc. among partners developing same value chains
Planned Activities for the period (refer to your work plan for the reporting period)	a) Organizing and conducting NSC meetings , consortium meetings and joint meetings b) arrange field Visit for NSC members c) organize Joint field visit for NSC and PIPs
Target Activities for the period (refer to your work plan for the reporting period)	• 3 NSC meetings • 2 consortium meeting • 1 field visit for NSC _Revised to consortium meeting • 1 joint field visit (PIPs and NSC)
Actual Activities for the period ✓ Explain what you implemented during this period you are reporting) Please include Annexes of the work. Annexes refers to activity reports/research reports/workshop reports and must be attached to each activity to support/give evidence of work done)	• From the planned activities, 2 NSC meeting and 3 consortium meetings (one at Dessie and two at Addis Ababa) are conducted. As indicated above the annual plan for consortium meetings was 2, but we already conducted three meetings because the consortium meetings were found necessary to enhance collaboration among pillar implementers/synergy among them and create an opportunity for consortium members to revise the activity plan jointly . The first consortium meeting was held on Friday 15th April 2022 and the second was held on Wednesday 15th June 2022 while the third was on 03/11/2022. • Additionally the joint field visit is conducted on 05/11/2022 in South Wollo together with NSC members and PIPs. It was an interesting visit, NSC observed the experiment sites that are undertaking by WU to determine the rate of application of different fertilizers on carrot production. The other visit has focused on the best experience of vermicomposting site implementing by farmer Ahmed Ali. Paso mile **IPM** groups were also visited which received different supports by pillar I and pillar2 implementers and wereda agriculture office.  Annex 3 Minute_ NSC meeting _June 2 Annex 4_ Minute_NSC meeting Annex 5 Report Consortium meeting 3 Annex 6 Report Joint field _November, 202 Annex 7 Report for Consortium Meeting 2 Annex 8 Report for_Cnsortium Meetin

Progress between reporting Periods Explain the progress you have made towards attaining your project targets/objectives)	• From the planned 3 NSC meetings, only 2 are conducted. • NSC field visit is was revised to consortium meeting because of two reasons 1. The budget is not enough to travel and visit due to inflation impact **2.** Repeated consortium meetings are mandatory for extensive work in the remaining period but finally the meeting is not undertaken
Analysis and Remarks ✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity ✓ Explain why you did not hit the target you set	• the CLO has supported the annual meeting of the general assembly of EAOA(Ethiopian Association of Organic Agriculture) conducted on 26 March 2022 (the association has selected new board members and new members have joined the association).This compared to the previous years is considered a good step towards creating vibrant EOA platform which can improve EOA governance and networking • The CLO also managed to complete project agreement procedures to bring Wollo University on board which took some time than expected. In the selection procedure risk capacity assessment exercise was useful to identify the strong and weak performance areas of the new partner and provide capacity building. • ISD participated in the regional steering committee meeting (RSC) conducted in Ruanda and shared the progress of the project in Ethiopia which also was benefited from the experiences of other EOA implementing countries. • The field visit conducted at Holeta on May 13, 2022 with the presence of, Ambassador of Switzerland to Ethiopia, Deputy Director General of SDC Head of cooperation for Africa for SDC and others from Switzerland government was an opportunity to show the efforts made by EOA farmers. The visit has motivated farmers to engage and increase the quantity and quality of EOA produce and continue supplying to the available markets all together with indicating the challenges they have been facing. the visit of BvAT M and E team to Ethiopia was found useful because the team has observed the ground practical implementation of the project under the different pillars, create an opportunity to physically visit institutional arrangements of project implementers including the CLO. The BvAT team gave reflections about their visit which has helped the consortium to consider areas of improvements, The BvAT M and E team has provided technical supports to pillar implementers and ISD MEAL team regarding result reporting afterwards. Conducting consortium meetings helped to have good collaboration and synergy among pillars, especially the meetings were very important for the new consortium member Wollo University (pillar one implementer) to better understand the needs in the areas of EOA research and revise the plan of action. ➢ Meetings with NSC members have been very crucial to assess the status of implementation of activities under the different pillars and receive recommendations for future actions. The NSC meeting was also supportive in designing EOA advocacy strategy at national level. In the meeting NSC members and ISD together planned to conduct national level EOA advocacy to increase EOA visibility and bring strong networking and provide evidences for attracting decision and policy makers this has increased commitment

	by NSC members to closely follow EOA implementation.
ACTIVITY IMPLEMENTATION UNDER OUTPUT 4.2. EOA practices mainstreamed into public policies and investment plans	
	Activity 4.2.1 Develop and implement an EOA advocacy and lobbying action plan for integrating into EOA practices mainstreamed into national policy **Frameworks, and other related aspects.**
Planned Activities for the period (refer to your work plan for the reporting period)	1. Develop a policy frame work/a legislation/an extension package on that support advocacy to integrate certain EOA technologies and practice in to the national agricultural system 2. validation workshop on the prepared document 3. Organize EOA national Advocacy
Target Activities for	**1 study document**

the period (refer to your work plan for the reporting period)	
Actual Activities for the period ✓ Explain what you implemented during this period you are reporting) Please include Annexes of the work. Annexes refers to activity reports/research reports/workshop reports and must be attached to each activity to support/give evidence of work done)	➢ Regarding the plan indicated in no.1, ISD decided to develop EOA extension package through consultation with an objective of creating an enabling condition for mainstreaming EOA in to the Ethiopia's agricultural extension to support EOA practitioners. Listed consultants were contacted and the appropriate consultant is already selected. ISD and the selected consultant signed an agreement with purpose of ''review conventional and ecological organic agriculture(EOA) extension package relevant to vegetables and root crops identified by ISD and prepare an implementable extension package for EOA in Ethiopia. The study will cover about two months under normal condition. ➢ Based on the agreement ISD will pay 50% as agreement is signed (already payed), 25% when submitting first final report and the last 25% immediately when the study is over and report, after validation workshop is carried out, is submitted. The cash will be deposited in consultants account. ➢ Regarding EOA national advocacy, it was planned upon the mutual agreement of ISD and NSC members. Due to different reason the advocacy workshop conducted on late December 29 2022. It was a great opportunity in connecting different key stakeholders to work together in upscaling EOA throughout the country. Universities, TVET colleges, elementary and secondary school directors, research institutions, regional agriculture Bureau heads, MoA representatives, etc were participants of the work shop. ➢ EOA implementer farmer presents their fruit full experience with display of products. This was another good opportunity to make the advocacy evidence based. ➢ Three local medias (one Oromiffa , Oromia broadcasting network and two Amharic, Amhara mass media agency and Ahadu radio) attended the advocacy workshop. OBN and Ahadu radio did record and took air time coverage in their Medias.  Annex 9_Advocacy workshop Dec.2022.c
Progress between reporting Periods Explain the progress	➢ For the extension package preparation, consultants already selected and agreement is signed. 50 % of the service payed. The will help to identify gaps and establish EOA extension package for vegetables and root crops.

you have made towards attaining your project targets/objectives)	
Analysis and Remarks ✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity ✓ Explain why you did not hit the target you set	➢ The advocacy workshop was very important to bring the government agriculture officials, organizations who work on EOA and farmers implementing EOA together.
	Activity 4.2.2 Facilitate stakeholder engagement to align EOA practices and technologies into agricultural systems.
Planned Activities for the period (refer to your workplan for the reporting period)	• Conduct Experience Sharing
Target Activities for the period (refer to your workplan for the reporting period)	2 experience sharing field visits for Stakeholders who engaged on EOA was targeted.

Actual Activities for the period ✓ Explain what you implemented during this period you are reporting) Please include Annexes of the work. Annexes refers to activity reports/research reports/workshop reports and must be attached to each activity to support/give evidence of work done)	The activity is revised and the budget is totally moved to EOA data collection
Progress between reporting Periods Explain the progress you have made towards attaining your project targets/objectives)	Revised
Analysis and Remarks ✓ Explain any additional activities you could have	➢ To conduct EOA result data survey, repeated discussion was held between ISD and BvAT , Finally mutual understanding was reached to use some of the budget lines for data exercise. ISD has revised the plan under pillars 3 and 4 to reallocate budget for the data exercise by considering how different targets can be meet without affecting what is initially agreed to deliver as target achievements

done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity ✓ Explain why you did not hit the target you set	➢ During this reporting period the result data is already collected and submitted to ISD for final review and cleaning.
ACTIVITY: OTHER PILLAR SUPPORT COS	
	4.3 Conduct M&E
Planned Activities for the period (refer to your work plan for the reporting period)	Monitoring visits conducted
Target Activities for the period (refer to your work plan for the reporting period)	4
Actual Activities for the period ✓ Explain what you implemented during this period you are reporting) Please include Annexes of	➢ The M and E work is replanned to be conducted along with the result exercise. This is to increase efficiency in terms of budget utilization. The M&E activity does not conducted independently; rather it happened together with result data survey.

the work. Annexes refers to activity reports/research reports/workshop reports and must be attached to each activity to support/give evidence of work done)	
Progress between reporting Periods Explain the progress you have made towards attaining your project targets/objectives)	➢ This reporting period is already the end of the year, hence no progress at all

REPORTING AT OUTPUT RESULTS LEVEL
Pillar 1

Out puts	Indicator Baseline	Indicator Targets	Actual Achievement	Progress Between Periods	Analysis and Remarks
Output 1.1	0	➢ 3 types of EOA technologies, practices and others generated and collated along the various value chains.	✓ Two guides prepared for potato and carrot production ✓		-Three research works under analyzed data, writing draft papers for validation and publications
Output 1.2	0	2 types of EOA technologies, practices and others validated and processed along the various value chains.			

OUTCOME 2: ADOPTION OF EOA PRACTICES BY VALUE CHAIN ACTORS ENHANCED		
EOA OUTPUT IND 2.1: EOA practices disseminated through various pathways (IEC materials, social media, websites, etc.)		
	Indicator Baseline Refer to the EOA M&Framework/Results Matrix	
2.1.1	**Indicators Planned** Refer to the EOA M&Framework/Results Matrix	At least 4 EOA knowledge products (success stories, procedures of applying a practice, control method, etc) disseminated through various pathways
	Actual Achieved Explain the indicators achieved based on activities implemented	6 knowledge produces disseminated: o 3 success stories and 1 procedure of habitat modification

	during the reporting period.	disseminated via Newsletter, 2 stories shared via Website ○ 1 pest management method disseminated as a brochure ○ 1 insect scouting video shared via EcoAgtube
	Progress between reporting period Narrate the incremental indicators towards your planned indicators	The following 7 dissemination pathways were used: ○ IEC materials ○ Social Media ○ Trainings ○ Exchange visit ○ Extension support ○ Website ○ Farm demonstration
	Analysis, Remarks ✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity ✓ Explain why you did not hit the target you set	Disseminating the stories of farmers to other project areas and/or in the same area was important in motivating farmers towards adopting more EOA practices and technologies. Exchange visits conducted were also important as the event helped peer to peer learning and experience sharing. Using more pathways was important as it brought different exposure routs to people and project beneficiaries.
	Indicator Baseline Refer to the EOA M&Framework/Results Matrix	
2.1.2	**Indicators Planned** Refer to the EOA M&Framework/Results Matrix	167,000 farmers reached with EOA information and knowledge disaggregated by gender and age.
	Actual Achieved Explain the indicators achieved based on activities implemented during the reporting period.	With the use of the above mentioned information and knowledge dissemination pathways, the following numbers were reached: • Farmers =3140 • Through twitter (Lump sum): 16,668 • Through the website (Lump sum): 91 • Through others (Telegram, YouTube & EcoAgTube): 738

	Progress between reporting period Narrate the incremental indicators towards your planned indicators	
	Analysis, Remarks ✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity ✓ Explain why you did not hit the target you set	
OUTPUT 2.2 EOA practices disseminated through training (formal and informal) of various target groups		
	Indicator Baseline Refer to the EOA M&Framework/Results Matrix	
2.2.1	**Indicators Planned** Refer to the EOA M&Framework/Results Matrix	180 ToToFs (extension officers/rural service providers) trained on benefits and application of various EOA practices and standards disaggregated by type of service, gender and age
	Actual Achieved Explain the indicators achieved based on activities implemented during the reporting period.	• 68 ToToFs (12 women) trained out of which 40 are new. • Extension support to 36 organic farming students, all youth (22 Females, 14 Male) • 21 farmers (5 women) under the plan extract producer and distributor group supported, training given
	Progress between reporting period Narrate the incremental indicators towards your planned indicators	
	Analysis, Remarks ✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity	• Two ToToF trainings were conducted in the last six months – in South Wollo and Arba Minch. The trainings included extension officers who are new to EOA and those who were previously trained. • Extension support on PGS development for 36 organic producers who took EOA trainings in Bishoftu Polytechnic College 2020 and 2021. The students completed the organic farming training and started their business on organic

	✓ Explain why you did not hit the target you set	vegetables production and distribution. • In Passomille, there was an established group working on preparation of plan extracts for pest management purposes. The group were distributing plant extracts to EOA farmers in other villages – including Estena and Gobeya. In 2021, season the group distributed a total of 410 litres of plant extracts. The extension support is to help them increase their production volumes in the 2022 season
	Indicator Baseline Refer to the EOA M&Framework/Results Matrix	
2.2.2	**Indicators Planned** Refer to the EOA M&Framework/Results Matrix	**2860 value chain actors (farmers, input suppliers, processors and transporters) trained on various EOA practices and standards (30% M; 60%F and 10% Y) - (2700 farmers, 40 input suppliers, 40 processors, 40 transporters, 360 certifiers)**
	Actual Achieved Explain the indicators achieved based on activities implemented during the reporting period.	Trainings were given for mainly three groups of value chain actors including producers, trainers and farmer group input suppliers.
	Progress between reporting period Narrate the incremental indicators towards your planned indicators	• Farmers = 483 (402 Male, 81 Female) • Trainers of college and university students: 15 (11 Male, 4 Female) • 21 Input producer and supplier farmer group members (16 Male, 5 Female)
	Analysis, Remarks ✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity ✓ Explain why you did not hit the target you set	A total of 519 (429 male and 90 female) value chain actors were involved in trainings out of which 83% were male and 17% female. Despite the call for more women to take part in trainings, it was not possible to reach the target for women farmers.

OUTPUTS FOR OUTCOME 4: Structured management of EOA enhanced through coordination, networking, advocacy, multi-stakeholder platforms and capacity building

OUTPUT 4.1 Synergies amongst governance, coordinating and implementing institutions strengthened

	Indicator Baseline Refer to the EOA M&Framework/Results Matrix	
4.1.1	**Indicators Planned** Refer to the EOA M&Framework/Results Matrix	**At least 12 different stakeholders participating in the platforms at national level.**
	Actual Achieved Explain the indicators achieved based on activities implemented during the reporting period.	No platform meeting is conducted but addressed under EOA national advocacy workshop (under activity 4.2.1) conducted in December, 2022. At least 30 different stakeholders participated in EOA advocacy workshop at national level MoA(4),regional agriculture office(3), universities(3),Research institutes(2),TVET(3),schools(3),partners(8),private(3),others(1)
	Progress between reporting period Narrate the incremental indicators towards your planned indicators	
	Analysis, Remarks ✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity ✓ Explain why you did not hit the target you set	Tracing additional budget source for conducting national advocacy**.**
OUTPUT 4.2 EOA practices mainstreamed into public policies and investment plans		
	Indicator Baseline Refer to the EOA M&Framework/Results Matrix	
4.2.1	**Indicators Planned** Refer to the EOA M&Framework/Results Matrix	**At least 9 EOA policies/legislations or related aspects integrated into national policy frameworks**
	Actual Achieved Explain the indicators achieved based on activities implemented during the reporting period.	1 national EOA extension package to be developed.

	Progress between reporting period Narrate the incremental indicators towards your planned indicators	Agreement is signed
	Analysis, Remarks ✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity ✓ Explain why you did not hit the target you set	The study will help to identify the current extension package gaps in relation to EOA for selected root crops and vegetables. If gap is identified ,it will be easy to fill
	Indicator Baseline Refer to the EOA M&Framework/Results Matrix	
4.2.2	**Indicators Planned** Refer to the EOA M&Framework/Results Matrix	At least 4 meetings/workshops held at national level to lobby and advocate EOA annually
	Actual Achieved Explain the indicators achieved based on activities implemented during the reporting period.	2 NSC meeting is conducted 1 EOA national advocacy conducted
	Progress between reporting period Narrate the incremental indicators towards your planned indicators	
	Analysis, Remarks ✓ Explain any additional activities you could have done within this activity ✓ Explain the benefits you feel you gained by undertaking the activity ✓ Explain why you did not hit the target you set	EOA advocacy workshop was a great opportunity to connect government agriculture officials, university elites, organizations who work on EOA, EOA implementer farmers, researchers, etc together to share ideas and evidence based experiences.

Challenges Experienced

Pillar I

The following were the main challenges faced during the reporting period:

- Agreement signed too late due to these reason pillar one stared the project in 4 April 2022 therefore 2021 & 2022 project activities and project targets planned together and that is why not produce output results
- High rate of inflation: inflation rate of the country has reached which caused difficulties to implement target activities with the limited budget.
- Lack of input supply for organic farming- especially quality seeds
- Lack of market centers especially in Tehuledere district
- Limited consumer awareness
- High demand driven request from EOA farmers so it conducting four (4) experimental research trails above the planned due to these reasons there is shortage budget therefore it requires additional budget for the experiments

Pillar 2

The following were the main challenges faced in 2022 reporting period was high rate of inflation: inflation rate of the country has reached an all-time high 37.5% which caused difficulties to implement target activities with the limited budget.

Pillar IV

The following were the main challenges faced during the reporting period:

- Agreement with pillar 1 signed too late

- High rate of inflation: inflation rate of the country has reached high which caused difficulties to implement target activities with the limited budget.
- Security issue made most stakeholders to give less focus for EOA related issue

Solution given for challenges

- As pillar IV We solved budget deficit faced for national advocacy workshop by merging other project with the same activity plan.

Opportunities Identified

Pillar I

- IPM group establishment by using indigenous technical knowledge for plant protection in Passomile Tehuldeders district, South Wollo Zone
- The Ethiopia government has started a national campaign on training and extension of composts and botanical pesticides preparations and its uses
- Wollo University has a research and community engagement program which can support such projects to ensure sustainability**.**

Pillar II

- **Haike and Kombolcha TVET Colleges joining the EOA curriculum implementation:** The two colleges are located in the EOA project area in South Wollo – Amhara Region. In a meeting and joint workshop, the two colleges agreed that they will include EOA courses in their agriculture department.
- **Haike TVET College hosting organic farming demonstration plots:** Haike TVET College joined the EOA project and give a plot in its compound to demonstrate the EOA technologies and practices. The college has now 47 students doing the demonstration plots. EOA farmers around Haike are also taking trainings in the college. "The college dean said that they will make the college an EOA information dissemination and training centre".

Organic Agriculture included in the revised national TVET colleges' curriculum: Ministry of Agriculture and the Ministry of Labour and Skills have revised the curriculum for the TVET colleges. In these curriculums, organic agriculture is well covered and that is an opportunity for EOA to push on the extension through TVET colleges

Pillar IV

- The Ethiopian government gave attention to EOA in case of high price of inputs which will be taken as good advantage for upscaling EOA

Success story

Story of Mohammed Ali

I want vermicomposting to expand – reaching more farmers" – a story of Mr Mohammed Ali on the production and use of organic fertilizers – Vermicompost

Mohammed Ali is a smallholder farmer in Gobeya Village, Tehuledere district of South Wollo zone in Amhara Region, Ethiopia. He is one of the adopters of vermicomposting technology in his village. He is now involved in the production and sale of Vermicompost and Vermiculture in his village.

Mr Mohammed said that he started Vermicompost production in 2018 with support from Organization for Rural Development in Amhara (ORDA) – a governmental organization which is engaged in rural development activities. Through Ecological Organic Agriculture (EOA) project, the Institute for Sustainable Development (ISD) has been providing technical support for Mr Mohammed. Mr Mohammed said that he started the Vermicompost unit with a small wooden box covered with plastics but it was not enough to produce the volume needed for his plots. "The follow up, technical and material support I get from District agriculture office, ORDA and ISD was a motivation for me to expand my Vermicompost production" – Said Mr Mohammed when asked about how he managed to produce enough volume of Vermicompost for his plots.

The efforts he put on the Vermicompost production and use paid him off that ORDA awarded him with a larger and well-constructed vermicomposting unit made from cemented pits and corrugated iron roof.

Using Vermicompost

Mr Mohammed grows vegetables, fruits and cereal crops both in his backyard and in his plot few kilometres away from his home. He has fully replaced synthetic fertilizers with Vermicompost for vegetables and fruits in his backyard and for cereal crops which are grown in a relatively bigger plots away from his homestead. "I started adding Vermicompost in my backyard after I got my first Vermicompost harvest in 2018 and my backyard is now fully transformed in to a fertile land" – said Mr Mohammed speaking about when he started applying Vermicompost and how long it took him to transform his plots.

Once he found it effective in his backyard, Mr Mohammed started using Vermicompost in his Teff (Eragrostis tef) farm in 2020 – taking Vermicompost out of his backyard to his main fields. Since 2020, he stopped adding synthetic fertilizers for cereal crops production in his main fields as well. Tef grown with the use of Vermicompost was so healthy with little or no sign of pest attack; hence he didn't need to spray pesticides. "My farms are now fully transformed and I don't need to add too much Vermicompost leave alone adding conventional inputs for crop production" - Mr Mohammed.

Income generation from selling Vermicompost and Vermiculture

Experiences and results Mr Mohammed got from using Vermicompost has attracted the attention of other farmers in his neighbourhood. In addition to that, lack of agrochemical inputs has occurred in Ethiopia since 2021 and this was an opportunity for Mr Mohammed to start selling Vermicompost and Vermiculture which became additional sources of income for his family. He sells 1 quintal (100 kg) of Vermicompost of 1500 Birr (equivalent to 29 USD) and 1 Kilogram of Vermiculture for 500 Birr (about 10 USD).

Expansion of vermicomposting

Promotion of compost preparation and use has become a focus area for the agriculture extension to tackle the nationwide lack of agrochemical inputs. The government agriculture offices are promoting composting technology through media and extension systems. An agriculture office expert in Tehuledere district, Mr Aragie Abate, said that they are now promoting compost use and providing trainings for farmers on different composting techniques through their extension systems. Mr Mohammed has become a key resource person for the district agriculture office by providing trainings and inputs for farmers beyond his village.

He is playing an important role in the expansion of Vermicompost beyond Tehuledere district. As a start-up of the technology expansion, he provided Vermiculture, free of charge, for two districts via Tehuledere district agriculture office. "So far, I gave 12 kilograms of Vermiculture for two districts for free and that is worth 6000 Birr (about 117 USD). I am doing this because I want the technology to reach more farmers in other areas too" – said Mr Mohammed.

Story of Hurume Eticha

Organic farming has become my lifestyle"

Meet Hurume Eticha who adopted organic farming systems for crop production and livestock management

"Organic Agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic Agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved" (IFOAM definition). This is the story of Mrs Hurume Eticha on how she embraced organic farming and implemented it as a lifestyle – putting the definition into practice.

Hurume Eticha is a smallholder woman farmer in her mid-40s who resides in Berfeta Tokoffa village in Walmara district of Oromia region – Ethiopia. She is a dedicated organic farmer who grows vegetables, fruits, cereal crops and herbs in her backyard. She manages poultry and livestock in addition to crop production.

Mrs Hurume was recruited by the EOA field officer based in Holeta. She joined the EOA project in 2019 and took part in a number of trainings on organic farming. "She started implementing organic farming on a smaller portion of her plot as soon as she joined the EOA project and her plot is fully organic after nearly 4 years" – said Mr Tafach Meaza, the EOA field officer who follows up EOA farmers and provides extension support in the area.

After she joined, Mrs Hurume has rapidly taken up organic farming practices and technologies and started implementing them in her plot. Crop rotation, intercropping, applying farmyard manure and fallowing are some of the organic farming practices Mrs Hurume implements on her organically managed plot.

Bio-slurry, conventional composting and vermicomposting are the EOA technologies well adopted by Mrs Hurume. She uses the biogas as an energy source for cooking while the bio-slurry is used as a fertilizer.

Soil fertility enhancement: Mrs Hurume's farm is a well-established organic farm where crop residues, leftovers of animal feed and other organic wastes are recycled and added back to the farm as a compost and bio-slurry. These are the technologies used to

recycle organic wastes to close the nutrient loop and enhance soil health in her farm apart from the organic farming practices mentioned above.

Plant protection: Mrs Hurume mentioned that the major challenges in her organic farming have come from pests and diseases – mainly of vegetables. Commonly occurring pests are aphids, whiteflies, leafhoppers and other sucking pests which she managed to control with the use of a mixture of plant extracts like garlic, onion and chilli extracts. Intercropping, crop rotation, cropping time adjustment and other cultural methods are well utilised by Mrs Hurume to tackle pest and disease problems. "I didn't have plant extracts or other recipe that can be used to manage disease" – said Mrs Hurume when asked if she has a recipe used for disease management.

Marketing: Mrs Hurume is one of the women farmers who sell their organic vegetables at the organic market place in Addis Ababa on a regular basis. The opening of an Oro-Fresh market day on Sundays is another opportunity for the EOA farmers from Holeta (https://www.youtube.com/watch?v=iNuztPghtcU&t=153s). Organic farmers booked a booth and are providing organic vegetables on a weekly basis. Mrs Hurume is a regular attendant of the market day. Oro-Fresh market day is the second market place the organic farmers sell their vegetables in addition to Natani Café.