

Questionnaire

Experience Capitalization

Relevant GOOD PRACTICE

Clarification: The term “good practice” used in this questionnaire includes “experiences”, “good practices”, “methods” or similar kind of “knowledge” that can be shared with other organisations working in similar fields.

1. General Information

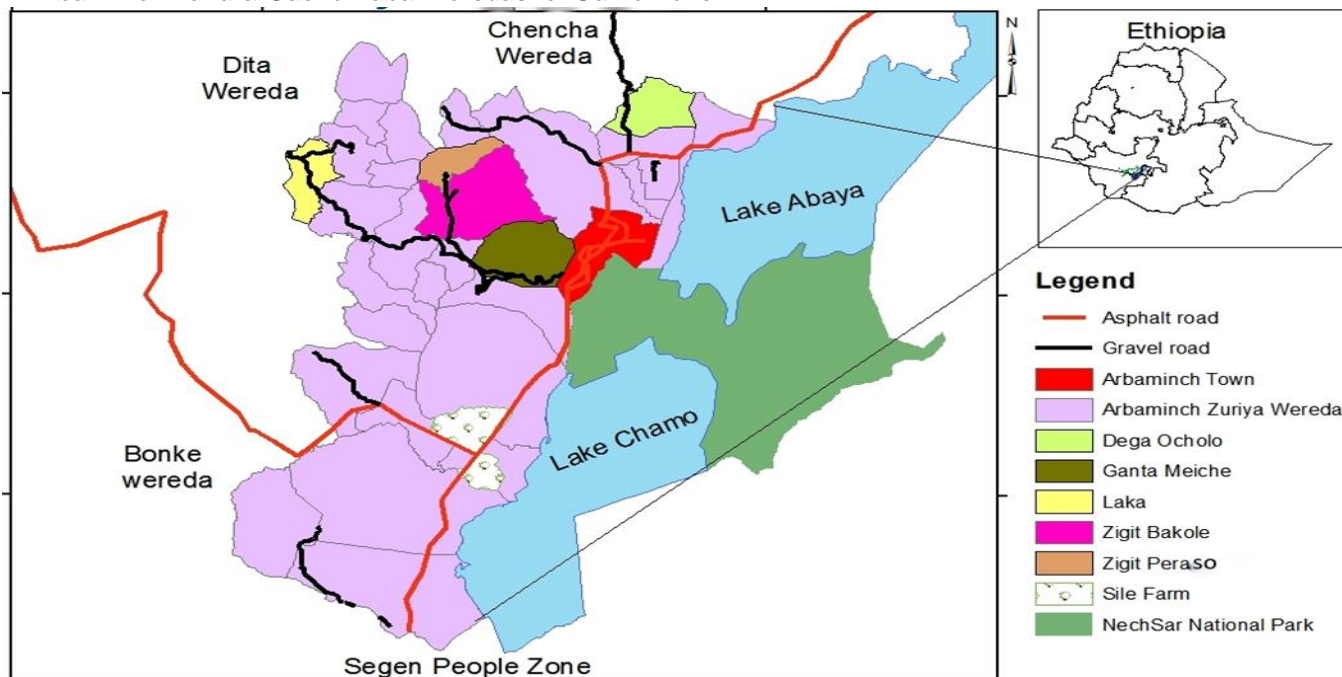
<p>What is the name, the address and the geographical region of your organisation or institution? <i>Please include postal address here</i></p>
<p>SCORE - Spiritan Community OutReach Ethiopia Headquarter – Addis Ababa, Ethiopia Coordination Office - Arba Minch, SNNPR, Ethiopia Tel +251468810182 P.O.Box 23 www.score-et.org info@score-et.org</p>
<p>What is the purpose of your institution and area of work? <i>(max. 3 lines)</i></p>
<p>The purpose of SCORE is the proclamation of the good news of the Kingdom of God, especially with action to the most disadvantaged, in pastoral and development works. Agriculture, women empowerment, cooperatives development, education, health, water-sanitation and hygiene, youth employment, and environment protection and humanitarian interventions are areas of work of SCORE.</p>
<p>What is the name of the good practice you want to share? Or what name describes the good practice best? <i>(max. 10 words)</i></p>
<p>Conservation agriculture improves soil quality, and increases production.</p>
<p>Why do you think this good practice could be relevant for other organisations in our network? <i>(max. 10 lines)</i></p>
<p>Smallholder farmers in many areas of the globe practice conventional agriculture. In this practice, there is usually high soil disturbance, depletion of specific nutrients of soil and moisture stress. These are related to repeated tillage, repeated plantation of the same crops and exposure of upper soil respectively. As a remedy to these problems SCORE has been practicing conservation agriculture which has three major principles. The principles are minimum tillage/zero tillage, crop rotation/intercropping and mulching (soil cover). Minimum tillage/zero tillage avoids or reduces soil disturbance. Crop rotation/intercropping by using nitrogen fixing crops improves nutrient content and or fertility of the soil. Mulching(soil cover) by using crop residues, decaying plant leaves and cover crops avoids exposure of the upper soil to erosion, retains soil moisture, facilitates enrichment of organic matter. Scientific researches on the adoption of the practice, production and soil fertility changes due to the practice and socio-economic impacts of the practice have confirmed considerable improvements of production and soil quality.</p>

2. Context

What is the geographical range where the experience has been made/ the practice is applied? (Country, region, province, district and town/village) if possible, add a map. (max.5 lines)

SCORE has applied the practice in Genta Mechie, Zigiti Bakole, Zigiti Peraso, Lakka and Dega Ochollo Kebeles in Arba Minch Zuria and Gacho Baba Woredas of Gamo Zone, SNNPR, Ethiopia. It has been in lowland, midland and highland agro-ecologies. In the practice maize crop in the lowland, maize & legumes in the mid land and small grain crops like barley in the highlands have been used.

The five target kebeles (Zigity Perasso, Lakka, Zigity Baqolle, Ganta Meychaie & Dega Ochollo) of the CA practice in Arba Minch Zuria & Gacho Baba Woredas of Gamo Zone.



When was this experience made?

Period during which the experience/ practice has been carried out.

1 January 2017 to 31 December 2020, with project consolidation phase up to 30 June 2021.

What was the reason for the good practice to emerge? What was the context (the initial situation) and challenge(s)?

Narrative description of the initial challenges and the reason(s) why the experience did emerge. (max. 10 lines)

Crop production was continuously declining in the areas of the practice before the intervention. Smallholder farmers could not produce sufficient food for their consumption. Family members of smallholder farmers including women and girls were highly engaged in their farm exerting considerable labour from farm preparation up to harvest. Widowed or women-headed households shoulder a higher burden for land preparation by hiring labour from outside with food cost for the labourers. There were also indications that farms especially in the highlands were being leached out leaving the field with minimum organic matter. Some specific soil nutrients were very minimal as the smallholders usually plant similar crops season after season. The farmers especially those in the lowland and midland were easily challenged by climate change effects like drought as crops failed in cases of moisture stress.

Were gender and/or HIV/Aids aspects or environmental issues part of the initial challenge? If yes, explain how they affected the situation.

Women and girls strongly engage in farm activities in addition to domestic and reproductive responsibilities. They take part in farmland preparation, weeding, transporting cow manure as fertilisers and harvesting. They engage in a triple gender role primarily responsible for all unpaid domestic and reproductive role in the household, labour-intensive on-farm production and off-farm trading and community social responsibilities. Climate change effects like

heavy rainfall of short time followed by floods and extended dry period are challenges of the areas of practice. Lowland areas face moisture stress and crops fail repeatedly.

Additional interpretation/ clarification of the context by HORIZONT3000 Field Office:

Which elements of the contextual framework / living conditions etc. in the country/region should be understood to get an insight into the function and relevance of the experience/practice?

NA

3. Development of the good practice

Where does good practice come from? How was it developed and by whom?

Narrative description of the development, naming the important actors. (max. 10 lines)

CAFOD SCIAF Trocaire(CST) with its back donor Canadian Food Grain Bank (CFGB) had been supporting a conservation agriculture projects with some local NGOs in Ethiopia & East Africa. SCORE was introduced to the practice and invited to implement the practice by its partner while implementing a livelihood improvement and food security project in partnership with CST in 2016. Considering the climate change effects on crop production in its intervention area, SCORE envisaged practising conservation agriculture for additional partnership with CST. In depth technical guidance in the field was provided by the technical advisor of CFGB, periodic training, constant experience sharing visits have well contributed for the knowledge and skill of SCORE staff on conservation agriculture. These have been shared with the small holder farmers. The practising farmers have also shared experiences among themselves through field days and visits.

How did this good practice evolve (the process/ history)? Describe chronologically the main steps and turning points! In which way was it a participatory process?

It was a challenge to introduce a new way of farming, conservation agriculture, to the intervention areas while the government was ambitiously intervening in the sector by distributing inorganic fertilisers and seeds to the whole farmers in the country to promote conventional agriculture. As a non-government organisation, SCORE needs to agree on and share responsibilities with the government regarding the projects it is implementing for smooth implementation and sustainable benefit of the community. To this end, the community representatives and government people were involved in all phases of the project cycle. However, the government people especially officials in the agriculture sector stood against the practice thinking it would halt the campaign like distribution of improved seeds and fertilisers and in turn delay the production increase. The practice was started by a few volunteer smallholder farmers, twenty lead farmers from each five intervention kebeles, for progressive adaptation of the practice. The volunteer farmers started the practice in two plots of land for comparison, one of which is conventional practice and the other is conservation agriculture. Each twenty lead smallholder farmers were expected to recruit two follow farmers in the first intervention year, who would join the project as beneficiaries in the second year. This had continued for the project period, four years. Meanwhile many copy farmers had come out looking into the success of their fellow farmers in addition to the formal recruitment of the farmers. Knowledge and skill trainings, experience-sharing visits were major parts of the implementation. The beneficiaries were also provided with crop seeds and hand tools. Two researchers from Arba Minch university were conducting scientific research on the adoption of the practice, production and soil fertility changes due to the practice, and socio-economic impacts of the practice. Two research reports, "CA in comparison with conventional & traditional for enhanced soil fertility & maize yield" and "adoption and impact of conservation agriculture on smallholder farmers' livelihood", were produced and validated. The local government partners have also been convinced and supported the implementation looking into the result for two production seasons. As a result, Gamo Zone agriculture department requested for conservation agriculture training for its employees in the districts out of SCORE's intervention areas. As a response SCORE had given conservation agriculture training for forty six agriculture sector employees in ten districts of Gamo zone. The federal government has also been influenced through the national CA network to include conservation agriculture as one of its extension approaches in the year 2018 with its guidelines.

4. Main characteristics of the good practice

Purpose/ Objective: Describe the purpose of your good practice in a few sentences

(max. 10 lines)

2.1. Overall goal

To contribute to the enhancement of sustainable livelihood & food security of male and female smallholder households in Zigity Perasso, Lakka, Zigity Baqolle, Gantae Merchaie & Dega Ochollo kebele communities in ArbaMinch Woreda of GamoGofa Zone, SNNPRs, Ethiopia.

2.2. Specific Objective

The project has the following two specific objectives:

- To Increase agricultural production and productivity of 1600 small holder farmers using conservation agriculture (CA) techniques
- To promote CA systems for dissemination of wider application to stakeholders (smallholder farmers, community animators (CAs), agricultural technical facilitators, development agents (DAs), government and other experts)

Methodology: Which tools, instruments/ methods and/or methodology are used in order to implement the experience and address the challenges? Did you specifically mainstream gender aspects? If yes, please highlight the main actions.

To mobilise and support the target community members for the practice, recruitment of two community animators was done from each target kebele/village. These were already members of the target community and selected as beneficiaries of the practice. They were given training on principles of conservation agriculture and facilitation skills at first. Then the community animators promoted the whole households in the village to select volunteer households who could avail two 25m*25m plots for trial of the practice. The community animators were able to get volunteers and guide them on the principles. The major principles were zero tillage/minimum tillage, permanent soil cover/mulching, crop rotation/intercropping. Data on productivity of crops, fertility of soil and socio-economy of the areas were collected for baseline at the start of the practice by researchers from Arba Minch university. Each volunteer first line farmer of each project year was expected to recruit follow farmers. Accordingly 20 first line farmers in the first project year in each five kebele had reached 1600 after four years of project implementation. 31% of the beneficiaries were female to mainstream gender aspects.

5. Stakeholders and Partners

Beneficiaries: Who are the main beneficiaries of the good practice?

Individuals or Groups of people (women, men, girls, boys, others) / collectives / institutions / systems (max. 5 terms)

Smallholder farmers, 30% are female.

Which parties/ institutions and groups of people (women, men, girls, boys, others) are mainly involved in the implementation of the experience?

Please indicate for each stakeholder the motivation for their participation, their tasks and responsibilities, and if there are different roles men and women have.

Male smallholder farmers were major beneficiaries involved in the practice. 31 % women were also involved as beneficiaries. Girls and boys supported their families in implementing the practice. The practice was simpler as zero or minimum tillage is less laborious compared to frequent tillage (four to six times). Children and women were active participants as the practice needed collection of mulch materials like tree leaves, crop residues in a man-headed household. They also participate in planting seeds, weeding(if any) and harvesting. The project staff and the trained development agents of the government technically support the farmers in their farmland. The practice is proved to be adaptable

by women headed households. The women are able to accomplish everyday tasks in the practice. Some tasks are even better accomplished by women. Researchers from Arba Minch university took part in following up the production and productivity differences between the conventional and the conservation agriculture practices. They were also able to record the fertility changes of the farmlands due to conservation agriculture practice. The researchers also followed up socio-economic effects of the practice. In addition, the technical advisor of CA for CFGB has technically supported the project implementation through intense field visits and training.

6. Resources

What kinds of resources are needed to carry out/ implement the good practice? How much of every resource is needed?

Resources could be: human, material, time, finance, knowledge, methodology, etc.

The practice was started as a four years project in partnership with international civil society organisations in Ethiopia and abroad (CST & CFGB). The civil society organisation abroad has a technical advisor to support the implementer continuously. The project staff are assigned as project officer, technical facilitators and community animators. There were four technical facilitators guiding the community animators in addition to supporting the individual smallholder farmers. Two community animators each based in the four target communities mobilise, support and animate the communities especially the project beneficiaries. The technical facilitators have been trained and given experience-sharing visits on the practice. The project beneficiaries have been given periodical training aligned with the stages of the practice. There were periodical field day celebrations for exchange of best practices among smallholder farmers. Beneficiaries were provided with simple hand tools appropriate for the practice by the project. They were also provided with other inputs like main crop and cover crop seeds/cuttings. There were twenty lead farmers in each 5 target kebele in the first practice year, a total of 100 farmers, which are expected to recruit three fellow farmers each for the second year. Therefore, there were a total of 400 farmers in the second year, three hundred newly recruited farmers and the hundred farmers of the first year. In the third year, the newly recruited three hundred farmers will each in turn recruit four farmers and 1200 new farmers. Therefore, in the fourth year a sum total of 1600 farmers practised conservation agriculture. Farmers training centres established by the government in each target kebele were used as demonstration and research sites for the practice.

7. Validation Process

Has there been any kind of evaluation/ assessment/ systematization on the experience by the stakeholders, especially final beneficiaries?

Brief description of the process, if there was

Two evidence-based researches were parts of the project activities. Soil samples were taken from representative farmlands of the practitioners in the first and fourth years of the project to record fertility change due to the practice. Similarly, production amounts in the conventional and conservation agriculture plots adjacent to each other were recorded in each project year. Household surveys and secondary data collection were conducted to examine the factors influencing adoption of this farming practice by the farming community in the target areas. In addition, to evaluate the impact of CA on crop production and on improvement of the farmers' livelihood status compared to traditional agriculture. Mid-term and project life evaluations were conducted by external independent evaluators and local government partners.

8. Impact

What has been the impact of this experience on the beneficiaries' (women, men, girls, boys, others) livelihoods? What has improved through the presented experience on the level of individuals, and on the organisational level?

Please describe if and how the beneficiaries' livelihoods have been improved environmentally, socially and/or economically (max. 10 points)

- Conservation agriculture made a positive difference in productivity and income of the small target households as compared to conventional agricultural practice
- Large positive effects of the practice allow easy dissemination of the knowledge of CA technology even beyond its project limit.
- A better livelihood condition of target farmers by practising conservation agriculture was partly due to the practice being a labour saving one and the farmers employed their saved labour in other works and earned extra money income.
- Most CA farmers do not apply synthetic fertilisers and pesticides on their farm and money saved from reduced use of synthetic fertilisers and pesticides were used in other livelihood activities.
- CA farmers follow a nearly organic production method and crops free of synthetic fertilisers and pesticides had a huge demand in the market and accordingly the farmers earned a notable amount of money by selling these products.
- The likelihood of female farmers to adopt conservation agriculture was more than that of male farmers as the practice is labour saving.
- Farmers' cooperative membership played an important role as a channel of communication and sources of information for the dissemination of CA practices and this result demonstrates social capital-trust represents a solid foundation upon which social networks can be built
- The use of CA packages in plots was the potential to replace inorganic fertilisers for better maize crop productivity. Because maize crop yields of CA packages were highly significant as compared to maize crop yields of conventional practice.
- Zero or minimum tillage, and mulching substantially suppressed weed development and retained moisture.
- The soil health (nutrient content, organic matter) is far better in the CA practice as compared to the conventional practice which is reflected in the production increase.
- There is less exposure of upper soil for erosion in the CA practice

Did the experience contribute to an innovation in the livelihoods of men and women? If yes, describe in which way!

Conservation agriculture practice was introduced for big grains mainly for maize in the area. However, the farmers applied the practice for small grains, vegetables and spices, and were effective. They were challenged by tall & falling down stems of small grain plants in the practice and tackled the challenge by tying up the plant stems in an innovative way.

9. Lessons learned and Challenges

What are the key messages and lessons learned from the experience?

What went well and should be repeated? What would you do differently, if you could start again from the beginning?

Conservation agriculture practice brings about better production, productivity, and soil health. It is also labour saving and easily disseminating practice. The practice is applied mainly in the midlands. As the practice retains moisture well, it can be widely practised in lowland areas where retention of soil moisture is minimum and landholding is better.

69% of the beneficiaries of the practice were male. But, it is well adopted by female beneficiaries and the practice can include more females as it is more convenient for females.

It also needs to include the gender dimension of CA as a research activity as it was done on the production and adoption activities.

There could also be wider promotion possibilities parallel to implementation of the practice in the target areas.

What would you suggest to someone in a similar situation/ planning a similar intervention?

Capacity building for the staff and the farmers through training and experience sharing visits intensively eases adoption of the practice. Guiding materials like manuals, posters shall be contextualised to the local language and set-up. Lead – follow farmer approach is appropriate for the implementation. Organising the practising farmers in cooperatives makes easy marketing and input access.

What are the remaining challenges encountered in applying the good practice?

Beneficiaries feel exhausted at first as the practice needs much mulch/soil cover. Crop residues are used for animal feed and local house roof cover while they are important permanent soil cover for the practice. Zero grazing is not being applied in the areas and resulted in permanent soil damage by cattles.

How have these challenges been addressed so far?

Introduction of cover crops which have dual benefits is a remedy. Promoting fodder grass cuttings around the farmlands. Promoting zero grazing.

10. Sustainability

What are the elements that need to be put into place for the practice to be institutionally, socially, economically and environmentally sustainable?

Local government employees of the agriculture sector shall be part of the skill training, the beneficiary farmers shall be organised in groups/cooperatives for markets and inputs, All household members shall be involved in the practice.

11. Experience Sharing/ Up-scaling

What are the conditions (institutional, economic, social and environmental) that need to be in place for the practice to be replicated?

If you were giving advice to men and women living in another geographical area, what are the conditions that should be met/ respected in order to be able to replicate the practice?

There have to be beneficiary farmers who are volunteers to avail plots of conventional and conservation agriculture practices. The farmers shall be selected by involvement of community animators who are based in the community, from the community itself and also implement the practice. The selected households shall be convinced to realise the principles of conservation agriculture through training and experience sharing visits. There has to be training with respect to the life stages of the crop from planting up to harvesting. Intensive follow up, support and animation by the community animators who are continuously backed by the technical facilitators stationed in the office. Sometimes the technical facilitators shall also support the farmers directly. The smallholder farmers shall be supported by quality main and cover crop seeds, hand tools. The local government agriculture sector staff in the sites and at the district level should have the knowledge and skill on conservation agriculture, and should support the practice on the field. Guidance manuals for community animators, posters on successful conservation agriculture practices in local languages, well established nursery sites for soil and water conservation activities and for cover crops. The implementer shall be in networks of other like minded organisations for information exchange and exposure visits. Evidence based action research by academic institutions shall be part of the practice. External technical advisor with accumulated experience in the practice is also important.

Did you already share your experience with other organisations or institutions?

<i>If yes, Name and Country of the organisation/ institution you shared it with.</i>
Yes, <ul style="list-style-type: none"> - Water & land resource centre Addis Ababa University Ethiopia, - Horizont 3000 and DKA Ethiopian partners - All Canadian Food Grain Bank partners in Ethiopia(Terepheza development Association Wolaita Soddo, Migbare Senay children and family support organisation, Muluwongel church development commision, Kale heywet church social development commision, Food for Hunger Ethiopia) in the workshop hosted by SCORE in Arbaminch, 25 Southern region CA master trainers in Soddo.
Do you know any other institutions which have similar experiences or which have implemented similar practices?
<i>Name of the practice / name of the institution / where (max. 3 points with max. 2 lines each)</i>
Yes, EKHC-Ethiopian Kale Hiwot Church, TDA-Terepheza Development association- Wolaita Soddo
Which other group(s), institution(s) or organisation(s) could be interested in this experience/ practice? For whom do you think this experience could serve as a reference?
<i>Name the institution or group of people (max. 5 points)</i>
Organisations(working on Agriculture, organic farming, women,climate change mitigation/adaptation environment and natural resource management), extensionists, farmers could use this experience as reference.

12. Further Information / Links

Name and contact details of the author?
Name:- Zegeye Zagie Email:- zegeye.zagie@score-et.org Phone:--+25116831206 Skype:- zegeye.zagie
Are there any testimonies / personal reports from relevant stakeholders or beneficiaries available that confirm the success of this experience?
<i>If yes, please attach the statements(s)/ document(s)!</i>
Please find shared Folder having testimonies in the link below:- https://drive.google.com/drive/folders/1u6xbJgu-MJWroPrERGZIQzc7hoz5O2b?usp=sharing
Are there any pictures, video- or audio documents available?
<i>(Please send us at least 3 pictures NOT in this Word Document, but as attachment to your E-Mail! If you have any documentation such as video- or audio-files, please let us know where we can download it!)</i>
Please find shared Folder having pictures, video in the link below:- https://drive.google.com/drive/folders/1u6xbJgu-MJWroPrERGZIQzc7hoz5O2b?usp=sharing
Is there any kind of related documentation to the practice available? If yes, which documents (training manuals, posters, technical fact sheets, etc.) and where can they be found? (link to website, attach to questionnaire)
<i>If yes, please attach the document and write down the name of the file, URL, etc.</i>
https://drive.google.com/drive/folders/1u6xbJgu-MJWroPrERGZIQzc7hoz5O2b?usp=sharing

13. Storytelling

Do you think the experience could be a fit for an impact story told with our storytelling method?

The method tries to focus on experiences from a personal perspective. That's the reason why we build the stories around one representative person who is assigned the role of the protagonist of the story. Other required story elements are: problem, mentor, solution.

Yes

If you answered yes to the previous question, please describe the story elements briefly.

Protagonist	Problem	Mentor	Solution
<p><i>Choose one individual person from whose perspective the story will be told. Please indicate full name, position (in organisation i.e.), some background information and contact details</i></p>	<p><i>What is the context of the experience? What were the difficulties or problems to solve? Describe the initial situation here:</i></p>	<p><i>What was the organisation, tool, method etc. that helped to change that situation (i.e. HORIZONT3000, Partner Organisation, Training, Event etc.)</i></p>	<p><i>How could the problem finally be solved – or who solved the problem and how?</i></p>
<p>Aregahegn Petros Project Officer during the time of Implementation and currently Monitoring and Evaluation Senior officer.</p> <p>Email:- aregahegn.petros@sc-ore-et.org Phone:- +251902922392</p>	<p>Before the project Implementation Aregahegn says that; Conventional farming method is the dominant way of production in the area of Implementation. The production and productivity of field crops was very low and the trend was decreasing due to Climate change induced rainfall variability; Soil fertility loss.</p> <p>But the demand for food items to meet the growing population is significantly increasing.</p>	<p>SCORE conducted the situation assessment and designed a project to tackle these problems; then Intensive training for Staff then lead farmers; frequent mentorship of farmers; organising platforms of farmers field visit days; Researches were conducted during implementation used to demonstrate comparison of CA and conventional plots in the demo site.</p>	<p>Finally, the production and soil fertility issues were solved due to practising CA with farmers. Lab tests of the soil in the research witnessed that there was improvement in soil health simultaneously with significant production increase of farmers as the yield matrix of CA practitioners data shows.</p> <p>Mr. Aregahegn mentioned that “currently SCORE is working hard to pull resources from partners to promote CA in all field offices using the experience capitalised in the past 6 years.</p>

14. Action Plan for Learning

Was this questionnaire helpful in reflecting on your experience?

(if yes, why? If no, why not?)

Yes

Which actions will you take to apply the main lessons learnt/ learnings from this experience in your organisation?

Action	Until when	Responsible Person
	2022-forward	

Was this questionnaire helpful in reflecting on your experience?*(if yes, why? If no, why not?)*

Yes

Which actions will you take to apply the main lessons learnt/ learnings from this experience in your organisation?

Action	Until when	Responsible Person
Practising CA in the Lowland with Horizont 3000 and other partners	2023	Aregehegn and Salilew Shago(CA Master Trainers)
50% of women will be practitioners of CA promotion in Hammer.	2024	Natnael Elsa
Conducting research on gender dimension of CA	2022-2025	Aregehegn Ptros
Establishing three centres of excellence of CA (in Hamer, Gamo and Borana Area) for broader experience sharing and broader expansion.		Salilew Shago

Thank you very much for sharing your knowledge!