



CEDESOTA

The Project to Upscale adoption of CSA practices by Smallholder Women and Youth Farmers in Kandashe, Makiba and Mareu villages in Meru District Councils

PROGRESS REPORT COVERING

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**Submitted
To**

**DKA AUSTRIA& KFB AUSTRIA WORKING PARTNERSHIP
DEVELOPMENT COORPERATION AGENCY**

By

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I. Introduction

Climate change poses a significant threat to Tanzania, especially its agriculture sector, which is the primary livelihood for many. Conservation Agriculture (CA) is a promising climate-smart approach to mitigate these impacts. CEDESOTA has been actively promoting CA in Makiba, Kandashe, and Mareu villages. The project aims to mitigate climate change by reducing greenhouse gas emissions and enhance carbon sequestration with increasing agricultural productivity in terms of crop yields and quality. Also, building resilience through empowering small-scale farmers, particularly women and youth, to adapt to climate change and promote indigenous seeds as a strategy to preserve local biodiversity and enhance food security. Key strategic activities implemented were; capacity building training on integrated agro ecology, food security, and post-harvest handling techniques, public awareness campaigns to promote and encourage adoption of CA principles and practices including minimum tillage, permanent soil cover, and crop diversification. By implementing these strategies, CEDESOTA will be working towards and contributing to a more sustainable and resilient agricultural future for Tanzania.

II. Implemented Activities and Achievements

1. Capacity building to 50 women and youth farmers in each village on entrepreneurship and how to use the skills to establish and manage IGAs such as indigenous chicken, goat and bee-keeping as well as linking them to the markets.

1.1 Training Objectives

The main objective of the workshop was to increase the entrepreneurial skills and knowledge of women and young farmers and community members in order to reinforce the involvement and benefits of local communities through sustainable agriculture and awareness as well as other income generating activities. In particular, the workshop was intended to develop knowledge and skills among women and young farmers and community members to enable them to undertake sustainable income generating activities that add value to the specific products.

1.2 Approaches used

Sessions were delivered through topic narratives and illustrations to enable learning through interaction, group discussions and reflection. The training covered the following key topics; entrepreneurship fundamentals, business planning, financial management, record-keeping, marketing strategies, and specific techniques for indigenous chicken, goat, and beekeeping. Also facilitated group marketing initiatives to leverage collective bargaining power.

1.3 Outputs

- The training was successfully conducted to women and youth farmers in each village, 50 in Kandashe, 50 in Mareu and 49 in Makiba totaling to 149 individuals.
- The participants have gained knowledge and skills in the various aspects of strategic business planning and entrepreneurship principles and the specific requirements for their chosen IGAs. Others have chosen to keep chicken, goats while others engaged in running small shops, Agro-Vet shops, food vending etc.
- Participants acquired practical skills in chicken and goat keeping, beekeeping and enhancing their ability to manage their ventures effectively.

- Facilitated connections with potential buyers and markets, expanding opportunities for participants to sell their products. For instance in Kandashe Village; Vegetable farmers have established connections with potential buyers who buy and supply live chicken, eggs, vegetable and cereal produce to Ngarenanyuki, Leguruki and Karansi markets while farmers in Makiba they have a link with business people from Mbuguni, Tengeru and Mererani within the district. Other IGAs are petty businesses (small shops, food vending).
- Initially they were transporting their produces to the near and far markets themselves facing a lot of losses. Initially indigenous chicken were left roaming outside from morning to evening but after training nowadays farmers are constructing huts to keep chicken to protect against polecats, thieves, diseases and easy collection of eggs. People have started keeping indigenous and crossed breed for milk production and selling live goats.

1.4 Outcomes of the Entrepreneurship training workshop

- 149 women and youth farmers in the three villages were equipped with essential entrepreneurial skills. Some of them are now attempting to establish small enterprises. Others are engaging in keeping indigenous and improved chicken (Saso), goats and vegetable cultivation creating additional income streams for basic requirements in their families.

1.5 The common challenges that affect entrepreneurs, especially those starting out.

During the training, participants were repeatedly explained the challenges facing many entrepreneurs.

- Securing funding as capital to start and grow a business can be a significant obstacle.
- Maintaining a positive cash flow, especially during the early stages, is crucial.
- Market may be oversaturated (high supply), making it harder to stand out.
- Attracting and retaining customers can be a constant challenge.
- Entrepreneurs sometimes they lack or have inadequate knowledge and skills about entrepreneurship and loans.
- Farmers get loans with high interest rates for them to pay the loans promptly.

2. Capacity development and institutional strengthening to 3 village farmer committees of 10 members each on basic leadership and management practices and application of skills to carry out core functions. This activity was conducted for 30 farmers, that is, 10 leaders and 20 members in each village, totaling 90 for all villages.

Capacity building to the farmer committee members is vital because many farmers have limited formal education, making it difficult to grasp management concepts and apply them effectively. Also, they have limited experience in leadership and management roles and are not familiar with decision-making processes and conflict resolution strategies.

2.1 Outputs

- The training was attended by 30 farmers in Kandashe, 31 in Mareu and 30 in Mkaiba totaling to 91 participants. The training session was conducted with a series of training sessions covering the following topics; leadership styles, types of leadership, decision-making, effective communication and conflict resolution, financial management, record-keeping and reporting, project planning and implementation and Monitoring and evaluation.

- Increased Capacity: Before training participants were ill-informed about their roles and responsibilities in terms of leadership and management. Sometimes they could act on issues that are for the village government officials without knowing that they work under and accountable to village leaders. Through daily assessment during the training it was revealed that their knowledge was improving.
- Increased understanding among committee and group members on the importance of acquiring knowledge on leadership and management practices particularly in the areas of problem solving techniques, communication, decision making, cooperation and roles and responsibilities

2.2 Outcomes

- Enhanced leadership skills of committee members to lead and motivate their teams.
- Improved skills on how to resolve conflicts peacefully when happens and team building.
- Increased awareness of committee members to carry out their core functions effectively including ability to make decisions and implement them. One example is registration of their groups as legal entity at the district headquarters.
- The committees adopted transparent and accountable practices, fostering trust and confidence among community members.

3. Follow up training report to “150 contact farmers” on agroecology, CSA practices, entrepreneurship, food security and sovereignty in Makiba, Kandashe & Mareu villages.

This report is on the follow-up training conducted to "150 contact farmers" after being trained on agroecology, CSA practices, entrepreneurship, food security and sovereignty within the past six months in Makiba, Kandashe & Mareu villages. The follow up was based on the review of the training conducted, situation of the project in terms of achievements, success stories, challenges, how do they tackle emerged challenges and recommendations as summarized hereunder;

Aspect	Observation/Achievement	Remarks /Action
Villages Reached	The villages reached are Kandshe, Makiba and Mareu	
Farmers Contacted (Original Trainings)	Original number of farmers attended training were 48 in Makiba, 51 in Kandashe and 49 in Mareu totaling to 148	
Farmers Contacted (Follow-up Training)	Participants in the 3-days training were at 48 in Kandashe, 50 in Mareu and 49 in Makiba villages totaling to 149 contact farmers.	Two (2) farmers could not participate in Makiba and did not send any apology note. One (1) was sick in Mareu.
Follow-Up Contact Method	The follow-up contact method(s) used were; (a)Review of training conducted earlier on CSA, Entrepreneurship, Food Security and Sovereignty (b)Focus Group Discussion(FGD) and (c) Field visit	

Agro-ecology Practices Applied	The predominant agro-ecological practice adopted by farmers in the three villages was Conservation Agriculture (CA) and Climate-Smart Agriculture (CSA). A total of 150 farmers received formal training in CSA, while an additional 8 farmers adopted these practices independently, demonstrating the spread of knowledge through informal village meetings and interactions between farmers and livestock keepers.	Increased adoption of agro-ecological practices, such as crop rotation, intercropping, and organic fertilization, to improve soil health, reduce reliance on chemical inputs, and enhance agricultural sustainability.
Food Security and Food Sovereignty	The increased adoption of sustainable agricultural practices has led to significant improvements in food security and livelihoods. Since 2023, farmers in the three villages have been able to ensure food security within their households by selling some of their produce and storing the rest. Additionally, they are able to purchase items that are not readily available to them or in their farms. Moreover, they have the ability to access these goods including paying for school fees, health costs and others. Farmers became more aware of the need to preserve harvested crops for future consumption, recognized the importance of post-harvest loss reduction and have diversified their crop production to include okra, tomatoes, pawpaw, beans, pigeon peas, and avocado. Consequently, household food consumption is increasing, with many families now enjoying two or even three meals per day. For instance during follow up training; out of 139 households (contact farmers) contacted in three villages, their food intake before project was; 76 took 1 meal a day, 44 two meals a day and 19 three meals a day. In the course of project implementation for the 139 household contacted, 32 (23%) have increased their food intake from 1 meal to 2 meals a day and 14 (10%) from 1 meal to 3 meals a day. This indicates that we still have 30 (21%) households who are taking 1 meal a day, 76 (55%) households having 2 meals a day and 33 (24%) 3 meals a day. According to the farmers, many of those who eat two meals a day, the reason has been discussed as being a habit they are accustomed to eating twice because of the responsibilities they have throughout the day and that the underlying cause is not a lack of food. The common foods for these people are maize, beans, banana and meat or fish. In terms of food sovereignty; farmers have started developing capacity of controlling their production by using local seeds (maize), locally available resources (animal manure, mulching) to increase soil fertility and conserve environment. There is a gradual increase in reducing reliance on external inputs (mostly chemical fertilizers and insecticides).	

Entrepreneurial training and Activities	After receiving entrepreneurial training, contact farmers have taken steps to establish new businesses and the expansion of existing ones. For instance 15 in Kandashe, 17 in Mareu and 12 farmers in Mkiba villages have established new income generation activities including buying and selling cereals produces, goat keeping, vegetable cultivation, poultry farming for egg production and the selling of live chickens, food vending, small shops and groceries. Other have successfully expanded their businesses, such as food vending, fish roasting and agro-vet services, demonstrating positive impact of the training on entrepreneurship.	
Challenges Faced	The unfavorable weather conditions, characterized by excessive rainfall, during the season adversely affected growth and yield of both indigenous and hybrid maize seeds despite timely planting through application of CSA principles. And application cow dung manure (organic farming).	In response to these challenges, and ensure food security, farmers decided to engage in planting beans and vegetables cultivation as they anticipate the arrival of the next farming season.
Recommendations: To enhance agricultural resilience and productivity, the following recommendations were proposed	Increase Fruit Tree Seedlings to contact farmers. By increasing the availability of fruit tree seedlings, we can help farmers reap the environmental, economic, and social benefits of fruit tree cultivation. Fruit trees can provide additional income through the sale of fruit and a reliable source of nutritious food for farmers and their families and contribute to enhancement of biodiversity. Another reason for the recommendation is for their financial constraints to afford purchasing of seedlings also farmers may have difficulty accessing seedlings, especially in remote areas. This time we request each of them to get at least ten seedlings.	Preferably <i>avocado</i> and <i>mango</i> seedlings to diversify their income sources and improve nutrition.
	Strengthen Extension Services and Climate-Smart Agriculture	-Promote sustainable farming practices like conservation agriculture, agroforestry, water harvesting and climate-resilient crops and livestock. -Introduce early warning systems for timely response to weather events.
	Improve Value Addition and Market Access: Farmers who have accustomed in producing maize can change maize into flour, packaging and brand with their group name. This product will be sold at higher price than raw maize. Vegetables can be treated the same e.g. tomatoes, pepper can be processed into sausages to fetch better price.	-Training in value-addition techniques (processing, packaging, and branding). -Facilitate market linkages to ensure fair prices and timely sales.
	Strengthen Post-Harvest Management:	-Capacity building on post-harvest handling, drying, and storage. -Support the construction of communal storage facilities to minimize post-harvest losses.

- 4. Facilitate 2 stakeholders dialogues of 70 people each (35 women and 35 men) on the adoption of climate smart agriculture and CA practices. This included district officials from the department of agriculture and community development, ward and village government officials, agricultural inputs suppliers, women and youth farmers, NGOs and traditional leaders.**

4.1 Outputs / Achievements

CEDESOTA organized and conducted a dialogue session with women and youth farmers, local government officials, and other stakeholders from Mareu, Makiba, and Kandashe villages and district council. The dialogue provided a platform for farmers, the district agricultural officer, and CEDESOTA team to share experiences and insights on the impact of conservation agriculture. A total of 60 people including the contact farmers, local government officials and other stakeholders participated in the dialogue session.

Farmers from the villages discussed how CEDESOTA's training had empowered them to adopt sustainable farming practices. They highlighted the benefits of conservation agriculture practices such as pitting, organic fertilization, and precise seed sowing. These practices, they explained, reduce costs, improve soil health, and enhance food security.

Participants also emphasized the importance of post-harvest practices, including storage techniques to ensure year-round food availability and capitalize on favorable market prices.

Furthermore, farmers noted that conservation agriculture had significantly reduced soil erosion by minimizing soil disturbance and promoting the use of mulch. They also discussed the positive impact of entrepreneurship training, which had enabled them to start small businesses and manage their finances effectively.

CEDESOTA presented on the long-term benefits of conservation agriculture, including soil conservation, improved crop yields, and biodiversity preservation. The importance of farmer groups and agroforestry practices was also highlighted.



Figure 1: The picture on the left is a contact farmer from Kandashe sharing his experience in implementing the conservation agriculture on the achievements and posing a question to the District Officer on the availability of extension services in the community levels. The picture in the right is the District Agricultural Officer responding to the questions.

4.2 Outcomes

- Increased awareness among stakeholders about climate change impacts, climate-smart agriculture (CSA), and conservation agriculture (CA) practices.
- Improved knowledge sharing through knowledge exchange between diverse stakeholders, including government officials and farmers.
- Strengthened collaboration between the organization (CEDESOTA) and the local government officials to address climate change challenges. This collaboration will be achieved as discussed through:
 - Developing and implement capacity-building programs to equip local government officials with the necessary skills and knowledge.
 - Sustaining regular platforms for dialogue and knowledge exchange, such as workshops, seminars, and conferences and influence integration of climate change considerations into local development plans and budgets. This may require district to allocate extension workers.
 - Empowering women and youth, mobilizing communities and involve them in climate action initiatives including; climate-smart agriculture (CSA) and conservation agriculture, promotion of local seeds and inputs.
 - Establishing a joint monitoring and evaluation framework to track progress and measure impact and share lessons learned and best practices to improve future interventions.

4.3 Challenges

- Lack of regular agricultural extension services
- Pest and disease outbreaks, particularly rat infestations

4.4 Recommendations

Recommendations to address the above challenges; lack of regular agricultural extension services and pest and disease outbreaks, particularly rat infestations.

- **For the lack of regular agricultural extension services**
 - The project may propose to develop mobile applications and online platforms to provide farmers with timely information on best practices, crop management, and pest control.
 - Use of social media to disseminate information and engage with farmers.
 - Mobilize local farmers and train them as extension agents to provide peer-to-peer support within their communities.
 - Influence local government to increase agricultural extension services including recruitment and training of qualified extension staff.
- **For pest and disease outbreaks, particularly rat infestations**
 - Promote the use of eco-friendly pest control methods, such as biological control agents and cultural practices (use of local knowledge).
 - Encourage the use of traps and baits to target specific pests, minimizing environmental impact.
 - Empower farmers to participate in pest control efforts through community-based initiatives.

- Organize community clean-up campaigns to remove potential breeding sites for pests.



Figure 2: People who participated in the dialogue session in Kikulunge CKC Centre. Standing in front second from right is Mrs Regina Head of Agriculture Section from the District Council. Others are Contact farmers from Makiba, Mareu and Kandashe Villages.

4. Monitoring and Evaluation Activity in Mareu, Makiba, and Kandashe Villages

CEDESOTA's team conducted a Monitoring and Evaluation (M&E) exercise in three villages: Makiba, Kandashe, and Mareu. During the M&E, it was observed that farmers were preparing their land using conservation agriculture techniques, including digging pits, applying organic fertilizer, and sowing indigenous seeds after the first rains.

Majority of farmers (> 80%) in the three villages employed slashing to suppress undergrowth and leave the cut grasses to mulch and enrich soil fertility, and few of them are still using pesticides to manage pests and diseases affecting their crops though the plans and motive is to promote use of plants as raw materials to produce natural pesticides. Natural pesticides are substances or mixtures derived from natural sources, such as plants, minerals, or microorganisms that are used to control pests such as aphids, caterpillars or beetles. Farmers are increasingly practicing crop rotation, mixed cropping to improve soil fertility. Maize is primarily grown for food and commercial. Farmers who adopted conservation agriculture techniques demonstrated positive performance, from germination through weeding to maturity stage. Untrained farmers (conventional farmers) were found applying conservation agriculture techniques into their farming practices.

CEDESOTA distributed 900 fruit trees to 150 farmers across the three villages. Each farmer received six fruit tree seedlings of the *Persea Americana* species, commonly known as *avocado*,

which is a fast-maturing variety. Each seedling was planted in 60cm x 60cm pit, spaced by 4 meters from plant to plant. Cow dung manure was mixed with topsoil and filled into the pits to a depth of 30 cm.

4.1 Objectives: The evaluation aimed to assess the degree of achievement and the benefits derived by farmers in the three villages from conservation agriculture training and its implementation in their farming practices. The assessment was based on achievements, challenges, and farmer opinions.

4.2 Methodology Ten group leaders from each village were involved in the M&E process, providing information to the CEDESOTA monitoring team. The team collected data through discussions and field visits.

4.3 Achievements / Observations

- Farmers reported that they successfully prepared their farms using conservation techniques, including pitting, cow dung manure , and sowing indigenous seeds, resulting in a 90% germination rate.
- Through CEDESOTA's training, farmers in Makiba, Mareu, and Kandashe began to appreciate the positive environmental impacts of conservation agriculture, such as reduced soil erosion and increased organic matter.
- Conventional agriculture farmers, who had received training from CEDESOTA, continued adopting conservation agriculture practices in their farms.
- Conservation agriculture farms experienced lower pest and disease infestations compared to conventional farms. For those affected, effective pest and disease control measures were implemented.
- Farmers applied their conservation agriculture knowledge to cultivate vegetable crops like okra, tomatoes, amaranth, and spinach, with successful outcomes.

5.0 Conclusion and Recommendations

5.1 Conclusion

The project successfully implemented a comprehensive approach to empower women and youth farmers in Kandashe, Mareu, and Makiba villages. Through targeted capacity building, the project enhanced participants' entrepreneurial skills, knowledge of sustainable agriculture practices, and leadership abilities as a results farmers are increasingly adopting conservation agriculture practices. Participants have established and managing their income-generating activities, such as poultry farming and small businesses such as small shops, buying and selling maize, beans and goats. The project has also strengthened community resilience to climate change and food security challenges as well as empowered farmer committees to effectively address local needs and advocate for their interests (reference is in dialogue session).

5.2 Recommendation

To further build on these achievements and enhance the agricultural resilience and economic empowerment of 150 smallholder women and youth farmers in Kandashe, Mkaiba, and Mareu villages, it is recommended to:

- (i) Strengthen collective vegetable, root crop and fruit farming initiatives and improve value addition and market access for their agricultural products. This approach when adopted can leverage economies of scale and improve market access.
- (ii) Encourage and support the wider adoption of agro-ecological farming techniques, including the use of *organic fertilizers* to improve soil health and reduce reliance on chemical inputs and *pest control* methods and support to farmers on natural pesticides and climate-resilient practices, such as water harvesting and drought-tolerant crop varieties. This will contribute to sustainable agriculture and environmental conservation.
- (iii) Solicit support for infrastructure development mainly in *storage facilities (food bank)* to store surplus produce, to protect crops yields, reduce post-harvest losses and ensure food security.
- (iv) Provide more fruit seedlings, predominantly avocado and mango, to promote diversified farming and increase income generation.
- (v) Farmers through CEDESOTA to advocacy for the availability of agricultural extension services to provide technical assistance and advice to farmers.

6.0 Other events CEDESOTA participated during June – November 2024

6.1 Fundraising:

- (i) CEDESOTA successfully met with the Foundation for Civil Society and agreed to commence a project aimed at promoting cross-border trade through farmer groups. CEDESOTA has agreed to utilize the groups we established to promote and develop conservation agriculture in Kandashe and Miririni villages in Legurukli ward. The goal of this project is to empower marginalized groups, including women, youth, and people with disabilities (PWDs), by providing access to trade opportunities, climate-smart practices, and land ownership initiatives. The official implementation will commence in January 2025.
- (ii) CEDESOTA also sent a proposal to Climate Accelerator (ClimAccelerator). Climate Accelerator works to create a livable environment for a net-zero future. They offer a platform for knowledge sharing and innovation through intensive training, boot camps, environmental advocacy, clean-up initiatives, tree-planting drives, ecological field trips, and encouraging the development of new ideas.

6.2 Participating in CSO Week organized by the Foundation for Civil Society and other partners. Among other agenda the following Climate Change related were discussed

- (i) **Building Capacity for CSOs to Advocate for More Inclusive Benefit-Sharing as Part of Carbon Deals.** This session provided a comprehensive exploration of carbon markets and their impact on Tanzania, focusing on strategies for sustainable development and ensuring a just transition. Participants gained valuable insights into how climate change affects Tanzania and the role of carbon deals in promoting environmental sustainability.
- (ii) **Outreach: Community-Based Climate Action:** Black Soldier Fly Larvae (BSFL) offer a sustainable solution to waste management and animal feed production. These remarkable insects can efficiently convert organic waste, such as food scraps and manure, into nutrient-rich animal feed. By reducing organic waste and producing sustainable feed, BSFL plays a crucial role in mitigating climate change and promoting environmental sustainability.
- (iii) **Participation in FORUMCC Symposium:** CEDESOTA is a member of FORUM for Climate Change CSOs (FORUM CC). This year the forum organized a Climate Change Symposium (CCS) & Expo in Dodoma (the capital city) which brought together scientists, policymakers, and practitioners to foster collaboration and accelerate climate action. The event showcases innovative initiatives from governments, businesses, and civil society

organizations that address climate change adaptation and mitigation. The 2024 Symposium thematic focus was on **"Increased Climate Extremes, Green Growth, Just and Equitable Future: Enhancing Accountability and Preparedness in the Loss and Damage Financing & Investment."** The discussions explored strategies to address the increasing frequency and intensity of climate-related disasters, promote sustainable economic growth, and ensure a fair and equitable transition to a low-carbon future. Also, the critical issue of loss and damage, as outlined in Article 8 of the Paris Agreement was addressed including the need for financial support, technology transfer, and capacity-building to help vulnerable developing countries cope with the impacts of climate change.

6.3 Preparation for Farmer's Exchange visit to Organic and Conservation Agriculture Farms

This month CEDESOTA staff undertaken a preparation visit to farmers in Gonja Ward –Same district who practice organic farming, conservation agriculture, and poultry farming. The aim of the visit is to prepare farmers' exposure to sustainable agricultural practices, foster knowledge exchange, and inspire the adoption of these methods. The following pictures represent the farmers who hosted staff from CEDESOTA.

(a) The following was done during the preparatory visit:

- Identified farms demonstrating successful implementation of organic farming and conservation agriculture principles.
- Prioritized farms with diverse crop and livestock systems, including poultry farming.
- Agreed on the tentative dates to visit and arranged transportation for participants, including buses or land cruiser, depending on the number of attendees and their availability.
- The host farmers to develop informative handouts or brochures on organic and conservation agriculture principles, poultry farming techniques, and best practices.
- Facilitators from the host organization equipped with knowledge on organic and conservation agriculture, poultry farming, and effective communication techniques to guide discussions, answer questions, and encourage active participation from the host farmers and visiting farmers *(See figures 3 – 6 below)*.



Figure 3: The picture on the left indicates farmer group members in Gonja ward-Same district with the Director for CEDESOTA Mr. Jackson Muro (the second from right front line) who visited the group for preparations for

farmer exchange visit next January 2025. He is getting explanation on Ginger farming. Ginger is economic crop relied by many farmers on the Pare Mountain areas (One Kilogram worth 5000 -7000shs). The picture on the right is banana mixed with coffee, Ovacado and mangoes trees. The team is employing CSA techniques in all farming practices.



Figure 4: The picture on the left is poultry farming with Saso and Rodeksi Chicken species (aged 7 months). On the right is a picture of local “Brooder” with eggs expected to hatch out after 21 days. The IGA project belongs to Mrs. Dorah (One of the farmer group member in Gonja-Same)



Figure 5: The picture represent an Ovacado fruit tree planted in 2022, a Hass Variety from Morogoro. According to the farmers Hass ovacado it’s a fast growing species with disease resistant qualities. The

right picture indicates banana (Kimalindi Species) planted with Ovacado and manage trees. The far looking is a cow shelter with cow inside. The cows, goats are all kept for milk production. It is from these animals that they get manure.



Figure 6: Natural insecticides has been the best alternative of chemical insecticides. On the picture (left) is natural plants that include pepper (pilipili kichaa), alovera, wild sunlower and others which are crashed together to produce a natural insecticides indicated in the right picture ready for use. The mixture is used to kill the pests and act as “booster”.

(b) Expected outcomes after the farmers’ exchange visit in Same District:

- Increased awareness of sustainable agricultural practices to farmers from Arusha.
- Enhancement knowledge and skills on organic and conservation agriculture techniques.
- Inspiration to adopt or improve existing sustainable farming practices.
- Enhanced networking among farmers to connect and share experiences.
- Identified potential challenges and opportunities for scaling up sustainable agriculture project.