



LONG FALLOWS Project Research co-design workshop report

10th – 11th September 2024

Nachingwea District Council Offices



About the LONG FALLOWS Project

With funding through the REDAA programme, the Tanzania Forest Conservation Group (TFCG) is partnering with the Tanzanian Community Forest Conservation Network (MJUMITA) and the University of Leeds (UoL) to implement the project 'Lengthening of Swidden Natural Forest Re-Growth Cycle through Farmers' Action, Learning, and Leadership Opportunity for Well-being and Social Inclusion' (LONG FALLOWS). The project will be implemented between March 2024 and December 2027. The project is being implemented in three Nachingwea District villages: Kiegei B, Kilimarondo and Namatunu.

The **goal** of the project is to enable people, nature and climate to thrive from the restoration of degraded East African Coastal forests through improved governance, capacity and knowledge.

The project's **outcomes** are:

1. The project will increase knowledge and capacity to integrate long-fallow swidden agriculture and agroforestry with community-based forest management. This will change policy and practice benefiting small-scale farmers and forest-owning communities and promoting gender equality and social inclusion.
2. The project will develop innovative toolkits linking fallowing, forest restoration and carbon markets.
3. The project will encourage multi-stakeholder dialogue around land restoration through an integrated CBFM – long-fallow swidden and agroforestry model.



About the Tanzania Forest Conservation Group

The Tanzania Forest Conservation Group (TFCG) is a national non-government organisation with a mission to reduce rural poverty in rural communities and to conserve the biodiversity of globally important forests in Tanzania for the benefit of the present and future generations. Established in 1985, TFCG has successfully supported over one hundred communities to establish village land forest reserves covering 250,000 hectares.

About the REDAA Programme

Reversing Environmental Degradation in Africa and Asia (REDAA) is a programme that catalyses research, innovation and action in sub-Saharan Africa and South and Southeast Asia by offering grants and technical support. Funded projects are interdisciplinary, locally led, and focused on solutions for ecosystem restoration, enabling people and nature to thrive together in a changing climate.

The REDAA programme offers technical support to grantees on organisational practices based on common needs, aiming to enhance local capacity and foster collaboration among practitioners. It also seeks to broaden the impact of its research-to-action projects by sharing generated knowledge with a wider community of practice.



REDAA is funded by UK International Development from the Foreign, Commonwealth and Development Office and managed by IIED. For more information, visit www.redaa.org.



Table of Contents

Table of Contents.....	iii
1. Introduction.....	1
2. Session 1. Introductions, project overview, workshop aim and objectives.	1
3. Session 2. Critical review of the project’s baseline information on the project area.....	3
4. Session 3. Review of the project’s framing, assumptions and proposed approaches	3
5. Session 4. Exploration of the current situation and co-definition of an innovation platform	12
6. Session 5. Co-defining an innovation platform	13
7. Session 6. Group work to elaborate plans around the research themes	15
8. Session 7. How will we work together?.....	19
9. Session 8. Workshop participatory evaluation and way forwards	21
10. Way forward	21

List of Annexes

Annex 1. Session 1. About the LONG FALLOWS Project.	24
Annex 2. Participant expectations	27
Annex 3. Session 2. Presentation 2.1 Why are we interested in long-fallow swidden agriculture? A summary of research on fallows, from around the world.	31
Annex 4. Session 2. Presentation 2.2 Baseline information on Kiegei B, Kilimarondo and Namatunu Villages.....	32
Annex 5. Session 2. Presentation 2.3 Gender equality and social inclusion analysis (GESI).....	34
Annex 6. Session 3. Group work instructions for World Café review of project framing, assumptions, and proposed approaches.....	37
Annex 7. Session 3. Agreement ranking for project assumptions.	39
Annex 8. Presentations on three communities’ visions for community-based forest management, long-fallow swidden and agroforestry.....	40
Annex 9. Research ideas	46
Annex 10. Session 5. List of research objectives developed by the working groups.....	48
Annex 11. Participant information statement	49
Annex 12. Participant evaluation feedback	50

1. Introduction

This document describes the LONG FALLOWS Project research co-design workshop. The workshop was a key milestone in the LONG FALLOWS project. The workshop provided a multi-stakeholder forum to define the project's research objectives. Involving 43 participants, the workshop was held from 10th – 11th September 2024 in the meeting room of the Nachingwea Local Government Headquarters. The workshop was held in Swahili and was facilitated by Professor J. Jeckoniah. The design of the workshop broadly followed 'Phase 2 Co-definition of an innovation platform' of the research co-design framework set out by Andrieu et al 2019¹.

2. Session 1. Introductions, project overview, workshop aim and objectives.

2.1 Welcome remarks from the Guest of Honour

The Nachingwea District Executive Director (DED) welcomed participants and thanked the workshop organisers. In his speech, he expressed heartfelt gratitude to the Tanzania Forest Conservation Group (TFCG) for initiating a research project of great interest and relevance in Nachingwea District. He noted that this project comes at a critical time, as Nachingwea is among the few districts in the Lindi region with extensive Village Land Forest Areas (VLFAs) but is facing significant deforestation pressures, primarily due to agricultural activities, including cashew production.

The Director highlighted that many community members in the project's selected villages practice shifting cultivation within the VLFAs—a primary driver of deforestation. He emphasized that the research findings from this study could play an essential role in informing policies on the potential benefits of integrating swidden agriculture and agroforestry into Community-Based Forest Management (CBFM). He added that positive outcomes from this study could pave the way for implementing on-ground projects that will help conserve the country's natural forests, which are currently being cleared at an alarming rate for new farmland.

He further extended his sincere appreciation to everyone involved in designing this research project, particularly the involvement of diverse stakeholders from Tanzania and beyond at its implementation stage. This includes research institutions such as the Tanzania Agricultural Research Institute (TARI), the Tanzania Forestry Research Institute (TAFORI), Sokoine University of Agriculture (SUA), the University of Leeds (UK), the Tanzania Community Forest Conservation Network (MJUMITA), and the Nachingwea Local Government Authority.

In his opening remarks, he concluded by affirming that the Nachingwea District Council is fully committed to providing the necessary support to ensure the study's success. The Council pledges maximum cooperation throughout the research period. He encouraged all participants, including Nachingwea District staff, to engage actively in this co-design research program, as it forms the foundation for all research activities to be conducted from 2024 to 2027, as outlined in recent capacity-building meetings



Photo 1. The Nachingwea District Executive Director welcoming participants.

2.2 Participant introductions

Participants introduced themselves. Participants included:

¹ doi: 10.3389/fsufs.2019.00037

27 villagers (6 farmers, 1 village leader, 1 woman, 1 pastoralist per village from 3 villages)
5 District Staff
3 TARI and TAFORI Researchers
2 academics from Sokoine University of Agriculture
1 MJUMITA Project Officer
1 TFCG LONG FALLOWS Project Manager
1 Tanzania Wildlife Authority representative
1 Village Climate Solutions Ltd representative (REDD+ project)
2 University of Leeds representatives
1 Journalist from ZBC
1 DED
The research co-design workshop involved 47 participants with (34 male, 17 female).

2.3 Workshop aim and objectives

The Project Manager presented the workshop aim and objectives.

Aim: To develop a locally-led, inter-disciplinary, research-to-action plan integrating long fallow swidden, community-based forest management and agroforestry, reflecting local priorities, gender equality and social inclusivity.

Objectives

1. To review the LONG FALLOWS Project understanding of integrated CBFM and long-fallow swidden with a focus on gender equality, social inclusivity and climate change.
2. To review the project's research framing, assumptions and proposed approach.
3. To identify multi-stakeholder research priorities.
4. To co-design a research implementation, participation and communication plan.
5. To agree on next steps.

2.4 LONG FALLOWS project overview and key concepts

The Project Manager provided an overview of the project. See Annex 1.

2.5 Participant expectations

Participants were asked to write down their expectations on manila cards (see Annex 2). The expectations were analysed and clustered. Broadly expectations were clustered around the following nine topics.

- Resolving farmer – pastoralist conflict
- Learn about agroforestry
- Learn about long fallows
- Learn about forests and forest protection
- Learn about gender
- Learn about carbon projects
- Learn about research processes
- Learn about the project
- Improve project outcomes

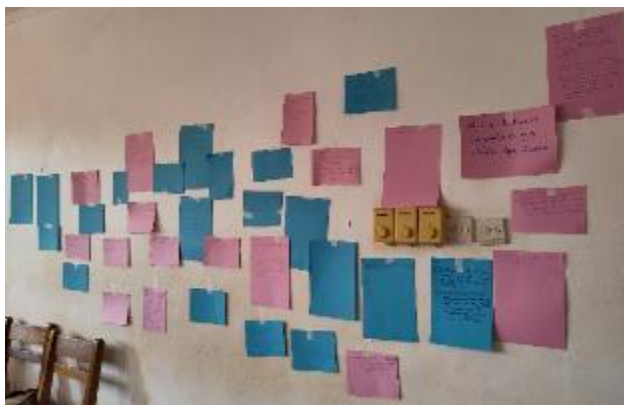


Photo 2. Participant expectations displayed on manila cards.

2.6 Free Prior and Informed Consent

The facilitator reminded participants on the principles of free prior and informed consent, including around photography during the workshop. Participants were reminded that they have the right to request not to be included in photographs. All participants were given a participant information sheet. The English translation of the participant information sheet is provided in Annex 11.

3. Session 2. Critical review of the project's baseline information on the project area

Session objective: To critically review the LONG FALLOWS Project current understanding of integrated CBFM and long-fallow swidden, in the national and local context with a focus on gender equality, social inclusivity and climate change. Presentations were based on published research, and data collected by the project in the project villages including household surveys, the Management Effectiveness Tracking Tool, and focus group discussions.

Three presentations were made:

1. Community-Based Forest Management and research on benefits / costs of long following – Presented by Dr Numan Amanzi, Tanzania Forestry Research Institute. See Annex 3.
2. Village profiles including results from baseline monitoring surveys. Give the social and environmental context. Presented by Abdallah Makale, Tanzania Agricultural Research Institute. See Annex 4.
3. Results of the Gender Equality and Social Inclusivity surveys. 20 minutes. Presented by Professor J. Jeckoniah, Sokoine University of Agriculture. See Annex 5.

Presentations were followed by plenary discussions.



Photo 3. Dr Numan Amanzi presenting background information to the LONG FALLOWS project.

4. Session 3. Review of the project's framing, assumptions and proposed approaches

Session objective: To critically review the project's research framing, assumptions and proposed approach, and reach consensus on the project's research-to-action themes and approaches.

Using the world café method², participants circulated between five different tables focusing on different aspects of the project's framing, assumptions and proposed approaches.

Participants were divided into 5 groups:

1. Practitioners (Local Government, NGOs, Tanzania Wildlife Authority (TAWA))
2. Pastoralists from the three villages plus the MJUMITA Pastoralist Officer
3. Kiegei B: farmers, village leaders.

² <https://theworldcafe.com/about-us/>

4. Kilimarondo: farmers, village leaders.
5. Namatunu: farmers, village leaders.

One facilitator was stationed at each of the five tables. The groups circulated between the tables, spending longer at the first table than subsequent tables. Instructions for each of the tables are provided in Annex 6 .

The facilitator outlined the activity relevant to their table, and for the second sitting onwards, presented the results from the previous group(s), inviting additional comments. For those tables where a scoring activity was required, each group discussed the scoring until reaching a consensus. An average of the scores given by the five groups for the project's assumptions is presented in Table 1. Scores by the individual groups are provided in Annex 7. The group work was followed by a gallery walk with each facilitator presenting their table's results as follows:

Table One. Are the project's assumptions correct about integrating long-fallow cultivation, agroforestry and community-based forest management?

Table One focused on project assumptions and framing around long-fallow cultivation, agroforestry and community-based forest management. The validity of seven project assumptions were discussed and scored by each of the five groups. See Annex 7.

Assumption 1: Long fallows swidden agriculture can improve people's lives.

Two groups (Kiegei B and Kilimarondo) were neutral, two groups strongly agreed (Pastoralists and Practitioners), and one group disagreed (Namatunu). The reasons given by the neutral groups and the Namatunu group were that the success of long fallows swidden is uncertain; there is no guarantee that cultivating in long fallows will yield high harvests. This led the two neutral groups to express that long fallows swidden agriculture does not guarantee a 100% improvement in people's lives. Another reason given is that long fallows helps improve lives by reducing farming costs; specifically, when practicing agroforestry, there is a period during which you may not need some of the agricultural inputs such as fertilizers , thus lowering agricultural expenses.

Assumption 2. Integrating long fallow swidden agriculture with Community Based Forest Management can enhance the protection of community forest reserves.

Three groups agreed, two groups (Kiegei B and Kilimarondo) did not agree with this assumption. Some groups argued that permitting agriculture in these areas could lead to forest degradation, as those farming in community forest reserves may become forest offenders. Conversely, some participants agreed that farming in village land forest reserves could enhance forest protection, as those cultivating these lands might take on the role of safeguarding the forest, fostering a sense of mutual responsibility among the community.

Assumption 3. It would be possible to oversee a system of allocating cultivation rights within a long-fallows forest management unit in a village land forest reserve, without causing conflict.

Four groups agreed. One group (Kiegei B) was neutral. The four groups who agreed explained that there is a well-organized system for sharing cultivation areas that can prevent disputes. The neutral group explained that, while the allocation system for fallow lands could either lead to conflicts or avoid them, they see the potential for both outcomes.

Assumption 4. Farmers would be willing to pay for permits, issued by the village natural resources committees, to cultivate in a long-fallows forest management unit.

Four groups disagreed. One group (Kilimarondo) was neutral. Groups argued that farmers will not be willing to pay for the right to farm in fallow lands within the VLFR. Reasons for this refusal included:

- Lack of certainty in generating sufficient income or adequate fallow land.
- It would increase production costs for the farmer, as they would have to pay for both production expenses and the permit fees simultaneously.

Assumption 5. The community would be willing to extend the village land forest reserve to include a long-fallows buffer zone adjacent to the current village land forest reserve.

This assumption was rejected by all groups. Community members stated that they would not be willing to allow their fallow areas, which are close to the village forest reserve, to be included in the reserve. The reason

given is that people want to maintain more freedom over the use of their land and incorporating it into the reserve would reduce their freedom to use these areas as they see fit.

Assumption 6. It would be problematic to include agroforestry (e.g. cashew) management units in a village land forest reserve.

All groups agreed that it would indeed be problematic because it would limit the freedom to manage and use these areas. They explained that if individuals' cashew areas are included in the forest reserve, it reduces their freedom to control and utilize their own land.

Assumption 7. If training on gender and social inclusivity is provided for communities, more women and pastoralists will be included in village governance.

This assumption was unanimously accepted by all groups, who indicated that if training on gender and inclusion is provided to women or the community, then more women and pastoralists will be able to participate in decision-making and hold various positions at the village level.

Additionally, the pastoralist community expressed that they felt they were not adequately represented in these seven concepts. As part of the community, they emphasized the need to include their practices to determine whether they would be accepted and well-received. However, the pastoralists felt that there were certain issues they would agree with if considered, one of which was allowing them to graze livestock in fallow areas under a paid arrangement. They believe pastoralists would be willing to pay to graze their livestock in these areas.

Table Two. Are the project's assumptions correct about climate finance and climate change resilience?

Five assumptions were discussed at Table 2.

Assumption 1. Long-fallow swidden helps people to be more resilient to climate change.

Four groups agreed. One group (Kiegei B) was neutral. The Kiegei B group believed that, while long fallows may help with climate resilience, the impact may not be significant.

Assumption 2. Community-based forest management helps people to be more resilient to climate change.

Four out of five groups agreed with this assumption, stating that forest management within communities does indeed help people withstand climate change, as forests are a source of clean air and absorb pollutants, while also providing resources like charcoal. One group (Kiegei B) was neutral, acknowledging that forest management does assist people in coping with climate change.

Assumption 3. If communities received money (climate finance) for long fallowing, more people would adopt the practice.

Three groups agreed. Two groups (Kiegi B and Namatunu) were neutral. The groups who agreed fully endorsed the idea, stated that it aligns with their current farming practices, and receiving payments would be an added incentive, making it an opportunity they would readily embrace. They explained that if carbon payments were available, many people would adopt fallow agriculture practices. The other two groups agreed to some extent.

Assumption 4. Climate finance could enhance community support for the protection of the village forest reserve

All groups agreed completely with this assumption, stating that if they receive funds either through forests or carbon credits, the money could be reinvested into forest protection. They believe that forest security could be strengthened, as funds could support patrols, such as fueling motorcycles for monitoring. Therefore, all groups agreed that this concept is entirely valid.

Assumption 7. If there was climate finance, the community would be more willing to extend the village land forest reserve to include a long-fallows buffer zone adjacent to the current village land forest reserve.

This assumption suggests that if climate funds were available, the community would be willing to expand forest reserves. For instance, if they currently have 8,000 hectares, they might increase it to 10,000 hectares, especially if they receive carbon credit funds through their village forests.

Three groups (Kilimarondo, Pastoralists, Practitioners) agreed with this idea because, although they have forests now, there are also smaller forests outside their village forest reserves that they currently don't benefit from. TFS (Tanzania Forest Services) issues permits, and if there are needs, such as for school desks, the government takes responsibility. Legally, they know they have no control over these areas, which they see as a disadvantage. However, if they had the opportunity to benefit financially from these forests, they would be willing to expand their forest reserves if funds were indeed provided. One group (Kiegei B) was neutral and Namatunu did not respond on this.

Additional questions for Table 2.

Have you heard anything about climate change adaptation and resilience funds so far?

For example, funds provided by donors to address climate change—have you heard anything about them, and is there anything you disagree with regarding these funds?

Most responded that they haven't heard any negative information, but they are uncertain because they don't fully trust those who assess and measure the carbon levels for funding purposes. They are concerned about where the satellite measurement points will be placed. Their main worry is that if the measurement points fall in areas without trees at that time, they might receive less funding. However, overall, they were pleased to receive this positive information.

The final question was whether there are any climate funding issues that have not been addressed up to now. They responded that, as far as they know, they are still engaged in a project focused on carbon initiatives. For now, they feel everything has been discussed, but they would like to receive more comprehensive training. They are requesting additional education to better understand how fallow farming generates income, how carbon is measured, and, ultimately, to enable everyone to fully understand and participate in conservation activities.

Table Three. What kind of research, and research outcomes and outputs should we be aiming for?

Four questions were discussed with each group.

Question 1. What is research?

Participants viewed research as a process aimed at finding solutions to unknown issues. This summary reflects the general responses from all five groups. In summary, all groups saw research as an investigation focused on identifying solutions to a problem.

Question 2. What is the point of research and what should be the outcomes of research?

We wanted to know what these groups understood as the goal of research in this project, as well as what they thought the outcomes should look like.

The first group, the pastoralists, responded:

- The purpose of the research is to understand the real state of the environment and the community as a whole, to adapt to climate change. The group also stated that it is about identifying the root cause of the problem(s) and providing recommendations on how to address them.
- They said it is about gathering information that aids in informed decision-making.
- They also discussed the desired outcomes, suggesting that they should focus on providing solutions to the existing issues within the community.
- They also believe the outcomes should be informative and provide learning opportunities within the community
- They expressed a desire to see changes that can help resolve conflicts.

The Kilimarondo group expressed their support for the pastoralists' points.

Participants from Kiegei B added that the goal of research is to uncover unknown information and identify the root cause of an issue. In their view, the outcomes can be either positive or negative, depending on the findings. They emphasized that the results should promote progress and foster collaboration among stakeholders, specifically farmers, pastoralists, and forest conservators. These were the insights shared by the Kiegei B group.

The LGA group added that:

- Their goal is to identify the problem, determine its source, and find a solution.
- They aim to enhance understanding.
- They seek to understand the past, the present situation, and future implications, as well as the benefits and drawbacks of the research.

The LGA group emphasized that the research outcomes should focus on resolving issues within the community, such as conflicts between farmers and pastoralists, as well as disputes between people and wildlife. They added that these solutions are essential for promoting harmony in the community. The final group on this question supported the previous points made.

Question 3. How can the project best integrate the research process with community livelihoods?

The first group, the pastoralists, provided the following responses: They suggested that this could be achieved by visiting the community to hold joint meetings and fostering cooperation between pastoralists and farmers. They emphasized that collaboration is essential for the project to connect the research process with community life.

Additionally, they mentioned the importance of listening to the needs of each land-using group and prioritizing those needs. They also highlighted the necessity of providing education aimed at resolving conflicts between the community members, specifically between pastoralists and farmers. Furthermore, they suggested organizing joint meetings that involve all stakeholders utilizing the land, including pastoralists, farmers, and forest conservators. This was the viewpoint of the pastoralist group.

The Kilimarondo group supported all the above points.

In contrast, the Kiegei B group stated that the village could appoint leaders from among the pastoralists to help reduce conflicts.

The LGA group presented the following points:

- They emphasized the need for active participation in the process.
- They suggested that the research should be conducted on the farms of community members, rather than solely initiating studies on their own plots.
- They highlighted that the community should benefit from the research outcomes, meaning that the research conducted should aim to benefit the community.
- They stressed the importance of considering gender and gender inclusivity in the process.

The people from Namatunu supported the points made by the LGA group, reinforcing the discussion for this third question.

Question 4. What research outputs are most important e.g. printed summaries, meetings, radio etc?

The aim was to understand what results the groups hope to see from the study—specifically, results that could be shared in announcements, publications, media, and other platforms.

The pastoralists provided the following insights on the desired outcomes of the research:

- Community Participation: They emphasized the importance of every community member being included in known areas and reflected in village reports. They believe research findings should incorporate these aspects.
- Conflict Resolution: They expressed a desire for developments that foster solutions to conflicts. They want research findings of this nature to be introduced and recognized widely.
- Inclusion of All Stakeholders: The pastoralists also highlighted the need for outcomes that arise from the involvement of all groups of land users.

The Kilimarondo group fully supported these points, expressing their agreement at 100%.

Next, the Kiegei B group added their perspectives:

- Global Recognition: They aspire for Kiegei to be recognized globally and featured in various media outlets.
- Gender Equality: They called for the establishment of equitable gender relations within their community.
- Research Feedback: They also requested that feedback from the research be shared with village residents.

The LGAs representatives contributed additional thoughts:

- Economic Impact: They expressed a desire for research outcomes that touch on the economic activities within the community, emphasizing that these results should be highlighted and widely known.
- Climate Change Solutions: They also hoped for findings that offer solutions to the challenges posed by climate change.

These insights reflect a strong desire among all groups for research outcomes that not only address their immediate needs but also promote sustainable development and inclusivity.

- They also expressed a wish for outcomes that provide solutions to conflicts between farmers and pastoralists, as well as issues involving wildlife and its interactions with people.

The people from Namatunu stated that they fully support all the points made.

Table Four. Are the project's assumptions correct about research co-production?

Table Four reviewed four assumptions and responded to two questions.

Assumption 1. Research is more likely to be useful to communities if they are involved in the whole research process from design to implementation to communication?

All groups agreed with this hypothesis to a significant extent, citing the following reasons:

- The training they received indicates that they will gain benefits.
- They will learn to discern between positive and negative aspects.
- Trust in the project will be built, fostering greater confidence, understanding, and active participation among various groups.
- Direct involvement and access to accurate information will enable them to make informed decisions and foster trust.
- Additionally, participation leads to positive outcomes, contributing to overall development.

Assumption 2. Farmers and pastoralists are interested to participate in research co-production.

Among the groups, there were varying levels of agreement: Practitioners were neutral on this, while Kilimarondo, Kiegei B and the pastoralist groups expressed strong agreement. The reasons they provided for their willingness to collaborate included a strong interest in participating in training sessions and meetings. Group Three, which expressed a moderate level of agreement, indicated that they need adequate practical education to feel confident in their participation. They noted that not everyone is equally interested in collaboration. For instance, they estimated that only about 50% of farmers are interested, while herders expressed concern that their interest might be as low as 20%.

Assumption 3. Farmers and pastoralist would be willing to test some research ideas around agroforestry and long-fallows, on their farms.

For this assumption, most participants, particularly those from the higher agreement group, indicated that such initiatives are possible if comprehensive education is provided. They still feel they require additional training. Conversely, the group with a strong inclination believes that minimal education has been offered so far, and they emphasize the importance of conducting successful trials. They argue that if initial trials are successful, it will inspire others to follow suit, fostering a willingness to participate. Group Three highlighted a noticeable disparity in willingness to participate, suggesting that while farmers might be open to collaboration at a rate of 70%, herders might only agree at a rate of 20%.

Assumption 4. Communities would be willing to test some research ideas by adjusting the management of their village land forest reserves.

These new ideas may necessitate changes in existing management practices. In this context, many participants are positioned between moderate and strong agreement. Those in the higher agreement category expressed the following views:

- They recommend establishing a proper framework, which would help alleviate conflicts and ensure that land users effectively utilize their designated areas.
- They acknowledge that while there are principles for optimal land use, these are not consistently followed.
- Some participants emphasized the importance of fostering advocacy and influence for land users.

- Others expressed their willingness to engage with the research, provided it yields tangible benefits, particularly improvements in the village's revenue.
- Several indicated that they would be open to change if it resulted in positive outcomes.
- However, some cautioned that not all community members may readily accept the results or agree to implement changes, as there are individuals resistant to adapting.
- Additionally, others mentioned uncertainty about what adjustments would look like after the research is completed.

Assumption 5. Policy-makers are more likely to listen to research findings if farmers and pastoralists have been involved in the research process.

Most respondents positioned themselves at a moderate level of agreement, with only one group expressing a slightly higher level of support. Those in the moderate category offered the following insights:

- A significant portion of the pastoralist community may remain unreachable because they live in remote areas. They expressed concern that although the concept of participation in policymaking might be appealing, many pastoralists may not be accessible.
- Others argued that democracy needs to be strengthened so that policymakers can more broadly endorse the findings.
- Additionally, they noted that as the community becomes more informed, policymakers are likely to be more supportive of the results, as they appreciate the importance of community engagement.
- Some pointed out that seeing is believing; policymakers are more likely to trust the outcomes when they witness active community involvement. However, they also cautioned that if the findings do not carry political weight, it may be relatively easy for policymakers to accept them.

Additionally, another group expressed that there is a need for more education in this research.

Question 1. What are the important principles in making a research co-design process work for you?

All groups agreed that the most critical factor is the need for inclusive meetings to take place.

Question 2. What benefits do you see from a research co-design approach?

The consensus was that one significant advantage is that everyone's ideas would be heard and considered, fostering an opportunity for active participation in activities. However, there was also a concern that a small percentage of individuals, particularly herders, might not benefit from this approach. The reason given was that their remote location may prevent them from being closely involved. Additionally, the value of gathering collective insights was highlighted as another key benefit.

They expressed their satisfaction in seeing that the villages of Kilimarondo, Kiegei, Namatunu, and NGA have come together, recognizing the benefit of sharing their ideas collaboratively. One participant noted that although these villages may have different customs, this diversity enriches the process, allowing them to learn from each other's traditions.

Another significant advantage is the involvement of various groups, which fosters a sense of ownership over the project—essentially making it theirs. Furthermore, this engagement promotes sustainability, as the community members feel a vested interest in the ongoing success of the initiative.

Table Five. What do you think about the project's proposed approach (inter-disciplinary, research-to-action)?

Table Five aimed to gather responses regarding the proposed project methodologies, while the second question sought to identify the best ways to transition from traditional or conventional research to practical, hands-on research.

Question 1. What do you think about the project's proposed approach (inter-disciplinary, research-to-action)?

Overall, the groups largely agreed that the suggested methodologies were appropriate, providing several reasons for their endorsement. Beginning with the local government representatives, TAWA, and the DC's office, they noted:

- This approach is commendable as it aims to resolve conflicts of interest through the inclusion of multiple stakeholders. Often, various research initiatives emerge, each led by different stakeholders, which can leave some parties excluded despite their essential role in the success of the research. When these key stakeholders are absent, garnering support for the research becomes challenging.
- They also emphasized that this method is effective because it enables stakeholders to engage in hands-on work. In contrast, traditional methods often benefit only academics, as many studies conclude with findings presented in foreign languages that are not accessible to ordinary stakeholders, who we refer to as having expert experience.
- Furthermore, they pointed out that the correct approach fosters a sense of ownership, as these two methodologies promote active participation among stakeholders.
- Another supportive group highlighted that this is a participatory approach. The pastoralists mentioned that it embodies democratic principles since everyone is involved, and all stakeholders' perspectives are valued and considered.
- However, they raised concerns regarding research aimed at enhancing access to alternative grazing lands. The pastoralists expressed that they face challenges when moving their livestock into other areas, such as forests and agricultural lands. They believe that this research can help address these issues effectively.
- The introduction of alternative forage sources could significantly help alleviate conflicts that often arise with other stakeholders, such as those in agriculture, forestry, and wildlife. By diversifying their sources of feed, they may reduce their dependency on traditional pastures that frequently lead to disputes.
- The Kiegei community emphasized that effective strategies are crucial for addressing the current challenges they face. Presently, there are ongoing conflicts between farmers and pastoralists, as well as between farmers and wildlife, primarily due to livestock encroaching on areas designated for wildlife.

Question 2. What are the best ways to convert research to action?

To transition effectively from conventional research to practical, hands-on studies, they proposed several approaches:

- Establishing demonstration farms (field farms) and model farms to provide practical examples of successful agricultural practices.
- Creating training cooperatives for project stakeholders that prioritize gender considerations while involving the community in practical research initiatives.
- Another recommended approach is implementing high-quality livestock management training. Pastoralists suggested organizing study tours to successful livestock management sites, which would offer valuable insights and practical knowledge.

The Kiegei community highlighted the importance of providing training on effective market research and strategies for obtaining better prices for their crops.

Meanwhile, the Kilimarondo community expressed the need for quality education on how to implement mixed farming practices. They mentioned that they have primarily relied on traditional agricultural training, but they are eager to learn more about agroforestry techniques. They wish to compare the results of mixed farming with traditional methods to determine which approach yields the most produce, enabling them to make informed decisions about adoption.

Table 1. Validation of project assumptions: participant scoring of their degree of agreement with the project's assumptions.



5. Session 4. Exploration of the current situation and co-definition of an innovation platform

Session objective: To identify stakeholders' zone of interest in long-fallow shifting cultivation and agroforestry and to begin to define an innovation platform.

Presentation of village visioning results: Based on pre-workshop meetings in each of the three project villages, the results of community-based visioning exercises were presented by representatives from each of the three villages. See Annex 8.

The presentations included information on:

- Description of current situation in terms of agroforestry and long-fallow cultivation including participatory maps from baseline surveys showing where fallowing is practiced.
- Vision for the future of agroforestry and long-fallow cultivation in their land and forest management considering how they can contribute to: improved livelihoods, climate change resilience and governance, and reduced deforestation.
- Risk mitigation measures and knowledge needs.



Photo 4. Representatives of the three project villages present their village visioning results.

Presentations were followed by a plenary discussion.

Participant activity. Participants were then requested to write down three areas of research and innovation interest on separate manila cards. These were collected and noted down. See Annex 9. Overnight the workshop team clustered these as a basis for the themes for Session 5.

6. Session 5. Co-defining an innovation platform

Session objective: To co-define the innovation platform and research objectives.

Plenary: The facilitator asked participants to describe and reflect on key findings from Day 1. The facilitator then explained the Session 5 group work, including explaining the four research clusters. Based on the research topics listed by participants during Session 4 on Day 1 (Annex 9), four research clusters were identified:

1. Governance & conflict - wildlife, farmer-pastoralist community-based forest management
2. Soils, crops and ecology of fallows
3. Livelihoods, Agroforestry and, gender equality and social inclusivity.
4. Climate finance and carbon

Participants divided into four self-selected groups around the four research themes emerging from Day 1, with one TARI/TAFORI/TFCG facilitator in each group. At least one person from each village was present in each group.

The groups were then asked to identify research and innovation objectives related to their theme, considering the research ideas from Day 1 and the results of the village visioning process. The group facilitator was given the relevant Day 1 manila cards with research ideas, specific to their group's research area. The full list of research objectives developed by the groups is provided in Annex 10.

Groups were asked to prioritise their research objectives and to present their 'Top 3' objectives in a plenary gallery walk. During the presentation of each group's top three priorities, participants were invited to provide feedback. Below are the comments shared for each group.

Comments for Group 1 Governance and conflict

1. During the gallery walk discussion, it was suggested that objectives one and two are essentially similar and could be combined into a single objective. This would leave two objectives instead of three, with objectives one and two merged as one, and the current objective three becoming the new objective two.
2. During the group discussion, it was recommended to create a map of all three project villages highlighting areas where human-elephant conflicts are most frequent. Additionally, the map should indicate areas with conflicts between pastoralists and note any tensions between local and migrant herders. For each conflict area, it would be helpful to identify the specific stakeholders involved.
3. It was also recommended to develop a geo spatial map to track livestock movements. By coding this data, we can monitor the direction and locations of potential conflicts, enabling us to alert communities proactively before issues arise.

Comments for Group 2 Soils, crops and ecology of fallows

In this group it was commented that, the first objective, assessing and improving soil fertility in fallow areas, overlaps with the second, which evaluates the benefits and drawbacks of these areas. Therefore, the second can be removed to avoid redundancy.

Comments for group 3 Livelihoods, Agroforestry and, gender equality and social inclusivity

1. The first objective from group 3 can be merged with the fourth as they are similar.
2. When implementing objectives, it should not appear as if the outcomes are already predetermined.
3. A key challenge is identifying the most suitable fertilizer. One benefit of fallow areas is that they naturally incorporate nutrients from decomposed plants, crop residues, and animal matter. Soil conditions in these areas should be assessed to determine the appropriate fertilizer.
4. The research should focus on understanding soil conditions rather than specifying a particular type of fertilizer.

Comments from Group 4 Climate finance and carbon

Overall points from this group look good. However, for number five (formerly number four), participant thought that, the regulations, procedures, and market information are already well established.

The top three research priorities per group are listed in Table 2.

Table 2 List of research priorities identified by workshop participants.

Governance & conflict

- To evaluate natural resources governance in the project villages.
- To identify ways to reduce human-wildlife and pastoralist-farmer conflicts.
- To assess conflicts in the project area, their causes and effects on natural resources management.

Soils, crops and ecology of fallowing

- To determine optimal soils and crops for agroforestry.
- To investigate the impact of weeds in long-fallows on crops.
- To evaluate the advantages and disadvantages of long-fallows for biodiversity, soil and crop pests.
- To investigate the impact of long-fallowing on soil fertility, and identify optimal fallowing strategies to enhance soil fertility.

Livelihoods, agroforestry and GESI

- To evaluate the impact on agriculture of differences in the species composition of regenerating fallows.
- To investigate the relationship between agroforestry and livelihoods.
- To explore gender differences in the allocation of income and labour in the context of agroforestry and long fallows.

Climate finance, fallows and carbon

- To explore the relationship between agriculture and carbon sequestration.
- To evaluate payment options for carbon payments from long-fallows carbon credits considering village, CBO and individual payments.
- To assess the carbon dynamics of long-fallowing.



Photo 5. Session 5. Presenting research objectives.

7. Session 6. Group work to elaborate plans around the research themes

Session objective: To elaborate research plans.

Group work

Participants and group facilitators returned to the same four self-selected groups as in Session 5. Each groups identified key aspects of the research plan for their subject area including: location (which villages / sub-villages), methods, work plan, key participants, and resources needed. Participants also discussed how frequently co-researchers should meet and how to communicate results. Group recommendations were recorded on flip charts and presented through a plenary gallery walk as follows:

Group 1. Research plan under Governance and Conflict

Objective	Methods	Location	Time frame	Resources needed	Key participant
To assess conflicts in the project area, their causes and effects on natural resources management.	1. Focus Group Discussions 2. Household Surveys 3. Key Informant Interviews	Kiegei B, Namatunu Kilimarondo	6 months	1. Funds, 2. Transportation 3. Personnel 4. Schedule	1. Community members 2. Village Government Leaders 3. Research Experts 4. District Council Leaders
To identify ways to reduce human-wildlife and pastoralist-farmer conflicts	1. Review past studies in successful areas 2. Household Surveys 3. Key Informant Interviews	Kiegei B, Namatunu Kilimarondo	6 months	1. Funds, 2. Transportation 3. Personnel 4. Schedule	1. Community members 2. Village Government Leaders 3. Research Experts 4. District Council Leaders
Conduct an assessment of good governance in village natural resource management	1. Dialogue Meetings 2. Household Surveys 3. Focus-Group Discussions	Kiegei B, Namatunu Kilimarondo	6 months	1. Funds, 2. Transportation 3. Personnel 4. Schedule	1. Community members 2. Village Government Leaders 3. Research Experts 4. District Council Leaders

Additionally, after each group presented their findings, participants were able to provide recommendations. The following are the recommendations that were made

Plenary comments on Group 1.

It was suggested that the term 'researchers' in the research plan should be explicitly defined. For instance, instead of simply stating 'researchers,' it is important to specify entities such as TARI, TAFORI, or SUA. Additionally, the group was advised to clearly outline the type of transport to be used during the research work if it is a vehicle or vehicle or both should be clearly stated, as this is crucial during the preparation stage

Group 2. Research plan under Soils, crops and ecology of fallowing

Objective	Methods	Location	Duration	Resources needed	Key participant
Assessing and improving soil fertility in long fallow Swidden	(a) Assessing soil fertility in long fallow. Steps: 1. Examining vegetation cover 2. Observing soil color 3. Using field based approach 4. Assessing soil quality 5. Collecting sample for	Kilimarondo Namatunu Kiegei B	2 years	1. Farms 2. Germinating seeds 3. Sample-collection equipment 4. Casual labourers 5. Renting laboratory services 6. Financial resources	1. TARI 2. TAFORI 3. Donors 4. Community 5. UoL 6. SUA

Objective	Methods	Location	Duration	Resources needed	Key participant
	laboratory analysis (b) Improving soil fertility in long fallow. Steps: 1. Categorizing the long fallow plot into group 2. planting soil amendment in the fallows 3. Collecting sample before and after treatment			7. Renting fallows plots 8. Funding laboratory services 9. Covering transportation costs 10. Enabling experts	7. LGA
Assessing the benefits and drawbacks of long fallow swidden through: 1. Biodiversity and microbes 2. Climate conditions and wild plants 3. Identifying soil carbon levels before and after long fallows swidden. 4. Identifying and evaluating the impact of invasive weeds in long fallow swidden and their effects on crops.	1. Biodiversity and microbes Steps: (a) Select long fallows based on the variation in vegetation appearance. (b) Identify the types and numbers of biodiversity present. (c) Collect samples to be sent to the laboratory for analysis of biodiversity that is not visible to the naked eye. 2. Identifying Wild Plants and Weather Conditions 1. Identify harmful weeds in the long fallows. Steps: (a) Select fallows with a history of weed infestation. (b) Identify and list harmful weeds. (c) Determine the ratio of these harmful weeds. 2. Impact of Weeds on Crops Steps: (a) Weeds that dominate the area will be assessed for their potential impact on forest crops. (b) Newly emerging weeds will be identified, and their effects on agricultural crops will be evaluated.	Kilimarondo Namatunu Kiegei B	2 years	1. Plots 2. Sampling equipment 3. Laborers 4. Funds	1. TARI 2. TAFORI 3. Donors 4. Villagers 5. LGA 6. UoL 7. SUA
Identifying soil characteristics and compatible crops for intercropping	1. Designating areas 2. Identifying soil characteristics 3. Collecting samples and sending them to the laboratory 4. Linking soil properties with crop requirements for intercropping	Kilimarondo Namatunu Kiegei B		1. Farms 2. Laborers 3. Equipment 4. Funds	1. TARI 2. Donors 3. SUA 4. LGAS

Plenary comments on Group 2.

During discussion, one of the researcher argue that, when looking at point number one it seems like the farms lacks soil fertility and thus why the group propose on improving soil fertility. Based on that scenario it is recommended to conduct an assessment / research and later to come up with the result that will help in understanding the type of the soil. Basically, after obtaining the result, decision can be made on appropriate soil enhancement methods.

Group 4. Research plan under the potential for integrating carbon markets with long fallow swidden agriculture

Objective	Methods	Location	Duration	Resources needed	Key participant
Research on the relationship between long fallow swidden and the amount of carbon sequestration	<ol style="list-style-type: none"> 1. Using GIS mapping 2. Conducting abiological assessment 3. Prepare a map for visiting long-term plots 4. Hold meetings with the village government/natural resources committee 4. Conduct carbon assessments on plots of varying ages, sizes, and locations 5. Interview plot owners 6. Analyze data 7. Conduct a summary workshop 	Kiegei B, Namatunu and Kilimarondo	2year.	<ol style="list-style-type: none"> 1. stationaries 2. cars 3. GPS 4. telephone 	<ol style="list-style-type: none"> 1. VNRC 2. SUA 3. TAFORI 4. VCSL 5. Farmers 6. LGA
Research on the economic trade-off between carbon sequestration and the use of long fallow swidden agriculture.	<ol style="list-style-type: none"> 1. Obtain estimates through farm visits 2. Interviews (unstructured interview) 3. Present the research report 2. Identify farmers within the plots 3. Prepare and create farm maps 4. Collect crop data 5. Analyze data 6. Organize and conduct a summary workshop 		1 year and a half	1	<ol style="list-style-type: none"> 1. Farmers 2. VNRC 3. TARI 4. SUA 5. TAFORI 6. VCSL 7. LGA
Research on the appropriate method of payment for carbon sequestration achieved through long fallow swidden agriculture.	<ol style="list-style-type: none"> 1. unstructured interview 2. Prepare interviews 3. Conduct interviews with various stakeholders 3. Analyze data 4. Organize and conduct a summary workshop 		1 year		<ol style="list-style-type: none"> 1. TAFORI 2. VCSL

Group 3. Research plan under livelihoods, agroforestry and GESI

Objective	Methods	Location	Duration	Resources needed	Key participant
The impact of leaving land fallow for an extended period and its effects on naturally regenerating trees and crops after the first growing season	1. To identify long fallows and their history (participatory mapping). 2. Developing a protocol 3. , Interview with the most influential people, 4. Groups of men and women 4. Experts	Kiegei B, Namatunu and Kilimarondo	May 2025 to June 2025	1. Working equipments 2. People 3. Funds	1. Community members 2. TAFORI 3. TARI 4. LGA's
The relationship between agroforestry and community livelihoods: its inefficiencies, benefits, responsibilities, and income	1. Conducting interviews with the most influential people 2. Men and women groups 3. Expertise 4. Men and women 5. Households	Kiegei B, Namatunu and Kilimarondo	July 2025 to August 2025	1. Working equipments 2. Transport including the use of vehicles and motorcycle 3. Human resource	1. Community members 2. TAFORI 3. TARI 4. LGA's

Plenary comments on Group 3.

During plenary discussion the group members were asked on why their plan is scheduled in the next year and just one month only i.e. from July to August 2025?

Responses:

With the above question the group responded that, they scheduled July to August next year because the , the current period coincides with LGA's elections. Additionally, there will be heavy rains and peak farming activities, making it difficult to proceed when everyone is occupied with agricultural activities but also in the next year 2025 there will also the national election whereby the local communities will be busy with the political meetings and thus why the research plan is scheduled for one month from July to August 2025.

Furthermore, another researcher from TARI questioned on the second objective by saying that. The objective requires more time because evaluating outcomes within a single month as reported by the group members presents some challenges. Additionally, it is difficult to conclusively attribute the results to agroforestry. For instance, if a farmer clear the farm this year, plant maize and pigeon peas alongside cashew in February, and then harvest the maize in March, it would be hard to claim that the high maize yield is solely due to the crop combination. I think this issue needs to be examined more carefully.

8. Session 7. How will we work together?

Session objective: To agree on how co-producers can work together.

Participants returned to the same four groups as for sessions 5 & 6. Each group brainstormed ideas on how best to work together including: how frequently to meet; how to participate; how to communicate; inter-village cooperation; finance; and roles and responsibilities. The groups also considered how the innovation activities will operate. Ideas were recorded on flip charts and presented to the plenary. Collectively from all four groups the following were the responses as follows:

8.1 Meeting frequency

- ✓ Meetings will be scheduled based on the activity at hand.
- ✓ Meetings will be held according to the guidelines outlined in the work plan.

8.2 Inter-village cooperation

During group discussion participants come up with the collaboration approaches including but not limited to:

- ✓ Leadership Exchange: Village leaders should share experiences with each other.
- ✓ Quarterly Meetings: Conduct joint quarterly meetings, either by phone or letter.
- ✓ Hold regular meetings to share experiences and work together on data collection efforts
- ✓ Exchange Visits for Learning: Participants should foster a culture of visiting neighboring villages to learn from their successes.
- ✓ Good Neighbour Meetings: Villages should hold joint meetings for knowledge exchange. For example, if Namatunu and Kilimarondo have a meeting, they should invite Kiegei B to participate
- ✓ Working in groups/meetings to exchange ideas.
- ✓ Collaboration with relevant stakeholders within the village
- ✓ Working together on data collection

8.3 How to communicate

- ✓ Participant recommended communicating via phone when internet access is available or in writing, using letters or fliers.
- ✓ Through government and religious institutions
- ✓ Text Messaging: If the internet is down, send SMS.
- ✓ Written Letters: If both options fail, send letters to ensure information reaches the relevant parties.

8.4 Stakeholders roles and responsibilities

8.4.1 Local communities/villagers

- ✓ Participate in project implementation, such as collecting information, receiving research findings, and applying
- ✓ The community's role is to actively participate in project implementation, such as data collection, receiving research findings and applying them.
- ✓ Provide research areas (areas for testing the long fallow swidden agriculture)
- ✓ Attend various meetings and receive feedback
- ✓ The communities will have the task of gathering and analysing research data

8.4.2 Research Institutions:

- ✓ Research institute such as TAFORI and TARI will engage in research and provide training.
- ✓ Focus on technical expertise
- ✓ Improve research methodology proposals
- ✓ Conduct and validate research data

8.4.3 Higher Education Institutions such as UoL and SUA

- ✓ Participate in research
- ✓ Maintain international relationships.

8.4.4 Local Government Authority (Nachingwea District Council)

- ✓ The Nachingwea LGA's personnel including but not limited to Agricultural officers, Community Development Officers, and District Forestry Officers will participate in research activities as well as providing education on topics such as agriculture and forestry.

- ✓ Ensuring security and safety.
- ✓ Provide education on various guidelines

8.4.5 Policy-makers

Policy-makers play a crucial role in this research by incorporating findings into policy development and guidelines. The results can facilitate amendments to laws or regulations based on the research outcomes.

8.4.6 Donors

Support all financial operations.

8.4.7 TFCG:

- ✓ Lead and oversee the project during research.
- ✓ **Participate in report writing and provide feedback to the stakeholders**

8.5 How innovative activities will operate

- ✓ Conduct Scientific Research
- ✓ Use Various Surveys
- ✓ Interviews
- ✓ Review of previous publications
- ✓ All findings will be openly shared with participants, and methods may adapt based on activity needs. Each participant will be involved in every field activity stage.
- ✓ Any findings will be openly shared with all participants
- ✓ Any methods used during the exploration/research activity may be adjusted based on the specific circumstances of the activity
- ✓ Each participant will be involved in every aspect of the field activities."
- ✓ Through capacity building, for example, in areas such as budget preparation and work planning



9. Session 8. Workshop participatory evaluation and way forwards

During the co-design workshop Evaluation Valerie was used to gather feedback from the participants. Evaluation Valerie is an interactive and visual evaluation tool designed to gather feedback about an event or session. <https://thefacilitationhub.com/engaging-participative-evaluation-methods/>. See Annex 12.

10. Way forward

Presentation and plenary discussion by Facilitator.

The Facilitator outlined the three next steps:

- Workshop report and Swahili summary
- Implementation plan development
- Village meetings

Closing remarks from 3 village leaders.

The closing remarks were delivered by the Acting District Executive Director. Prior to his speech, representatives from the villages, research institutions, the carbon monitoring department, the pastoralist community, and the University of Leeds were each given the opportunity to express their thanks to the participants.

Firstly, the representative from the three villages delivered the final speech on behalf of the villagers. They expressed sincere gratitude for the opportunity to participate in the training and pledged to share the knowledge gained with their fellow villagers. During their address, they made the following requests to the project team:

- ✓ They requested more frequent visits and additional training to gain a deeper understanding of the LONG FALLOWS project and sustainable forest management practices.
- ✓ They explained that there is a limited understanding of conservation practices within their communities and emphasized the value of the training provided so far. Both Namatunu and Kiegei B villages specifically requested the continuation of these training sessions to help deepen their community's knowledge.

Secondly, the word of thanks was given by the representatives from the research institutions (TAFORI). In his speech, the TAFORI representative expressed deep appreciation for the project and pledged their commitment to collaborate from start to the end of the project implementation.

Thirdly a word of thanks was given by the representatives from the University of Leeds (UK). The research coordinator briefly congratulated the participants for their active involvement over the two-day workshop as part of this important co-design research program. She noted that the workshop had yielded positive results and marked the beginning of a road that all participants would travel together, even if the destination is not yet fully clear. She concluded by thanking everyone for their contributions and wished them a safe journey home. Another participant from the University of Leeds expressed heartfelt gratitude for the opportunity to join the workshop participants. She shared her excitement at visiting Nachingwea for the first time and noted her hope that participants would return home with fond memories of Leeds University. She concluded by assuring everyone that "we are all in this together" and that the University of Leeds is fully committed to supporting the project's implementation.

The researcher from Department of Forest Resource Assessment and Management (DFRAM) of Sokoine University of Agriculture (SUA) thanked the facilitators for introducing them to the LONG FALLOWS project and extended gratitude to the community members for their enthusiastic participation in the training. He encouraged everyone to keep working diligently to ensure the project's success.

The representative from the pastoralist community began by thanking God for a safe and successful two-day workshop. He expressed the pastoralist society's appreciation for being included in the event, sharing that he personally learned a great deal and looks forward to learning even more. He promised to share what he has learned with his fellow pastoralists upon returning to the village.

He acknowledged that engaging the pastoralist community can be challenging, especially with training sessions of this kind. However, he emphasized that with patient, one-on-one education, positive change would be possible, like a bright star shining through. He thanked the organizers once again, noting the sense of unity, collaboration, and mutual support that marked the two days they spent together.

Reflecting on the workshop, he shared his admiration for the experts and educated participants, recognizing the hard work and mental effort they put into the project, which, as he put it, is no small feat. He promised to serve as a strong ambassador for the LONG FALLOWS project and sustainable natural resource management within the pastoralist community.

In closing, he stressed that education and training of this kind must continue, with a commitment to include pastoralists in these efforts. He also suggested that, if possible, they be taken on study tours to deepen their understanding. This way, they can return as effective ambassadors for sustainable forest management.

Finally, the Acting District Executive Director delivered his closing remarks. He noted that the selected villages of Kiegei B, Namatunu, and Kilimarondo represent areas in Nachingwea with significant land resources for agriculture, forestry, and livestock. He was so much pleased to see that pastoralist communities were included in the initiative. However, he highlighted that while this training and the lessons learned are beneficial, lasting progress depends on resolving conflicts at the local level. For this project to succeed, mutual understanding and cooperation from everyone involved are essential.

He also said, all the things we've learned are valuable and beneficial, yet if there are conflicts on the ground, none of this progress can be sustained. He further said there was a time when we invited our pastoralist colleagues, but they couldn't attend due to farmers-pastoralist conflicts. They feared that if they came, it might lead to them being arrested. Farmers, too, viewed them as adversaries. But the way the discussions have unfolded here today has been very encouraging, and I sincerely wish this project success. I'm hopeful it will be successful.

He proceeded by saying, as participants, we have been directly involved in these discussions, offering our perspectives. I must emphasize that we rely heavily on the forest sector, but currently, most conflicts revolve around forest land. Pastoralists need land, farmers need land, and yet forests are essential to all of us in this district. Recently, he had a conversation with the Director, who asked him about the progress of this initiative. He responded that the project has arrived at just the right time. On behalf of the Director, he informed the participants that the selected project area is within the Kilimarondo Division which is a key area for investment.

On the same Kilimarondo division where the LONG FALLOWS project is implemented, there is also a 'Block Farm'³ project being championed by the Ministry of Agriculture. In Nachingwea, the district began the Block farm initiative by focusing on Kilimarondo Division, particularly in the villages of Namatunu, Kiegei, Kilimarondo, and Matekwe. While the reception has been gradual, the district started by offering sesame seeds and land free of charge to farmers. Their only responsibility was to cultivate the land and ensure the sesame is sold within the district. This approach benefits the district council through a levy called "crop cess," which helps fund local infrastructure like classrooms and teachers' housing.

³ The Block Farm initiative in Nachingwea District was launched in early 2020, initially targeting 10 villages, including Matekwe and Kiegei B villages. This program was designed to support landless youth, both men and women, by providing opportunities to cultivate food crops. Although the initiative aimed to cover all 10 villages, only four villages in Kilimarondo Ward accepted the program, while others chose not to participate. The Block Farm program provides essential inputs such as sesame seeds, herbicides, insecticides, and technical expertise, all free of charge. In every village where a Block Farm is established, an agricultural extension officer is also allocated a farm, similar to those given to the youth. This farm doubles as a demonstration plot, serving as a training site for all farmers in the village. The Nachingwea District Council allocated 100 acres per village for the initiative, with each individual initially receiving 2 acres for free. However, due to low participation from the youth, some farmers were later allocated larger plots of 5–6 acres. Those interested in cultivating even more land were encouraged to request additional acreage. Now that the program has been running for over three years, the district is planning to introduce crop rotation. Areas that have been cultivated continuously for more than three years will be planted with leguminous crops like cowpeas and green peas, while uncultivated areas will continue to grow sesame.

With high potential in Nachingwea District (Kilimarondo division) in particular, he therefore insisted the participants to serve as a good ambassador for the idea that we can coexist—farmers, pastoralists, and forests alike—and utilize our resources for the collective good.

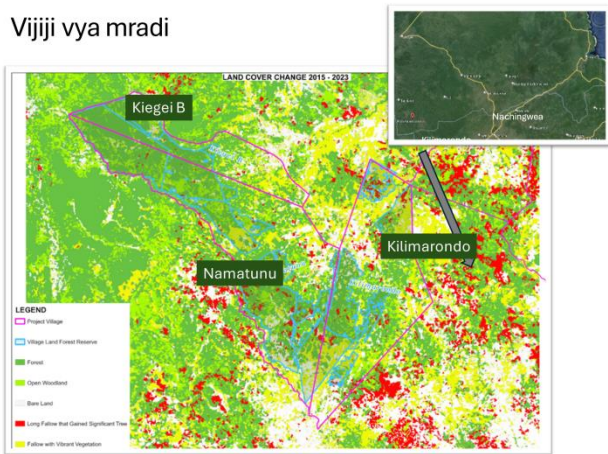
He further said, recently, the district has been introduced to the topic of carbon credits whereby nearly all heads of department and council members participated in a learning visit to Katavi region for more understanding on carbon credits. Now, discussions in the council are focused on how to implement what the LGA learned from the trip. Nachingwea District anticipated that the first implementation phase will take place in Kilimarondo Division, where LONG FALLOWS project is located. Even if farmers aren't yet fully informed, the district expects that within a week or a month, everything will fall into place, and they'll be well aware of carbon credits that is to be done by Nachingwea District Council. He finally concluded that once the community understands carbon credit to be done by District council, the participating community and the Nachingwea District council will be achieving multiple objectives with one effort: engaging in forest conservation, carbon credits, as well as supporting both farmers and pastoralists.

Lastly, he said, that on behalf of the District Executive Director, he extends his heartfelt congratulations to the facilitators, organizers and all invited participants. He finally said, he is truly pleased with all that has been achieved in the research co-design workshop.

About the LONG FALLOWS Project

Goal: To enable people, nature and climate to thrive from the restoration of degraded East African Coastal forests through improved governance, capacity and knowledge.

Vijiji vya mradi



LONG FALLOWS Project Goal

- To enable people, nature and climate to thrive from the restoration of degraded East African Coastal forests through improved governance, capacity and knowledge.

Research co-design in Long FalloWS Project

- ✓ Research framework
- ✓ Co-researcher team formation including Nachingwea LGA, Farmers, Village Leaders, Researchers (TARI / TAFORI / SUA / University of Leeds), TFCG/ Facilitator
- ✓ FPIC and introductory village and district meetings
- ✓ Stakeholder, GESI and situation analysis
- ✓ Baseline data collection
- **Co-definition of an innovation platform**
- **Define & prioritise actions**
- Ethical review
- Monitoring plan

Warsha hii. Leo na kesho

Project partners, collaborators, funding, timing & location

Timing: 3 years and 10 months (March 2024 – December 2027)



About the Tanzania Forest Conservation Group



Tanzania Forest Conservation Group
Shirika la Kuhifadhiwa ya Asili Tanzania

- National non-governmental organization established in 1985
- Registration number I-NGO/R1/00993.
- Project lead organisation

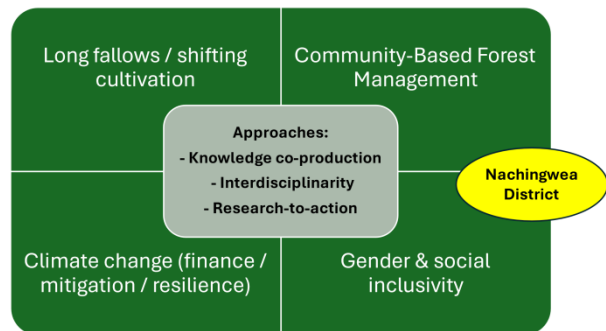
Mission

- To reduce poverty in rural communities and to conserve and restore the biodiversity of globally important forests in Tanzania for the benefit of the present and future generations.

LONG FALLOWS Project: Broad research questions

1. What happens when you combine long-fallow swidden agriculture with community-based forest management and agroforestry?
2. How can we link long-fallow swidden with carbon markets?
3. How can forest restoration and agroforestry projects promote gender equality and social inclusivity (GESI)?

LONG FALLOWS project research framework



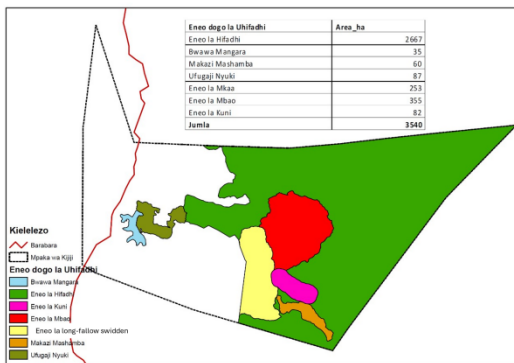
What is long-fallow swidden?

Swidden: crop cultivation that includes a fallow period.
Fallow: land left to regenerate naturally between cropping cycles. Fallows require natural regeneration (rather than agroforestry).
Long-fallow: leaving agricultural land for long enough that forest regenerates (tree height: $\geq 3m$; $\geq 10\%$ tree cover)

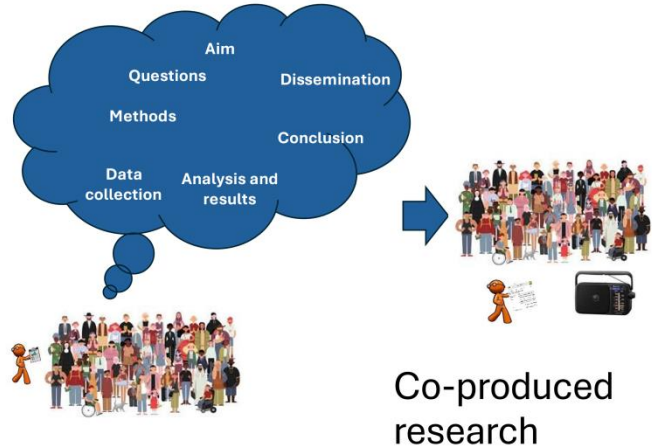
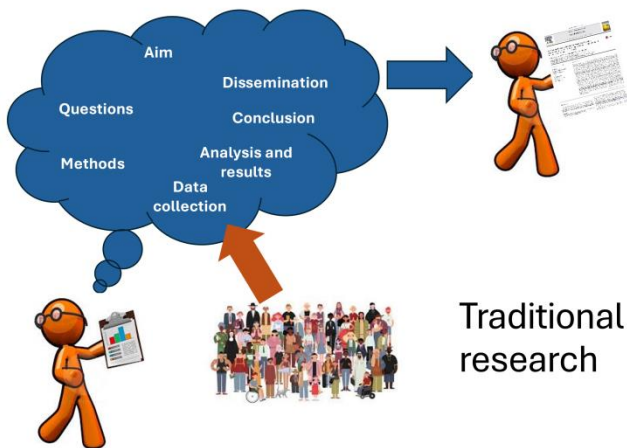
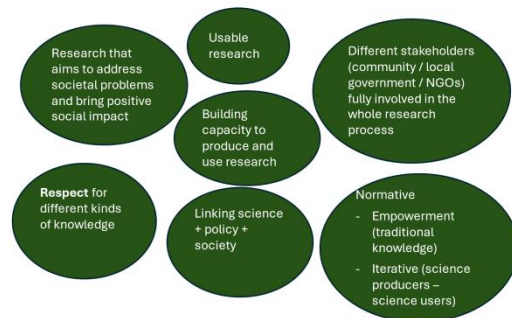


What is community-based forest management?
 Participatory management of forests on village land, including establishment and management of village land forest reserves.

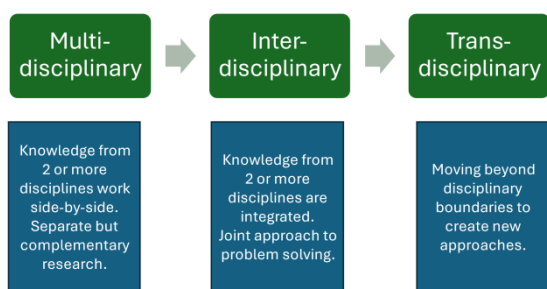
Integrating CBFM and Swidden: a theoretical example



Concept 1: Knowledge co-production



Inter-disciplinary research in the Long Fallows Project



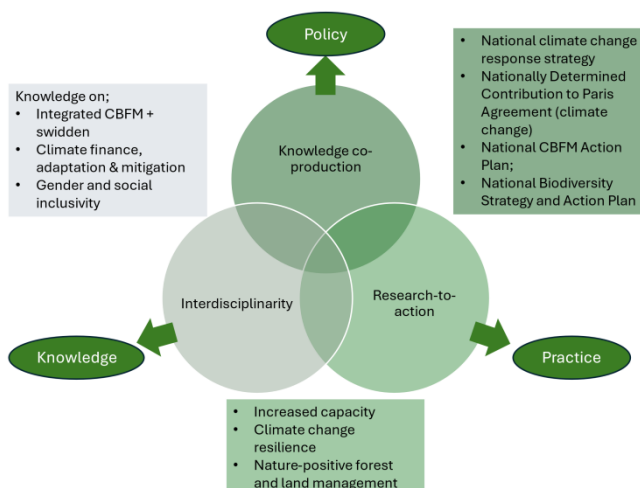
Inter-disciplinary research



Research to action



Source: REDAA 2023. REDAA Research-to-Action Strategy



Indicative budget for research activities for 3 years

Budget items including transport, DSAs, refreshments, stationery and equipment	TZS
Methods development	5,164,600
Data collection	13,300,800
Innovation platform activities	23,864,600
Data validation meetings	4,848,400
Equipment for innovation platform	17,000,000
Presentation / validation of draft research outputs	2,890,000
Communicating results	3,355,800
Media coverage	2,815,200
Total	73,239,400

Annex 2. Participant expectations

Swahili	English
Expectations around farmers and pastoralists and their interactions	
Mradi kuweka / panga fedha za kuwahushisha wafugaji kwenye mradi kwa kiwango kikubwa.	The project to allocate funds to fully involve pastoralists in the project
Kuhakikisho maswala ya wafugaji yanaiaeiza kwenye mradi	Ensuring that the concerns of the pastoralists are included in the project
Kuweka mfumo wa ushawishi wafugaji wapate nafasi zaidi kwenye CBFM	To set up a system of influencing the pastoralists to get more opportunities in CBFM
Nielewe mambo ya wakulima	To understand farmers' issues
Namna mradi huu utaleavyosaida kutatia changamoto zilizopo za wakulima na wafugaji kwenye maeneo ya mradi	How the project will help to resolve the existing challenges between farmers and pastoralists in the project area
Jamii itaondokana na migogoro baina ya wafugaji na wakulima	Communities resolve conflicts between pastoralists and farmers
Namna ufugaji ndani ya misitu	Learn about silvo-pastoralism
Kushiriki kilimo bila kusababisha kero kwa wenzangu au majirani	To participate in farming without causing nuisance to my colleagues or neighbours
Kupata uelewa jinsi ya kufanya ufugaji bila kusababisha kero kwa wengine	To understand how to farm livestock without causing nuisance to others
Kujifunza kushiriki kilimo na ufugaji na kupata faidi kote (kilimo wa mifugo)	Learning to participate in agriculture and animal husbandry and to gain profit throughout (livestock farming)
Kuelewa jinsi ya kupunguza matatizo baina ya wakulima na wafugaji.	Understand how to reduce problems between farmers and breeders.
Kujitunzia kilimo cha kuhamahama na kilimo mseto	To improve shifting cultivation and agroforestry.
Namna gani ya kuchanganya mazao pamoja na miti kwa kilimo na nini faida yako na nin hasara yake	How to combine crops with trees for agriculture and what are your advantages and disadvantages
Kujifunza uhifadhi na kilimo mseto na kaboni (hewa ukaa)	To learn about forest conservation, agroforestry and carbon sequestration
Learning about agroforestry	
Kuongeza uelewa zaidi kuhusu kilimo mseto / msitu	Increase awareness about agroforestry / forests
kupata faida ya kilimo mseto kama ... kali ilyoone ili kuepuka kazi ya kufyeka msitu ovyo	To get the benefit of agroforestry as ...to avoid the work of cutting down the forest indiscriminately
Kupata uelewa zaidi kuhusu kilimo mseto	Gain more understanding about agroforestry
Kupata uelewa zaidi kuhusu kilimo mseto	Gain more understanding about agroforestry
Kujifunza kilimo mseto	To learn about agroforestry
Mafunzo haya kwa muda kwa siku mbili nahitaji sana kufahamu juu ya kilimo mseto	This training for a period of two days I really need to understand about agroforestry
Learning about long fallows	
Kupata uelewa juu ya uhusiano uliopo katika Mradi wa Long Fallows na Carbon Trading katika halmashauri ya wilaya na Nachingwea	To gain an understanding of the relationship between the Long Fallows Project and Carbon Trading in the district council and Nachingwea
kujifunza kilimo cha mafundu	To learn about long fallow agriculture
Kuona faida moja wapo katika klimo kwenye mafundu	To see the benefits of long fallow agriculture
Kuwa ??elowishaji kwa wakulima uyewangu?? Kuhusu kilimo mafundu	Gain more understanding about long fallows

Swahili	English
Kujua mambo ya kilimo na mambo ya mafundu	To know the issues around long fallow agriculture
Nitaweza kuelimisha jamii wenzangu katika athari za kilimo cha kuhamahama	I will be able to educate my fellow communities on the effects of shifting cultivation
Kujifunza limo cha mafundu	To learn about long fallow agriculture
Mimi napenda nijue maana ya hewa ukaa na kilimo cha kuhamahama ni zalika	I would like to know the meaning of climate change and shifting cultivation
Learning about forests and forest protection	
Kujifunza zaidi juu kuhifadhi na kuilinda ardhi na misitu yetu.	Learn more about preserving and protecting our land and forests.
Kujifunza umuhimu wa misitu	To learn about forests
Kufahamu msitu halisi	Get to know the real forest
Kupata mafinikio ya mengi na pamoja na utunzaji wa msitu	To get good results including improving the protection of the forests.
Nashukuru mradi kutaka kutunza misitu yetu	Thank you for wanting to take care of our forests
Learning about gender	
Nahitaji kufahamu zaidi usawa wa kijinsia	I need to know more about gender equality
Kujifunza muhimu wa kijinsia	To learn about the importance of gender
Learning about, and benefiting from, carbon projects	
Kujifunza uhifadhi na kilimo mseto na kaboni (hewa ukaa)	To learn about forest conservation, agroforestry and carbon sequestration
Kujifunza kuhusu hewa hukaa	To learn about carbon projects
Kupata uelewa juu ya uhusiano uliopo katika Mradi wa Long Fallows na Carbon Trading katika halmashauri ya wilaya na Nachingwea	To gain an understanding of the relationship between the Long Fallows Project and Carbon Trading in the district council and Nachingwea
Kutarajio kupata fedha nyingi - mradi wa hewa ukaa	The prospect of getting a lot of money from the carbon project
Kupata mafinikio katika uvunaji wa hewa ukaa	To get results from the carbon project
Learning about the project	
Nitajikuelewa zaidi kuhusu mradi long fallows, kilimo cha kuhama kinakuaje, je uvunaji wa hewa ukaa unakuaje.	I will understand more about mradi ya long fallows, shifting cultivation and carbon projects.
Kuelewa zaidi kuhusu mradi long fallows Kilimo cha kuama kinakuje	To understand more about the long fallows project
Namna / mbinu zitatoa za tumika kuli ngamisha / kutekeleza mradi wa long fallows kwa kipindi chote.	Methods that will be used to implement the long fallows project for the entire period.
Kufahamu ni kwa vipi unaweza kutunza misitu ya wakati huo huo kuitumia kingiza kipato	Find out how you can take care of the forests at the same time and use them to generate income
Kuwa kujakujua na kuelewa jinsi ya mradi wa long fallow	Be familiar with and understand how the long fallows project will operate
Kujifunza jinsi ya kutekeleza mradi wa long fallow na kujua jinsi gani tunatakiwa kufanya ili tuweze kuweka sawa	Learning how to implement the long fallow project and knowing how we need to do it so that it runs smoothly
Kujua vitu gani tunatakiwa kuyafanya ili mradi unendele	To know what is needed for the project to continue
Kuweza kufahamu mafinikio ya mradi	Be able to understand the project's achievements
Naomba kupa mafanikio ya mradi	I wish to give success to the project

Swahili	English
Kupata uelewa juu ya ushiriki jumuishi wa makundi mbalimbali katikia mradi wa Mafundu wa Muda Mrefu za wakulima, wafugaji, wanawake, vijana, watu wenye ulemavu nk	To gain an understanding of the integrated participation of various groups in the project of Long Term Projects of farmers, breeders, women, youth, people with disabilities etc.
Kujua mpango wa uendeleu wa mradi (sustainability plan) baada ya miaka 3 na miezi ya uwepo wa mradi	To know the sustainability plan of the project (sustainability plan) after 3 years and months of the existence of the project
Kuandaa mradi utakaowezesha uhifadhi wa misitu, ardhi na uboreshaji wa maisha ya jamii kwa uendeleu	To prepare a project that will facilitate the conservation of forests, land and the improvement of community life for sustainability
Kupata mafanikio kwenye vijiji na taifa kwa ujumla	To achieve success in the villages and the nation as a whole
Kupokea masomo yote muhimu yatakaetolewa	Receive all important lessons that will be given
Kusudia kupata ufanisi wakina na wene ueledi	Aiming to be effective and efficient
Kuhifadhi mazingira	Save the environment
Kupata matokeo makubwa baadaye kupata elimu hii	To get greater results after getting this training
Learn about stakeholder opinions and priorities	
Kuwa na sauti za jumuiya ya ndani zijumushwe katika muundo utekelezaji na utafiti wa taarifa za utafiti	To have local voices included in the research design, implementation and reporting
Kufanya kazi na jamii ili kuzalisha maarifa ambayo in muhimu	To work with communities (and other stakeholders) to generate knowledge that is useful that improves livelihoods and livelihoods reliant on our environment and the services it provides to us.
Jifunze kuhusu vipaumbele vya utafiti vya wadau	To learn about stakeholders' research priorities
Kupata malengo ya pamoja maeneo ya kufanyika utafiti (nini kifanyiwe utafiti n.k.)	Finding common goals and areas for research (what should be researched, etc.)
Kusikia maoni ya wakulima juu ya maeneo ya utafiti ambayo wangependa yafanyiwe kazi	To hear the opinions of the farmers on the research areas that they would like to be worked on
Kusikia mtazamo na mapokeo ya wananchi (wakulima, wafugahi na viongozi) juu ya utafiti huu.	To hear the observations and suggestions of the people (farmers, pastoralists and leaders) on this research.
Mimi ninaona mambo ayana utofauti natuliyo sifuara na naona kutakulwana maendeleo madhuli sana	I see things that are different and I see a lot of progress
Learn about and improve farming	
Kupata mafinikio ndani ya uvunaji kwa jamii mzima	To get results in the harvests for all the community
Elimu ya kutosha kuhusu kilimo	Enough education on farming
Kuondokana na kilimo cha mazoea	To move away from traditional farming
Jamii uelewa wa kutosha kuhusu matumizi bora ya ardhi.	Communities gain enough understanding about good land use management.
Natarajio kuona mbinu bora za kuikwamua jamii kutoka kwa wimbi la umasikini	I hope to see the best methods to rid society from the wave of poverty
Kujifunza jinsi kilimo kitamnufaizha mkulima bila kusababisha athari kwenye eneo ninalolima	Learning how agriculture will benefit the farmer without causing an impact on the area I cultivate
Utafiti kuhusu mienendo na manufaa ya kilimo	Research on the trends and benefits of agriculture
Learn about research processes	
Elimu ya nadharia	Theoretical education

Swahili	English
Elimu ya vitendo	Practical education
Nategemea kujifunza namna ya ubunifu wa pamoja wa mradi wa utafiti	I hope to learn how to create a collaborative research project

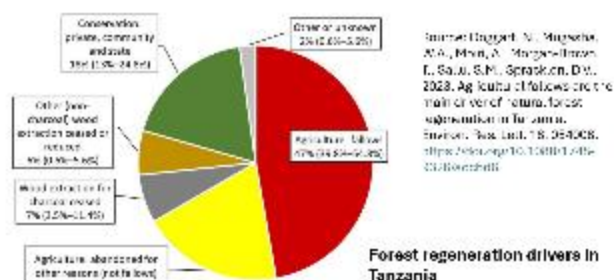
Annex 3. Session 2. Presentation 2.1 Why are we interested in long-fallow swidden agriculture? A summary of research on fallows, from around the world.

- Fallows provide benefits for livelihoods and the environment.
- Fallowing is an important way to restore forests.
- Fallows are in global decline, mainly due to agricultural intensification.
- There are many unanswered questions about how fallows can benefit people and the environment more.

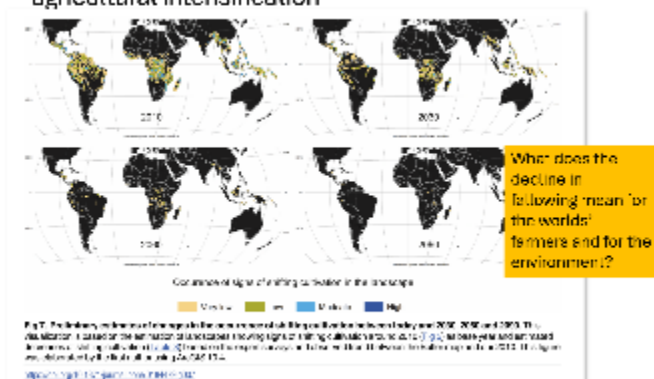
Village land-cover change trends in Tanzania 1987 - 2021



Source: Daggert, N., Khasati, W.A., Muri, A., Mungai-Rumen, T., Salla, S.M., Spracklen, D.M., 2023. Agricultural fallows are the main driver of natural forest regeneration in Tanzania. *Environ. Res. Lett.* 18, 064008. <https://doi.org/10.1088/1748-9326/acbcb9>

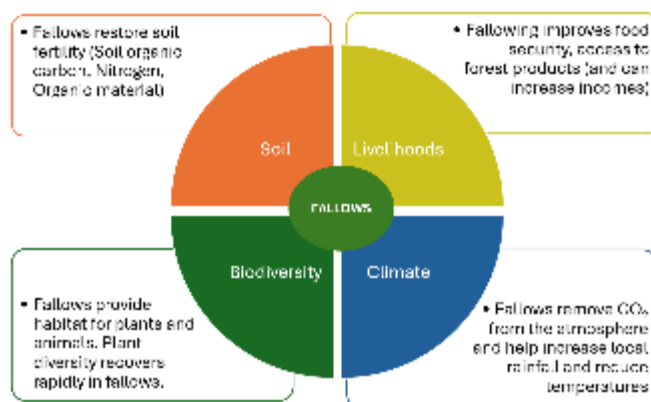


Fallowing is declining globally, mainly due to agricultural intensification



Source: Harrison, A., West, C., Eickling, S., Epstein, C., Jensen, A., Emani, K., et al. (2017). A global view of shifting cultivation: Present, context, and future extent. *PLOS ONE*, 12(8), e0184478. <https://doi.org/10.1371/journal.pone.0184478>

Benefits of fallowing compared with intensification: what research from around the world shows



Annex 4. Session 2. Presentation 2.2 Baseline information on Kiegei B, Kilimarondo and Namatunu Villages

Baseline information collected through:

- Village meetings in April 2024
- Baseline surveys in August 2024 including
- Household interviews (15 hh / village)
- Expert interviews with village leaders
- Mapping
- Focus Group discussions (3 groups per village)
- Visioning groups (1 group per village)
- Knowledge Attitude and Practice Surveys (9 / village)

Basic economic data about the three project villages based on household surveys

Village	Population	% of households Main livelihood is crop farming	Other livelihood activities	% of households cultivating					Main tribes
				maize	pigeon peas	sesame	cashew nuts	coconut	
Kiegei B	3726 (male 1,817, female 1956)	> 95%	Petty trading (20% of HH), small livestock / poultry (27% HH)	93%	100%	87%	100%	7%	Ngindo (67% HH), Makua (13%)
Kilimarondo	3239 (male 1,586, female 1,656)	> 90%	Petty trading (33% of HH), small livestock / poultry (67% HH)	67%	80%	53%	93%	7%	Mwera (67% HH), Makua (20%)
Namatunu	4560	> 95%	Petty trading (7% of HH), small livestock / poultry (27% HH)	93%	93%	73%	100%	0%	Mwera (40%), Wandonde (33%), Yao (20%)

Status of fallowing / swidden in the three project villages

Village	% hh practicing fallowing	Average number of fields under fallow	Max years left as fallows	Min years left as fallow
Kiegei B	47%	2	6	3
Kilimarondo	20%	1	4	3
Namatunu	47%	1	4	2

Key results from the Management Effectiveness Tracking Tool for the three project villages

Village	VLFR name	Area (ha)	Date of Establishment	METT score	Biggest threats	Strengths (highest METT score)	Challenges (lowest METT score)
Kiegei B	Nkalola	18,219	(2006) 2011	50%	Settlement, agriculture, livestock-grazing, fire	Planning process (66%)	Outcomes (33%)
Kilimarondo	Ndechela	4,839	2007	57%	Agriculture, livestock-grazing, fire	Outcomes (100%)	Inputs (44%)
Namatunu	Nakambe nga	8,567	(2006) 2014	58%	Agriculture, livestock-grazing, fire, human-wildlife conflict	Planning process (76%)	Outputs (47%)

CBFM awareness and support in the three project villages

Village	% hh aware of the VLFR in their village	% hh involved in VLFR activities	% hh collecting forest products from VLFR	% hh supportive of CBFM
Kiegei B	60%	27%	13%	67%
Kilimarondo	93%	7%	20%	73%
Namatunu	100%	13%	47%	80%

Status of REDD+ in the project villages

- ✓ All three villages are involved in the VCSL REDD+ project
- ✓ Barua za idhini/ridhaa za kukubali utekelezaji wa mradi zilipatikana
- ✓ Usajili wa Wazo la Mradi (PIN)
- ✓ Ramani za Hifadhi ya Misitu ya Ardhi ya Kijiji zimerekebishwa na mipaka kuwekwa alama
- ✓ Mkataba wa biashara ya kaboni imekubaliwa na jamii, serikali za mitaa, na serikali kuu, inasubiri kutiwa saini.
- ✓ Teknolojia ya doria inafanya kazi. vijiji vinapokea kati ya TZS 164,000 na TZS 249,000 kila mwezi kwa ajili ya doria kutoka VCSL.
- ✓ Noti ya Wazo la Mradi imewasilishwa kwa Mamlaka ya Kitaifa Iliyoinishwa; ada ya usajili imelipwa, tunasubiri Barua ya Kutokuwepo kwa Pingamizi.
- ✓ Uandishi wa Hati ya Usanifu wa Mradi (PD) unaendelea,
- ✓ Utayarishaji wa ripoti ya kwanza ya ufuatiliaji inaendelea,
- ✓ Uthibitishaji wa Hati ya Mradi, uhakiki wa kwanza, na utoaji unatarajiwa kufanyika katika robo ya pili ya mwaka 2025.

Main challenges faced by households in the respective villages, based on HH surveys.

Village	Elephants	Other wildlife	Flooding	Farmer - pastoralist conflicts	Inputs
Kiegei B	40%	27%	13%	33%	27%
Kilimarondo	7%	7%	0%	13%	7%
Namatunu	20%	7%	20%	40%	40%

Presented by: Prof. Jeckoniah, J.N.

Goal and objectives of the consultancy

The aim of this consultancy were to:-

- Evaluate the current status of GESI in land and natural resources governance and agriculture with a focus CBFM,
- Identify and analyze the barriers and challenges faced by different genders and marginalized groups in accessing and benefiting from CBFM,
- Explore opportunities for enhancing GESI within the integration of CBFM, swidden agriculture, and agroforestry
- Develop recommendations for integrating GESI considerations into project planning, implementation, monitoring, and evaluation processes
- Propose strategies for capacity building and raising awareness among project stakeholders regarding the importance of GESI and how it can be integrated effectively into CBFM, swidden agriculture, and agroforestry initiatives
- Propose Specific SMART indicators to monitor the project's impact on GESI and associated risks

Approach and Methodology

The GESI analysis employed qualitative methods and techniques

The data collection was preceded by a one-day capacity-building workshop to key project stakeholders: Selected staff of Nachingwea District Council TARI and TAFORI

After the capacity building, TARI and TAFORI researchers constituted the research team.

Methods for data collection included: Documentary/desk review, Focus group discussion and Key informants interview

Data analyzed employed ethnographic content/thematic analysis

Findings

- The knowledge about GESI was low among project partners (LGA, TARI and TAFORI)
- The division of labor in productive activities is influenced by gender, social and cultural beliefs rooted in patriarchal values
- There is no equality in the access to and control of resources and property (affected by gender, social and cultural setup)
- The gender division of labour constrains women more than men
- Women are engaged in so many productive and reproductive, including care, works; they work longer hours and most of their work is not recognized
- There are cultures and traditions practices (*Jando* and *Unyago*) which instill the patriarchal cultural values in which women are subordinated and lower women's agency.
- Migrants from other tribes and villages (the Barabaigs, Sukuma and Mbulu) are considered socially excluded groups.
- The social inclusion/exclusion is based on pastoralists' tribes and livelihood practices
- The language barrier is among the reason for pastoralists' social exclusion
- Some women, boys and girls are considered vulnerable because their access to, and control of, resources may depend on the head of the household who are mostly men
- The challenges for the marginalized and the socially excluded people include lack of access to and control of resources and power relations indecision making

- There are opportunities for enhancing GESI by capitalizing on social and cultural practices from other tribes such as self-help groups for both farming among Sukuma tribes.

Conclusions

The following conclusions are made:

- The level of knowledge about GESI is low among the project stakeholders and this may affect their participation
- Low level of knowledge about GESI may hinder the integration of GESI issues in the project design, implementation, monitoring and evaluation phases of the project
- Agriculture production is the mainstay of the people's economy; livestock keeping and mining activities are emerging as important economic activities
- Shifting cultivation is a common practice in the surveyed villages due to the availability of fertile land
- The longevity of the fallow differs across the village
- Both men and women rely on land and forest resources to derive their livelihood; there is a gendered pattern in the division of labour in accessing the benefits from the village forestry and in the products
- Women, men and youth (boys and girls aged below 18yrs) have access to land but the control over land falls under men
- The patriarchal system is still common and popular; men dominate in decision-making on all important matters within the household and at the community level and have control over property
- The patriarchal system is slowly changing over time and there are changes in gender roles including men's involvement in some household activities that were considered female activities.
- Women's participation in leadership roles is generally low, both men and women have negative attitudes towards women's participation in leadership roles.
- The level of women's political empowerment is generally low, even women do not support their fellow women's movement into leadership roles and positions.
- There are some social and cultural norms and practices which limit women's participation in some agricultural practices.
- The migrants from other villages and tribes (the pastoralists and agro-pastoralists) are considered both marginalized and socially excluded groups
- The socially excluded minorities e.g., pastoralists do not have a working knowledge of the swidden agricultural practices
- The socially excluded and marginalized groups present opportunities as well as challenges for enhancing GESI within the integration of CBFM, swidden agriculture, and agroforestry
- There are sociocultural norms disadvantage women through locking women within household chores and subsistence farming
- Weak enforcement of by laws or village plans affects adherence to established land use plans

Recommendations

The following recommendations are proposed:

- There is a need for more capacity building and raising awareness among on GESI integration into CBFM, swidden agriculture, and agroforestry initiatives
- There is a need to have tailor made awareness and sensitization to build the knowledge among project partners
- During project implementation, the focus should be on looking at the actual participation of the selected groups in making decisions about the use and management of natural resources at various levels of decision-making
- During the project implementation, it is necessary to look on how to address the norms, traditions and cultures that are obstacles or opportunities for various social groups to participate

- It's essential to ensure social inclusion in the research process, including considerations of sex, ethnicity, disability, and wealth class/status
- The project should explore the knowledge about fallow from the pastoralist perspectives to avoid conflicts over resource uses
- There is a need to explore on the optimum fallow period practiced about the longevity of the fallow
- The project implementation apart from targeting more women, should also engage men or at least inform them
- The project should devise the means of empowering the vulnerable and marginalized groups
- There is a need to improve the participatory approaches in the preparation and enforcement of bylaws or village plans aiming at improving inclusivity in the access to and control of resources and adherence of land use plans that affects pastoralists and agro-pastoralist who are considered non-residence in the villages
- In order to improve social inclusion, the LONGFALLOW project should enhance and capitalize on the district council initiatives to increase access to resources especially land to non-native agro-pastoralist.

Thank you!

Table 1. Are the project's assumptions correct about integrating long-fallow cultivation, agroforestry and community-based forest management?

Introductory explanation by the table facilitator. Facilitator reviews the terms:

- Long-fallow swidden
- Community-based forest management

Part 1. Ranking assumptions

Read each of the assumptions and then ask the group to rank each assumption on a scale of 1 to 5 where:

1 = strongly disagree, 2 = disagree, 3 = agree somewhat, 4 = mostly agree, 5 = strongly agree

Six project assumptions around integrating CBFM and long-fallows cultivation

1. Long-fallow swidden can help peoples' livelihoods
2. Integrating long-fallow swidden with community-based forest management could enhance support for the protection of the village forest reserve
3. It would be possible to oversee a system of allocating cultivation rights within a long-fallows forest management unit in a village land forest reserve, without causing conflict.
4. Farmers would be willing to pay for permits, issued by the village natural resources committees, to cultivate in a long-fallows forest management unit.
5. The community would be willing to extend the village land forest reserve to include a long-fallows buffer zone adjacent to the current village land forest reserve.
6. It would be problematic to include agroforestry (e.g. cashew) management units in a village land forest reserve.
7. If training on gender and social inclusivity is provided for communities, more women and pastoralists will be included in village governance.

Scores for the six assumptions are recorded on flip charts together with notes on the rationale for the scores.

Part 2. What's missing? What's not quite right?

Are there other considerations linked to integrating CBFM and long-fallows that the project should be considering?

Is there anything that you have heard about CBFM and long-fallows agriculture so far today that you disagree with?

Comments are recorded on manila cards and attached to a flip chart.

- For the 2nd – 5th groups, the facilitator starts by presenting the work from the previous groups, requesting each group to provide scores / explanation for scores (Part 1), and adding more comments (Part 2).

Table 2. Are the project's assumptions correct about climate finance and climate change resilience?

Introductory explanation by the table facilitator. Facilitator reviews the terms climate finance and climate change resilience

Part 1. Ranking assumptions

Read each of the assumptions and then ask the group to rank each assumption on a scale of 1 to 5 where:

1 = strongly disagree, 2 = disagree, 3 = agree somewhat, 4 = mostly agree, 5 = strongly agree

Five project assumptions around integrating CBFM and long-fallows cultivation

1. Long-fallow swidden helps people to be more resilient to climate change.
2. Community-based forest management helps people to be more resilient to climate change.
3. Climate finance could enhance community support for the protection of the village forest reserve
4. If communities received money (climate finance) for long fallowing, more people would adopt the practice.
5. If there was climate finance, the community would be more willing to extend the village land forest reserve to include a long-fallows buffer zone adjacent to the current village land forest reserve.

Scores for the five assumptions are recorded on flip charts together with notes on the rationale for the scores.

Part 2. What's missing? What's not quite right?

Facilitator introduces two questions:

Are there other considerations linked to climate finance that have not been considered today?

Is there anything that you have heard about climate change finance and climate change resilience, so far today, that you disagree with?

Comments are recorded on manila cards and attached to a flip chart, clustered around the two questions.

- For the 2nd – 5th groups, the facilitator starts by presenting the work from the previous groups, requesting each group to provide scores / explanation for scores (Part 1), and adding more comments (Part 2).

Table 3. What kind of research, and research outcomes and outputs should we be aiming for?

Introductory explanation by the table facilitator.

Ask people for their comments on:

- What is research?
- What is the point of research and what should be the outcomes of research?
- How can the project best integrate the research process with community livelihoods?
- What research outputs are most important e.g. printed summaries, meetings, radio etc?

Comments are recorded on manila cards and attached to the flip charts, clustering around the four questions. For the 2nd – 5th groups, the facilitator starts by presenting the work from the previous groups, requesting additional comments.

Table 4. Are the project's assumptions correct about research co-production?

Facilitator reviews the term research co-production.

Part 1. Ranking assumptions

Read each of the assumptions and then ask the group to rank each assumption on a scale of 1 to 5 where: 1 = strongly disagree, 2 = disagree, 3 = agree somewhat, 4 = mostly agree, 5 = strongly agree

Five project assumptions research co-production.

1. Research is more likely to be useful to communities if they are involved in the whole research process from design to implementation to communication?
2. Farmers and pastoralists are interested to participate in research co-production.
3. Farmers and pastoralist would be willing to test some research ideas around agroforestry and long-fallows, on their farms.
4. Communities would be willing to test some research ideas by adjusting the management of their village land forest reserves.
5. Policy-makers are more likely to listen to research findings if farmers and pastoralists have been involved in the research process.

Part 2.

Facilitator introduces two questions:

- What are the important principles in making a research co-design process work for you?
- What benefits do you see from a research co-design approach?

Comments are recorded on manila cards and attached to a flip chart, clustered around the two questions.

For the 2nd – 5th groups, the facilitator starts by presenting the work from the previous groups, requesting each group to provide scores / explanation for scores (Part 1), and adding more comments (Part 2).

Table 5. What do you think about the project's proposed approach (inter-disciplinary, research-to-action)?

Introductory explanation by the table facilitator. Facilitator reviews the terms: inter-disciplinary, research-to-action.

What are the best ways to convert research to action?

Facilitator hint: consider policy and practice

For the 2nd – 5th groups, the facilitator starts by presenting the work from the previous groups, requesting additional comments.

Annex 7. Session 3. Agreement ranking for project assumptions.

Table	Assumptions	Group					Mean
		Kiegei B	Kilimarondo	Namatunu	Pastoralist	Practitioners	
1	1. Long-fallow swidden can help peoples' livelihoods	3	3	2	5	5	3.6
1	2. Integrating long-fallow swidden with community-based forest management could enhance support for the protection of the village forest reserve	1	2	4	5	5	3.4
1	3. It would be possible to oversee a system of allocating cultivation rights within a long-fallows forest management unit in a village land forest reserve, without causing conflict.	3	4	4	5	5	4.2
1	4. Farmers would be willing to pay for permits, issued by the village natural resources committees, to cultivate in a long-fallows forest management unit.	2	3	2	1	2	2
1	5. The community would be willing to extend the village land forest reserve to include a long-fallows buffer zone adjacent to the current village land forest reserve.	1	1	1	1	1	1
1	6. It would be problematic to include agroforestry (e.g. cashew) management units in a village land forest reserve.	5	5	5	5	4	4.8
1	7. If training on gender and social inclusivity is provided for communities, more women and pastoralists will be included in village governance.	5	4	5	5		4.75
2	1. Long-fallow swidden helps people to be more resilient to climate change.	3	4 & 5	5	5	4	4.25
2	2. Community-based forest management helps people to be more resilient to climate change.	3	5	5	5	4	4.4
2	4. If communities received money (climate finance) for long fallowing, more people would adopt the practice.	3	5	3	5	5	4.2
2	5. If there was climate finance, the community would be more willing to extend the village land forest reserve to include a long-fallows buffer zone adjacent to the current village land forest reserve.	3	4		5	5	4.25
4	1. Research is more likely to be useful to communities if they are involved in the whole research process from design to implementation to communication?	5	5		5	5	5
4	2. Farmers are interested to participate in research co-production.	5	4		5	3	4.25
4	3. Farmers would be willing to test some research ideas around agroforestry and long-fallows, on their farms.	5	3	4	4	4	4
4	4. Communities would be willing to test some research ideas by adjusting the management of their village land forest reserves.	3	5	5		4	4.25
4	5. Policy-makers are more likely to listen to research findings if farmers have been involved in the research process.	3	3	3		4	3.25

1 = strongly disagree, 2 = disagree, 3 = agree somewhat, 4 = mostly agree, 5 = strongly agree

Annex 8. Presentations on three communities' visions for community-based forest management, long-fallow swidden and agroforestry.

Village 1: Kiegei B



Kiegei B

Kiegei B Vision statement

Achieving economic transformation through the project.

Seeing improvements in conservation and shifting cultivation.

As women, we want to own our own land, even if we are married.

As pastoralists, we want to engage with the village council and be involved in land and forest management to demonstrate our commitment to conserving both the forest and the land.

Kiegei B : current practices

USMI	Kilimo ya mafundo maraji	Kilimo msoto
<p>Uses: timber, traditional medicines, firewood, charcoal, honey, rapeseed. Benefits: income from forest products, contributing for community development projects; more respect for forests. Status: 15-person VNRG in place</p>	<ul style="list-style-type: none"> • Common practice in some areas. • Fallow time: 1-2 years, Max 7 cycles • Crops include sorghum, maize, sesame, pigeon peas, beans • Benefits for following: soil fertility • Challenges: overlapping field boundaries; farmers invading others' boundaries 	<ul style="list-style-type: none"> • Mlungwa, Mlungwa, Machingo, Misingi • Many times own 4 acres • Challenges: conflicts between farmers and pastoralists • Gender: Most land is owned by men. USMI has 11 members (1 woman)

Kiegei B Theory of Change – Long Fallow Swidden

IF we allow the land to rest, allow insects and animals to reproduce, and let natural vegetation regenerate while avoiding burning during the preparation of our farms, **THEN** we will be in a good position to conserve our forests.

IF a management law for fallow lands is enacted, it will provide an opportunity for farmers to receive education (on the advantages and disadvantages of long-fallow swidden cultivation and the preservation of natural vegetation). **THEN** this will increase productivity on their farms, and the land will be used efficiently.

IF fallow lands are officially recognized and their ownership is clearly defined, **THEN** it will be easier for owners to receive training, ensure the safety of the fallow land, and reduce conflicts.

Kiegei B Theory of Change – Agroforestry

IF farmers are trained in agroforestry, particularly in how to combine crops in small areas, proper farm preparation, making and using compost, provided with improved seeds, and learning about pest and

disease control, **THEN** they will be able to produce crops more efficiently in small areas and increase income for the community.

IF agroforestry farmers receive training, **THEN** they will harvest efficiently and conserve forests sustainably. For example, a model forest farming plot for farmers can contribute to forest conservation.

IF farmers receive education on climate change by avoiding random tree cutting, shifting cultivation, and integrating agroforestry by combining food and cash crops in one area, **THEN** they will increase their capacity to cope with climate change.

Kiegei B Theory of Change – USMJ

IF the community is educated and stops farming in forest reserves and instead cultivates in designated areas, **THEN** the community will achieve success both in farming and forest conservation.

IF we hold joint meetings in the village, **THEN** it will help every community member understand the plans and regulations in place, and by adhering to these guidelines, conservation efforts will become sustainable.

IF we ban the practice of randomly preparing new farmlands and enforce inclusive village forest conservation laws, **THEN** we will reduce deforestation and thereby decrease carbon emissions.

Kiegei B: Research and communication priorities

Research priorities

Research and measure soil fertility and recommend suitable crops in Kiegei B village.

Research on agroforestry and its potential to improve community productivity.

Communication preferences

- Newsletters
- Brochures
- AZAM TV
- TTCL network
- Government leaders
- Religious institutions (Sheikhs and pastors)
- Meetings and workshops/seminars

Village 2. Kilimarondo

Kilimarondo



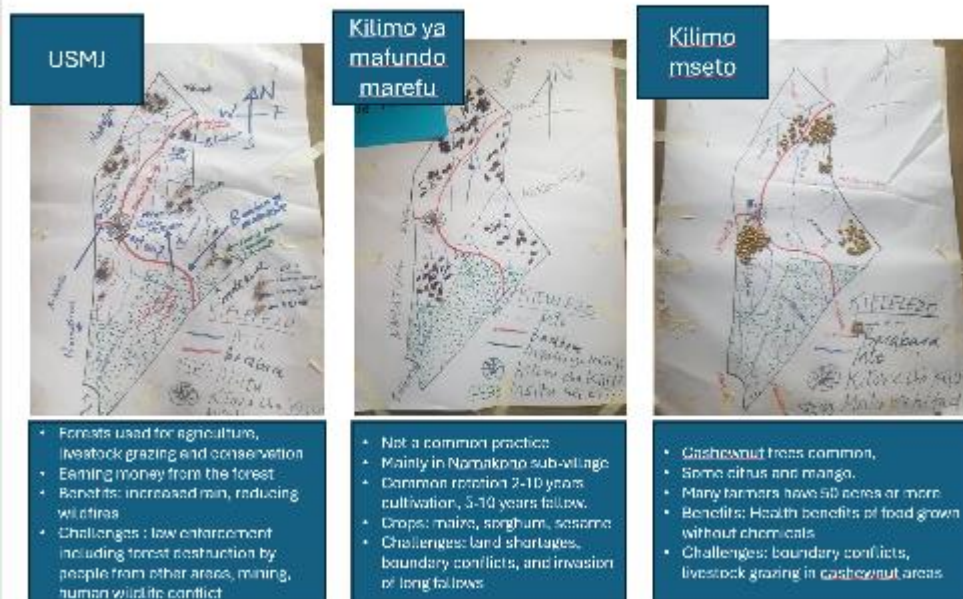
Vision statement

Proper farming and forest conservation are the foundations for the development of Kilimarondo.

As pastoralists, we would like our village to allocate specific areas for both farmers and pastoralists to avoid conflicts.

As women, we would like more women to actively participate in the management of village natural forest and the land uses.

Kilimarondo: current practices



Kilimarondo Theory of Change – Long Fallow Swidden

IF we receive education on the proper use of agricultural inputs on our farms, **THEN** we will be able to protect the soil and its fertility, reduce the likelihood of invasive weeds on our farms, increase crop yields, and better withstand climate change.

IF we focus on the combination of crops, animals, and trees based on their interdependence, where animals assist in farming and crops are grown in sync with the natural environment, **THEN** we can increase income from the sale of tree products. Therefore, we need to plant and raise livestock according to the natural ecosystem to achieve sustainable development and income.

IF we follow the laws and forest management plans, and if we gain more education on the benefits of forests, and community members adhere to expert advice on agriculture while regular patrols are conducted, **THEN** people will reduce tree-cutting and improve forest conservation.

IF the government regulates and certifies land ownership, **THEN** it will reduce land disputes and save time lost in establishing new farms, thus resulting in increased harvests.

IF the government and other institutions conduct research to control dangerous weeds, **THEN** people will have no reason to migrate randomly, allowing trees in fallow lands to regenerate naturally.

Kilimarondo Theory of Change – Agroforestry

IF farmers receive agroforestry training, **THEN** they will produce more efficiently on smaller plots of land.

IF crops that can be combined in one area are introduced and farmers are trained on proper land preparation, the production and use of compost fertilizers, and are provided with quality seeds; and **IF** farmers are equipped with the ability to identify pests and diseases. **THEN** productivity and incomes will increase.

IF agroforestry or forest farming farmers are trained, **THEN** they will harvest efficiently, conserve forests, and practice sustainability.

IF farmers receive education on climate change and avoid random tree cutting and shifting cultivation, and instead practice agroforestry by mixing trees with food or cash crops, **THEN** this will help adapt to climate change.

IF the community becomes educated and stops farming in protected forests and instead cultivates in designated agricultural areas, **THEN** the community will achieve success both in forests and on farms.

IF we ban the practice of randomly clearing new farmlands and enforce inclusive forest conservation laws in the village, **THEN** we will stop indiscriminate deforestation.

Kilimarondo Theory of Change – USMJ

IF local by-laws are well-enforced, **THEN** fire hazards and forest clearing will decrease, leading to better forest conservation.

IF the community receives education on proper forest management, **THEN** it will help generate income from forest products such as logging, reducing the random cutting of trees, especially in agricultural activities.

IF the community develops a strategic plan for better management of forests, land, and livestock, **THEN** it will facilitate the absorption of harmful gases, bring moderate rainfall and sunlight, and reduce desertification and drought.

IF the community plants trees in conservation areas and the committees work closely with the community to enforce conservation laws, **THEN** it will significantly reduce forest destruction from activities like wildfires and random tree cutting. This will help forests be well-preserved and ensure sustainable development for both current and future generations, ensuring forests remain intact and that wildlife is also conserved effectively.

Kilimarondo: Research and communication priorities

Research priorities

Research on weeds that damage crops in the fields, e.g., 'Chikungoloo,' especially in maize and sorghum, and 'Nakapunga' in rice fields.

Research to determine how many people are engaged in agroforestry and shifting cultivation in the villages, and the size of each farm.

Research on how to improve the relationship between shifting cultivation and climate change

Communication preferences

Direct visits by experts

Brochures

TTCL network

Government leaders

Religious institutions (Sheikhs and pastors)

Meetings and workshops/seminars

Village 3. Namatunu

Namatunu



Vision statement



We want Namatunu to progress through sustainable forest conservation and management, and community resilience to the impacts of climate change.

We want to see the Namatunu community conducting its activities according to proper guidelines.

As women, we would like greater involvement of women in committees, aiming for at least 50% female representation and we would like the community to stop cultivating near water sources and to plant trees in these areas to protect and restore them

As pastoralists, we would like to live like any other members of the village community and not be isolated and we would like to work with the VNRC to improve forest management.

Namatunu: current practices

USMJ	Kilimo ya mafundo marefu	Kilimo mseto
		
<ul style="list-style-type: none"> • Forests used for agriculture, livestock grazing and conservation • Earning money from the forest • Challenges : law enforcement including forest destruction by people from other areas, mining 	<ul style="list-style-type: none"> • Following commonly practiced. • Also transitioning from annual crops to cashewnuts. • Common rotation 3 - 10 years cultivation, 10-15 years fallow. • Crops: maize, sorghum, mungas, cassava, pigeon peas, and cowpeas (in a bean). Cash crops: sunflower, sesame, and peanuts. • More shifting with cash crops, especially sesame. • Challenges: land shortages, and invasion of zang fallows 	<ul style="list-style-type: none"> • Michungwa, Mikorosho, Miembe na minazi • Tree crops are planted on farm boundaries.

Namatunu Theory of Change – Long Fallow Swidden

IF the concept of participatory community forest management is integrated with long fallow swidden agriculture, **THEN** the community will implement agroforestry.

IF The community will cultivate a mix of food and cash crops alongside forest resources, **THEN** income and financial benefits for farmers will increase.

IF carbon revenue is introduced, **THEN** it will lead villages to strengthen their local economy, reduce poverty, and improve community livelihoods.

Namatunu Theory of Change – Agroforestry

IF the community is educated, **THEN** they will utilize trees from agroforestry, reducing their dependence on natural forests, thus strengthening forest conservation.

IF there are favorable conditions for harvesting planted trees, **THEN** it will reduce reliance on natural forests.

IF education is provided, **THEN** it will help reduce the planting of invasive species near protected forests.

IF the community is educated on planting soil-enriching trees, **THEN** it will increase agricultural productivity and improve the community's livelihood.

IF the community plants trees for construction and energy and gains access to a market for these trees, **THEN** it will help improve their livelihood.

IF the community gains access to the carbon market, **THEN** the village will receive funds, thereby improving living standards.

IF the community is educated on better agroforestry practices, **THEN** it will help reduce agricultural challenges and improve the community's livelihood.

IF the community plants drought-resistant and fast-growing trees and ensuring their proper care, **THEN** these trees will be able to absorb significant amounts of carbon dioxide and increase resilience to climate change.

Namatunu Theory of Change – USMJ

IF we integrate participatory forest management with long fallow agriculture, soil fertility in the fields will increase, and biodiversity will improve due to leaving the land fallow for extended periods.

IF the community practices climate-resilient farming, with drought-resistant seeds that mature quickly, and the soil becomes more fertile from long fallowing, **THEN** the community will increase the production of both food and cash crops. This will lead to increased income and we will reduce poverty within the community.

IF the community gain access to carbon credits **THEN** we will reduce poverty within the community.

IF land is managed properly and there is sustainable use of forests **THEN** this will enhance soil fertility, increase crop production, and improve the health of trees as well.

Namatunu Research and communication priorities

Research priorities

Conduct an assessment to determine the appropriate time to restore soil fertility in fallowed land.

Evaluate the right time to leave a farm for fallowing.

Assess the relationship between the crops grown and the appropriate time for fallowing.

Evaluate the types of crops suitable for mixing in swidden farming.

Why do farmers migrate or shift fields?

Assess the spread of invasive weeds in the soil and its relationship with the crops grown.

Communication preferences

Direct visits by experts

Letters

Phone calls

Government leaders

Religious institutions (Sheikhs and pastors)

Meetings and workshops/seminars

Annex 9. Research ideas

Carbon and long fallows

To research the level of carbon in long fallows

Climate change resilience

Gender research to improve the relationship between shifting cultivation and climate change

Resilience initiatives as far as the impact of climate change are concerned

Human-wildlife and pastoralist-farmer interactions

Farmer-pastoralist interactions.

To reduce conflict between farmers and pastoralists.

To investigate ways to remove conflict between community members.

To investigate ways to enhance participation of pastoralists in participatory land use management.

To investigate farmer - pastoralist interactions

To reduce conflict between farmers and pastoralists.

Human-wildlife conflict

Forest management and governance

Improve forest management

Proper forest protection

To assess the status of forests and long fallows.

To understand the meaning of forest.

Research to support forest patrols.

Research that will contribute to reducing uncontrolled deforestation.

Agroforestry

To explore the relationship between forest protection and agroforestry.

Comparison of social and ecological impacts of different agroforestry models to include impacts on crop yields, soil fertility, pest-predator abundance, fodder/grazing, elephants, socio-economic benefits and costs (and their distribution) etc.

To evaluate the spread of invasive weeds in the soil, and the relationship with the crops being grown.

To investigate the potential for agroforestry to improve farmers' productivity

Relative effects between agroforestry and long fallow in increased economy

To investigate the effects of long-fallows on ecology and biodiversity.

To use different methods to understand interactions between communities and agroforestry

Long fallows

Research on weeds that damage crops in the farm including the impact of the weed 'chikungoloo' on maize and millet, and 'nakupunga' on rice.

To explore why farmers practice shifting cultivation.

To investigate how many farmers are practicing long fallows and the size of each field; how many of us are engaged in shifting cultivation in rural areas and the size of each farm

Costs and benefits (or risks and rewards) analysis of long fallows considering length of fallows ensuring inclusive of perspectives of different people

Difference between long fallow during cultivation and before cultivation

To investigate how long fallows can contribute to increasing food production.

To investigate how long fallows can contribute to increasing crop productivity

To investigate the problems around long fallows.

To research long fallows and the climate.

To improve education on long fallows and their benefits for crops and farmers

To investigate long fallow agriculture.

To apply the findings of the research.

Long fallow issues and related crops

To evaluate and find out the time that it takes to restore soil fertility in soil that has been farmed.

Length of fallow and crop yield

Role of long fallow on biodiversity improvement

Evaluate optimal crop types to mix in long fallow swidden agriculture.

Gender

To investigate gender-based differences in responsibilities around land use and long fallows.

To investigate agriculture, forests and gender

General agriculture

Evaluate the relationship between the crops that are grown and the timeframe for harvesting.

To know more about crops and livestock

Research on sesame farming

Production of mung beans and potential to mix mung beans and cashew nut trees.

Optimal locations for cultivation of mung beans in project villages

Research and measuring soil fertility with recommendations on optimal crops for Kiegei B.

Research on soil, agriculture, livestock, forest protection and water.

Other

I want development

Governance & conflict

1. To assess conflicts in the project area, their causes and effects on natural resources management.
2. To identify ways to reduce human-wildlife and pastoralist-farmer conflicts.
3. To evaluate natural resources governance in the project villages.
4. To investigate optimal strategies to include pastoralists in land and natural resources management.
5. To investigate optimal strategies to achieve inclusive village and natural resources governance.
6. To explore and compare compliance with natural resources management laws and regulations between different social groups.

Soils, crops and ecology of fallowing

1. To determine optimal soils and crops for agroforestry.
2. To evaluate the advantages and disadvantages of long-fallows for biodiversity, soil and crop pests.
3. To investigate the impact of weeds in long-fallows on crops.
4. To investigate the impact of long-fallowing on soil fertility, and identify optimal fallowing strategies to enhance soil fertility.

Livelihoods, agroforestry and GESI

1. To evaluate the impact on agriculture of differences in the species composition of regenerating fallows.
2. To investigate the relationship between agroforestry and livelihoods.
3. To explore gender differences in the allocation of income and labour in the context of agroforestry and long fallows.
4. Compare crop productivity in different areas across multiple crops.
5. Soil analysis to determine different soil types and their fertility profiles in the context of agroforestry (improving knowledge on which seeds / crops are suited to different areas; and what type of fertiliser to use).

Climate finance and carbon

1. To explore the relationship between agriculture and carbon sequestration.
2. To evaluate payment options for carbon payments from long-fallows carbon credits considering village, CBO and individual payments.
3. To assess the carbon dynamics of long-fallowing.
4. To explore the compatibility of the project's long-fallow model with Tanzanian and international carbon rules and procedures.
5. To identify optimal timings for long-fallow swidden in relation to maximising carbon revenues.

**LONG FALLOWS Project
Participant Information Statement
Research Co-Design Workshop
September 2024**

This co-design workshop is part of the LONG FALLOWS project. The full name of the project means lengthening natural forest fallows through farmer action, learning and leadership opportunities for well-being and social inclusion.

You are being invited to take part in a research project. You can choose whether, or not, to participate. Before you decide it is important for you to understand why the research is being done and what it will involve.

The aim of the project is to support people to benefit from restoring degraded natural forests in Nachingwea District. The project also aims to benefit biodiversity and the climate. The project plans to investigate and test solutions that combine sustainable forest management with long-fallow swidden agriculture and agroforestry.

The project is being implemented by the Tanzania Forest Conservation Group and Mtandao wa Jamii wa Usimamizi wa Misitu Tanzania. The project is working with Sokoine University of Agriculture, the Tanzania Forestry Research Institute, the Tanzania Agricultural Research Institute and the University of Leeds, a university in the UK. It is financed by the UK Government with the aim of finding solutions to address problems caused by climate change. The project will run for 3 years and 10 months from March 2024 to Dec 2027.

The project is being implemented in Kiegei B, Namatunu and Kilimarondo. These villages were selected because they have large village forest reserves and are close to each other.

The information that is collected during the LONG FALLOWS research co-design workshop may be used for research purposes, as well as project planning.

The aims and objectives of this workshop are:

Aim: To develop a locally-led, inter-disciplinary, research-to-action plan integrating long fallow swidden and community-based forest management, reflecting local priorities, gender equality and social inclusivity.

Objectives

1. To critically review the LONG FALLOWS Project current understanding of integrated CBFM and long-fallow swidden, in the national and local context with a focus on gender equality, social inclusivity and climate change.
2. To critically review the project's research framing, assumptions and proposed approach.
3. To identify multi-stakeholder research priorities.
4. To co-design a research implementation, participation and communication plan.
5. To agree on next steps.

Your participation in this workshop is voluntary, and you can choose to participate or decline. If you agree to participate, you may also choose to leave the workshop at any time. The workshop is for two days.

Whilst there are no direct benefits to you in participating in this workshop, the project aims to benefit the three project villages by improving land and forest management.

Your name will not be included in the workshop report. Contact information that we collect about you during the workshop will be kept strictly confidential and will be stored separately from the workshop report. If you have questions in future, you can contact the Project Manager, Nuru Nguya. Her number is: xxxxx

Annex 12. Participant evaluation feedback

Participant feedback, clustered into particular topics.

Something that participants remember

1. Workshop Structure and Facilitation

- Organization and efficiency of the workshop activities.
- Good facilitation.
- The humility of facilitators like Nike and Susie in answering questions.
- Effective communication through phone discussions.

2. Training Quality and Content Knowledge

- Quality training on the Long Fallows Project.
- Excellent training on the Long Fallows Project.
- Learning how to continue cultivating in long fallows.
- Community education on agroforestry.
- Agroforestry, including the practice of mixing trees with crops on one piece of land.
- Integrating agroforestry and long fallows within Community-Based Forest Management (CBFM) on shared land.
- Research on agroforestry practices.
- Understanding that farmers and pastoralists can coexist peacefully and support each other.
- Interconnections between wildlife conflict and pastoralist-farmer disputes.
- Curiosity to learn more about the Long Fallows Project.

3. Community Engagement and Interaction

- Unity and solidarity among participants.
- Involvement of villagers in the training workshop.
- Strong collaboration throughout the workshop.
- Importance of including representatives from different cultural and livelihood backgrounds.
- Active participation by all attendees.
- Community members' skillfulness in contributing to discussions.

4. Empowerment and Participant Experience

- Freedom of expression and overall participant freedom.
- Freedom for participants to make their own decisions.
- Satisfaction with all aspects of the workshop.
- Adults working in groups, which helps with retention and fosters teamwork.
- Anxiety when asked to present a village report in front of participants.

5. Research and Skills Development

- Increased understanding of research methods.
- Gaining new research experiences.
- Continuation of learning.
- Hands-on education.
- Shifting cultivation.

One thing that participants love

1. Stakeholder Engagement and Inclusivity

- Involvement of diverse stakeholders.
- Inclusion of all stakeholders, regardless of status or position.
- Involvement of the community in project goal setting.
- Strong understanding of long fallows and carbon credit topics.

2. Workshop Quality and Training Effectiveness

- High-quality workshop services.
- Comprehensive training sessions.

- Quality training provided.
- Educational content and clear instructions.
- Successful and satisfying training experience.
- Positive feedback on the training.
- Appreciation for the valuable training received from TFCG, with a readiness to apply new skills in agricultural work.

3. Collaboration and Interaction

- Collaboration between the project team and experts across all areas.
- Effective collaboration between participants and facilitators.
- Strong understanding of long fallows and carbon credit topics.
- High level of participation throughout the workshop.
- Enthusiasm from all participants to work together and share ideas.

4. Commitment and Practical Application

- Commitment to applying all training content.
- Desire to gain more knowledge.
- Positive outcomes expected in agriculture due to training.
- Happiness with all aspects of the workshop.
- Appreciation for the training.
- Research focus on long fallows.
- Engaging in the Long Fallows Project.

5. Sustainability and Agroforestry Awareness

- Agroforestry practices.
- How the project can help protect forests.
- Sustainable use of forests for agriculture, livestock, fuel wood, and building materials.

Something that participants would have done differently

1. Community Engagement and Inclusion

- Presentation of group work reports by villagers/community members.
- Involving more stakeholders in the process.
- Forming groups that consider gender and community representation.
- Moving away from designing practical research without involving affected communities.
- Community involvement in research.
- Uniting pastoralists and farmers through joint leadership.

2. Training and Knowledge Building

- Receiving agricultural training.
- Gaining a better understanding of research.
- Repeating training sessions to deepen understanding.
- Recognizing that participants need further training.
- Leaving the workshop with valuable knowledge on long fallows and agroforestry, with plans to serve as a community ambassador.
- Research and training sessions.

3. Commitment and Participation

- Commitment to attending all Long Fallows Project meetings.
- Participating in training whenever possible.
- Following all training protocols.
- Commitment to work.
- Attending meetings.
- Continuing to learn.

4. Communication and Collaboration

- Maintaining good communication.
- Collaboration.

- Meeting and interacting with diverse people.
- Ensuring people involved in the project understand its purpose.

5. Workshop Structure and Time Management

- Adjusting time management on day one.
- Allocating more time for the World Café activity.
- Conducting the workshop in a venue without AC and far from restrooms.

6. Topics and Practical Applications

- Shifting cultivation practices.
- Abandoned fields.
- Group work.
- Establishing joint leadership between pastoralists and farmers.

One thing participant will take with them

1. Workshop Organization and Facilitation

- The overall organization of activities.
- The workshop was excellent.
- Well-organized training.
- Dedication and hard work of the facilitators.
- Comprehensive training content and skilled facilitators.
- Quality training sessions.
- Good training sessions.
- Effective methods for involving communities in research.

2. Training Content and Quality

- Education on swidden agriculture and agroforestry.
- Training on forest management.
- Agroforestry practices, including mixing crops with trees on the same plot of land.
- Various training sessions.
- All training conducted.
- Training provided throughout the workshop.
- Good training on long fallows and agroforestry; participants are ready to become community ambassadors.
- Numerous new research ideas.
- Increased understanding of TAFORI's work.
- Knowledge gained during training.

3. Community Engagement and Ownership

- Participatory approaches in setting project objectives.
- Involving communities in project planning gives them a sense of ownership.
- Community involvement in designing research methods.
- Community education.
- Plans to educate the community.
- Taking all training content back to the community.
- Anticipating expert support and follow-up research.

4. Research and Practical Applications

- The research component of the project.
- Research.
- Community involvement in designing research methods.
- Selling carbon credits from community forests.
- Increased understanding of TAFORI's work.
- Presenting training sessions to stakeholders.

5. Collaboration and Networking

- Meeting new people.

- Developing a habit of collaborative meetings to address challenges.
- Promoting coexistence between farming and pastoralist communities while fostering environmental stewardship.

6. Future Action and Knowledge Sharing

- Plans to educate the community.
- Taking all training content back to the community.
- Good training on long fallows and agroforestry; participants are ready to become community ambassadors

Something that participant didn't like

1. Logistics and Facilities

- Toilet facilities and general hygiene were inadequate.
- Toilets were dirty and needed regular cleaning.
- The distance between the venue and the toilets was inconvenient.
- The training venue lacked air conditioning.

2. Time Management and Scheduling

- Poor time management on Day 2.
- Participants took breakfast in their groups while discussions continued.

3. Content and Educational Gaps

- Insufficient education on long fallows.
- Limited exploration of the gender equality topic, leaving some participants dissatisfied, particularly local legal advisors.

4. Stakeholder Engagement and Collaboration

- Other stakeholders within the village were not involved.
- Limited collaboration between villages.

5. Participant Experience and Interaction

- Poor reception and treatment of new participants.
- Some participants moved around with food during sessions.

6. Food and Health Concerns

- Excessive food portions led some participants to feel they gained weight.