# LONG FALLOWS Project
# Y1 Planning and Evaluation Meeting

05/03/2025

Nachingwea District, Lindi Region, Tanzania

ABRREVIATIONS & ACRONMYS

| | |
|---|---|
| LGA | Local Government Authority |
| MJUMITA | Mtandao wa Jamii wa Usimamizi wa Misitu Tanzania |
| TAFORI | Tanzania Forestry Research Institute |
| TARI | Tanzania Agriculture Research Institute |
| TAWA | Tanzania Wildlife Management Authority |
| TFCG | Tanzania Forest Conservation Group |
| VCSL | Village Climate Solution |
| VNRC | Village Natural Resources Committee |

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## 1. Self-introductions

Participants introduced themselves. A summary of workshop participants is provided in Annex 1.

## 2. Welcoming remarks and opening the meeting by the Guest of Honour

Rafael Ajetu, Director of Agriculture, Livestock and Forestry Department welcomed participants. He thanked TFCG for the opportunity while recognizing the importance of bringing together farmers and pastoralists. For visitors, he highlighted that the district is celebrating World Women's Day, explaining that we have guests from the region. Welcomed participants to participate in the day's events. Our contribution is to help move the project forward. Reiterated his welcome to the participants and officially opened the workshop.

## 3. Presentation of the agenda and objectives of the meeting

By Nuru Nguya, TFCG

The workshop objectives were presented as follows:

1. Reporting and evaluating on the progress of the LONG FALLOWS project for the period of March 2024 to March 2025. Reporting will be on the extent of achievement versus planned activities.
2. Reporting preliminary research progress and planned Y2 research areas.
3. Participatory evaluation of the project's progress in Y1.
4. Planning for the next project period (April 2025 to March 2025) with reference to the identified practices, challenges, lessons learnt from the field.
5. Any other business.

The meeting timetable was presented. See **Annex** 2.

## 4. Project overview and key achievements in Year 1

The Project Manager provide a brief overview of the LONG FALLOWS Project, key achievements in Year 1 relative to targets, and updated project risks. See **Annex** 3. Project risks were presented and participants were requested to provide comments on the status of locally relevant project risks as identified in the project's risk register.

***Figure 1.*** *Project Manager presented overview and key achievement in Year 1*

**Risk: Change in agricultural policy can affect the implementation of long fallow cultivation**
It was noted that the Agricultural Policy is from 2013. It is likely that the policy will be revised soon as it is over ten years old. However, it was suggested that the risk of policy changes that would impact on the project was low.

Consensus: the risk is low.

**Risk: Block farms in the project aera could affect the area of land available for fallowing and livestock grazing.**
It was noted that there are block farms in all three project villages. However, participants concluded that the risk that the block farms will limit grazing land or fallowing land is low because the block farms are limited to the area of more intensive agriculture. In each village there are designated grazing areas. The block farms are not in the areas designated for grazing.

Consensus: the risk is low.

**Risk: National elections in 2025 can disrupt the implementation of project activities.**
On the one hand, the risk of National Elections disrupting activities is low because we are working at local level whereas the elections are at national levels. However, challenges can occur when people are expected to participate in campaigning activities. This can cause people to participate in campaign events instead of project events. It was noted that this has occurred in Kilimarondo. Overall, it was concluded that the risk was moderate.

Risk status: Moderate

Proposed mitigation strategy: good communication to advise the project when campaigning or election-related events are planned so that the project can plan accordingly.

**Risk: Transparency and DSA rates**
The DSA rate for co-researchers (TZS 5,000) is too low, causing some individuals to decline participation. This has especially affected the willingness of more knowledgeable individuals to engage, which may result in the project not receiving the most accurate or comprehensive information. Furthermore, in Nachingwea District, several organizations operate with their own procedures regarding DSAs and the provision of food, creating varying expectations around these allowances. It is crucial to establish clear agreements at the start of the project. The national policy should be used as a guideline, with the DSA rate set at TZS 10,200. Additionally, it has been observed that when people hear about a project, they often perceive it as a business opportunity rather than recognizing its broader benefits.
Risk status: Moderate
Proposed mitigation strategy: Increase the DSA

**Risk: Clash of project activities with timing of agricultural activities**
At some times, farmers are particularly busy with planting or harvesting, especially considering key times for cashew, pigeon peas and sesame. Elaborated that it is particularly sensitive for sesame which needs to be harvested as soon as it is ready. For the cashew nuts, it doesn't matter so much.
Risk status: Moderate
Proposed mitigation strategy: plan activities to avoid the busiest time for farmers.

**Risk: Communication between the Principal Researcher and Co-researchers**
The Principal Researcher initially requested six co-researchers but later increased the number to twelve. This change made it challenging for co-researchers to recruit the additional participants, resulting in fewer individuals available for the focus group discussion.
Risk Status: High
Mitigation Measure: The Principal Researcher should communicate any changes in advance to avoid last-minute requests to co-researchers.

**Risk: Village leaders were unaware of the "long fallows project"**
Some village leaders were elected after the project had already started, which has created a significant challenge in securing their cooperation and helping them understand the project's purpose.
Risk status: Moderate
Mitigation Measure: Capacity building for village leaders on the Long Fallows project.

## 5. Year 1 research progress, results and way forward in Y2

Researchers from TARI, TAFORI and TFCG presented initial results.

Participants were requested to consider whether the findings appeared correct. In case, anything was unclear or incorrect, participants were requested to raise this.

***Theme 1. Soils, weeds and agroforestry by Abdallah Rajabu Makale, TARI***
See Annex 4.

***Theme 2. Natural resources governance by Dr Numan Amanzi, TAFORI***
See Annex 5.

***Theme 3. Agroforestry and livelihoods by Dr Amani Uisso, TAFORI***
See Annex 6.

***Figure 2.*** *Researcher presenting on agroforestry and livelihoods under Theme III of the LONG FALLOWS Project.*

***Theme 4. Climate finance and carbon dynamics by Amana Kilawi, TFCG***
See Annex 7

**Discussion and validation**
The discussion began with a Q&A session, where the Principal Researchers were asked to respond to questions based on their presentation. The session then became an open discussion between the participants and the Principal Researchers, as shown in **Table** 1. Overall, all participants agreed that they were satisfied with the initial research results.

***Table 1. Q&A session during planning and evaluation meeting***

| |
|---|
| QUESTION 1: In your presentation, you mentioned that certain plants indicate soil fertility. Which plant species are these?<br>ANSWER: The plant species that indicate soil fertility are *Chlorophytum gallabatence and Siphonochitus kirkii* |
| QUESTION 2: Will the participants receive a copy of the presentation? |

ANSWER: Yes, all participants will receive a copy of the presentation.

QUESTION 3: Which tree species did you measures?
ANSWER: We measured all tree species found on the north and east sides of the plot with a DBH size ranging from 5 to 65 cm using a Vernier caliper. For trees with a DBH greater than 65 cm, we used a DBH tape for measurement.

QUESTION 4: Will the co -researcher receive a copy of the Y2 budget?
ANSWER: Yes, the Project Manager confirmed that all stakeholders will receive a copy of the Y2 budget.

QUESTION 5: Will the DSA rate for co-researchers be increased?
ANSWER: The Project Manager clarified that, while this has been recognized as a risk, it does not constitute an agreement to increase the DSA rate.

QUESTION 6: Was there a difference in the amount paid for similar work?
ANSWER: The Project Manager clarified that there was a payment difference: co-researchers were paid 10,000 Tsh, while those who spent the entire day in the field received 15,000 Tsh.

QUESTION 7: Was there an issue with the participation of co-researchers in the carbon team?
ANSWER: Yes, one VNRC member became upset in the carbon team and refused to participate. The VNRC member claimed that the DSA rate was too low compared to the tasks involved.

## 6. Recommendations

- Village should receive more training on fallows

A recommendation was made to equip the villagers with additional training on fallows. In response, participants discussed and emphasized the need to explore the practicability of fallows, as some villagers, including newly elected village leaders who joined after the project's introduction, lack knowledge on the subject. This training will help provide a clear understanding of long fallows in the project villages.

- The budget for co-researchers should be increase

There was a discussion about the budget for co-researchers. While a budget is in place, the co-researchers claim it is too low. Therefore, there is a need to revise the budget and provide guidance to the co-researchers.

- TFCG should support transport costs for co-researchers

When a project meeting is held in one village, co-researchers from other villages face difficulties attending due to the transportation costs they incur. To address this, it is recommended that TFCG provide transportation support for co-researchers to prevent delays in meetings.

- Study tour should be organized for project stakeholders

To enhance collaboration and inter-agency coordination, a study tour should be organized for project stakeholders.

## 7. Participatory evaluation of the project

- The Project Manager presented the details of the project evaluation criteria and method. See

**Annex** 8. Participants broke into four groups to evaluate the project on the basis of five criteria:

- ✓ Relevance
- ✓ Efficiency
- ✓ Effectiveness
- ✓ Sustainability
- ✓ Cross cutting issues

***Table 2.*** *Groups presented the results of the evaluation.*

| Strengths | Weakness | Recommended improvements |
|---|---|---|
| **Group 1. Relevance** | | |
| To facilitate the well-being of society (people), the environment, and the climate, from the restoration of degraded forests in Africa through improved governance and capacity building on the importance of conservation. | | Awareness raising for the communities. |
| Participation of various stakeholders: district (forestry, wildlife); TAFORI; TARI; SUA; co-researchers, Villagers (farmers, pastoralists) | | Improve communication. |
| Capacity building: co-researchers (research methods); TARI joined forces with the carbon assessment group to learn about those methods; Forestry Officer, TAFORI, TARI, on land conflict issues. | | |
| **Group 2. Efficiency** | | |
| The project is participatory with all social groups including farmers, pastoralists, elders, youth, religious leaders, fathers, mothers. | Increasing allowances for co-researchers | Awareness raising in communities on long fallow cultivation. |
| Obtaining a lot of project information in a short time that can help to monitor project implementation | Provision of clear information from lead researchers | Provide regular capacity building for co-researchers |
| | Regular capacity building for co-researchers | Improved payments to project stakeholders. |
| **Group 3. Effectiveness** | | |
| Involving / engaging communities / stakeholders; good relationships; co-designing. | Implementation has not completed/fulfilled the expectations and needs of participants: farmers (inputs); pastoralists (areas + infrastructure); Participants' livelihoods. | The project aims to provide content that meets the needs of stakeholders: - allowances, inputs, locations |
| Its content has touched all groups including farmers, pastoralists, LGAs etc. | The research project environment is more focused on theory and not on practice | Project to focus on more practical research: field studies, multiple samples |
| **Group 4. Sustainability** | | |

| Strengths | Weakness | Recommended improvements |
|---|---|---|
| Having co-researchers | There are no resources for co-researchers such as transportation, various equipment, and education on the use of equipment if available. | Finding jobs, transportation, etc |
| Involving all groups in society | Budget shortfall for co-researchers (budget should be increased) | The budget should be sufficient. |
| Have 16 model farmers in each village | Co-researchers and model farmers lack sustainable employment | The project should provide training on long fallow agriculture and agroforestry before the project closes. |
| Conducting practical research on the social benefits of the model (Society directly participates) | The community should be empowered to understand the advantages and disadvantages of long fallows. | Have farmer field schools (examples) |
| Natural resource conservation education | | Collaborating with researchers and farmers and pastoralists to find sustainable work |
| Motivation for the community | | Making the fallows a reliable source of income (carbon dioxide) |
| Involvement of the community and its leaders | | Improving the welfare of participants (e.g. allowances) |
| Partnering with district authorities and research institutions | | Solving existing challenges in society (conflicts) |
| The issue of investigating the possibility of CO2 (carbon dioxide) trading | | To continue building the capacity of participants. |
| | | Co-researchers / participants to have the opportunity to visit other areas (exposure). |
| **Group 4. Cross-cutting issues** | | |
| Involving all groups in society: women, men, youth, and those with special needs | The project has not provided any education on HIV / AIDS | Provide education on HIV / AIDS |
| Participation of people with different capacities / abilities. | Information was not reaching the wider communities due to the limited understanding of the co-researchers | Co-researchers to be provided with more education so that they can share their learning with their communities. |
| Health was a criterion for participating in the project | | |
| The project has enabled the development of new relationships, for example: village to village, person to person (recognizing each other) network | | |

## 8. Presentation on the Year 2 activities and budget

The Project Manager presented the Year 2 project plan and budget. Participants requested more clarity on the budget, as the presentation only included totals per activity, making it difficult to assess whether the budgets were adequate. The Project Manager promised to share the detailed Year 2 activity budget with stakeholders. During the presentation, several discussions were raised. One emphasized the importance of stakeholders providing input before the budget is finalized to ensure its adequacy. Another discussion focused on determining the optimal time for researchers to visit, considering farmers' commitments. Overall, all villages confirmed their readiness to establish demonstration plots for the fallowing.

***Figure 3.*** *Nuru Nguya Nguya – Poject Manager, Long Fallows Project, Nachingwea.*

## 9. Updates from stakeholders on related interventions with the LONG FALLOWS project

Presentation by Ramadhani Nyuni, Kiegei B Village

The presenter provided a brief overview of the LONG FALLOWS project in Kiegei B, noting that the project was introduced to the village in March 2024, with completion scheduled for December 2027, making it a three-year initiative. He expressed gratitude to TFCG for bringing the project to Kiegei B, which focuses on researching soils, biodiversity, and other benefits of long fallows. Additionally, he thanked other stakeholders, including MJUMITA, TAFORI, TARI, SUA, the University of Leeds, and UK AID, for their participation in the project. He also highlighted the following accomplishments of the project:

- Training for co-researchers and village leaders on conflict resolution; and
- Providing opportunities for learning about fallowing.

He concluded by highlighting the challenges encountered during the implementation of the project in Year 1. These challenges included limited understanding of the project, communication issues with Kilimarondo via phone, transportation difficulties for the co-researchers, and low DSAs for those participating in meetings and training. Kilimarondo Village and Namatunu Village stated that the presentation by Mr Nyuni was representative for the three villages.

***Figure 4.*** *The representative from Kiegei B handing over the report that was presented during the meeting*

**TARI**

Presentation by Abdallah Makale

The presenter expressed appreciation to TFCG for the Long Fallows project and for the opportunity to collaborate with TARI. A brief overview of TARI Naliendee Mtwara and its work was provided, highlighting the institute's multidisciplinary research approach, which includes Agronomy, Breeding, Crop Protection (Pathology and Entomology), Socio-Economics, Soil Science, and Value Addition (Crop Processing). All recommended technologies are then transferred to stakeholders through the Technology Transfer and Partnership Department. These stakeholders include farmers, central government authorities (CGAs), crop buyers (both national and international clients), local government authorities (LGAs), and others.

**TAFORI**

Presentation by Numan Amanzi

The Tanzania Forestry Research Institute (TAFORI) is a national research institution established by Act No. 5 of 1980, operating under the Ministry of Natural Resources and Tourism (MNRT). TAFORI is mandated to conduct, coordinate, regulate, and oversee all Forestry and Beekeeping research in Tanzania. The Institute is responsible for documenting and disseminating research findings to promote sustainable forest management in the country, while also contributing to the socio-economic and environmental well-being of present and future generations. Additionally, the Institute registers researchers and issues research permits.

**TAWA**

Presentation by Linus Ezekiel Chuwa

Appreciated the learning that he had got from the workshop. Recognised that elephants are a big challenge across Lindi Region. As stakeholders, community safety is a priority. TAWA has been strengthening capacity in Kilimarondo. TAWA

has also been doing awareness raising including on the use of chilli bombs and oil rags.

Also, exploring with using bee hives as an alternative way of protecting communities from elephants. Also increasing surveillance in Kilimarondo.

Training VGS: 10 VGS trained in Nachingwea in 2024. TAWA will be increasing the number of VGS. Requested support to train more VGS. VGS are the first responders. Also, chilli bombs and 400 bombs to deter elephants.

Other relevant work by TAWA, paying compensation for crop damage. In 2024, TAWA paid TZS 400 million to farmers in Nachingwea.

Overall, the government is working hard to provide a secure environment for communities.

**Nachingwea District Council**
Presentation by Paiton Kamnana

Appreciated the learning that he had got from the planning and evaluation meeting. He noted that the Nachingwea District Council is engaged in three key activities. The first is providing training to the Village Natural Resources Committee on good governance, forest management, and the harvesting and collection of revenue from forest products. The second activity focuses on resolving boundary conflicts between villages in conservation forest areas, specifically involving Kiegei B, Majonga, and Namatunu. The third activity entails conducting joint patrols with village councils, district councils, and the Village Natural Resources Committee, as well as demarcating two forests: one managed by the district council and the other by the village council.

**Village Climate Solutions Limited**
Presentation by Emmanuel Mwakajumba

The Village Climate Solutions (VCSL) project is being implemented by Village Climate Solutions Limited (VCSL). This project is being carried out in seven councils, including Nachingwea and Nanyumbu District Councils. In Nachingwea, there are 16 villages, including Namatunu, Kilimarondo, and Kiegei B. The Nachingwea District Council oversees a forest area of 114,713.80 hectares within the project zone. The villages with significant forest areas include Kiegei B (18,226.30 ha), Namatunu (15,658.2 ha), and Kilimarondo (15,457.70 ha). Their effectiveness in preventing deforestation is as follows: Kilimarondo achieved 1% effectiveness, resulting in a share of TZS 27,745,897; Namatunu achieved 17% effectiveness, earning TZS 66,630,092; and Kiegei B achieved 18% effectiveness, with a share of TZS 62,551,420. These results reflect lower revenues due to these villages having larger forests and higher deforestation rates.

**University of Leeds**
Dr Nike Doggart appreciated the collaborative work of all stakeholders and thanked participants for their contributions.

## 10. LONG FALLOWS project Way forward

**Reporting and planning**

- Finalisation of the Year 2 work plan and budget by 15/03.
- Write up of the workshop report for sharing with participants and publishing online in the project webpage.

**Research**

- Proceeding with data uploading, analysis and publication preparation by end of 2025.
- Year 2 research – continuing throughout Year 2.
- Meeting with co-researchers to present research findings and provide research summaries August – September 2025.

**Integrating fallowing with CBFM**

- Identification of potential areas by 30/04/2025.
- Meeting with village leaders, farmers and other stakeholders to agree on way forward and proceed with interventions May – September 2024.

**Other**

- Project Advisory Committee meeting. Online meeting - April 2025. In-person meeting – September 2025.
- Training on wildlife conflict management subject to funding availability.

## 11. Official closing

The meeting was officially closed by the Director of the Agriculture, Livestock, and Forestry Department. The guest of honor expressed gratitude by thanking all participants, facilitators, and the TFCG team for their support during the implementation of the Year 1 Long Fallows Project. He also conveyed his appreciation for the fact that this project targets three villages, which are following the directive from the Minister of Agriculture and Livestock to establish block farms. As the head of the Agriculture and Livestock Department, he promised to provide full support and cooperation for the project.

### *Annex 1. Workshop participants*

Kiegei B Village representatives (3)
Kilimarondo Village Representatives (3)
Namatunu Village representatives (3)
Nachingwea District Council (2)
Tanzania Agricultural Research Institute (2)
Tanzania Forestry Research Institute (2)
University of Leeds (1)
Tanzania Wildlife Authority (1)
Tanzania Forest Conservation Group (2)
Village Climate Solutions Limited (1)

## *Annex 2. Meeting programme*

Project Reporting, Evaluation and Planning Meeting Programme
5th March 2025,

Venue: Nachingwea DC

| Time | Theme/Activity | Responsible |
|---|---|---|
| 8:00-8:30 | Arrival of the participants and Registration | All |
| 8:30-9:00 | Introduction of the participants. | Amana Kilawi, all participants |
| 9:00-9:15 | Welcoming remarks and opening the meeting. | Afisa misitu/Maliasili Wilaya |
| 9:15 – 9:25 | Main Agenda /objective of the meeting & Logistics | Amana Kilawi |
| 9:25 – 9:45 | A brief overview of the LONG FALLOWS Project, key achievements in Year 1 relative to targets, and updated project risks. | Nuru Nguya |
| 9:45 - 10:45 | Year 1 research progress, results and way forward in Y2 (15 minutes per theme)<br>Theme 1. Soils, weeds and agroforestry. By Abdallah Makale<br>Theme 2. Natural resources governance by Dr Numan Amanzi, TAFORI<br>Theme 3. Agroforestry and livelihoods by Dr Amani Uisso.<br>Theme 4. Climate finance and carbon dynamics by Amana Kilawi | TARI and TAFORI Researchers |
| 11:00 -11.30 | Tea/ Coffee Break and group photo | All |
| 11:30-11:40 | Presentation on the evaluation approach including evaluation criteria | Nuru Nguya |
| 11.40 - 12.30 | Evaluation, critical thinking and lessons learnt through group works related to the following evaluation criteria<br>✓ Relevance<br>✓ Efficiency<br>✓ Effectiveness<br>✓ Sustainability<br>✓ Cross cutting issues | All |
| 12.30 – 13:00 | Group work presentations | Group representatives |
| 13:00 - 13:30 | Presentation on the Year 2 activities and budget | Amana Kilawi |
| 13: 30-14:00 | Lunch break | All |
| 14:00-14:30 | Updates from stakeholders on related interventions with the LONG FALLOWS project<br>✓ Participating project villages<br>✓ TARI<br>✓ TAFORI<br>✓ TAWA<br>✓ LGA<br>✓ VCSL | Stakeholders |
| 14:30 – 14:40 | LONG FALLOWS project Way forward | Dr. Nike Doggart |
| 14:40 – 15:00 | Official closing | DNRO |
| 15: 00- 16:00 | Evening Tea | All |

## *Annex 3. Presentation 1: Project overview and progress in Year 1*

**Overview of the LONG FALLOWS Project**
Presented by Nuru Nguya- Project Manager
Tanzania Forest Conservation Group
05/03/2025-Nachingwe DC

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

**Project partners, collaborators and funding**
Project partners: TFCG, MJUMITA, University of Leeds.
Collaborating institutions: TARI, TAFORI, Sokoine University of Agriculture, Nachingwea District Council

**Timescale and project location**
Timescale: 01/03/2024 – 31/12/2027
**Location:** 3 villages in Nachingwea District: Kiegei B, Kilimarondo and Namatunu

**Year 1 Project achievements 01/03/2024 – 31/03/2025**

**Y1 Planned Activities**
1.2.2 Introduce the project at the national and district levels
1.2.3 Introduce the project at the village level and obtain the consent of the citizens to participate in the implementation of the project and select model farmers for each village
1.2.4 Workshops in the project area aimed at collaborating to prepare a research program (co-design research program) involving experts from SUA, TARI, TAFORI, farmers, district levels and a British university
1.2.7 Village meetings and field/forest visits to test research methods and guidelines.
1.5.1 Training workshops for researchers from TARI, TAFORI, SUA on participatory research methods and gender equality and social inclusion issues (GESI)
1.5.2 Project inception GESI analysis
1.5.2.1 Promoting Gender Equality and Social Inclusion in Sustainable Forest Management and Gender Training and Governance at Village Level

**Y1 Achievements**
Project Introduction

- The project was successfully introduced at village, district, and national levels.
- A Free Prior Informed Consent (FPIC) process was conducted in all project villages, where village leaders signed consent forms to proceed with the project.
- Village Profiles and land cover maps were prepared in all project villages.
- 16 farmers from each village agreed to participate in the project and completed the FPIC process and were confirmed at the village assembly

**Gender Equality and Social Inclusion**

A Gender Equity and Social Inclusion (GESI) baseline assessment was successfully conducted in three project villages, involving four researchers, 168 village leaders and farmers, one District Agriculture Officer, and ward councilors from all villages. It was led by Professor Jeckoniah from Sokoine University of Agriculture.

- The gender equity assessment (GESI) showed that project stakeholders, DCs, researchers from TARI and TAFORI, as well as participating communities, had limited awareness of Gender Equity and Social Inclusion (GESI) issues.
- A training workshop on GESI and collaborative research methods was successfully completed, involving 2 researchers from TARI, 2 from TAFORI, 16 staff from Nachingwea DC, and one person from Tanzania Wildlife Authority (TAWA).
- This workshop enhanced the capacity and knowledge of all stakeholders on Gender Equality and Social Inclusion (GESI), joint research design, joint research, and action research.
- Baseline survey in all project villages has been conducted in collaboration with the DC, and researchers from TARI and TAFORI, including: Household Survey, Knowledge, Attitudes, and Practice Survey, Interviews with key individuals, and Focus Group Discussions

**Project baseline survey**

A baseline survey in all project villages was conducted in collaboration with the DC, and researchers from TARI and TAFORI, including: Household Survey, Knowledge, Attitudes, and Practices Survey, Key Person Interviews, and Focus Group Discussion

**Research co-design**

The research design for the Joint Research started at the Village level and was then validated and developed through a 2-day joint research design workshop held in Nachingwea, involving representatives from 3 villages, TAFORI, TARI, SUA, TAWA, VCSL, and Nachingwea DC.

In this Joint research design, we found 4 research topics
1. Agriculture and fallowing
2. Governance, long-term sustainability and natural resource management.
3. Agroforestry, fallows, livelihoods, and gender
4. Climate finance

Research progress

- Village meetings and forest/field visits to test research methods including evaluating the research protocol
- The activity of holding meetings and testing research methods has been done in collaboration with community members of all groups, co-researchers, researchers from TARI, TAFORI, SUA, DC and the natural forest conservation organization,

Risks or factors that could hinder the implementation of the project

• Project risks

These project risks or factors that could hinder the implementation of the project are available from:

- Various project stakeholders through various discussions
- Project partners by sharing their experiences from other projects similar to LONG FALLOWS

• Lessons learned

- The research idea of integrating sustainable forest management with agroforestry and agroforestry is new to the participating communities and even to high-level government officials.
- The research methods used in this project—including collaborative research, interdisciplinary research, and

research that focuses on gender equality and social inclusion—have attracted great interest from experts and government officials.

- Community members have a very good understanding of agroforestry
- Community members have little understanding of agroforestry and climate change

## *Annex 4. Research presentation 1. Agriculture, soils and fallowing*

By Abdallah Makale, Tanzania Research Institute of Agriculture

LONG FOLLOW PROJECT: THEME I – AGRICULTURE, SOILS AND FALLOWING

**Title:** Effects of fallowing on the dynamism of soils and plants for ecological beneficiaries

**Approach and method used**

- Resource Mapping (TARI joined forces with TAFORI)

Specifically, the goal is to create a village map that highlights natural resources with potential impacts on agriculture, such as rivers, grazing areas, fertile and less fertile land, swamps, dams, and mining areas.

- Crop Budgeting

Participants include farmers, elders, women, youth, and agro-pastoralists. They were given the opportunity to identify potential crops in their villages and highlight expenses such as field preparation costs, pesticide charges, harvesting expenses, and the common prices of their crop harvests per unit (kg/bag).

- Seasonal Calendar

Participants discussed the weed cycle and cropping cycle, including field preparation, sowing, crop maturity, and harvesting. They also highlighted field management, weather information, marketing, animal breeding, seasonal hazards such as wildfires, floods, and drought, as well as seasonal traditional events (jando, unyago, and weddings).

- Focus Group Discussion
- Key Informant Interview (KII)
- Field Observation (TARI joined forces with SUA)

**Output from field work**

Characteristics of fallow present in the study area

- The presence of tree crops, such as cashew and mango, within a dense thicket of wild trees.
- The presence of house remnants.
- The presence of young trees growing from large old stumps.
- The presence of small wild trees growing closely together, especially in areas with fertile soil.
- The presence of plant species, such as Mitomoni (locally named), which tend to grow after the area is left untilled for years.

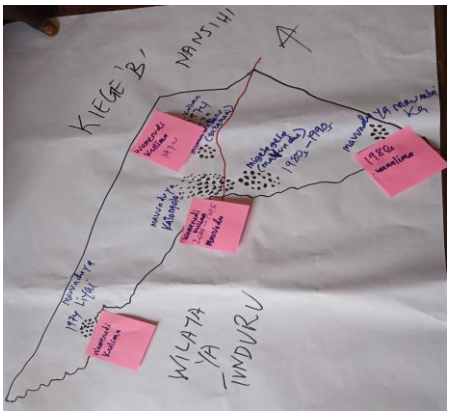
Fallows Ownership Across study areas

| **Indicators of Owned fallows** | **Indicators of unowned fallows** |
|---|---|
| The presence of cashew and mango trees<br>The presence of nearby farm(s)<br>The presence of new wild trees emerging from old stumps. | The presence of mature wild trees over 25 years old<br>The absence of tree crop, particularly if they are not properly managed, such as cashew and mango trees |

Implications of the presence of plants such as grasses, trees, or shrubs in fallow land for agriculture.

- The emergence of broadleaved plants known as Kiyoki (blackjack) indicates that the soil is suitable for sesame farming.
- The presence of Malongwila (local name) grasses suggests the soil is suitable for maize farming.
- The emergence of shrubs called Kipalapala (local name) indicates fertile soil, suitable for growing various crops such as sorghum, maize, pigeon peas, groundnuts, and more.
- The appearance of Maeya (local name) grasses also points to fertile soil, ideal for crops like sorghum, maize, pigeon peas, and groundnuts.

Identification of Fallows based on size and age


Fallows identification in Kiegei B

Fallows identification in Namatunu

Most disturbing weeds

- Locally known as Kilabi, Chikungulu/Chikobwikobwi, Nakapunga, Nakache, and Likale, these plants are prevalent in the area. However, weeds like Mnelea contribute positively to crop growth and livestock.

Weed management approaches

- Tillage (1 to 3 rounds per season depend on type of crop)
- Herbicides
- Herbicides, commonly glyphosate (e.g., Roundup and Twiga) and 2,4-D
- Integrated methods, starting with tillage followed by herbicide application
- Crop rotation
- Leaving fields untilled for a period (fallowing)

General observation

- Fallowing has occurred due to limited knowledge on soil management, weed proliferation, land tenure prestige, social interactions across communities (e.g., marriage), and villagization in the 1970s (a historical reason).
- Indigenous knowledge needs further investigation for the optimal use of wild resources (plants, soils, and animals).
- Training is required for stakeholders (farmers, pastoralists, etc.) on the potential benefits of fallowing across the study areas.
- An advisory package to influence new policy development on long fallow practices, based on the findings and outputs at the end of this project.

## *Annex 5. Research Presentation 2. Natural resources governance*

By Numan S. Amanzi, Tanzania Forestry Research Institute

LONG FOLLOW PROJECT: THEME II – NATURAL RESOURCES MANAGEMENT

Objectives of the proposed research by stakeholders

- 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.

Objective prioritised for the Y1 research

Assessment of Natural Resource Conflicts and Resolution Methods in Nachingwea District, Lindi Region, Tanzania

Specific research objectives

- Identify incidents of conflicts involving natural resources and wildlife, including their types, sources, and causes in the project area;
- Identify the actors of natural resource and wildlife conflicts, their interactions and their strengths in the project area;
- Analyze the impacts (who and how they are affected) of natural resource and wildlife conflicts in the project area;
- Assess the effectiveness, availability, and acceptability of existing conflict resolution mechanisms in the project area; and
- Explore alternative conflict resolution approaches.

**Phases of Research Implementation**

The implementation is in 2 phases

Phase I – Preliminary Research (Testing Data Collection Tools (Methods)

Phase II – In-depth Research

Preparing data collection tools

Phase I – Work completed during Phase 1 Preliminary Research

The preliminary research was conducted between 12.02.2025 to 23.02. 2025.It involved Co-Researchers and the Principal Researcher.

**Conducting preliminary research using the following methods**

- Participatory Resource Mapping;
- Historical Timeline;
- Focus Group Discussions;
- Key Informant Interviews; and
- Field Visit

**Conflicts related to natural resources and wildlife**

| Natural Resources | Types of conflicts | Sources of conflict | Conflicts |
|---|---|---|---|
| **Land** | Land ownership (Land tenure) | Unclear land ownership<br>Unclear land boundaries | Farmers Vs Farmers<br>Village Vs Village<br>Village Vs TPDF |
| | Agriculture land<br>Access and use | Shrinking of grazing land<br>Competition for land | Farmers Vs Pastoralists<br>Farmers Vs Farmers |
| **Forest (Ndechela VLFR)** | VLRF access and use | Changes in land use<br>Illegal resource extraction | VNRC Vs Illegal harvesters<br>VNRC Vs farmers<br>VNRC Vs pastorlaists<br>VNRC Vs miners |
| **Water** | Water use | Water scarcity<br>Limited domestic water infrastructure | Farmers Vs pastoralist |
| **wildlife** | Wildlife | Habitat encroachment<br>Land use changes | Human Vs wildlife |

**Impact of conflicts**

- Reduction of land use
- Land or forest degradation
- Loss of revenue due to clearance of forest
- Injuring human
- Loss of property
- Migration (abandon of farmlands and house)
- Crop damage

**Current and proposed conflict resolution systems**

**Different conflict resolution was made between Farmers and Pastoralists, Human and wildlife, village and village. However, no resolution was made between farmers and farmers. Among of the conflict resolution made are following:**

- Joint committee of farmers and pastoralists
- Strengthening Rapid Response Team for wildlife (TAWA and DC)
- District Council to review village borders

Phase II: In-depth Research

Expected to be conducted this year. It will involve collecting detailed information on Natural Resource Conflicts and Resolution Methods. It will involve the Co-Researchers and the Principal Researcher as well as other villagers. The researchers will meet with various groups and visit conflict areas

## *Annex 6 Research Presentation 3. Agroforestry and fallowing*

By Amani Uisso, Tanzania Forestry Research Institute

LONG FOLLOW PROJECT: THEME III – AGROFORESTRY AND FALLOWING

Overview of the project theme

**Research Priorities**

- 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.

Title: Assessing Livelihoods, Cashew Nut Based Agroforestry, Fallows and Gender in Nachingwea District, Lindi Region, Tanzania

Main objectives

To explore the interplay of livelihoods, agroforestry, long fallows and gender to inform policy, extension services and community-based initiatives for enhancing agricultural practices and rural development in Nachingwea district, Tanzania.

**Specific Objectives**:

I. To explore the significance to farmers of different wild plant and animal species presence in agricultural fallows.
II. To investigate the role of cashew-nut based agroforestry and long fallows on rural livelihoods.

**Research questions**

I. How significant to farmers is the presence of different wild plant and animal species in agricultural fallows?
II. How do agroforestry and long fallows systems impact contemporary livelihoods?

**Approach and method used**

I. Conducted pre data collection meeting with the co-researchers at Kilimarondo:
    - Brief of the research themes as a results of the last year workshop at Nachingwea)
    - Research ethics
    - Payment modalities
    - Data collection tools
    - The role of co-researchers (logistical arrangements, selection of participants)

II. Data collection in respective villages
    - Timeline inform Participatory Community
    - Mapping inform Transect Walk

**Key findings on objective 1:** To explore the significance to farmers of different wild plant and animal species presence in agricultural fallows.

- Histories of long fallows and cashew nut-based agroforestry

Long fallow cultivation began during the colonial period (pre-1960s). Many fallows were abandoned in 1974 during villagization but started to return in the 2000s. This practice was inherited from parents as a cultural tradition. Extension services were poor during the colonial period, improved somewhat during villagization, and have significantly improved since the 2000s.

Cashew nut-based agroforestry – cashew nut cultivation started during colonial period, brought by immigrants from Msumbiji via Mtwara where it spread to other parts including the study area. Earlier cultivated for food crops. Commercial cultivation began in 1970s. Presently it is highly cultivated for commercial purposes

- Soil infertility, land use planning, cultural practices, villagization, market forces (commercial value), topography (mountainous areas), population growth, and distance are both drivers and barriers to change.

- Fallow land is believed to be fertile, during colonial period,

- Fallow land provides areas for agroforestry, pollinations services, wind breaker

- Species such as monkeys, wild pig, elephant, snakes, rats etc, variety of tree/grass species native species, few exotic species (*Eucalyptus spp, Mangifera indica*) are found in regenerated fallows.

- Increased patrols during the farming season, crop destruction, fear of wild animal attacks, grasses attracting livestock that may damage crops, trees in fallows acting as windbreaks, providing pollination services, and the belief that trees in fallows attract rain are the perceived impacts of these species on agricultural activities.

- some tree and plant species are indicators of soil fertility, presence of weeds such as chikungulu

- Tree species indicate suitability for different crops and availability of water.

**Key findings on objective 2:** To investigate the role of cashew-nut based agroforestry and long fallows on rural livelihoods

- Fallow lands regulate microclimate such as act a wind breaker, attract rain, habitat for vermin animals, and pollination services);
- Agroforestry can be expanded on the fallow land;
- Fallow provide nutritious fodder for livestock
- Livestock eat grasses reduce fire risks
- Agroforestry provides residuals to feed livestock

## *Annex 7 Research Presentation 4. Climate finance and carbon*

By Amana.O. Kilawi, Tanzania Forest Conservation Group

LONG FALLOWS Project theme IV: Climate finance and carbon

During the PAC meeting held in Nachingwea on March 15, 2024, participants discussed and agreed on four main themes. One of these themes is climate finance and carbon, specifically aiming to assess the feasibility of connecting carbon markets with long fallows.

**Objectives**

I. To assess the carbon dynamics of long-fallowing.
II. To evaluate payment options for carbon payments from long-fallows carbon credits considering village, CBO and individual payments.

**What has been done in the field**

Data on above ground biomass and soil organic carbon were collected across 86 sampling points in Kiegei B, Kilimarondo, and Namatunu village. At each of the 86 points, the research team conducted three key tasks:

- plot description to provide an overview of the sampling point
- biomass assessment including measuring all trees and collecting soil samples
- Key informant interviews to determine the land use and land use history of the sampling point.

The team identified features such as mounds, soil types, and various plant species that indicate soil fertility in the surveyed plot. Additionally, a diversity of animals was observed across each plot.

**Data collection methods**

- Field Observation
- Interview through KOBO Collect
- Photographing
- Recording

**Materials used**

- Smartphone: Used for data collection through the KOBO Collect application.
- Sound Recorder: Used to record information during interviews.
- GPS: Used to determine the location of plots and record the coordinates of surveyed plots.
- Vernier Caliper: Used to measure the Diameter at Breast Height (DBH) of trees ranging from 5 to 65 cm.
- DME: Measures tree distance from the center.
- Forestry Pro II: Measures tree height.
- Cylinder: Used to measure bulk soil density from soil samples.
- Hoe: Used for digging soil sample holes.
- Ruler: Measures soil depth.
- Plastic bags: Used for storing soil samples for lab testing.

Challenges presented are:

- Low DSA ‘s rate for VNRC
- Delayed Payment for Researchers in the Carbon Team

## *Annex 8. Project Evaluation: where are we now?*

Project Evaluation for March 2024 – March 2025
Presented by: Nuru Nguya, Project Manager, TFCG

**Project Evaluation Objectives**
What are we evaluating? What are we evaluating the Project against?

- Progress: what we have done so far
- Process: how we have worked so far
- Our relationships with other stakeholders
- Resources and capacities available for the project

1. Relevance

This criterion measures how the project objectives relate to the challenges in the project area/community and/or the real needs of the target group

2. Efficiency

• This criterion measures how carefully a project uses resources, by looking at the relationship between what is input (such as money, personnel, management and time) and the results or benefits obtained

• "Efficiency" means how something is done with few resources but with good results. It is related to using time, money, and energy in the best possible way without wasting.

• Example: If a project uses a small budget and a short time but produces good results, then the project is highly effective.

3. Effectiveness

This criterion measures how well the project objectives planned in the initial stages were achieved

4. Sustainability

• This criterion helps to determine whether the program's success will continue even after external financial and technical support ends.

• This criterion also examines whether the project's results will continue to bring about development in the forestry sector, agriculture, in the relevant community, or the country in the long term.

5. Cross-cutting issues including gender, HIV/AIDS, and poverty.

• Assessment of the extent to which the project will bring about changes in gender relations, HIV/AIDS, and poverty.

Formation of groups
1. Two groups will be formed by numbering 1,2, 3, 4, 5
2. Each group will conduct an assessment on two criteria. One of criteria 1-4 and criterion No. 5
3. Criteria no. 5 will apply to all groups.
4. One representative will present on behalf of all participants

## *Annex 9 Results of the participatory evaluation (Swahili version)*

| Mazuri | Madhaifu Weakness | Namna ya kuboresha |
|---|---|---|
| **Group 1. Relevance** | | |
| Kuwezesha ustawi wa jamii (watu), mazingira, hali ya hewa, kutokana a urejeshaji wa msitu iliyoharibika ya pwani ya Afrika Mashiriki kupitia uboreshaji wa utawala na kujengewa uwezo maarifa juu ya umuhimu wa uhifadhi | | Kotoa elimu kwa jamii |
| Ushirikisjaji wa wadau mbalimbali: wilayani (msitu, wanyama); TAFORI (Makuni Maalum); TARI (wazee walemavu), SUA (Jinsi), Co-researcher, Wanakijiji (wakulima, wafugaji) | | Mawasiliano mazuri ili kuboresha ushirikiano kwa wadau mbaimbali wa mradi |
| Kujengwa uwezo: co-researcher (mbinu za utafiti); TARI waliungana na kundi la kaboni kwa lengo la kujifunza; Afisa Misitu, TAFORI, TARI, kwenye masuala ya migogoro ya ardhi | | Kuongeza Utayari kwa jamii |
| **Group 2. Efficiency** | | |
| **Mazuri** | **Madhaifu Weakness** | **Namna ya kuboresha** |
| Mradi umeshirikishi na makundi yote katika jamii, mfano wakulima, wafugaji, wazee, vijana, viogozi wa dini, akinababa, akinamama. | Kuongeza posho kwa watafiti wenza na kwa waalikuwa | Elimu kwa jamii kuhusiano na mradi wa kilimo mavundu |
| Kupata taarifa nyingi za mradi kwa muda mfupi ambazo zinaweza kurahisisha ufuatiliaji wa utekelezaji wa mradi. | Kuwa na taarifa za ufanisi kutoka kwa watafiti wakuu | Kujenga uwezo wa mara kwa mara watafiti wenza |
| | Kujengewa uwezo wa mara kwa mara kwa watafiti wenza | Posho langaliwe kwa uangalifu mkulima kwa ajili ya uwezeshaji wa shughuli za mradi |
| | | Uboreshaji wa malipo kwa wadau wa mradi. |
| **Group 3. Effectiveness** | | |
| Mazuri | Mapungu | Improve |
| Kuhusisha / kushirikisha jamii / wadau; mahusiano mazuri; co-designing. | Utekelezaji haujamaliza/ timiza matarajio na mahitaji ya washiriki mto wakulima (pembejeo); wafugaji (maeneo + miundo mbinu); Poszho za washiriki. | Mradi kuweka maudhui yanayo kidhi mahitaji ya wadau: - posho, pembejeo, maeneo |
| Maudhui yake yamegusa makundi yote. Wakiwemo wakulima, wafugaji, LGA etc | Mazingira ya mradi kiutafiti yamelenga zaidi nadharia na siyo vitendo siyo. | Mradi kuelekeza nguvu katika tafiti kwa vitendo zaidi: mashamba darasa, sampuli nyingi |
| **Group 4. Sustainability** | | |
| Mazuri | Madhaifu Weakness | Namna ya kuboresha |
| Kuwa ja watafiti wenza | Hakuna vitendea kazi kwa watafiti wenza kama usafiri, vifaa mbalimbali na elimu juu ya matumizi ya vifaa kama vitapatikaa | Kupata vitenda kazi, usafiri nk |
| Kushirikisha makudi yote katika jamii | Ufinyu wa bajeti kwa watafiti wenza wakulima (bajeti iongezeke) | Bajeti iwe ya kutosha |
| Kuwa na wakulima 16 wa mfano katika kila kijijji | Kufanya tafiti kwa vitendo mfao vundu la mfano katika jamii (Jamii kushiriki moja kwa moja) | Mpaka sasa jamii hajaelezwa jinsi ya kilimo mavundo |
| Jamii ijengewe uwezo juu ya kujua faida na hasara za mavundo ya muda mrefu. | Watafiti wenza na wakulima wa mfano kutokuwa nas kazi endelevu | na kilimo mseto kinayofanya kazi ya mradi ukifa |

| Mazuri | Madhaifu Weakness | Namna ya kuboresha |
|---|---|---|
| Ushirikishwaji wa makundi yote | | haitakuwa edelevu |
| Elimu ya unhifadhi wa maliasili | | Kuwa na masamba darasa (majaribio) |
| Motisha kwa jamii | | Watafiti wenza na wakulima na wafugaji kuwana kazi endelevu |
| Ushirikishwaji wa jamii na viongozi wake | | Kufanya mavundu kuwa chanzo cha uhakika cha mapato (hewa ukaa) |
| Kushirikisha mamlaka za wilaya na taasisi za utafiti | | Kuboresha maslahi ya washiriki (e.g. posho) |
| Suala la kujumisha uwezekano wa biashara za CO2 (hewa ukaa) | | Kutatua changamoto zilzipo katika jamii (migogoro) |
| | | Kuendelea kujengea uwezo washiriki |
| | | Washiriki kupata fursa za kutembelea maeneo mengine (exposure) |
| **Group 4. Cross-cutting** | | |
| Kuhusisha makundi yote katika jamii: wanawake, wanaume, vijana, na wenye mahitaji maalumu | Mradi haujotoa elimu juu ya UKIMWI | Elimu itolewe juu ya UKIMWI |
| Ushiriki kwa watu wenye uwezo tofauti | Taarifa zilikuwa hazifiki kwa wananchi kwa sababu ya uelewa mdogo wa watafiti wenza | Watafiti wenza wapewe elimu zaidi ili waweze kupeleka elimu kwa wananchi |
| Afya kikuwa kigezo cha kutoa shiriki katika mradi | | |
| mradi umeweza kutuongezea mahusiano mfano: kijiji na kijiji, mtu na mtu (kutambuana) network | | |