Tanzania Forest Conservation Group
Shirika la Kuhifadhi Misitu ya Asili Tanzania

MTANDAO WA JAMII WA USIMAMIZI WA MISITU TANZANIA
MJUMITA

Integrated Forest Biomass Energy Solutions for Tanzania

Project Baseline Report

Dar es Salaam

2025

Co-funded by the European Union

About the IFBEST Project

The IFBEST project aims to reduce deforestation around the Nguu Mountain forests, a part of the Eastern Arc Mountains, and around the Gendagenda Coastal Forest. The forests provide habitat for at least ten Endangered and Vulnerable species. Agriculture-driven deforestation around these high-biodiversity forests threatens the unique biodiversity inside the areas' forest reserves, and their buffer zones. The overall objective of the project is to enhance environmental sustainability through sustainable forest management and wood-fuel production in Tanga Region. The project will achieve its overall goal by building the capacity and commitment of local communities, LGAs and other stakeholders to engage in sustainable forest management and wood-fuel value chains. The project is financed by the European Union and the African Rainforest Conservancy.

About the Project Partners

The IFBEST project is implemented by the Tanzania Forest Conservation Group (TFCG) and the Community Forestry Network of Tanzania (MJUMITA)

Tanzania Forest Conservation Group (TFCG). www.tfcg.org
TFCG's mission is to reduce poverty in rural communities and to conserve the biodiversity of the present and future generations.
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Mtandao wa Jamii wa Usimamizi wa Misitu Tanzania (MJUMITA)

MJUMITA's mission is to provide knowledge, build capacity and link communities with local networks (CBOs) for increased participation of stakeholders in advocacy and decision-making in ownership, management and utilization of forests.

https://mjumita.or.tz/

About the consultants who prepared the report

Baseline information for the Integrated Forest Biomass Energy Solutions for Tanzania (IFBEST) Project Baseline Survey plan was developed by a team of two experts from the Tanzania Forestry Research Institute (TAFORI)

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EXECUTIVE SUMMARY

Introduction

The Tanzania Forest Conservation Group (TFCG) and the Community Forestry Network of Tanzania (MJUMITA) are implementing the Integrated Forest Biomass Energy Solutions for Tanzania (IFBEST) project in Kilindi, Handeni, Pangani, and Mkinga Districts of Tanga Region from 2023 to 2026. The project's goal is to promote environmental sustainability by implementing sustainable forest management and wood fuel production within the region. Funded by the European Union via the Ministry of Finance on behalf of the Tanzanian government, and the African Rainforest Conservancy, the project's future progress will be measured against a baseline, which is essential for making informed decisions. Thus, this report outlines the baseline information for the IFBEST Project.

Purpose of the consultancy

The baseline survey, conducted in November 2024, aims to provide essential data on key indicators for the IFBEST project. This data will be used to evaluate the project's impact by the project's end in 2026. The survey specifically seeks to assess the management effectiveness of protected areas (Village Land Forest Reserves-VLFRs) using the Management Effectiveness Tracking Tool (METT). Additionally, it aims to gather information on Community Based Forest Management (CBFM), with a focus on VLFRs, sustainable charcoal production, nature-based enterprises (NBEs), Village Land Use Plans (VLUPs), community group associations, as well as gender considerations and forest restoration efforts through stakeholder consultations and Key Informant Interviews (KIIs). The baseline survey was conducted at the end of the first year of the project. Therefore, during the data collection period, both baseline and first-year data were gathered. Indicators used to assess baseline conditions are derived from the project's logical framework and monitoring plan.

Key findings

Results of Key Informant Interviews (KIIs)

The table below shows the baseline values (pre-intervention conditions) for key project indicators.

Indicators	Baseline values
Impact indicators	
Hectares of natural forest under sustainable management in project districts	76,242.31 ha
Tonnes of sustainably produced charcoal from well governed woodlands in project villages	0 tonnes
Number of backstopping/technical support visits conducted by district staff in project villages supporting sustainable forest management and wood-fuel production	0

Indicators	Baseline values	
Amount of funds allocated by the district in providing technical support in project villages for sustainable forest management and wood-fuel production	TZS 0	
Outcome indicators		
People earning an income from sustainable charcoal production and other nature-based enterprises for the last 5 years in 13 project villages		
Number of women, men and youth earning an income from sustainable charcoal production and other nature-based enterprises.	Women	0
	Men	0
Revenues should be disaggregated by forest product.	TZS 0 from sustainable charcoal production TZS 0 from sustainable timber production	
Villages practicing more sustainable forest and land management including status of CBFM, and village land use planning and management in each village.	2 villages	
Village Land Forest Reserves generating revenue from forest-based enterprises including sustainable wood-fuel production in 13 project vilalges		
Number (and names) of village land forest reserve generating revenues from sustainable charcoal (project villages)	0 VLFRs	
Number (and names) of village land forest reserves generating revenues from timber harvesting (project villages)	0 VLFRs	
Number (and names) of village land forest reserves generating revenue from other sustainable forest-based enterprises (project villages)	0 VLFRs	
Annual revenue from forest-based enterprises disaggregated by project village and forest product	TZS 0	
Local government authorities with increased capacity, commitment and policy support to support sustainable natural forest management and nature-based enterprises, including information on	43 LGA staff	
Number of LGAs with staff who are capable of facilitating villages in land use planning, establishing CBFM and facilitating implementation of land use and CBFM plans	21 LGA staff	
Number of districts that have set aside funding for supporting CBFM scale up / implementation over the last five years.	1 District	
Number of land use plans, CBFM plans and forest bylaws approved by the districts over the last five years.	LUP	107
	CBFM plans	8
	Bylaws	8
Villages practising tree planting, agroforestry and assisted natural regeneration in charcoal forest management units, forest restoration areas and / or in VLFR boundaries		

Indicators	Baseline values	
Number of project villages practicing assisted natural regeneration in charcoal Forest Management Units over the last five years	0 villages	
Number of project villages restoring degraded forest areas within VLFRs over the last five years	0 villages	
Number of project villages marking VLFR boundaries with details on type of marking used e.g. tree planting, fire breaks etc over the last five years	0 villages	
Output indicators		
Women and men from project villages skilled in community-based forest management, land use management and / or wood-fuel governance	Men	0
	Women	0
LGAs with plans on CBFM, sustainable charcoal and nature-based enterprises, taking an inter- sectoral approach		
Number of LGA staff capable of supporting villages in land use planning	43 LGA staff	
Number of LGA staff capable of supporting villages in bylaws	29 LGA staff	
Number of LGA staff who have received training on CBFM	16 LGA staff	
Number of LGA staff who have received training on land use management	30 LGA staff	
Number of LGA staff who have received training on wood-fuel governance	0 LGA staff	
Number of districts which have integrated CBFM in the district development plans	All (4) districts	
Number of districts which have integrated sustainable charcoal in the district development plans	1 (Handeni)	
Number of districts which have integrated CBFM nature-based enterprises in the district development plans	All (4) districts	
Trees survive as enrichment planting in charcoal kiln scars, restoration of degraded areas, VLFR boundary-marking	0 trees	
Women / men skilled in sustainable charcoal production and other nature-based enterprises, good governance and entrepreneurship		
Number of women in project villages skilled in sustainable charcoal production and other forest-based enterprises, good governance and entrepreneurship	0 women	
Number of men in project villages skilled in sustainable charcoal production and other forest-based enterprises, good governance and entrepreneurship	0 men	
Number of people who are members of charcoal associations, disaggregated by gender and village	0 people	
Women and youth benefiting from nature- based enterprises and improved wood-fuel governance		
Number of women benefiting from nature-based enterprises and improved wood-fuel governance	0 women	

Indicators	Baseline values
Number of youth benefiting from nature-based enterprises and improved wood-fuel governance.	0 youth
Average income earned by sustainable charcoal producers.	TZS 0 / year
Women / men with improved entrepreneurial skills and / or improved access to capital	
Number of women (sustainable wood fuel producers) with entrepreneurial skills and / or access to capital	0 women
Number of men (sustainable wood fuel producers) with entrepreneurial skills and / or access to capital	0 men
Revenue (TZS) earned by communities/villages from forest royalties, for forest management and community development over the last 5 years	TZS 0
Number of women benefiting from VSLAs in project villages	0 women
Output variable 2.5.2 Number of men benefiting from VSLAs in project villages	0 men
Number of MUMITA networks in Tanga region promoting good forest and wood-fuel governance with qualitative information on their relevant activities over the last 5 years	8 MJUMITA networks
Number of other community-based organization in Tanga Region promoting good forest and wood fuel governance	4 CBOs
MJUMITA networks or other community- based organisations in Tanga Region promoting gender equality in forest and land management, good forest and wood-fuel governance	
Number of MJUMITA network members in Tanga region promoting gender equity in forest and land management	8 MJUMITA network members
Number of other community-based organizations in Tanga Region promoting gender equity in forest and land management	4 CBOs
Number of LGAs providing monitoring data for NFPIS and NNCBFM-AP from Tanga region	All (4) districts

Management Effectiveness Tracking Tool (METT) results

Eight protected areas (VLFRs), were assessed using a METT-based framework; these include Ololili, Vuju, Mahongwe, Nyuki, Lekirumo, Gendagenda, Bagamoyo, and Beho. The assessment revealed that three VLFRs are in the initial phases of establishment, while five are nearing the final phase, pending district-level approval. The main values of these VLFRs are biodiversity, water catchments, forest products, and medicinal values, with timber, non-timber forest products, and water being the main ecosystem services offered. However, despite these values, challenges such as illegal logging, cultivation, grazing, loss of high-value species, and fires are prevalent and have adversely impacted the core values of these areas, particularly biodiversity and water catchment. The overall METT score for all protected areas stood at 40%. Individual METT scores indicated that Bagamoyo VLFR achieved the highest of 50%, whereas Mahongwe VLFR scored the lowest of 15%. In terms of METT elements,

planning received the highest average score of 52% and inputs the lowest of 34%. Nyuki, Gendagenda, and Beho VLFRs scored highest in planning at 67% each, while Mahongwe VLFR scored lowest (3%) in the process component. Overall, the management effectiveness falls below the acceptable standard for effective management of VLFRs which is a score > 67%. This suggests a management deficiency within the protected areas at the commencement of the project.

Recommendations on improvements to the monitoring approach

Impact enhancement

i. The project should clearly define impact metrics by making sure that all indicators are Specific, Measurable, Achievable, Relevant, and Time-bound (SMART);
ii. It is essential for the project to engage stakeholders (e.g., beneficiaries, local communities, and LGAs' staff) in the monitoring process (participatory monitoring approach);
iii. There should be a regular feedback loops by establishing continuous feedback mechanisms to adjust strategies in real-time; and
iv. The project should ensure that data collection is accurate, timely, and valid by regularly reviewing and cross-checking data sources.

Sustainability improvement

i. The project should invest in building the technical and managerial capacity of local stakeholders, including beneficiaries, village leaders and LGAs' staff, so they can independently manage and sustain monitoring activities after the project ends.
ii. The project should embed monitoring system within existing institutional or governmental frameworks to promote its long-term sustainability.
iii. The project should assist district and villages to obtain and use low-cost technologies such as mobile applications or online dashboards to automate data collection, analysis, and reporting.
iv. The project should create platforms for sharing findings, lessons learned, and best practices, both within the project and with external stakeholders.
v. The project should secure long-term funding by diversifying sources of support, including partnerships with other organisations interested in forest data (e.g., TAFORI, CIFOR and BIOPAMA), grants, governmental contributions, or a portion of the village income generated from the harvesting of forest resources

Reliability enhancement

i. The project should ensure the use of multiple sources of data (qualitative and quantitative) and methods (surveys, interviews, observation) to ensure consistency and increase the reliability of findings.
ii. The project should develop contingency plans to address potential disruptions in the monitoring process, such as data loss or delays.

iii. The project should establish clear roles and responsibilities for all parties involved in the monitoring process.

Technology integration

i. The project should integrate automated systems for data collection, reporting, and analysis, such as the use of ODK for collection of data from Charcoal Producer Associations and VSLAs.
ii. The project should use GIS (Geographic Information System) tools to track geographical data and visualize impact on restoration activities of degraded areas and monitoring of regeneration in charcoal management units
iii. The project should procure and utilize mobile phones or tablets to collect real-time data from different data sources such as LGAs staff, village leaders, VNRC, charcoal producer associations and VSLAs.

Collaboration and stakeholder engagement

i. The project in collaboration with other stakeholders like Tanzania Forestry Research Institute (TAFORI) to create centralised platforms where all relevant stakeholders (government, partners, beneficiaries) can access and contribute to data.
ii. The project should provide regularly training to people who will be responsible for monitoring at all levels, especially field staff to ensure they have the necessary skills to maintain high-quality, reliable monitoring.

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The Consultants, Dr. Amani J. Uisso and Dr. Numan S. Amanzi, extend their gratitude to the Tanzania Forest Conservation Group (TFCG) for granting the contract to develop the baseline information for the IIFBEST Project. Through this consultancy service, the Consultant has acquired much information pertinent to developing the National CBFM Action Plan and the forest sector at large.

Much gratitude goes to a good number of organisations/individuals who supported the consultants during field exercises. We would like to thank all for their immeasurable support. It will suffice though to mention a few: District Councils of Handeni, Kilindi, Mkinga, and Pangini. We would like to express our sincere appreciation to the Ward and Village Leaders (Mkalamo, Gendagenda, Mswaki, Mapanga, Nghobole, Mseko, Lusane and Mmbogo) for their active participation in the survey. Their engagement and insights have greatly enriched our understanding of the existing situation in the project area.

We also thank the CBFM Coordinator, Augustino Tegeyeko, for accompanying the Consultants during fieldwork. Moreover, the coordinator provided background information based on his extensive experience with TFCG. We also thank Dr. Nike Doggart, Mr. Simon Lugazo and Mr. Emily Gervas for thorough review of the inception report of the baseline survey, offering constructive comments and input, which were considered during the development and shaping of the final report.

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LIST OF ACRONYMS AND ABREVIATIONS

ANR	Assisted Natural Regeneration
CAP	Computer Assisted Personal Interviews
CBFM	Community Based Forest Management
CBOs	Community-based Organisations
CMGs	Community Micro-Finance Groups
CPA	Charcoal Producer Association
DFO	District Forest Officer
DNRO	District Natural Resources Officer
E & R	Eco-Tourism and Recreation
EU	European Union
FBC&H	Forest-based Crafts and Handicraft
FBEs	Forest-based enterprises
FMNR	Farmer Managed Natural Regeneration
FORVAC	Forestry and Value Chains Development programme
GDP	Gross Domestic Product
IBEK	Improved Basic Earth Mound Kiln
IFBEST	Integrated Forest Biomass Energy Solutions for Tanzania
KIIs	Key Informant Interviews
LGAs	Local Governments Authorities
METT	Management Effectiveness Tracking Tool
MJUMITA	Mtandao wa Jamii wa Usimamizi wa Misitu Tanzania
NBEs	Nature-based enterprises
NFPIS	National Forest Policy Implementation Strategy
NNCBFM-AP	Community-Based Forest Management Action Plan
NTFP	Non-Timber Forest Products
PA	Protected Area
PLUM	Participatory Land Use Management
SPSS	Statistical Package for the Social Sciences
TFCG	Tanzania Forest Conservation Group
VEO	Village Executive Office
VICOBA	Village Community Banks
VLFRs	Village Land Forest Reserves
VLUM	Village Land Use Committee
VLUPs	Village Land Use Plans
VNRC	Village Natural Resource Committee
VSLAs	Village Saving and Lending Associations

1.0 INTRODUCTION

1.1 Background information

The charcoal sub-sector in Tanzania is one of the most important economic sectors at the level of households, communities, and the nation. The sector is the largest source of household energy in urban areas for cooking and heating (TFCG, 2020). According to MNRT (2019), charcoal consumption accounts for 50% of total energy use (other energy use include liquid petroleum gas, firewood, electricity and kerosene). It is widely used by many households due to its affordability and availability. The sector provides direct and indirect employment to thousands, from production to transportation and retail. For instance, in 2014 it was estimated that charcoal generated at least 1 billion US$ per annum in revenues (MEM, 2014). In 2021, the Ministry of Natural Resources and Tourism (MNRT) estimated the contribution of charcoal to the forest sector's Gross Domestic Product (GDP) to be 44.2%, standing out as one of the most important forest products contributing to the forest sector (URT, 2021). Charcoal contributes significantly to rural incomes, as many smallholder farmers engage in its production during off-farming seasons.

Despite its importance, charcoal production in Tanzania is linked with deforestation and forest degradation. The results of recent studies show that charcoal production contributes to 12% of deforestation events, making it the second leading cause after agriculture which is the main driver in 81% of deforestation events (Doggart *et al*., 2020). However, if land is left unused after charcoal production, forests rapidly regenerate (Doggart *et al*., 2023). In many rural areas charcoal production is produced using traditional methods with low biomass-to-charcoal conversion rates. Traditional methods often involve unsustainable harvesting practices contributing to deforestation and impacting biodiversity. Traditional methods include constructing a pit or mound kiln, which are simple earth mounds covered with soil often with low conversion efficiency. Charcoal burning, like other biomass energies and fossil fuels (e.g. LPG), contribute to greenhouse gas emissions, worsening climate change.

There are initiatives to promote sustainable charcoal production, such as setting aside Village Land Forest Reserves (VLFRs), developing harvesting plans and promoting improved kilns that increase efficiency and reduce emissions. The Integrated Forest Biomass Energy Solutions for Tanzania (IFBEST) project is one of the initiatives aiming to enhance environmental sustainability through sustainable forest management and wood fuel production in the Tanga Region. The project is financed by the European Union through the Ministry of Finance on behalf of the Tanzanian government. The baseline study was conducted in November 2024 after one year of project implementation. This allowed time to identify project villages, and introduce the project to the villages before doing the baseline. However, it also meant that activities in some villages were well advanced at the time of the baseline. The report distinguishes between baseline values i.e. those prior to project inception, and Year 1 achievements.

With this background, this technical report baseline information for the IFBEST project baseline survey conducted in the 8 project villages where the project had been introduced during Year 1. The report sets a baseline reference point to measure project impact over time. It will be used to ensure accountability by comparing pre- and post-intervention data. However, it should be noted that the baseline was conducted while the project was completing the implementation of activities for the first year. Therefore, during the baseline survey, data before the start of the project and that for the first year were collected.

1.2 The objective of the consultancy

1.2.1 Main objective

To provide accurate baseline data on sustainable forest management and woodfuel production in IFBEST-supported villages in the Tanga Region.

2.0 METHODOLOGY

2.1 Study area

The project is being implemented in four districts, Handeni, Pangani, Mkinga and Kilindi Districts, in Tanga Region. Villages included in this baseline survey are Mkalamo, Gendagenda, Mswaki, Mapanga, Nghobole, Mseko, Lusane and Mmbogo. These eight villages are among the 13 villages of the project. The selection of these villages reflects villages where the project had been formally introduced making it easier to obtain information as the village leadership and villagers were already familiar with the project. In some of these villages, project activities were under way at the time of the survey. The remaining five villages were not involved because project introduction had not yet begun, so it would have been difficult to gather information.

2.2 Implementation Design

The baseline survey used a combination of document review, stakeholder consultation, key Informant Interviews (KII), and the Management Effectiveness Tracking Tool (METT).

2.2.1 METT assessment

In the project-supported villages, we collected data on forest management using METT4.1 using all three datasheets to record information on:

1. Protected area attributes
2. Detailed assessment of threats
3. METT 4 questions and scores, questions 1 – 38

Separate METT files were opened for each Village Land Forest Reserve (VLFR). The forms were completed in a participatory way involving ten people from each village: Village Executive Officer (VEO), four members of Village Natural Resources Committee (VNRC) namely Chairperson, Secretary, Treasurer and ordinary member, two members (2) of Village Land Use Management Committee (VLUMC) members, two members of village council and 1 old famous person.

Table 1 presents schedule of meetings for the METT process. In each village, a separate file was opened, filled and analysed. The METT exercise covers four different dimensions of management measured in a respective Protected Area (PA):

1) Design and Planning, relating to the legal status, design and identification of objectives of the PA;

Plate 1: Participants in METT Assessment in Mmbogo Village on 07/11/2024

2) Capacity and Resources, covering the adequacy of staffing, budgets and equipment;

3) Monitoring and Enforcement Systems, summarizing the effectiveness of monitoring and law enforcement; and

4) Decision-Making Arrangements, reflecting the engagement of local stakeholders in management decisions.

The METT has six elements namely: context, inputs, planning, processes, outputs and outcomes of conservation management activities.

Table 1: Schedule of meetings for METT assessment

SN	Date	District	Village name	Name of VLFR	# of participants
1	02/11/2024	Handeni	Mkalamo	Bagamoyo	11
2	03/11/2024	Handeni	Gendagenda	Gendagenda	10
3	04/11/2024	Kilindi	Mswaki	Nyuki	10
4	05/11/2024	Kilindi	Mapanga	Vuju	10
5	06/11/2024	Kilindi	Lusane	Ololili	10
6	07/11/2024	Kilindi	Mmbogo	Mahongwe	10
7	08/11/2024	Kilindi	Ngobole	Lekirumo	9
8	11/11/2024	Pangani	Mseko	Beho	9

The METT has 38 main questions with some having sub-questions (Hockings *et al*., 2018). The METT-4 assessment form comprises a second section of the tracking tool. The form is structured around 38 questions presented in tabulated form. The assessment assigns simple scores, where 0 = poor, 1= fair, 2= good and 3 = excellent. A series of four alternative answers are provided against each question to help assessors to determine the score to assign in a consistent and comparable way.

2.2.2 Desk work

The deskwork was conducted with two specific objectives:
1) to collect secondary data on available information concerning the impact indicators listed in the TORs; and
2) to establish an information gap that were filled in other phases of the assignment: stakeholders' consultation, interviews and METT.

Literature that was reviewed includes Forest Management and harvesting plans for VLFRs, and existing Village Land Use Plans (VLUP). Others include Participatory Forest Management (PFM) facts and figures of 2022 and National CBFM Action Plan (2021 – 2031) of 2021, District development plans and profiles, and baseline information for the national CBFM action plan of 2023.

2.2.3 Consultation with key stakeholders at the district and project levels

At district level, we used KII to collect baseline data for those indicators and variables included in the Project MEC Plan. Key stakeholders in the project area, including IBEST Project Staff, District Forest Officers (DFOs) and District Natural Resources Officers (DNROs) were approached and interviewed to collect baseline values. The exercise of consultation at district and project level was conducted with a fairly open framework, which allows for focused, conversational, and two-way communications. It was started with general questions, and then specific questions. The checklist was used to guide the interviews (see Appendix 1 and 2).

2.2.4 In-depth interviews through KIIs at the village level

Some of the baseline values which were not collected by METT were gathered through in-depth interviews with key informants at the village level. All participants took part in the METT analysis and were later interviewed as key informants to obtain more in-depth information (Plate 2). This was guided by a structured checklist (Appendix 3) and was done with two objectives: 1) to supplement secondary data, and 2) to seek clarification of issues that emerged during literature reviews. Data from KII were collected by Kobotool box installed in mobile phone. In addition, 12 leaders of Village Saving and Lending Associations (VSLAs), and charcoal producer associations were interviewed through telephone.

Plate 2: Research assistant conducting interview with KII in Mkalamo Village on 02/11/2024

2.3 Data analysis

Qualitative data that were collected through interviews with key informants and literature review were subjected to content analysis focused on themes and patterns in non-numerical data. The quantitative data collected through KIIs were analysed using descriptive statistics to identify baseline values. This analysis was carried out using the IBM - Statistical Package for the Social Sciences (SPSS) software version 26 software that allowed for the computation of frequencies, percentages, and averages.

The online Excel version of the METT-4 software was generated summarized information (Figures and Tables) regarding the threat assessments, management elements (Planning, Inputs, Process, Outputs and Outcomes) and various responses to improve management of the protected areas. The collected data through FGD for METT were, therefore, qualitatively analysed to find out causes, effects and relationships among METT parameters. In further evaluating the management effectiveness level, the category set by Leverington *et al*., (2010a, b) was utilised. According to this category, management effectiveness can be classified into three levels: scores < 33% indicates inadequate management (major management deficiency), scores between 33% - 67% indicate basic management (considerable improvement is still needed) and scores > 67% indicates sound management (being managed relatively well). In terms of literature review, the analysis involved a content analysis by reading and re-reading texts to get a general understanding of the texts grouping texts into units and extracting meanings from the grouped units.

2.4 Presentation of results

The results are presented in tables. Since data collection took place after the project activities had started (Year 1), the presentation of the results includes both the baseline and the first year of the project. It also includes activities carried out by other development partners, government own funding and other stakeholders such as NGOs.

3.0 RESULTS AND DISCUSSION

3.1 Summary of the baseline indicator values based on Key Informants at District, Project and Village Levels

3.1.1 Hectares of natural forest under sustainable management in Tanga Region

Table 2 summarizes areas of natural forest under sustainable management in the project area. The survey results show that before the IFBEST project started, there was a total of 118 villages with 113 declared CBFM forests covering an area of 76,242.31 hectares. These CBFM forests were established between 2006 and 2024 by district councils with funding from various stakeholders. Many CBFM forests were established between 2006 and 2012 (Appendix 4 - 7), which was a period when the Government through Forestry and Beekeeping Division (FBD) implemented the Participatory Forest Management (PFM) programme under financial support of development partners such as Norad, DANIDA, FINIDA, and the World Bank. After 2012 other stakeholders came in to support either establishment CBFM forests or review of forest management plans for CBFM forests. These include TFCG and WWF - Tanzania in Mkinga District, Forestry and Value Chains Development programme (FORVAC) in Handeni and Kilindi Districts, and Tanzania Forest Conservation Group (TFCG) in Handeni District.

Table 2: Hectares of natural forest under sustainable management in four project districts in Tanga Region at project inception

SN	District Name	# of villages with CBFM forests	# of CBFM forests	Total area of CBFM forest
1.	Handeni	77	77	33,110.21
2.	Kilindi	24	19	15,649.10
3.	Mkinga	9	9	10,047.00
4.	Pangani	8	8	17,436.00
	Total	**118**	**113**	**76,242.31**

Source: Field survey, 2024

3.1.2 Status of sustainable charcoal production in each project district and village

Before the start of the IFBEST Project, Handeni District had one village, Kwedikabu, which was implementing a sustainable charcoal production. The project was initiated by Forestry and Beekeeping Division (FBD) and funded by FORVAC aimed at piloting sustainable charcoal production method. Other two villages has no sustainable charcoal production.

In eight project villages, the results of baseline survey indicate that none of the village was started sustainable charcoal production. Since none of project villages was implemented sustainable charcoal, no tonne of sustainably produced charcoal from well governed woodlands. The IFBEST project has started a process of sustainable charcoal production. At year 1, the project concentrated on preparations harvesting

plans, which is pre-requisite for village to harvest charcoal in VLFR, forming charcoal producer associations in project villages and training members of charcoal association.

3.1.3 Level of LGA support to communities implementing CBFM for the last 5 years

3.1.3.1 Number of backstopping/technical support visits and amount of funds that districts for sustainable forest management for the past 5 years

Local Governments Authorities (LGAs) are the custodians of CBFM forests in the project area. LGAs are responsible to provide backstopping/technical support visits in sustainable forest management and wood-fuel production, and provide funds for sustainable forest management and wood-fuel production. Table 3 summarizes number of backstopping/technical support visits conducted by district staff and amount of funds that districts have allocated for sustainable forest management for the past 5 years before and at year 1 of IFBEST project. The results show that before the introduction of the IFBEST project, district officials were visited villages, but not with the aim of backstopping/technical support for sustainable forest management. Instead, they went to the villages to coordinate tree harvesting activities in collaboration with TFS.

Table 3 further show number of backstopping/technical support visits at year 1 of IFBEST project implementation. The results show number of backstopping/technical support visits varies across project villages because of activeness of the project activities. Villages with active project activities like Mkalamo and Gendagenda in Handeni, Lusane and Mapanga in Kilindi and Mseko in Pangani were visited more frequently to support implementation of project activities of year 1, which was mainly encouraging community participation in project. The difference across village could be because of the project's implementation schedule, which aligns with the steps for implementing Community-based Forest Management (CBFM) to enhance the capacity of the beneficiaries. Furthermore, the results of the survey show that there is no district that has allocated funds for sustainable forest management in the project villages.

Table 3: Number of backstopping/technical support visits and amount of funds that districts for sustainable forest management for the past 5 years

SN	District Name	Village Name	# of backstopping / technical support visits before the IFBEST project	# of backstopping / technical support visits in 2024	Amount of funds allocated for sustainable forest management
1	Handeni	Mkalamo	0[1]	>10	0

[1] There was an exercise to conduct a monetary valuation of trees in a part of VLFR, which was allocated to a mining investor.

SN	District Name	Village Name	# of backstopping / technical support visits before the IFBEST project	# of backstopping / technical support visits in 2024	Amount of funds allocated for sustainable forest management
		Gendagenda	0[2]	>10	0
2	Kilindi	Lusane	0	>5	0
		Mapanga	0	>5	0
		Mmbogo	0	1	0
		Msawaki	0	2	0
		Ngobore	0	1	0
3	Pangani	Mseko	0[3]	>10	0

Source: Field survey, 2024

3.1.3.2 Number of backstopping/technical support visits and amount of funds that districts for wood-fuel production for the past 5 years

Table 4 summarizes number of backstopping/technical support visits conducted by district staff and amount of funds that districts have allocated for wood-fuel production before and at year 1 of IFBEST project. Again, the results in Table 4 shows that project villages were not visited for backstopping/technical support on wood-fuel production before the IFBEST project. Instead, at year 1 of IFBEST, project villages have visited at least once by staff form LGA to build their capacity in wood-fuel production. However, the district has not allocated any funds for wood-fuel production in the past five years.

Table 4: Number of backstopping/technical support visits and amount of funds that districts for wood-fuel production for the past 5 years

SN	District Name	Village Name	# of backstopping / technical support visits before IFBEST project	# of backstopping / technical support visits in 2024	Amount funds allocated for wood-fuel production
1	Handeni	Mkalamo	0	>10	0
		Gendagenda	0	>10	0
2	Kilindi	Lusane	0	>5	0
		Mapanga	0	>5	0
		Mmbogo	0	1	0
		Msawaki	0	2	0
		Ngobore	0	1	0
3	Pangani	Mseko	0	>10	0

Source: Field survey, 2024

[2] There was charcoal harvesting organized by TFS in collaboration with the District Council in forests on village land (general land), including the area that is now the VLFR.

[3] There was charcoal harvesting within the VLFR, which was organized by TFS in collaboration with the District Council.

3.1.4 People earning an income from sustainable charcoal production and other nature-based enterprises (NBEs) for the last 5 years

Sustainable charcoal harvesting has not commenced in the project villages, and therefore zero people have earned any income from it. This is because preparations for sustainable charcoal harvesting were still incomplete by the end of Y1, including the development of harvesting plans and the demarcation of harvesting blocks and coupes. Additionally, there are some villages that have not yet finalised the CBFM process of establishing VLFRs.

In addition, before and after project inception, neither men nor women have reported earning income from other NBEs such as tree planting (restoration projects), beekeeping, or crafting by using resources harvested sustainably from declared VLFRs. Recently, beekeeping projects through group initiatives have been introduced in some project villages, such as Lusane and Mswaki, but production has not yet begun. The harvesting of NTFPs like fruits and mushrooms is solely for household consumption.

3.1.5 Villages practicing more sustainable forest and land management

Establishing sustainable forest management involves several steps including village land use planning to demarcate land for VLFR, and CBFM process to establish VLFRs. Before the start of the IFBEST project, sustainable forest management was initiated in two villages, Mkalamo and Mseko (Table 5). The two villages had developed land use plans, elected Village Natural Resources Committee (VNRC), developed and approved Forest Management Plan (FMP), and declared VLFR. However, by November 2024, the plans for two VLFRs were outdated, and the committee was dormant.

The IFBEST project has restarted the process of sustainable forest management. In 2024, the project is renewing FMP and VNRC in Mkalamo and Mseko villages, and three (3) villages were at various stage III of CBFM process (Table 5). The CBFM process in the three villages will be finalised in 2025.

Table 5: Villages practicing more sustainable forest and land management

SN	District	Village	SFM status before IFBEST (Nov 2023)	Status of CBFM by November 2024	Status of VLUP by November 2024	Status of management plan by November 2024
1.	Handeni	Mkalamo	VLFR declared but plan expired	Stage 3 – approval of the plan	Completed	At district level for approval
		Gendagenda	None	Stage 3 – approval of the plan	Completed	At district level for approval
2.	Kilindi	Lusane	None	Stage 3 – approval of the plan	Completed	At district level for approval

SN	District	Village	SFM status before IFBEST (Nov 2023)	Status of CBFM by November 2024	Status of VLUP by November 2024	Status of management plan by November 2024
		Mapanga	None	Stage 3 – approval of the plan	Completed	At district level for approval
		Mmbogo	None	Not completed	Not completed	Not completed
		Mswaki	None	Not completed	Not completed	Not completed
		Ngobore	None	Not started	Not started	Not started
3.	Pangani	Mseko	VLFR declared but plan expired	Stage 3 – approval of the plan	Completed	At district level for approval

Source: Field survey, November 2024

3.1.6 Village Land Forest Reserves (VLFRs) generating revenue from forest-based enterprises

Forest-based enterprises (FBEs) are businesses that rely on forest resources for raw materials, services, or ecosystem-based activities. Examples of FBEs of relevant in project villages include Non-Timber Forest Products (NTFPs), timber production, sustainable charcoal production, carbon offset projects, forest-based crafts and handicrafts (FBC&H), and eco-tourism and recreation (E & R). The survey results show that none of the VLFR had generated revenue from FBEs by November 2024 (Table 6). This is because no harvesting is currently taking place until legal procedures are completed, including the approval of harvesting plans and the existence of revenue collection documents such as a permit book, a receipt book, an income and expenditure book (financial ledger).

Table 6: Number of VLFRs in project villages that have generated revenue from forest-based enterprises by November 2024

SN	District	NTFPs	Timber	Carbon	FBC&H	E & R
1	Handeni	0	0	0	0	0
2	Kilindi	0	0	0	0	0
3	Pangani	0	0	0	0	0

Source: Field survey, November 2024

3.1.7 Local government authorities with increased capacity, commitment and policy support to support sustainable natural forest management and nature-based enterprises

3.1.7.1 Number of LGAs with staff capable of facilitating villages in land use planning, establishing CBFM and facilitating implementation of land use and CBFM plans

LGAs namely Handeni, Kilindi Mkinga and Pangani play an important role in supporting sustainable natural forest management and NBEs. To achieve such crucial role, capacity, commitment and policy support are necessary. Table 7 presents the number of LGA staff capable of facilitating villages in land use planning, establishing CBFM and facilitating implementation of land use and CBFM plans before the project.

The results show that in all districts, there were several experts who can facilitate planning and implementation of land use plans. This is because the facilitation of land use plans in the districts is being carried out by a District Participatory Land Use Management (PLUM) team, consisting of 8 – 10 members of different disciplines and various professionals. In addition, all districts had at least three (3) staff capable of facilitating the establishment and implementation of CBFM.

Table 7: Number of LGA staff who are capable (knowledgeable) of facilitating villages in land use planning, establishing CBFM and facilitating implementation of land use and CBFM plans

SN	District	Facilitating village land use planning	Establishing CBFM	Facilitating implementation of land use	Facilitating implementation of CBFM plans
1.	Handeni	15	10	15	10
2.	Kilindi	10	3	10	3
3.	Mkinga	10	4	10	4
4.	Pangani	8	4	8	4
	Total	**43**	**21**	**43**	**21**

Source: Field survey, 2024

3.1.7.2 Number of districts that have set aside funding for supporting CBFM scale up / implementation over the last five years

Table 8 presents the number of districts that have set aside funding for supporting CBFM scale up / implementation over the last five years. The results in Table 8 show that Kilindi District is the only district that reported allocating funds from own sources for the scaling up CBFM. For instance, in the 2024/25 fiscal year, the district allocated TZS 3,155,000 from own sources to initiate CBFM in Mafisa Madukani and Mafisa Majengo villages. Regarding the implementation of CBFM, all districts reported that they allocated funds for monitoring forest management activities, including the management of CBFM forests. However, the allocated funds were reported to be insufficient and were often disbursed late, which negatively affects the implementation of planned activities. The amount of funds allocated annually is estimated to be between 10 and 25 million. However, there was no data on actual expenditure in CBFM per year.

Table 8: Number of districts that have set aside funding for supporting CBFM scale up / implementation over the last five years

SN	District	Whether set aside funding for supporting CBFM scale up in 2024/25 budget	Whether set aside funding for supporting CBFM implementation in 2024/25 budget
1.	Handeni	No	Yes
2.	Kilindi	Yes	Yes
3.	Mkinga	No	Yes
4.	Pangani	No	Yes

Source: Field survey, 2024

The results from non-project villages in Handeni district, where timber and charcoal harvesting takes place, indicates that the district have allocated funds to support the management of harvesting activities. Table 9 shows the amount of funds allocated by the district. The funds were generated from the sale of charcoal and timber, which were collected by the village governments and used to finance development projects in villages such as making school desks, renovate or build classrooms and washrooms in schools.

Table 9: Amount of funds that districts allocated to support sustainable forest management for the past 5 years (2019/20 – 2023/24)

SN	Village name	Year	Amount of funds allocated to villages
1.	Gole, Kitumbi, Kwedikabu, Kwamsundi and Mazingara	2023	22,000,000
2.	Gole, Kitumbi, Kwedikabu, Kwamsundi and Mazingara	2022	12,500,000
3.	Gole, Kitumbi, Kwedikabu, Kwamsundi and Mazingara	2021	12,500,000
4.	Gole, Kitumbi, Kwedikabu, Kwamsundi and Mazingara	2020	12,500,000
5.	Gole, Kitumbi, Kwedikabu, Kwamsundi and Mazingara	2019	12,500,000

Source: Field survey, 2024

3.1.7.3 Number of land use plans, CBFM plans and bylaws approved by the districts over the last five years

Table 10 presents number of land use plans, CBFM plans and bylaws approved by the districts over the last five years (before the project). The results indicate that Kilindi and Mkinga districts have the most villages with village land use plans approved over the last five years. This is because these two districts received government funding through the Ministry of Lands, Housing, and Human Settlements Development, which financed 44 plans in Kilindi and 41 plans in Mkinga. Other stakeholders involved in preparing land use plans in the project districts include WWF in Mkinga, TFCG in Handeni, Kilindi and Pangani, and FORVAC and Kusini Gateway (a mining company) in Handeni. In addition, the results in Table 10 show that neither CBFM plans nor bylaws have been approved in the Mkinga District Council over the past five years. Available information indicates that there are five plans and five bylaws that have already been submitted to the district council for approval. These plans are for the villages of Mbuta (1 CBFM forest), Mwakikonge (1 CBFM forest), and Dima (3 CBFM forests).

Table 10: Number of land use plans, CBFM plans and bylaws approved by the districts over the last five years

SN	District	# of land use plans approved in last 5 years	# of CBFM plans approved in last 5 years	# of bylaws approved in last 5 years
1.	Handeni	13	5	5
2.	Kilindi	46	2	2
3.	Mkinga	46	0	0
4.	Pangani	2	1	1
	Total	107	8	8

Source: Field survey, 2024

3.1.8 Villages practising tree planting, agroforestry and assisted natural regeneration (ANR) in charcoal forest management units, forest restoration areas and / or in VLFR boundaries

3.1.8.1 Number of villages practicing assisted natural regeneration in charcoal Forest Management Units over the last five years

Table 11 summarizes the number of villages practising tree planting, agroforestry and ANR in charcoal forest management units, forest restoration areas and / or in VLFR boundaries. The baseline results in Table 11 indicate that before and after year 1 of the IFBEST project, there were no ANR activities in project villages. Instead, ANR activities was reported in one Kilindi District non-project village. ANR activities in this village were supported by World Vision Tanzania through financial support of European Union. Besides ANR, farmers in Kilindi District are implementing Farmer Managed Natural Regeneration (FMNR) in their farmlands under technical and financial support from World Vision Tanzania and Climate Action Network (CAN). The Table further show that none of the village in project districts are restoring degraded forest areas within VLFRs.

Table 11: Number of villages practising tree planting, agroforestry and ANR in charcoal forest management units

SN	District	# of villages practising ANR in charcoal forest management units		# of villages restoring degraded forest areas within VLFRs		# of project villages marking VLFR boundaries		# of villages practising agroforestry		# of villages practising tree planting within VLFR	
		Before	Year 1	Before	Year 1	Before	Year 1	Before	Year 1	Before	Year 1
1.	Handeni	0	0	0	0	0	2	All	All	0	1
2.	Kilindi	0	0	0	0	0	2	All	All	0	1
3.	Pangani	0	0	0	0	0	2	All	All	0	
	Total	1	0	0	0	0	5	All		0	

Source: Field survey, 2024

Table 11 further shows that before IFBEST project there was no CBFM forests that their boundary was marked. Instead, boundaries of CBFM forests were recognized by natural features. At year 1 of the project, boundaries of 5 CBFM forests were marked using paint (blue or white colour) applied to boundary trees. In Mkinga District, three CBFM forests, although were not IFBEST project villages, have had their boundaries cleared and marked with beacons. The activity of boundary marking and clearance was under Forest Landscape Restoration (FLR) project, which is implemented by WWF Tanzania and TFCG through financial support of WWF Switzerland & WWF Finland through MFA Finland.

Regarding agroforestry, a mix of agricultural crops and trees, either planted or retained indigenous trees, is evident in all villages and started before the project. This reflects a long tradition of growing fruit trees (e.g., oranges and mangoes) and education provided by various stakeholders, including district councils and World Vision Tanzania, which focuses on Farmer Managed Natural Regeneration (FMNR). Furthermore, Table 11 indicates that only one village in Mkinga District, Mbuta, has planted trees along the boundary of Mlima Mbuta VLFR. In other villages, tree planting is carried out individually on farms or homesteads for building materials, fuelwood or shade.

3.1.9 Skills in community-based forest management, land use management and / or wood-fuel governance

Managing forest resources sustainably and equitably requires a multidisciplinary skill set that combines ecological knowledge, community engagement and technical expertise. The results of the baseline survey show that there were no statistics on women and men from the project villages who had gained skills in CBFM, land use management, and/or wood-fuel governance before the IFBEST project. This is because there were no records of neither the types of training nor the number of participants.

In Year 1 (2024), the IFBEST project provided training on CBFM to 217 community members (VNRCs and Village Councils), on land use management to 171 people (VLUM and Village Councils) and on wood fuel governance to 140 members of charcoal producer associations (Table 12). Training on wood fuel governance focused on legal procedures for commercial harvesting. Before the project, no one had ever received training in wood-fuel governance.

Table 12: Number of women and men from project villages skilled in CBFM, land use management and / or wood-fuel governance at end of year 1 (November 2024) of the IFBEST project

SN	District	Village Name	CBFM		Land use management		Wood-fuel governance	
			Women	Men	Women	Men	Women	Men
1.	Handeni	Mkalamo	10	12	0	0	6	12
		Gendagenda	12	28	14	30	1	25
2.	Kilindi	Lusane	21	30	21	30	0	17
		Mapanga	15	27	15	27	3	17
		Mmbogo	11	23	11	23	6	16
		Mswaki	0	0	0	0	3	14
		Ngobore	0	0	0	0	-	-
3.	Pangani	Mseko	10	18	0	0	0	20
	Total		**79**	**138**	**61**	**110**	19	121

Source: Field survey, 2024

3.1.10 LGAs with plans on CBFM, sustainable charcoal and nature-based enterprises

3.1.10.1 Number of LGA staff capable of supporting villages in land use planning and bylaws

Table 13 summarizes the number of LGA staff capable of supporting villages in land use planning and bylaws before the IFBEST project. The result indicates that, before the project, 43 LGA staff were capable of supporting villages in land use planning while 29 LGA staff were capable of supporting villages in preparation of bylaws. The results suggest that there is a significant number of LGAs staff capable of supporting villages in land use planning and village bylaw development. The significant number of capable LGA staff is due to the fact that the preparation of land use plans and by-laws is participatory, which includes experts from various sectors. Such sectors include forestry, wildlife, agriculture, land, planning, law, environment, and community development.

Table 13: Number of LGA staff capable of supporting villages in land use planning and bylaws before IFBEST project

SN	District	# of LGA staff capable of supporting villages in land use planning	# of LGA staff capable of supporting villages in bylaws
1.	Handeni	15	10
2.	Kilindi	10	6
3.	Mkinga	10	5
4.	Pangani	8	8
	Total	**43**	**29**

Source: Field survey, 2024

3.1.10.2 Number of LGA staff who have received training on CBFM, land use management and / or wood-fuel governance

Table 14 summarises the number of LGA staff who have received training on CBFM, land use management and / or wood-fuel governance. The results in Table 14 show that a total of 16 LGA staff received CBFM training before the IFBEST project, and 32 received it in the Year 1 of the project. Additionally, a total of 30 LGA staff received training on land use management before the project while 32 received training during Year 1 of the project. Furthermore, no LGA staff had previously received training on wood fuel governance, but 32 received it during the Year 1 of project implementation. According to the IFBEST Project Manager, the training was provided to eight people for each district, including one person from Agriculture, Planning, Wildlife, Community Development, and TFS, as well as three people from Forestry. The training package covered Land Use Planning, CBFM, climate change, gender, and governance.

Table 14: Number of LGA staff who have received training on CBFM, land use management and / or wood-fuel governance

SN	District	# of LGA staff who have received training on CBFM		# of LGA staff who have received training on land use management		# of LGA staff who have received training on wood-fuel governance	
		Before the Project	Year 1 of the project	Before the Project	Year 1 of the project	Before the Project	Year 1 of the project
1.	Handeni	4	8	2	8	0	8
2.	Kilindi	6	8	10	8	0	8
3.	Mkinga	3	8	10	8	0	8
4.	Pangani	3	8	8	8	0	8
	Total	**16**	**32**	**30**	**32**	**0**	**32**

Source: Field survey, 2024

3.1.10.3 Number of districts which have integrated CBFM, sustainable charcoal and nature-based enterprises in the district development plans

Table 15 summarizes the number of districts which have integrated CBFM, sustainable charcoal and NBEs in the district development plans before the IFBEST project. The results in Table 15 indicate that all districts have integrated CBFM in their district development plans, particularly two aspects of CBFM: establishment and implementation. This is influenced by the presence of forest policies that emphasize community involvement in forest management, the existence of CBFM forests, and the presence of stakeholders supporting the establishment and implementation of CBFM forests. Additionally, the availability of economic opportunities within CBFM, such as carbon trading and sustainable charcoal production, encourages the inclusion of CBFM in development plans. The results in Table 15 show that only Handeni District has incorporated sustainable charcoal into its development plans. This is because the district began implementing sustainable charcoal initiatives in 2021 in Kwedikabu Village under the funding of FORVAC. Integration of NBEs in the district development plans was reported in all districts and commonly NBEs mentioned was beekeeping and tree planting.

Table 15: Number of districts which have integrated CBFM, sustainable charcoal and nature-based enterprises in the district development plans before the IFBEST Project

SN	District	Whether districts have integrated CBFM in the district development plans (Yes/No)	Whether districts have integrated sustainable charcoal in the district development plans (Yes/No)	Whether districts have integrated NBEs in the district development plans (Yes/No)
1.	Handeni	Yes	Yes	Yes
2.	Kilindi	Yes	No	Yes
3.	Mkinga	Yes	No	Yes
4.	Pangani	Yes	No	Yes

Source: Field survey, 2024

3.1.11 Trees survive as enrichment planting in charcoal kiln scars, restoration of degraded areas, VLFR boundary-marking

The use of trees for enrichment planting, restoration of degraded areas, and boundary-marking in VLFRs addresses critical needs in ecosystem recovery, sustainable resource use, and community-led conservation. The baseline survey conducted in the project villages has revealed that no tree was planted as enrichment planting in charcoal kiln scars, restoration of degraded areas, and VLFR boundary-marking. Therefore, the assessment of tree survival was not conducted in project villages.

3.1.12 Skills in sustainable charcoal production and other nature- based enterprises, good governance and entrepreneurship

3.1.12.1 Number of women skilled in sustainable charcoal production and other forest-based enterprises, good governance and entrepreneurship

Addressing sustainability in charcoal production and NBEs requires a combination of technical expertise, governance skills, and entrepreneurial mindset. Before the IFBEST project, there was no data on the number of people who had received training in sustainable charcoal production, other nature-based enterprises, good governance, and entrepreneurship. Therefore, the baseline value is zero (0) for all aspects in this section.

In Year 1, the IFBEST project, in collaboration with the district councils trained 140 community members on sustainable charcoal production and other NBEs; 844 on good governance; and 456 on entrepreneurship (Table 16). In addition, the project has formed seven (7) charcoal producer groups and provided training to members on sustainable charcoal production. Training was focussed on the following: 1) legal procedures for commercial harvesting, 2) harvesting guidelines/plan, 3) safety measures during harvesting, 3) Improved Basic Earth Mound Kiln (IBEK) preparation, 5) training on business planning, marketing and value addition, and 6) training on good governance and gender.

Table 16: Number of men and women skilled in sustainable charcoal production and other forest-based enterprises, good governance and entrepreneurship at Year of the Project

SN	District	Village Name	Sustainable charcoal production and other FBEs		Good governance		Entrepreneurship	
			Women	Men	Women	Men	Women	Men
1.	Handeni	Mkalamo	6	12	73	25	63	13
		Gendagenda	1	25	46	113	20	55
2.	Kilindi	Lusane	0	17	82	106	40	46
		Mapanga	3	17	60	100	30	46
		Mmbogo	6	16	28	69	6	23
		Mswaki	3	14	54	4	54	4

SN	District	Village Name	Sustainable charcoal production and other FBEs		Good governance		Entrepreneurship	
			Women	Men	Women	Men	Women	Men
		Ngobore	-	-	0	0	0	0
3.	Pangani	Mseko	0	20	35	49	25	31
	Total		**19**	**121**	**378**	**466**	**238**	**218**

Source: Field survey, 2024

During the training sessions for various groups that were established by the project or local institutions in the project villages, good governance was one of the topics taught to the participants. These include 140 members of charcoal producer associations who were trained on charcoal production, 217 members of VNRC and Village Councils who were trained on CBFM, 171 members of VLUMC and village council who were trained on land use management, and 327 members of VSLAs who were trained on financial management. Entrepreneurship was also one of the topics covered and was taught to 140 members of charcoal producer associations and 327 members of VSLA. Issues that were covered during training include development of business plan, marketing, value addition and enterprise selection.

3.1.12.2 Number of people who are members of charcoal associations, disaggregated by gender and village

The project also facilitated the formation of Charcoal Producer Associations (CPAs), which did not exist at all before the project. The associations have a total of members of 140 people (19 Women and 121 men) (Table 17). Charcoal producer associations are organisations formed to represent the interests of individuals and groups involved in the production of charcoal. These CPAs aim to promote sustainable practices, improve members' livelihoods, and address challenges within the charcoal production industry.

Table 17: Number of people who are members of charcoal associations

SN	District	Village Name	# of CPA before project	# of CPA at Year 1 of the project	Name of producer association	Women	Men	Total
1.	Handeni	Mkalamo	0	1	Nguvukazi	6	12	18
		Gendagenda	0	1	Vijana na Mazingira	1	25	26
2.	Kilindi	Lusane	0	1	Amejoswa	0	17	17
		Mapanga	0	1	Nikwija	3	17	20
		Mmbogo	0	1	Mahongwe	6	16	22
		Mswaki	0	1	Kwenyengo	3	14	17
		Ngobore	0	0	-	-	-	-
3.	Pangani	Mseko	0	1	Mzundu	0	20	20

SN	District	Village Name	# of CPA before project	# of CPA at Year 1 of the project	Name of producer association	Women	Men	Total
		Total	**0**	**7**		**19**	**121**	**140**

Source: Field survey, 2024

3.1.13 Women and youth benefiting from nature- based enterprises and improved wood-fuel governance

3.1.13.1 Number of women benefiting from nature-based enterprises and improved wood-fuel governance

Nature-based Enterprises (NBEs) and improved wood-fuel governance are integral to sustainable development, balancing economic growth, environmental conservation, and social equity. Before the IFBEST project, neither NBEs nor improved wood fuel was started in the project villages. At Year 1 of the project, sustainable charcoal production was the only NBE established in the project villages. Within 1 year of project implementation, a total of 7 CPAs has been formed in project villages with 140 members. These CPAs include women and youth aged between 18 and 35 years. Among all the associations, only one is exclusively composed of youth, known as Vijana na Mazingira in Gendagenda Village. In the remaining six associations, youth account for an estimated 60% of the total members. Both women and youth have benefited by receiving training on sustainable charcoal production and wood fuel governance. Their associations were also registered at district level and the Tanzania Forest Services Agency (TFS) as entities dealing with production and trade of charcoal. Furthermore, women and youth were mobilised to join VLSAs, and about 75% of women and 50% of youth who are members of CPA in the project villages have already joined VSLAs. Before the project, all villages had Village Community Banks (VICOBA) instead of VSLAs.

Table 18: Number of women and youth benefiting from nature-based enterprises and improved wood-fuel governance

SN	District	Village Name	Existence of NBEs and wood fuel governance before the project	# of people benefiting from NBEs and improved wood-fuel governance at Year I of the IFBEST project	
				Women	Youth
1.	Handeni	Mkalamo	No	6	7
		Gendagenda	No	1	25
2.	Kilindi	Lusane	No	0	10
		Mapanga	No	3	10
		Mmbogo	No	6	10
		Mswaki	No	3	8
		Ngobore	No	0	0
3.	Pangani	Mseko	No	0	12
		Total		19	73

Source: Field survey, 2024

3.1.13.2 Number of youth benefiting from nature-based enterprises and improved wood-fuel governance.

Regarding income, the results show that neither women nor youth have earned income from the sustainable charcoal production. This is because the established associations have not yet begun production, as legal procedures, including the approval of harvesting plans and the issuance of record-keeping books, are still being finalised. However, women and youth have benefited from allowances earned through participation in meetings and training sessions that were organised by the IFBEST project.

3.1.13.3 Average income earned by sustainable charcoal producers

The results of baseline survey show that no income earned by sustainable charcoal producers.

3.1.14 Women / men with improved entrepreneurial skills and / or improved access to capital

3.1.14.1 Number of women and men (sustainable wood fuel producers) with entrepreneurial skills and / or access to capital

Building entrepreneurial skills and improving access to capital are essential for fostering successful and sustainable businesses, especially in resource-based enterprises like nature-based businesses or small-scale charcoal production. There was no data indicating the number of people who acquired entrepreneurial skills or accessed capital before the project indicating that the baseline value for this variable is 0. In the Year 1 of the project, a total of 7 charcoal-producing communities with 140 members were established. All 140 members of charcoal producer associations have received entrepreneurial skills but none have accessed capital from his/her charcoal producer associations (Table 19). However, there were members of the charcoal associations who were also members of VSLA of which it estimated that 60% of such members have accessed loans from VSLA. Before the project, people accessed capital through VICOBA, but there is no data on the number of people who accessed capital.

Table 19: Number of women and men (sustainable wood fuel producers) with entrepreneurial skills and / or access to capital

SN	District	Village Name	# of people with entrepreneurial skills before the project		# of people Entrepreneurial skills at Year 1 of the project	
			Women	Men	Women	Men
1.	Handeni	Mkalamo	0	0	6	12
		Gendagenda	0	0	1	25
2.	Kilindi	Lusane	0	0	0	17
		Mapanga	0	0	3	17
		Mmbogo	0	0	6	16
		Mswaki	0	0	3	14

SN	District	Village Name	# of people with entrepreneurial skills before the project		# of people Entrepreneurial skills at Year 1 of the project	
			Women	Men	Women	Men
		Ngobore	0	0	-	-
3.	Pangani	Mseko	0	0	0	20
		Total	0	0	19	121

Source: Field survey, 2024

3.1.15 Revenue (TZS) earned by communities/villages from forest royalties, for forest management and community development over the last 5 years

The results of baseline survey show that neither communities nor villages have earned forest royalties. This is because the project villages have not yet started harvesting from their VLFRs as the harvesting plans have not yet been approved by the district authorities to start implementation. This means that the villages have not yet obtained user rights of VLFRs as outlined in the Forest Act of 2002 and the CBFM guidelines of 2007.

3.1.16 Number of women and men benefiting from Village Savings and Loan Associations (VSLAs) in project villages

Before the project, each village had at least three VICOBA groups, which are also Community Micro-Finance Groups (CMGs). These groups in the project villages were established by various stakeholders with the aim of providing villagers with the opportunity to access quick loans under favorable conditions, especially for those who could not access bank loans due to lack of collateral. Elsewhere in rural Tanzania, Uisso *et al*., (2021) and Dyngeland *et al*., (2014) noted that VICOBA has created new opportunities for local communities to access loans and credit, which are vital for improving their livelihoods.

In Year 1, the IFBEST project facilitated the establishment of 12 VSLAs in six project villages, two in each village of Lusane, Mapanga, Mswaki, Gendagenda, Mkalamo and Mseko. No records of VSLAs in two villages of Kilindi District namely Mmbogo and Ngobore. VLSAs are community-driven financial institutions that enable members to save money, access small loans, and provide social funds to support their financial needs. These financial institutions are important in project villages because most of villages have limited formal financial services or unavailable such as banks and micro-credit institutions. More than half of the VSLA members in the project villages are women, and many VSLAs have already started providing loans to their members, with one-third of the women having received loans. Table 20 summarises number of women and men who are members of VSLA in the project villages and have benefited by accessing loans.

Table 20: Number of women and men benefiting from VSLAs in project village at year 1 of the project

SN	District	Village Name	Name of VLSAs	# of VSLA members			# of people have accessed loans by 28.11.2024		
				Men	Women	Total	Men	Women	Total
1.	Handeni	Mkalamo	Umoja ni nguvu	10	25	**35**	6	13	**19**
			Tunaweza	3	32	**35**	3	19	**22**
		Gendagenda	Vijana na Mazingira	14	0	**14**	12	0	**12**
			Upendo Vicoba group	11	19	**30**	11	18	**29**
2.	Kilindi	Lusane	Erato	7	23	**30**	-	-	**-**
			Sinyati	9	17	**26**	-	-	**-**
		Mapanga	Pesa kwa wote	7	13	**20**	5	4	**9**
			Ukombozi	12	14	**26**	-	-	**-**
		Mmbogo	-	-	-	**-**	-	-	**-**
			-	-	-	**-**	-	-	**-**
		Mswaki	Upendo	2	23	**25**	0	13	**13**
			Cheka nao	2	28	**30**	2	6	**8**
		Ngobore	-	-	-	**-**	-	-	**-**
			-	-	-	**-**	-	-	**-**
3.	Pangani	Mseko	Umoja ni nguvu	14	13	**27**	11	9	**20**
			Ushirikiano	17	12	**29**	-	-	**-**
	Total			**108**	**219**	**327**	**50**	**82**	**112**

Source: Field survey, 2024

3.1.17 Number of MJUMITA networks and other community- based organisations in Tanga Region promoting good forest and wood-fuel governance with qualitative information on their relevant activities over the last 5 years

MJUMITA (short for Mtandao wa Jamii wa Usimamizi wa Misitu Tanzania in English Community Forest Conservation Network of Tanzania) is a network in Tanzania that brings together CBFM groups, civil society organisations, and other stakeholders involved in the management and conservation of forests. Eight (8) MJUMITA networks are already established in Tanga Region. Besides MJUMITA networks, 4 other Community-based Organisations (CBOs) in the Region that promoting good forest and wood-fuel governance with qualitative information on their relevant activities over the last 5 years (Table 21). In Kilindi District, these CBOs include Envirocare (Environmental, Human Rights Care and Gender Organisation), Community Research and Development Services (CORDS) and Ereto Maasai Youth (EMAYO) while Inuka Youth Development Organization (IYDO) in Handeni District. Table 22 presents a list of MJUMITA networks and members in Tanga Region.

Table 21: Number of MJUMITA networks and other CBOs in Tanga region promoting good forest and wood fuel governance

SN	District	# of MJUMITA networks	# of other community-based organisations
1.	Handeni	3	1
2.	Kilindi	1	3
3.	Mkinga	4	0
4.	Pangani	0	0
	Total	**8**	**4**

Source: Field survey, 2024

Table 22: List of MJUMITA networks and members in Tanga Region

District	Name of the Network	YEAR	Ward	Villages	Network members		
					Male	Female	Total
Kilindi	HIMIMSA	2019	Msanja	Mswaki, Mkonde na Mzungu wa Sala			32
Handeni	MJUMIKWEKIGE	2024	Mgambo	Gendagenda, Kitumbi na Kwedihwahwala	28	12	40
Handeni	MJUMIKWAMKWE	2021	Kwamsisi	Kwamsisi, Mkalamo and Kwedikabu	42	18	60
Handeni	MJUMIKA	2021	Kan'gata	Gole, Kang'ata and Madebe	21	12	33
Mkinga	SHIWAMAMA	2012	Maramba	Maramba A and Maramba B	42	28	70
Mkinga	MTAHIMKAKI	2012	Kigongoi	Kwekuyu, Vuga Hemsambia, Kidundui	34	16	50
Mkinga	UMAKAM	2013	Mhinduro	Matemboni, Segoma, Bamba, Muheza, Mchangani, Majengo, Mhinduri and Churwa	97	53	140
Mkinga	UMAKABO	2013	Bosha	Kwamtili, Bosha, Muzi and Kuzekibago	83	47	120

Source: Field survey, 2024

The primary role of MJUMITA and other CBOs in the project villages is to advocate for the sustainable management of forest resources. For instance, in Kwamsisi ward, the MJUMITA network called MJUMIKWAMKWE has helped resolve a conflict over village boundary between Mkalamo Village and Gendagenda Village. Additionally, it facilitated Gendagenda Village in securing compensation exceeding TZS 176 million from mining activities within the VLFR. Another network in Mgambo ward, called MJUMIKWEKIGE, is currently facilitating the resolution of a village boundary conflict between Gendagenda and Langoni Villages in Pangani District. The District Commissioners of Pangani and Handeni have visited the disputed areas to address the matter.

3.1.18 MJUMITA networks or other community- based organisations in Tanga Region promoting gender equality in forest and land management, good forest and wood-fuel governance

Besides promoting good forest and wood fuel governance, MJUMITA networks and other CBOs are also promoting gender equality in forest and land management, good

forest and wood-fuel governance. This is being achieved by advocating for the implementation of policies and laws that create an enabling environment for women and youth to participate in forest land management. In the project villages, gender equality is evident in the established VNRCs, VSLAs, VLUM, and charcoal producer associations.

3.1.19 Local Government Authorities (LGAs) providing monitoring data for NFPIS and NNCBFM-AP from Tanga region

Local Government Authorities (LGAs) in Tanga Region are supposed to monitor data of the National Forest Policy Implementation Strategy (NFPIS) and the National Community-Based Forest Management Action Plan (NNCBFM-AP). Results in Table 23 show that all districts providing monitoring data for NFPIS and NNCBFM-AP even before the commencement of the IFBEST project. However, data is only provided when requested by the region or the Ministry of either Natural Resources and Tourism or President Office – Regional Administration and Local Government (PO – RALG). This is due to the absence of a specific reporting system (e.g., web-based system). Most of the information provided relates to tree planting and the establishment of village forest reserves, which can be requested once or twice throughout the entire year.

Table 23: LGAs providing monitoring data for NFPIS and NNCBFM-AP from Tanga region

SN	District	Whether LGA providing monitoring data for NFPIS before the project (Yes/No)	Whether LGA providing monitoring data for NNCBFM-AP before the project (Yes/No)
1	Handeni	Yes	Yes
2	Kilindi	Yes	Yes
3	Mkinga	Yes	Yes
4	Pangani	Yes	Yes

Source: Field survey, 2024

3.2 METT Results as Per the Protected Area at Village Level

The results of the METT survey are presented here focusing on four major issues namely: i) Protected area context, ii) protected area management objectives, values and ecosystem goods and services, iii) threats of the protected areas, and iv) management effectiveness aspects.

3.2.1 Protected areas background

This section provides background information on the attributes of protected areas. It encompasses essential data regarding the district, village, protected area (VLFR) name, size, establishment date, Village Natural Resource Committee (VNRC), budget, and the status of the management plan (Table 24). The METT assessment indicates that the VLFRs' size varies between 1,185 to 5,000 hectares, with the size of two forests unknown. Except for the Bagamoyo VLFR, all VNRCs lack a budget. As for the

management plan's status, three await district approval, and five are in the preliminary phases of the CBFM process, including the establishment of VNRCs. This suggests that the majority of VLFRs are in the early stages of establishment. Those VLFRs nearing the final approval phase, demonstrate promising progress, however they cannot be fully implemented until the establishment process is complete. Thus, this serves as an indication for the IFBEST project to expedite the establishment process for all protected areas.

Table 24: Protected area attributes as per the protected area

District	Village	VLFR name	Area Covered (Ha)	Date established	Size of VNRC	Budget (TZS)	Status of Management Plan
Kilindi	Lusane	Ololili	1899.6	2024	12	0	VLFR area proposed and VNRC members selected
	Mapanga	Vuju	1897.1	2010 (2024)	12	0	VLFR area proposed and VNRC members selected
	Mmbogo	Mahongwe	Not known	2024	10	0	VLFR area proposed and VNRC members selected
	Msawaki	Nyuki	5000	2024	14	0	VLFR area proposed and VNRC members selected
	Ngobore	Lekirumo	Not known	2018 (2024)	16	0	VLFR area proposed and VNRC members selected
Handeni	Gengagenda	Gendagenda	4799.5	2007 (2024)	14	0	At district level for approval
	Mkalamo	Bagamoyo	1185.6	2014 (2024)	10	8 million	At district level for approval
Pangani	Mseko	Beho	3500.77	2008 (2024)	14	0	At district level for approval

Source: Field survey, 2024

3.2.2 Protected area management objectives, values and ecosystem services

The results indicated that the primary management objectives for all VLFRs generally focused on the sustainable conservation and utilisation of forest resources to benefit the livelihoods of current and future generations. The key values associated with these VLFRs included biodiversity, water catchments, forest products, and medicinal properties. The main ecosystem services identified were timber, non-timber forest products, and water provision (Table 25).

Table 25: Management objectives, values and ecosystem services

Village	VLFR name	Management objectives	Main Values	Main Ecosystem services
Lusane	Ololili	i. Sustainable conservation of forest resources ii. Sustainable use of forest resources for community livelihoods	i. Biodiversity (flora and fauna species) ii. Climate regulations iii. Natural resources iv. Cultural value v. Wild food	i. Timber and Non-Timber Forest Products (NTFP) ii. Climate mitigation (carbon sequestration /storage) iii. Cultural, spiritual and aesthetic iv. Water (quality/quantity)
Mapanga	Vuju	i. Sustainable management of the forest ii. Livelihood benefits and village development for present and future population	i. Natural resources (timber, water) ii. Climate regulations iii. Water catchment iv. Cultural values (ritual places) v. Biodiversity (flora and fauna)	i. Timber and NTFP ii. Climate mitigation (carbon sequestration /storage) iii. Cultural, spiritual and aesthetic iv. Water (quality/quantity)
Mmbogo	Mahongwe	i. Sustainable conservation of the forest ii. Sustainable use of forest resources including timber, medicinal plants, beekeeping, charcoal etc for the present and future generation	i. Biodiversity value ii. Landscape Aesthetic value iii. Medicinal value v. Natural resources value v. Water catchment	i. Timber and NTFP ii. Health (medicines, exercise, mental) iii. Water (quality/quantity) iv. Wild food including fish
Msawaki	Nyuki	i. Conserve forests and their natural resources ii. Sustainable utilisation of forest resources and livelihoods benefits	i. Forest products (honey, medicinal plants, firewood) ii. Climate regulations iii. Biodiversity v. Natural vegetation	i. Timber and NTFP ii. Climate mitigation (carbon sequestration /storage) iii. Health (medicines, exercise, mental) iv. Water (quality/quantity)
Ngobore	Lekirumo	i. Conserve natural forests and their resources including trees, bees, animals	i. Biodiversity (trees, wildlife), ii. Medicinal plants, iii. Wild food value, v. Connectivity value, and	i. Timber and NTFP ii. Health (medicines, exercise, mental) iii. Wild food including fish

Village	VLFR name	Management objectives	Main Values	Main Ecosystem services
		ii. Sustainable use of forest resources for present and future generations	v. Traditional ceremony significance	iv. Agriculture support (pollination, pest predators)
Gengagenda	Gendagenda	i. Sustainable management, protection, and conservation of natural forests, including forest resources and biodiversity ii. Sustainable utilisation to achieve the socioeconomic and environmental benefits for local people, both present and future.	i. Biodiversity conservation ii. Medicinal plants iii. Landscape connectivity v. Water source (source of rivers) v. Climate regulations	i. Timber and NTFP, ii. Water (quality/quantity), iii. Climate mitigation (carbon sequestration /storage) iv. Wild food including fish
Mkalamo	Bagamoyo	i. Sustainable management, protection, and conservation of natural forests, including forest resources and biodiversity ii. Sustainable management and utilisation for achieving the socioeconomic and environmental benefits for local people, both present and future.	i. Water catchment /Sources of water for rivers ii. Cultural importance -provide medicinal plants iii. Providing resources for local subsistence (Wild food - fruits, honey, building materials) v. Minerals (Graphite, Gold, Granite)	i. Water (quality/quantity) ii. Timber and NTFP iii. Health (medicines, exercise, mental) iv. Wild food including fish
Msekp	Beho	i. Conserve natural resources ii. Sustainable use of resources for livelihood benefits	i. Biodiversity ii. Water catchments iii. Medicinal value v. Wild food v. Minerals and good sand	i. Timber and NTFP ii. Water (quality/quantity) iii. Health (medicines, exercise, mental) iv. Wild food including fish

Source: Field survey, 2024

3.2.3 Threats to the protected areas

According to Stolton, and Dudley, (2016), “threats are the human activities or processes that have caused, are causing, or may cause the destruction, degradation, and/or impairment of biodiversity targets (e.g., unsustainable fishing or logging). Threats can be past (historical), ongoing, and/or likely to occur in the future”. The results of the assessment of the threats facing the protected areas are indicated in Table 26. Most of the protected areas expressed greater concern over the following threats that need to be managed; illegal logging, cultivation, illegal grazing, loss of high-value species and fires. The main values which are more affected by the threat are biodiversity and water catchment. The extent (widespread and effects of the value and severity (likely to destroy value where threat occurs) (Stolton *et al*., 2021) ranged from low to high (Table 26). The presence of threats implies a current and future management challenge of the protected areas and management effectiveness. Thus, future management actions of the protected area should focus on addressing the identified threats.

Table 26: Threats facing the protected areas and the main values affected

Village and VLFR	Main Threats	Main values affected	Extent	Severity
Gendagenda (Gendagenda VLFR)	Crop cultivation	Biodiversity conservation, Water source (source of rivers)	Low	Low
	Illegal grazing	Water source	Medium	High
	Illegal hunting	Biodiversity conservation	Medium	Medium
	Illegal logging	Biodiversity conservation	High	High
	Fire	Biodiversity conservation	Medium	Medium
	Dominance of some native species	Biodiversity conservation	Low	Low
	Boundary dispute	Biodiversity conservation	Low	Low
	Illegal charcoal production	Biodiversity conservation	Medium	Medium
Lusane (Ololili VLFR)	Settlement	Biodiversity (flora and fauna species), Natural resources	Medium	Medium
	Crop cultivation	Biodiversity (flora and fauna species), Natural resources, Wild food	Medium	High
	Mining activities	Biodiversity (flora and fauna species)	Low	Low
	Illegal logging	Biodiversity (flora and fauna species), Wild food, Natural resources, Climate regulations	High	High
	Fire	Natural resources, Wild food, Biodiversity (flora and fauna species)	Low	Medium
	Illegal charcoal production	Biodiversity	medium	medium
Mapanga (Vuju VLFR)	Settlement	Cultural values (ritual places), Biodiversity (flora and fauna), Water catchment, Natural resources (timber, water)	Low	Medium

Village and VLFR	Main Threats	Main values affected	Extent	Severity
	Crop cultivation	Biodiversity (flora and fauna), Natural resources (timber, water), Water catchment	Medium	Medium
		Biodiversity (flora and fauna), Water catchment	Low	Low
	Illegal grazzing	Water catchment, Biodiversity (flora and fauna), Natural resources (timber, water)	Medium	Low
	Mining activities	Water catchment, Biodiversity (flora and fauna)	Medium	Medium
	Illegal hunting	Biodiversity (flora and fauna)	Low	Low
	Medicinal plants collections	Biodiversity (flora and fauna)	Low	Low
	Illegal logging	Biodiversity (flora and fauna), Natural resources (timber, water)	Low	Low
	Mining research	Biodiversity (flora and fauna), Water catchment	Low	Low
	Fire	Biodiversity (flora and fauna), Natural resources (timber, water)	High	High
	Loss of high value species	Biodiversity (flora and fauna)	High	High
	Dominance of some native species	Biodiversity (flora and fauna)	Medium	Medium
Mkalamo (Bagamoyo VLFR)	Settlement	Biodiversity (Flora and Fauna), Water catchment /Sources of water for rivers	Medium	Low
	Crop cultivation	Water catchment, Water catchment /Sources of water for rivers	Medium	Medium
	Illegal grazing	Water catchment	High	High
	Mining activities	Biodiversity	Medium	Low
	Road crosses the forest	Biodiversity	Low	Low
	Illegal logging	Biodiversity	High	High
	Fire	Biodiversity	Medium	Low
	Loss of high value species	Biodiversity	High	High
	Dominance of some native species	Biodiversity	Medium	Medium
	Flooding	Biodiversity	High	Medium
	Illegal charcoal production	Biodiversity	low	Low
Mbogo (Mahongwe VLFR)	Crop cultivation	Biodiversity value, Water catchment	Low	Low
	Illegal grazing	Natural resources value, Biodiversity value, Water catchment	High	High
	Mining activities	Water catchment, Biodiversity value	Low	Low
	Collection of medicinal plants	Biodiversity value	Low	Low

Village and VLFR	Main Threats	Main values affected	Extent	Severity
	Fire	Biodiversity value	High	Medium
	Air pollution	Natural resources value	Low	Low
	Sound pollution	Natural resources value	Low	Low
Mseko **(Beho VLFR)**	Settlement	Biodiversity	Medium	Medium
	Crop cultivation	Biodiversity, Water catchments	Medium	Medium
	Illegal grazing	Biodiversity, Water catchments, Wild food	Low	Low
	Mining activities	Biodiversity	Low	Low
	Roads crosses through the forest	Biodiversity	Low	Low
	Illegal hunting	Biodiversity	Low	Low
	Illegal logging	Biodiversity, Medicinal value	Low	Low
	Illegal charcoal production	Biodiversity, Medicinal value,	Medium	Medium
Mswaki (Nyuki VLFR)	Illegal grazing	Natura vegetation, Biodiversity, Forest products (Beekeeping honey, medicinal plants, Firewood)	High	High
	Road crosses the forest	Biodiversity	Low	Low
	Illegal logging	Forest products (Beekeeping honey, medicinal plants, Firewood), Biodiversity	Medium	Medium
	Los pollinator species	Biodiversity, Forest products (honey, medicinal plants, firewood)	Medium	Medium
	Illegal charcoal production	Biodiversity	Medium	Medium
Ngobore (Lekirumo VLFR)	Settlement	Biodiversity (trees, wildlife), Wild food value	Medium	Medium
	Crop cultivation	Biodiversity (trees, wildlife)	High	High
	Illegal grazing	Biodiversity (trees, wildlife)	High	Medium
	Illegal hunting	Biodiversity (trees, wildlife)	Low	Low
	Illegal logging	Biodiversity (trees, wildlife)	Medium	Medium
	Construction of water pump forest	Biodiversity (trees, wildlife)	Low	Low
	Fire	Biodiversity (trees, wildlife), Medicinal Plants, Wild food value	Low	Low
	Forest boundary conflict	Biodiversity (trees, wildlife)	Medium	Medium

Source: Field survey, 2024

3.2.4 Management Effectiveness Tracking Tool Scores

Considering the overall METT scores across all villages, Bagamoyo VLFR in Mkalomo village achieved the highest score at 50%, while Mahongwe VLFR in Mbogo village received the lowest at 15%. Examining the METT scores for each management element across all villages reveals that planning is the strongest aspect (highest METT

score at 67%), and the process is the weakest (lowest METT score at 3%) (Table 27). Overall, for all protected areas surveyed, the average score per management element indicates that planning is the highest at 52%, while inputs are the lowest at 34%. This suggests weak management for inputs and moderate for planning. The overall METT average score stands at 40% (Table 27). According to the management effectiveness levels categorised by Leverington *et al*., (2010a, b), the management effectiveness of the protected areas is classified as basic management with significant deficiencies (score between 33 and 67%). This reflects a management weakness in the protected areas. It can be inferred that the overall management effectiveness is hampered by the incomplete process of establishing the VLFRs, which limits their full adoption and implementation. Thus, increased efforts are necessary to enhance management actions to achieve effective management (score above 67%). Greater focus should be placed on improving inputs, process, and outputs management components.

Table 27: Management Effectiveness Tracking Tool Scores per VLFR per Management Element and Total METT Score

Village	VLFR name	Planning	Inputs	Process	Outputs	Outcomes	Total METT Score
Lusane	Ololili	52	33	43	**50**	**56**	43
Mapanga	Vuju	52	47	38	33	**56**	44
Mmbogo	Mahongwe	25	13	3	22	33	15
Msawaki	Nyuki	**67**	39	49	40	33	49
Ngobore	Lekirumo	28	20	12	25	44	21
Gengagenda	Gendagenda	**67**	22	**52**	47	33	48
Mkalamo	Bagamoyo	57	**50**	47	42	**56**	**50**
Msekp	Beho	**67**	47	42	42	33	48
Average		**52**	34	36	38	43	**40**

Source: Field survey 2024

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusion

This document presents the 2024 report for the assessment of 8 protected areas (VLFRs) using the key formant interviews at village, district and project levels and METT assessment. Both KIIs and METT assessment will act as a baseline information for the current socio-economic status and the management effectiveness trends of future VLFRs within the IFBEST project over three years-period. The subsequent project assessment, scheduled for 2027 (at the end of the project), will enable a comparison of results from this assessment and the monitoring of progress and potential concerns.

The KII results have shown the existence of 113 CBFM forests that were declared before and after the IFBEST project. Therefore, the four districts involved in the project (Handeni, Kilindi, Mkinga and Pangani) have 113 declared CBFM forests covering 76,242.31 hectares. The results indicate that the project has created an enabling environment for the implementation of its activities, including the establishment of local institutions such as VNRCs and VLUMCs, as well as economic institutions like CPAs and VSLAs. In parallel, by the end of its first year the project has built capacity for all the established institutions in three main areas: implementation of institutional responsibilities (e.g., sustainable charcoal production or financial management), good governance, and entrepreneurship. One area that has not yet shown results (by end of Year 1) is the income generated from the sustainable harvesting of forest resources from CBFM forests. The results show that neither individual nor village has earned income from village forests since the process for starting harvesting in these forests has not yet been completed.

The METT assessment shows that the establishment of the VLFRs and their management plans is currently incomplete, with three VLFRs pending district approval and five in the preliminary stages, particularly in the proposal phase and the establishment of VNRCs. The primary values of these VLFRs include biodiversity, water catchments, forest products, and medicinal resources, while the main ecosystem services identified are timber, non-timber forest products (NTFPs), and water. Nevertheless, the VLFRs face several threats such as illegal logging, illegal cultivation, illegal grazing, the loss of high-value species, and fires within the protected areas. Biodiversity and water catchment are the key values impacted by these threats, indicating a need for concerted efforts to mitigate them within the protected areas. The overall METT score for all protected areas indicates basic management with significant shortcomings, suggesting inadequate management of the VLFRs. This could prevent the VLFRs from fulfilling their objectives, thereby impeding their capacity to provide ecosystem goods and services to local communities.

4.2 Recommendations

Based on the baseline survey conducted in the project villages, we recommend the following areas of improving the monitoring approach; impact enhancement, sustainability improvement, reliability enhancement, sustainability improvement, reliability enhancement, technology integration and collaboration and stakeholder engagement.

4.2.1 Impact enhancement

Metrics	The project should clearly define impact metrics by making sure that all project indicators are specific, measurable, achievable, relevant, and time-bound (SMART). For instance, outcome indicator stating "Villages practicing more sustainable forest and land management…..", "Women and men from project villages skilled in community-based forest management…..". These should start with "Number of ……) and aligned with both short-term and long-term objectives of the IFBEST Project.
Approach	The project should engage stakeholders (e.g., beneficiaries, local communities, and LGAs' staff) in the monitoring process (participatory monitoring approach). This helps in identifying relevant outcomes and ensures that the system addresses real needs.
Feedback	There should be a regular feedback loops by establishing continuous feedback mechanisms to adjust strategies in real-time. To minimize cost to the project, this can be achieved through focus groups, or online platforms, through which beneficiaries, local communities, and LGAs' staff will be allowed to provide feedback for more adaptive decision-making.
Data Quality Assurance	The project should ensure that data collection is accurate, timely, and valid by regularly reviewing and cross-checking data sources.

4.2.2 Sustainability improvement

Capacity building	The project should invest in building the technical and managerial capacity of local stakeholders, including beneficiaries, village leaders and LGAs' staff, so they can independently manage and sustain monitoring activities after the project ends.
Integration into local systems	The project should embed monitoring system within existing institutional or governmental frameworks to promote its long-term sustainability. For instance, the project can utilize the

	VNRCs to monitor forest management activities and report to districts.
Technology	The project should assist district and villages to obtain and use low-cost technologies such as mobile applications or online dashboards to automate data collection, analysis, and reporting. The use of low-cost technologies reduces costs and making the system more sustainable.
Knowledge sharing	The project should create platforms for sharing findings, lessons learned, and best practices, both within the organisation and with external stakeholders
Resources	The project should secure long-term funding by diversifying sources of support, including partnerships with other organisations interested in forest data (e.g., TAFORI, CIFOR and BIOPAMA), grants, governmental contributions, or a portion of the village income generated from the harvesting of forest resources.

4.2.3 Reliability enhancement

Data Triangulation	The project should ensure the use of multiple sources of data (qualitative and quantitative) and methods (surveys, interviews, observation) to ensure consistency and increase the reliability of findings.
Risk Management Plans	The project should develop contingency plans to address potential disruptions in the monitoring process, such as data loss or delays. Regularly assess risks and develop strategies to mitigate them.
Stakeholder Accountability	The project should establish clear roles and responsibilities for all parties involved in the monitoring process. This can be achieved through holding stakeholders accountable for delivering accurate and timely data and using the information for decision-making.

4.2.4 Technology integration

Automation	The project should integrate automated systems for data collection, reporting, and analysis, such as the use of ODK for collection of data from Charcoal Producer Associations and VSLAs.
Geospatial tools	The project should use GIS (Geographic Information System) tools to track geographical data and visualize impact on restoration activities of degraded areas and monitoring of regeneration in charcoal management units

Mobile platforms	The project should procure and utilize mobile phones or tablets to collect real-time data from different data sources such as LGAs staff, village leaders, VNRC, charcoal producer associations and VSLAs.

4.2.5 Collaboration and stakeholder engagement

Collaborative data platforms	The project in collaboration with other stakeholders like TAFORI to create centralised platforms where all relevant stakeholders (government, partners, beneficiaries) can access and contribute to data.
Training and capacity development	The project should provide regularly training to people who will be responsible for monitoring at all levels, especially field staff to ensure they have the necessary skills to maintain high-quality, reliable monitoring.

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APPENDICES

Appendix 1: Checklist for stakeholder consultations (At district level - DFOs, DNROs, TFS and District Planning Officers)

My name is ..... This checklist is designed to gather baseline information for the Integrated Forest Biomass Energy Solutions for Tanzania (IFBEST) Project. You are being asked to participate in this study because your insights are invaluable, and we appreciate your willingness to share your experiences with us. The information gathered from this study will be strictly used for the purpose of the project. Every attempt will be made to keep all information collected in this study anonymous and strictly confidential. If any publication results from this study, you will not be identified by your name. There is no guarantee that you will benefit directly from the study and there is no financial costs directly associated with participation in this study. Your participation in this study is entirely voluntary and you are free to refuse participation. You may also discontinue your participation at any time without prejudice. If you discontinue participation in the interview, you may request that we not use the information already given to us. Do you agree to participate in this study? Yes or No. By saying yes, you are indicating that you have consented to /agreed to participate in this study.

Questions	**Response**
Name of Interviewer	
Date of Interview	
District name	
Name of the department:	
Name of the interviewee:	
Designation:	

SECTION A: COMMUNITY BASED FOREST MANAGEMENT

1. What kind of support did the district provide to the communities to implement CBFM in the last 5 years?

SN	**Kind of support**	**Year**	**Villages**
1.	Training and capacity building		
2.	Financial support		
3.	Technical assistance		
4.	Awareness campaigns		
5.	Other ; Mention/specify		

2. What was the source of funding for implementing such activities?
   1= District funds/own source
   2= Development partners; Mention them
   3= Both (own source and development partners-Mention them)

3. How many backstopping/technical support visits conducted by district staff in supporting CBFM for the past 5 years?

Village	**Year**	**# of backstopping/technical support visits conducted**

4. What is the amount of funds allocated by the district in providing technical support for CBFM and wood-fuel production to communities in the last 5 years?

SN	Village name	Year	Amount of funds allocated o villages

5. How many LGA staff who have skills/knowledge of facilitating villages in the preparation and implementation of CBFM plans?

6. How many CBFM plans and associated bylaws have been approved by the district in the past 5 years? (Provide a list and their status if available)

Year	# of plans and associated bylaws approved	Names of CBFM forests
2023		
2022		
2021		
2020		
2019		

7. Who financed/funded the approved CBFM plans and associated bylaws?

1= District funds/own source

2= Development partners; Mention them

3= Both (own source and development partners-Mention them)

8. Has the district staff received training on CBFM, land use management and / or wood-fuel governance over the past 5 years? Please specify

Type of training	No	Yes	If YES, Year
CBFM			
Land use management			
Wood-fuel governance			

9. Who supported/financed the training(s)?

1= Central government

2= The district-as part of district financed capacity building initiatives

3= Development partners-Mention them;

4= Both, the Government (central government/the district) and development partners-Mention them

SECTION B: CBFM, SUSTAINABLE CHARCOAL AND NATURE-BASED ENTERPRISES

10. Has the district integrated CBFM, sustainable charcoal and nature-based enterprises in the district development plans?
0 =No
1=Yes
2= I don't know

11. If, YES, do you think CBFM, sustainable charcoal and nature-based enterprises are prioritised in the budget allocation?
0= No
1= Yes
2=Don't know

12. If NO, Why?

13. What are your recommendations to improve district investment on CBFM/sustainable charcoal and nature-based enterprises?

14. What are relevant targets/activities of the district in relation to integrated CBFM, sustainable charcoal and nature-based enterprises? Ask for the development plan (collect development plan)

15. How many CBOs in the district promoting good forest and wood-fuel governance with qualitative information on their relevant activities over the last 5 years?.....

16. What are their activities?

Year	Name of the CBOs	Major Activities
2023		
2022		
2021		
2020		
2019		

17. How many backstopping/technical support visits conducted by district staff in supporting wood-fuel production for the past 5 years?

Village	**Year**	**# of backstopping/technical support visits conducted**

SECTION C: VILLAGE LAND USE PLANS

1. Does the district staff have skills/knowledge of supporting villages in land use planning and bylaws?
0=No
1=Yes.
2= I don't know

2. If YES, how many LGA staff who have skills/ knowledge facilitating villages in the preparation and implementation of village Land Use Plans?
3. How many district staff have skills/knowledge to supporting villages in land use planning and bylaws?
   0= No
   1=Yes.
   2=I don't know
4. How many land use plans and associated bylaws have been approved by the district in the past 5 years? (Provide a list and their status if available)

Year	**# of land use plans and associated bylaws approved**	**Names of villages where land use plans and associated bylaws approved**
2023		
2022		
2021		
2020		
2019		

5. Who financed/funded the approved land use plans and associated bylaws?
   1= Central Government
   2= District funds/own source
   3= Development partners; Mention them
   4= Both, the government (central government/district own source) and development partners-Mention them)

SECTION D: MONITORING OF NFPIS AND NNCBFM-AP

6. Does your district provide monitoring data for NFPIS and NNCBFM-AP from Tanga region (DFOs and DNROs only)
   0=No
   1=Yes
   2= I don't know.
7. If YES, which indicators do they report on?

8. If not providing monitoring data to either / both NFPIS / NCBFM-AP, why not?

SECTION E: MEMBERSHIP IN COMMUNITY GROUPS OR ASSOCIATIONS

9. How many MJUMITA network members in Tanga region?

SN	**District**	**# of MJUMITA members**
1		
2		
3		
4		
5		

SECTION F: GENDER

10. Does the district promote gender equity in forest and land management?
0=No
1=Yes
2= I don't know

11. If Yes, how?

12. If, No, why?

13. And what are your recommendations to improve gender equity in forest and land management?

Appendix 2: Checklist for key informants (At village level)

My name is ..... This checklist is designed to gather baseline information for the Integrated Forest Biomass Energy Solutions for Tanzania (IFBEST) Project. You are being asked to participate in this study because your insights are invaluable, and we appreciate your willingness to share your experiences with us. The information gathered from this study will be strictly used for the purpose of the project. Every attempt will be made to keep all information collected in this study anonymous and strictly confidential. If any publication results from this study, you will not be identified by your name. There is no guarantee that you will benefit directly from the study and there is no financial costs directly associated with participation in this study. Your participation in this study is entirely voluntary and you are free to refuse participation. You may also discontinue your participation at any time without prejudice. If you discontinue participation in the interview, you may request that we not use the information already given to us. Do you agree to participate in this study? Yes or No. By saying yes, you are indicating that you have consented to /agreed to participate in this study.

Questions	**Response**
Name of Interviewer	
Date of Interview	
District name	
Name of the village:	
Name of the interviewee:	
Designation:	

SECTION A: SOCIO-ECONOMIC CHARACTERISTICS

1. Gender?
   0=Female
   1=Male

2. What is your age?

3. Educational level
   1=No formal education
   2=Primary education

3=Secondary Education
4=College/University

4. What is your main economic activity?
   1= Farming
   2= Business
   3= Employed
5. Others specify

SECTION B: VILLAGE LAND USE PLAN

6. What is the current status of land use plan and management in your village?
   1= No LUP
   2= Preparation
   3=Completed
   4= Implementation
   5= I don't know
7. What are the main land uses in the village? (Can be more than one)
   1= Agriculture
   2= Forest
   3=Settlement
   4= Grazing land
   5= Others, mention
   6= I don't know

SECTION C: COMMUNITY BASED FOREST MANAGEMENT (CBFM)

8. What is the current status of CBFM in your village?
   1= No CBFM,
   2= Preparation,
   3= Completed,
   4= Implementation
   5= I don't know

9. Has the district provided support to the implementation of CBFM in the past 5 years?
   0=No
   1=Yes
   2= I don't know

10. What kind of support has the district provided to the communities to implement CBFM in the last 5 years?

SN	Kind of support	Year
1	Training and capacity building	
2	Financial support	
3	Technical assistance	
4	Awareness campaigns	

5	Other; Mention/specify	

11. How many backstopping/technical support visits conducted by district staff in supporting CBFM for the past 5 years in the village?

Year	# of backstopping/technical support visits conducted for CBFM
2023	
2022	
2021	
2020	
2019	

SECTION D: VILLAGE LAND FOREST RESERVE

12. What is the size (in ha) of natural forest under the following types of management in your village?

SN	Type of management	# of forest	Forest size
1	Village land forest reserve (VLFR)		
2	Community Forest Reserve		
3	Private Forest Reserve		

13. Does the VLFR generate revenue from timber harvesting?
    0=No
    1=Yes
    2= I don't know
14. If YES how much is generated from harvesting timber by the village per year for the past 5 years?

SN	Year	Annual income (TZS)
1	2023	
2	2022	
3	2021	
4	2020	
5	2019	

15. Has the village marked the VLFR boundaries over the last 5 years?
    0=No
    1= Yes
    2= I don't know
16. If yes what type of marking?
    1= Tree planting,
    2= Boundary clearance (fire breaks),
    3= Beacon
    4= Painting boundary trees
    5= Others, specify ……..

SECTION D: FOREST BASED ENTERPRISES

17. How many tonnes of sustainably produced charcoal from the CBFM/VLFR in your village for the past 12 months?

18. How many backstopping/technical support visits conducted by district staff in supporting wood-fuel production for the past 5 years in the village?

S/N	Year	# of backstopping/technical support visits conducted for sustainable wood fuel production
	2023	
	2022	
	2021	
	2020	
	2019	

19. How much income do your village earn from each of these enterprises for the last year? Income disaggregated by individual enterprise.

Type of product	Income (TZS)
Charcoal	
Firewood	
Timber	
Honey and Beeswax	
Livestock	
Mushroom	
Others (specify)	

20. How many women, men and youth earning an income from sustainable charcoal production and other nature-based enterprises in your village for the last year? Revenue disaggregated by forest product

Type of product	Men	Women	Youth
Charcoal			
Timber			
Honey and Beeswax			
Livestock			
Mushroom			
Others (specify)			

21. How much revenue has been generated by the village from forest royalties, for forest management and community development over the last 5 years?

Year	Amount of revenue generated	Use
2023		
2022		
2021		
2020		
2019		

SECTION E: FOREST RESTORATION

22. Has the village been practicing Assisted Natural Regeneration (i.e., protecting and nurturing existing the natural regeneration of native species in the charcoal Forest Management Units for the past five years?
    0=No
    1=Yes
    2= I don't know
23. Has the village been restoring degraded forest areas within VLFRs for the past 5 years?
    0=No
    1=Yes
    2= I don't know
24. Has the villagers involved in restoring degraded forest areas (areas where trees were cut) within VLFRs for the past 5 years?
    0=No
    1=Yes 2=
    I don't know
25. If YES what are the restoration activities carried out within VLFR for the past 5 years?

SN	**Year**	Restoration activities (1 = Tree planting; 2 = Protection of regeneration sites)
1	2023	
2	2022	
3	2021	
4	2020	
5	2019	

SECTION F: GENDER

26. How many women and men in the village know about community-based forest management, land use management, wood fuel governance, sustainable charcoal production, good governance and entrepreneurship? knowledge disaggregated by gender

Variable	**Men**	**Women**
Community-based Forest management		
Land use management		
Wood-fuel governance		
Good governance		
Sustainable charcoal production/enterprise		
Timber enterprises		
Honey and Beeswax		
Livestock		
Mushroom		
Others (specify)		

27. How many women and men (sustainable wood fuel producers) with entrepreneurial skills/knowledge in your village?
    Women ……
    Men…….
28. How many women and men (sustainable wood fuel producers) with access to financial capital in your village?
    Women……..
    Men…….

SECTION G: MEMBERSHIP IN COMMUNITY GROUPS OR ASSOCIATIONS

29. Is there a charcoal association in your village?
    0=No
    1=Yes
    2=I dont know

30. How many people in your village are members of charcoal associations? Disaggregated by gender

SN	Name of charcoal association	Number of members by gender		
		Men	Women	Total

31. Do you think that villagers are benefiting from Village Saving and Loaning Associations (VSLA)?

Type of benefit	No	Yes	If YES, # of people benefiting	
			Women	Men
Saving money				
Access to small loan				
Financial education				
Others specify				

32. Are there MJUMITA network members in the village promoting good forest and wood-fuel governance with qualitative information on their relevant activities over the last 5 years?
    0=No
    1= Yes
    2= I don’t know
33. If yes Mention their activities

Year	MJUMITA Network Member	Major activities
2023		
2022		
2021		
2020		

2019		

34. Are there CBOs in your village promoting good forest and wood-fuel governance over the last 5 years?
    0=No
    1= Yes
    2= I don't know

35. If yes Mention their activities

Year	Name of CBO	Major activities
2023		
2022		
2020		
2021		
2019		

Appendix 3: Checklist – consultation with project staff (PS)

My name is ..... This checklist is designed to gather baseline information for the Integrated Forest Biomass Energy Solutions for Tanzania (IFBEST) Project. You are being asked to participate in this study because your insights are invaluable, and we appreciate your willingness to share your experiences with us. The information gathered from this study will be strictly used for the purpose of the project. Every attempt will be made to keep all information collected in this study anonymous and strictly confidential. If any publication results from this study, you will not be identified by your name. There is no guarantee that you will benefit directly from the study and there is no financial costs directly associated with participation in this study. Your participation in this study is entirely voluntary and you are free to refuse participation. You may also discontinue your participation at any time without prejudice. If you discontinue participation in the interview, you may request that we not use the information already given to us. Do you agree to participate in this study? Yes or No. By saying yes, you are indicating that you have consented to /agreed to participate in this study.

Questions	Response
Name of Interviewer	
Date of Interview	
District name	
Name of the village:	
Name of the interviewee:	
Designation:	

1. How many **women and men in the project villages have skills/knowledge** are on community-based forest management or land use management and wood-fuel governance?

Type of skill/knowledge	Men	Women

Community-based Forest management		
Land use management		
Wood-fuel governance		
Good governance		
Sustainable charcoal production/enterprises		
Timber enterprises		
Honey and Beeswax enterprises		
Livestock enterprises		
Mushroom enterprises		
Others (specify)		

2. How many women and men have skills/knowledge on sustainable charcoal production and other forest-based enterprises, good governance and entrepreneurship in the project villages?

Type of skill/knowledge	**Men**	**Women**
Community-based forest management		
Land use management		
Wood-fuel governance		
Good governance		
Sustainable charcoal production/enterprise		
Timber enterprises		
Honey and Beeswax enterprises		
Livestock enterprises		
Mushroom enterprises		
Others (specify)		

3. Are there charcoal association in the project villages? 0=No 1= Yes 2= I don't know
4. How many people in the village are members of charcoal association? Disaggregated by gender

SN	**Name of charcoal association**	**Number of members by gender**		
		Men	**Women**	**Total**

5. How many women and men (sustainable wood fuel producers) with entrepreneurial skills/knowledge in the project villages? Women ……Men…….

6. How many women and men (sustainable wood fuel producers) with access to financial capital in the project villages? Women……..Men…….
7. How much revenue has been generated by the villages from forest royalties, for forest management and community development over the last 5 years?

Year	Amount of revenue generated	Use

8. Are there MUJUMITA networks members in village promoting good forest and wood-fuel governance with qualitative information on their relevant activities over the last 5 years?
   0=No
   1= Yes
   2= I don't know
9. if yes mention their activities

Year	MJUMITA Network Member	Major activities
2023		
2022		
2021		
2020		
2019		

10. How many MJUMITA network members in the project Villages promoting gender equity in forest and land management?
11. Are there CBOs in your village promoting good forest and wood-fuel governance over the last 5 years? 0=No 1= Yes 2= I don't know
12. If yes Mention them

Year	Name of CBO	Major activities
2023		
2022		
2021		
2020		
2019		

13. How many villages in the project districts are practicing enrichment planting in charcoal kiln scars, restoration of degraded areas and VLFR boundary-marking?.
14. How many trees have survived as enrichment planting in charcoal kiln scars, restoration of degraded areas, VLFR boundary-marking in the project villages?

Place of enrichment planting	No of trees survived
Charcoal kilns scars	
Degraded areas	
VLFR-boundary marking	

Appendix 4: Declared CBFM forests in Kilindi District

SN	Forest name	Street/Village name	Ward name	Forest area (Ha)	Number of Villages	Year of Declaration
1	Bokwa Forest Ranges	Kwamba, Vilindwa, songe, bokwa	songe, Bokwa,	3,766.3	4	2008
2	Kenei	Tuliani Kwedijero	Kimbe	442.1	1	2010
3	Kibua	Kilwa	Kilwa	203.5	1	2010
4	Kigari	Kimbe	Kimbe	781.0	1	2010
5	Kwamajali	Gombero	Kibirashi	172.8	1	2008
6	Kweingo'Ombe	Kwesapo	Kimbe	516.6	1	2010
7	Kwekilatu	Balang'a	Kisangasa	596.0	1	2010
8	Kwevizumi	Kisangasa	kisangasa	287.6	1	2018
9	Lumpi	Vunila	Kimbe	852.0	1	2010
10	Luye	Kilwa	Kilwa	185.9	1	2010
11	Mafyeyu Mavagiro	Kwamaligwa	Kibirashi	373.5	1	2008
12	Masenya	Balang'a	Kisangasa	154.0	1	2010
13	Matagusa	Kwamwande	Bokwa	1,077.0	1	2008
14	Mwega	Vyadigwa	Kimbe	521.0	1	2010
15	Pinguli	Komnazi	Kimbe	404.7	1	2010
16	Zimeme	Tuliani, Kwadijero, Mabalanga	Mabalanga	356.1	3	2010
17	Oliolili	Lusane	Tunguli	1,899.1	1	2024
18	Mapanga	Mapanga	Kwekivu	1,957.8	1	2024
19	Mbwego	Mnkonde	Msanja	1,102.1	1	2020
				15,649.1	24	

Appendix 5: A list of declared CBFM forests in Handeni District

SN	Forest name	Village name	Ward name	Forest area (Ha)	# of Villages	Year of Declaration
1	Kwizu	Kwedikwazu	Kabuku	27.2	1	2011
2	Kwamahede	Kwedikwazu	Kabuku	12.6	1	2011
3	Nkonjeni	Kwedikwazu	Kabuku	28.1	1	2011
4	Mnahoza	Kwedikwazu	Kabuku	21.1	1	2011
5	Kwekipelelo	Kwedikwazu	Kabuku	45.8	1	2011
6	Kwachogongo	Kwedikwazu	Kabuku	45.6	1	2011
7	Kwakirunga	Kwamatuku	Kwamatuku	227.2	1	2011
8	Zaila	Kwamatuku	Kwamatuku	27.7	1	2011

9	Npehoni	Kwamatuku	Kwamatuku	23	1	2011
10	Cheliguru	Kwamatuku	Kwamatuku	15.8	1	2011
11	Luhombwa	Kwamatuku	Kwamatuku	6.2	1	2011
12	Kwasamhika	Kwamatuku	Kwamatuku	32.6	1	2011
13	Ntumbili Hill	Kwamatuku	Kwamatuku	125	1	2011
14	Mavuga	Chanika Kofi	Ndolwa	782	1	2011
15	Kwamangwengwe	Chanika Kofi	Ndolwa	468.2	1	2011
16	Mkumbara	Chanika Kofi	Ndolwa	185.7	1	2011
17	Kwedilamamitoho	Chanika Kofi	Ndolwa	126.5	1	2011
18	Kwedifingo	Kwamsundi	Kwankonje	221.4	1	2011
19	Mnindo	Kwamsundi	Kwankonje	8.5	1	2011
20	Kwekilingo	Kwamsundi	Kwankonje	326.5	1	2011
21	Kwedipanga	Kwamsundi	Kwankonje	317.3	1	2011
22	Chogawali	Kwamsundi	Kwankonje	36.4	1	2011
23	Chihomonto	Kwamsundi	Kwankonje	207.3	1	2011
24	Majari mkurumiro	Mazingara	Mazingara	1,385.70	1	2011
25	Kwanjebe	Mazingara	Mazingara	39.7	1	2011
26	Talawe	Mazingara	Mazingara	90	1	2011
27	Selewa	Mazingara	Mazingara	19.8	1	2011
28	Zikilo	Mazingara	Mazingara	6.5	1	2011
29	Komdala	Mazingara	Mazingara	17.1	1	2011
30	Mlima Nkulimba	Mazingara	Mazingara	282.6	1	2011
31	Lufuvi	Mzundu	Ndolwa	40.5	1	2011
32	Kwekisanga	Mzundu	Ndolwa	107.4	1	2011
33	Amani	Mzundu	Ndolwa	101.2	1	2011
34	Komkora	Kwedibangala	Kiva	29.7	1	2011
35	Kwedibirika	Kwedibangala	Kiva	4.7	1	2011
36	Kwenjeze	Kwedibangala	Kiva	8.4	1	2011
37	Mantindi	Kwedibangala	Kiva	13.8	1	2011
38	Mawanda	Kwedibangala	Kiva	15.7	1	2011
39	Maziwa	Kwedibangala	Kiva	60.7	1	2011
40	Koluwe	Kwedibangala	Kiva	8.7	1	2011
41	Mbwewe	Kwedibangala	Kiva	31.8	1	2011

42	Kweng`ombe	Kwedibangala	Kiva	76.6	1	2011
43	Mlima Mongo	Michungwani	Segera	26.7	1	2011
44	Kwamlishi / Msagavile	Michungwani	Segera	632	1	2011
45	Mpangala	Michungwani	Segera	148	1	2011
46	Kwachundo	Kweditilibe	Kiva	30.8	1	2011
47	Kwamsangule	Kweditilibe	Kiva	28	1	2011
48	Kwedolome	Kweditilibe	Kiva	15	1	2011
49	Kikuyuni	Kweditilibe	Kiva	34	1	2011
50	Kwedizandu	Kweditilibe	Kiva	50	1	2011
51	Kweisonga	Kweditilibe	Kiva	69.5	1	2011
52	Mgana	Kweditilibe	Kiva	143.2	1	2011
53	Kwehuzi	Kweditilibe	Kiva	38.6	1	2011
54	Mbwewe	Kweditilibe	Kiva	31.8	1	2011
55	Kwedibane	Kweditilibe	Kiva	5.6	1	2011
56	Kwedijela	Kweditilibe	Kiva	21.6	1	2011
57	Ugonamzungu	Kweditilibe	Kiva	21.6	1	2011
58	Kwedikabu	Kwedikabu	Kwamsisi	3,642.5	1	2011
59	Zumbe Ntale	Bongi	Sindeni	94.41	1	2011
60	Kwendizi	Bongi	Sindeni	17.3	1	2011
61	Lewa	Bongi	Sindeni	6.3	1	2011
62	Lukwela	Nkale	Kwamatuku	255.8	1	2011
63	Komfeno	Nkale	Kwamatuku	370.1	1	2011
64	Kwedibane	Nkale	Kwamatuku	54.1	1	2011
65	Mzungu wa Saba	Nkale	Kwamatuku	288.3	1	2011
66	Kwamungwe	Nkale	Kwamatuku	234.2	1	2011
67	Kwachilungu	Kweisasu	Sindeni	29	1	2011
68	Kwamnana	Kweisasu	Sindeni	14.6	1	2011
69	Lwelojang`oma	Kweisasu	Sindeni	8.9	1	2011
70	Kwamawia	Kweisasu	Sindeni	8.7	1	2011
71	Vumo	Kweisasu	Sindeni	2.5	1	2011
72	Kwandege	Kweisasu	Sindeni	10.8	1	2011
73	Gole	Gole	Kang'ata	6,679.4	1	2012
74	Milangantembo	Kwamsisi	Kwamsisi	567.4	1	2015
75	Bagamoyo	Mkalamo	Kwamsisi	1,366.4	1	2014
76	Lugala	Kitumbi	Kitumbi	7,705.3	1	2012
77	Gengagenda	Gendagenda	Mgambo	4799.5	1	2024
				33,110.2	76	

Appendix 6: A list of declared CBFM forests in Mkinga District

SN	Forest name	Village name	Ward name	Forest area (Ha)	# of Villages	Year of Declaration
1	Dima	Dima	Gombero	1,620.3	1	2014
2	Kichangani	Kichangani	Gombero	391.0	1	2011
3	Mavovo	Mavovo	Bwiti	76.1	1	2013
4	Mwakikonge	Mwakikonge	Duga	381.0	1	2012
5	Mwakikoya	Mwakikoya	Duga	182.0	1	2012
6	Mwanyumba	Mwanyumba	Bwiti	1,700.0	1	2010
7	Vunde Manyinyi-Kiingo	Vunde Manyinyi	Gombero	792.0	1	2011
8	Mlima Mbuta	Mbuta	Mwakijembe	2,482.8	1	2010
9	Kiraka	Mazola Kifili	Doda	2,421.8	1	2012
				10,047.0	9	

Appendix 7: A list of declared CBFM forests in Pangani District

SN	Forest name	Village name	Ward name	Forest area (Ha)	# of Villages	Year of Declaration
1	Beho	Mseko	Ubangaa	3,577.9	1	2006
2	Bojo	Kwakibuyu	Kipumbwi	3,411.3	1	2013
3	Kibubu	Mivumoni	Bushiri	2,800.0	1	2006
4	Kwatango	Mtango	Mikinguni	1,092.0	1	2006
5	Kwavinonde	Msaraza	Bushiri	82.6	1	2013
6	Kwesinge	Kigurusimba	Masaika	331.4	1	2006
7	Mawata	Mkwaja	Mkwaja	4,953.3	1	2006
8	Mtonga Ndani	Mtonga	Mikinguni	1,187.5	1	2006
				17,436.00	8	