



Ministry for Foreign
Affairs of Finland

FORESTRY AND VALUE CHAINS DEVELOPMENT PROGRAMME (FORVAC)

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SEMI-ANNUAL REPORT FOR THE PERIOD FROM 1 JULY 2021 TO 31 DECEMBER 2021



February 2022

PREFACE

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PROGRAMME AREA



PROGRAMME FACT SHEET

Document:	Semi-Annual Report for the period from 1 July to 31 December 2021
Programme title:	Forestry and Value Chains Development Programme (FORVAC)
Sub-sectors:	Forestry Development, Private Sector Development
Geographical coverage:	<p>Tanzania – institutional development nationwide</p> <p>Tanga Cluster: Handeni and Kilindi Districts in Tanga Region, Mpwapwa District located in Dodoma Region and Kiteto District (Suledo Forest Community) in Manyara Region</p> <p>Lindi Cluster: Liwale, Ruangwa and Nachingwea Districts</p> <p>Ruvuma Cluster: Namtumbo, Tunduru, Songea, Mbinga and Nyasa Districts</p> <p>Headquarters in Dodoma</p>
Duration:	Four years (7/2018–7/2022)
Programme financing:	<p>Government of Finland € 9,950,000</p> <p>Government of Tanzania in kind contribution (salaries, operating expenses and office space) € 200,000</p> <p>Programme total budget € 10,150,000</p> <p>Additional potential funding: max € 10 million (to be agreed)</p>
Competent authorities:	<p>Ministry for Foreign Affairs, Finland</p> <p>Ministry of Natural Resources and Tourism, Tanzania</p>
Consultant:	FCG Finnish Consulting Group Ltd
Impact:	Increased economic, social and environmental benefits from forests and woodlands
Results of the Programme:	<p>Expected outcome: Improved forest sector market / value chains contributing to sustainable forestry and forest-based livelihoods</p> <p>Output 1: Improved value chains and increased private sector involvement in the forest sector</p> <p>Output 2: Stakeholder capacity to implement and promote forestry value chain development enhanced</p> <p>Output 3: Functional extension, communication, monitoring systems and Management Information System in place</p> <p>Output 4: Supportive legal and policy frameworks to forest value chain and sustainable forest management developed</p>
Distribution:	<p>Steering Committee, Supervisory Board</p> <p>Programme website: https://forvac.or.tz/publications/administrative-and-management-reports/</p>

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ABBREVIATIONS

AAC	Annual Allowable Cut
AWP	Annual Workplan
BTI	Beekeeping Training Institute
CBFM	Community-Based Forest Management
CBO	Community-Based Organization
CC	Cluster Coordinator (FORVAC)
DFO	District Forest Officer
EAWLS	East African Wildlife Society
EoF	Embassy of Finland
EU	European Union
FBD	Forest and Beekeeping Division (of the MNRT)
FGLG	Forest Governance Learning Group
FITI	Forest Industries Training Institute
FTI	Forestry Training Institute
FLEGT	Forest Law Enforcement, Governance and Trade
FMP	Forest Management Plan/Planning
FSC	Forest Stewardship Council
FORVAC	Forestry and Value Chains Development (Programme)
GoF	Government of Finland
GoT	Government of Tanzania
HRBA	Human Rights Based Approach
KVTC	Kilombero Valley Teak Company
LAMP	Land Administration and Management Programme
LGA	Local Government Agency
LIMAS	Lindi and Mtwara Agribusiness Support
LKTS	Lesser-known Timber Species
LUP	Land use plan
MCDI	Mpingo Conservation & Development Initiative
MFA	Ministry for Foreign Affairs (of Finland)
MNRT	Ministry of Natural Resources and Tourism
MMC	Mama Misitu Campaign
MSA	Market Systems Analysis
NAFOBEDA	National Forestry and Beekeeping Database
NAFORMA	National Forest Resources Monitoring and Assessment
NFBKP II	National Forestry and Beekeeping Programme Phase II
NFP	National Forest Programme
NGO	Non-Governmental Organization
NPC	National Programme Coordinator (FORVAC)
NTFP	Non-Timber Forest Product
NWFP	Non-Wood Forest Product

PAF	Performance Agreement Framework
PD	Programme Document
PFP 1	Private Forestry Programme – Panda Miti Kibiashara
PFP 2	Participatory Plantation Forestry Programme
PFM	Participatory Forest Management
PIM	Programme Implementation Manual
PFM	Participatory Forest Management
PFP	Private Forestry Programme
PLWD	Person Living with Disability
PMO	Prime Minister’s Office
PMT	Project Management Team
PO-RALG	President’s Office Regional Administration and Local Government
PMT	Programme Management Team
PPP	Public Private Partnership
REDD+	Reducing Emissions from Deforestation and Forest Degradation
RALG	Regional Administration and Local governments
SC	Steering Committee
SB	Supervisory Board
SHIVIMITA	Tanzania Forest Industries Federation
SUA	Sokoine University of Agriculture
TA	Technical Assistance
TFS	Tanzania Forest Services Agency
TFCG	Tanzania Forest Conservation Group
TFS	Tanzania Forest Service Agency
TFWG	Tanzania Forestry Working Group
TGA	Tree Growers Association
TLAS	Timber Legality Assurance System
TNRF	Tanzania Natural Resources Forum
TP	Transit Pass
TRA	Tanzania Revenue Authority
TZS	Tanzanian shilling
UNDP	United Nations Development Programme
VCA	Value Chain Development Advisor (FORVAC)
VC	Village Council
VFMA	Village Forest Management Area
VICOBA	Village Community Bank
VLFR	Village Land Forest Reserve
VLUP	Village Land Use Plan
VNRC	Village Natural Resource Committee
WWF	World Wildlife Fund for Nature

EXECUTIVE SUMMARY

Forestry and Value Chains Development (FORVAC) is a 4-year Programme (7/2018 – 7/2022) funded by the Ministry for Foreign Affairs of Finland (MFA Finland) and implemented under the Ministry of Natural Resources and Tourism of Tanzania (MNRT). It contributes to increasing economic, social and environmental benefits from forests and woodlands. The expected outcome of the Programme is “Improved forest sector market / value chains contributing to sustainable forestry and forest-based livelihoods”. FORVAC focuses on forest value chain development based on production of timber, charcoal and Non-Wood Forest Products (NWFP)/Non-Timber Forest Products (NTFP) in twelve Districts located in the three Programme Clusters (Tanga, Lindi and Ruvuma), and forests allocated there to Community-Based Forest Management (CBFM) within Village Land Forest Reserves (VLFRs).

The FORVAC Annual Workplan and Budget (AWP) from July 2021 to June 2022 was approved by the Steering Committee on 14 June 2021. This document is a Semi-Annual Progress Report of the implementation of this workplan over the period from 1 July 2021 to 31 December 2021. It presents the progress towards the achievement of the expected results (Impact, Outcome and Outputs) defined in the Programme Results Framework.

During the reporting period, two governments have continued negotiations to extend the project until July 2024. Confirmation for this extension is expected by March-April 2022.

Impact and Outcome

The achievement of Impact and Outcome level indicators will mainly be assessed at the end of the Programme. However, during the reporting period, FORVAC has contributed to the addition of 45,487 hectares of forest area to sustainable forest management by supporting production of 8 Forest Management Plans (FMPs) for as many Village Land Forest Reserves (VLFRs). Additionally, seven (7) produced FMPs are waiting for District level approval covering VLFR area of 58,201 ha. The programme has supported gazettement of 15 new VLFRs covering forest area of 51,135 ha, this process is supposed to be finalized beginning of 2022. Moreover, six (6) Land Use Plans (LUPs), with the forest area of 47,523 ha in total, were approved, and 12 LUPs, with the forest area of 175,845 ha in total, are waiting for approval.

Villages with FORVAC supported FMPs have started to produce sustainably harvested timber to the market. During the reporting period, 27 villages (2 villages in Ruvuma, 23 villages in Lindi, and 2 villages in Tanga Cluster) sold a total of 4,106 m³ of timber with the value of TZS 1,146,685,093 (EUR 458,674). Part of the revenue (as planned in the business plan), the villages will use to improve social services in the villages.

To assist the legal timber trade in Tanzania, FORVAC, in partnership with TRAFFIC and in close collaboration with Tanzania Forest Service Agency (TFS) and FBD, compilation of the Tanzania Timber Legality Framework was commenced in November 2020. On 8 December 2021, the technical consultative/validation workshop of the Framework was held with the good success in Dar es Salaam. The Framework will be finalized in January-February 2022.

Major results of the Programme implementation are given by Outputs below.

Output 1: Improved value chains and increased private sector involvement in the forest sector

The main results from July 2021 to December 2021 for Output 1:

Output 1 Improved value chains and increased private sector involvement in the forest sector

1.1 Support to establishment & mobilization of VLFRs (base activities)

- **6 Land Use Plans (LUPs)**, with the VLFR area of 47,523 ha in total, approved. Additionally, 12 LUPs, with the VLFR area of 175,845 ha in total, waiting for approval.
- **8 forest management and harvesting plans**, covering 45,487 ha of VLFR, approved and 7 plans (58,201 ha) waiting for approval. Additionally, forest management planning process in SULEDO Community Forest have been completed in 12 villages with VLFR area of 77,502 ha in total.
- Cluster-wise cumulative **annual allowable cut (AC)** for sustainable community timber is 11,711 m³ in Ruvuma, 62,402 m³ in Lindi and 1,952 m³ in Tanga, totaling over 76,000 m³.
- FORVAC started supporting the **establishment of bee reserves** in 5 villages in Tanga Cluster, totaling the bee reserve area of 5,059 ha.

1.2 Support to value chains development

- **Timber trade:** MCDI has supported and offered capacity for villages to trade timber and make contracts with buyers. 27 villages (2 villages in Ruvuma, 23 villages in Lindi, and 2 villages in Tanga Cluster) sold a total of 4,106 m³ of timber with the value of TZS 1,146,685,093 (EUR 458,674).

- **Sawmilling:** Two community owned portable sawmills started operating in 2 villages in Ruvuma Cluster and in 1 village in Lindi Cluster generating income of TZS 26,500,250 in total. Procurement of two more community owned sawmills and two solar kilns is ongoing.
- **Timber value chain** has created employment opportunities for a total of 1,012 (847M/165F) villagers.
- **Micro-business support Phase I:** The phase I completed in Handeni, Liwale, and Mbinga Districts but follow-up support, backstopping, and monitoring visits for the supported 60 businesses will still continue. Achievements so far are promising.
- **Micro-business support Phase II:** Based on the lessons learnt during Phase I, 65 new businesses have been selected from the Districts of Nyasa, Songea, Namtumbo and Tunduru in Ruvuma Cluster; and Nachingwea and Ruangwa in Lindi Cluster. The fieldwork and mentoring will start in each District during the first quarter of 2022. That time, around ten (10) more businesses will be identified for the support.
- **Honey value chain:** Cooperation with Swahili Honey company in Handeni and Mwapwa Districts in Tanga Cluster has resulted in increased yields as beekeepers (25 supported groups) have learnt more efficient beekeeping methods and got a buyer for the honey. During the first honey harvesting season, June – September 2021, the trained beekeepers sold 2,088 kg of unprocessed comb honey with the value of TZS 5,782,000 to Swahili Honey.
- **Mushroom value chain:** FORVAC will start cooperation with Mamaland Mushroom company in Songea and Mbinga Districts in early 2022. Mamaland will train the selected mushroom collectors to collect, dry, and pack the mushroom properly and offer a market for dried mushrooms.
- **Charcoal production model:** Implementation of the Intensified VLFR Charcoal Production Model and related research started in the two pilot villages in Handeni District in September 2021. Two Charcoal Making Groups in both pilot villages have been formed involving a total of 158 (104M/54F) members. Charcoal production will start in 2022.
- **Lesser-known species promotion:** Department of Forest Engineering and Wood Sciences of Sokoine University of Agriculture formulated a catalog for newly studied 14 lesser-known timber species and already known miombo timber species and started to set up a website to support the marketing of these species. The study and its final reports, as well as the miombo timber species database and website (<https://www.miombotimbertanzania.or.tz/>), shall be launched in March 2022.
- **Teak plantation:** Preparations for the teak planting for the 2022 planting season have started. 203 people have registered to plant a total of 100 ha of teak in five (5) villages in Nyasa District.

Output 2: Stakeholder capacity to implement and promote forestry value chain development enhanced

FORVAC works on increasing the capacities in CBFM and related value chain development from the community level to districts and further the national level and the scientific community and educational institutions. Main results under output 2 are listed below.

Output 2 Stakeholder capacity to implement and promote forestry value chain development enhanced

Community level

- Through the MCDI partnership, FORVAC **trained 934 (632M/302F) members of Village Natural Resource Committees (VNRCs) and Village Councils (VCs)** in various subjects related to harvesting supervision, efficient and safe harvesting practices, logs and sawn timber measurements and volume calculation, sawn timber air drying, quota management and harvesting record keeping, and development of timber business plans.
- MJUMITA partnership: **Illegal Logging Platforms** for reporting illegalities occurring in VLFRs for relevant government authorities operational in all four (4) community-owned networks in 15 villages where FORVAC operates in Handeni and Kilindi Districts in Tanga Cluster and Namtumbo District in Ruvuma Cluster.
- **MJUMITA Annual Forum** held in Morogoro on 25 November 2021, with a focus on highlighting the importance of forest restoration and conservation through sustainable forest management and mitigation and adaption to climate change: 153 participants (104M/49F).
- **Training of VLFR communities by Local Government Agencies (LGAs):** FORVAC supports Districts to offer necessary capacity building and training to communities with VLFRs, including financial management and business planning, First Aid, patrolling and fire control, and financial training.
- Support to **establishment of four (4) Village Saving and Loan Associations (VSLAs)** in Nachingwea District and three (3) VSLAs in Ruangwa District in Lindi Cluster: 140 members (39M/101F).

District, regional and national level authorities

- **Training of District Officers on participatory forest resource assessment (PFRA)** through the FORVAC-MCDI partnership in three (3) Clusters: 33 participants (24M/9F).

Education, training institutions

- Support to **four (4) CBFM value chains related dissertations** commenced within AWP 2020-2021 completed, Master's degree students successfully graduated at the College of Forestry, Wildlife and Tourism (CFWT) of Sokoine University of Agriculture (SUA) in Morogoro in December 2021; dissertations published.
- Support to **two (2) additional MSc dissertations** commenced in November 2021.

Output 3. Functional extension, communication, monitoring systems and Management Information System in place

Major results of Output 3 during the reporting period are set out in the textbox below.

Output 3 Functional extension, communication, monitoring systems and Management Information System in place

- **FORVAC in media:** FORVAC continued active involvement of media in the different events organized in the clusters. Media involvement has offered good visibility and publicity for FORVAC and CBFM in Tanzania. Most of the FORVAC related online publications (YouTube videos and Blog texts) can be found from the Programme's website (<https://forvac.or.tz/forvac-in-media/>). Some of the broadcasted TV news are also available on this website.

The activity on Facebook and publicity of FORVAC also in other media have **increased the number of the Facebook page followers from 612 to 1053 and the posts have reached around 6,500 people in total.**

- **Production of video documentaries of the successful interventions of FORVAC** was commenced during the reporting period. These short documentaries are used for marketing, campaigns, and educational purposes, also increasing awareness about FORVAC and development co-operation and its positive effects especially in Tanzania and Finland.
- During the fourth operational year, the Programme has put efforts into marketing, campaigning, and awareness-raising. The **preparation of the FORVAC booklet** was one of the works included in the marketing and visibility plan of the Programme. The purpose of the booklet is to raise awareness about FORVAC and its achievements so far.
- In July-August, FORVAC supported MNRT/FBD to establish a set of CBFM/VLFR and beekeeping and forest value chain development related extension material. Eventually **25 reports, guidelines and other extension and promotion materials** (a total edition of 11,000 pcs.) were printed in September 2021.
- FORVAC supported the Forestry and Beekeeping Division (FBD) of the MNRT to participate in the **45th Dar es Salam International Trade Exhibition** from 28 June to 13 July 2021. The exhibition helped FBD generally promote the national forest policies and legislation as well as forestry and beekeeping guidelines.
- FORVAC supported the organization of the **7th Annual Maji Maji Selebuka Festival and World Bee Day** in Songea, Ruvuma Region. The festival took place on 24-31 July 2021, addressing to recognizing, awareness raising and promotion of the ecological, social, and economic functions of forests.
FORVAC facilitated **17 business groups and the relevant Beekeeping Officers and Forest Officers to participate in the festival** from Nyasa, Mbinga, Songea DC, Namtumbo, and Tunduru Districts of Ruvuma Cluster and from Ruangwa District of Lindi Cluster.
- **Liwale investment forum and exhibition:** On 6 November 2021, FORVAC supported Liwale District Authority to organize an investment forum and exhibition to promote the local investment opportunities. The event brought together different development partners and investors from all over the country.

Joint monitoring

- **Joint monitoring visits with the relevant District officers, also involving representatives of PO-RALG and TFS,** to the target Districts to assess Programme-supported activities and report findings facilitated in each Cluster.
- **Results Sharing and Planning Workshop for newly appointed regional and district leaders** in all FORVAC Clusters involving all 12 operational Districts. The workshop was organized in Lindi and Ruvuma Clusters in September and in Tanga Cluster in November.
- In September 2021, **representatives of the Embassy of Finland together with the FORVAC National Programme Coordinator (NPC) from MNRT/FBD conducted a field visit to Lindi Cluster.** The progress of the Programme in Ruangwa and Liwale Districts was demonstrated to visitors in Nandenje and Barikiwa villages.

Output 4 Supportive legal and policy frameworks to forest value chain and sustainable forest management developed

Output 4 is implemented through two interventions, namely 4.1 Support training to increase understanding of policies and laws relevant for CBFM development; and 4.2 Forest law enforcement, forest governance and trade of legally sourced timber. The main results of this Output are listed below.

Output 4 "Supportive legal and policy frameworks to forest value chain and sustainable forest management developed"

- FORVAC continued to support the Forestry and Beekeeping Division (FBD) to prepare the **National Forest Policy Implementation Strategy (2021-2031)** and **National Beekeeping Policy Implementation Strategy (2021-2031)**, the documents printed and disseminated.
- **Production and printing of Guidelines for Establishment and Management of Bee Reserves and Apiaries in Tanzania supported.**
- Support MNRT to prepare the **National Charcoal Strategy and Action Plan.** By the end of 2021, working group meetings have been organized twice, in October and November 2021, resulting in the draft Charcoal Strategy and Action Plan.
- **Formulation of the Tanzania Timber Legality Framework** co-facilitated together with TRAFFIC and implemented in close collaboration with the Tanzania Forest Services Agency (TFS) and Forestry and Beekeeping Division (FBD) of the MNRT.

Summary of Expenditure

The budget of FORVAC for the whole Programme duration, 07/2018-07/2022, totals EUR 9,934,572 (TZS 26,823,344,393), of which EUR 8,778,096 (TZS 23,700,860,396; 88%), has been used by the end of the December 2021.

The total budget for the implementation (Operations and Management), excluding Technical Assistance (TA) costs, of the AWP 2021-2022 covers EUR 2,642,559 (TZS 7,134,910,100). The related expenditure in the middle of the planning period was EUR 1,409,428 (TZS 3,805,455,600), 53 % of the total Annual Budget for Operation and Management. A percentage of 62% of the Technical Assistance (TA) budget has realized by the end of 2021. The outstanding balance of the overall budget of the Programme, remaining to 22 July 2022, is EUR 1,430,244 (TZS 3,861,658,894).

Lessons learned, conclusions and recommendations

Based on the land use plans and production of the forest management plans, VLFRs are entering into timber harvest and sales. This process has been supported through specific timber trade events organized in Lindi and Ruvuma Clusters. Additionally, two community owned portable sawmills have commenced production.

Results of these activities seem promising: 3,993 m³ of timber, up to a total value of TZS 1,120,844,200 (EUR 448,338), was sold in Liwale Cluster during the reporting period by the end of 2021. The total volume sold and its value in the whole operational area of FORVAC (Lindi, Ruvuma and Tanga Clusters) are given below:

<i>Timber sold in total</i>	<i>Value, TZS</i>	<i>Value, EUR</i>	<i>Total number of buyers</i>
4,106 m ³	1,146,685,093	458,674	32

To reach more results and more efficiently support timber and other forest value chains, some findings and recommendations for the future are listed below.

The beekeepers FORVAC has supported are relatively small, produce low volumes of honey, and sell their honey in remote areas with hard access especially during a rainy season which does not attract buyers.

- 1) FORVAC requested Swahili Honey to identify potential collection centres in Mpwapwa and Handeni Districts. In Mpwapwa, Swahili Honey proposed a collection centre either in Gulwe village, since its location is central and transporting honey even through railway is easy, or in Mpwapwa town, as all necessary services like mobile money centres are available there and the distance to nearby villages is not long. In Handeni, Swahili Honey suggested to have a collection centre at Mkata town since it is near to almost all the villages and next to the main road. But in addition to Mkata, Swahili Honey is proposing to have a small collection centre in Gole village as it is a bit too far from Mkata. This collection centre would serve Gole and the nearby villages.

Recommendation: FORVAC will encourage beekeepers to establish honey collection centres to improve the market in the Districts. Bigger honey volumes in one place will attract more buyers.

- 2) During the Phase 1 of micro-business support in the Districts of Handeni, Liwale and Mbinga, the investment support came at the end of mentoring, which caused delays for implementation and problems in required training, also including user training related to supported machinery/equipment.

Recommendation: Procurement (e.g. equipment, machinery and gear), included in the investment support, has to be started early enough, in 3-4 months from the commencement of the Service Contract of the micro-business support.

- 3) Heavy requirements for data regarding the VLFR timber resource reduce financial viability of smaller or degraded VLFRs and cut profits from well stocked VLFRs.

The knowhow for producing reliable data on the existing timber resources is currently not existing at the District level, and highly skilled institutions must be consulted to meet the data requirements every five years (renewal period for the Forest Management Plans). This increases the costs of the planning phase. Due to a high price of inventories, smaller or degraded VLFRs, even if they had some resource, cannot start the timber business and earn funds for financing the patrols etc. needed to manage the area – the VLFR management would not be financially viable.

Recommendations: a) The data requirements could be reduced and the planning phase simplified; b) Consideration should be given to whether inventories could be totally left out and trust communities follow the minimum diameters and their willingness to not allow unsustainable cutting, in order conserve resources in future years. This can be combined with some finance for spot checks by DFOs and related bans from operations if inconsistencies are observed; and c) The requirements increase through certification. If the FSC certification is a

financially viable solution to a specific community, the community will invest in inventory to meet the FSC standards.

- 4) To increase private sector involvement in forest value chains, alternative identification/selection processes are required.

As per Output 1, FORVAC will increase private sector involvement in forest value chains. FORVAC has created a method of identifying potential market actors and developing a concept in cooperation with the private sector partner to increase the capacity of the communities to provide the needed quantities and quality of the product in question. Hence for now, support has been towards training costs, and in addition to the increased capacity, the anticipated result is a long-term relationship between the market actor and the communities. Instead of tendering out the training to the cheapest tenderer, it would be important to allow an alternative approach for FORVAC. The most important factors in selecting the partner should be presence in the area, or interest in extending the operations to the area. Only partners selected with these criteria can result in the second goal – long term partnerships. In forest value chains, potential partners filling the above-mentioned criteria are few or only one. There should be a consensus from the Competent Authorities, that the traditional tendering rules do not systematically apply for these community – private sector partnerships and that other ways and criteria for selection should be allowed.

Recommendation: Use partner identification as a valid method for establishing a partnership instead of requiring tendering for training services, when goal is to facilitate long-term partnerships between the community and the market actor.

Extension of the Programme to July 2024

In order to ensure a high standard of implementation and to increase the impact and sustainability of the intervention, the FORVAC mid-term evaluation, held in March-April 2021, recommended a two-year extension of the Programme to July 2024. During preparation of this Semi-Annual Progress Report 07-12/2021, the donor agency confirmed additional funding of EUR 4,200,000 for the extension. Part of this funding is intended to support the implementation of the Annual Workplan 2021-2022. To ensure adequate resources for the implementation of the Programme, for example to keep the Cluster Coordinators in place in the relevant Clusters until the end of the period covered by the Annual Workplan and the start of the extension phase, it is of the utmost importance to mobilize this funding timely, by April 2022 at the latest.

1 Introduction and the Programme description

1.1 Background

Forestry and Value Chains Development (FORVAC) is a 4-year Programme (7/2018 – 7/2022) funded by the Ministry for Foreign Affairs of Finland (MFA Finland) and implemented under the Ministry of Natural Resources and Tourism of Tanzania (MNRT). It contributes to increasing economic, social and environmental benefits from forests and woodlands. The expected outcome of the Programme is “Improved forest sector market / value chains contributing to sustainable forestry and forest-based livelihoods”.

The FORVAC builds on the activities, experiences and lessons learned from three bilateral programs in Tanzania financed by Finland: National Forest and Beekeeping Programme (NFBKP II, 2013–2016), Lindi and Mtwara Agribusiness Support (LIMAS, 2010–2016), and Private Forestry Programme (PFP 1, 2014–2019). NFBKP II and LIMAS have worked under the Community-Based Forest Management regime to advance sustainable forest management and generate income and employment to communities from declared Village Land Forest Reserves. Participatory Plantation Forestry Programme (PFP 2, 2019 – 2023) is working solely in plantation forests but, together with PFP 1, has created valuable experiences to share in value chain development, mobilization of rural communities for economic activities, and developing training and extension services for small-scale forest enterprises.

FORVAC focuses on forest value chain development based on production of timber, charcoal, and Non-Wood Forest Products (NWFP)/Non-Timber Forest Products (NTFP) in the Programme Districts and areas allocated there to local communities (CBFM within Village Land Forest Reserves). The Programme also supports the development of forest law enforcement, as it is relevant to the development of CBFM, and improvements of conditions for the trade of legally sourced timber, charcoal and other forest products originating from the project area. Legal and policy frameworks are improved and harmonized to guide and improve sustainable forest management and trade procedures.

1.2 Institutional framework

The Programme Competent Authorities (CAs) are the Ministry of Natural Resources and Tourism of Tanzania (MNRT) and the Ministry for Foreign Affairs of Finland (MFA). The Implementing Agency is the Forestry and Beekeeping Division (FBD) of the MNRT, and the Programme is carried out in close collaboration with the President's Office Regional Administration and Local Government (PO-RALG) District Authority, responsible for Village Land Forest Reserves (VLFR), and the Tanzanian Forest Services Agency (TFS). Communities have a main implementation responsibility together with Districts under the PO-RALG, and private sector entities and NGOs as service providers. VLFRs are managed by Village Natural Resource Committees (VNRCs), and they are accountable to the Village Councils.

The decision-making system of the Programme includes the Supervisory Board (SB), the Steering Committee (SC) and the Programme Management Team (PMT). At the local level, coordination is managed by the Cluster Coordinators (CCs) in the respective Regions/Clusters in cooperation with District Councils, through appointed officers, and Village Councils, through Village Natural Resource Committees (VNRC) at the village level.

Over the reporting period, the FORVAC field working area has been divided into three Clusters covering twelve (12) Districts as follows:

- Tanga Cluster: Handeni and Kilindi Districts in Tanga Region, Mpwapwa District located in Dodoma Region, and Kiteto District (Suledo Forest Community) in Maynyara Region;
- Lindi Cluster: Liwale, Ruangwa and Nachingwea Districts; and
- Ruvuma Cluster: Namtumbo, Tunduru, Songea, Mbinga and Nyasa Districts.



Figure 1. Map of FORVAC target areas.

1.3 Results framework

The FORVAC Results Framework is set out in the Programme Document. It is also presented in this paper as part of Annex 1 (Planning Matrix for Annual Targets), indicating results (Impact, Outcome and Outputs), related indicators, baselines, annual targets, end of Programme targets, means of verification and assumptions. Furthermore, the Programme Results are given below:

Impact: Increased economic, social and environmental benefits from forests and woodlands.

Outcome: Improved forest sector market / value chains contributing to sustainable forestry and forest-based livelihoods.

The outcome is achieved through the accomplishment of the following four outputs:

Output 1: Improved value chains and increased private sector involvement in the forest sector;

Output 2: Stakeholder capacity to implement and promote forestry value chain development enhanced;

Output 3: Functional extension, communication, monitoring systems and Management Information System in place; and

Output 4: Supportive legal and policy frameworks to forest value chain and sustainable forest management developed.

1.4 Annual Workplan 2021 – 2022 and the Semi-Annual Report 07-12/2021

Annual Workplan 2021 – 2022

The preparation of the Annual Workplan (July 2021 – June 2022) was carried out from the district level to the Cluster (Lindi, Ruvuma and Tanga) and the entire Programme levels. The Annual Workplan and Budget (AWP 2021 – 2022), also including Cluster workplans and a plan for the Programme coordination/PMT, was approved by the FORVAC Steering Committee on 14 June 2021. “Coordination/PMT” herewith refers to activities implemented under direct coordination of the FORVAC Programme Management Team (PMT). The annual targets set out during the planning process are presented in tabular form in Annex 1 (Planning matrix for annual targets) and Annex 2 (Workplan 7/2021 – 6/2022).

Semi-Annual Report 07-12/2021

The implementation of the above-discussed Workplan started on 1 July 2021. This document is a Semi-Annual Progress Report of the implementation over the period from 1 July 2021 to 31 December 2021. It presents the progress towards the achievement of the expected results (Impact, Outcome and Outputs) defined in the Programme Results Framework (Annex 1). Under Outputs, it also discusses implementation of the related activities. Moreover, it specifies resources and budget used during the reporting period as well as assumptions and risks. Furthermore, it briefly discusses sustainability and cross-cutting objectives of the intervention and findings and recommendations made based on the Programme implementation.

Extension of the Programme to July 2024

At the end of the reporting period, the two governments held negotiations to extend the FORVAC Programme implementation until July 2024. The final confirmation for this extension is expected to be available by March-April 2022.

2 Progress towards the achievement of the expected results

2.1 Impact – increased economic, social and environmental benefits from forests and woodlands

Operational area

By the end of the reporting period, FORVAC has operated in 122 villages, including Suledo Community Forest Reserve that covers 13 villages in Kiteto District. The operational coverage of the Programme is set out in Table 1 below, and a full village list by activities is given in Annex 3.

Table 1. Operational coverage of FORVAC in each District.

Cluster	District	Output 1 / Output Area 1.1:						Output 1 / Output Area 1.2:	Output 2 / Output Area 2.1:		Total No of Villages where FORVAC Operates
		VLUP by FORVAC		Established & Mobilized VLFRs by FORVAC		FMPs by FORVAC		Value Chain Development by FORVAC	Capacity Building at the Village Level by FORVAC	Support of Fund Raising Activities by FORVAC (VICOBAs & VSLAs)	
		Implemented	Ongoing	Implemented	Ongoing	Implemented	Ongoing				
		No of Villages									
RUVUMA	NAMTUMBO	6		6		1		4	7		8
	SONGEA	4		4		4		5	7		7
	MBINGA	6		6				7	7	7	7
	NYASA	4		3				4	15	4	15
	TUNDURU	1		1		3		3	4		4
LINDI	RUANGWA	5		5		5		5	10	4	11
	LIWALE	5		16		18		11	27	8	27
	NACHINGWEA	2		10		11		4	12	7	14
TANGA	HANDENI	2		2		3	1	5	5	1	5
	KILINDI	3		3		1		1	5	1	5
	MPWAPWA	3		3				6	3	1	6
	KITETO						13*		13*		13
Total No of Villages		41		59		46	14	55	115	33	122

* SULEDO Community Forest Reserve in Kiteto District covers 13 villages.

Herewith we describe progress taken (achievements) by FORVAC against Impact indicators given in the Planning Matrix for Annual Targets in Annex 1 of this document and further discussed in the Annual Workplan 2020 – 2021 (Annex 2). Impact level indicators and related achievements are set out in Table 2 below.

Table 2. Impact level indicators and achievements.

Indicators	Annual target 7/2021 – 6/2022	End of Programme target 7/2018 – 7/2022	Achievement (7/2021 – 12/2021)	Cumulative achievement since the beginning of the Programme
Increased household incomes derived from forests (Disaggregated by age, sex, disability)	Household incomes improved (progress measured during the endline study)	+15%	Household incomes improved (progress measured during the endline study).	
Less deforestation in the area where FORVAC works	Deforestation reduced	Deforestation significantly lower by the Programme end in the VLFRs where FORVAC works compared to other VLFRs of the Region	Additional forest reserve area under sustainable management through: <ul style="list-style-type: none"> 8 Forest Management Plans (FMPs) produced and approved at the District level, covering VLFR area of 45,487 ha in total. Additionally, 7 FMPs (58,201 ha) produced but waiting for District level approval. 	Additional forest reserve area under sustainable management through: <ul style="list-style-type: none"> 29 VLUPs produced and approved covering a total area of 444,242 ha and the VLFR area 123,462 ha. 16 VLFRs gazetted, 146,064 ha in total. 28 FMPs produced and approved at the Ministry level & 12 FMPs produced and approved at District

Indicators	Annual target 7/2021 – 6/2022	End of Programme target 7/2018 – 7/2022	Achievement (7/2021 – 12/2021)	Cumulative achievement since the beginning of the Programme
Less deforestation in the area where FORVAC works			<ul style="list-style-type: none"> Village Land Use Plans (VLUP) in 6 villages approved covering the land area of 140,382 ha and forest area of 47,523 ha. Additionally, 12 villages, with the forest area of 28,997 ha in total and total land area of 175,845 ha, waiting for approval. Gazettement of VLFRs is ongoing in 15 villages, 51,135 ha in total. 	level, covering a total VLFR area of 269,024 ha. 7 FMPs (58,201 ha) are waiting for District level approval.
Improved services for villages, e.g. water services, health services, RE solutions, village office	Services improved in FORVAC supported villages (progress measured during endline study)	Villager's opinions of the related services is improved during the project lifetime (disaggregated by sex, age and disability)	Impact assessment to be done towards the end of the Programme.	
VLFRs increased contribution to national level sustainable woodland and forest management	26 forest management plans produced; 90,000 ha	National target 2,4 million ha	<p>Village Land Use Plans (VLUP) in 6 villages approved covering the land area of 140,382 ha and forest area of 47,523 ha. Additionally, 12 villages, with the forest area of 28,997 ha in total and total land area of 175,845 ha, waiting for approval.</p> <p>Gazettement of VLFRs is ongoing in 15 villages, 51,135 ha in total.</p> <p>8 Forest Management Plans (FMPs) produced and approved at the District level, covering VLFR area of 45,487 ha in total. Additionally, 7 FMPs (58,201 ha) produced but waiting for District level approval.</p>	<p>123,462 ha of forests in 29 villages allocated to new VLFRs (VLUP covers a total land area of 444,242 ha). 16 VLFRs gazetted, 146,064 ha in total.</p> <p>28 FMPs produced and approved at the Ministry level & 12 FMPs produced and approved at District level, covering a total VLFR area of 269,024 ha. 7 FMPs (58,201 ha) are waiting for District level approval.</p>
Improved institutional support for the forest sector through regulations and legislation in place	<p>National Forest Act reviewed</p> <p>Kiswahili translation of Forest Act and Beekeeping Act 2021 produced and disseminated</p> <p>Forest Policy Implementation Strategy formulated and approved</p> <p>Charcoal Policy and Implementation Strategy approved and taken into use</p>	Supportive regulations and legislation revised for sustainable forest management by Programme end	Beekeeping Act No: 15 of 2005 translated into Swahili, Dec. 2021.	<p>Beekeeping Act No: 15 of 2005 translated into Swahili, Dec. 2021.</p> <p>Forest Act & regulations:</p> <ul style="list-style-type: none"> Needs Assessment Report submitted to the Attorney General. Draft of the Guidelines for Natural Forest Management produced. CBFM books reviewed and amended. 4500 pieces of reviewed CBFM books, printed to support VLFR management (10 different books). Charcoal Policy and Implementation Strategy: Report for 'Assessing Potential and Identifying Optimal Strategies for

Indicators	Annual target 7/2021 – 6/2022	End of Programme target 7/2018 – 7/2022	Achievement (7/2021 – 12/2021)	Cumulative achievement since the beginning of the Programme
Improved institutional support for the forest sector through regulations and legislation in place (continues)				<p>National Charcoal Sub-Sector Development in Tanzania finalized.</p> <p>Inception Report for Preparation of the National Charcoal Policy (NCP) developed by the Task Force and submitted to decision makers in September 2019.</p> <ul style="list-style-type: none"> • Beekeeping Research Master Plan developed and approved. • Stakeholders workshop by the MNRT/FBD to review the Forest Act No: 14 of 2002, Forestry Training Institute Olmotony, December 2020. Participants: Task Force members from FBD, Department of Legal Service (DLS) of the Ministry, and Tanzania Forest Service Agency (TFS), and stakeholder representatives from other Departments of the Ministry such as Policy and Planning, Wildlife and Tourism, 17 participants in total.

2.2 Outcome – improved forest sector value chains contributing to sustainable forestry and forest-based livelihoods

In a results framework, Impact refers to the higher-level development policy objectives. The direct Programme goals (outcomes) should contribute towards achieving this impact. Table 3 below indicates progress taken against Outcome indicators defined in the Programme. More narration follows in the context of the presentation of FORVAC Outputs in Section 2.3.

Table 3. Outcome level indicators and achievements.

Indicators	Annual target 7/2021 – 6/2022	End of Programme target 7/2018 – 7/2022	Achievement (7/2021 – 12/2021)	Cumulative achievement since the beginning of the Programme
Improved business environment in forestry sector related to - Taxes and royalties - Standards - Forest value chains	Kiswahili translation of Forest Act and Beekeeping Act 2021 produced and disseminated Forest Policy Implementation Strategy formulated and approved Charcoal Policy and Implementation Strategy approved and taken into use	Transparent and just system for levying taxes and royalties in place Construction/technical standard developed The number of forest value chains related regulations revised, benefit sharing modalities in use (the number to be defined during the course of FORVAC)	In partnership with TRAFFIC and implemented in close collaboration with the TFS and MNRT/FBD compilation of Tanzania Timber Legality Framework commenced in November 2020. On 8 December 2021, the technical consultative/ validation workshop of the Framework was held in Dar es Salaam. The Framework will be finalized in Jan.-Feb. 2022. 14 lesser-known species tested and draft final reports delivered to FORVAC. Miombo Timber Species Database and Catalog established, data input ongoing (Service Provision Contract). Beekeeping Act No: 15 of 2005 translated into Swahili, Dec. 2021.	In partnership with TRAFFIC and implemented in close collaboration with the TFS and MNRT/FBD compilation of Tanzania Timber Legality Framework commenced in November 2020. On 8 December 2021, the technical consultative/ validation workshop of the Framework was held in Dar es Salaam. The Framework will be finalized in Jan.-Feb. 2022. Identification and technical testing of lesser-known tree species done. Establishment of an open-access Miombo Timber Species Database (Service Provision Contract) ongoing: • 18 potentially valuable species identified. • Technical properties and commercial value/marketability analyzed for 14 species. • Miombo Timber Species Database established, data input continues. CBFM Annual Stakeholder Forum (over 300 participants) co-facilitated in December 2020.
Supporting functions/ Service provision for: - Improved market information system - Improved forest value chain financing - Enhancing capacities in value chain development	Beekeeping database established Forest sector businesses better linked with financing alternatives SUA offers a value chain development curricula	Market information system in place Forest sector businesses linked with financing alternatives Better functioning forest value chains in Tanzania benefitting forest sector and including participation of women and disadvantaged groups (data disaggregated by sex, age, disability) Value chain development included in the curricula of forestry training institutions	7 Village Saving and Loans Associations (VSLAs) established with 140 members (39M/101F) to facilitate financing through savings in Lindi Cluster. 4 forest value chain dev. related MSc studies (Dissertations) initiated within AWP 2020 – 2021, dissertations completed and the relevant students graduated in December 2021. Support to additional 2 forest value chain dev. related MSc	41 VSLAs & 19 VICOBAs formed with 1369 members to facilitate financing through savings (515M/854F) in Lindi, Tanga, and Ruvuma Clusters. Investment support and mentoring/training of 60 local micro-business initiatives through 49 producers groups and 11 individuals, 648 participants (409M/239F). BSc and MSc Curriculars for Forest Value Chain and Business Development formulated in SUA under

Indicators	Annual target 7/2021 – 6/2022	End of Programme target 7/2018 – 7/2022	Achievement (7/2021 – 12/2021)	Cumulative achievement since the beginning of the Programme
Supporting functions/ Service provision for: <ul style="list-style-type: none"> - Improved market information system - Improved forest value chain financing - Enhancing capacities in value chain development 			studies (Dissertations) to be commenced in January 2022.	FORVAC support during the AWP 2019 – 2020. MSc curricula approved by the Post-Graduate Committee in August 2020. The proposed curricula submitted to the University Senate of SUA for approval. The BSc curricula approved by the College of Forestry and Wildlife and Tourism (CFWT) board and is waiting an approval from the Post-Undergraduate Committee. 6 forest value chain dev. related MSc studies (Dissertations) supported within AWP 2019 – 2020 and 2020-2021, and the relevant students graduated timely. Support to additional 2 forest value chain dev. related MSc studies (Dissertations) to be commenced in January 2022.
Increased number of community producer groups and their members engaged in wood and NWFP harvesting, processing and marketing (per products/ district/ year, by sex, age and potential disability)	28 producers' groups established	70 groups of 30 women/ men; totaling 2100 members (figures to be revised on the basis of the baseline)	1 TGAs (Tree Growers' Association): 80 members (62M/18F) in Nyasa District. 4 Charcoal Making Groups (CMGs): 158 members (104M/54F) in Handeni District.	4 TGAs (Tree Growers' Association) and 1 Tree Growers' Group: 434 members (338M/96F) / 6 PLWD (3M/2F) in Nyasa District. 4 Charcoal Making Groups (CMGs): 158 members (104M/54F) in Handeni District. Natural wood production: VNRCs have been formed/ remobilized in 60 villages: 851 members (566M/285F). Micro-business support for 49 producer groups (28 beekeeping, 15 carpentry, 2 bamboo, 2 handicrafts and 2 cooking stoves), 637 beneficiaries (403M/234F, 1 primary and 19 secondary PLWD beneficiaries) in Handeni, Liwale, and Mbinga Districts. 13 beekeeping groups formulated and supported through Swahili Honey collaboration in Mpwapwa District: 134 members (91M/43F).
Social fund distribution from forest produce sales (e.g. school uniforms, school desks, dispensary building, benefitting vulnerable; by gender, age and	+15 %	+75 %	Impact assessment to be done towards the end of the Programme.	

Indicators	Annual target 7/2021 – 6/2022	End of Programme target 7/2018 – 7/2022	Achievement (7/2021 – 12/2021)	Cumulative achievement since the beginning of the Programme
disability) and number of people benefiting				
AAC - Annual Allowable Cut defined in harvesting plans, and logging done according to plans	15 % (to be adjusted against harvesting plans)	xx % increase	In the context of FORVAC supported Forest Management Planning, 8 timber harvesting plans for the AAC of 8,345 m ³ in total produced and approved. 27 villages with VLFRs sold timber a total of 4,106 m ³ with the value of TZS 1,1 milj. in Lindi, Ruvuma and Tanga Clusters.	In the context of FORVAC supported Forest Management Planning, 40 timber harvesting plans for the AAC of 76,064 m ³ in total produced and approved. <u>2021-2022:</u> 27 villages with VLFRs sold timber a total of 4,106 m ³ with the value of TZS 1,1 milj. in Lindi, Ruvuma and Tanga Clusters. <u>2020-2021:</u> Timber trade event for Lindi Cluster held in Ruangwa District in October 2020: 7 VLFRs involved, volume marked for sale 2,570 m ³ in total, value of TZS 1,016,733,740 (EUR 376,568). By the end of June 2021, 168 m ³ sold. Timber sale in Liwale District: 8 VLFRs involved, 703 m ³ sold (TZS 201,150,000)
Increased areas under sustainable forest management (CBFM)	90,000 ha	+ 60 % (additional 151,149 ha)	Additional forest reserve area under sustainable management through: <ul style="list-style-type: none"> 8 Forest Management Plans (FMPs) produced and approved at the District level, covering VLFR area of 45,487 ha in total. Additionally, 7 FMPs (58,201 ha) produced but waiting for District level approval. Village Land Use Plans (VLUP) in 6 villages approved covering the land area of 140,382 ha and forest area of 47,523 ha. Additionally, 12 villages, with the forest area of 28,997 ha in total and total land area of 175,845 ha, waiting for approval. Gazettement of VLFRs is ongoing in 15 villages, 51,135 ha in total. 	29 VLUPs produced and approved covering a total area of 444,242 ha and the VLFR area 123,462 ha. 16 VLFRs gazetted, 146,064 ha in total. 28 FMPs produced and approved at the Ministry level & 12 FMPs produced and approved at District level, covering a total VLFR area of 269,024 ha. 7 FMPs (58,201 ha) are waiting for District level approval. Formation and/ or re-mobilization of 60 VNRC through land use planning and CBFM activities.
Improved Forest Law enforcement and Governance system to replace trade of illegal	Progress taken in establishment of components of Forest	Key Forest Law enforcement and Governance system components in place	In partnership with TRAFFIC and implemented in close collaboration with the TFS and MNRT/FBD compilation of Tanzania Timber Legality	In partnership with TRAFFIC and implemented in close collaboration with the TFS and MNRT/FBD compilation of Tanzania Timber Legality

Indicators	Annual target 7/2021 – 6/2022	End of Programme target 7/2018 – 7/2022	Achievement (7/2021 – 12/2021)	Cumulative achievement since the beginning of the Programme
timber with legally produced timber	Law enforcement and Governance system		Framework commenced in November 2020. On 8 December 2021, the technical consultative/ validation workshop of the Framework was held in Dar es Salaam. The Framework will be finalized in Jan.-Feb. 2022.	Framework commenced in November 2020. On 8 December 2021, the technical consultative/ validation workshop of the Framework was held in Dar es Salaam. The Framework will be finalized in Jan.-Feb. 2022.

2.3 Implementation and achievements by Outputs

The FORVAC implementation takes place under four Outputs: i) Improved value chains and increased private sector involvement in the forest sector; ii) Stakeholder capacity to implement and promote forestry value chain development enhanced; iii) Functional extension, communication, monitoring systems and Management Information System in place; and iv) Supportive legal and policy frameworks to forest value chain and sustainable forest management developed. The following Sections describe activities conducted under these Outputs during the reporting period as well as achievements against the Programme Results Framework and related Indicators.

2.3.1 Output 1. Improved value chains and increased private sector involvement in the forest sector

Herewith we present FORVAC's achievements in relation to the indicators of Output 1 "Improved value chains and increased private sector involvement in the forest sector". The presentation covers the following Output areas (Interventions):

1.1 Establishment and mobilization of Village Land Forest Reserves (VLFR)

1.2 Support to value chain development

Indicators and achievements under Output 1 are set out in Table 4 below.

Table 4. Indicators and achievements under Output 1.

Indicators	Annual target 7/2021 – 6/2022	End of Programme target 7/2018 – 7/2022	Achievement (7/2021 – 6/2022)	Cumulative achievement since the beginning of the Programme
Number of VLFRs declared and operational, including village land use plans and forest management plans	26 VLFRs forest management & harvesting plans completed; 26 additional VLFRs declared and operational	85 VLFR functional (number of new VLFRs to be established 28) 52 VLUP	Additional forest reserve area under sustainable management through: <ul style="list-style-type: none"> 8 Forest Management Plans (FMPs) produced and approved at the District level, covering VLFR area of 45,487 ha in total. Additionally, 7 FMPs (58,201 ha) in Lindi and Ruvuma Clusters produced but waiting for District level approval. 12 FMPs in the area of SULEDO Community Forest prepared, waiting for approval by Kiteto District. Village Land Use Plans (VLUP) in 6 villages approved covering the land area of 140,382 ha and forest area of 47,523 ha. Additionally, 12 villages, with the forest area of 28,997 ha in total and total land area of 175,845 ha, waiting for approval. Gazettement of VLFRs is ongoing in 15 villages, 51,135 ha in total. 	29 VLUPs produced and approved covering a total area of 444,242 ha and the VLFR area 123,462 ha. 16 VLFRs gazetted, 146,064 ha in total. 28 FMPs produced and approved at the Ministry level & 12 FMPs produced and approved at District level, covering a total VLFR area of 269,024 ha. 7 FMPs (58,201 ha) are waiting for District level approval. Additionally, 12 FMPs in the area of SULEDO Community Forest prepared, waiting for approval by Kiteto District. Formation and/ or re-mobilization of 60 VNRC through land use planning and CBFM activities.

Indicators	Annual target 7/2021 – 6/2022	End of Programme target 7/2018 – 7/2022	Achievement (7/2021 – 6/2022)	Cumulative achievement since the beginning of the Programme
Number of forest harvesting contracts contributing to the timber value chain managed in VLFRs (species, volume sold and unit prices) villages/district /year	26 VLFRs harvesting plans completed 15 new harvesting contracts by June 2022	At least for 25 % of the VLFRs established during FORVAC +200%	In the context of FORVAC supported Forest Management Planning, 8 timber harvesting plans for the AAC of 8,345 m ³ in total produced and approved. 27 villages with VLFRs sold timber a total of 4,106 m ³ with the value of TZS 1,146,685,093 (appr. EUR 460,000) in Lindi, Ruvuma and Tanga Clusters. Timber sales contracts with 32 separate buyers in total.	In the context of FORVAC supported Forest Management Planning, 40 timber harvesting plans for the AAC of 76,064 m ³ in total produced and approved. <u>2021-2022:</u> 27 villages with VLFRs sold timber a total of 4,106 m ³ with the value of TZS 1,1 milj. in Lindi, Ruvuma and Tanga Clusters. Timber sales contracts with 32 separate buyers in total. <u>2020-2021:</u> Timber trade event for Lindi Cluster held in Ruangwa District in October 2020: 7 VLFRs involved, volume marked for for sale 2,570 m ³ in total, value of TZS 1,016,733,740 (EUR 376,568). By the end of June 2021, 168 m ³ sold. Timber sale in Liwale District: 8 VLFRs involved, 703 m ³ sold (TZS 201,150,000)
Lesser-known species with market potential identified and researched	Study completed	At least 10 with potential for market/business dev.	14 lesser-known timber species (LKTS) tested and draft final reports delivered to FORVAC. Miombo Timber Species Database, Catalog and Website established, data input ongoing (Service Provision Contract).	A set of lesser-known timber species are included in the forest inventory of the VLFRs by MCDI/FORVAC partnership. Marketing of LKTS commenced: Within AWP 2021-2022, 792 m ³ of timber from 7 lesser-known tree species sold with the value of TZS 144,000,000 in total. Identification and technical testing of lesser-known tree species done. Establishment of an open-access Miombo Timber Species Database and Website (Service Provision Contract) ongoing: <ul style="list-style-type: none"> • 18 potentially valuable species identified. • Technical properties and commercial value/marketability analyzed for 14 species. • Miombo Timber Species Database and Website established, data input continues.
Advocacy on lesser-known species	Miombo Timber Species Database and Catalog developed and market	At least 10 species of lesser-known species disseminated	Miombo Timber Species Database and Catalog/Website	Miombo Timber Species Database and Catalog

Indicators	Annual target 7/2021 – 6/2022	End of Programme target 7/2018 – 7/2022	Achievement (7/2021 – 6/2022)	Cumulative achievement since the beginning of the Programme
	information made accessible to potential buyers, VLFRs, district and central authorities and other relevant stakeholders		established, data input ongoing. Marketing of LKTS commenced: 792 m ³ of timber from 7 lesser-known tree species sold with the value of TZS 144,000,000 in total. 2 timber trade events held in Lindi and 1 event in Ruvuma Cluster also specifically promoting LKTS.	established, data input ongoing. Marketing of LKTS commenced: Within AWP 2021-2022, 792 m ³ of timber from 7 lesser-known tree species sold with the value of TZS 144,000,000 in total. Within AWP 2021-2022, 2 timber trade events held in Lindi and 1 event in Ruvuma Cluster also specifically promoting LKTS.
Honey producer or other NWFP/NTFP producer groups linked with traders and other value chain actors (by sex) and their income increased	10 producer groups linked with traders min. 30% memberships of women	+ 30% + 100% + 100% + 100%	Mushroom collectors from Mbinga and Songea Districts will be linked with a trader during harvesting season 2022 (identification and contracting of a private sector actor completed).	Mushroom collectors from Mbinga and Songea Districts will be linked with a trader during harvesting season 2022 (identification and contracting of a private sector actor completed). Investment support and mentoring/training of 60 local micro-business initiatives through 49 producers' groups and 11 individuals completed, 648 participants (409M/239F, 2 primary, and 19 secondary PLWD beneficiaries). 13 beekeeping groups established (91M/43F) and linked with a trader in Mwapwa. 12 beekeeping groups (89M/70F) linked with a trader in Handeni.
Increased efficiency of timber processing (e.g. use of efficient sawmills contra pit sawing)	4 mobile sawmills procured and made operational, and the broken sawmill of SULEDO in Kiteto district repaired 2 solar kilns procured, installed and taken into use in 2 of the FORVAC supported sawmills	5 – 10% increase	2 community-owned mobile sawmills (Norwood Lumber Pro HD36) are under procurement: <ul style="list-style-type: none"> Recovery rate of 60% attained by the high-efficiency community-owned mobile sawmills compared to 30% recovery rate attained by using traditional technologies and pit sawing. Operation of 2 sawmills procured within AWP 2020-2021 commenced: value of sawn timber in Jul.-Dec. 2021 TZS 26,500,250. 2 solar kilns (1 to Lindi and 1 to Ruvuma Cluster) are under procurement.	2 community-owned mobile sawmills (Norwood Lumber Pro HD36) established in Lindi and Ruvuma Clusters in 2020-2021. Operation of 2 sawmills procured within AWP 2020-2021 commenced: value of sawn timber in Jul.-Dec. 2021 TZS 26,500,250 Additionally, 2 more sawmills to Lindi Cluster are under procurement: <ul style="list-style-type: none"> Recovery rate of 60% attained by the high-efficiency community-owned mobile sawmills compared to 30% recovery rate attained by using traditional technologies and pit sawing.

Indicators	Annual target 7/2021 – 6/2022	End of Programme target 7/2018 – 7/2022	Achievement (7/2021 – 6/2022)	Cumulative achievement since the beginning of the Programme
				2 solar kilns (1 to Lindi and 1 to Ruvuma Cluster) are under procurement.
Number of new institutional arrangements / business models with market linkages (e.g. MoUs, joint ventures, PPP & other partnerships)	+ 3 – 5 new institutional arrangements/ business models with market linkages, including community owned and managed portable sawmills	10 – 15	<p>Establishment of organizations for 2 community-owned solar kilns has been started; 1 solar kiln for Lindi Cluster and 1 solar kiln for Ruvuma Cluster.</p> <p>Swahili Honey (Central Park Bees Ltd, honey trademark and exporter, bee wax producer) collaboration will be extended to Kilindi District at the beginning of 2022.</p> <p>4 Charcoal Makers Associations established in connection with formation of a model for intensified VLFR charcoal production in Handeni District.</p>	<p>Partnership with MCDI on long term presence for CBFM in Lindi (Districts of Liwale, Ruangwa and Nachingwea), Ruvuma Cluster (Districts of Songea, Namtumbo and Tunduru), and Tanga Cluster (Kiteto, Kilindi and Handeni Districts).</p> <p>Establishment of organizations for 2 community-owned solar kilns has been started; 1 solar kiln for Lindi Cluster and 1 solar kiln for Ruvuma Cluster.</p> <p>In 2020-2021, organizations established for community owned portable sawmills and sawn timber production for 1 sawmill in Lindi Cluster and 1 sawmill in Ruvuma Cluster.</p> <p>In 2021-2022, production and sale of sawn timber started.</p> <p>A model developed for piloting intensified charcoal production in VLFRs (2 VLFRs in Handeni District in Tanga Cluster), involving technical, financial and organizational (Charcoal Makers Associations) set-up and scientific studies.</p> <p>Swahili Honey (Central Park Bees Ltd, honey trademark and exporter, bee wax producer) connected with 25 beekeepers' groups from Mpwapa and Handeni Districts.</p>
Number of private business actors engaged in legal timber processing (per district/year) increased	At least +30% increase	+150%	<p>Timber sales contracts with 32 separate buyers in total facilitated, covering 27 villages (VLFR timber sold 4,106 m³ with a total value of TZS 1,146,685,093 (appr. EUR 460,000) in Lindi, Ruvuma and Tanga Clusters.</p> <p>Micro-business support Phase I (mentoring and investment support) completed involving 23 enterprises engaged in legal timber processing (carpentry 17 groups,</p>	<p>Timber sales contracts with 32 separate buyers in total facilitated covering 27 villages (VLFR timber sold 4,106 m³ with a total value of TZS 1,146,685,093 (appr. EUR 460,000) in Lindi, Ruvuma and Tanga Clusters.</p> <p>Through the FORVAC micro-business support, 23 participating enterprises engaged in legal timber processing (carpentry 17 groups, bamboo 4 groups,</p>

Indicators	Annual target 7/2021 – 6/2022	End of Programme target 7/2018 – 7/2022	Achievement (7/2021 – 6/2022)	Cumulative achievement since the beginning of the Programme
			bamboo 4 groups, and handicrafts 2 groups), 177 individuals.	and handicrafts 2 groups), 177 individuals. 41 carpenters have been trained and engaged on how to make modern beehives.
Increased employment (# of persons getting income) in harvesting and transportation, processing, pit sawing and saw milling; by gender.	+ 300 (15 % women)	+1000 people (at least 20 % women)	1012 (847M/165F) people have got temporary/part-time employment in forest harvesting and sawmilling related activities.	1012 (847M/165F) people have got temporary employment in forest harvesting and sawmilling related activities. Through the FORVAC micro-business support, 23 participating enterprises engaged in legal timber processing (carpentry 17 groups, bamboo 4 groups and handicrafts 2 groups), 177 (M152/F25) individuals. 41 carpenters (all men) have been trained and engaged on how to make modern beehives.
Total income from charcoal sales within FORVAC VLFRs	+20%	+200%	Impact assessment to be done towards the end of the Programme	
Reduction in annual illegal forest harvesting cases in FORVAC supported forests	<5 cases Establish Forest User Networks to report on illegalities Pilot illegality reporting dashboard Work on availability of legal timber via CBFM	10% of the respondents report illegal harvesting of timber	Forest management (and harvesting) planning supported by FORVAC produced the Annual Allowable Cut of 8,345 m ³ in total in 8 villages Lindi and Ruvuma Clusters (helps to control illegal logging). The all 4 community owned networks, established by MJUMITA within AWP 2020-2021, have been active and the platform, established to report illegalities in VLFRs, has been effective.	Forest management (and harvesting) planning supported by FORVAC has produced the Annual Allowable Cut of 76,064 m ³ in total in 40 villages in 3 Clusters in (helps to control illegal logging). Within AWP 2020-2021, MJUMITA established 4 new community-owned networks: 2 in Tanga Cluster (Handeni and Kilindi Districts) and 2 in Ruvuma Cluster (Namtumbo District). A total of 15 villages involved. Within AWP 2020-2021, MJUMITA established a platform for reporting illegalities in VLFRs in Ruvuma (4 villages) and Tanga (4 villages) Clusters.

2.3.1.1 Establishment and mobilization of Village Land Forest Reserves (VLFR), Output area 1.1

Even though a focus of FORVAC operations was shifted to development of timber, charcoal and non-wood forest products value chains during implementation of the previous AWP 2020-2021, the Programme continued support to establishment and mobilization of VLFRs during the first half of the AWP 07/2021-06/2022. The related activities covered production of Village Land Use Plans (VLUPs), Forest Management Plans (FMP) and Harvesting Plans (HP), and gazettement of selected VLFRs.

Cumulative results of the FORVAC support to establishment and mobilization of Village Land Forest Reserves (VLFR), from the beginning of the Programme implementation, are set out in Annex 4 and narrated below.

Land Use Planning (LUP)

During the reporting period, FORVAC continued to support the establishment and mobilization of Village Land Forest Reserves (VLFRs). The boundaries of VLFRs are defined during Village Land Use Planning. Field work of land use planning was completed in a total of additional 12 villages covering the land area of 175,845 ha and the forest reserve area of 28,997 ha. These VLUPs have been endorsed by the National Village Land Use Planning Commission (NLUPC) and are now waiting for approval from the relevant District Councils. Additionally, six (6) VLUPs were completed and approved, covering the land area of 140,382 ha and the forest area of 47,523 ha.

Gazettement of Village Land Forest Reserves (VLFRs)

Forest gazettement, a public notification at the national level through announcement by the Minister in the Government Gazette that a forest has been reserved, is not necessary for a VLFRs to be legally recognized. However, it guarantees a strong tenure for the related areas.

FORVAC supported gazettement of 16 VLFRs within the AWP 2020-2021. In September 2022, this gazettement was extended to 15 additional villages. In the end of the reporting period, the gazettement process was still ongoing in these villages (given in Table 5) and it is foreseen to be completed by the end of April 2022.

Table 5. List of selected VLFRs for gazettement in September 2021-April 2022.

Cluster	District	Village	Name of the declared Village Land Forest Reserve	Declared VLFR area, ha
Lindi Cluster	Liwale	1. Nahoro	Namai	1,028
		2. Litou	Mtamba	1,808
		3. Mihumo	Machemakale	8,691
		4. Ngongowe	Kwiga	6,488
		5. Ngunja	Nakawale	6,555
		6. Kibutuka	Kinyololo	5,654
		7. Mikuyu	Miwagiro	1,387
		8. Legezamwendo	Kindumbachajike	828
Tanga Cluster	Handeni	9. Gole	Gole	6,679
		10. Kitumbi	Kitumbi	7,728
		11. Mazingara	Majali Mkurumilo	1,385
		12. Kwamsundi	Kwekilingo	327
	Kilindi	13. Mkonde	Mbego	1,095
		14. Kwamwande	Matugusa	1,077
		15. Bandari	Pinguli	405
Total area (ha):				51,135

Forest Management Planning (FMP) and Annual Allowable Cut (AAC)

Table 6 summarizes a status of the FORVAC supported Village Land Use Plans (VLUP) and Forest Management Plans (FMP) that have been approved by relevant District Councils, also including Annual Allowable Cut (AAC), in the Programme target area by Clusters.

Table 6. Summary of approved Land Use Plans (VLUPs) and Forest Management Plans (FMPs) supported by FORVAC.

VLUP and FMP	Clusters			FORVAC Clusters in total
	Ruvuma	Lindi	Tanga	
Total number of villages with the FORVAC supported VLUP (by 12/2021)	11	10	7	28
Total VLFR area covered by the FORVAC supported VLUPs (by 12/2021), ha	35,664	69,722	18,076	123,462
Total land area covered by VLUP by 12/2021, ha	171,689	175,699	96,854	444,242
7/2021-12/2021: Forest management planning, number of villages covered	1	7	0	8
7/2021-12/2021: Forest management planning, area covered, ha	3,497	41,990	0	45,487
Harvesting plans, Annual Allowable Cut (AAC) generated by 12/2021 in total, m ³	11,711 m ³	62,402 m ³	1,952 m ³	76,065 m ³

During the reporting period, forest management planning was completed up to approval by relevant District Councils in eight (8) villages in total (Ruvuma and seven in Lindi Cluster). As given in Table 6 above, these approved Forest Management Plans (FMPs) cover a total VLFR area of 45,487 ha. Additionally, seven (7) villages, with VLFR area of 58,201 ha, are waiting for District level approval for their FMPs. A special case is Mazingara village in Handeni District in Tanga Cluster, where FORVAC is supporting the production of FMP for the charcoal pilot (discussed in the chapter 2.3.1.2.). Harvestable forest does not exist in the VLFR of Mazingara but charcoal production will start in 2022.

SULEDO Community Forest

In SULEDO Community Forest in Kiteto District (Tanga Cluster), FORVAC partnered with Mpingo Conservation & Development Initiative (MCDI), focusing mainly on production of the new Forest Management Plan for SULEDO, starting from the re-survey of forest boundaries to training of VC and VNRC members on CBFM practices and Participatory Forest Resource Assessment (PFRA) and implementation of this PFRA in the area. This process covered 13 villages given in Table 7.

Table 7. VLFR area per village in SULEDO Community Forest – approval of forest management plans (FMP).

#	Village Name	VLFR area, ha	FMP approved by Village General Assembly (VGA) meetings, July- December 2021
1	Mesera	5 569	√
2	Ndotoi	10 236	√
3	Aswamata	22219	√
4	Engang'uengare	5 735	√
5	Laiseri	192	√
6	Lengatei	1 109	√
7	Lesoiti	2 976	√
8	Loltepesi	12 219	√
9	Olgira	10 332	√
10	Olkitikiti	2 097	√
11	Zambia	709	√
12	Chang'ombe	60	√
13	Sunya	4 049	Field survey completed in Jan. 2022
Total		77 502 ha	12

The previous forest management plan for SULEDO Community Forest was drafted in 2009, and it was a ten-year plan. This plan expired in 2019, and FORVAC was asked to support production of a new plan. As the results of the planning process (Table 7 above) show, the forest area of SULEDO, initially 167,416 ha, has decreased significantly since its establishment in 1994 down to 77,502 ha. This has been mainly caused by encroachment of agriculture, cattle grazing, human settlement, and illegal logging. The FMP process supported by FORVAC confirms the current VLFR area to be 77,502 hectares, and the support also covers boundary demarcation to ensure that the boundaries of the community forest are visible to avoid future encroachments.

Annual Allowable Cut (AAC)

So far, the FORVAC supported Forest Management Plans (approved by relevant District Council and/or MNRT) have produced a total annual allowable cut (AAC) volume of **76,064 m³** in the Programme area. This logging quota is given per Clusters and relevant Districts in Table 8.

Table 8. Annual Allowable Cut (AAC) generated by the FORVAC supported and approved FMPs.

Cluster	Ruvuma Cluster	Lindi Cluster	Tanga Cluster	Total AAC generated
District	Namtumbo: 4,205 m³	Ruangwa: 3,537 m³	Handeni: 797 m³	76,065 m3
	Songea: 5,237 m³	Liwale: 46,343 m³	Kilindi: 1,155 m³	
	Tunduru: 2,269 m³	Nachingwea: 12,522 m³		
Total AAC:	11,711 m³	62,402 m³	1,952 m³	76,065 m3

Additionally, the twelve (12) new village level forest management plans approved at the village level define a total annual allowable cut of 8,730 m³ for SULEDO Community Forest Reserve as set out in Table 9 (results of Sunya village will slightly increase this volume early in 2022). It is expected that all the village level plans as well as the FMP for the entire SULEDO Community Forest will be approved by Kiteto District in February-March 2022.

If seven (7) FMPs, waiting for a District level approval in Lindi Cluster, and FMPs for twelve (12) villages of SULEDO Community Forest Reserve ready for approval from Kiteto District are taken into account, the annual harvesting quota (AAC) will increase to the level of 98,000 m³.

Table 9. Annual allowable cut (AAC) by major species in SULEDO Community Forest (2021).

#	Species	AAC (annual logging quota), m ³	Volume / Quota for timber harvest for 5 years, m ³
1	Mpingo	882	4,409
2	Msane	5,679	28,396
3	Mtondoro	1,203	6,014
4	Mninga jangwa	204	1,020
5	Mninga bonde	178	889
6	Msisimizi	185	925
7	Kilemelantembo	399	1,994
Total, m³		8,730	43,647

Patrolling and other field activities of VLFRs

In any forestry work, safe operations and occupational safety are important. FORVAC supported its beneficiaries with 432 uniforms, including strong leather boots and hats. The uniforms and shoes protect the members of the VNRCs while working in a forest but also help others to recognize the legal patrollers.

The uniform sets were targeted to 25 Village Natural Resource Committees (VNRCs), which have the approved Forest Management Plans (FMPs), and correspondingly distributed to the villages as follows:

1) Lindi Cluster	Ruangwa District	3 villages
	Nachingwea District	3 villages
	Liwale District	5 villages
2) Ruvuma Cluster	Songea District	4 villages
	Tunduru District	3 villages
	Namtumbo District	3 villages
3) Tanga Cluster	Handeni District	3 villages
	Kilindi District	1 village



Figure 2. Village Natural Resource Committee (VNRC) members of Barikiwa village with the new uniforms.

Motorbikes to VLFRs

The Village Land Forest Reserve (VLFR) areas are large and not always close to the villages. To help communities manage their forest reserves sustainably and effectively, FORVAC handed over motorbikes to VNRCs in October 2021. VLFRs in Ruvuma Cluster received two (2) motorbikes and in Lindi Cluster eight (8) motorbikes. Earlier, FORVAC had already provided 10 motorbikes to communities in Tanga, Lindi, and Ruvuma Clusters.

Motorbikes to district authorities

District authorities have an essential role in offering constant support to villages. FORVAC supported extension officers in its operational area to implement their duties better by handing over part of motorbikes to them to reach and visit villages. A total of 5 new motorbikes were provided in Ruvuma Cluster in October 2021, addition to 11 motorbikes that Districts in Tanga, Lindi, Ruvuma Clusters had received earlier. The motorbikes ensure that villages will get the necessary assistance timely.



Figure 3. Handing-over of FORVAC supported motorbikes in Lindi Cluster.

Establishment and gazettelement of bee reserves

Bee Reserve is an area of land administered and managed for the purpose of sustainable development of beekeeping and bee fodder resources. To ensure the sustainability of these resources, the National Beekeeping Policy of 1998 encourages the establishment and management of Bee Reserves. It emphasizes setting aside sufficient forest areas for the purpose of developing and managing honeybees as well as maximizing the production and utilization of bee products. The bees and bee fodder resources are at high risk due to illegal human activities such as livestock keeping, tree felling, mining, and crop cultivation. Hereby, FORVAC supported National Beekeeping Policy Implementation Strategy (2021- 2031) directs to gazette Bee Reserves with the area of 114,000 ha by June 2031.

During the reporting period, FORVAC started supporting the establishment of bee reserves in Tanga Cluster where forest reserves are degraded, and the establishment of Village Land Forest Reserves (VLFRs) is not financially viable. A total of five (5) villages were selected for the process as FORVAC has already supported four (4) of the villages to prepare Village Land Use Plans (VLUPs) and they had set aside an area for conservation. The fifth village is Kwamwande in Kilindi District which has an expired VLUP, but its VLFR area is so small that FORVAC has not supported the village with a new VLUP.

The field survey and mapping have been conducted already in all five (5) villages resulting in the bee reserve area of 5,059 ha in total as follows:

- | | |
|--|--|
| • Three (3) villages in Mpwapwa District | • Two (2) villages in Kilindi District |
| - Ikuyu 104 ha | - Mnkonde 190 ha |
| - Chiseyu 3951 ha | - Kwamwande 54 ha |
| - Chitemo 760 ha | |

The establishment of bee reserves will continue in 2022.

2.3.1.2. Support to value chain development, Output area 1.2

Timber harvest and sales

During the reporting period, timber harvesting and selling started in 27 FORVAC supported VLFRs (two villages in Ruvuma, 23 villages in Lindi, and 2 villages in Tanga Cluster). FORVAC, in partnership with MCDI, organized a specific timber trade event in Ruangwa in September 2021. During this event, 16 villages were supported to prepare and present their available timber stocks, especially the lesser-known tree species, to a total of 21 timber buyers. The forum also presented an opportunity for the stakeholders to share their challenges of timber trade in Lindi Cluster. The second timber trade event was incorporated with the Liwale District Investment Forum held in November 2021.

In Ruvuma Cluster, FORVAC partnering with MCDI organized a timber trade event in connection with the Majimaji Selebuka Festival held in Songea in July 2022. This event specifically focused on marketing of lesser-known timber species found in VLFRs.

These efforts seem successful: 3,993 m³ of timber, up to a total value of TZS 1,120,844,200 (EUR 448,338), was sold in Liwale Cluster by the end of 2021. The volumes are lower in the areas of Ruvuma and Tanga Clusters, together with Lindi Cluster still providing a remarkable volume and value for timber sold in these three clusters between July and December 2021. The related key numbers are given below with details set out in Table 10.

<i>Timber sold in total</i>	<i>Value, TZS</i>	<i>Value, EUR</i>	<i>Total number of buyers</i>
• 4,106 m ³	• 1,146,685,093	• 458,674	• 32

Table 10. Data of the sold timber by district and villages during July – December 2021.

Cluster	District	Village	Harvested timber volume (m³)	Revenue collected	
				TZS	EUR
Ruvuma	Songea	Litowa	13	3,770,000	1,508
		Ndongosi	6	1,726,250	691
SUB-TOTAL, RUVUMA CUSTER			19	5,496,250	2,199
Lindi	Ruangwa	Nandenje	159	38,320,000	15,328
		Nahanga	40	9,790,000	3,916
		Mchichili	36	10,740,000	4,296
		Lichwachwa	174	38,680,000	15,472
		Ng'au	70	20,300,000	8,120
	Sub-total, Ruangwa		479	117,830,000	47,132
	Liwale	Barikiwa	264	76,200,000	30,480
		Chimbuko	515	162,370,000	64,948
		Darajani	133	33,500,000	13,400
		Kibutuka	30	9,300,000	3,720
		Kitogoro	330	97,500,000	39,000
		Likombora	99	28,030,000	11,212
		Luwele	76	22,280,000	8,912
		Mihumo	260	54,150,000	21,660
		Mikunya	196	55,380,000	22,152
		Mikuyu	269	75,230,000	30,092
		Mtawatawa	339	95,600,600	38,240
		Mtungunyu	56	16,240,000	6,496
		Nahoro	104	31,338,600	12,535
		Nangano	235	70,750,000	28,300
		Nanjegeja	210	62,100,000	24,840
		Ngongowe	175	48,365,000	19,346
		Ngunja	92	26,980,000	10,792
		Turuki	130	37,700,000	15,080
	Sub-total, Liwale		3,513	1,003,014,200	401,206
SUB-TOTAL, LINDI CLUSTER			3,993	1,120,844,200	448,338

Cluster	District	Village	Harvested timber volume (m ³)	Revenue collected	
				TZS	EUR
Tanga	Kilindi	Mkonde	51	9,862,223	3,945
	Handeni	Gole	44	10,482,420	4,193
SUB-TOTAL, TANGA CLUSTER			94	20,344,643	8,138
TOTAL:			4,106	TZS 1,146,685,093	EUR 458,674

The timber sales taken place during July-December 2021 included a considerable volume of seven (7) lesser-known tree species with the following amount and value:

- Sold timber of lesser-known species: 792 m³
- Value: TZS 144,000,000

Establishment of community-owned mobile sawmills and solar timber drying kilns

FORVAC has been partnering with Mpingo Conservation & Development Initiative (MCDI) in supporting Community Based Forest Management (CBFM) since 2019. Currently, 32 villages in Lindi Region, 8 villages in Ruvuma Region and 17 villages, also involving villages of SULEDO Community Forest in Kiteto District in Tanga Cluster are being facilitated for CBFM value chain development. FORVAC and MCDI have set targets to improve forest-based income, livelihoods and environmental benefits deriving from CBFM. One strategy that the partners are pursuing to achieve this is to increase the income of the rural communities through value-added sawn timber production. To facilitate this, four portable sawmills, which are suitable for hardwoods processing, have been procured, three for Lindi Cluster and one for Ruvuma Cluster. Currently two of these sawmills are in operation, and shipment of the other two sawmills is underway. Additionally, procurement and set-up of two solar timber drying kilns is ongoing.

As given above, two portable community-owned sawmills started to operate during the reporting period. The first results of this sawmilling are presented in Table 11 below.

Table 11. Value of sawn timber produced by FORVAC supported community-owned portable sawmills by Dec. 2021.

Cluster	District	Villages	Sawn timber	Value, TZS
Lindi	Ruangwa	Nandenje	771 planks of Mninga and Mmule (lesser-known tree species)	21,504,000
Ruvuma	Songea	Litowa and Ndongosi	486 planks sawn timber	4,996,250
Total value, TZS				26,500,250

Box 1 – Community carpentry workshop for wood processing in Songea, Parangu Ward



During the reporting period and resulting from the FORVAC – MCDI partnership, Mpingo Conservation & Development Initiative established a community wood carpentry workshop in Parangu Ward of Songea District in Ruvuma Region. The investment of FORVAC in the community owned mobile sawmill has made this set-up possible. The two are closely connected and dependent on each other.

The CBFM villages will benefit from this rural carpentry workshop in many ways such as:

- Production of more value-added wood products such as school desks, doors etc. will increase with an improved market access for the end products, increasing demand for sawn timber from the VLFRs.
- Carpentry creates employment opportunities creation.

iii) The workshop will also be used as a training center to rural carpenters – local capacities for timber processing enhanced.

Some of the sawn timber produced from Litowa village supported by FORVAC were bought for the construction of the building, so Litowa village has already started benefitting from the carpentry.



Figure 4. Two community owned mobile sawmills started operations in Ruvuma and Lindi Clusters.

The mobile sawmills are fully owned by the villages through a signed agreement. Districts authorities will work alongside FORVAC/MCDI to oversee the operations and management of the sawmills. This strategy has already resulted in notable achievements in the villages where secondary processing has already started. It has been proven that investing in high-efficiency sawmills is more beneficial to VLFR, increases productivity and margin from the sale. Records show recovery rate of 60% attained by these sawmills compared to 30% recovery rate attained by using traditional technologies and pit sawing. In addition, economic gains are also achieved by increasing the value of one cubic meter of standing tree volume from TZS 260,000 to TZS 416,000 of sawn timber, equivalent to 60% increment. This secures improved income, employment, and livelihoods at community level as shown in Table 12 (Number of persons employed in forest harvesting and sawmilling related activities in the villages in 07-12/2021).

However, the mobile sawmills alone cannot completely resolve challenges related to the market access. This is because technical and environmental standards have become an important issue in high value timber markets especially for construction and furniture companies as well as eco-lodges, as one of main buyers. Therefore, the establishment of community-owned solar timber drying kilns for seasoning timber and adding value of timber processing is seen important.

FORVAC in partnership with MCDI commenced procurement of two environmentally friendly timber drying systems, to establish one of them in Ruangwa District in Lindi Region and one more in Songea District in Ruvuma Region. The shipment is on the way and establishment remains to first half of 2022. Like the mobile sawmills, the solar timber drying kilns will be owned by communities and all the operations are overseen by the District Authorities in partnership with FORVAC/MCDI.

In practice, the establishment of solar kilns for seasoning timber is well connected with the portable sawmills already supported by FORVAC. The solar kiln in Ruangwa in Lindi Region serves 19 villages of Ruangwa and Nachingwea Districts but also other nearby villages will have access to the kiln. Another solar kiln is located in Ruvuma Region serving nine (9) VLFRs in Namtumbo and Songea Districts. Sawn timber, which requires drying, will be transported from the villages to be seasoned in the kiln before transported to the buyers.

Timber harvest and sawmilling – employment opportunities

VNRCs are responsible for organizing and monitoring forest harvesting operations. During the reporting period, harvesting was conducted in two (2) villages in Ruvuma Cluster, 23 villages in Lindi Cluster, and in two (2) villages in Tanga Cluster. Harvesting, processing, and skidding logs to timber yards offered employment for 272 (262M/10F) people, monitoring of harvesting was conducted by 435 (305M/130F) VNRC members, transportation employed 163 (162M/1F) and sawmilling 142 (118M/24F) people.

At this stage the timber harvest and processing provide the following total number of employment opportunities:

<i>Total number of villagers employed</i>	<i>Male, total</i>	<i>Female, total</i>
1,012	847	165

VLFRs are often located far from the villages, therefore engaging people living with disabilities (PLWD) is difficult. The number of people employed in forest harvesting -related activities is presented per District and per village in Table 12.

Table 12. Number of persons employed in forest harvesting and sawmilling related activities in the villages (07-12/2021).

Cluster	District	Village	Harvesting, processing, and skidding logs to landing site			Monitoring of harvesting (done by VNRC)			Transportation			Sawmilling		
			M	F	Total	M	F	Total	M	F	Total	M	F	Total
Ruvuma	Songea	Litowa	10		10	5	3	8	9		9	29	13	42
		Ndongosi	17	7	24	5	3	8	8		8	15	7	22
Lindi	Ruangwa	Nandenje	5	1	6	8	8	16	6	1	7	2	1	3
		Nahanga	4	1	5	8	6	14	6		6	3	1	4
		Mchichili	3	1	4	15	3	18	6		6	2		2
		Lichwachwa	2		2	12	4	16	8		8	2		2
		Ng'au	4		4	10	6	16	5		5	6	2	8
	Liwale	Barikiwa	20		20	12	5	17	10		10			
		Chimbuko	12		12	12	5	17	6		6			
		Darajani	6		6	13	4	17	5		5			
		Kibutuka	10		10	12	5	17	6		6			
		Kitogoro	6		6	12	5	17	5		5	12		12
		Likombora	8		8	12	5	17	6		6			
		Luwele	8		8	12	5	17	6		6			
		Mihumo	16		16	12	5	17	6		6	4		4
		Mikunya	10		10	13	4	17	6		6	6		6
		Mikuyu	12		12	12	5	17	6		6			
		Mtawatawa	40		40	12	5	17	6		6	10		10
		Mtungunyu	12		12	12	5	17	5		5			
		Nahoro	6		6	12	5	17	5		5			
		Nangano	10		10	12	5	17	5		5			
		Nanjejeja	6		6	11	6	17	5		5			
		Ngongowe	18		18	12	5	17	5		5	10		10
		Ngunja	6		6	12	5	17	6		6	10		10
		Turuki	2		2	12	5	17	4		4			

Cluster	District	Village	Harvesting, processing, and skidding logs to landing site			Monitoring of harvesting (done by VNRC)			Transportation			Sawmilling		
			M	F	Total	M	F	Total	M	F	Total	M	F	Total
Tanga	Kilindi	Mkonde	5		5	13	5	18	5		5	3		3
	Handeni	Gole	4		4	12	3	15	6		6	4		4
Total			262	10	272	305	130	435	162	1	163	118	24	142

Micro-business support

When villagers benefit from the forests, they are more likely to conserve the natural resources nearby. FORVAC has seen it important to enhance household-level income from forests, also to reduce/prevent illegal forestry activities. For this purpose, the Programme has set up specific tools to develop local micro-businesses.

Phase I

FORVAC piloted a village-level forest related micro-business support model in three Districts, Handeni, Liwale and Mbinga, during AWP 2020-2021. The model included comprehensive business mentoring, technical support, and investment support, offering know-how and tools to make the businesses grow and succeed. A total of 60 businesses received this support.

The Phase I was concluded during the third quarter of 2021 when the last procurement was handed over and installed and the last technical support and mentoring delivered. The results of this micro-business support have been encouraging. They are summarized below:

- In Handeni and Liwale Districts, FORVAC has supported 17 carpentry businesses to certificate and register their businesses as forest produce dealers and traders. Some carpentry businesses have already received purchase orders by local governments for school furniture produced using timber harvested from VLFRs.
- In Handeni District, FORVAC has supported two (2) pottery businesses. These businesses have managed to improve the quality and increase quantity of produced energy-saving cooking stoves and found new markets out of their village. This has increased profitability of the businesses as well as income of households involved.
- FORVAC has supported 12 beekeeping groups in Handeni District, where the market demand was low, and beekeepers were struggling to sell honey. FORVAC introduced a private sector actor that trained group members on enhanced beekeeping techniques and offered market for honey. Within the first harvesting season, the supported beekeepers managed to sell 1,175 kg of comb honey with an approximate value of TZS 3,254,000.
- FORVAC trained carpenters to produce modern beehives in Liwale, Handeni, and Mbinga Districts. After training, these carpenters have received orders for 226 beehives, which they have already delivered.
- In Liwale District, FORVAC supported three (3) bamboo business groups selling raw bamboo for construction purposes. The groups have reached new markets from other villages and have increased their sale.
- In the Mbinga area, the two bamboo business groups had very limited capacity to produce more valuable end products, with sales prices ranging from 1,000 to 3,000 TZS only. FORVAC provided a comprehensive training in which the groups practiced furniture manufacturing, which they can now sell at up to 70,000 TZS.

Follow-up support, backstopping, and monitoring visits for these 60 businesses will continue, and more comprehensive achievements will be reported in FORVAC Annual Report 2021-2022.



Figure 5. Handing-over event for 20 FORVAC supported micro-businesses in Handeni District held in Tanga Region in July 2021. H.E. Marry Masanja, Deputy Minister of Natural Resources and Tourism, and H.E. Riitta Swan, Ambassador of Finland, handed over investment support (equipment, machinery and materials) for a total of 206 beneficiaries.



Figure 6. Bamboo businesses have been trained on furniture production in Mbinga District.

The lessons learned from Phase I of the micro-business support were previously discussed in the FORVAC Annual Report 2020-2021. These have been taken into use to improve the Phase II of business support. The call for business proposals was organized in November 2022. This time it was more thematic: only 1-3 of the

Phase II

A micro-business support Phase II has been planned to start in the beginning of 2022. It will be continuation for the forest-related business support scheme piloted in three FORVAC covered Districts (Handeni, Liwale, and Mbinga) in 2020-2021.

The support is now extended to six (6) additional Districts: Nyasa, Songea, Namtumbo and Tunduru Districts in Ruvuma Cluster; and Nachingwea and Ruangwa Districts in Lindi Cluster. Additionally, backstopping and monitoring visits will be organized to businesses supported during the Phase I.

most potential value chains (beekeeping/honey processing, bamboo, carpentry, wood carving, or tree nurseries) were opened for calls in each District, in accordance with the local conditions. The selection of supported value chains was done by District authorities with support from FORVAC. The identification of the most potential value chains was based on the following criteria:

- Villages with approved Forest Management Plans -> carpentry and beekeeping businesses
- Villages with approved FMPs and good availability of Mpingo timber species -> wood carving businesses
- Villages with teak plantation but without Village Land Forest Reserves -> teak nurseries and beekeeping businesses
- Villages with access to bamboo -> bamboo-related businesses

The micro-business support Phase II had two levels of call:

- The village level call: addressed to the existing businesses at the community/village level
- District level call: addressed to the advanced businesses at the District level. These businesses can offer markets for village-level businesses (off-takers).

This time, more weight was given to the field assessment of businesses (implemented by the FORVAC team in collaboration with relevant District authorities) to ensure the businesses are operational and applicants have sufficient capacity and expertise. The business selection process is further described in Annex 5.

FORVAC received a total of 185 proposals from the six Districts mentioned above. Finally, 65 of the most potential businesses were selected for the business support. During the evaluation, the aspect of supporting vulnerable groups and people living with disabilities (PLWD) was highlighted, and the selection criteria were adjusted for this purpose. Finally, two (2) individual businesses of entrepreneurs living with disabilities, and three (3) groups, which have a total of seven (7) members of PLWD, passed the criteria and were selected to receive the business support. Table 13 below summarizes the 28 group initiatives by value chains; 37 selected businesses run by individuals are given in Table 14.

The support will reach a total of 484 beneficiaries, of which 46% are women.

Table 13. Call for local business proposals - selected group initiatives per business area in each District.

District	Beekeeping				Carpentry				Bamboo				Carvings				Total			
	Groups	F	M	Tot.	Groups	F	M	Tot.	Groups	F	M	Tot.	Groups	F	M	Tot.	Groups	F	M	Tot.
Nyasa	7	118	36	154	0	0	0	0	0	0	0	0	0	0	0	0	7	118	36	154
Songea	7	47	83	130	0	0	0	0	2	10	6	16	1	0	6	6	10	57	95	152
Namtumbo	3	14	34	48	0	0	0	0	0	0	0	0	0	0	0	0	3	14	34	48
Tunduru	3	10	21	31	0	0	0	0	0	0	0	0	0	0	0	0	3	10	21	31
Nachingwea	2	5	27	32	0	0	0	0	0	0	0	0	0	0	0	0	2	5	27	32
Ruangwa	2	8	14	22	1	1	4	5	0	0	0	0	0	0	0	0	3	9	18	27
Total	24	202	215	417	1	1	4	5	2	10	6	16	1	0	6	6	28	213	231	444

Table 14. Call for local business proposals - selected individual business initiatives per business area in each Cluster.

District	Beekeeping				Carpentry				Bamboo				Tree nursery				Carvings				Total			
	Ind.	F	M	Tot.	Ind.	F	M	Tot.	Ind.	F	M	Tot.	Ind.	F	M	Tot.	Ind.	F	M	Tot.	Ind.	F	M	Tot.
Nyasa	10	1	9	10	0	0	0	0	0	0	0	0	3	2	1	3	0	0	0	0	13	3	10	13
Songea	5	1	4	5	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	6	1	5	6
Namtumbo	4*	2	3	5	2	0	2	2	1	0	1	1	0	0	0	0	0	0	0	0	8	2	6	8
Tunduru	2	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	2
Nachingwea	2*	2	2	4	3	0	3	3	0	0	0	0	0	0	0	0	1	0	1	1	6	2	6	8
Ruangwa	2	0	2	2	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
Total	25	7	21	28	7	0	7	7	1	0	1	1	3	2	1	3	1	0	1	1	37	9	31	40

The fieldwork and mentoring will start in each District during the first quarter of 2022. That time, around ten (10) more businesses will be identified for the support. The Terms of Reference (ToR) of the Phase II will be improved to emphasize the importance of inclusion of District authorities in the process as well as adequate focus on marketing and development of market linkages.

Improved honey value chain and increased private sector engagement

During the Phase I of the micro-business mentoring in 2020-2021, FORVAC with a service provider for the micro-business support (SEDIT) defined the biggest gaps in the honey value chain in Handeni District: non-existent market, low production and poor quality honey. To solve these gaps, FORVAC identified a private-sector actor, called Central Park Bees Limited (brand name Swahili Honey), which has a long-term interest in building the capacity of beekeepers and providing a market for honey and beeswax. FORVAC connected 25 beekeepers' groups from Handeni and Mpwapwa Districts with this market actor. Ideally, all group members would have been beekeepers, but as beekeeping was not very popular in the target villages in Mpwapwa District. Therefore, people with an interest in beekeeping were invited to form groups and attend training (only 20% of the trained people had earlier experience in beekeeping, mostly using local beehives, in Mpwapwa).

Nevertheless, Swahili Honey successfully trained the selected beekeepers in production-related issues (bee biology, hive management, active colonization, pests, technology and equipment, apiaries development, harvesting, and storage), provided some key gear (commercial hives, protective gear, and hive management/harvesting gear), and offered market. Additionally, the training sessions were open also to non-selected beekeepers to attend in Handeni District. The interest among beekeepers was good and a total of 19 (9M/10F) additional beekeepers, who were not under the FORVAC support scheme, also received training.

The cooperation resulted in increased yields, and during the first honey harvesting season, June – September 2021, the trained beekeepers sold 2088 kg of unprocessed comb honey with the value of TZS 5,782,000 to Swahili Honey. Selling to Swahili Honey was voluntary, but all the trainees who managed to produce honey during the reporting period (18 groups) and 21 other beekeepers' groups and individual beekeepers sold comb honey to Swahili Honey in Mpwapwa and Handeni Districts. The amount of comb honey the non-supported beekeepers sold was 2,568 kg with the value of TZS 7,111,000. In Table 15, the amounts of honey Swahili Honey purchased from the beekeepers are summarized per village.

Previously, the beekeepers were only depending on local beer-makers, and the market demand was low. Now, the new external market has offered them a chance to sell their honey in bulk at a lower price. This has encouraged also other beekeepers to improve the management of their existing hives and engage in honey production.

Table 15. The amounts of honey Swahili Honey purchased from beekeepers within June – September 2021 per village.

District	Village	Amount purchased (kg)	Number of beekeeping groups/individuals	Remarks
Handeni	Kwamsundi	941	8	Supported beekeepers
	Kitumbi	234	2	Supported beekeepers
	Palagwe	650	3	Non-supported beekeepers
	Kwankonje	130	1	Non-supported beekeepers
	Mkata	52	1	Non-supported beekeeper
	Kwamsundi	1,118	7	Non-supported beekeepers
Mpwapwa	Chitemo	598	5	Supported beekeepers
	Chitemo	156	1	Non-Supported beekeepers
	Chiseyu	315	3	Supported beekeepers
	Mpwapwa	150	4	Non-supported beekeepers
	Namba 30	130	2	Non-supported beekeepers
	Buhemero	130	1	Non-supported beekeepers
	Chang'ombe	52	1	Non-supported beekeeper
TOTAL		4,656	39	

Due to the positive results and feedback, the cooperation with Swahili Honey was extended to season 2022. The contractual issues of the Phase II were finalized at the end of 2021, and the fieldwork starts in the beginning of 2022. The Phase II will involve more beekeepers from Handeni and Mpwapwa Districts, and, in addition, Swahili Honey will start to operate also in Kilindi District. Phase II will focus on further increasing production volumes and is expected to lead to a long-term business relationship that will continue after FORVAC.

Moreover, FORVAC supported the formation/reactivation of a local beekeepers' association in Mpwapwa. The association is formed by 15 beekeepers' groups. The four (4) of these groups are from FORVAC supported villages. In Mpwapwa, interest in beekeeping is low, so in the Phase II, Swahili Honey will concentrate to collaborate with the beekeepers who are members of the association.

Box 2 – Increased honey production and reliable markets secure livelihood for beekeepers

Within implementation of the AWP 2020-2021, FORVAC linked beekeepers from Handeni and Mpwapwa Districts with Swahili Honey. The first harvesting season, when Swahili Honeys started procuring honey from these Districts, was between June-September 2021.

Swahili Honey offered the most reliable honey market for beekeepers. Earlier, the beekeepers were depending on local beer makers and some few individuals who bought low volumes. However, now they sold all their comb honey in a bulk at a price of TZS 72,000 per 26 kg bucket to Swahili Honey.

This reliable market inspired three (3) groups from Mpwapwa to invest in their business and they spontaneously procured a total of twenty (20) new beehives to increase their production volumes. Also, four (4) groups from Handeni procured 30 new hives without investment support from outside.



Figure 7. Beekeepers selling honey for Swahili Honey.

Developing a mushroom value chain

During the implementation of AWP 2020-2021, the mushroom value chain was identified to have market potential in Mbinga and Songea Districts in Ruvuma Cluster. Wild mushrooms offer one of the untapped revenue streams to forest adjacent communities. In addition, developing a wild mushroom value chain can have a significant impact on the most unprivileged community members, because typically wild mushroom collectors are some of the poorest in the forest communities and to large extent women.

The wild mushroom value chain in Tanzania is yet under-developed, with a tiny part of the public being aware of the usage of fresh and dry wild mushrooms. Wild mushrooms are currently purchased and consumed locally, and they are not widely considered a delicacy and healthy food. At present, there are not many off-takers in Tanzania for the wild mushrooms. However, FORVAC has identified a potential operator, Mamaland Mushroom Farms, to the conditions of Ruvuma Cluster. It has a long-term business interest in the area and existing market for the mushrooms.

Mamaland is a Tanzanian privately owned company founded in 2016. It has a market for dried *Cantharellus*, *Lactarius*, and *Russula* species, and it sold 1.4 tons of dried wild mushrooms in 2019/2020. In the future, Mamaland is interested in developing a procurement channel for fresh mushrooms, but during this pilot phase, it commits to procuring a minimum of half a ton of dried mushroom from the trained collectors in Ruvuma Cluster.

During AWP 2020-2021, in Mbinga District, FORVAC supported five female-led small-scale wild mushroom enterprises in the villages of Kindimba Chini and Amani Makoro as part of the micro-business support scheme. Additionally, Mamaland, together with FORVAC and District Council, will identify two of the most potential villages for mushroom value chain development in Songea District. In these four (4) selected villages, Mamaland will train and teach the wild mushroom collectors on what and how to collect, improve the drying know-how, and advise on packing and storing to preserve the quality after processing. In Songea, Mamaland will organize an open-to-all training, where anyone already involved in mushroom collecting will be invited. Mamaland will select the most potential collectors, emphasizing females and youth to be receivers of the collection-related gear. The selected people will also be joint owners of the demo driers which are built during the training.

Mamaland mushrooms provide a market for collectors, but the better quality of both fresh and dried wild mushrooms, combined with improved packaging, is likely to raise a higher price for them in existing markets in Mbinga and Songea as well. Cooperation with Mamaland will begin in early 2022.

Charcoal production model for VLFRs

In Tanzania, annual charcoal demand is 2.3 million tons, and it is increasing due to the growing population. Charcoal is currently mainly produced unsustainably, without any forest management system. The current pricing basing of the end-product does not encourage investing in technology to reach better recovery rates, resulting in huge volumes of biomass being burned to meet the market demand. Simultaneously small and degraded VLFRs struggle with finance, and due to lack of funds for monitoring, patrolling, and management of the area, they are suffering from deforestation, partly resulting from charcoal making.

During AWP 2020-2021, a model for intensified VLFR charcoal production, addressing these problems, was developed in FORVAC. TAFORI and SUA were identified as partners for running a pilot and further developing the model, and two pilot villages (Mazingara and Kwedikabu) were identified from Handeni District. The concept of the intensified charcoal production model in VLFRs is explained in Annex 6.

On 8 September 2021, an inception workshop for “Developing Intensified Charcoal Production Model for Conservation and Livelihoods Improvement” was held in Morogoro. Thereafter, an intensive implementation of the pilots started by organizing a series of awareness-raising meetings at different levels, most importantly in the selected villages. During Village Assembly meetings in the selected pilot villages, the charcoal model was introduced and interested villagers guided to establish Charcoal Making Groups (CMG). Based on the interest of villagers, two (2) CMGs were formed and registered in both pilot villages. Youth were considered while forming the groups, resulting in that two (2) “youth” groups, with members from 18- to 35-year-old, were formed. The four (4) groups involve a total of 158 (104M/54F) members. The more detailed information of the groups is presented in Table 16.

Table 16. Summary of the new formed Charcoal Making Groups in the two pilot villages in Tanga Cluster. The age group “youth” involves members between 18- to 35-year-old.

Village	Group name	M	F	Total	Age group	Average age
Kwedikabu	Nguvumali	37	23	60	Elders	51
	Songambebe	32	4	36	Youth	27
Mazingara	Mchakamchaka	31	12	43	Elders	46
	Matanuru	4	15	19	Youth	30
Total		104	54	158		

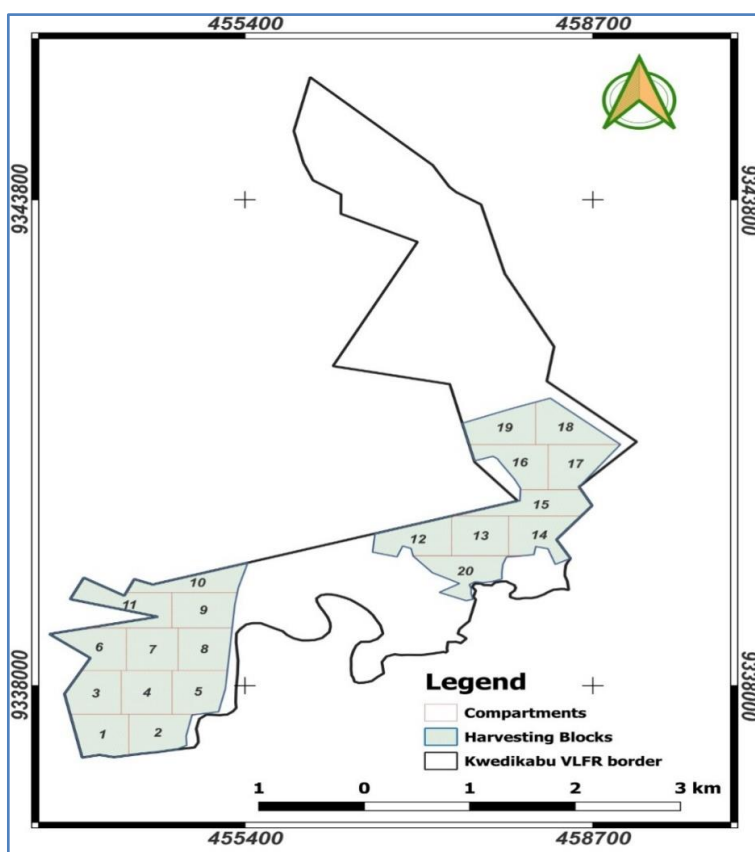


Figure 8. Map showing part of the Kwedikabu VLFR from where 15% of forest area is marked for charcoal production.

The establishment of a charcoal management unit (CMU) in the Village Land Forest Reserve (VLFR) requires updating forest management and harvesting plans. This work has progressed well in both of the pilot villages, and suitable degraded forest areas have been identified and marked in the forest as CMUs. The charcoal making will start in these management units during the first half of 2022. For this purpose, the charcoal production unit is divided into 20 harvesting blocs, of which one will be harvested annually during the coming 20 years.

The charcoal pilot also covers research on effective charcoal production. The topics that will be studied are:

- i) Effect of cutting length to regeneration rate;
- ii) Effect of moisture content on the recovery rate of charcoal burning from miombo timber;
- iii) Economic viability of the intensified VLFR charcoal production model.



Figure 9. Research team members and villagers working at the charcoal pilot to study the moisture content and its effect on the recovery rate.

The procedures and action taken so far are presented in more detail in Annex 7.

A conflict of land use interests took place in one of the piloting villages, Mazingara, in Handeni District. The conflict was resolved as presented in Textbox 3.

Box 3 – Conflict resolution of land-use interests

In Mazingara village, which is one of the selected charcoal pilot villages, the Programme faced challenges in different land-use interests. The research group, together with the village and District representatives, had identified a suitable area for a charcoal management unit from the existing Village Land Forest Reserve. The village leaders did not know about livestock keepers in the identified area, but the livestock keepers claimed that the area belongs to them even though livestock keeping in the VLFR is not allowed.

Finally, the challenge was resolved under the leadership of the District Commissioner, who after several meetings with the stakeholders (livestock keepers, Mazingara village leaders, and District Forest Officers), agreed to demarcate an area of 300 ha for livestock keepers and leave the remaining planned part of the VLFR (1085 ha) for the charcoal project. The demarcation was done on in December 2021.

Study of lesser-known timber species (LKTS) and establishment of the miombo timber species database

The Tanzanian timber market is dominated by a small number of commercially well-known timber species. The country has more than 700 indigenous wood species ranging from low to high densities and out of these species, only about 20 species of well-known tree species are utilized commercially, and often for purposes which other lesser-known but equally suitable and cheaper timber species could be used for. These cheaper species are lesser utilized because markets do not know them. Additionally, the properties and technical information of these lesser-known and lesser-utilized timber species are not always known and recorded, making it difficult to promote them to national and international markets.

This has resulted in over-concentration on a few well-known timber species, and consequently to overexploitation. If more is known about the properties of lesser-known and lesser-utilized timber species, some of these species could be found suitable and therefore reduce pressure on the well-known timber species, also contributing to the local economy, particularly to the Village Land Forest Reserves (VLFRs) with proper forest management plans.

To answer this problem, FORVAC has supported the Department of Forest Engineering and Wood Sciences of Sokoine University of Agriculture (SUA) to implement an important study to identify new valuable tree species (“Study of Lesser-Known Timber Species”) for utilization and to establish the related product catalogue to support the marketing of Tanzanian community timber from miombo forests.

In parallel with this lesser-known timber species study, also a Miombo Timber Database has been structured, and the data input, involving lesser-known species and already marketed timber species, has been commenced.

The field data collection and laboratory testing for the selected 14 lesser-known timber species (LKTS) were completed within AWP 2020-2021. During the ongoing work plan, the Department of Forest Engineering and Wood Sciences from SUA has continued formulation of the catalog for newly studied and already known miombo timber species and setting up a website to support their marketing. The study and its final reports, as well as the miombo timber species database and website (<https://www.miombotimbertanzania.or.tz/>), shall be launched in March 2022. The website will be the first of its kind in Tanzania as it introduces the technical properties, characteristics, and recommended uses for over 65 earlier studied miombo timber species as well as for the 14 newly studied species.

During the above-described process of the lesser-known timber species study and establishment of the Miombo Timber Species Database/Website, promotion and marketing of lesser-known timber species have already been commenced in the FORVAC Clusters as discussed in Section 2.3.1.2, resulting in sales of the following volume and value of sold timber:

- Volume of seven (7) lesser-known tree species (species such as Msufipori, Mtondoro, Mmula, Mchenga, Mnjiligiwi, and Mkarati) sold: 792 m³.
- Total value of lesser-known timber species sales in July – December 2022: TZS 144,000,000.

Additionally orders from several local governments have been requested and received (e.g. for the VLFRs of Litowa, Ndongosi and Muhukulu-lilahi villages in Songea District).

Teak planting in Nyasa District

FORVAC has continued the work the Private Forestry Programme (PFP 1, 2014–2019) started in Nyasa District by encouraging individuals to establish woodlots. In August 2021, weeding was implemented for a total of 74 ha of planted teak woodlots in Liuli village. These woodlots were planted in early 2021. In the other villages, woodlots' owners did circular weeding and established fire breaks around the woodlots.

During the planting season 2022, Liuli, Lipingo, Mkali A and Mkali B villages in Nyasa District established teak plots under the FORVAC support. For the planting season 2022, the plantation area will be extended to one more village, namely Nkalach. Preparations for the teak planting for the 2022 planting season have started. 203 people have registered to plant a total of 100 ha of teak in the five (5) villages. These villages, with a number of woodlot owners and area to be planted, are presented in Table 17 below.

Table 17. Summary of the planting area and number of people/woodlot owners (M/F) who will plant teak in 2022 per village.

#	Village name	# of people	Male	Female	Planting area (ha)
1	Liuli	25	15	10	10
2	Lipingo	33	21	12	15
3	Mkali A	30	25	5	10
4	Mkali B	35	27	8	30
5	Nkalachi	80	62	18	35
TOTAL		203	150	53	100

The plantation activities (land preparation, planting, weeding etc.) in Nyasa District involve the following groups with a total of 434 members (338M/96F) including 6 persons living with a disability, as follows:

- Tree Growers Associations (TGAs) established under the FORVAC support and further supported during the reporting period:
 - Liuli village, 125 members (89M/36F)
 - Lipingo village, 84 members (64M/20F)
 - Mkali A village, 99 members (84M/15F)
 - Nkalachi village, 80 members (62M/18F)
- Tree Growers Group of Mkali B, 46 members (39M/7F)

At this stage, planting material (teak stump) comes from a nursery managed by TFS in Songea District. However, in micro-business support Phase II, FORVAC will support the development of private tree nurseries in Nyasa District. These nurseries will offer the saplings in the coming years. Additionally, agro-forestry shall be applied to the areas of 2022 planting season. Results of this activity will be reported in the Annual Report 07/2021-06/2022.

2.3.2 Output 2. Stakeholder capacity to implement and promote forestry value chain development enhanced

In this Section, we present FORVAC's achievements in relation to the indicators of Output 2 "Stakeholder capacity to implement and promote forestry value chain development enhanced". The presentation covers the following Output areas (Interventions):

- 2.1 Improved institutional and management capacities of Village Councils and VNRC to implement CBFM and develop forest value chains;
- 2.2 Improved capacities to support and monitor CBFM/forest and related value chains and incorporating HRBA aspects; and
- 2.3 Forest products value chain/market systems and business development skills incorporated in relevant training institutes.

Indicators and achievements of Output 2 are set out in Table 18 below.

Table 18. Indicators and achievements under Output 2.

Indicators	Annual target 7/2021 – 6/2022	End of Programme target 7/2018 – 7/2022	Achievement (7/2021 – 6/2022)	Cumulative achievement since the beginning of the Programme
Number of government staff trained in forest management and value addition techniques, disaggregated by sex (inclusive VETA training programme)	120 district officers (10 officers in each Programme district) 22 regional and central government officers 20% women	Defined in TNA	96 (74M/22F) District Officers. 35 (27M/8F) Regional & central government officers. 23% women.	920 (713M/217F) District officers. 61 (47M/14F) Regional & central government officers. Training and events: - CBFM Annual Stakeholder Forum - International Scientific Conference - Forest inventory planning, implementations and inventory data analysis - Forest value chains - CBFM techniques
Number of individuals trained in forest management and value addition techniques, disaggregated by sex, age and disability/ by category (village level, SMEs, service providers)	3400 village leaders (85 villages: 20 Village Councils + 20 VNRCs) 300 MSME employees, at least 20% women 20 staff members of Service Providers	Defined in TNA	1,778 (1194M/584F)* village leaders 59 SME individuals/employees (36M/23F) and 25 SMEs * Cumulative total participation in different training events: -Business planning -Forest value chains -CBFM techniques	8,895 (6,086M/3,466F) village leaders in 122 villages* 1060 individuals (612M/389F) and 158 SMEs 399 (317M/82F) tree growers trained on tree planting and plantation management. 21 staff members of service providers. * Cumulative total participation in different training events: - Business planning - Forest value chains - CBFM techniques

Indicators	Annual target 7/2021 – 6/2022	End of Programme target 7/2018 – 7/2022	Achievement (7/2021 – 6/2022)	Cumulative achievement since the beginning of the Programme
Value chain related efficiency in decision making and in administrative procedures increased	Steps taken to improve efficiency of value chain development related decision making and administrative procedures, average time for getting permits reducing	Average time for getting permits reduced procedures simplified	Addressed in 2022	n/a
Forest value chain development incorporated in University and FTI/FITI curricula	SUA offers a VCD curricula	Curricula developed and in use Issues of gender, age and disability considered in learning materials	MSc curricula remain waiting for approval by the University Senate of SUA.	BSc and MSc Curriculars for Forest Value Chain and Business Development formulated in SUA under FORVAC support during the AWP 2019 – 2020. MSc curricula approved by the Post-Graduate Committee in August 2020. The proposed curricula submitted to the University Senate of SUA for approval. The BSc curricula approved by the Collage of Forestry and Wildlife and Tourism (CFWT) board and is waiting an approval from the Post-Undergraduate Committee.

2.3.2.1 Improved institutional and management capacities of Village Councils and VNRC to implement CBFM and develop forest value chains, Output area 2.1

Community level training under MCDI partnership

Mpingo Conservation and Development Initiative (MCDI) is facilitating varied community-level training in a total of 61 villages under the FORVAC support. The key task of MCDI is to improve the capacity and competence of VCs and VNRCs to sustainably manage their VLFRs. Besides village representatives, MCDI collaborates closely with Regional Authorities, District Forest Officers, and TFS.

Results of the partnership between FORVAC and MCDI has been discussed in various places earlier in this report. As a facilitator in the context of improved institutional and management capacities of VNRCs, MCDI has, during the reporting period, supported VNRCs to reach financial autonomy through village timber business planning, and to make timber sales contract with buyers. In the context of value chain development, MCDI has trained members of VNRCs on management of community-owned sawmills, air drying, logs and sawn timber measurements, volume calculation, and harvesting supervision. End of the training, MCDI has organized an exam for participants and those with the highest marks have qualified to be selected as harvesting supervisors of the VNRCs.

During the reporting year, MCDI has engaged 934 members of VNRCs/VCs in various trainings as follows (subject, location, participation):

- Lindi Cluster:
 - Harvesting supervision, efficient and safe harvesting practices, 3 villages in Nachingwea, 5 villages in Liwale, 3 villages in Ruangwa, 369 (258M/111F)
 - Logs and sawn timber measurements and volume calculation, 1 village in Ruangwa, 30 (17M/13F)
 - First aid, 1 village in Ruangwa, 2 (2M)
- Ruvuma Cluster:
 - Efficient and safe harvesting practices, 4 villages in Songea, 180 (126M/54F)
 - Logs and sawn timber measurements and volume calculation, 2 villages in Songea, 68 (42M/26F)
 - Harvesting supervision, 2 villages in Songea, 33 (22M/11F)
 - Sawn timber air drying, 1 village in Songea, 35 (25M/10F)
- Tanga Cluster:
 - Quota management and harvesting record keeping, 3 villages in Handeni, 91 (58M/33F)
 - Development of timber Business Plans, 1 village in Kilindi, 3 villages in Handeni, 126 (82M/44F)

A total number of participants of the VNRC/VC training: 934 (632M/302F).

MJUMITA partnership

During the Annual Workplan (AWP) 2020-2021, FORVAC collaborated with Mtandao wa Jamii wa Usimamizi wa Misitani Tanzania (MJUMITA), also known as the Community Forest Conservation Network of Tanzania, to establish four (4) new community-owned networks in 15 villages where FORVAC operates in Handeni and Kilindi Districts in Tanga Cluster and Namtumbo District in Ruvuma Cluster. MJUMITA has established local networks across the country, and they have been very active in undertaking advocacy activities at the local level, addressing forest crimes and deficiencies of village forest management. During the reporting period, the FORVAC supported networks have concentrated to create awareness of the local communities on forest conservation through their Village General Assemblies. The aim has been to educate the community members to stop clearing the forest reserves for farming purposes. The networks have also activated villages to organize patrolling in VLFRs.

Annual Forum

As part of the establishment of the four Community Forest Conservation Networks, MJUMITA utilized a platform developed in 2011 and set up illegal logging platform for reporting illegalities occurring in VLFRs for relevant government authorities. All the networks took the platform for active use already within AWP 2020-2021. During the reporting period, the platform has helped the villages to report the illegalities and get fines after catching the culprits. Textbox 4 introduces a couple of examples of how the platform has been utilized.

Box 4 – Samples of the activities of Community Forest Conservation Networks in Tanga Cluster

1. On 28 December 2021, the MJUMITA network in Handeni District reported to the Gole village office about pastoralism activities occurring in their VLFR. After this incident, the pastoralist was penalized, and he had to pay a fine of TZS 700,000 to the village council. Eventually, the fund was deposited to the VNRC's account.
2. Mbwengo Forest Reserve, which is under the management of Nkonde village in Kilindi District, has faced illegal farming and pastoralism. On 23 October 2021, the HIMISA network members reported two crimes to the village office. After reporting the crimes, the network members collaborated with the forest patrolling team to patrol the forest and succeeded to evict all pastoralists and farmers from the forest reserve.



Figure 10. FORVAC Tanga Cluster Coordinator, Petro Masolwa, having presentation on forest value chain development.

As during the previous AWP, FORVAC supported MJUMITA to implement the MJUMITA Annual Forum, held in Morogoro on 25 November 2021. The forum focused on highlighting the importance of forest restoration and conservation through sustainable forest management and mitigation and adaption to climate change. Discussed topics included issues such as natural regeneration in miombo and coastal forests, tree planting and agroforestry techniques, and forest products value chain development for improving livelihoods and forest conservation.

The workshop brought together 153 participants (104M/49F), of which 113 (76M/37F) re-presented the local communities from the areas where MJUMITA networks are active, including participants also from the three FORVAC Districts (Handeni, Kilindi, and Namtumbo). The total budget of the Annual Forum was TZS 47,435,000, of which TZS 12,000,000 was financed by FORVAC. Other donors were MJUMITA, WWF, and the FAO/FFF project.

Training of VLFR communities by Local Government Agencies (LGAs)

FORVAC supports Districts to offer necessary capacity building and training to communities with VLFRs. These trainings include financial management and business planning, First Aid, patrolling and fire control. Tanzanian Forest Service Agency (TFS) participates in organizing part of the relevant events. In Lindi Cluster, District staff also supports community members to establish micro-saving groups.

Financial management and laws and regulations related to forest value chain development

FORVAC has supported District staff to organize financial training for the VLFR communities. During the reporting period, the training was organized in four (4) villages in Songea District in November 2021 and in three (4) villages in Handen District during August – September 2021. The members of the Village Natural Resource Committees (VNRCs) participated in the training that covered feasibility calculations, business planning, financial transactions, and record keeping. The training offered knowledge for the VNRCs required to manage VLFRs financially sustainably.

District staff also trained ten (10) villages in Ruvuma Cluster (Songea District 4; Namtumbo 3; and Tunduru 3 villages) in Ruvuma Cluster on laws and regulations related to forest value chain development.

First Aid training

Nandenje village in Ruangwa District was among the villages that started logging and sawmilling operations within the reporting period. Hereby, the Programme trained two (2) Village Natural Resource Committee (VNRC) members on First Aid and purchased two (2) First Aid Kits in October 2021. It is of utmost importance to have first aid at present when the need comes. Therefore, the Nandenje village government, as well as all other villages in Lindi and Tanga Clusters having FORVAC supported Forest Management Plans, have budgeted First Aid Kits and services in their annual work plans.

Forest patrolling and fire management

During the dry season, forest fires are common, and they cause challenges in managing forests. FORVAC has organized training for the members of Village Natural Resource Committees (VNRCs) on forest fire control. Topics covered during the training were causes of forest fire and how to combat them by eliminating one of three elements of the fire triangle: heat, fuel, or oxygen. The training included also lessons on how to offer first aid to a person who has been injured by the fire as well as forest patrolling.

In Tanga Cluster, the training was organized in one village in Handeni District and in one village in Kilindi District in August-September 2021, and in two villages in Handeni District in December 2021. In Ruvuma Cluster, the training was organized in all five (5) Districts (Songea, Tunduru, Namtumbo, Mbinga, and Nyasa), and a total of 31 villages attended training in September 2021.

As a result of the forest patrolling and fire management training, a total of four (4) villages in Nyasa District managed to establish fire breaks around their woodlots. Additionally, some TGA members conducted circular weeding to the planted trees and slashing to reduce risks in case of a wildfire outbreak. In Kilindi District, a trained village has started to patrol their Village Land Forest Reserve (VLFR) twice a week and they have several informers who will let the VNRC know if any illegal activity occurs in the forest. The VNRC has noticed that the control of pastoralists remains to be a major challenge during the dry season since good pastures and water are often found in the VLFR. In November 2021, a total of three (3) pastoralists were arrested in the reserve, and they were fined TZS 40,000 of each.

Box 5 – Combating fire with the fire beaters

The District Forest Officer of Kilindi (Mr. Lawrence Lema) has designed and fabricated fire beaters by using used car tires. During the practical training, the participants were guided to make this type of fire beaters. The fire beaters were then proved to be more effective in the fight against forest fires compared to using tree branches. They also are cheaper than those sold in hardware stores.

Forest Officers from Handeni District have shown interest in using similar fire beaters. Therefore, one fire beater was sent to the Handeni District where a local carpentry workshop will start to fabricate them for the villages in Handeni



Figure 11. VNRC members in Mnkonde village in Kilindi District practicing fire control.

Some of the villages are still struggling to organize patrolling and fire management due to a lack of funds. However, the situation will be better in the near future, when the villages have started timber selling and they get money to buy required equipment and organize transportation. Also, the gazettement of VLFRs, that FORVAC funds, will support patrolling activities as it will prove villages' ownership on the VLFRs. For example, if a VNRC arrests an encroacher and takes the case to the court, it must prove the ownership of the forest reserve by showing the gazettement statement.

Establishment of micro-saving groups

FORVAC started supporting the establishment of Village Savings and Loan Associations (VSLAs) and Village Community Banks (VICOBAs) during the AWP 2019-2020. This type of village-level support has been valuable because it offers possibilities for rural people to get a loan at an affordable interest rate to help them finance business growth and at the same time improve rural livelihoods. This way, VSLAs help villagers increase forest-based business activities in their communities.

During the reporting period, FORVAC has supported establishment of four (4) VSLAs in Nachingwea District and three (3) VSLAs in Ruangwa District in Lindi Cluster. Table 19 gives information about the memberships of these groups.

Table 19. Summary of the established VSLAs in Lindi Cluster in July-December 2021.

District	No. of VSLAs	Female	Men	No. of members
Nachingwea	4	52	28	80
Ruangwa	3	49	11	60
TOTAL	7	101	39	140

The establishment of saving groups was facilitated by the District staff. District staff started by introductory meetings with VC members, which after Village Assembly meetings were organized and facilitated in every village. Interested community members were identified and registered during these meetings. Finally, a total of 20 VSLA members were registered for each group. This was followed by training to the VSLA members. FORVAC also supported the groups with basic start-up packages. Towards the end of the training, every group was tasked to organize and facilitate the first saving meeting. The task was successfully completed with minimal technical support from District staff, which indicates that the training is well understood.

2.3.2.2 Improved capacities to support and monitor CBFM/forest and related value chains incorporating HRBA aspect, Output area 2.2

District level capacity building

Local government agencies in the Districts participate in the implementation of FORVAC supported activities nearly daily, also learning by doing. Additionally, specific training is addressed to them as part of LUP, FMP, and value chain development. End of the year 2020, the Programme organized a training workshop for District staff from Ruangwa, Liwale, and Nachingwea dealing with Forest Management Planning (FMP) to improve their skills and knowledge (capacity) on forest inventory planning, implementation, and inventory data analysis. In September 2021, the follow-up training for the same District representatives was organized in a specific focus on forest inventory data entry, verifying, and analysis by using the MCDI – PFRA tool.

After these two workshops, the participants now have a wide range of tools to apply when undertaking PFRA exercises. The training is part of the Programme's strategy to ensure the sustainability of the CBFM interventions beyond the Programme timeframe.

The number of District staff who have been trained by MCDI and are competent in using the MCDI PFRA tool are listed below.

- Lindi Cluster:
 - Liwale, Nachingwea and Ruangwa Districts, 18 (13M/5F)
- Ruvuma Cluster:
 - Tunduru District, 10 (7M/3F)
- Tanga Cluster:
 - Kiteto District, 5 (4M/1F)

A number of participants of this PFRA training by MCDI totals 33 (24M/9F).

2.3.2.3 Forest products value chain/market systems and business development skills incorporated in relevant training institutes, Output area 2.3

MSc and BSc curriculars for forest value chain and business development and support to MSc dissertations

Starting from the beginning of the Programme, FORVAC has cooperated with the College of Forestry, Wildlife and Tourism (CFWT) of Sokoine University of Agriculture (SUA) from Morogoro. MSc and BSc curriculars for Forest Value Chain and Business Development were formulated in SUA under FORVAC support during the AWP 2019 – 2020. The MSc curricula was approved by the Post-Graduate Committee in August 2020. Thereafter, the proposed MSc curricula has been submitted to the University Senate of SUA for approval. The BSc curricula has been so far approved by the Collage of Forestry and Wildlife and Tourism (CFWT) Board and is waiting an approval from the Post-Undergraduate Committee. Political will among SUA decision makers have delayed the process of finalization of the curriculars.

In 2019-2021, FORVAC has supported six (6) students in total with their dissertations. All of them have completed their studies on time and they have been well employed after graduation. The dissertations are available in the Programme's website: <https://forvac.or.tz/publications/technical-reports/>.



Figure 12. Ceremonies of four FORVAC supported MSc graduates, Hussein Nyangasa, Doris Mavindi, Alpha Mfilingi, and William Marandu in December 2021.

During AWP 2021-2022, FORVAC will continue collaboration with SUA and support two (2) additional dissertations. Subjects of these studies are given below:

- Impact of community forest-based projects on livelihoods and conservation of village land forest reserves, by Angela A. Mlawa; and
- Analysis of institutions and power relations along timber value chain in Liwale and Nachingwea Districts, Tanzania, by Magiri, Mary C.

Within the AWP 2020 – 2021, FORVAC supported implementation of four (4) MSc dissertations/studies related to forest products value chains/market system and business development relevant to CBFM. The dissertations were completed at the early stage of the implementation of AWP 2021 – 2022 and all students graduated in December 2021. These studies and relevant graduates are listed below:

- Market System Analysis of Furniture Industries in Dar es Salaam, Dodoma and Tanga Regions, by Alpha Mfilinge;
- Assessment of edible wild mushrooms value chain and its contribution to livelihood improvement in Mbinga and Songea Districts, by Dorice Mavindi;
- Analysis of Charcoal Market System in Handeni, Kinondoni and Magharibi A Districts, by William Marandu; and
- Gender and Forest Products Value Chain from Village Land Forest Reserves of Songea and Namtumbo Districts, by Hussein Nyangassa.

Box 6 – Utilization of FORVAC supported MSc dissertations

During the AWP 2019-2020, FORVAC supported two students with their dissertations:

- Market System Analysis of Bamboo Products in Ruvuma Region, by Ms. Lilian Magafu; and
- Honey Production and Value Chain Development in Ruvuma Region, by Ms. Patricia Msolla.

The students graduated in December 2020.

Both of these were done in Ruvuma Region, where the research results have been utilized in practice. For example, the results of the honey value chain study showed the most common challenges in the development of the honey production, processing and marketing in Ruvuma. As means of tackling the challenges and recommendations provided in the study, the Regional Forest Officer conducted a two-day strategic planning meeting together with all Ruvuma Beekeeping Officers, including TFS Beekeeping Officers.

During the meeting, challenges showed in the study were discussed, and a strategic plan to tackle the challenges was developed. The challenges are presented below:

- Inadequate resources to the governmental supporting functions
 - The meeting directed the District Councillors and TFS to allocate funds for the beekeeping supporting activities and insisted on frequent visits. FORVAC has supported motorbikes for all five (5) Beekeeping Officers in Ruvuma Cluster which will support these functions.
- Inadequate training and coaching on production maintenance and marketing
 - The meeting directed to develop a Ruvuma beekeeping calendar and circulated it to all districts.
 - The target is also to establish five (5) honey collection centres (one in each district of Tunduru, Namtumbo, Songea, Mbinga, and Nyasa) where producers and traders can sell their products.



Figure 13. The District Forest Officer facilitating Village Assembly Meeting to enact VLFR by-laws at Liuli village, Nyasa District.

- Ruvuma Regional Authority has agreed to collaborate with Likuyu – Sekamaganga, a Community Based Training Centre, which is among the training institutions managed by the Ministry of Natural Resources and Tourism under the Wildlife Division. The training centre is located in Namtumbo District in Ruvuma Region. The institute will introduce a beekeeping pre-professional course suitable for active beekeepers who have completed the grade seven (primary school).
- Lacking access to finance
 - The meeting guided that all youth and women beekeeping groups should be linked with Community Development Officers so that they would be able to access the district loan.
- Presence of wildfires and theft of hives
 - The Regional Administration in Ruvuma has directed each village in Ruvuma Region to enact by-laws concerning reckless wildfires and theft of beehives.

Manual to support forest-based value chains and business development of grassroots groups

In cooperation with SUA – FORCONSULT, FORVAC developed a manual to support forest-based value chains and business development of grassroots groups. The manual was approved within AWP 2020-2021 and printed in October 2021. The manual concentrates on beekeeping, bamboo, carpentry, and charcoal production and introduces possible value chains of related products. The manual exists in Swahili and in English.

Forestry and Beekeeping Division (FBD) under the Ministry of Natural Resources and Tourism (MNRT) has decided to upgrade the manual to be part of their official manuals. Earlier, they lacked manuals for forest-related value chain development.

International Scientific Conference

On 23 – 25 February 2021, FORVAC supported TAFORI to arrange an important event called “The International Scientific Conference on Forest and Honeybee Products Value Chains for Development for Sustainable Livelihoods and Industrial Economy”. The conference shared research results relevant to

Community-based Forest Management (CBFM) and value chains development in the areas of timber, honey, other non-timber products, policies and legislations.

To make the presented practical research findings useful for a larger audience, FORVAC signed a contract with TAFORI to produce a popular version report of the Scientific Conference in December 2021. The report shares the important research findings useful for the CBFM communities and other actors working in the forestry and beekeeping sectors. The aim of the report is to increase awareness of recent developments and studies related to CBFM and forest value chain development in Tanzania.

2.3.3 Output 3. Functional extension, communication, monitoring systems and Management Information System in place

This Section described FORVAC's achievements in relation to the indicators of Output 3 "Functional extension, communication, monitoring systems and Management Information System in place". The presentation covers the following Output areas (Interventions):

- 3.1 Enhanced extension and communication services; and
- 3.2 Monitoring and Management Information System (MIS) established.

Indicators and achievements of Output 3 are set out in Table 20 below.

Table 20. Indicators and achievements under Output 3.

Indicators	Annual target 7/2021 – 6/2022	End of Programme target 7/2018 – 7/2022	Achievement (7/2021 – 6/2022)	Cumulative achievement since the beginning of the Programme
Communication strategy mobilized	FORVAC website and facebook page used & updated.	FORVAC communication according to strategy	Website www.forvac.or.tz and Facebook page have been updated frequently. Followers of FB page increased from 612 to 1053 and our posts reached around 6,500 people. FORVAC booklet telling about the Programme's achievement at the community level has been written in English and Swahili, designed, and printed (500 + 800 pcs.). Documentation of FORVAC success stories has been completed in Tanga Cluster (2 stories) and started in Ruvuma and Lindi Clusters (5 stories).	Posting FORVAC activities and success stories on Facebook frequently. Documentation of FORVAC success stories has been completed in Tanga Cluster (2 stories) and started in Ruvuma and Lindi Clusters (5 stories). Media trainings and tours held for journalists in 2019 & 2020, and media in-depth reporting tour held in March 2021. Tours have been successful, and they have brought a good publicity for FORVAC. Tours have provoked journalists to write about forestry. Website www.forvac.or.tz established in August – September 2019 and updated frequently. FORVAC visual image designed and marketing material created and printed (leaflets, posters, booklets). Communication strategy outlined in December 2018 – January 2019, taken into use in 2019.

Indicators	Annual target 7/2021 – 6/2022	End of Programme target 7/2018 – 7/2022	Achievement (7/2021 – 6/2022)	Cumulative achievement since the beginning of the Programme
Extension strategy developed, aiming for synergies with FBD, on the principles of HRBA, incorporating value chain development	Implementation strategies and extension manuals of forestry and beekeeping policies developed. PFM Facts and Figures 2020 published and the VLFR database updated and taken into use	Strategies and Extension manuals developed and taken in use	<p>Launching of the Beekeeping Policy Implementation Strategy, produced under the FORVAC support, during the Maji Maji Selebuka Festival in Songea on 29 July 2021.</p> <p>In July-August 2021, FORVAC supported MNRT/FBD to establish a set of CBFM/VLFR and beekeeping and forest value chain development related extension material: 25 reports, guidelines and other extension and promotion materials (a total edition of 11,000) printed in September 2021.</p>	<p>Launching of the Beekeeping Policy Implementation Strategy, produced under the FORVAC support, during the Maji Maji Selebuka Festival in Songea on 29 July 2021.</p> <p>In July-August 2021, FORVAC supported MNRT/FBD to establish a set of CBFM/VLFR and beekeeping and forest value chain development related extension material: 25 reports, guidelines and other extension and promotion materials (a total edition of 11,000) printed in September 2021.</p> <p>Preparation of bee reserve and apiary establishment and management guideline, drafted by the Task Force of MNRT/FBD in November – December 2020, submitted to MNRT for approval in December 2020.</p> <p>CBFM Apex Body approach defined during AWP 2020-2021.</p> <p>PFM Facts and Figures 2020 developed and the VLFR database established.</p> <p>Outlines of Extension strategy included in the Communication strategy developed through a short-term consultancy (1 international and 1 national expert) in December 2018 – January 2019.</p>
Programme MIS (management information system) unit established contributing to FBD MIS development	MIS updated monthly	Functional MIS Unit	MIS updated monthly, and MIS Activity Reports (bi-monthly/quarterly) distributed to MNRT & EoF (Competent Authorities) and Clusters.	FORVAC MIS developed and taken into use in October 2019, updated monthly.

2.3.3.1 Enhanced extension and communication services, Output area 3.1

Exhibitions, festivals, and forums

Dar es Salaam International Trade Fair

FORVAC has supported the Forestry and Beekeeping Division (FBD) of the Ministry of Natural Resources and Tourism to print Community Based Forest Management (CBFM) and value chain related informative exhibition material to be used in national and international exhibitions. Additionally, the Programme supported FBD to participate in the 45th Dar es Salaam International Trade Exhibition held in Dar es Salaam from 28 June to 13 July 2021. The exhibition helped FBD generally promote the national forest policies and legislation as well as forestry and beekeeping guidelines.

Maji Maji Selebuka Festival and World Bee Day

FORVAC supported the organization of the 7th Annual Maji Maji Selebuka Festival and World Bee Day in Songea, Ruvuma Region. The festival took place on 24-31 July 2021. The theme of the 2021 festival “Misitu ni uchumi” was addresses to recognizing, awareness raising and promotion of the ecological, social, and economic functions of forests. FORVAC facilitated 17 business groups and the relevant Beekeeping Officers and Forest Officers to participate in the festival from Nyasa, Mbinga, Songea DC, Namtumbo, and Tunduru Districts of Ruvuma Cluster and from Ruangwa District of Lindi Cluster. The business groups displayed different forest-related products such as timber, honey, beeswax, bamboo products (winnowers, jamanda, baskets, etc.), and dried wild mushrooms. During the festival, the business groups had a chance to promote their products, get new buyers, and establish new connections with entrepreneurs from other parts of the country. Additionally, villages with VLFRs and approved forest management plans displayed and promoted timber species, also the lesser-known species, found in their VLFRs.

The entrepreneurs used this opportunity also to share experiences with fellow entrepreneurs who had arrived from all over the country. This offered new knowledge and ideas to FORVAC supported businesses, especially what comes to the value addition of products. For example, most honey producers in Ruvuma Region use used packages like water bottles as packaging materials. In the festival, the honey producers were recommended to improve the packaging material to make the final product attractive and comply with the hygiene standard.



Figure 14. The former Prime Minister of Tanzania and the Minister of Natural Resources and Tourism involving the exhibition facilitated by FORVAC during the beekeeping day.

Box 7 – World Bee Day

International Beekeeping Day is normally conducted on 20 May, but due to COVID-19, it was postponed this year. National Beekeeping Day was finally organized on 29 July 2021 during the Maji Maji Selebuka Festival by the Forestry and Beekeeping Division under the Ministry of Natural Resources and Tourism. The main topic discussed was ‘Fursa na changamoto zilizopo kwenye mnyororo wa thamani wa mazao la nyuki’, meaning “Opportunities and challenges in beekeeping value chain”.

The guest of honour Hon. Mizengo Pinda, the former Prime Minister of Tanzania, was accompanied by Minister of Natural Resources and Tourism, Tabora Regional Commissioner, and Director of Natural Resources and Tourism. In the event, Beekeeping Policy Implementation Strategy, produced under the FORVAC support, was launched.

Liwale investment forum and exhibition

On 6 November 2021, FORVAC supported Liwale District Authority to organize an investment forum and exhibition to promote the local investment opportunities. The event brought together different development partners and investors from all over the country. The event was also a good opportunity for the business groups supported by FORVAC through the micro-business support scheme in Liwale to market their products outside the District. In the exhibition, the micro-businesses displayed furniture made from the common and lesser-known timber species and bee products.

FORVAC in media

FORVAC has continued active involvement of media in the different events organized in the clusters. Media involvement has offered good visibility and publicity for FORVAC and CBFM in Tanzania. Most of the FORVAC related online publications (YouTube videos and Blog texts) can be found from the Programme's website (<https://forvac.or.tz/forvac-in-media/>). Some of the broadcasted TV news are also available at the same address.

During the reporting period, FORVAC updated its Facebook page frequently and posted a total of 29 times. Through the Facebook, FORVAC raises awareness about the Programme as well as development cooperation and its importance. The Facebook posts shows how development cooperation benefits Tanzania at all levels of society. The activity on Facebook and publicity of FORVAC also in other media have increased the number of the Facebook page followers from 612 to 1053 and the posts have reached around 6,500 people in total.

Documentation of success stories

The Programme has started to document the successful interventions FORVAC has implemented during its four (4) operational years. These short documentaries are used for marketing, campaigns, and educational purposes, also increasing awareness about FORVAC and development co-operation and its positive effects especially in Tanzania and Finland but also worldwide, and sharing knowledge FORVAC has gained through its successful interventions.

The first round of documentation was implemented in Tanga Cluster in August 2021. Two (2) successful interventions of FORVAC Programme were selected to be documented in Handeni District:

1. Micro-business support through business mentoring and grant support. The document concentrates on a business group that produces improved clay cooking stoves. These stoves contribute to more efficient charcoal usage.
2. Linking a private sector actor (buyer) with local beekeepers. FORVAC has supported 12 beekeeping groups through micro-business support and by linking the groups with a private sector actor, namely Swahili Honey, in Handeni.

Two documentaries, one shorter (around 3 minutes) and other longer (around 8 minutes), were produced from both interventions. The documentaries have been translated into English. The longer versions of the interventions can be found from YouTube:

Intervention 1: <https://www.youtube.com/watch?v=WmwENPJ3rs&t=2s>

Intervention 2: <https://www.youtube.com/watch?v=QItuZi65e7Y>

In November – December 2021, the second round of the documentation was organized in Ruvuma and Lindi Clusters. At this time, five successful interventions of the Programme were identified:

1. Micro-business support through business mentoring, technical training, and grant support. The document concentrates on a business group that is weaving bamboo products and who will start bamboo enrichment planting in 2022 to secure the source of raw material and to get different varieties of bamboo species. Additionally, the document covers a story of a bamboo entrepreneur living with a disability.
2. FORVAC supported teak plantation activities in Nyasa District, Ruvuma Cluster.

3. Sustainable Community Based Forest Management (CBFM), covering the stories of forest management planning, timber harvesting and selling, and socio-economic benefits of the process.
4. Timber value chain: telling the story how community-owned portable sawmill and solar kiln help communities to increase the value of timber and how they create employments for villagers.
5. Promoting lesser-known timber species.

During the fieldwork in November – December 2021, only intervention five (5), promotion of lesser-known timber species, was fully covered, and the first draft document was produced before the end of the year 2021. The other four (4) interventions are waiting for a second field visit during the rainy season in March 2022.

FORVAC booklet

During the fourth operational year, the Programme has put efforts into marketing, campaigning, and awareness-raising. The preparation of a booklet was one of the works included in the marketing and visibility plan of the Programme. The purpose of the booklet is to raise awareness about FORVAC and its achievements so far. The booklet summarized the Programme's achievement at the community level until the end of June 2021. The booklet has been available in different stakeholder events, and it has been distributed to the Districts where FORVAC operates.



Figure 15. Samples pages of the booklet (in Swahili).

Strategies and Extension Manuals of Forestry and Beekeeping Policies

In July-August, FORVAC supported MNRT/FBD to establish a set of CBFM/VLFR and beekeeping and forest value chain development related extension material. Eventually 25 reports, guidelines and other extension and promotion materials (a total edition of 11,000 pcs.) were printed in September 2021. A list of this material is given below:

- | | |
|---|--|
| 1) National Forest Policy 1998 (Book) | 16) Procedures For the Establishment Of Village Land Forest Reserves For Local Government Authorities (Brochure) |
| 2) National Beekeeping Policy 1998 (Book) | 17) Procedures To Establish Village and Private Bee Reserves (Brochure) |
| 3) Forest Act No 14 Of 2002 (Book) | 18) Roles Of Communities, Non-Governmental Organizations and Local Government Authorities In Forestry And Beekeeping Management (SW & EN, (Brochure) |
| 4) Beekeeping Act No 15 Of 2002 (Book) | 19) Roles And Responsibilities of Communities, Non-Governmental Organizations and Local Government Authorities In The Management And Development Of Bee Resources (SW & EN) (Brochure) |
| 5) Guidelines For Quality Assurance of Bee Products In Tanzania (Book) | 20) Understanding The Procedures to Be Followed By The Beekeeper Training And Extension Service (Brochure) |
| 6) Forest Plantation and Woodlot Technical Guideline (Book) | 21) Understanding The Procedures When Preparing A Tree Nursery And Management of Forest Plantation (Brochure) |
| 7) Integrated Forest Fire Management Guideline for Commercial Plantations(Book) | 22) Techniques For Recognizing the Quality Of Honey (Brochure) |
| 8) National Beekeeping Training and Extension Manual (Book) | 23) Improved Beekeeping Technique (Booklet) |
| 9) Department Responsibilities: Objectives and Responsibilities (Banner) | 24) PFM (Brochures & Poster) |
| 10) Forest And Beekeeping Sector Guidelines (Banner) | 25) Forest And Bee Themes (Tear Drops) |
| 11) Forest Industry (Banner) | |
| 12) Beekeeping Industry (Banner) | |
| 13) How To Understand National Forest Policy 1998 (Brochure) | |
| 14) How To Understand National Beekeeping Policy 1998 (Brochure) | |
| 15) Procedures For the Establishment of Village Forest Reserves And Local Government Authorities (Brochure) | |

2.3.3.2 Monitoring and Management Information System (MIS) established, Output area 3.2

Joint monitoring mechanism

The FORVAC PMT monitors implementation of service contracts and consultancies, and specifically Cluster Coordinators monitor implementation of the field activities. The Programme also applies a joint monitoring mechanism to M&E. During the reporting period, the relevant District officers, also involving representatives of PO-RALG and TFS, conducted monitoring visits to the target Districts to assess Programme-supported activities and report findings.

Periodically also representatives of central level authorities and the Embassy of Finland (EoF) participate in the M&E and workplanning missions. During the reporting period, the major this type of mission was “FORVAC Introduction, Results Sharing and Planning Workshop” for newly appointed regional and district leaders in all FORVAC Clusters involving all 12 operational Districts. The workshop was organized in Lindi and Ruvuma Clusters in September and in Tanga Cluster in November. Besides district and regional leaders, also representatives from MNRT, PO-RALG, and TFS participated in these important workshops. Additionally, representatives of EoF were involved in the workshop in Lindi. The leaders were happy that the Programme has considered their involvement in the implementation process and promised to provide all support required to achieve the objectives of the Programme.

In September 2021, representatives of the Embassy of Finland together with the FORVAC National Programme Coordinator (NPC) from MNRT/FBD conducted a field visit to Lindi Cluster. The progress of the Programme in Ruangwa and Liwale Districts was demonstrated to visitors in Nandenje and Barikiwa villages.



Figure 16. FORVAC Introduction, Results Sharing and Planning Workshop for newly appointed regional and district leaders in Lindi Cluster in September 2021.

2.3.4 Output 4 Supportive legal and policy frameworks to forest value chain and sustainable forest management developed

This Section describes FORVAC's achievements in relation to the indicators of Output 4 "Supportive legal and policy frameworks to forest value chain and sustainable forest management developed". The presentation covers the following Output areas (Interventions)

4.1 Support training to increase understanding of policies and laws relevant for CBFM development; and

4.2 Forest law enforcement, forest governance and trade of legally sourced timber.

Indicators and achievements of Output 4 are presented in Table 21 below.

Table 21. Indicators and achievements under Output 4.

Indicators	Annual target 7/2021 – 6/2022	End of Programme target 7/2018 – 7/2022	Achievement (7/2021 – 6/2022)	Cumulative achievement since the beginning of the Programme
FORVAC development support for Guidelines: CBFM books	Methodologies and guidelines for Participatory Forest Resources Assessment (PFRA) developed, 1000 pcs. printed and disseminated	Books updated and distributed to CBFM actors Issues of gender, age and disability considered in visual materials	National Taskforce to Review the CBFM Action Plan (TFCG in collaboration with MNRT): the Programme Forest Management Expert represented FORVAC in the taskforce meeting on 2-3 Nov. 2021 and contributed to the review process up to its completion in the end of 2022.	CBFM books reviewed and amended, 4500 pieces printed (10 different books).
Updated forest legislation (Forest Act and regulations) approved	National Forest Act reviewed Kiswahili translation of Forest Act and Beekeeping Act 2021 produced and disseminated	Forest Act approved; related information disseminated in project area (with consideration to accessibility for all potential users)	Beekeeping Act No: 15 of 2005 translated into Swahili, Dec. 2021.	Beekeeping Act No: 15 of 2005 translated into Swahili, Dec. 2021. Stakeholders working sessions on improving Assessment Document to the review of the Forest Act No: 14 (2002), held at the Forestry Training Institute – Olmotonyi Arusha, December 2020.
Implementation Strategies and Extension Manuals of Forestry and Beekeeping Policies Disseminated	Forest Policy Implementation Strategy formulated and approved	Implementation Strategies and Extension Manuals of Forestry and Beekeeping disseminated	National Forest Policy Implementation Strategy (2021-2031) and National Beekeeping Policy Implementation Strategy (2021-2031) printed and distributed in July 2021. Ref. Output area 3.2 above, Guidelines for establishment and management of bee reserves and apiaries	National Forest Policy Implementation Strategy (2021-2031) and National Beekeeping Policy Implementation Strategy (2021-2031) printed and distributed in July 2021. Under Output area 3.2 above, Guidelines for establishment and management of bee reserves and apiaries in

Indicators	Annual target 7/2021 – 6/2022	End of Programme target 7/2018 – 7/2022	Achievement (7/2021 – 6/2022)	Cumulative achievement since the beginning of the Programme
			in Tanzania printed and disseminated in July 2021.	Tanzania produced by the Task Force of MNRT/FBD and submitted to MNRT for approval in December 2020. The guideline printed and disseminated in July 2021.
National Assessment on the Charcoal sector results supported by FORVAC	Charcoal Policy and Implementation Strategy approved and taken into use	Strategy in use	Working group meetings organized twice, in October and November 2021, resulting in the draft National Charcoal Strategy and Action Plan.	Working group meetings organized twice in October and November 2021, draft National Charcoal Strategy and Action Plan. Charcoal Policy and implementation strategy available in Nov. 2022. Report for “Assessing Potential and Identifying Optimal Strategies for Nat. Charcoal Sub-Sector Development in Tanzania” finalized in 2020. Inception Report for Preparation of the National Charcoal Policy (NCP) developed by the Task Force and submitted to decision makers in September 2019.
Timber legality assurance system (TLAS) established	Tanzanian Timber Legality Manual popularized versions developed and distributed to communities. Checkpoint guidelines developed: 1000 pcs. printed and disseminated FREMIS recognizing VLFR timber, and data input from the stump inbuilt	TLAS developed and in use, efficient country-wide timber tracking system piloted and taken into use	In partnership with TRAFFIC and implemented in close collaboration with the TFS and MNRT/FBD compilation of Tanzania Timber Legality Framework commenced in November 2020. On 8 December 2021, the technical consultative/validation workshop of the Framework was held in Dar es Salaam. The Framework will be finalized in Jan.-Feb. 2022. Tentative discussions and initial	In partnership with TRAFFIC and implemented in close collaboration with the TFS and MNRT/FBD compilation of Tanzania Timber Legality Framework commenced in November 2020. On 8 December 2021, the technical consultative/validation workshop of the Framework was held in Dar es Salaam. The Framework will be finalized in January 2022. Review of Forest Law Enforcement, Governance and

Indicators	Annual target 7/2021 – 6/2022	End of Programme target 7/2018 – 7/2022	Achievement (7/2021 – 6/2022)	Cumulative achievement since the beginning of the Programme
			collaboration with TRAFFIC on development of Timber Tracker to support establishment of Chain of Custody for “Tanzanian Community Timber”.	Support to Trade of Legally Sourced Timber (FLEGT) implemented in Nov. – Dec. 2018 and reported (“FORVAC – Approach to the Development of Forest Law Enforcement, Good Forest Governance and Trade of Legally Sourced Timber”).

2.3.4.1 Support training to increase understanding of policies and laws relevant for CBFM development, Output area 4.1

FORVAC has supported Forestry and Beekeeping Division (FBD) with the preparation of National Forest Policy Implementation Strategy (2021-2031) and National Beekeeping Policy Implementation Strategy (2021-2031). Additionally, FORVAC has supported MNRT/FBD to prepare Guidelines for Establishment and Management of Bee Reserves and Apiaries in Tanzania. All the three documents were printed and disseminated 2021.

Within AWP 2021-2022, FORVAC supports FBD to prepare National Charcoal Strategy and Action Plan. By the end of 2021, working group meetings have been organized twice, in October and November 2021, resulting in the draft Charcoal Strategy and Action Plan.

In September 2021, FORVAC was requested to assign a member for the National Taskforce to Review the CBFM Action Plan. TFCG in collaboration with MNRT facilitated this process. The Programme Forest Management Expert represented FORVAC in the taskforce meeting on 2-3 Nov. 2021 and contributed to the review process up to its completion in the end of 2022.

2.3.4.2 Forest law enforcement, governance and trade of legally sourced timber, Output area 4.2

The Programme conducted a Review of Forest Law Enforcement, Governance and Support to Trade of Legally Sourced Timber (FLEGT) at the end of 2018 and outlined the FORVAC’s strategy to approach this important subject. Within AWP 2020-2021, FORVAC commenced the development of the Timber Legality Assurance System by supporting the formulation of the *Tanzania Timber Legality Framework*.

FORVAC co-facilitates this activity together with TRAFFIC and implements it in close collaboration with the Tanzania Forest Services Agency (TFS) and Forestry and Beekeeping Division (FBD) of the Ministry of Natural Resources and Tourism (MNRT). Additionally, a representative from Tanzania Natural Resource Forum (TNRF) contributes to the process.

On 8 December 2021, during the technical consultative/validation workshop of the Tanzania Timber Legality Framework, participated by MNRT/FBD, TFS, Embassy of Finland (EoF), the Tanzania Forestry Working Group, (TFWG), TNRF, MCDI, and FORVAC, the final draft report of “Framework for Assessing Legality of Forestry Operations, Timber Processing and Trade - Principles, Criteria and Indicators for Tanzania (Handbook for forestry practitioners and relevant stakeholders)” was shared with the participants for their review. The workshop was fruitful, and good discussions arose. Based on the discussions and comments, the Framework will be finalized in January – February 2022.

Improving the recording of forest products information has been planned to be the next phase of TFS/MNRT/TRAFFIC/FORVAC cooperation. Tracking of CBFM products and establishment of a Chain of Custody for “Tanzanian Community Timber” could be addressed in partnership.

3 Resources and budget

3.1 Human resources in the FORVAC framework

The main human resources used for the FORVAC implementation during the reporting period are presented by categories in Table 22 below.

Table 22. Human resources.

Type of resources	Human Resources / Roles	Comments
PMT - Programme Management Team (FORVAC core team)	Technical Assistance: Chief Technical Advisor (Int.) Finance and Administration Manager (Nat.) Forest Management Expert (Nat.) Three Cluster Coordinators (Nat.) Support staff: Assistant Financial Manager (AFAM) National Junior Expert, NJE (VCD) International Junior Expert, IJE (M&E, communication)	2 Junior Experts (1 national + 1 international) and AFAM are financed through the operational/management & admin. budget. (Working months of the International Value Chain Development Advisor exhausted in December 2020.)
	National Programme Coordinator, NPC	Assigned by FBD
	Five (5) drivers	
FCG Support	Home Office Coordinator Technical Backstopper	From FCG Home Office, with periodic interaction with PMT and regular visits to the Programme
Focal Persons	Two persons representing TFS and PO-RALG respectively, to liaison with FORVAC aiming at facilitating interaction among key partners	Appointed
Service Providers	Of different kind (NGOs, private actors, research institutions, etc.) depending on the specific needs to support actions in the field/at the institutional level	To be engaged based on specific terms of references and/or MoUs or Service Contracts
Technical short-term support	Pool of experts (Int. and Nat.) to provide key support on specific actions, through short-term assignments or studies	Based on specific terms of references after needs identification Only 15 ST consultancy days remaining for the year 2022.
Type	Human Resources / Roles	Comments
Service contracts	<ul style="list-style-type: none"> Pulsans Technology Limited: Service provision contract to establish and maintain the FORVAC website 	<ul style="list-style-type: none"> www.forvac.or.tz Signed on 12 September 2019. Regarding maintenance and technical support the related contract continues to the end of the Programme.
	<ul style="list-style-type: none"> FORCONSULT / SUA, Department of Forest Engineering and Wood Sciences: Establishment of a Database and Catalog for Miombo Timber Species and Study of lesser-known species. 	<ul style="list-style-type: none"> Signed on 15 June 2020 Extended to 25 January 2022
	<ul style="list-style-type: none"> FORVAC – MCDI Partnership Agreement on Support to Develop CBFM and Related Value Chains in Ruvuma Cluster 	<ul style="list-style-type: none"> Signed on 29 July 2020 Extended to 31 October 2021 Completed
	<ul style="list-style-type: none"> FORVAC – MCDI Partnership Agreement on Support to Develop CBFM and Related Value Chains in Lindi Cluster 	<ul style="list-style-type: none"> Signed on 14 September 2020 Extended to 31 October 2021 Completed
	<ul style="list-style-type: none"> SEDIT – Mentoring and Grant Management Services for Community Level Business Initiatives 	<ul style="list-style-type: none"> Signed on 7 October 2020 Extended to 5 November 2021 Completed

Type of resources	Human Resources / Roles	Comments
	<ul style="list-style-type: none"> FORCONSULT – SUA, Service Contract for Support to MSc Dissertations 	<ul style="list-style-type: none"> 7 December 2020 – 31 July 2021 Completed
	<ul style="list-style-type: none"> Mamsteen Consultants Limited – Service Contract for village land use planning in 15 villages in the areas of Lindi and Ruvuma Clusters 	<ul style="list-style-type: none"> Signed on 14 December 2020 Extended to 15 September 2021 Completed
	<ul style="list-style-type: none"> FORVAC – MCDI Partnership Agreement on Support to Develop CBFM and Related Value Chains in Tanga Cluster 	<ul style="list-style-type: none"> Signed on 26 April 2021 Extended to 31 October 2021 Completed
	<ul style="list-style-type: none"> TAFORI – Service Contract for Development of a CBFM Charcoal Production Model and Establishment of Two (2) Charcoal Production Pilots in VLFRs in Handeni District 	<ul style="list-style-type: none"> 1 September 2021 – 28 February 2022 (option for extension)
	<ul style="list-style-type: none"> TAFORI – Service Contract for production of a popular version report of the Scientific Conference 	<ul style="list-style-type: none"> 25 November 2021 – 15 February 2022
	<ul style="list-style-type: none"> MCDI – Service Contract for establishment a community owned solar kilns in Lindi and Ruvuma Clusters 	<ul style="list-style-type: none"> 20 September 2021 – 31 March 2022 (option for extension)
	<ul style="list-style-type: none"> MCDI – Service Contract for establishment two community owned portable sawmills in Lindi Cluster 	<ul style="list-style-type: none"> 9 December 2021 – 8 June 2022 (option for extension)
	<ul style="list-style-type: none"> FORVAC – MCDI Partnership Agreement on Support to Develop CBFM and Related Value Chains in Lindi Cluster 	<ul style="list-style-type: none"> 14 November 2021 – 30 June 2022 (option for extension)
	<ul style="list-style-type: none"> FORVAC – MCDI Partnership Agreement on Support to Develop CBFM and Related Value Chains in Ruvuma Cluster 	<ul style="list-style-type: none"> 23 November 2021 – 30 June 2022 (option for extension)
	<ul style="list-style-type: none"> FORVAC – MCDI Partnership Agreement on Support to Develop CBFM and Related Value Chains in Tanga Cluster 	<ul style="list-style-type: none"> 1 December 2021 – 31 March 2022 (option for extension)
	<ul style="list-style-type: none"> Central Park Bees Limited – Service Contract for Supporting Honey Value Chain in Handeni and Mpwapwa Districts through Engaging a Private Sector Actor to Deliver Beekeeping Trainings and Market Access 	<ul style="list-style-type: none"> 16 February 2021 – 31 July 2021 Completed
	<ul style="list-style-type: none"> Central Park Bees Limited – Service Contract for Supporting Honey Value Chain in Handeni, Mpwapwa and Kilindi Districts through Engaging a Private Sector Actor to Deliver Beekeeping Trainings and Market Access 	<ul style="list-style-type: none"> 20 December 2021 – 22 July 2022 (option for extension)
	<ul style="list-style-type: none"> Kijani Consult Tanzania – Service Contract for Documentation of Successful Interventions of the FORVAC Programme in Ruvuma and Lindi Clusters 	<ul style="list-style-type: none"> 15 November 2021 – 30 April 2022 (option for extension)
Technical short-term support (Short-term Consultancies)	<ul style="list-style-type: none"> Service Provision for supporting value chains development under FORVAC 	<ul style="list-style-type: none"> 13 October 2021 – 31 January 2022, max. 12 effective working days
	<ul style="list-style-type: none"> International Forest Value Chain Dev. Expert 	<ul style="list-style-type: none"> No working days remaining for the AWP 2021-2022.
	<ul style="list-style-type: none"> ST consultancy on preparation of the amended FORVAC Programme Document 	<ul style="list-style-type: none"> 12 working days total, during the period of 21 September – 12 October 2021 (10 days in Tanzania & 2 days in Finland)

3.2 Summary of expenditure

Table 23 below summarizes the FORVAC expenditure for Operations (Outputs 1 – 4), Programme Management, Contingency, and Support staff against the Annual Workplan and Budget 2021 – 2022. It also gives the total budget of the FORVAC for the entire duration of the Programme (23/7/2018 – 22/7/2022) and related outstanding balances as of 31 December 2021. The financial report, additionally, covering costs of Technical Assistance (TA), is given in more detail in Annex 8 of this document.

Table 23. Summary of Expenditure, as per end of December 2021.

Project Task No.	Description	Total Project Budget	Budget Year 4 (Jul 21-Jun 22)	Accumulated Usage Year 4 (Jul 21-Jun 22)	% Usage Budget Year 4	Outstanding Balance Year 4 (Jul 20-Jun 21)	Total Outstanding Balance
5001	1. Improved VCs & increased PS involvem. in Forest sector						
5010	1.1 Establishment and mobilization of VLFRs	1 034 200,00	325 593,00	153 982,12	47,29 %	171 610,88	171 610,88
5012	1.2 Support to value chains	1 223 000,00	916 295,00	506 078,37	55,23 %	410 216,63	410 216,63
5013	Subtotal Output 1	2 257 200,00	1 241 888,00	660 060,49	53,15 %	581 827,51	581 827,51
5100	2. Stakeholder capacity to implement & promote forestry value chain development enhanced						
5105	2.1 Impr. inst. & mgmt capacity for villages VNRC	770 000,00	239 630,00	202 207,81	84,38 %	37 422,19	37 422,19
5115	2.2 Improved capacities of forest national level	750 000,00	213 074,00	158 589,08	74,43 %	54 484,92	54 484,92
5135	2.3 Forest products VC/market systems & BD skills	490 000,00	25 556,00	6 618,70	25,90 %	18 937,30	18 937,30
5140	Subtotal Output 2	2 010 000,00	478 260,00	367 415,59	76,82 %	110 844,41	110 844,41
5160	3. Functional extension, communication, monitoring systems & MIS						
5165	3.1 Enhanced extension and communication services	410 000,00	77 407,00	54 048,49	69,82 %	23 358,51	23 358,51
5170	3.2 Monitoring and Management Information System	480 000,00	120 741,00	10 214,23	8,46 %	110 526,77	110 526,77
5179	Subtotal Output 3	890 000,00	198 148,00	64 262,72	32,43 %	133 885,28	133 885,28
5180	4. Legal and policy frameworks in forestry supported						
5185	4.1 Improved policy and regulatory framework for forest value chain development	480 000,00	118 889,00	97 354,41	81,89 %	21 534,59	21 534,59
5190	4.2 Forest law enforcement, forest governance and trade of legally sourced timber	380 000,00	56 111,00	0,00	0,00 %	56 111,00	56 111,00
5199	Subtotal Output 4	860 000,00	175 000,00	97 354,41	55,63 %	77 645,59	77 645,59
5200	Programme Management						
5210	Investments	430 000,00	45 000,00	3 040,80			41 959,20
5215	Vehicle fuel and maintenance costs (all vehicles)	200 000,00	55 000,00	28 896,04			30 003,96
5216	Drivers	72 000,00	60 000,00	28 637,67			34 862,33
5220	Communication	32 000,00	18 000,00	11 630,99			7 469,01
5225	Media & publishing	16 000,00	9 000,00	0,00			9 720,00
5230	Translations	40 000,00	0,00	0,00			0,00
5235	Banking & financial management	8 000,00	5 000,00	1 994,42			3 855,58
5238	Running office costs	0,00	42 000,00	28 021,60			17 178,40
5240	Books, periodicals & stationary	7 000,00	20 000,00	7 968,25			13 031,75
5245	Maintenance of devices & equipment	18 000,00	1 000,00	0,00			1 240,00
5250	Monitoring and auditing	229 000,00	35 000,00	2 165,03			33 934,97
5251	Facilitation by NPC and Stakeholders	0,00	20 000,00	6 505,12			15 264,88
5255	Steering Committee and Supervisory Board Meetings	0,00	10 000,00	19 267,59			-6 558,72
5299	Subtotal Programme Management	1 052 000,00	320 000,00	138 127,51	43,16 %	181 872,49	201 961,36
5300	Contingency and TA-briefing						
5310	Contingency (2,5%)	242 566,00	84 263,00	0,00	0,00 %	84 263,00	86 363,00
5320	International TA-briefing	4 800,00	0,00	0,00		0,00	0,00
5330	Subtotal Contingency and TA-briefing	247 366,00	84 263,00	0,00	0,00 %	84 263,00	86 363,00
5410	Support Staff (incl IJE and NJE)	0,00	145 000,00	82 207,94	56,70 %	62 792,06	65 792,06
7999	TOTAL CONTRACT	7 316 566,00	2 642 559,00	1 409 428,66	53,34 %	1 233 130,34	1 258 319,21

The budget of FORVAC for the whole Programme duration, 07/2018-07/2022, totals EUR 9,934,572 (TZS 26,823,344,393), of which EUR 8,778,096 (TZS 23,700,860,396; 88%), has been used by the end of the December 2021. Table 24 summarizes the budget and realized expenditure during the reporting period divided by Operation and Management (OP) and Technical Assistance (TA) categories.

Table 24. Budget and realized expenditure by main categories.

Budget category	Annual budget for 07/2021 – 06/2022	Accumulated usage by the end of December 2021	% of the usage from the annual budget
Operations and Management	EUR 2,642,559 (TZS 7,134,910,100)	EUR 1,409,428 (TZS 3,805,455,600)	53%
Technical Assistance (also including ST consultancies)	EUR 390,531 (TZS 1,054,433,818)	EUR 240,823 (TZS 650,222,100)	62%
TOTAL	EUR 3,033,090 (TZS 8,189,343,918)	EUR 1,650,251 (TZS 4,455,677,700)	55%

The total budget for the implementation (Operations and Management), excluding Technical Assistance (TA) costs, of the AWP 2021-2022 covers EUR 2,642,559 (TZS 7,134,910,100). The related expenditure in the middle of the planning period was EUR 1,409,428 (TZS 3,805,455,600), 53 % of the total Annual Budget for Operation and Management. A percentage of 62% of the Technical Assistance (TA) budget has realized by the end of 2021. The outstanding balance of the overall budget of the Programme, remaining to 22 July 2022, is EUR 1,430,244 (TZS 3,861,658,894). Table 24 summarizes the budget and realized expenditure during the reporting period divided by Operation and Management (OP) and TA categories.

4 Assumptions and risks

The main assumptions previously identified and presented in the original Programme Document remain, and they are not commented in this Semi-Annual Report for the Year 4. However, below we present some new specific critical issues including assumptions and response measures.

The timely and efficient implementation of FORVAC include the following new assumptions:

- The COVID-19 pandemic will remain under control and restrictions will not stop or delay FORVAC operations.
- Minimizing utilisation of funds in unexpected (non-planned) initiatives.
- Political will and support to application of legal framework based on clear roles and mandates.
- Political environment remains friendly to CBFM, referring to GN417, which has been criticized for narrowing the rights of communities and willingness to tackle challenges in trade of timber from VLFRs.
- The Programme will have the two-year extension (2022-2024) which will help to sustain the Community Based Forest Management (CBFM) and value chain activities and interventions FORVAC has started.
- The Programme will get an additional funding to keep the long-term experts at work full-time until the end of AWP 2021-2022 (without this finance, specifically TA funds for salaries of Cluster Coordinators will be exhausted by the end of April 2022).

As in most other countries, the COVID-19 pandemic spread to Tanzania in the end of the first quarter of 2020. It has affected the implementation of the Programme (some delays and postponements of planned activities) and limited traveling of the FORVAC staff as well as stakeholders. Periodically large gatherings have been avoided. The pandemic may still cause changes in the implementation of the Workplan 2021-2022 as the new mutations occurred in late 2021.

The Donor Agency has proposed an update of the Risk Matrix and Risk Analysis of the Programme Document as part of the planning for a two-year extension of the Programme up to July 2024. This update will take place in February 2022.

5 Cross-cutting objectives

Ministry for Foreign Affairs (MFA) has recently updated guidelines for supporting mainstreaming of cross-cutting objectives and human rights-based approach in MFA financed development cooperation. As Finland's development policy bases on the Agenda 2030 and Paris Agreement, climate aspects through low emission development have been further emphasized in addition to the previous cross-cutting objectives – gender equality, non-discrimination (especially PLWD rights), and climate resilience.

5.1 Gender equality

FORVAC works with both officially elected structures (Village Council, Village Natural Resources Committees, Village Land Use Management Teams) and non-official non-elected groups (VICOBAs, VSLAs, different business groups). Female engagement is encouraged throughout the activities, but with the elected, formal structures, FORVAC has less power to have an impact on the composition.

Forestry is typically a very male-dominated field, and women are in several areas not considered to be strong enough e.g. to take part in long patrols which require sleeping in the forest. Regardless of this prejudice, in average 34% of the members of the VNRCs, which FORVAC is working with, are female. FORVAC has directed capacity building to VNRCs that are responsible of managing village forests. Female members of VNRCs have been encouraged to be active and, for example, the females are equally operating the two mobile-sawmills FORVAC has supported in Ruvuma and Lindi Clusters.

At the time of land use planning, female engagement is of utmost importance. In all FORVAC project areas, women are typically mainly responsible for fetching water, collecting firewood, and farming for family's needs. Therefore, almost all land-related decisions affect the daily lives of women more than men. To ensure that female community members' needs and views are taken into account during the village land use planning process, Government of Tanzania guides at least 30% of the team members to be female. In the FORVAC supported land use planning processes, the formed VLUM teams have in average 41% female members.



Figure 17. FORVAC supports the development of the mushroom value chain, which is a female-dominated business area.

FORVAC supports several forest-related businesses, either individuals or groups involving them. Even though forestry related activities are rather male-dominated, e.g. carpentry, some NTFPs are collected and marketed mainly by women, e.g. mushrooms. When selecting the businesses for the micro-business support Phase I and Phase II, female-owned enterprises or female members in the group businesses were rewarded in the scoring, resulting in a total of 37% of the supported entrepreneurs were women in Phase I (this percentage for Phase II seems to be even higher, around 46%). Additionally, the formed VICOBA and VSLA savings groups include more women (60 %).

5.2 Non-discrimination

Typically, the forestry sector is dominated by men but through communication and Programme activities FORVAC encourages women and vulnerable groups to participate in forest value chains and works on the decision-making processes to be non-discriminatory. Non-discrimination is in the heart of human rights-based approach (HRBA). HRBA concerns the right to the process, rather than to the outcome: all human beings have the right to participate in their social, political, economic, and cultural development. Within the base activities (CBFM, LUP), government guidelines for non-discrimination are followed, and important decisions are shared in the village assemblies transparently.

The whole community, including the vulnerable groups, benefit from FORVAC Programme indirectly when villages with VLFRs get income from harvesting operations. This income is used for financing sustainable forest management and social services such as water, health care services, and schools in the villages.

When considering the CBFM derived funds to the community, awareness-raising and community involvement are required, so that the village assembly knows that they can choose how to use the funds. As discussed in the “Participatory Forest Management in Tanzania: 1993 – 2009” paper by FBD, if communities are not aware of their rights, CBFM benefits can disappear due to elite capture, and the poorer parts of the community do not benefit or even suffer from the CBFM regime. MJUMITA, also in collaboration with FORVAC, gives trainings to improve CBFM related governance and awareness in the village level, including the involvement of women.

It is also in the focus for FORVAC to foster gender equality, the inclusion of vulnerable groups and work on making forest value chains equally inclusive to all groups. During the selection of micro-businesses for the support scheme, it has been noticed that even if vulnerability grouping was added as a weighted characteristic in the scoring, many of the applications by the people living with disabilities (PLWD) did not fill other criteria that were set for the businesses selected for the support. A direct linkage between PLWD and value chain development has been found challenging also in other projects worldwide. Instead, the secondary impact (impact on family/household members) is easier to reach and more effective in numbers. Examples of FORVAC’s inclusive activities and impact are given below:

- In the micro-business support Phase I, two (2) businesses of PLWD were directly supported (bamboo and beekeeping), secondary beneficiaries in the 60 selected micro-enterprises were 19 PLWD (13 Mbinga, 5 Liwale, and 2 Handeni).
- In the micro-business support Phase II, nine (9) PLWD (1 in Ruangwa, 1 in Namtumbo, and 7 in Nyasa) will be directly supported (beekeeping and bamboo businesses).
- The poorest households and mostly women are active in the mushroom value chain. Five (5) women-owned mushroom businesses were supported in Mbinga through micro-business support Phase I (drying facilities, skills, market linkages). FORVAC will next concentrate to develop the mushroom value chain in Mbinga and Songea Districts by linking a private sector actor (Mamaland Mushroom) who can offer practical training for the mushroom pickers and offer a voluntary market for dried mushrooms.
- Also, honey has been identified as an accessible value chain for poorer households, although it requires more skills and investment as compared to mushroom business. FORVAC is in all the areas actively supporting honey production by offering beehives, gear, and technical training.

- FORVAC has trained a number of carpenters in the production of beehives to support honey/bees wax value chain development. In Handeni District, a carpenter with albinism was included in the beehive production training and he delivered his part of the order of almost 500 beehives from FORVAC.
- Parallel to technical support from outside the community, a local peer supporter, hired by FORVAC, has brought extension services for honey value chain in Handeni District. The peer supporter is a person living with albinism.
- All village members, age above 18, have had an equal right to apply a plot for teak plantation in five (5) villages in Nyasa District. At the moment, around 22% of woodlot owners are female and additionally, six (6) PLWD own a woodlot. Moreover, youth have been encouraged to participate in teak plantation activities to be woodlot owners in the future.

5.3 Climate resilience

Ensuring the existence of natural forest cover through sustainable forest management and supporting forest-derived livelihoods is linked to climate resilience in multiple ways. Adaptation is improved through ecosystem services like watershed management, micro-climate stabilization, and control of land erosion, but also, forest livelihoods add to the household income and reduce dependency on agriculture, which is highly at risk to face climate change-related challenges like extreme weather events, droughts, and pests.

Fire has been identified as a risk factor to the VLFRs and to the teak plantations in Nyasa. In Nyasa, the TGA members have established fire breaks and lines to protect the plantations from fire. Additionally, fire control/management trainings has been held to VNRCs in Ruvuma and Tanga Clusters.

Beekeeping is prone to climate effects, especially fire and pests. In the training, the resilience actions focus on the placement of hives (shadow, high, close to water) and timely and frequent checking for pests. Also, transferring from the still widely used bark hives to modern hives conserves trees.

5.4 Low-emission development

In Tanzania, 72.7 % of the carbon emissions stem from land use change and forestry (USAID Greenhouse Gas Emissions Fact Sheet, 2018), and according to the Center for International Forestry Research (CIFOR), the proportion of Tanzania's deforestation that is directly related to wood fuel production is as high as 70 %. Despite the forest management and harvesting plans, illegal logging may still occur in Village Land Forest Reserves. The type of illegal logging depends on the area and existing market: in remote areas forest degradation is a likelier option through the extraction of valuable timber species by selective logging, whereas closer to market centers in addition to the demand for timber, also demand for charcoal is a driver for deforestation.

In addition to increasing communities' motivation in keeping the forest intact through increased income flow, FORVAC has addressed illegal logging through MJUMITA partnership by establishing a platform for reporting illegalities in VLFRs in Ruvuma and Tanga Clusters. VNRCs' capacity to patrol has been supported through training, and by providing motorbikes and gear. FORVAC has also co-facilitated the development of Tanzanian Timber Legality Framework with TRAFFIC and is in discussions to support the development of a technological solution for tracking VLFR timber from stump to market.

Charcoal is a major driver for deforestation, but also a potential source of income for forest communities. The reality is that the annual demand of over 2.3 million tons (figure for 2012, a quantity predicted to double by 2030, Ministry of Energy and Minerals, 2014) of charcoal is not going to disappear and parallel to shifting to alternative fuels, also models for sustainably producing charcoal are needed. TFCG has been piloting sustainable charcoal production in Kilosa. FORVAC has worked on an additional more intensive model for the CBFM context together with TAFORI and SUA. The goal is to ensure scalability through simplified startup and low initial investment and to instead invest in simple improved kiln technology (simple metal kilns). By raising the recovery rate from the current appr. 15% to e.g. 40%, would require less than half of the biomass burned currently to answer to the same market demand, hence directly reducing the deforestation rate

6 Lessons learnt, conclusions and recommendations

Based on the land use plans and production of the forest management plans, VLFRs are entering into timber harvest and sales. This process has been supported through specific timber trade events organized in Lindi and Ruvuma Clusters. Additionally, two community owned portable sawmills have commenced production.

Results of these activities seem promising: 3,993 m³ of timber, up to a total value of TZS 1,120,844,200 (EUR 448,338), was sold in Liwale Cluster during the reporting period by the end of 2021. The total volume sold and its value in the whole operational area of FORVAC (Lindi, Ruvuma and Tanga Clusters) are given below:

<i>Timber sold in total</i>	<i>Value, TZS</i>	<i>Value, EUR</i>	<i>Total number of buyers</i>
• 4,106 m ³	• 1,146,685,093	• 458,674	• 32

To reach more results and more efficiently support timber and other forest value chains, some findings and recommendations for the future are listed below.

- 1) The beekeepers FORVAC has supported are relatively small, produce low volumes of honey, and sell their honey in remote areas with hard access especially during a rainy season which does not attract buyers.

FORVAC requested Swahili Honey to identify potential collection centres in Mpwapwa and Handeni Districts. In Mpwapwa, Swahili Honey proposed a collection centre either in Gulwe village, since its location is central and transporting honey even through railway is easy, or in Mpwapwa town, as all necessary services like mobile money centres are available there and the distance to nearby villages is not long. In Handeni, Swahili Honey suggested to have a collection centre at Mkata town since it is near to almost all the villages and next to the main road. But in addition to Mkata, Swahili Honey is proposing to have a small collection centre in Gole village as it is a bit too far from Mkata. This collection centre would serve Gole and the nearby villages.

Recommendations: FORVAC will encourage beekeepers to establish honey collection centres to improve the market in the Districts. Bigger honey volumes in one place will attract more buyers.

- 2) During the Phase 1 of micro-business support in the Districts of Handeni, Liwale and Mbinga, the investment support came at the end of mentoring, which caused delays for implementation and problems in required training, also including user training related to supported machinery/equipment.

Recommendations: Procurement (e.g. equipment, machinery and gear), included in the investment support, has to be started early enough, in 3-4 months from the commencement of the Service Contract of the micro-business support.

- 3) Heavy requirements for data regarding the VLFR timber resource reduce financial viability of smaller or degraded VLFRs and cut profits from well stocked VLFRs.

The knowhow for producing reliable data on the existing timber resources is currently not existing at the District level, and highly skilled institutions must be consulted to meet the data requirements every five years (renewal period for the Forest Management Plans). This increases the costs of the planning phase. Due to a high price of inventories, smaller or degraded VLFRs, even if they had some resource, cannot start the timber business and earn funds for financing the patrols etc. needed to manage the area – the VLFR management would not be financially viable.

Recommendations: a) The data requirements could be reduced and the planning phase simplified; b) Consideration should be given to whether inventories could be totally left out and trust communities follow the minimum diameters and their willingness to not allow unsustainable cutting, in order conserve resources in future years. This can be combined with some finance for spot checks by DFOs and related bans from operations if inconsistencies are observed; and c) The requirements increase through certification. If the FSC certification is a financially viable solution to a specific community, the community will invest in inventory to meet the FSC standards.

- 4) To increase private sector involvement in forest value chains, alternative identification/selection processes are required.

As per Output 1, FORVAC will increase private sector involvement in forest value chains. FORVAC has created a method of identifying potential market actors and developing a concept in cooperation with the private sector partner to increase the capacity of the communities to provide the needed quantities and quality of the product in question. Hence for now, support has been towards training costs, and in addition to the increased capacity, the anticipated result is a long-term relationship between the market actor and the communities. Instead of tendering out the training to the cheapest tenderer, it would be important to allow an alternative approach for FORVAC. The most important factors in selecting the partner should be presence in the area, or interest in extending the operations to the area. Only partners selected with these criteria can result in the second goal – long term partnerships. In forest value chains, potential partners filling the above-mentioned criteria are few or only one. There should be a consensus from the Competent Authorities, that the traditional tendering rules do not systematically apply for these community – private sector partnerships and that other ways and criteria for selection should be allowed.

Recommendation: Use partner identification as a valid method for establishing a partnership instead of requiring tendering for training services, when goal is to facilitate long-term partnerships between the community and the market actor.

FORVAC extension and additional finance for the implementation of AWP 07/2021-06/2022

In order to ensure a high standard of implementation and to increase the impact and sustainability of the intervention, the FORVAC mid-term evaluation, held in March-April 2021, recommended a two-year extension of the Programme up to July 2024. During preparation of this Semi-Annual Progress Report 07-12/2021, the donor agency confirmed additional funding of EUR 4,200,000 for the extension. Part of this funding is intended to support the implementation of the Annual Workplan 2021-2022. To ensure adequate resources for the implementation of the Programme, for example to keep the Cluster Coordinators in place in the relevant Clusters until the end of the period covered by the Annual Workplan and the start of the extension phase, it is of the utmost importance to mobilize this funding timely, by April 2022 at the latest.

ANNEXES

Annex 1 Planning matrix
(Results Framework supported with annual targets)

Annex 1 Planning matrix (Results Framework supported with annual targets)

Results	Indicators	Baseline	Annual target 7/2021 – 6/2022	End of programme target 7/2018 – 7/2022	Means of verification	Assumptions
Impact						
Increased economic, social and environmental benefits from forests and woodlands	Increased household incomes derived from forests (Disaggregated by age, sex, disability)	9% forest-based employment, 17.5% (TZS 45,854) HH income from forest-based enterprises	Household incomes improved (progress measured during the endline study)	+15%	Baseline and endline studies	GoT Land and other NR related policy improve or at least remain favourable for development of the forestry sector GoT allocates sufficient resources for forestry development Political commitment for sustainable forest management and value chain development in CBFM NR and land related law enforcement is in place and is being enforced Policy harmonization contribute to sector development
	Less deforestation in the area where FORVAC works	Deforestation rate in FORVAC regions	Deforestation reduced	Deforestation significantly lower by the programme end in the VLFRs where FORVAC works compared to other VLFRs of the region	National Carbon Monitoring Centre statistics	
	Improved services for villages, e.g. water services, health services, RE solutions Improved services of the village office for villagers, e.g. regarding land registry	15.4% find service delivery systems well-functioning	Services improved in FORVAC supported villages (progress measured during the endline study)	Villager's opinions of the related services are improved during the project lifetime (disaggregated by sex, age and disability)	FORVAC baseline and endline reports	
	VLFRs increased contribution to national level sustainable woodland and forest management	247,789.2 ha (NFBK II & LIMAS)	26 forest management plans produced; 90,000 ha	2,4 million ha	NAFORMA MNRT statistics	
	Improved institutional support for the forest sector through regulations and legislation in place	Existing regulations and legislation at baseline	National Forest Act reviewed Kiswahili translation of Forest Act and Beekeeping Act 2021 produced and disseminated Forest Policy Implementation Strategy formulated and approved Charcoal Policy and Implementation Strategy approved and taken into use	Supportive regulations and legislation revised for sustainable forest management by the programme end	Forest related regulation	

Results	Indicators	Baseline	Annual target 7/2021 – 6/2022	End of programme target 7/2018 – 7/2022	Means of verification	Assumptions
Outcome						
Improved forest sector value chains contributing to sustainable forestry and forest-based livelihoods	Improved business environment in forestry sector related to <ul style="list-style-type: none"> - taxes and royalties - standards - forest value chains 	Poor transparency of taxes and royalties Non existing standards in place Poorly functioning forest value chains	Kiswahili translation of Forest Act and Beekeeping Act 2021 produced and disseminated Forest Policy Implementation Strategy formulated and approved Charcoal Policy and Implementation Strategy approved and taken into use	Transparent and just system for levying taxes and royalties in place Construction/technical standard developed The number of forest value chains related regulations revised, benefit sharing modalities in use (the number to be defined during the course of FORVAC)	Programme reports Published Standard Revised Regulations published; programme reports	Political commitment for sustainable forest management and value chain development in CBFM Favorable political, legal and policy framework for Public Private Partnerships (PPP) and towards private sector and civil society engagement in business development Institutional stability within MNRT
	Supporting functions/ Service provision for: <ul style="list-style-type: none"> - Improved market information system - Improved forest value chain financing - Enhancing capacities in VC 	Non-existent market information system Low awareness on business financing options Low capacity in place in Tanzania for value chain development	Beekeeping database established Forest sector businesses better linked with financing alternatives SUA offers a value chain development curricula	Market information system in place Forest sector businesses linked with financing alternatives Better functioning forest value chains in Tanzania benefitting forest sector and including participation of women and disadvantaged groups (data disaggregated by sex, age, disability) VC included in the curricula of forestry training institutions	Project reports Data collected from forestry training institutes	Good cooperation between MNRT / FBD, TFS and PO-RALG; all having clear roles on how to support communities and private sector Domestic market available for sustainably harvested timber, charcoal, honey and other NWFP products Increasing international market access for FSC certified timber
	Increased number of community producer groups and their members engaged in wood and NWFP harvesting, processing and marketing (per products/ district/ year, by sex, age and potential disability)	Process (0)	28 producers' groups established	70 groups of 30 women / men; totaling 2100 members (Figures to be revised on the basis of the baseline)	Survey on NWFPs, group records	Level of forest encroachment does not increase

Results	Indicators	Baseline	Annual target 7/2021 – 6/2022	End of programme target 7/2018 – 7/2022	Means of verification	Assumptions
Outcome						
Improved forest sector value chains contributing to sustainable forestry and forest-based livelihoods	Social fund distribution from forest produce sales (e.g. school uniforms, school desks, dispensary building, benefitting vulnerable; by gender, age and disability) and number of people benefitting	In 40% of the 20 villages sampled at the baseline study forestry has contributed to social services (contribution 40% of forest income): total of TZS 1,119,000,000 since starting of CBFM	+15 %	+75 %	Baseline/Endline studies VNRC book keeping, Village records	
	AAC - Annual Allowable Cut defined in harvesting plans, and logging done according to plans	Very few of the villages had updated harvest plans in place in the beginning of FORVAC	15 % (to be adjusted against harvesting plans)	xx % increase	VNRC records, district records	
	Increased areas under sustainable forest management (CBFM)	247,789 ha	90,000 ha	+ 60 % (additional 151,149 ha)	Management plans; District and VNRC records, and survey	
	Improved Forest Law enforcement and Governance system to replace trade of illegal timber with legally produced timber	Situation in 2018	Progress taken in establishment of components of Forest Law enforcement and Governance system	Key Forest Law enforcement and Governance system components in place	Project and FBD/TFS/district records	

Results	Indicators	Baseline	Annual target 7/2021 – 6/2022	End of programme target 7/2018 – 7/2022	Means of verification	Assumptions
Output 1. Improved Value Chains and increased Private Sector Involvement in the forest sector	Number of VLFRs declared and operational, including village land use plans and forest management plans	57 VLFRs (NFBKP II 20 + LIMAS 16) 24 LUP	26 VLFRs forest management & harvesting plans completed; 26 additional VLFRs declared and operational	85 VLFR functional (number of new VLFRs to be established 28) 52 LUP	District register (DFO) VLFR Mgt Plans programme reports VNRC reports	<p>Law enforcement is sufficiently efficient to make legally harvested timber viable</p> <p>Management plans fulfilled and are implemented according to sustainability criteria</p> <p>Strong leadership and equitable participation of villagers in CBFM is maintained</p> <p>FBD and PO-RALG take active stance in solving the coordination and monitoring issues</p> <p>PO-RALG allocates sufficient resources to districts</p> <p>Villages, private sector and civil society are committed to interact with GoT institutions</p> <p>Political will to support CBFM exists at District level</p> <p>A sufficient number of qualified Service providers available</p> <p>Domestic market demand increases for lesser-known timber species; for quality honey and other honey</p>
	Number of forest harvesting contracts contributing to the timber value chain managed in VLFRs (species, volume sold and unit prices) villages/district / year	to be established Income level 150 000 000 TZS/a	26 VLFRs harvesting plans completed 15 new harvesting contracts by June 2022	At least for 25 % of the VLFRs established during FORVAC +200%	VNRC records, district records, programme report	
	Lesser-known species with market potential identified and researched	process (0)	Study completed	at least 10 with potential for market/business dev.	Assessment Report on Lesser-Known Species, programme reporting	
	Advocacy on lesser-known species	process (0)	Miombo Timber Species Database and Catalog developed and market information made accessible to potential buyers, VLFRs, district and central authorities and other relevant stakeholders	x species of lesser-known species disseminated	TFS/districts records, market study on species and their market potential assessed and promoted, programme reporting	
	Honey producer or other NWFP/NTFP producer groups linked with traders and other value chain actors (by sex) and their income increased	70 groups Kg 21 000 / a honey Kg 5250 / a bees wax NTFP: to be established % women producers	10 producer groups linked with traders min. 30% memberships of women	+ 30% + 100% + 100% + 100%	District statistics/records, programme reporting survey on honey sales and / or NWFP sales	

Results	Indicators	Baseline	Annual target 7/2021 – 6/2022	End of programme target 7/2018 – 7/2022	Means of verification	Assumptions
Output 1. Improved Value Chains and increased Private Sector Involvement in the forest sector	Increased efficiency of timber processing (e.g. use of efficient sawmills contra pit sawing)	Current recovery rate 25 -30 % (to be confirmed)	4 mobile sawmills procured and made operational, and the broken sawmill of SULEDO in Kiteto district repaired 2 solar kilns procured, installed and taken into use in 2 of the FORVAC supported sawmills	5 – 10% increase	Survey on recovery rates	products produced in Tanzania Other NWFPs (other than honey products) with commercialization potential are available Private sector, villagers and VNRC exist in the districts and are interested to participate in value chain development
	Number of new institutional arrangements / business models with market linkages (e.g. MoUs, joint ventures, PPP & other partnerships)	Process (0)	+ 3 – 5 new institutional arrangements/ business models with market linkages, including community owned and managed portable sawmills	10 – 15	TFS, District and programme records	
	Number of private business actors engaged in legal timber processing (per district/year) increased	Baseline study results (covering 20 villages)	At least +30% increase	+150%	VNRC (VLFR), TFS, District and programme records Endline study	
	Increased employment (# of persons getting income) in harvesting and transportation, processing, pit sawing and saw milling; by gender.	5 % of population in target villages employed in timber processing	+ 300 (15 % women)	+1000 people (at least 20 % women)	Baseline and endline studies, project reports	
	Total income from charcoal sales within FORVAC VLFRs	Handeni: TZS 3.5 million per year Kilindi: 39.6 million per year	+20%	+200%	District forestry offices	
	Reduction in annual illegal forest harvesting cases in FORVAC supported forests	Illegal harvesting of timber was reported by 17.9% of the respondents (Baseline study)	<5 cases Establish Forest User Networks to report on illegalities. Pilot illegality reporting dashboard Work on availability of legal timber via CBFM	10% of the respondents report illegal harvesting of timber	Baseline and endline studies	

Results	Indicators	Baseline	Annual target 7/2021 – 6/2022	End of programme target 7/2018 – 7/2022	Means of verification	Assumptions
Output 2. Stakeholder capacity to implement and promote forestry value chain development enhanced	Number of government staff trained in forest management and value addition techniques, disaggregated by sex (inclusive VETA training programme)	Government staff not having or possessing inadequate knowledge and skills on forest mgt and VCD	120 district officers (10 officers in each Programme district) 22 regional and central government officers 20% women	Defined in TNA	FBD/NFBKP II/LIMAS records from previous phase and service provider records	Government organisations willing to implement capacity development results Villages, districts, private sector, civil society actors and other organizations willing and able to implement capacity development and are committed to interact with GoT institutions Equitable participation of villagers in CBFM related capacity development FBD/TFS and PO-RALG take active stance in promoting capacity building at all levels Willingness and ability of relevant educational institutes to include forest value chain development in their curricula
	Number of individuals trained in forest management and value addition techniques, disaggregated by sex, age and disability/ by category (village level, SMEs, service providers)	Village Councils and VNRCs, villagers involved in timber harvest & processing, charcoal production and trade with totally lacking or inadequate knowledge and skills on forest management and VCD	3400 village leaders (85 villages: 20 Village Councils + 20 VNRCs) 300 MSME employees, at least 20% women 20 staff members of Service Providers	Defined in TNA	Records kept by the project and service providers	
	Value chain related efficiency in decision making and in administrative procedures increased	Status/baseline as of situation in 2018	Steps taken to improve efficiency of VC related decision making and administrative procedures, average time for getting permits reducing	Average time for getting permits reduced procedures simplified	Procedures defined and used as a reference for assessing the performance	
	Forest value chain development incorporated in University and FTI/FITI curricula	No existing VC related education	SUA offers a VCD curricula	Curricula developed and in use Issues of gender, age and disability considered in learning materials	Programme reports; existing curricula	
Output 3. Functional extension, communication, monitoring systems and Management Information System in place	Communication strategy mobilized	Established (ST consultancy in 2018)	FORVAC website and Facebook page used & updated.	FORVAC communication according to strategy	Programme reports	MNRT and PO-RALG take active stance in extension and communication services along the VC at all levels Villages, districts, private sector, civil society actors and other organizations

Results	Indicators	Baseline	Annual target 7/2021 – 6/2022	End of programme target 7/2018 – 7/2022	Means of verification	Assumptions
Output 3. Functional extension, communication, monitoring systems and Management Information System in place	Extension strategy developed, aiming for synergies with FBD, on the principles of HRBA, incorporating value chain development	Non-existent	Implementation strategies and extension manuals of forestry and beekeeping policies developed. PFM Facts and Figures 2020 published and the VLFR database updated and taken into use	Strategies and Extension manuals developed and taken in use	Implementation Strategies and Extension Manuals of Forestry and Beekeeping Policies	willing to develop extension and communication TFS and FBD and other concerned governmental parties including research institutions, as well private sector and NGOs are committed to set up functional monitoring and MIS systems and provide inputs on regular basis Districts, villagers and VNRCs cooperate in collecting data for village monitoring system
	Programme MIS unit established contributing to FBD MIS development	Non-existent	MIS updated monthly	Functional MIS Unit	Programme reports	
Output 4. Supportive legal and policy frameworks to forest value chain and sustainable forest management developed	FORVAC development support for Guidelines: CBFM books	Version outdated	Methodologies and guidelines for Participatory Forest Resources Assessment (PFRA) developed, 1000 pcs. printed and disseminated	Books updated and distributed to CBFM actors Issues of gender, age and disability considered in visual materials	Programme reports	Political will exist for updating and endorsing the sector level policy and legal documents GoT committed to support Forest Law and Governance enforcement, as well as implementation of Charcoal Policy and Implementation Strategy Private sector and civil society are committed to interact with GoT institutions in legal and policy revision processes, and GoT takes due recognition
	Updated forest legislation (Forest Act and regulations) approved	Updated Forest act needed for Forest policy	National Forest Act reviewed Kiswahili translation of Forest Act and Beekeeping Act 2021 produced and disseminated	Forest Act approved; related information disseminated in project area (with consideration to accessibility for all potential users)	MNRT reports and records	
	Implementation Strategies and Extension Manuals of Forestry and Beekeeping Policies Disseminated	No up-to-date strategy available, no recent dissemination	Forest Policy Implementation Strategy formulated and approved	Implementation Strategies and Extension Manuals of Forestry and Beekeeping disseminated	Implementation Strategies and Extension Manuals, Programme reports	
	National Assessment on the Charcoal sector results supported by FORVAC	Draft in progress	Charcoal Policy and Implementation Strategy approved and taken into use	Strategy in use	MNRT records on National Charcoal Strategy	

Results	Indicators	Baseline	Annual target 7/2021 – 6/2022	End of programme target 7/2018 – 7/2022	Means of verification	Assumptions
Output 4. Supportive legal and policy frameworks to forest value chain and sustainable forest management developed	Timber legality assurance system (TLAS) established	Initiated, with development of timber tracking sub-component of TLAS, electronic device piloted in selected checkpoints	Tanzanian Timber Legality Manual popularized versions developed and distributed to communities. Checkpoint guidelines developed: 1000 pcs. printed and disseminated FREMIS recognizing VLFR timber, and data input from the stump in-built	TLAS developed and in use, efficient country-wide timber tracking system piloted and taken into use	TFS reports, MNRT report, programme reporting	

Annex 2 Workplan 7/2021 – 6/2022

FORVAC: ANNUAL WORKPLAN FROM JULY 2021 TO JUNE 2022

Code (#)	Project output/main Activity description	FORVAC (in total)							Programme coordination, PMT	Clusters				Responsible person	
		Definition of the activity within AWP 2021 - 2022	Schedule				Unit	Target (total)		Tanga	Lindi	Ruvuma	Leading role	Support	
			07-09/2021	10-12/2021	01-03/2022	04-06/2022				Target	Target	Target			Target
1	Improved Value Chains and increased Private Sector Involvement in the forest sector														
1.1	Establishment and mobilization of Village Land Forest Reserves (VLFR)														
1.1.1	Establishment of VNRCs (<i>awareness raising, forming the VNRC</i>)	VNRCs established						VLFR	7		1	1	5	CCs	FME
1.1.2	Agreement & demarcation of village boundaries (Identifying village land and its use; agreeing village boundaries; Obtaining legal authority; Demarcating village boundaries)	Villages with Land Certificates						Village	4				4	CCs	FME
1.1.3	Support to Establishment of Village Land Use Plan (VLUP) Production of (Village Land Use Plan (VLUP), Forest Area Demarcation)	Printing and dissemination of 20 VLUPs						VLUP	20	20				FME	FAM
1.1.4	Demarcation of the forest area, forest inventory and production of VLFR/CFR Management Plans (Participatory Forest Timber Inventory; Analyzing the Inventory Data; Drafting the VLFR Management Plan)	Survey & mapping of VLFRs to obtain an official job number (JB)						VLFR	10		5		5	CCs	FME
		VLFR Mgt Plans (FMPs) developed and approved, including review of the FMPs by the FBD, including SULEDO						VLFR Mgt Plan (FMP)	26		1	19	6	CCs	FME
1.1.6	Gazetting of VLFRs/CFRs	Gazetted VLFRs						VLFR	14		2	6	6	CCs	NPC FME
1.1.8	Support to patrolling and other field activities of operational VLFRs/CFRs: equipment & motorbikes for selected VLFRs/CFRs	Support for field equipment (uniforms, measurement tools etc.)						VLFR	25		5	10	10	CTA FAM	AFAM
1.1.10	Introduce and pilot information dashboard for reporting illegal activities involving communities and private sector as informants in selected districts – workshops, FGDs, support to related investments	Information dashboard introduced and piloted						District	2		1		1	CCs	VCA
1.1.11	Establishment of bees reserves to support beekeeping value chains	Establishment of bees reserves, gazzetment						Bee reserve	5		5			FME CCT	NPC NJE

Code (#)	Project output/main Activity description	FORVAC (in total)						Programme coordination, PMT	Clusters			Responsible person			
		Definition of the activity within AWP 2021 - 2022	Schedule				Unit		Target (total)	Tanga	Lindi	Ruvuma	Leading role	Support	
			07-09/2021	10-12/2021	01-03/2022	04-06/2022		Target		Target	Target	Target			
1.2	Support to value chain development														
1.2.4	Wood products, NTFP/NWFP, Charcoal: Business plans and business skills development in all areas	Service Contract: Developing intensified CBFM Charcoal Production Model for VLFRs for protection of forests and livelihoods improvement (piloting in Handeni Districts) and related research						Pilot site	2		2			CTA CCT	FME
1.2.6	Support institutional arrangements/business models with market linkages (e.g. MoUs, joint ventures, PPP & other partnerships, groups/association/cooperative initiatives)	Marketing events & activities						Event	5	1	1	1	2	CCs	FME NJE
		Support mobilization of beekeepers groups / associations business agreements with potential buyers						Group / Association	8		3		5	CCs NJE	FME
1.2.7	Assist communities to improve the quality of timber harvested from community forests and link their production with market (demand)	Sawmills operational (community empowerment, organizing the sawmill ownership, management and operation & maintenance) in 4 new sawmills and 2 sawmills established within AWP 2020 - 2021						Community with a sawmill	6		1	3	2	CTA	FME CCs
1.2.8	Assist communities to improve the quality of timber and other forest products harvested from community forests and link their production with market (demand) – support for better equipment	Portable sawmills procured						Sawmill	4		1	2	1	CTA	FME FAM
		SULEDO sawmill repaired and remobilized, including additional user training						Sawmill	1		1			CTA	FME CCT
		Solar kiln procured and established for 2 of the sawmills, includes user training						Solar kiln	2			1	1	CTA FAM	FME CCs
		Other equipment for 1 VLFRs (also small-scale harvesting and timber processing machinery / equipment)						VLFR	4		2		2	CCs CCs	FME

Code (#)	Project output/main Activity description	FORVAC (in total)						Programme coordination, PMT	Clusters			Responsible person	
		Definition of the activity within AWP 2021 - 2022	Schedule				Unit	Target (total)	Tanga	Lindi	Ruvuma	Leading role	Support
			07-09/2021	10-12/2021	01-03/2022	04-06/2022							
1.2.9	Support to timber processing entities to improve efficiency of timber processing (e.g. use of efficient sawmills contra pit sawing, saw doctoring, improved recovery and quality of production): FGDs, training/workshops, mentoring, access to finance	Service Contract: review of capacities (machinery/equipment, business mgt, supervision/ staff skills) and sources of raw material of sawmilling and carpentry industry in the FORVAC districts/regions, developing a capacity building plan, demand - supply analysis for community timber					SP / Process	1	1			FME CTA	NPC
1.2.11	Identification of lesser known species	Service Contract: contract for lesser-known species study (10 - 15 species tested and recorded), establishment of a Miombo Timber Database (completion of the ongoing study)					SP / Process	1	1			CTA	FME FAM
		Promotion of identified lesser known species to the market (includes fabrication of furniture, tools and other utilities from LKS), catalogue development/market information					Process	1	1			CTA	FME IJE
1.2.12	Support VLFRs in harvesting contracts: mentoring, formulation of contracts, linkages with contractors/harvesting companies/buyers	Establishment of timber harvesting contracts					Harvesting contract	6		2	2	2	CCs FME
1.2.13	Support piloting production of bamboo and manufacturing of products from bamboo in FORVAC districts	Bamboo production (growing) pilot sites					Bamboo pilot	1				1	CCR FME NJE
		Bamboo product pilots / demos (bamboo baskets production group, capacity building / training/marketing - baskets + barbeque sticks + tooth sticks)					Group	2			1	1	CCR CCL NJE FME
1.2.15	Improved capacities of VNRCs, tree growers and SMEs within the value chain so that management of VLFRs, volume, quality of tree growing and processing will be improved.	Tree planting: in 4 villages in Nyasa District (TTGAU/TGA cooperation)					Ha	100				100	CCR FME

Code (#)	Project output/main Activity description	FORVAC (in total)						Programme coordination, PMT	Clusters			Responsible person			
		Definition of the activity within AWP 2021 - 2022	Schedule				Unit		Target (total)	Tanga	Lindi	Ruvuma	Leading role	Support	
			07-09/2021	10-12/2021	01-03/2022	04-06/2022		Target		Target	Target	Target			
1.2.17	Call for Business Proposals, Category 1: Community level call	Call for Business Proposals -community level supporting functions in district/cluster level (announcements, interviews of applicants, selection board)						District	6		0	2	4	NJE FME	CCs
		Service Contract: mentoring (8 months), procurement of assets, distribution, grant management						District	6		0	2	4	CTA FAM	FME NJE
		Support to investments of the selected micro businesses (100 initiatives)						Micro-business initiative	100		25	25	50	CTA FAM	FME NJE
		Technical support to community businesses selected via call for business proposals, e.g. honey quality, increased capacity in wood works, advanced bamboo processing techniques						District	7		1	2	4	NJE CCs	FME
1.2.18	Business Proposals, Categories 2 - 3: Mezzo & National level (e.g. honey processing in identified areas, bamboo processing, sawmilling)	Private sector involvement - Mezzo & National level						Cluster	4		2	1	1	CCs NJE	FME
1.2.22	Support to forest certification process	VLFRs certified (FSC)						VLFR	6			6		CCL	FME
2	Stakeholder capacity to implement and promote forestry value chain development enhanced														
2.1	Improved institutional and management capacities of Village Councils and VNRC to implement CBFM and develop forest value chains														
2.1.1	Capacity building in VLFRs/CFRs, LUP, laws and regulations related to value chain	Training events conducted for Village Councils and VNRCs on VLFRs/CFRs, LUP and on laws and regulations related to CBFM						Event	12		4	3	5	CCs	CTA FME
2.1.2	Support negotiations for VLFRs/CFR benefit sharing	Capacity building for VC & VNRC members on Governance						Event	10		2	2	6	CCs	CTA FME

Code (#)	Project output/main Activity description	FORVAC (in total)							Programme coordination, PMT	Clusters			Responsible person	
		Definition of the activity within AWP 2021 - 2022	Schedule				Unit	Target (total)		Tanga	Lindi	Ruvuma	Leading role	Support
			07-09/2021	10-12/2021	01-03/2022	04-06/2022			Target	Target	Target			
2.1.3	Train/educate communities on their rights and benefits of sustainable forest management	Training events for community members on village forest governance and rights and benefits of sustainable forest management					Event	28		5	11	12	CCs	FME
		Support the 16 Village Forest Governance Networks within FORVAC areas					Network	16		2	10	4	CCs	CTA FME
2.1.4	Training of VNRCs in financial aspect (feasibility calculations, business planning)	Training events facilitated by district officers					Event	23		5	10	8	CCs	NJE
2.1.5	Capacity building in Forest management plan development & implementation	New VNRCs/VCs trained					Event	5		1	1	3	CCs	FME
		Training on patrolling & fire mgt to VNRC (by district officials)					Training event	40		10	15	15	CCs	FME
2.1.7	Support fund raising activities for the development of new value adding activities (grants and loans from existing service providers, such as TaFF, VICOBA/VS&L/SACCO)	Producers' groups established/ supported, VICOBA/VSLA activities					Producers' group	19		5	7	7	CCs	NJE FME
2.1.9	Exchange visit to area of successful interventions in CBFM and value chains	Exchange visits for community members facilitated					District	11		3	3	5	CCs	FME NJE
2.2	Improved capacities to support and monitor CBFM/forest and related value chains and incorporating HRBA aspect													
2.2.2	Capacity building in PFM, LUP, laws and regulations related to Value chain	Training events for district level authorities on PFM, VLFR/CFR, LUPs, forestry and beekeeping related laws and regulations					Event	8		2	3	3	FME CTA	CCs
		Co-facilitating Annual CBFM Stakeholder Forum in Ruvuma Region					Event	1	1				CTA FME	CCR
		Training on Government Notices (eg. GN 417, GN 627) to implementors (TFS, LGAs officers,VLs, DHCs)					Event	3		1	1	1	FME NPC	CTA
2.2.3	Capacity building to districts staff on forest value chain (value links) development	Training events on VCD					Training event	11		3	3	5	CCs	FME NJE
2.2.5	Cooperation with Tanzania Forest Industries Federation (SHIVIMITA)	Forest Industry's training on procurement and marketing timber from VLFRs					Training event	2			1	1	FME NPC	CTA

Code (#)	Project output/main Activity description	FORVAC (in total)						Programme coordination, PMT	Clusters			Responsible person		
		Definition of the activity within AWP 2021 - 2022	Schedule				Unit		Target (total)	Tanga	Lindi	Ruvuma	Leading role	Support
			07-09/2021	10-12/2021	01-03/2022	04-06/2022		Target		Target	Target	Target		
2.2.9	Exchange visits to area of successful interventions in CBFM and value chains (local)	Exchange visits					Exchange visit	5	1	1	1	2	CCs	FME NJE
2.2.12	Support district facilities during implementation of FORVAC activities.	Repair a vehicle/district					Vehicle	10		3	3	4	FAM CCs	AFAM
		Maintenance & fuel, TZS 800,000/month/vehicle					Vehicle	10		3	3	4	FAM CCs	AFAM
2.3	Forest products value chain/market systems and business development skills incorporated in relevant training institutes													
2.3.1	Support Tutors and Lecturers of training institutes (SUA and FTI/FITI/TBI) to participate on forest value chain/market systems and business development related trainings/short courses	Planning of a process to develop a VCD module to the curricula of 1-2 institutes					Process	1	1				FME CTA	FAM NPC
2.3.3	Support studies and thesis/dissertations related to forest products value chain/market system and business development relevant for CBFM	2 MSc studies / thesis supported					Study, thesis	2	2				FME	CTA
2.3.4	Support scientific workshops for sharing research results relevant to CBFM and value chains development	Scientific seminar (2/2021): Lay-out and printing of the report of the International Scientific Conference (ISC) on Forest and Honeybee Products Value Chains					Process	1	1				CTA NPC	FME
		Production of a popular version of the scientific seminar report for the use of CBFM communities					Process	1	1				CTA FME	NPC
3	Functional extension, communication, monitoring systems and Management Information System in place													
3.1	Enhanced extension and communication services													
3.1.1	Supporting Districts & FBD on Forest and beekeeping related events (Sabasaba, Beekeeping & Tree planting day, Nanenane)	Facilitate participation of communities, FBD & PO - RALG in National events (e.g. Sabasaba, Nanenane, World Environment Day, World Forest Day, Industries Week, World Bee Day)					Event	8	2	2	2	2	CCs NPC	FME
3.1.2	Assists active journalists committed to forest issues to be further involved in forestry related activities to report and learn new concepts emerging in the forest sector – workshops and other forums, dialogues	Media tour & engagement of media in documenting CBFM/VCD, production of documentaries on FORVAC success stories.					Event	4	1	1	1	1	CCs IJE	FME

Code (#)	Project output/main Activity description	FORVAC (in total)						Programme coordination, PMT	Clusters			Responsible person			
		Definition of the activity within AWP 2021 - 2022	Schedule				Unit		Target (total)	Tanga	Lindi	Ruvuma	Leading role	Support	
			07-09/2021	10-12/2021	01-03/2022	04-06/2022		Target		Target	Target	Target			
3.1.4	Develop Implementation Strategies and Extension Manuals of Forestry and Beekeeping Policies	Develop Implementation Strategies and Extension Manuals of Forestry and Beekeeping Policies						Process	1	1				CTA NPC	FME
		Develop guidelines and/or policy reviews for Tanzanian forestry and beekeeping industries relevant to CBFM and VCD						Process	1	1				FME NPC	CTA
3.1.9	Awareness raising for the youth on sustainable forestry, related livelihoods and environmental issues	Development and distribution of awareness raising materials for primary/secondary schools						Process	1	1				IJE	AFAM CCs
		Awareness raising events in selected schools						Event	12		4	3	5	IJE	CCs
3.2	Monitoring and Management Information System (MIS) established														
3.2.1	Support district & national authorities in monitoring of FORVAC interventions	Review and planning workshops biannually						Workshop	8	2	2	2	2	CCs NPC	FME
		Technical monitoring & backstopping to FORVAC interventions by districts/ regional/national authorities						Monitoring & backstopping visit	15	4	3	3	5	CCs NPC	FME
		FBD capacity building to implement and monitor forestry and beekeeping policies						Process	1	1				FME NPC	CTA
3.2.4	Update facts and figures of PFM across Tanzania	Lay-out, printing (3000 copies) and dissemination of PFM Facts and Figures 2020						Edition	1	1				CTA FAM	NPC FME
		Service contract: data input / update of the VLFR database						SP / Process	1	1				CTA NPC	FME
3.2.5	Programme end impact assessmet	Service contract: Programme end impact study to support implemenation of the programme exit strategy						SP / Process	1	1				CTA	FME
		ST consultancy: Support to the Programme end impact study (30 ST consultancy days)						ST / Process						CTA	

Code (#)	Project output/main Activity description	FORVAC (in total)						Programme coordination, PMT	Clusters			Responsible person			
		Definition of the activity within AWP 2021 - 2022	Schedule				Unit		Target (total)	Tanga	Lindi	Ruvuma	Leading role	Support	
			07-09/2021	10-12/2021	01-03/2022	04-06/2022		Target		Target	Target	Target			
3.2.6	Monitoring forest cover in the Programme area (target villages)	Service contract: satellite image -based monitoring of development of forest coverage (deforestation) in the Programme area						SP / Process	1	1				CTA	FME IJE CCs
4	Legal and policy frameworks in forestry supported														
4.1	Improved policy and regulatory framework for forest value chain development														
4.1.1	Support training to increase understanding of policies and laws relevant for CBFM development	National workshops/forums on policies and laws and challenges related to CBFM and its value chains						Workshop	1	1				CTA NPC	FAM FME
4.1.2	Support to development of Natural Forest Management Planning Guidelines and CBFM books and their dissemination	Working group meetings / workshops on review and development of CBFM Guidelines						Workshop	3	3				CTA NPC	FAM FME
		Printing of the guidelines (1,000 pcs.)						Edition	1	1				FAM NPC	FME
4.1.3	Updated forest legislation (Forest Act and regulations)	Workshops/focus group discussions/Taskforce meetings to review the National Forest Act No 14 of 2021						Event	2	2				FAM NPC	FME
		Printing of reviewed and translated Forest Act (3000 psc.)						Edition	1	1				FAM NPC	FME
		Translation of Forest Act and Beekeeping Act into popular versions, working group meetings						Event	2	2				FME NPC	FAM
4.1.4	Support dissemination of Implementation Strategies and Extension Manuals of Forestry and Beekeeping Policies	3,000 copies (in total) of the Implementation Strategies and Extension Manuals printed and disseminated						Edition	1	1				FAM NPC	FME
4.1.5	Support preparation of Charcoal Policy and Implementation Strategy	Taskforce (13 members) meetings / workshops on preparation of the National Charcoal Strategy						Event	4	4				CTA NPC	FAM
		3,000 pcs. of National Charcoal Strategy printed						Edition	1	1				FAM NPC	FME

Code (#)	Project output/main Activity description	FORVAC (in total)						Programme coordination, PMT	Clusters			Responsible person	
		Definition of the activity within AWP 2021 - 2022	Schedule				Unit	Target (total)	Tanga	Lindi	Ruvuma	Leading role	Support
			07-09/2021	10-12/2021	01-03/2022	04-06/2022							
4.2	Forest law enforcement, forest governance and trade of legally sources timber												
4.2.1	Capacity building – workshops and focus group discussions to set-up a national action plan for developing the Timber Legality Standards that also cover timber production in natural forests including VLFRs	Support to TFS/TFWG/TRAFFIC to organize a national seminar on illegal logging and Tanzania Timber Legality Framework					Event	1	1			CTA	NPC FME
4.2.2	Support timber tracking systems: Contribute to a process of reducing number of checkpoints in major highways (option: merging TFS and District council checkpoints) – focus group discussions, workshops.	Workshops and FGDs on operationalization of checkpoint data management system in collaboration with TRAFFIC/TFS					Event	3	3			CTA NPC	FME
4.2.5	Timber Legality Framework	Lay-out, printing (1000 copies) and dissemination of Tanzania Timber Legality Framework produced within AWP 2020 - 2021					Process	1	1			FAM NPC	FME
		Preparation of a popular version of the Tanzania Timber Legality Framework for district/communiy level, printing 1,500 pcs.					Process	1	1			CTA NPC	FME
4.2.6	Chain of Custody for VLFR timber	Develop a technological solution for tracking VLFR timber from stump to market, FGDs and workshops					Process	1	1			CTA NPC	FME
		Stakeholder workshop to collect views and feedback regarding the solution					Event	1	1			CTA	FME

Annex 3 Operational coverage of FORVAC in each District

Cluster	District	Output 1 / Output Area 1.1:						Output 1 / Output area 1.2:	Output 2 / Output area 2.1:		A Total No of Villages Where FORVAC Operates
		VLUP by FORVAC		Established & Mobilized VLFRs by FORVAC		FMPs by FORVAC		Value Chain Development by FORVAC	Capacity Building at the Village Level by FORVAC	Support of Fund Raising Activities by FORVAC (VICOBAs & VSLAs)	
		Implemented	Ongoing	Implemented	Ongoing	Implemented	Ongoing				
RUVUMA	NYASA								Ngingama		4
									Nkalachi		
									Liweta		
	TUNDURU	Misechela		Misechela		Liwangula		Liwangula	Liwangula		
						Kajima		Kajima	Kajima		
						Mkowela		Mkowela	Misechela		
									Mkowela		
LINDI	RUANGWA	Machang'anja		Nandenje		Nandenje		Michenga	Lichwachwa	Nandenje	11
		Mmawa		Mchichili		Mchichili		Nandenje	Mchichili	Kitandi	
		Chingumbwa		Nahanga		Nahanga		Nahanga	Nahanga	Nahanga	
		Nahanga		Lichwachwa		Lichwachwa		Mtondo	Nandenje	Mchichili	
		Mchichili		Nga'u		Nga'u		Machang'anja	Mmawa		
									Kitandi		
									Chingumbwa		
									Machang'anja		
									Mtondo		
									Michenga		
	LIWALE	Likombora		Mtawatawa		Mtawatawa		Barikiwa	Mtawatawa	Nanjegeja	27
		Turuki		Kitogoro		Kitogoro		Chimbuko	Kitogoro	Tuungane	
		Luwele		Nangano		Nangano		Litou	Kiangara	Turuki	
		Lilombe		Nahoro		Nahoro		Kiangara	Litou	Chimbuko	
		Chigugu		Mtungunyu		Mtungunyu		Nangano	Kibutuka	Legezamwendo	
				Mikunya		Mikunya		Ngongowele	Nangano	Barikiwa	
				Darajani		Darajani		Kibutuka	Nahoro	Mahonga	
				Naujombo		Naujombo		Mihumo	Mtungunyu	Mikunya	
				Chimbuko		Chimbuko		Likombora	Mikunya		
			Barikiwa		Barikiwa		Lilombe	Legezamwendo			
		Nanjegeja		Lilombe		Ngunja	Tuungane				
		Mahonga		Luwele			Ngongowele				
		Luwele		Chigugu			Mikuyu				
		Lilombe		Lilombe			Ngunja				
		Chigugu		Luwele			Lilombe				

C l u s t e r	District	Output 1 / Output Area 1.1:						Output 1 / Output area 1.2:	Output 2 / Output area 2.1:		A Total No of Villages Where FORVAC Operates
		VLUP by FORVAC		Established & Mobilized VLFrs by FORVAC		FMPs by FORVAC		Value Chain Development by FORVAC	Capacity Building at the Village Level by FORVAC	Support of Fund Raising Activities by FORVAC (VICOBAs & VSLAs)	
		Implemented	Ongoing	Implemented	Ongoing	Implemented	Ongoing				
L I N D I	LIWALE			Ngumbu		Mahonga			Chigugu		
						Nanjegeja			Luwele		
						Ngumbu			Mihumo		
									Darajani		
									Likombora		
									Turuki		
									Mahonga		
									Nanjegeja		
									Ngumbu		
									Naujombo		
									Chimbuko		
									Barikiwa		
	NACHINGWEA	Majengo		Nahimba		Nahimba		Nahimba	Kegei 'A'	Nahimba	14
		Matekwe		Majonanga		Kilimarondo		Kilimarondo	Mbondo	Likwela	
				Kilimarondo		Nanjihi		Majonanga	Majonanga	Namapwia	
				Nanjihi		Majonanga		Mbondo	Kilimarondo	Kiegei 'A'	
				Mbondo		Mbondo			Majengo	Nanjihi	
				Kiegei 'A'		Kiegei 'A'			Matekwe	Matekwe	
				Kiegei 'B'		Kiegei 'B'			Nahimba	Majengo	
				Ngunichile		Ngunichile			Nanjihi		
				Luipuyu		Luipuyu			Kiegei 'B'		
				Namatunu		Namatunu			Ngunichile		
						Matekwe			Luipuyu		
									Namatunu		
T A N G A	HANDENI	Kitumbi		Kitumbi		Kitumbi	Mazingara	Kitumbi	Kitumbi	Kitumbi	5
		Kwamsundi		Kwamsundi		Gole		Gole	Gole		
						Kwedikabu		Kwedikabu	Kwedikabu		
								Mazingara	Mazingara		
								Kwamsundi	Kwamsundi		
	KILINDI	Mnkonde		Mnkonde		Mnkonde		Mnkonde	Mnkonde	Kwamwande	5
		Turiani		Turiani Kwedijero					Tuariani Kwedijero		
		Komnazi		Komnazi					Komnazi		
									Kwamwande		
								Vunila			

C l u s t e r	District	Output 1 / Output Area 1.1:						Output 1 / Output area 1.2:	Output 2 / Output area 2.1:		A Total No of Villages Where FORVAC Operates
		VLUP by FORVAC		Established & Mobilized VLFs by FORVAC		FMPs by FORVAC		Value Chain Development by FORVAC	Capacity Building at the Village Level by FORVAC	Support of Fund Raising Activities by FORVAC (VICOBAs & VSLAs)	
		Implemented	Ongoing	Implemented	Ongoing	Implemented	Ongoing				
T A N G A	MPWAPWA	Chiseyu		Chiseyu				Lwihomelo	Chiseyu	Ikuyu	6
		Ikuyu		Ikuyu				Lufusi	Ikuyu		
		Chitemo		Chitemo				Chiseyu	Chitemo		
								Nduga			
								Ikuyu			
								Chitemo			
	KITETO						SULEDO*		SULEDO*		13
Total No of Villages		41		59		46	14	55	115	33	122

* SULEDO Community Forest Reserve covers the following 13 villages: Asamatwa, Engang'uangare, Laiseri, Lengatei, Lesoiti, Loltepesi, Mesera, Ndotoi, Olgira, Olikitikiti, Zambia, Sunya, and Chang'ombe villages.

Annex 4 FORVAC supported Village Land Use Plans (VLUPs), Forest Management Plans (FMP), Harvesting Plans (HP), and gazetted Village Land Forest Reserves (VLFR)

FORVAC supported Village Land Use Plans (VLUPs), Forest Management Plans (FMP), and Harvesting Plans (HP)

Cluster	District	Village	VLUP Area (ha)	VLUP Approved at District level	VLFR Area (ha)	Area of VLFR Gazetted	FMP Area (ha)	FMP & HP Approved at Village Level	FMP & HP Approved at Higher Levels	Annual Allowable Cut (m³)
Ruvuma	Namtumbo	Kumbara	5,587	6/2020	750					
		Limamu	73,192	6/2020	16,391		16,391	2/2021	District level 4/2021	4,205
		Njalamatata	13,449	Not yet Approved	2,021					
		Chengena	14,789	Not yet Approved	844					
		Kilangalanga	10,979	Not yet Approved	835					
		Masuguru	16,676	Not yet Approved	2,924					
	Songea	Liweta	13,488	12/2019	1,449		1,449	9/2020	Ministry level 3/2021	563
		Litowa	17,100	12/2019	1,190		1,190	9/2020	Ministry level 3/2021	966
		Kikunja	21,692	12/2019	4,498					
		Ndongosi		Existing LUP valid			4,941	9/2020	Ministry level 3/2021	1,865
		Mhukurulilahi		Existing LUP valid			7,698	9/2020	Ministry level 3/2021	1,843
		Matimila A	12,621	Not yet Approved	4,253					
	Mbinga	Ndongosi	6,894	12/2019	944					
		Kindimba juu	10,389	12/2019	1,618					
		Kindimba chini	11,162	12/2019	4,807					
		Amani makolo	9,947	Not yet approved	1,201					
		Kiwombi	4,256	Not yet approved	653					
		Barabara	6,710	Not yet approved	1,980					
	Nyasa	Litumbakuhamba	3,536	11/2019	1,094					
		Hinga	5,343	11/2019	2,663					
		Litoromelo	3,306	11/2019	260					
		Mkali B	1,524	Not yet Approved	91				Area for tree planting	
		Misechela	65,681	Not yet Approved	4,934					
	Tunduru	Liwangula		Existing LUP valid			6,124	3/2021	District level 4/2021	1,615
		Kajima		LUP has expired			3,497	6/2021	District level 8/2021	654
		Mikowela		Existing LUP valid			14,221	9/2021	Not yet Approved	1,533
		Lichwachwa		Existing LUP valid		2,414	2,414	8/2020	Ministry level 3/2021	594
Lindi	Ruangwa	Mmawa	1,416	11/2019	446					
		Nandenje		Existing LUP valid		5,084	5,084	8/2020	Ministry level 3/2021	1,666
		Nahanga	8,167	Not yet approved	3,053	3,053	3,053	8/2020	Ministry level 3/2021	629
		Chingumbwa	4,507	11/2019	1,690					
		Mchichili	11,046	Not yet approved	6,188	6,188	6,188	8/2020	Ministry level 3/2021	387
		Machang'anja	8,918	11/2019	2,460					
		N'gau		Existing LUP valid		4,095	4,095	8/2020	Ministry level 3/2021	261
		Mikunya		Existing LUP valid		1,369	1,369	3/2020	Ministry level 12/2020	5,422
	Liwale	Mtawatawa		Existing LUP valid		12,391	12,391	6/2020	Ministry level 12/2020	1,799
		Nangano		Existing LUP valid		8,822	8,822	3/2020	Ministry level 12/2020	1,799
		Mtungunyu		Existing LUP valid		18,992	18,992	6/2020	Ministry level 12/2020	2,834
		Nahoro/VLFR 1		Existing LUP valid		20,905	20,905	6/2020	Ministry level 12/2020	8,422
		Nahoro/VLFR 2		Existing LUP valid			1,028	6/2020	Ministry level 12/2020	771
		Naujombo		Existing LUP valid			6,737	9/2020	Ministry level 12/2020	932
		Chimbuko		Existing LUP valid			18,915	10/2020	Ministry level 12/2020	7,406
		Barikiwa		Existing LUP valid		19,268	19,268	9/2020	Ministry level 12/2020	9,601
		Darajani		Existing LUP valid			5,035	6/2020	Ministry level 12/2020	1,309
		Kitogoro		Existing LUP valid		8,275	8,275	6/2020	Ministry level 12/2020	3,548
		Likombora	16,947	12/2019	11,006	11,006			Old FMP valid till 2021	
		Turuki	14,625	12/2019	9,086	9,086			Old FMP valid till 2021	4,005
		Chigugu/VLFR 1	15,600	8/2021	3,601		3,601	3/2021	Not yet approved	1,244
		Chigugu/VLFR 2		Same with VLFR1	3,564		3,564	3/2021	Not yet approved	1,174
		Lilombe	25,314	8/2021	17,314		17,314	3/2021	Not yet approved	1,432
		Luwele/VLFR 1	40,605	8/2021	6,332		6,332	5/2021	Not yet approved	284
		Luwele/VLFR 2		Same with VLFR1	9,929		9,929	5/2021	Not yet approved	3,207
		Mikuyu		Existing LUP valid		11,644			Old FMP valid	
		Mahonga					4,781	12/2020	District level 2/2021	1,532
		Nanjegeja					2,646	12/2020	District level 2/2021	628
		Ngumbu					13,712	8/2021	District level 10/2021	340

Cluster	District	Village	VLUP Area (ha)	VLUP Approved at District level	VLFR Area (ha)	Area of VLFR Gazetted	FMP Area (ha)	FMP & HP Approved at Village Level	FMP & HP Approved at Higher Levels	Annual Allowable Cut (m³)
Lindi	Nachingwea	Nanjihi		Existing LUP valid			3,572	10/2019	District level 11/2021	2,947
		Kilimarondo		Existing LUP valid			4,900	3/2021	District level 11/2021	556
		Matekwe	31,123	10/2021	3,240		3,240	9/2021	Not yet approved	365
		Majengo	16,644	10/2021	1,054					
		Nahimba		Existing LUP valid			1,817	7/2019	Ministry level 1/2021	2,702
		Mbondo		Existing LUP valid			2,673	1/2021	District level 11/2021	399
		Kiegei A		Existing LUP valid			1,841	3/2021	District level 11/2021	202
		Kiegei B		Existing LUP valid			13,824	1/2021	District level 11/2021	2,648
		Namatunu		Existing LUP valid			8,600	6/2020	Ministry level 1/2021	1,078
		Ngunichile		Existing LUP valid			1,468	2/2021	District level 11/2021	599
		Lipuyu		Existing LUP valid			1,061	5/2019	Ministry level 1/2021	1,208
		Majonanga		Existing LUP valid			5,317	5/2018	Ministry level 1/2021	183
Tanga	Handeni	Kitumbi	27,215	11/2019	7,705		7,705	8/2020	Ministry level 12/2020	105
		Gole		Existing LUP valid			6,679	7/2020	Ministry level 12/2020	659
		Kwedikabu		Existing LUP valid		3,472	3,472	7/2020	Ministry level 12/2020	32
		Kwamsundi	5,023	11/2019	460					
	Kilindi	Mnkonde	12,743	11/2019	1,095		1,095	7/2020	Ministry level 12/2020	1,155
		Turiani Kwedijero	17,431	11/2019	565					
		Komnazi	5,117	11/2019	353					
	Mpwapwa	Chiseyu	9,046	11/2019	4,041					
		Ikuyu	9,183	11/2019	1,368					
		Chitemo	11,096	10/2021	2,489					
Total (ha or m³)			620,087		158,008	146,064	327,225		*269,024	89,308

*Area of FMPs approved at District or Ministry level.

Annex 5 Micro-business support phase II – process of business selection

Micro-Business Support Phase II – Process of Business Selection

Major changes based on the lessons learnt to the concept in Phase II

- Thematic / value chain vice calls, suitable themes identified for each village and only applications from these lines of business invited.
- Specific requirements for applicants per theme applied (below).
- Micro-businesses from district centers with tighter criteria invited for the calls (e.g. small scale honey processors/marketers, small scale bamboo processors) -> off takers for community products.
- Support for investments (machinery, equipment, materials): TZS 1,000,000-20,000,000 (for community level applications, a maximum of TZS 15,000,000 applied).

As in case of Phase I, no direct grants (money) provided but machinery/equipment/materials provided against handing over certificates.

General conditions, apply to all businesses

- Businesses must be based/implemented in the target village(s)/Village Land Forest Reserves or, in case of a district center businesses, use raw material or products from these villages.
- Businesses existing, been operating at least for 2 years.
- For group proposals (producers' groups): the applying groups must be registered and registration certificate attached.
- For individual businesses: minimum age 18 years.

Requirements for applicants as per value chain

Beekeeping, village level

- In case of applications by individuals, at least 10 beehives in use (no bark hives counted).
- In case of group businesses, at least 20 hives in use (no bark hives counted).
- Managing basic technical knowhow of beekeeping (both in case of applications of individuals and group businesses, checked during field assessment).

Beekeeping/honey production and sale, district level

- Registered processing site.
- At least basic processing equipment already available.
- Valid business license.
- Existing market (details required from the applicants).

Carpentry, village level

- A roofed production site required.
- Basic knowhow of carpentry (reviewed during field assessment).
- Minimum business registration: business license (leseni ya biashara), further registrations and licenses are taken into account in scoring.

Wood carving, village level

- A roofed production site required.
- Having basic tools for wood carving.
- Basic knowhow of production (samples to be presented during field assessment).
- In case of group businesses, every member has the basic knowledge of production (assessed in the field).

Mushrooms, village level

- Recommendation letter from the village office assuring that the applicant is involved in the mushroom business (collection, processing/drying, sale).

- Basic knowhow

Tree nurseries, village level

- Nurseries already existing/established at least for small scale seedling production.
- Basic knowhow

Bamboo processing, district level

- Registered processing site/space.
- Valid business license.
- Machinery / equipment already existing at least for the value of TZS 5,000,000.

Selection Criteria – Scoring

Information about the business

- 1) Registration of the business (0-5, a business passed all registrations with the maximum scoring).
- 2) Duration, time of the start-up of the business (0-5, business existed over 2 years with the maximum scoring).
- 3) Total number of employees/group members/women/PLWD (0-8, a business with more than 50% women and involving vulnerable villagers/PLWD with the maximum scoring).
- 4) Ownership of the business assets (0-7, a business invested by all members with the maximum scoring).

Production

- 5) Production rate (0-6, a business with good yield during the last 2 year reach the highest scoring).
- 6) Group businesses operative and working actively (0-6, the maximum scoring for the groups with working schedule and timeframes).
- 7) Legality of the raw materials (0-6, the maximum scoring when raw material is legally sourced).
- 8) Verification of the business assets (0-7, the maximum scoring for the businesses offering reliable information).

Market

- 9) Existing and identified potential markets (0-8, the maximum scoring for the businesses with the existing markets and identified potential markets after business growth).
- 10) Annual sales and profitability (0-8, the maximum scoring for the businesses with business calculations and plans to ensure profitability).
- 11) Plans for the business growth (0-9, the maximum scoring for the businesses with growth plans).

Sustainability of the business

- 12) Motivation level (0-6, the maximum scoring for the businesses with high the motivation and passion. In the case of group businesses, all members were cross-checked if they share the same business ideas).
- 13) Plans for the business growth without support from the FORVAC (0-6, the maximum scoring for the businesses with alternative growth plans).
- 14) Annual business investment (0-6, the maximum scoring for the businesses which invest back to the business after sale).
- 15) Identifying and solving business challenges (0-7, the maximum scoring for the businesses which have identified the challenges and found the solutions).

HRBA/inclusion of vulnerable groups/PLWD

- In the context of advertisement of the micro-business support (call), people were informed that vulnerable groups/PLWD shall be highly considered and supported to fill applications.
- In the application form, special question set regarding HRBA/inclusion of vulnerable groups/PLWD.
- Identification of potential applicants within vulnerable groups/PLWD was extended to the field assessment phase.
- Any applications including representatives from vulnerable groups/PLWD (directly applying or as family members) were automatically qualified to field assessment for further review.
- Finally, inclusion of vulnerable groups/PLWD is giving extra scores (1 – 5 of the total of 100 points).

Annex 6 Concept note – charcoal pilot model

Concept Note – Charcoal Pilot Model

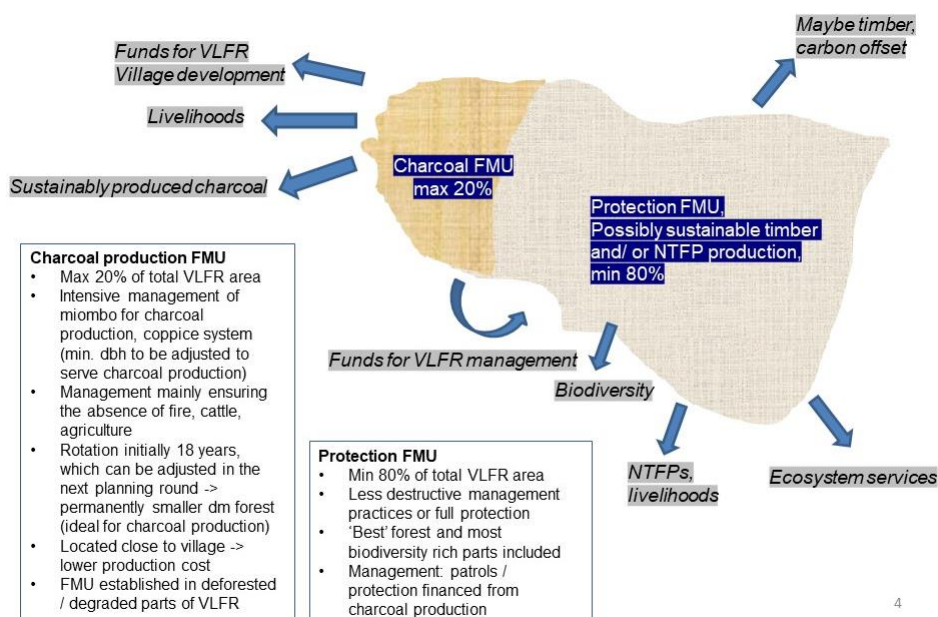
FORVAC programme under FBD is piloting a new charcoal production model for CBFM context. Majority of the charcoal to feed the 2.3 million tons annual charcoal demand in Tanzania is produced unsustainably from natural miombo forests. It is mainly produced in so called ‘general lands’, which is natural miombo forest (with different levels of degradation from none to heavy) but does not have any legal forest reserve status. This area is partly under low intensity agricultural use (shifting cultivation) or grazing land for cattle and is often in Village Land Use Plans allocated under ‘future agricultural land’. However, as per the PFM Facts and Figures study, also Village Land Forest Reserves (VLFRs) are encroached. Encroachment is usually a combination of illegal selective logging for timber, in some areas burning for charcoal and agricultural expansion and/or grazing. Especially the forests close to centers, whether administratively categorized as general lands or reserves, are prone to fragment and disappear on an increasing speed. From FORVAC’s operational areas, especially Handeni Cluster, and VLFRs there, have been much affected by forest degradation and deforestation due to booming charcoal demand in Dar es Salaam, Zanzibar and via Zanzibar even abroad.

There is an urgent need to develop models for efficient charcoal production. This model in question is fitted to CBFM context and the core idea is to ‘sacrifice’ part of the Village Land Forest Reserve (VLFR, max 20%) under intensive charcoal production to provide finance for protection of the rest (min 80%). The main objectives of this model are

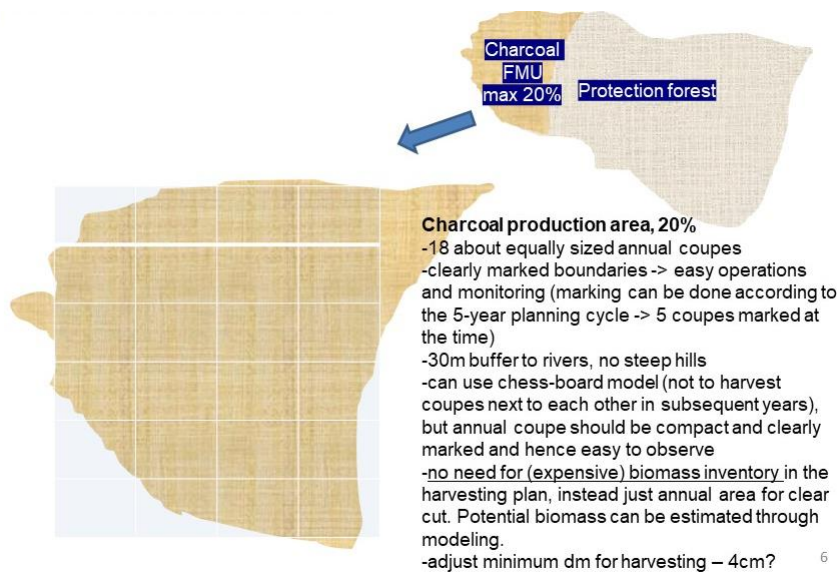
- 1) Protect VLFR by providing the finance for VLFR management from the 20% of intensively utilized charcoal production Forest Management Unit (FMU).
- 2) Provide income for village development.
- 3) Provide sustainably produced charcoal to feed the market demand.
- 4) Provide sustainable livelihoods for charcoal makers in a setting, where investment to technology improvement is encouraged through payment terms and long-term sustainability in terms of biomass availability.

Model

Below the idea of the model drafted in two pictures, first in whole VLFR scale (Picture 1) and secondly in charcoal forest management unit (FMU) level (Picture 2).



Picture 1. Charcoal production model in the whole VLFR level.



Picture 2. Charcoal production model in the FMU level.

Efficiency & simplicity of model

In order to maximize the benefit from as small as possible 'sacrificed' area unit, it is of utmost importance that the model is optimized for efficient biomass production in terms of rotation, minimum diameters, management practices, and planning & monitoring demands.

Model is kept as simple as possible, which will reduce the cost and hence maximize the income flow. E.g. biomass surveys / inventories are not included in the model, instead biomass is annually cut on a pre-defined area unit. Biomass potential is roughly estimated with biomass estimates from miombo research. The research component, which is an integral part of this pilot, will feed more information and estimates are improved on the way accordingly. Charcoal makers pay to VNRC per bag of charcoal (current system: payments per bag to authorities), but once both parties have experience in the potential income, they can by mutual agreement shift to area-wise payments, which gives incentive to charcoal makers to invest in technology to increase the recovery rate and hence increase the amount of charcoal produced from the same biomass.

Efficient monitoring

Goal is to keep the model simple and hence easy to monitor. If any authority meets any charcoal production outside the predefined, clearly marked annual coupe, but inside the VLFR, it is automatically illegal. The monitoring is, rather than monitoring by outsiders, more trusting on strict contractual terms between VNRC and Charcoal Makers Association (CMA). VNRC and CMA could for example agree that if any of the CMA members is met by VNRC burning charcoal outside the designated area, they will lose the membership in CMA for x months/years and hence right to use the VLFR charcoal production area. If VNRC fails to fulfill their forest management related responsibilities, e.g. in keeping the cattle out of the charcoal FMU regenerative areas, CMA could be waived from paying for x bags of charcoal or give a discount on the area-wise payment. VNRC and CMA should during the pilot with some outside facilitation adjust the terms and conditions into a form which best serves both parties. These contractual terms can work as a template for further charcoal production areas with slight adjustments to the local context.

The amount of charcoal can be monitored by authorities by comparing the rough production estimates done during the planning phase to the number of bags transported (recorded in the transport permit) out of village as community charcoal. If the quota is significantly exceeded (e.g. +20%), VNRC & CMA must explain why

more is produced (possible investments to recovery rates, or kiln management, from which increment in recovery rate can be calculated and quota adjusted to the new level).

District natural resources personnel should be involved in every step of the activities to ensure sustainability of the pilot, and to ensure that the monitoring duties are developed simultaneously to ensure the best results.

Ensuring regeneration

Key for sustainable charcoal production on miombo woodland is ensuring the regeneration. According to the research, most miombo species coppice effectively, and it is assumed that the key factors affecting the regeneration are fire, agricultural expansion, and cattle grazing. Hence, minimizing these threats is important and must be ensured by efficient division of duties in between Charcoal Makers Association (CMA) and the VNRC, and ensured by efficient intensives / punitive measures according to the contract between the two parties. The assumptions related to miombos regenerative qualities will be followed at the permanent sample plots (more about research component below), as well as the possible impact of this model to tree species distribution. Adjustments to the model will be made, e.g. in case there is a negative impact on the species most suitable for biomass production for charcoal, or if ensuring regeneration requires more measures.

Research Component

To support the model development, a strong research component will be designed for the pilot site. Permanent sample plots will be established on all annual coupes and data collection will continue also post-FORVAC with the strong commitment from SUA and TAFORI. The idea is to run the two charcoal forest management units selected for this pilot according to the model described here and in Annex 1 but adjust the model according to the information that is fed from the research component. If charcoal production is scaled up in other areas, the same adjustments can be made into the model in the other areas. So, the idea is not to wait for 18 years (rotation) to be able to scale up the described model. Enough information on the key issues (regeneration) should be available after a few seasons. Forests are disappearing in many areas in an alarming speed and hence, there is an urgent need for models for sustainable biomass production. The model is set for 18 years, and adjustments can be made 'on the way' to get closer to perfection and to answer possible unforeseen weak points in the model design.

The table 1 describes the research needs identified and they are connected to each step during the pilot.

Technology development

Current recovery rates in charcoal industry are low; usually below 20%, meaning that 5-fold amount of biomass is burned as compared to the end product. Improving the recovery rates directly correlates, in case of the amount of market-ready charcoal remains the same, with the reduction in felled biomass and further in deforested area. Globally, reaching 40-50% recovery rate is not impossible with some key adjustments to the charring technology. If recovery rate was 40%, only half of the biomass, and hence half of the forest area, would be felled as compared to the current situation of appr. 20% recovery rate.

Currently there is no investment or intensive to invest in more efficient technologies, because charcoal maker or trader does not pay for the biomass used in the charring process, because all the fees and costs are calculated for the ready-made product. To reduce pressure on the forests, it is important to incentivize technology development, which results in increased recovery rates and hence reduces the biomass needed to feed the same charcoal demand.

This model has been designed to permit technology development. This will be taken into account throughout the model, e.g. with the following aspects

- 1) Geographically compact, efficient charcoal production coupes, which allow technology testing efficiently without unnecessary moving of kilns during production period. Compact area also permits

investment in stationary charring technology like half-orange kilns, and investments in storing capacity to optimize the time of sales according to charcoal price fluctuations (higher price in rainy season).

- 2) Making it possible for charcoal makers to negotiate with VNRC area-based payment terms to incentivize investment (pay for biomass instead of end product).
- 3) Metal kilns designed and manufactured in Forestry and Wood Industry Training Centre (FWITC) will be piloted in 2021 season to increase the exposure to advanced technologies.
- 4) Baseline information on the recovery rates reached with IBK and the metal kiln will be recorded through the research component.
- 5) The pilot site and availability of baseline information provide an excellent setting for further technology development projects.

Pilot villages

1. **Kwedikabu**, about 3000 ha VLFR, forest management plan and timber harvesting plan has been made
2. **Mazingara** – Have 1 Large forest (with about 1500 Ha) and 6 smaller ones with about 456 Ha in total)

Table 1 Charcoal pilot steps 2020-2022

No	Task	Kwedikabu	Mazingara	Research component	Inputs to FBD charcoal model and recommendations to related policy framework
1	Awareness meetings at a village level	VNRCs and Village Leaders explain the idea to the general assembly	VNRCs and Village Leaders explain the idea to the general assembly		
2	Forest management plan, PFRA according to CBFM guidelines; identify and add charcoal FMU in the plan	Completed, but do necessary updates on the completed plan	PFRA with emphasis on the charcoal – check possibilities of adding degraded land in the VLFR to be used in charcoal production	Purchase durable data collection units (weatherproof, easy to use)	
3	Form Charcoal Makers' Association (CMA)	Register with relevant authorities (TFS, district, etc.), record keeping etc. training			
4	Exchange visit to Kilosa to learn (CMA, VNRC, district authorities?)	Charcoal makers to learn about benefits of doing business as an association and possible challenges. VNRC to peer learn about the management side.			
5	Pricing of charcoal	Basing on the market information set the price per bag / area unit (negotiation between VNRC and CMA, but basing on information collected)		Value chain assessment	

No	Task	Kwedikabu	Mazingara	Research component	Inputs to FBD charcoal model and recommendations to related policy framework
6	Charcoal FMU APO, related training to VNRC and CMA	Draft APO with VNRC and CMA, include management practices to ensure regeneration, mark annual coupes (possibly five years ahead so that they are clearly visible), agree on the payment structure (area-wise/per bag) related, related contract including terms and conditions, working gear for VNRC/CMA, training		Set up of permanent sample plots, get baseline (biomass, species distribution, size classes....)	Possible adjustments to the model -minimum diameter -rotation -forest management practices to ensure optimized species distribution -biomass information to facilitate scalable area-wise biomass estimates
7	Visualization of the model	Model well presented at the village entry and on the site (sign boards), awareness in the schools and village center for any visitor to see etc.			
8	Improved kilns to site	Get one metal kiln for each CMA for testing purposes, train CMA in the kiln management and in collecting data on the recovery			
9	Start operations, felling& charring	Practical training on IBEK or any other low investment kiln. Support charring process with IBEK and metal kiln.		Collecting kiln efficiency information (IBEK & metal kiln), measure the impact of moisture content /biomass size / species to recovery	Adjustments to the model – charring technology instructions -improvements in IBEK running instructions -improvements to mental kiln running instructions
10	Selling charcoal	Support CMA with market contacts, viability calculations, and accordingly the selection of market. Support CMA with record keeping. Support VNRC and CMA in contractual issues. Facilitate relationship with authorities (levies, fees paid)		Collect information of the possible bottlenecks in the sales.	Recommendations to authorities related to charcoal policy framework.
11	Pilot storing to demonstrate the price changes and their impact on the profits	Build a storage facility, test keeping x% of charcoal for rainy season. Demonstrate the benefits by profit calculations with CMA.			Adjustments to the model – storing capacity investment vs. added profit (case documented for other charcoal makers to learn)
12	2 nd year contracting – felling – charring - selling	Any changes needed for the contact between VNRC & CMA (e.g. changing fees to VNRC from per bag fee to area-wise fee?). Possible improvements into operations		2 nd year data from permanent sample plots	Adjustments to the contract template. Possible recommendations to charcoal policy.

Annex 7 Charcoal pilot - progress report

Tanzania Forestry Research Institute

DEVELOPING INTENSIFIED CHARCOAL PRODUCTION MODEL IN VILLAGE LAND FOREST RESERVES FOR CONSERVATION AND LIVELIHOODS IMPROVEMENT IN HANDENI DISTRICT, TANGA REGION

DR. CHELESTINO P. BALAMA, DR. NUMAN S. AMANZI, PROF. ROMANUS C. ISHENGOMA AND DR. GREYSON Z. NYAMOGA


**PRESENTED AT THE FORVAC UPDATE AND WORKPLANNING SESSION
MOROGORO, 27-28 JANUARY 2022**

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Tanzania Forestry Research Institute

PRESENTATION OUTLINE

- ☐ Introduction
- ☐ Intensified Charcoal Production Model
- ☐ Objectives
- ☐ Current Status
- ☐ Challenges Encountered
- ☐ Potential Challenges
- ☐ Recommendations




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INTRODUCTION

- ❑ Charcoal sub-sector has a significant contribution to the national economy and livelihoods of the people.
- ❑ In 2020, charcoal production in Tanzania was estimated at 1.9 million tonnes.
- ❑ It had a Gross Value Added (GVA) of TZS 2.1 trillion.




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INTRODUCTION *Cont...*

- ❑ However, its value chain has not been efficiently explored.
- ❑ It is considered as unclean and unsustainable energy source.
- ❑ To enhance sustainable forest management and efficient charcoal production, there is an urgent need to develop a model that suits the need.




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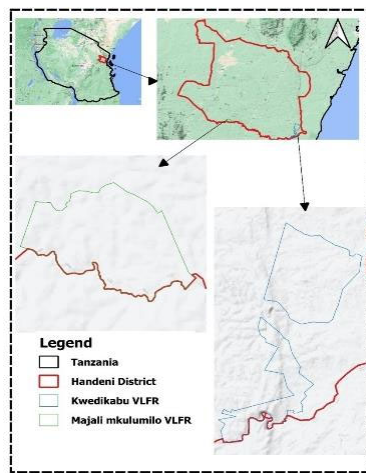
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INTENSIFIED CHARCOAL PRODUCTION MODEL

- ❑ The model is developed for VLFRs.
- ❑ The model aims on sacrificing and subjecting part of the VLFR (max 20%) under intensive charcoal production.
- ❑ It will involve selective tree cutting for trees suitable for charcoal production: > 5 cm DBH.
- ❑ Why - to provide finance for protection and management of the remaining VLFR (min 80%).



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OBJECTIVES


1. To facilitate awareness meetings about development of the model at the district and village levels and form CMGs at village levels
2. Update FMP and HP for the sampled project villages
3. Developing an intensified charcoal production model in VLFRs for increasing VLFR financial viability and livelihoods; and
4. Developing inclusive charcoal value chain in VLFRs under intensified charcoal production model

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Tanzania Forestry Research Institute	CURRENT STATUS	
	☐ This progress covers cover objectives 1 to 2, and partly 3.	
	To facilitate awareness meetings about development of the model at the district and village levels and form CMGs at village levels	Completed
	To update FMP and HP for the sampled project villages	Partially completed
	To develop an intensified charcoal production model in VLFRs for increasing VLFR financial viability and livelihoods	Started
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Tanzania Forestry Research Institute	OBJECTIVE 1	
	☐ To facilitate awareness meetings about development of the model at the district and village levels and form CMGs at village levels <ul style="list-style-type: none"> ➤ Awareness meetings at various levels and establishment of CMGs ➤ Assessment of current status of charcoal production and utilization in study village ➤ Formation and registration of CMGs ➤ Study visit to Kilosa for Village Leaders; VNRC members CMGs members 	
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Tanzania Forestry Research Institute	Objective 1: Awareness meetings at various levels and establishment of CMGs				
	SN	Date	Place	Participants	Activity
	1	28.09.2021	Mkata – Handeni DC HQ	DED – Handeni DC, DNRO, and DFO	Courtesy call to DED office – Project introduction
	2	28.09.2021	Mkata – Handeni DC HQ	Council Management Team (CMT) members	Project introduction
	3	29.09.2021	Mazingara Village	Village Leaders, Village Councilors and VNRC	Project introduction and discussion on modality of project implementation
	4	28.09.2021	Kwedikabu Village	Village Leaders, Village Councilors and VNRC	Project introduction and discussion on modality of project implementation
	5	30.09.2021	Kwamsisi Ward	Ward Executive Officer (WEO)	Project introduction
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Tanzania Forestry Research Institute	SN	Date	Place	Participants	Activity
	6	30.09.2021	Saadani National Park – Maunde Post	Game Post	Project introduction
	7	30.09.2021	Kwedikabu Village	All community members	Village special meeting to introduce the project and mobilize villagers to prepare them to form charcoal making groups
	8	01.10.2021	Handeni Township	TFS – DFC Handeni	Project introduction
	9	02.10.2021	Mazingara Village	All community members	Village special meeting to introduce the project and mobilize villagers to form charcoal making groups; and training on development of constitutions
	10	04.10.2021	Kwedikabu Village	All community members	Formation of charcoal making groups and training on development of constitutions
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OBJECTIVE 1: Assessment of current status of charcoal production and utilization in study villages

□Kwedikabu Village

- There is charcoal production
- Produced from individual farms
- The most used Kiln are Msonge, Box and Chanuo
- About 30 people are estimated to be engaged in charcoal production
- Packed in Bags with 75 - 80 Kg
- Price of charcoal at the Kiln site 6,000 – 8,000
- Main buyers are from Dar es Salaam and Zanzibar



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OBJECTIVE 1: Assessment of current status of charcoal production and utilization in study villages


□Mazingara Village

- There is on going charcoal production
- Mainly produced from Bumboneka and kwa Mwazungu
- Most used Kilns are Msonge and Box
- No data on the number of charcoal makers
- Packed in Bags with 80 - 90 Kg
- Price at the Kiln site is about 7,000 – 8,000
- Buyers are mainly middlemen from Dar es Salaam

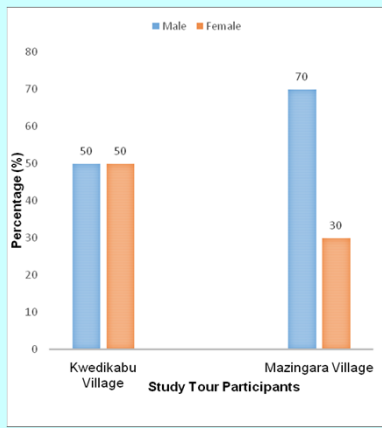



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Tanzania Forestry Research Institute	Objective 1: Formation and registration of CMGs							
	☐ The activity was facilitated by DCDO in collaboration with DFO and consultants							
	Village	Group name	M	F	T	Age group	Registration No	TFS Certificate
	Kwedikabu	Nguvumali	37	23	60	Elders	HW/HD/VU/Na. 1850	S/No.003490 4
		Songambebe	32	4	36	Youth	HW/HD/VU/Na. 1849	S/No.003490 5
	Mazingara	Mchakamcha ka	31	12	43	Elders	HW/HD/VU/Na. 1848	S/No.003490 3
		Matanuru	4	15	19	Youth	HW/HD/VU/Na. 1847	S/No.003489 8
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Tanzania Forestry Research Institute	OBJECTIVE 1: Study visit to Kilosa for Village Leaders; VNRC members CMGs members	
	☐ Twenty participants i.e. 10 people from each village	
	☐ 4 Village Leaders, 8 VNRCs, 8 CMGs.	
	☐ Visited Chabima and Ulaya Mbuyuni.	
	☐ Objective was to learn sustainable forest management, management of charcoal business and its value chains	
		
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OBJECTIVE 2

- ❑ Update forest management (FMP) and harvesting plans (HP) for the sampled project villages
- Production of current VLFRs cover maps
- Participatory Forest resources assessment
- Development of forest management and harvesting plans

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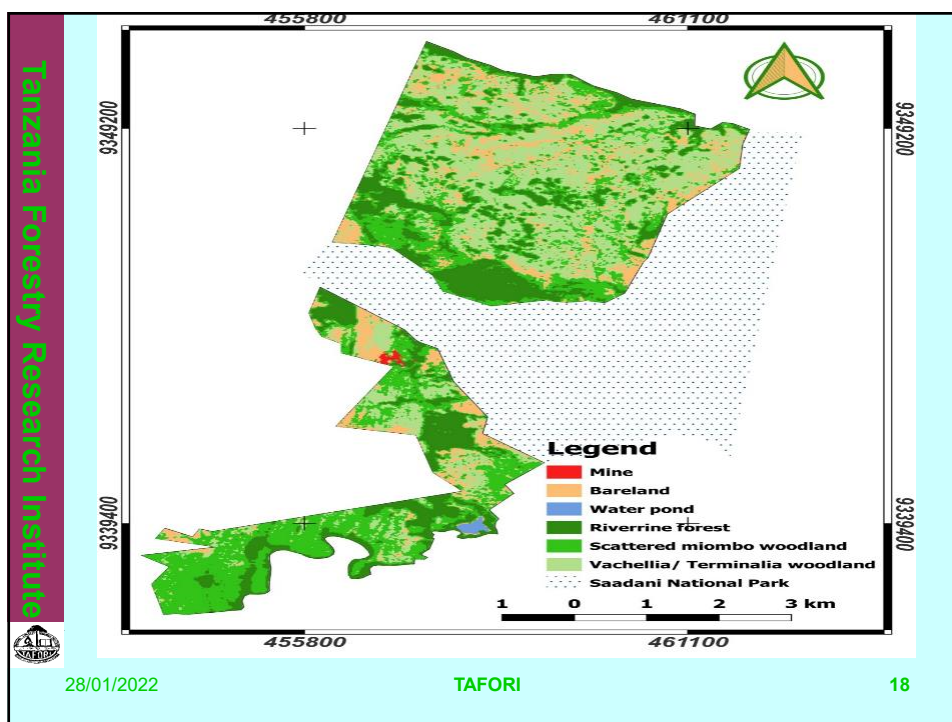
OBJECTIVE 2: Production of current VLFRs cover maps

□ Distribution of different land forest cover at Kwedikabu VLFR

Land forest cover	Area (ha)	Percentage %
Riverine forest	741.96	21.01489
Scattered Miombo woodland	1171.36	33.17699
<i>Vachellia / Terminalia</i> woodlands	1130.48	32.01912
Bare land	470.06	13.31373
Mine	6.66	0.188634
Water pond	10.12	0.286634
Total	3,530.64	100

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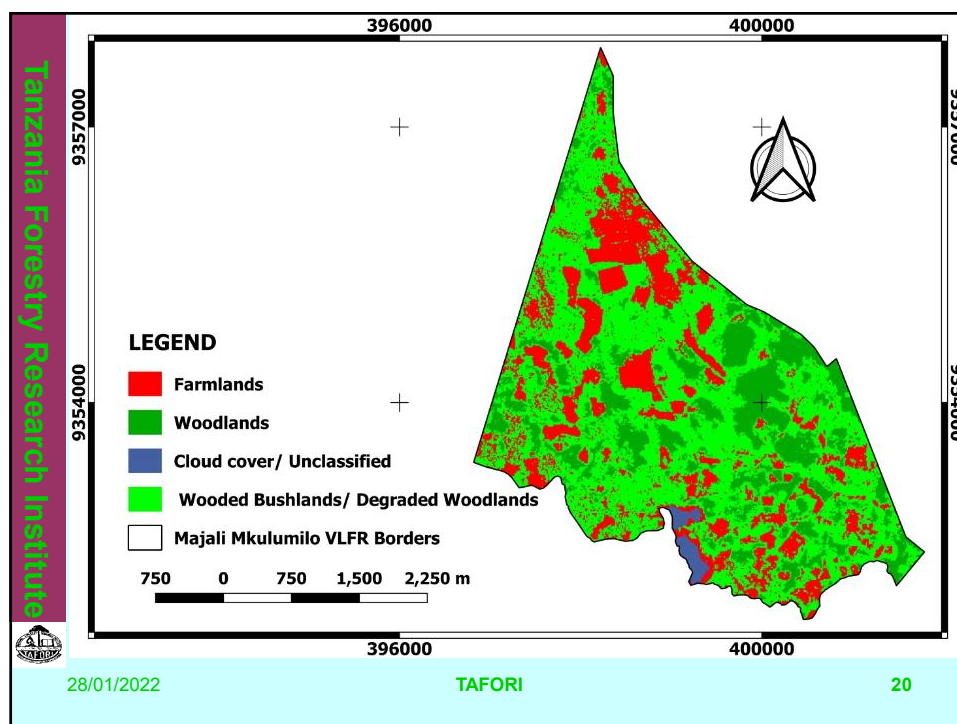
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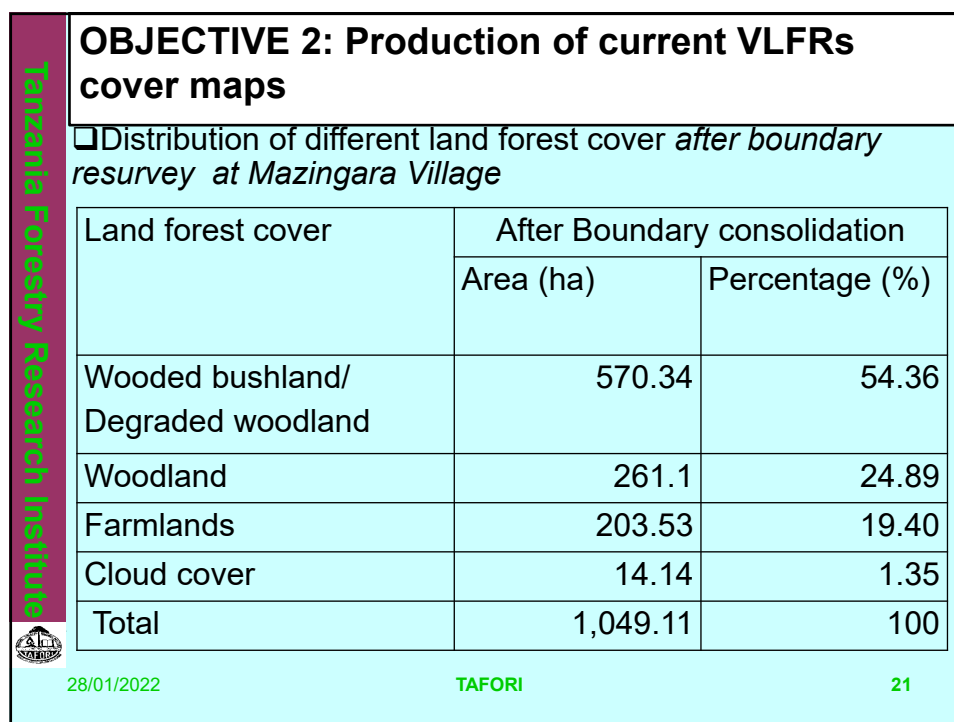
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Tanzania Forestry Research Institute	OBJECTIVE 2: Production of current VLFRs cover maps		
	□ Distribution of different land forest cover <i>before boundary resurvey at Mazingara Village</i>		
	Land forest cover	Before boundary consolidation	
		Area (ha)	Percentage %
	Wooded bushland/ Degraded woodland	726.11	54.20
	Woodland	279.76	20.88
	Farmlands	319.62	23.86
28/01/2022	Cloud cover	14.15	1.06
	Total	1,339.64	100
TAFORI			19

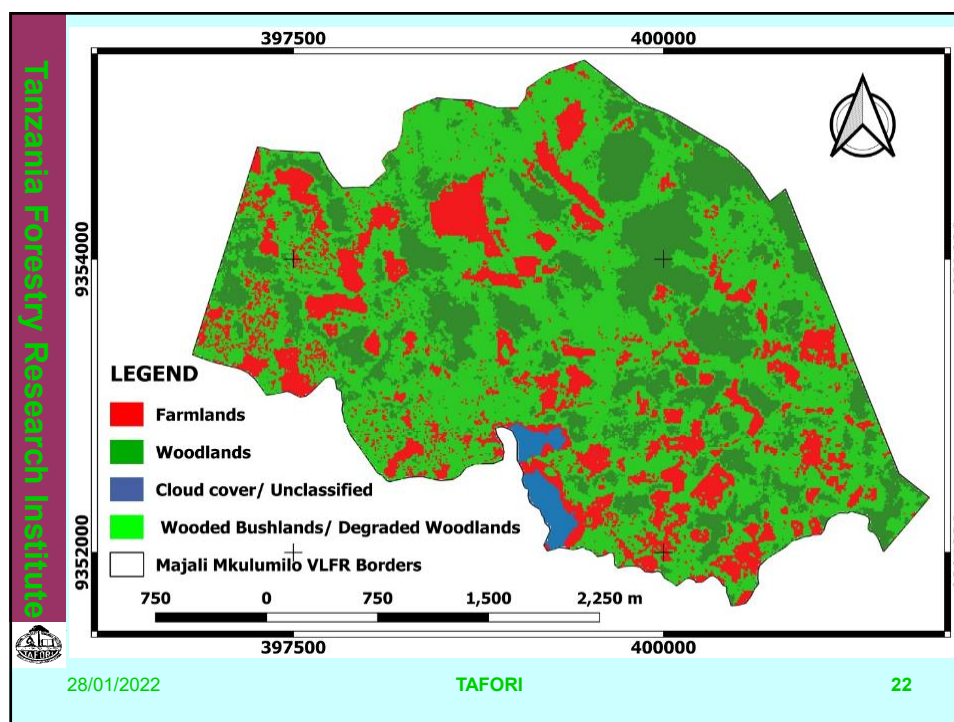
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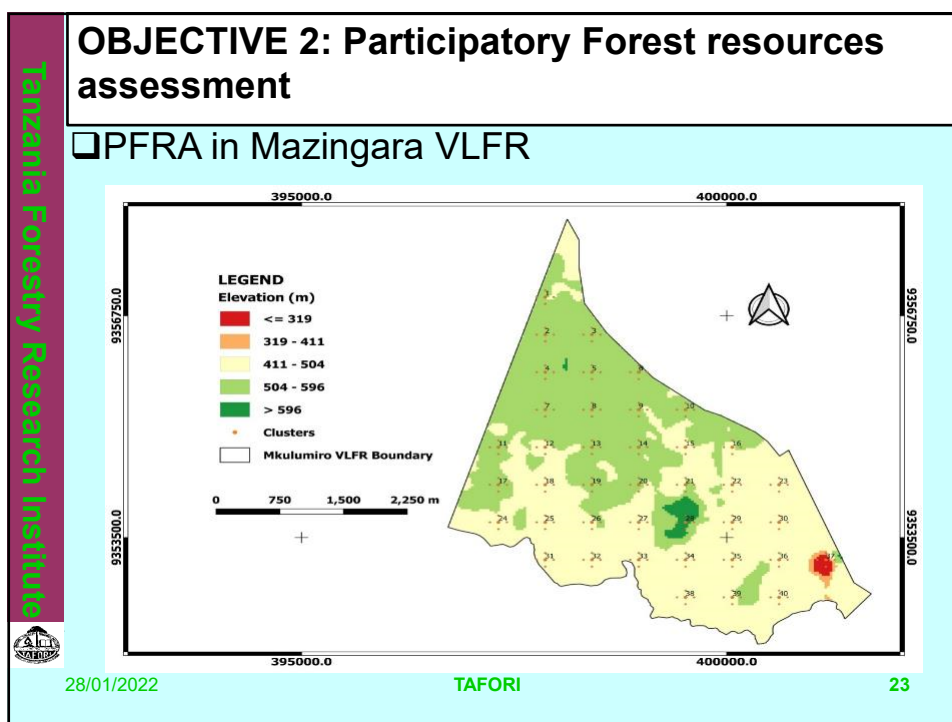
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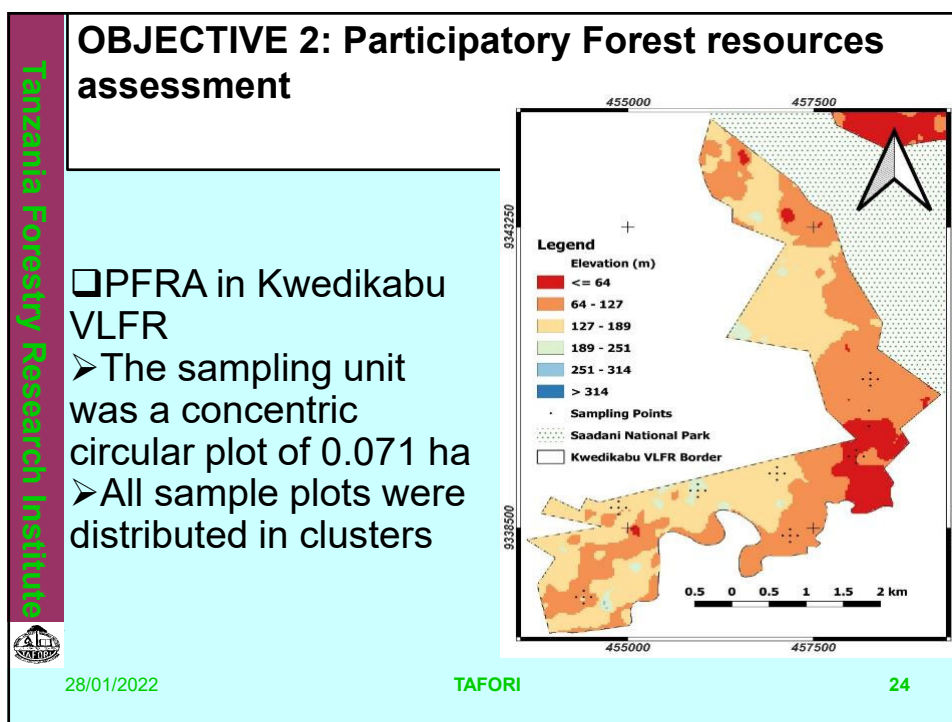
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OBJECTIVE 1: Participatory Forest resources assessment

Sub-plot Diameter	Tree measurements
2 m	Count of regenerants less than 5 cm DBH
5 m	Measurement of all trees with DBH \geq 5 cm
10	Measurement of all trees with DBH \geq 10 cm
15	Measurement of all trees with DBH \geq 20 cm

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OBJECTIVE 2: Development of forest management and harvesting plans


- ☐ Development of FMP and HP for Mazingara VLFR is on progress
- ☐ Development of HP for Kwedikabu VLFR is ready for approval

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Tanzania Forestry Research Institute	OBJECTIVE 2: Development of HP for Kwedikabu VLFR			
	□ Stand parameters in FMU for charcoal production at Kwedikabu VLFR			
	SN	DBH classes (cm)	Number of stems per ha (N)	Volume per ha (V)
	1	5 - 9.9	389.1	7.9
	2	10 - 19.9	103.2	11.7
	3	20 - 29.9	32.0	13.2
	4	30 - 39.9	13.7	13.9
	5	40 - 49.9	7.2	13.1
	6	50 - 59.9	2.3	6.7
	7	> 60	2.7	12.2
		Total	550.1	78.7
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Tanzania Forestry Research Institute	OBJECTIVE 2: Development of HP for Kwedikabu VLFR		
	□ Estimation of amount of charcoal per hectare	Average volume per hectare	78.7
		Volume available for charcoal/ha	46.9
	□ Assumptions ➤ only 70% of the total volume of trees will be harvested for charcoal ➤ only 85% of the volume of wood will be used for charcoal ➤ 1 m ³ of wood can produce 3 bags of 50 kgs	Number of bags of 50 kgs/ha	141
		Estimated weight in Kgs/ha	7,050
		Estimated weight in Kgs/ha	7.05
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OBJECTIVE 2: Development of HP for Kwedikabu VLFR

Identification of charcoal FMU

- The FMU covers 507 Ha, which is 15% of total forest areas
- It is divided into two harvesting blocks

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OBJECTIVE 2: Development of HP for Kwedikabu VLFR

Demarcation of charcoal FMU

- ❑ FMU was divided into 2 blocks
- ❑ Blocks were demarcated by using blue paint
- ❑ All boundary trees were painted at breast height or above
- ❑ Blocks were further divided into 20 compartments of 25 ha each

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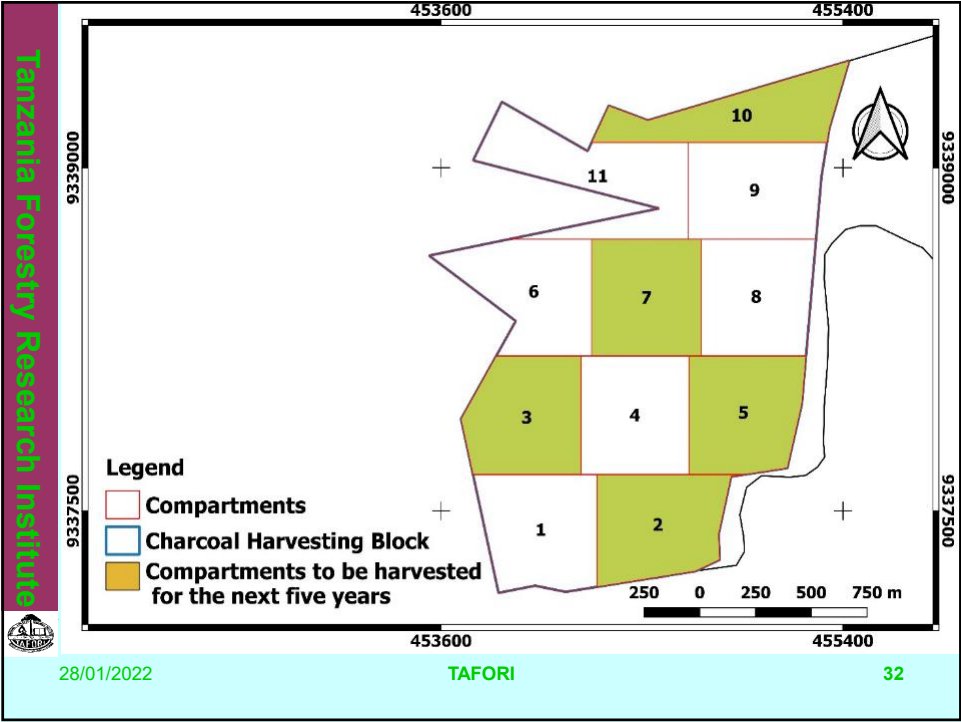
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**OBJECTIVE 2:
Development of HP for
Kwedikabu VLFR**

☐ **Demarcation of charcoal coupes**

- Each compartment is divided into 100 coupes
- Coupe size is 50 m by 50m
- A coupe estimated to produce 11.7 m³
- It is equivalent to 35 bags of charcoal of 50 kg

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OBJECTIVE 3

☐ **Development of intensive charcoal production model**

- Setting experiment area
- Charcoal production and trade

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OBJECTIVE 3: Setting PSP to assess effects of stump height on regeneration

S N	Coupe identificati on number	Cutting height (cm)	Treatme nt code
1	20, 48, & 89	15	T ₁
2	17, 38, & 88	30	T ₃
3	7, 51 & 87	60	T ₂



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OBJECTIVE 3: Effects of wood moisture contents on recovery

- ❑ Logs were sampled and weighted
- ❑ Then, logs were left for air dry (seasoning) for a duration of 14, 21 and 30 days
- ❑ Two kilns were established in each wood seasoning study duration

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CHALLENGES ENCOUNTERED

- ❑ Conflict over land ownership in the proposed VLFR, in, particular Mazingara Village
- ❑ A long distance to the VLFR: about 30 km in Mazingara and 20 km in Kwedikabu
- ❑ Poor road condition to access the VLFR especially in Mazingara Village


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POTENTIAL CHALLENGES

- ❑ Poor relationship between Village Leaders and VNRC members which are active
- ❑ Misuse of transport dedicated to VNRC in Kwedikabu
- ❑ Long distance to the charcoal coupes + lack of reliable means of transport




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RECOMMENDATIONS

- ☐ Purchase of two user friendly GPS
- ☐ Training VNRCs on GPS navigation
- ☐ Purchase two mobile android phones
- ☐ Training VNRC on the use of Avenza APP to locate harvesting coupes
- ☐ Continue monitoring of project activities
- ☐ Enhance governance of local institutions




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The End

Thank you very much for listening



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Annex 8 Budget follow-up, July 2021 – December 2021

Budget follow-up FORVAC OP December 2021 (EUR) - Amended budget of Operations and Management effective from 1 July 2021

Project Task No.	Description	Total Project Budget	Changes of Project Budget	Amended Total Project Budget	Total Usage Y1 (Jul 18-Jun 19)	Total Usage Y2 (Jul 19-Jun 20)	Total Usage Y3 (Jul 20-Jun 21)	Budget Year 4 (Jul 21-Jun 22)	Usage of the month December 2021	Accumulated Usage Year 4 (Jul 21-Jun 22)	% Usage Budget Year 4	Outstanding Balance Year 4 (Jul 20-Jun 21)	Total Accumulated Usage	Total Outstanding Balance	% Total Usage
5001	1 Improved VCs & increased PS involvem. in Forest sector														
5010	1.1 Establishment and mobilization of VLFRs	1 034 200,00	666 592,44	1 700 792,44	0,00	688 065,42	687 134,02	325 593,00	0,00	153 982,12	47,29%	171 610,88	1 529 181,56	171 610,88	147,86%
5012	1.2 Support to value chains	1 223 000,00	227 590,38	1 450 590,38	0,00	92 912,50	441 382,88	916 295,00	5 864,96	506 078,37	55,23%	410 216,63	1 040 373,75	410 216,63	85,07%
5013	Subtotal Output 1	2 257 200,00	894 182,82	3 151 382,82	0,00	780 977,92	1 128 516,90	1 241 888,00	5 864,96	660 060,49	53,15%	581 827,51	2 569 555,31	581 827,51	113,84%
5100	2 Stakeholder capacity to implement & promote forestry value chain development enhanced														
5105	2.1 Impr. inst. & mgmt capacity for villages VNRC	770 000,00	15 406,48	785 406,48	20 550,84	61 280,78	463 944,86	239 630,00	6 184,44	202 207,81	84,38%	37 422,19	747 984,29	37 422,19	97,14%
5115	2.2 Improved capacities of forest national level	750 000,00	-381 702,59	368 297,41	40 565,12	62 259,79	52 398,50	213 074,00	0,00	158 589,08	74,43%	54 484,92	313 812,49	54 484,92	41,84%
5135	2.3 Forest products VC/market systems & BD skills	490 000,00	-276 631,74	213 368,26	0,00	0,00	187 812,26	25 556,00	0,00	6 618,70	25,90%	18 937,30	194 430,96	18 937,30	39,68%
5140	Subtotal Output 2	2 010 000,00	-642 927,85	1 367 072,15	61 115,96	123 540,57	704 155,62	478 260,00	6 184,44	367 415,59	76,82%	110 844,41	1 256 227,74	110 844,41	62,50%
5160	3. Functional extension, communication, monitoring systems & MIS														
5165	3.1 Enhanced extension and communication services	410 000,00	-183 718,90	226 281,10	0,00	31 377,49	117 496,61	77 407,00	0,00	54 048,49	69,82%	23 358,51	202 922,59	23 358,51	49,49%
5170	3.2 Monitoring and Management Information System	480 000,00	-232 757,25	247 242,75	0,00	79 632,19	46 869,56	120 741,00	700,00	10 214,23	8,46%	110 526,77	136 715,98	110 526,77	28,48%
5179	Subtotal Output 3	890 000,00	-416 476,15	473 523,85	0,00	111 009,68	164 366,17	198 148,00	700,00	64 262,72	32,43%	133 885,28	339 638,57	133 885,28	38,16%
5180	4 Legal and policy frameworks in forestry supported														
5185	4.1 Improved policy and regulatory framework for forest value chain development	480 000,00	-75 182,07	404 817,93	69 515,31	166 450,35	49 963,27	118 889,00	0,00	97 354,41	81,89%	21 534,59	383 283,34	21 534,59	79,85%
5190	4.2 Forest law enforcement, forest governance and trade of legally sourced timber	380 000,00	-311 081,71	68 918,29	0,00	0,00	12 807,29	56 111,00	0,00	0,00	0,00%	56 111,00	12 807,29	56 111,00	3,37%
5199	Subtotal Output 4	860 000,00	-386 263,78	473 736,22	69 515,31	166 450,35	62 770,56	175 000,00	0,00	97 354,41	55,63%	77 645,59	396 090,63	77 645,59	46,06%
5200	Programme Management														
5210	Investments	430 000,00	126 253,93	556 253,93	382 716,88	84 855,61	43 681,44	45 000,00	1 964,66	3 040,80			514 294,73	41 959,20	119,60%
5215	Vehicle fuel and maintenance costs (all vehicles)	200 000,00	51 033,04	251 033,04	44 468,94	96 059,53	51 604,57	55 000,00	1 915,45	28 896,04			221 029,08	30 003,96	110,51%
5216	Drivers	72 000,00	128 809,82	200 809,82	29 772,83	56 192,54	51 344,45	60 000,00	2 420,71	28 637,67			165 947,49	34 862,33	230,48%
5220	Communication	32 000,00	25 435,02	57 435,02	7 551,03	13 071,30	17 712,69	18 000,00	1 392,28	11 630,99			49 966,01	7 469,01	156,14%
5225	Media & publishing	16 000,00	-1 301,93	14 698,07	1 187,89	3 790,18	0,00	9 000,00	0,00	0,00			4 978,07	9 720,00	31,11%
5230	Translations	40 000,00	-40 000,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00			0,00	0,00	0,00%
5235	Banking & financial management	8 000,00	9 587,59	17 587,59	2 262,00	5 192,46	4 283,13	5 000,00	4,86	1 994,42			13 732,01	3 855,58	171,65%
5238	Running office costs	0,00	111 888,53	111 888,53	6 348,02	18 798,57	41 541,94	42 000,00	242,42	28 021,60			94 710,13	17 178,40	
5240	Books, periodicals & stationary	7 000,00	52 966,91	59 966,91	3 280,42	16 237,95	19 448,54	20 000,00	25,88	7 968,25			46 935,16	13 031,75	670,50%
5245	Maintenance of devices & equipment	18 000,00	-13 811,63	4 188,37	977,11	1 630,26	341,00	1 000,00	0,00	0,00			2 948,37	1 240,00	16,38%
5250	Monitoring and auditing	229 000,00	-129 846,86	99 153,14	6 688,45	23 018,46	33 346,23	35 000,00	0,00	2 165,03			65 218,17	33 934,97	28,48%
5251	Facilitation by NPC and Stakeholders	0,00	85 879,60	85 879,60	18 962,78	25 473,50	19 673,32	20 000,00	142,02	6 505,12			70 614,72	15 264,88	
5255	Steering Committee and Supervisory Board Meetings	0,00	35 039,48	35 039,48	1 438,00	11 311,30	9 581,31	10 000,00	0,00	19 267,59			41 598,20	-6 558,72	
5299	Subtotal Programme Management	1 052 000,00	441 933,50	1 493 933,50	505 654,35	355 631,66	292 558,62	320 000,00	8 108,28	138 127,51	43,16%	181 872,49	1 291 972,14	201 961,36	122,81%
5300	Contingency and TA-briefing														
5310	Contingency (2,5%)	242 566,00	-137 807,02	104 758,98	0,00	18 395,98	0,00	84 263,00	0,00	0,00	0,00%	84 263,00	18 395,98	86 363,00	7,58%
5320	International TA-briefing	4 800,00	-1 454,34	3 345,66	3 345,66	0,00	0,00	0,00	0,00	0,00			3 345,66	0,00	69,70%
5330	Subtotal Contingency and TA-briefing	247 366,00	-139 261,36	108 104,64	3 345,66	18 395,98	0,00	84 263,00	0,00	0,00	0,00%	84 263,00	21 741,64	86 363,00	8,79%
5410	Support Staff (incl IJE and NJE)	0,00	248 812,82	248 812,82	0,00	0,00	100 812,82	145 000,00	10 310,51	82 207,94	56,70%	62 792,06	183 020,76	65 792,06	#DIV/0!
7999	TOTAL CONTRACT excl PFP Bridging Phase	7 316 566,00	0,00	7 316 566,00	639 631,28	1 556 006,16	2 453 180,69	2 642 559,00	31 168,19	1 409 428,66	53,34%	1 233 130,34	6 058 246,79	1 258 319,21	82,80%
	Bridging period PFP May - June	0	214 977,80	214 977,80	214 977,80	0	0,00	0,00	0,00	0,00			214 977,80	0,00	
	Teak plantation in Ruvuma (PFP Bridging Phase)	0	28 786,00	28 786,00	28 786,00	0	0,00	0,00	0,00	0,00			28 786,00	0,00	
	PFP Bridging Phase - Advance	0	30 004,68	30 004,68	30 004,68	0	0,00	0,00	0,00	0,00			30 004,68	0,00	
	Total PFP Bridging Phase	0,00	273 768,48	273 768,48	273 768,48	0,00	0,00	0,00	0,00	0,00	0,00	0,00	273 768,48	0,00	
7999	TOTAL CONTRACT incl PFP Bridging Phase	7 316 566,00	273 768,48	7 590 334,48	913 399,76	1 556 006,16	2 453 180,69	2 642 559,00	31 168,19	1 409 428,66	53,34%	1 233 130,34	6 332 015,27	1 258 319,21	86,54%

Budget Follow-up FORVAC TA December 2021 (EUR)

Project Task No.	Description	Total Original Project Budget	Total Usage Y1 (Jul 18-Jun 19)	Total Usage Y2 (Jul 19-Jun 20)	Total Usage Y3 (Jul 20-Jun 21)	Budget Year 4 (Jul 21-Jun 22)	Usage of the month December 2021	Accumulated Usage Year 4 (Jul 21-Jun 22)	Usage in % Year 4	Total Accumulated Usage	Usage in % of total budget	Total Outstanding Balance
	FEES											
2001	Long-Term Experts											
2010	Chief Technical Advisor (Int)	609 000,00	152 595,24	171 238,11	164 333,33	116 000,00	11 047,62	73 190,48	63,10%	561 357,16	92,18%	47 642,84
2020	Value Chain Development Advisor (Int)	196 000,00	90 000,00	84 333,33	21 666,66	0,00	0,00	0,00	0,00%	196 000,00	100,00%	0,00
2030	National Forest Management Expert	210 000,00	57 023,81	58 095,24	58 809,52	34 642,86	2 619,05	21 666,67	62,54%	195 595,23	93,14%	14 404,77
2040	Financial Manager	210 000,00	54 047,62	57 619,05	51 666,66	32 380,95	2 380,95	22 857,14	70,59%	186 190,47	88,66%	23 809,53
2041	Financial Accountant		10 571,42	2 190,48	0,00	0,00	0,00	0,00	0,00%	12 761,90		-12 761,90
2050	Cluster Coordinator Tanga	126 000,00	13 500,00	40 000,00	40 833,33	29 166,67	1 833,33	18 166,68	62,29%	112 500,01	89,29%	13 499,99
2060	Cluster Coordinator Ruvuma	126 000,00	15 666,67	40 333,33	41 999,98	26 333,33	2 333,33	18 833,33	71,52%	116 833,32	92,72%	9 166,68
2070	Cluster Coordinator Lindi	126 000,00	15 666,66	40 000,00	40 333,34	28 000,00	2 500,00	17 166,67	61,31%	113 166,66	89,81%	12 833,34
2099	Long-Term Experts, Total	1 603 000,00	409 071,42	493 809,53	419 642,83	266 523,81	22 714,29	171 880,96	64,49%	1 494 404,74	93,23%	108 595,26
2101	Short-Term Experts											
	International Short Term Experts		95 714,29	40 714,29	30 714,28		0,00	12 142,86		179 285,72		
	National Short Term Experts		58 571,42	119 285,71	67 142,86		0,00	0,00		244 999,99		
2199	Short-Term Experts, Total	435 000,00	154 285,71	160 000,00	97 857,14	22 857,15	0,00	12 142,86	53,12%	424 285,71	97,54%	10 714,29
	TOTAL FEES	2 038 000,00	563 357,13	653 809,53	517 499,98	289 380,96	22 714,29	184 023,82	63,59%	1 918 690,45	94,15%	119 309,55
	PROJECT EXPENSES											
3001	Reimbursables costs TEAM											
2080	Home Office Coordination Fee	48 000,00	11 000,00	12 000,00	12 000,00	12 000,00	1 000,00	6 000,00	50,00%	41 000,00	85,42%	7 000,00
3010	Home office visits	43 000,00	9 610,94	0,00	0,00	4 000,00	0,00	0,00	0,00%	9 610,94	22,35%	33 389,06
3015	Relocation costs (long term personnel)	14 100,00	12 143,18	0,00	5 000,00	0,00	0,00	0,00	0,00%	17 143,18	121,58%	-3 043,18
3020	Housing costs (CTA)	100 800,00	3 566,81	14 786,95	14 253,59	14 000,00	0,00	12 423,82	88,74%	45 031,17	44,67%	55 768,83
3025	Housing costs (Forest/Financial experts)	48 000,00	14 621,25	18 306,76	20 321,81	20 000,00	354,35	12 513,31	62,57%	65 763,13	137,01%	-17 763,13
3030	Housing costs (Cluster Coordinators)	32 400,00	0,00	12 950,46	12 274,05	10 150,00	0,00	2 981,66	29,38%	28 206,17	87,06%	4 193,83
3035	Local travel transport	110 521,00	54 354,87	45 753,14	45 677,08	23 000,00	19,30	13 925,59	60,55%	159 710,68	144,51%	-49 189,68
3040	Daily allowance local travel						0,00					
3045	Hotel costs (long term TA)						1 877,14					
3050	International Travel	28 000,00	5 465,87	8 096,23	3 287,88	3 000,00	0,00	0,00	0,00%	16 849,98	60,18%	11 150,02
3055	Daily allowance international	49 885,00	22 350,94	29 753,81	15 815,72	15 000,00	0,00	8 955,00	59,70%	76 875,47	154,11%	-26 990,47
3056	Daily allowance national						752,00					
3057	Weekend travel compensation						165,00					
3060	Hotel cost Value Chain Advisor						0,00					
3065	Education of children	24 000,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00%	0,00	0,00%	24 000,00
	Travel to/from duty station for family	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00%	0,00	#DIV/0!	0,00
3070	Repatriation costs (long term personnel)	14 100,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00%	0,00	0,00%	14 100,00
3075	Support staff	67 200,00	0,00	31 720,77	35 479,23	0,00	0,00	0,00	0,00%	67 200,00	100,00%	0,00
3099	TOTAL PROJECT EXPENSES	580 006,00	133 113,86	173 368,12	164 109,36	101 150,00	4 167,79	56 799,38	56,15%	527 390,72	90,93%	52 615,28
	Grand Total	2 618 006,00	696 470,99	827 177,65	681 609,34	390 530,96	26 882,08	240 823,20	61,67%	2 446 081,17	93,43%	171 924,83

