FORESTRY AND VALUE CHAINS DEVELOPMENT PROGRAMME

MARKET SYSTEM ANALYSIS

21 DECEMBER 2018

The United Republic of Tanzania
MINISTRY OF NATURAL RESOURCES
AND TOURISM

Ministry for Foreign
Affairs of Finland

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FINAL REPORT: Market Systems Analysis

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General Comments - MSA report

PREFACE

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Abbreviations

AMCO	Agricultural Marketing Co-operative Society
ARTI	Appropriate Rural Technology Institute
BRELA	Business Registrations and Licensing Agency
CBFM	Community-based forest management
CCRO	Certificate of Customary Right of Occupancy
DC	District Council
EoF	Embassy of Finland
FHP	Forest harvesting plan
FITI	Forest Industries Training Institute
FLEGT	Forest Law Enforcement, Governance and Trade
FMP	Forest management plan
FTI	Forest Training Institute
FSC	Forest Stewardship Council
FundaK	Fundación Capital
HRBA	Human Rights Based Approach
ICT	Information and Communication Technology
IGA	Income Generating Activity
JFM	Joint Forest Management
JMA	Joint Management Agreement
LGAs	Local Governments
MFA	Ministry for Foreign Affairs of Finland
MNRT	Ministry of Natural Resources and Tourism
M4P	Making Markets Work for the Poor (also known as MM4P and MMW4P)
MSA	Market Systems Analysis
NTFP	Non-Timber Forest Product
NWFP	Non-wood forest products
PES	Payments for Ecosystem Services
PFM	Participatory Forest Management
PMO	Prime Minister's Office
PMT	Project management team
PO	President's Office
RALG	Regional Administration and Local Governments
RS	Regional Secretariat
SACCO	Savings and Credit Cooperative Organisations
SC	Steering Committee
SE	Socio-economic
SP	Service Provider
SUA	Sokoine University of Agriculture
SUMATRA	Surface and Marine Transport Regulatory Authority
TA	Technical Assistance
TABEDO	Tanzania Beekeeping Development Organization
TASAF	Tanzanian Social Action Fund

TaTEDO	Tanzania Traditional Energy Development Organization
TBA	Tanzania Buildings Agency
TBS	Tanzania Bureau of Standards
TFCG	Tanzania Forest Conservation Group
TFS	Tanzania Forest Service
ToT	Training of Trainers
TP	Transit Pass
TZS	Tanzanian shilling
URT	United Republic of Tanzania
VAC	Value-added chain
VC	Village Council
VLFR	Village Land Forest Reserve
VLUP	Village Land Use Plan
VNRC	Village Natural Resource Committee
VPA	Voluntary Partnership Agreement
VICOBA	Village Community Bank
VSLA	Village Savings and Loans Associations

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Executive Summary

Background

The absence of a well-functioning enabling environment for the sustainable management and trade of natural forests and their related products puts the forests, with their forest dependent communities and importance in environmental services at a high risk. This risk is exacerbated when considering the increasing pressure on the land from a fast growing population (about 100 million in the coming 20-30 years) with unsustainable and degrading land use practices, and increasing negative effects from climate change.

Putting an excessive and costly burden to Village Forest Reserves, without a corresponding support in regulations, and at the same time not being able to address the illegal/semi-legal forestry sector is a perilous combination. The market actors making an effort to apply best management practices are facing many difficulties, while the ones in the illegal sector are the winners.

Study Objective

This Market System Analysis report incorporates a Human Rights Based Approach (HRBA) focus and includes conclusions and recommendations about:

- Market development in the programme during the implementation phase;
- VLFRs to be involved in the programme;
- Organisational strengthening with focus on sustainable forest management (in relation to market development);
- Integration with Management Information System (if feasible); and
- Establishing available baseline data for later programme monitoring.

Approach and Methodology

This assignment uses a Market System Analysis (MSA) approach, to analyse the supply and demand of wood and non-wood forest products, rules and business environment and supporting functions within an HRBA context.

Market systems approaches address the underlying causes of poor performance in specific markets that matter to people living in poverty, in order to create lasting changes that have a large-scale impact[1]. Improving the lives of the poor – stimulating growth and expanding access – means transforming the systems around them. Market systems development recognises this reality and provides a coherent, rigorous approach to understanding and intervening in market systems so that they function more efficiently and sustainably for poor women and men. There are three common components of any market system: the core market, supporting functions and the rules.

[1] More extensive information on the M4P and market systems approaches can be found on the BEAM Exchange website: www.beamexchange.org

The approach of this assignment was to carry out a diagnostic process for FORVAC in order to assist the programme to best identify how and where to carry out implementation activities as well as to provide inputs into the vision process.

The Diagnostic process is a method of understanding how a market system works and exactly why it fails to better serve the poor, prior to intervening in it. The aim was to identify the root causes of market player under-performance and the functions/rules most in need of redress. The information gathered during this assignment was used to pinpoint what is responsible for maintaining the poor's disadvantage and where intervention is most needed.

Key Findings

Wood from the Natural Forest

Core Market: Most sawn wood is of low quality partly due to forest management factors and partly due to the use of poor technology such as pit-saws and chainsaws. Small-scale timber traders accept low quality timber but the larger returns are available for other market segments e.g. construction. A significant gap is investment on appropriate equipment, which could be an important development of CBFM provided that sufficient capacity building and enabling regulatory framework accompany this activity. Timber is low quality and expensive compared to neighbouring countries imports such as Mozambique, Congo DRC and Zambia (which have larger sized timber as the same price point). Identification, experimentation and market development of the lesser-known timber species alongside a sustainable harvesting approach would open up the market sector.

Transporters: Timber from the natural forest is typically transported using various means; primarily using vehicles but also via motorcycle or bicycle. There is a need to develop a tracking information between checkpoints and this is one of the areas that FORVAC could intervene in and could potentially follow on from a previous data management pilot project carried out by TRAFFIC and Tanzania Forest Service (TFS).

Pricing: Transit Pass fees and royalties are paid to the Central Government through TFS. Royalty rates have been updated on a number of occasions but a clear model for their determination/setting has never been developed leading to market actor dissatisfaction on how royalty rates are established. Based on a recent study log tracking, it is proposed that stumpage appraisal be used as a model for price determination. There is an opportunity to revise prices of raw materials based on market trends by collecting data on some parameters of the model. Current rules and application of norms have a direct effect in pricing, and consequently in legal/formal market development and sustainable forestry, especially regarding VLFR and other related CBFM activities. In principle, the current context regarding pricing puts the formal producers in an untenable situation. Good governance and law enforcement is necessary at all levels.

Rules: Various regulations and policies converge in the forestry sector (e.g. in lands, agriculture, livestock, wildlife, tourism, etc.) but without a proper harmonisation leading to uncertainties in their application and follow up. Roles and responsibilities between agencies and institutions at different levels, especially at local level, are neither well understood nor properly implemented. For example, the forestry activities in village land (VLFR or CBFM) where authorities may apply excessive and costly supervision not in line with established guidelines, including application of royalties, pricing and fees that should not apply to VLFRs. The focus is on controlling legal/formal activities in VLFR and few resources are allocated to enforce the law towards the more serious illegal/semi-legal sector along the wood value chain.

The most exported tree species have been (in order) Mkuruti (*Babhia kirkii*), Mkurungu (*Pterocarpus tinctorius*) and Paurosa or Msekeseke (*Bobgunnia madagascariensis*). Within the last 3 months, Paurosa may have become the most exported species due to increased demand in the Chinese market[2].

Timber Certification: The market for FSC certified timber is currently small inside Tanzania although there is a good export market (for products of a high quality). FORVAC could conduct a cost-benefit assessment of FSC demand and supply for VLFR sourced timber. There is also strong competition against FSC certified timber partly due to the high amount of illegal timber in the market system. An alternative approach could be to use the FSC Tanzania standard for sustainable forest management as well as to develop an alliance of timber trading groups within a FORVAC district. FSC Controlled Wood Standard could also be considered.

Supporting Functions: Capacity building is needed at every level of market actors and stakeholders. There is a need to improve technology in line with government policy and to use the associated grants and funds. The starting point would be to first assess what market services are available and to support these market actors and stakeholders as well as empowering them to develop proposals including a business plan. Small-scale industrialisation could be encouraged, such as enabling small groups of artisans to potentially sell to Dodoma or Dar es Salaam. The focus could begin with primary industry and then develop secondary industry.

Forest Law Enforcement, Governance and Trade (FLEGT): A full FLEGT implementation in Tanzania is not envisaged but some elements of the FLEGT and the Voluntary Partnership Agreement (VPA) could be used to develop forest law enforcement, good forest governance and trade of legally sourced timber. There are a range of measures that exist that could be implemented in Tanzania and that these measures would have a positive contribution to the forest sector and forest governance. Previous studies have provided a series of recommendations e.g. on the development of a Timber Legality Assurance System (TLAS) to develop more efficient timber tracking systems to facilitate monitoring of movements of timber within Tanzania.

Charcoal

Core market: Charcoal production tends to be carried out in locations where wood resources are abundant to reduce time for piling the billets into kilns. Traditional earth kilns predominate in all the FORVAC clusters with low efficiency, recovery and sustainability of charcoal production. In addition, some producers were reluctant to monitor kilns during carbonization process leading to added wastage. Increasing the capacity to utilise improved kilns could be an important intervention (other locations in Tanzania are much further advanced in this area).

- From the point of transportation, women are highly involved in the value chain.
- Export: Charcoal export from Tanzania is illegal. However, charcoal is traded outside the country e.g. to Mombasa as well as to countries such as the Comoros (via Zanzibar)

[2] This anecdotal information was provided by Mr Mzirai (CEO of the MICO Import and Export Co. Ltd and Chairman of Forest Products Export and member to the National Tree Planting Committee) and cannot be quantified at this time.

- End user: Few households currently use efficient cooking stoves, which impacts on the sustainability of resources. There are projects that are focusing on this such as Tanzania Traditional Energy Development Organization (TaTEDO) but not in the FORVAC clusters.

Supporting Services:
Technology and skills on both supply and demand side is low. Almost all types of trees species are harvested, and is conducted without any regeneration considerations. Business skills are low and the majority of the harvesters achieve a low return compared to intermediaries in most areas charcoal is produced. Business skills training and business development services (BDS) as well as training on harvesting techniques, product specific processing and manufacturing require attention in the cluster regions. WWF and TaTEDO are developing a project on briquetting using sawdust waste in Songea. Appropriate Rural Technology Institute (ARTI) is working on solar equipment and energy efficient stoves in Dar es Salaam. However there is no information on who is doing what to facilitate marketing of (sustainable) products produced by the communities

Transportation: Charcoal transport is organised by cartel or monopolistic traders with similar costs on vehicle hiring. Motorcycles, using illegal routes, often transport charcoal and they lack the required documentation. Motorcycles are disorganised and their traceability is difficult so the development of monitoring system to monitor timber transportation would help to diminish illegality in the value chain. The time used at the checkpoints is substantial delaying transportation as well as increasing costs along the chain.

Rules: Various regulations control charcoal trade and transportation. For example, although the Surface and Marine Transport Regulatory Authority (SUMATRA) prohibits transportation of charcoal bags using bicycles and motorcycles, in practice most trade is via motorcycles. The maximum weight of charcoal allowed in the trade is 50kg (regardless of species) and the trader is required to pay royalty of TZS 12,400 (rates have increased). The numerous fees and permits reduce charcoal turnover including from VLFR, (a cause of illegal charcoal triggering forfeiture of income by the Central Government). Charcoal from black wattle does not pay royalties and so is a strong competitor in markets with charcoal from natural forests. Most of the rules and regulations are in legal language (often English). Interventions could include: training on laws and regulations, organising traders including motorcycles and networking to enhance control and management, grading/identification of legal charcoal, harmonise regulations and fees and influence discussions to ensure VLFRs generate profits in the business as incentive for sustainable management. Woodlot establishment for charcoal is also an option as it is less bureaucratic but could use fast growing species, high calorific value species.

NTFPs:
The main focus of the NTFP market screening was to gather sufficient market information to enable the MSA team to assess the key market constraints and opportunities. It is anticipated that once the FORVAC Cluster Coordinators are recruited then the potential for NTFPs in the programme locations can be investigated. One limitation during the MSA team fieldwork was that much of the village level information was gathered at district level and the officers tended to have a fairly low level of knowledge about the potential markets for

NTFPs other than honey. The NTFPs that were focused on included beekeeping and bamboo. To a lesser extent fruits (including strychnos), mushrooms and herbs were also discussed[3].

The findings from the MSA team for NTFP support the argument for including woodlots for timber and/or bamboo and/or fruit processing as well as considering the option of multipurpose woodlots and agroforestry (possibly linking to soil conservation and agriculture).

Site Selection

Land ownership and user rights need to be considered before progressing on site selection. The overall aim is to promote self-sustaining private sector supporting services so a careful evaluation of existing resources is likely to be an early task when the FORVAC Cluster Coordinators are appointed. Given the varied situations in the different FORVAC districts, a stepped approach for interventions within each cluster could be considered. The results from the MSA team include the following suggestions:

- To include Nyasa District due to the value adding opportunities, new road and number of VLFRs (especially compared to neighbouring Mbinga)
- To include the SULEDO CBFM which would allow for a pilot approach and larger scale interventions. It is also comparatively easy to access the site from the FORVAC central office.

  ➢ If this is agreed, then FORVAC could consider basing the cluster office in Kilindi for logistical reasons.

HRBA:

FORVAC may be able to actively seek to transform elements of the Tanzanian society by addressing discriminatory legislation, norms and practices that are impacted by the wood and (selected) NTFP sectors.

Targeted actions can also be developed for groups that need support via specific activities. For instance, if there are groups facing specific disadvantages to achieve their rights to forest-based livelihoods, specific targeted activities can be implemented. It is proposed that particular attention should be given to the following issues:

- Health & safety considerations in harvesting, processing and trading, land based rights and gender based violence.
- Targeted activities for pregnant girls, single mothers, youth (under 25 years) and the disadvantaged (people with disabilities or long-term sickness) – this could include an aim for 50% of beneficiaries to be from these focus groups. If this beneficiary group needs to be narrowed down further then one indicator could be to use TASAF recipients.
- Integrate target beneficiaries in all activities. Clarified lines of accountability and information on how to complain if there is a problem.

[3] Ecotourism is seen as being out of the remit of FORVAC

Recommendations (Interventions)
The recommendations in this report are quite extensive and primarily take the form of suggested interventions (section 5). The findings also include some interventions but as these can be grouped under the larger scale interventions in section 5 they are underlined for identification but not repeated elsewhere in the report to prevent duplication and possible confusion.

The overarching interventions could include capacity building, relationship building, information/ communication and HRBA. Other potential interventions are output specific and structured according to FORVACs output 1 and 2. Examples of these outputs are provided in the main document.

Thematic area potential interventions for output 1 include Enterprise / Innovation centres, Income Generating Activities (for wood, charcoal and NTFPs, Business plans and Business Skills Development (and Business Services Development) and research based interventions.

Thematic area potential interventions for output 2 include Rules and Regulations (governance), Charcoal specific intervention (rules and regulations), Development of PFMs and Financing.

A preliminary set of suggestions and approaches for the implementation phase (possible next steps) are summarised below:

Capacity building /Training
Tailored needs assessment addressing -What, How and especially Why- training is needed for, at key levels, e.g.:

- Villages (VNRCs), with focus on: awareness, empowering, and commitment, based on a good understanding on their role in VC development
- Districts, with a focus on:
  - Project cycle management in relation to their supportive role to villages (VNRC) and other VC actors in towns;
  - Development of proposals (together with target groups) to access funds for priority actions to promote sustainable VC development
- Other target groups (at village and district levels) such as vulnerable groups
- Information, communication/dissemination, extension support
- HRBA to be integrated at all stages/levels

Service providers (SP)
An extensive search for service providers would be needed taking into consideration different sectors (private, public, NGOs, Academia, etc.), and different purposes and levels (local, district, region). Elements to consider include:

- MoU/contracts based on specific TOR and transparent procurement process
- Establishment of criteria for SP identification/selection aiming at strengthening the base for sustainability of services post-programme
- Promote and strengthen local/regional service providers

Income generating activities

A wide search for NTFP and NWFP opportunities is required paying special attention to local conditions (constraints and potentials)

- Consider integrated alternatives based on field/village context, e.g.
  - Traditional ones, such as charcoal and bee-keeping
  - Woodlots for multipurpose uses (including bamboo and fruit trees), e.g.: fodder trees & shrubs, fuelwood/charcoal, soil conservation, agroforestry, raw material for artisans, etc.
  - Special attention to include vulnerable groups in economic activities
  - Evaluate access to special niches, such as eco-tourism, artisan market places, furniture & joinery, etc.

Information / communication

- Assess the needs for information for different purposes and levels in relation to the MIS framework
- Raise awareness, among data producers and users, on the importance of quality data/information for specific purposes at local as well as at higher level
- Promote good planning and monitoring practices, based on quality data for informed decisions at various levels
- Special attention to adequate dissemination of clear information about regulations, roles and responsibilities, regarding main stakeholders, as a key step to promote good governance

Financing

To identify financing options (at local, regional and central levels) with a focus on strengthening local stakeholders and priority actions, such as:

- Training and capacity strengthening according to specific needs
- Promotion of CBFM and registration of VLFR
- Planning process:
  - Land use plans
  - Management plans,
  - Harvesting plans
  - Business plans
- Investments in for example:
  - Operations/production
  - Transformation/value addition
  - Promotion/commercialization
  - Strategic market information

1. Introduction

1.1 Programme Overview

The Forestry and Value Chains Development (FORVAC) Programme aims to contribute towards increasing economic, social and environmental benefits from forests and woodlands while reducing deforestation. The expected outcome of FORVAC is: improved forest-based income, livelihoods and environmental benefits. The outcome will be achieved through the following outputs:

1) Improved value chains and increased private sector involvement in community and government forests:

- Potential commercial and other benefits in the forest-based value chains realised through responsible private sector involvements in the Village Land Forest Reserves (VLFR) under the Community Based Forest Management regime (CBFM) and Joint Forest Management (JFM).
- Private sector investors increasingly involved in forest reserves managed by TFS.

2) Improved capacities, monitoring systems, legal and policy frameworks in the forest sector:

- Improved capacities at all levels to plan, support, manage and monitor the CBFM, JFM and forest value chains, including operational forest extension, communication services and functional monitoring systems as well as improved and harmonized legal and policy frameworks to guide and improve sustainable forest management and trade procedures.

The implementing agency of the programme is the Forestry and Beekeeping Division (FBD) of the Ministry of Natural Resources and Tourism (MNRT), in close cooperation with the Tanzania Forest Services Agency (TFS) and the President's Office Regional Administration and Local Government (PO-RALG). Private sector organisations engaged in timber and non-timber forest products harvesting, processing, and marketing will have a key role in the implementation of this intervention.

The Programme supports forest management, commercialization and value addition in PFM regime in three clusters: Tanga cluster (Handeni and Kilindi districts), Lindi cluster (Liwale, Ruangwa and Nachingwea), and Ruvuma cluster (Namtumbo, Songea and Mbinga (and potentially Nyasa) districts).

The findings of this assignment are expected to contribute to the design of the programme during the Inception phase. At the same time, the study sets out some baseline data for later programme monitoring. Information is also provided for inputs into the MIS system study.

1.2 Market Systems Analysis (MSA) Assignment

This assignment began on 31st October 2018 and the in-country inputs were completed on 13th December 2018. A range of related literature was consulted adding important elements for team discussions, context understanding and improved field observations. The document review included for example: National Forest Policy; the Forest Act (including the Forest Amendments Regulations, 2017); Timber Market Dynamics in Tanzania and in Key Export Markets; Guidelines for Harvesting in Village Land Forest Reserves; Socio-Economic Assessment in the National Forestry and Beekeeping Programme (NFBKP II); LIMAS Project Completion Report; TRAFFIC report on Forestry, Governance and National development: Lessons learned from a Logging boom in southern Tanzania; National Five Year Development Plan 2016/17 – 2020/21 "Nurturing Industrialization for Economic Transformation and Human Development"; Tanzanian Wood Product Market Study for Forestry

Development Trust (FDT); National Forest Resources Monitoring and Assessment of Tanzania Mainland (NAFORMA). A list of literature and studies referenced in this report can be found in section 6 (bibliography). A shared OneDrive has been used as an electronic repository for the wider range of literature used in this study and is available to the FORVAC team.

This Market System Analysis report incorporates an Human Rights Based Approach (HRBA) focus and includes conclusions and recommendations about:

- Market development in the programme during the implementation phase;
- VLFRs to be involved in the programme;
- Organisational strengthening with focus on sustainable forest management (in relation to market development);
- Integration with Management Information System (if feasible); and
- Establishing available baseline data for later programme monitoring.

2 Methodology

A mixed method approach was used consisting of quantitative and qualitative analysis including the following general approaches:

a) Literature review using external and internally sourced documents;

b) Guided semi-structured interviews with key stakeholder informants;

c) Focus group discussions; and

d) Observation.

The overarching methodology was to incorporate the outputs of this assignment into an implementation using a Market Systems approach consistent with M4P.

2.1 M4P: Making Markets Work for the Poor (A Market Systems Approach)

Market systems approaches address the underlying causes of poor performance in specific markets that matter to people living in poverty, in order to create lasting changes that have a large-scale impact[4]. Improving the lives of the poor – stimulating growth and expanding access – means transforming the systems around them. Market systems development recognises this reality and provides a coherent, rigorous approach to understanding and intervening in market systems so that they function more efficiently and sustainably for poor women and men.

There are three common components of any market system: the core market, supporting functions and the rules as shown in the 'doughnut' in Figure 1.

[4] More extensive information on the M4P and market systems approaches can be found on the BEAM Exchange website: www.beamexchange.org

Table 1 The Market System 'Doughnut'

Core Market (Market Chain/ Actors and Linkages): Simple exchanges of goods or services, such as labourers earning wages, smallholder farmers selling forest products, or households buying domestic commodities, lie at the heart of market systems. The value chain maps the relationships between buyers and sellers, who are linked together. Each of their behaviours depends on their roles and functions, incentives and capabilities. This in turn shapes the availability, choice, price and quality of goods or services exchanged. This ultimately determines how effective and accessible the market is for poor people.

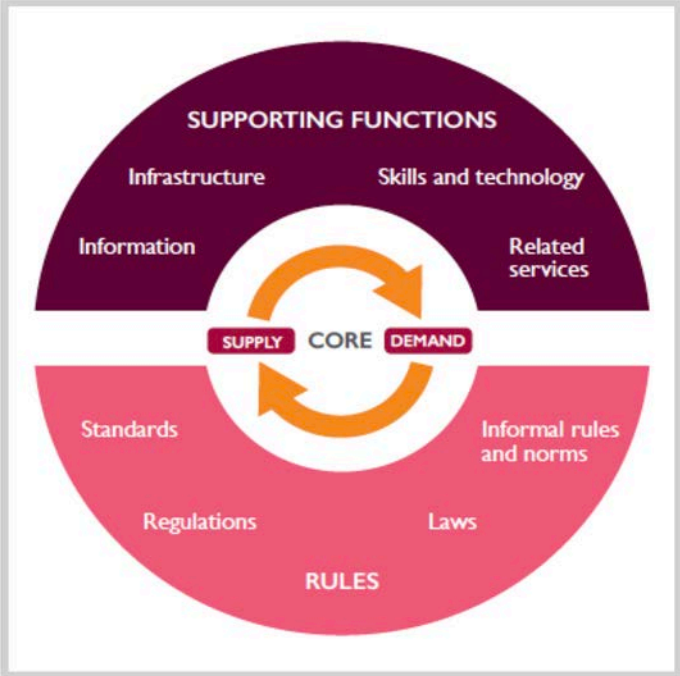

Figure 1: The Market System 'Doughnut'

Supporting functions: Supply chains can only develop and survive if there are supporting functions. A wider network of related services and infrastructure – such as transport services, materials supply-chains, electricity, banking services – are required for the core exchange to take place. The existence and quality of these supporting functions can therefore have a major impact on the benefits that poor people derive from these exchanges.

Rules: Value chains and supporting functions do not happen in isolation. They are always subject to an institutional context or business environment – laws, regulations, standards, social rules and behaviours that influence when, where and how exchanges take place. These determine the power of buyers and sellers along the value chain. For example, by preventing (or enabling) monopolistic behaviour, regulations influence how economic benefits are distributed.

Governments, regulatory agencies, infrastructure providers and business associations often create these rules. But they can also be shaped by broader societal values and attitudes, such as cultural attitudes that restrict women's access to work.

2.2 HRBA

The most relevant HRBA issues to market development were accorded a special focus in this assignment and treated as an integral part of the FORVAC approach.

According to the MFA Manual for bilateral programmes there are three levels of Human Rights Consideration. This diagnostic based MSA included programme implementation options that are consistent with the Human Rights Progressive level as a minimum. However, the team identified implementation options at the higher level of Human Rights Transformative. Consequently, it is anticipated that FORVAC will actively seek to transform elements of the Tanzanian society by addressing discriminatory legislation, norms and practices that are impacted by the wood and (selected) NTFP sectors.

2.3 Diagnostic Process

This assignment carried out a diagnostic process for FORVAC in order to assist the programme to best identify how and where to carry out implementation activities as well as to provide inputs into the vision process.

The Diagnostic process is a method of understanding how a market system works and exactly why it fails to better serve the poor, prior to intervening in it. The aim was to identify the root causes of market player under-performance and the functions/rules most in need of redress. The information gathered during this assignment was used to pinpoint what is responsible for maintaining the poor's disadvantage and where intervention is most needed. The purpose of this diagnostic study was to:

- Identify the system-level constraints (root causes) that FORVAC can feasibly address;
- Familiarise FORVAC with the incentives and capacities of market players associated with these constraints;
- Generate intelligence and insights which can be used to influence market players during intervention;
- Provide information that can be used for monitoring purposes.

2.4 Approach

The primary focus during this consultancy was placed on wood products (from the natural forest) with a secondary focus on charcoal. Additionally, NTFPs were covered more briefly as a market scan with the aim of providing guidance for next steps. Throughout this assignment, the MSA team included considerations of economic, social and environmental sustainability. Field activities consisted of sixteen days in total covering Kilwa, Nanjerinji Village, Ruangwa, Namtumbo, Mbinga, Nyasa, Songea, Ifakara (Kilombero Valley Teak Company Ltd), Dodoma, Babati, Forest Industries Training Institute (FITI), Shanga handcraft in Arusha Coffee Lodge, Forest Training Institute (FTI) Olmotonyi, Handeni and SULEDO. In the field, several focus group discussions were conducted with communities in Nanjerinji and SULEDO. Other group discussions were conducted at district level with district staff (beekeeping, planning, community development, trade and cooperatives, Forest Managers (DFM), Forest Officers (DFOs), District Lawyers). Seven days were spent in Dar es Salaam intermittently to interview traders, associations, constructors, and government officials. The market actors and stakeholders interviewed are included in Annex 2.

2.5 Report Structure

The structure of this report in section 3 broadly follows the three common components of the market system: the core market, supporting functions and the rules as shown in the 'doughnut' in Figure 1 for wood products, charcoal and NTFPs (other than charcoal). There is crossover between the different forest products and this has been dealt with by providing the most in-depth information in section 3.2. (wood products). To avoid repetition, where the information is identical for charcoal and timber, it is not included again under charcoal

Separate sections are shown under 'findings' for cluster specific information including socio-economic data and site selection. There is also a separate section for HRBA although these issues have also deliberately been included throughout the report with the aim of developing an integrated approach.

The systemic constraints are briefly considered but are primarily included within the findings. The findings section also includes (underlined) interventions that feed into the larger scale proposed interventions identified in Section 5.

3 Findings

3.1 Key Market Actors and their functions

There are many existing key market actors and they can be found at different levels, representing relevant government, civil society, private sector and other entities. The actors have roles and responsibilities that can be exploited by FORVAC for experience sharing and potential partnerships. Annex 1 details key stakeholder organisations and projects and Annex 2 lists the market actors and stakeholders that the MSA team interviewed.

3.2 Wood Products

3.2.1 Market Chain/ Actors and Linkages

An Identification of key roles and activities within the hardwood product value chain from the natural forest:

The timber value chain is comparatively short compared to those for other forest products. Timber is sourced from inside Tanzania as well as imported from neighbouring countries including Mozambique, Zambia, Malawi, Zambia, Uganda and Congo DRC (Chenga & Mgaza, 2016).

Internally sourced hardwood timber is predominantly from community based forest reserves and non-reserved forests. The main geographic sources of supply are Lindi, Tabora, Katavi, Morogoro, Tanga and Ruvuma (Chenga & Mgaza, 2016). The forests in the community based forest management and non-reserved forests are secondary, often seriously degraded, and the majority of class I and II timber species[5] have already been harvested. Non-reserved forests constitute un-reserved forests in village lands and general land.

According to data by the National Forestry Resources Monitoring and Assessment of Tanzania (NAFORMA) cited by a recent TRAFFIC report (Chenga & Mgaza, 2016), the Tanzania mainland has an estimated allowable cut of about 42.8 million m^3 annually consisting of timber for construction, utility poles, fuelwood (charcoal and firewood), furniture and joinery, pulp and paper. However, the overall national wood consumption on mainland Tanzania is estimated at 62.3 million m^3 based on a per capita consumption estimate, in which case 19.5 million m^3 more than the annual allowable cut, which could come from illegal and unreported wood harvesting as well as cross border timber movements and imports.

The list of tree species and their classification in Government Notice number 255 (The Forest (Amendments) Regulations, 2017) is included in Annex 4 and discussed in Section 3.2.2 of this report.

The potential value addition that could be added to this type of forest would be to invest in the identification and experimentation of the lesser-known timber species. There are about 700 species of trees suitable for timber, but not more than 200 species are used widely although the majority have a wide range of distribution[6].

[5] These are classification of tree species from non-plantations forests. Species in Class I and II have high royalties compared to other classes. Also see the classification in Annex 4 for further information.
[6] Interview with Prof F. Makonda, Head of Department of Forest Engineering and Wood Sciences, SUA (20/11/2018)

Out of the reported 500 species only 60 have been studied. The Department of Forest Engineering and Wood Sciences at Sokoine University of Agriculture (SUA) has studied and promoted 40 lesser-known wood species. For example, Msani (*Brachystegia bussei*) has similar wood properties with Mninga (*Pterocarpus angolensis*), and the resulting furniture is indistinguishable between the species; this is a good example of the implications of this work. Prior to these SUA's inputs there had been a strong preference for Mninga over Msani despite the similar wood features. After around 10 years of promotion, there was a similar level of preference for both species and demand rapidly increased for Msani as the availability of Mninga decreased. Before Msani had been investigated, it was sold as class IV but later MNRT promoted it to class II. Investigative studies of lesser-known tree species could reduce pressure on the more popular ones. Sound and Fair Ltd is developing a catalogue of species for timber for the industry, and MCDI is also working on these issues, particularly on promotion.

Forest Management in Village Land Forest Reserves

Harvesting frequently does not follow approved Forest Harvesting Plans (FHP) and the harvesting techniques are poor (e.g. first processing in the field is usually pit sawing and chain sawing) resulting in low quality timber. In many cases, after harvesting areas were unmanaged, they were affected by fire, livestock grazing and agricultural encroachment. These changes if not addressed would attract pioneer species consequently reducing regeneration capacity of the forests.

This is currently a male dominated activity. In some locations, primarily where there have been outside capacity building interventions such as in SULEDO and via MDCI in Nanjerinji; women are actively involved in forest management including overnight tasks such as patrolling the forest. In these locations, *the women that were interviewed strongly advocated that project interventions should promote an equal access approach for men and women and ensure that sufficient sensitising and education on equality and good governance should take place before any on-the-ground activities. Although the women felt there was some scope for individual male and female education there was an overall preference for an equal and joint approach.*

Suggestions that a special focus could also be made for youth (under 25) were enthusiastically welcomed and in some cases, already planned. Office type roles in particular could also be appropriate for vulnerable community members such as the disabled.

Stakeholder mapping

Primary Producers: The majority of trees from the natural forest are harvested using handsaws and axes. Producers typically receive inadequate returns due to low market prices for their timber when sold at village level. This situation is exacerbated due to a lack of collective bargaining and a low power ratio in relation to governmental authorities (see also the section 3.2.4).

This is currently a male dominated activity. However in some areas such as in Handeni, women were hiring men to carry out harvesting and sawmilling activities for them because these women had the financial capital to be able to do this. Youth could also be encouraged into this area of work (and along the whole value chain).

Secondary Producers: The majority of timber is processed in the forest using pit-saw ansd some is harvested by chainsaw, even though this is not legally permitted. There are some exceptions; particularly with regard to woodlots and private sector plantations but with the exception of large-scale operations, the majority of sawmilling machines are ding dongs or similar characterised with poor quality as well as low recovery and high

risks of accidents. However there are market actors such as NGO/project assisted interventions e.g. MCDI that have a portable sawmill and solar kiln facilities or SULEDO that has a ding-dong sawmill and a, currently broken, woodmizer sawmill[7].

A key issue at the start of FORVAC is that, due to inadequate techniques, most sawn wood is of low quality. Small-scale timber traders accept low quality timber but the larger returns available for other market segments (e.g. construction and large buyers such as Holtan (E.A) Ltd[8]) demand high quality sawn wood. Exported products and market niches such as for hardwood shutters, doors and windows also require high quality sawn wood.

Investment on appropriate equipment such as small-scale sawmills could be an important development of CBFM in FORVAC clusters provided that sufficient capacity building accompanies this activity (see section 4).

Tertiary Producers: Construction and furniture industries

Construction includes real estate, transport infrastructure (e.g. bridge building), and other civil works, including water supply. Construction contributed 13.6% to Tanzania's GDP and significant portion of the government's development budget (about 60%) is spent on construction projects[9] (Muhengi and Malongo, undated). The furniture industries in Tanzania are at range in size from very small to medium-scale. An example of the larger scale furniture industry includes *Holtan* E.A. Ltd., a construction company who include fitting out buildings within their activities. The challenges for the private sector include considerably reduced demand for construction and furniture, plus limitations due to increasingly expensive raw materials.

The public sector construction and furniture industry is currently much more active, due to the large amount of public sector development in both rural areas and in Dodoma. Most of this construction is now carried out by the government owned Tanzania Buildings Agency, which has a strong relationship with timber supply from TFS plantations. According to their website[10], Tanzania Buildings Agency (TBA) is the government's Executive Agency under the Ministry of Works, Transport and Communication (MoWTC) and their main role is to provide houses for the government and public servants as well as building consultancy services to the government including:

- Construction of new government buildings;
- Maintenance of government buildings;
- Allocation and /or sale of grade A and B government houses to public servants;
- Provision of building consultancy services to the government;
- Leasing government houses on commercial basis;

[7] Training service providers such as FITI are included in the following section (3.2.3)

[8] A construction company specialising in complete fitting out of public and commercial buildings and facilities and headquartered in Dar es Salaam

[9] https://www.tanzaniainvest.com/construction/tanzania-construction-sector-report

[10] http://tba.go.tz/

- Provision of project management services to Ministries, Departments and Agencies; and
- To advise the Government on policy and legal matters relating to the building subsector.

Transporters: Timber from the natural forest is typically transported using various means; primarily using vehicles but also via motorcycle or bicycle. In some areas transporters re-use permit documents and there are also issues of trying to identify whether imported timber has been legally harvested. The fees required to pay for legal transportation of timber include royalty, transit pass permit on top of transportation costs. Checkpoints rarely have objective approaches for verification of the timber load especially by truck. This causes dissatisfaction and complaints from timber transporters.

There is a need to develop a tracking information between checkpoints and this is one of the areas that FORVAC could intervene in and could potentially follow on from a previous data management pilot project carried out by TRAFFIC and Tanzania Forest Service (TFS).

***Wholesalers*:** This node is usually located in town and cities. They stock timber in large quantities and sell to end users such as individuals, contractors and furniture making industries. Wholesalers are required to pay income taxes, timber yard fees and timber trade licences (see Section 3.2.2). The main challenges with these nodes are that they have low levels of capital and are unable to reliably accumulate sufficient timber to trade with larger scale constructors. The timber is of low quality and expensive compared to ones from neighbouring countries such as Mozambique, Congo DRC and Zambia. Their timber sizes are also smaller compared to timber imported from neighbouring countries. This causes timber from the natural forest in Tanzania at this node to have a weak market demand.

Export markets: Sawn wood is one of Tanzania's most exported wood products. Top destinations counties for wood products from Tanzania (including sawn wood) are United Arab Emirates, South Africa, Kenya, United Kingdom and India (Abdallah and Kosei, 2018). Logs have to be processed before being exported with maximum size of 6 inches.

3.2.2 Timber Pricing, Demand and Supply

This section discusses timber prices for the government and along value chain.

Government Fees, Royalties and Permit prices

Royalties for timber are paid according to timber classes. Table 1 is extracted from the Forest (Amendment) Regulations, 2017 and summarises timber classes. The 16 species included in Table 1 consist of all those which are available in the FORVAC cluster areas that can provide timber.

Class	Botanical Name	Trade Vernacular Name
1A	*Dalbergia melanoxylon*	Mpingo
	Afzelia quanzensis	Mkongo
	Melicia exelsa	Mvule
IB	*Brachystegia microphyla*	Msani
	Pericorpsis spp	Mwanga
	Sterculia spp	Mgude
	Breonadia salicina	Mgwina
II	*Burkea africana*	Mkarati
	Brachystegia speciformis/ Julbernadia spp.	Mtondoro
	Syzgium cummnii	Zambarau Mwitu
	Acacia nigrescens	Mhama
	Albizia versicolar	Mkingu
	Bombax rhodognaphalon	Msufi pori/Msufi mwitu
III	*Pterocarpus* spp	Mninga
	Sterculia quinqueloba	Mbalamwezi
IV	*Terminalia sericea*	Mpululu

Table 1: Classes of timber tree species for the cluster, adapted from Forest (Amendment) Regulations, 2017

The royalties for different timber classes are provided in Table 2. These fees are payable on non-plantation forest production where the timber is cut and removed by the licensee from Government owned forest reserves and general land. This fees and permits regime targets the central Government forests (TFS) but they are also applied to the private sector and VLFRs.

Classes	2017	2015	% increase
Class IA	291,500	264,960	**10.0**
Class IB	260,000	235,520	**10.4**
Class II	195,000	176,640	**10.4**
Class III	146,000	132,480	**10.2**
Class IV (other species not listed in the GN)	**97,200**	**88,320**	**10.1**

Table 2: Royalty per cubic meter (standing tree volume in TZS) payable on natural forest products extracted from Forest (Amendment) Regulations, 2015 and 2017

The fees and royalties set by TFS solely for the Central Government forests, but other stakeholders such as the private sector and VLFRs are applying them as minimum prices for forest products. In this case, it is not a regulation (even if perceived to be by private sector) but a common practice.

The review of the fees is a process conducted by the Chief of Tanzania Forest Services Agency by formulating a Task Force. For example, members appointed to develop the Forest (Amendments) Regulations of 2017 consisted of four members (one was from SUA and three were from TFS). The approach solely consisted of a desk study and review but failed to include field visits to solicit stakeholder viewpoints or information. There was no stakeholder meeting to validate Forest (Amendments) Regulations of 2017. SHIVIMITA, as the representative of key stakeholders in forestry was also not involved. This unilateral development of the Regulations raised a considerable amount of concern in the forest sector as many stakeholders hold the opinion that the fees, royalties and permit charges (10% increase) are unrealistic and do not reflect the existing market

conditions. This lack of stakeholder engagement contrasts poorly with the approach taken to develop the Forest Regulation, 2017 which has used a more participatory model.

Timber traders are required to pay a royalty of 5% as a contribution to tree planting. This amount is currently administered by Tanzania Forest Fund. Other fees are payable on services such as transit pass (TP) and registration. The current service fees as extracted from Forest (Amendment) Regulations, 2017 and compared to 2015 are presented in Table 3. Contrary to other fees and royalties, there are no differences between the 2017 and 2015 figures.

Services / Transit pass fees	2017 (TZS)	2015 (TZS)
i) Vehicle below 7 MT	7,500	7,500
ii) Vehicle above 7 MT	15,000	15,000
Reserved[11] trees on private farms should be 20% of respective forest royalty given in Table 3 above	20%	20%
Registration of timber dealers and traders per year (for pit sawyers in productive natural forest)	256,000	256,000
Registration of timber yard	256,000	256,000

Table 3: Other fees payable on services related to timber trade

All fees and royalties shown above in table 3 are paid to the Central Government through TFS. According to Ngaga (2009), royalty rates have been updated on a number of occasions and in 2007 they were revised twice following complaints by the timber industry that they were too high. However, a concise model for their determination/setting has never been developed. Based on the recent study on log tracking, it is proposed that stumpage appraisal could be used as a model for price determination which would provide an opportunity to revise prices based on market trend through data collection and this information could be used to revise raw material prices. This should also include a review of the applicable mode of selling either stumpage or selling processed timber. *A comparative analysis of the methods for price determination for VLFRs could be among focal areas for FORVAC.*

The following text box explains the types of payments to government and related issues:

[11] "Reserved tree" means a tree reserved under section 65 of Forest Act of 2002 which prohibits to (a) fell, cut, lop, damage or remove any reserved tree or any part thereof on any general land; (b) take, offer for sale any produce from any reserved tree.

Box: Types of Payments to Government (e.g. fees, royalties, taxes payable at different levels both local and central government and legal provisions for collecting revenues)

(Extract from: Green Advocates International, Inc (2014) "Scoping Study of the Forestry Sector for the purpose of including the industry in Revenue Disclosure through the Tanzania Extractive Industries Transparency Initiative (TEITI))

Government forestry revenue comes from natural forest, plantations, exports and services: Most TFS revenue is collected from royalties, revenues from fines and confiscations generate a low 2%: The largest revenues are collected from royalty payments for harvesting. Tanzania Forest Fund (TaFF) charges generated an additional 19% of revenues. Logging and Miscellaneous Account (LMDA), collected from plantations, contributed to 5% of revenue. Fines and penalties levied contributed only 2%. Considering the high perceived levels of illegality it is surprising that compounding fees contributed so little.

In contrast to the royalties and fees listed above, which are provided for under the Forest Act 2002, direct taxes are governed by the Income Tax Act 2004 and are administered by the Tanzania Revenue Authority.

Royalty rates are determined administratively, not based on forest markets: Though royalty rates have been updated, a concise model for their determination has never been developed. Stakeholders claim there is an urgent need for royalty rates based on "economic surplus" models, which enable efficient markets and maximize revenue. Royalty rates have been determined arbitrarily.

80% of wood harvested is used to make charcoal, 90% of royalties are realized from timber, illustrates the "skewed" royalty setting system: Charcoal royalties in the Southern Zone generate 10% of revenues but the volume of charcoal that generated these revenues represents 80% of trees harvested. This illustrates a failure in the royalty system. TFS has responded to the mismatch between supply and demand by increasing the royalty rates.

Payment Flows (including payments and transfers to/from local and district levels of government) Royalties from forests is TZS 70 billion/year. At the same time, revenues from taxes levied on salaries, profits and VAT has remained at levels not exceeding TZS 3.6 billion/year. Forest trade and revenue reflects an industry focused on raw materials but offers little processing, value added or employment creation.

A number of studies have highlighted problems of revenue collection in the forestry sector. In comparing performance to goals the following issues arise:

- The licensing system for natural forests is not effectively controlling use of forest resources, the resource base is becoming degraded;
- The unsustainable use referred to above is largely illegal and is exacerbated by corruption;
- Controlling natural forests will always be challenging; natural forests tend to be large, remote, dispersed, and poorly served by public infrastructure;
- Market and institutional arrangements in forestry are characterized by multiple players (central government, local government, a poorly developed commercial sector, and communities), the crowded playing field complicates resource management.

Many districts in the FORVAC clusters are charged a CESS (District Council level product charge) of 5%. Unfortunately, most village councils in the FORVAC areas are yet to formulate and approve bylaws that stipulate fees for forest products within their areas of jurisdictions, such as timber harvested from general land forests. *FORVAC could coordinate formulation of draft generic by laws for adapting in each village council. Part of this money could be used to improve forest management in the villages.*

Prices along the market chain

Most Village Land Forest Reserves (VLFR) are selling standing trees. Timber traders have a strong preference for specific trees species, the most common preferred species being *Pterocarpus angolensis (Mninga), Julbernardia globifora (Mtondo), Melicia exelsa (Mvule), Afzelia Quanzensis (Mkongo), Bombax rhodognaphalon (Msufi pori), Sterculia quinqueloba (Mbalamwezi), Dalbergia melanoxylon (Mpingo) and Breonadia salicina (Mgwina)*. Wood from these trees is hard, heavy, very durable and termite resistant (Palgrave, 1988). They are reported to make excellent timber, which is highly valued by end users for furniture and construction. However, these species were heavily exploited in the past and in some places are becoming increasingly rare. There are lesser-known timber species, but they are not traded in high quantities compared to the more popular timber species. These timber species need to undergo further investigations and promotion to increase their market share.

The size of timber is also very important when pricing. Timber sizes traded from the cluster varied but the main sizes include 2x10x10 (inches), 2x8x10, 2x12x10 and 2x6x10. sizes of timber imported from neighbouring countries (Mozambique, Congo DRC and Zambia) are higher than those from Tanzania. This is one of the factors increasing timber competition in the market for Tanzanian sourced wood.

Timber prices vary along the value chain. For example, at the village level a piece of timber costs TZS 7,000 to 12,000 (according to size) while in Kilwa town it was TZS 30,000 but once it reaches Dar es Salaam the prices ranged from TZS 50,000 to 75,000 per piece. Timber from neighbouring countries (Congo DRC, Zambia and Mozambique) is cheaper than Tanzanian produce. Their timber sizes are larger than the equivalent timber species from Tanzania but both receive the same price of TZS 75,000 per piece therefore increasing competition. Key informants revealed that the price of a piece of timber of any dimension (e.g. 2"x4", 2"x6" or 1"x8") varied with distance to nearby town. For example in Lindi villages, the price of a piece of timber could fetch up to TZS 7,000 compared to the nearby town (10 km) where the price was TZS 15,000. There are a range of cost factors in the value chain including transportation but the low timber prices in villages partially reflect the low bargaining power that villagers have over prices reached in towns and cities such as Dar es Salaam, especially for trees species that are widely available.

If a specific value chain study was carried out then the marketing margins could be calculated to get an indication on what the best price of timber at the village level could be if their bargaining power could be enabled (and in consideration of other factors as well)

The wholesalers in town have good communications and linkages between each other so price fixing is understood to take place regularly. This ensures higher prices are achieved at the market and at the same time low prices are offered to village sellers. Timber wholesalers reported that business is problematic due to the numerous fees and permits and that there was generally a paucity of buyers. As a strategy, some traders are, or would like to, integrate furniture making into their businesses.

Export

A key challenge for exporting wood from the natural forest is that it is largely restricted to grade IV[12] timber due to poor sawmilling practices in Tanzania. This makes it impossible to meet the requirements for grade I, II, or III.

[12] This grading system appears to be informally used within the trade and not an official classification

There are not enough trees of sufficient quality within the grade I category due to previous uncontrolled harvesting practices. The Forest Policy emphasises value addition from forest products. As a requirement by the Forest Act of 2002, logs have to be processed before been exported. The maximum size of timber allowed for export purposes is 6 inches.

The Grade IV timber is not of interest for premium markets such as US or Japan. It is currently being exported from Tanzania to countries in the Far East such as China where the price ranges from 350 – 600 USD for one cubic meter. If timber is well dried and of good quality it can be sold in the US or Japan for up to 2,000 USD (i.e. Grade I). *It may be feasible for the VLFRs to ultimately produce and export grade II timber by using improved machinery and technology, skills and international standards in forest management and sawmilling.*

> *"I have previously tried to sell to US or Japan, but the consignment was returned for quality reasons. So I now sell mainly to China and Far East instead".* (Mr Mzirai the CEO of the MICO Import and Export Co. Ltd and Chairman of Forest Products Export and member to the National Tree Planting Committee)

Most tree species exported are (1) Mkuruti (*Babhia kirkii*), (2) Mkurungu (*Pterocarpus tinctorius*) and (3) Paurosa (*Swartzia madagasearensis)*. Paurosa may now the most exported species of the three when compared to three months ago because of high demand in Chinese market[13].

Timber Certification

Tanzania with support, primarily from WWF, has developed the FSC standard for the country[14]. The Tanzania national forest stewardship standard has been approved by FSC and is now included within the Tanzania Bureau of Standards (TBS). Mpingo Conservation Development Initiative (MCDI) with Fauna & Flora International and WWF partnership facilitated a group certification of forests in Lindi villages through Forest Stewardship Council (FSC). This rigorous certification scheme requires third party auditing and is based on ten principles covering social, economic, ecological and cultural issues; and includes managerial aspects as well as environmental and social requirements.

MCDI was mentioned in all the districts (SULEDO, Nanjerinji, Ruangwa, Handeni and Kilindi) that the MSA team visited. MCDI facilitate participatory forest resource assessment, developing forest management plans (at a cost for the village) and actively promote and engage with communities on FSC certification including acting as the group certificate manager for the 13 communities in Lindi. They work closely with organisations such as WWF, MJUMITA and Sound and Fair (FSC certified sawmill supplying black wood to the premium musical

[13] This anecdotal information was provided by Mr Mzirai (CEO of the MICO Import and Export Co. Ltd and Chairman of Forest Products Export and member to the National Tree Planting Committee) and cannot be quantified at this time.

[14] The FSC Principles and Criteria (P&C) set out the global requirements for achieving FSC forest management certification. This international standard is then adapted at the national (or regional) level to reflect the diverse legal, social and geographical conditions of forests in different parts of the world. The Tanzania Standard: https://ic.fsc.org/en/news-updates/id/2142

instrument market). MCDI and its partners have installed a mobile sawmill (on rotation to the communities) and a static solar kiln, which is utilised on a pay for use basis by the communities.

Nanjerinji village is a MCDI flagship on certification. MCDI supported the process of certification including, training, establishment of supporting structure and institutions such as VLUPs, forest gazettement, FMP, FHP and others. Nanjerinji village paid TZS 40 million (EUR 15,000) between 2014 and 2017 cumulatively to meet certification services including internal and external audit. However, the MSA team found that there was a significant gap in comprehending the process and implementation of FSC certification and the return on investment (as a whole) is unclear. The FSC process is long, expensive and, in this context, requires a return on investment from the market. According to MSCI, group FSC certification costs USD 50,000 to set up and USD 10,000 per year to maintain.

The findings from the MSA team fieldwork was that the transparency of the process is fairly low as the villagers appeared not to know the amount of money they are supposed to pay per year or the statistics of forest for harvests and revenue accrued. Although these figures are available at MCDI level, they are not known in Nanjerinji village. FSC costs go beyond direct costs (e.g. requires patrolling and protection costs) to the extent that it is impossible to know actual costs versus and profit.

There is a large amount of illegal timber entering timber markets, which means that Nanjerinji village failed to sell their timber because of competition from the illegal trade. Although, Nanjerinji village appeared to be dependent upon WWF and MCDI to 'bring them a buyer' so this lack of market knowledge and relationships could also be a factor.

The market for FSC timber is currently small in Tanzania and customers e.g. Grumeti are scarce There is a good market for FSC timber from countries such as USA, Europe and Japan but these countries also require a very high quality that is not currently available from the VLFRs (except through Sound and Fair which currently has fairly low capacity, about 5 m^3 sawn wood/day although they have plans to scale up into furniture manufacturing). Construction companies such as Holton Construction have tried to source FSC timber through MCDI but they ultimately rejected most of the delivery as the quality was deemed to be inferior. Furthermore, Holton Construction informed the MSA team that although they liked the FSC concept, they were more concerned with the quality of the timber and that in reality FSC certification was not an issue that concerned them.

3.2.3 Supporting Functions

The key focus of this section is the analysis of supporting functions (and rules) that are hindering the core market function and to understand how they affect the poor and disadvantaged, whilst proposing options to minimize impacts.

Analysis of skills and technology (including processing):
Existing technologies for timber production have low recovery and some of them (e.g. ding dong) pose high risks to their operators. Although it is not legally permitted for trade, some people are using chainsaws to process timber (which then becomes part of the illegal or semi-legal value chain). The technologies used and the level of skills in timber processing and seasoning is one of sources for low quality timber.

Poor business skills and a lack of conflict resolution approaches characterised most VLFRs. *Business skills training and business development services (BDS) as well as product specific processing and manufacturing including existing technologies in whatever form are important items to be developed in the cluster areas.*

Analysis of financing and funding:
Various financing institutions were mentioned and reported to be working in the cluster area. The institutions encompass self-financing (VICOBA) and Village Savings & Loans (VSLA), private sector (such CRDB, NBC and NMB Banks) as well as grants from organisations such as Tanzania Forest Fund and Eastern Arc Mountain Endowment Fund (EAMCEF).

Savings Groups
The Tanzanian Social Action Fund (TASAF) III is a social safety net based on cash transfers and targets Tanzanians living beneath the basic needs poverty line. One component of the program involves linkage of cash transfer recipients to savings groups (Bank of Tanzania, 2016). Under an IFAD and Skoll Foundation funded grant, Fundación Capital (FundaK)[15] started providing technical assistance to TASAF, which covers 1.1 million households. Using previous experience from Latin America, *FundaK developed a tool to support training of TASAF beneficiaries using a tablet application, as this had been shown to have lower per-person delivery costs at a consistently high quality. The objective was to test and improve a Minimum Viable Product designed to teach basic entrepreneurship content delivered through an app. The training was designed to be practical, so that beneficiaries could apply their new knowledge immediately to their own livelihoods. FAO has experience in delivering this technology and this could be a potential entry point for FORVAC both in terms of beneficiary and technology.*

The Village Community Bank (VICOBA) and Village Saving & Loan Association (VSLA) are local level initiatives typically found in villages and districts. Both VICOBAs and VSLAs are can be classified under the term of 'Savings Group'. According to Kesanta and Andre (2015), some of the most popular models that provide financial services to the rural population are the VSLA and the Village Community Bank (VICOBA). The VSLA model was introduced in Tanzania in 2001 by CARE. Similarly, the Village Community Bank (VICOBA), an informal financial institution, is considered an important establishment in Tanzania's rural areas because of its potential to encourage employment and empowerment, especially for women, youths and disadvantaged.

VICOBAs are member specific and may have monthly or annual contributions and requirements for new members to join. They can graduate into full-fledged banks. Their financial resources are low but they are considered to be reliable.

VSLAs are not officially registered (so may not be able to access district loans) but they appear to generally be considered as preferable to VICOBAs by the stakeholders that the MSA team engaged with. This is partly due to

[15] http://fundacioncapitalafrica.org/wp-content/uploads/2017/11/MVP-leaflet2.pdf http://fundacioncapitalafrica.org/wp-content/uploads/2017/09/MobileMoney_Graphic_Draft2.pdf, http://fundacioncapitalafrica.org/wp-content/uploads/2017/11/160405-Tanzania-Farmer-Financial-Inclusion-Insights.pdf and http://fundacioncapitalafrica.org/#results

the governance and monitoring included in VSLAs as well the typically smaller group size and lack of formalities required in establishment (at government level). Andrew *et al.* (2018) report that an SG Global-Outreach report states that VICOBA groups trail far behind groups formed by CARE, CRS, PACT, Plan and World Vision in number.

A study carried out by the Bank of Tanzania (2016) found that *record-keeping, meeting management and dispute resolution are the main areas that require additional skills for all savings group models. These issues were viewed as more important than either loan collections or cash management.*

Private sector and commercial banks are also an important source of financing. Tanzania Postal Bank (TPB), CRDB, NMB and NBC banks services are available in the cluster areas. They provide funds as loans with varied requirements by borrower category. One of the determinant conditions in these loans is interest rate. Interest rates vary (Table 4) depending to the purpose of the bank

Financial Institution	Interest Rates (Indicative)
CRDB Bank	18% to 21%.
Tanzania Agriculture Development Bank (TADB)	7 to 12%
Equity Bank	18%
National Microfinance Bank (NMB)	15%, for non-agriculture is 19 to 21%
Tanzania Investment Bank (TIB)	Fixed at 5% per annum for direct lending

Table 4: Interest rates charged on loans (Abdallah and Ishengoma (2016))

TaFF and EAMCEF are local level forest grant financing institutions that focus on forestry related activities. The institutions are fairly well structured making them predictable and reliable. Both TaFF and EAMCEF invite proposals annually with themes relevant for cluster areas sustainable community development.

For example, in 2018[16] the TaFF call targeted: Forest resources protection, conservation and management; Improvement of livelihood of communities living adjacent to the forest resource base; and, applied and adaptive research in forestry. The following are eligible to apply: individuals, local community groups, non-governmental organizations, faith-based organizations, academic institutions, non-academic institutions, research based institutions, private sector, central government ministries, departments and agencies as well as local government authorities.

The EAMCEF call[17] for proposals for the 2019/2020 had the following themes: Forestry activities (e.g. on-farm forestry, woodlots, buffer zone enrichment and sustainable utilization, promotion of non-timber forest products, among others), Ecotourism (e.g. campsites, bird-watching safaris, cultural activities, handicrafts, birding and guiding services, training of local guides, marketing, etc.); Education project/activities such as school extensions/additions, conservation education activities, traditional elders and school pupils environmental awareness programmes, farmer to farmer exchange visits, local community networking, etc.);

[16] http://www.forestfund.go.tz/resources/view/2018-call-for-project-proposals

[17] http://www.easternarc.or.tz/groups/webcontent/documents/pdf/Call%20For%20Project%20Proposals%202017-2018.pdf

Energy efficient or alternative energy technologies (e.g. firewood and charcoal cook stoves, solar power, biogas, etc.); Productive projects such as marketing of honey, basket making for sale to tourists, inputs needed to improve/intensify agriculture; Agro-forestry projects/activities, Livestock and veterinary, energy efficient or alternative energy technologies, and other projects such as; and other projects or activities such as improved infrastructure (rural roads, bridges, water, power), income generating and welfare improvement activities which will benefit local communities and groups.

Applicants, including community groups, that apply these funds are required to be legally registered and evidence should be attached to the project proposals. The call is on a competitive basis but the majority of communities in VLFR do not have the required knowledge and skills to compete in developing ideas that win the funds and allow efficient project implementation. *The DFO/DFM are positioned to assist communities develop proposals but they would need retooling and coaching by service providers to their raise standards of writing and procedural understanding. This requires FORVAC attention, as it is one of the areas, if well implemented, that will enhance sustainability of communities' activities.*

Activities such as improved infrastructure (rural roads, bridges, water, school extensions/additions, conservation education) are also included. The requirements for the call include Community Conservation and Development Projects that engage pupils in targeted conservation education programmes are given high priority for funding by the EAMCEF. Special consideration is given to projects that clearly address gender issues i.e. the way different groups are involved and benefit from the projects results. The EAMCEF grants ranged between TZS 3.5 million and up to 35 million per year.

REDD+ readiness activities were supported by Royal Norwegian Embassy. In some areas communities' awareness is high and capacity to implement carbon projects has increased, but REDD+ financing has not been agreed at international level therefore markets are fairly insignificant. Voluntary Carbon Standards could be developed to negate markets for carbon credits. However, this has high transaction costs and requires a good broker to link to the market. SULEDO has interest on this although the risks of inadequacy are very high in the market. It is suggested that FORVAC does not focus on REDD+ due to the huge efforts required and lack of a consistent market.

Analysis of transport/infrastructure:

Infrastructure development is in many cases a crucial factor in the marketing development of wood products. Many VLFRs are remotely located and roads from the forests to the neighbouring towns are in bad conditions and some are impassable during rainy season. Good plans are necessary for ensuring marketing of wood products. Improving transportation infrastructure is a key priority for the 5th Phase Government of United Republic of Tanzania.

In the cluster areas, efforts are being made to improve the transportation infrastructure. The road from Mbinga to Nyasa district is under construction to the tarmac level and the plan is to have it ready by 2019. Upgrading of Bagamoyo-Tanga-Mombasa road including one border post is planned for 2019 by African Development Bank

support. Construction of the Kiranjeranje to Ruangwa, Nachingwea[18] road (120 km) is at the planning stage and the feasibility study including the preparation of bidding documents for an International Competitive Bidding (ICB) process are complete. Some village roads connecting to towns are also being upgraded to bitumen.

Communications and linkages within the Market System:
With the exception of MCDI and Sound and Fair, communications including advertising, promotions, branding and online promotion receive low attention in wood activities in most places visited by the MSA team. *The main gaps noted in the cluster areas are that there are no organized approaches which favour mixing marketing and sales, joint meetings and joint sales/bargaining. Other communication gaps include lack of skills to create agreements; each VLFR works in isolation. "Siloed" structures persisted even in well-facilitated areas such as Nanjerinji and SULEDO.*

Market actors tend to only interact occasionally (unless within a group) and do not sell as a group or in a joined-up way (with the exception of the traders in Dar es Salaam acting as a cartel) and there are no existing organisational structures that foster market connections. SULEDO have a timber yard in Manzese in Dar es Salaam which is a good starting point but is not well known to customers and only used sporadically. Other marketing communication activities utilized by SULEDO, and to some extent Nanjerinji, include Saba Saba and Nane Nane trade fair shows, presentations in various forums, placing advertising placards in villages. However, they rarely link up vertically e.g. with SHIVIMITA that has wider communication network including customers or horizontally to other VLFRs. In many locations wood harvesting is carried out without a prior business or marketing plan that could identify opportunities, threats, weaknesses and strengths, and set objectives as well as developing an action plan to achieve marketing goals.

During the implementation of the MSA assignment, the Management Information System assignment was underway and targeting cluster areas. The Management Information System will provide more information on communication needs, messages and channel of communications supposed to be used.

3.2.4 Rules

Note: issues on HRBA and socio-economic aspects would normally be included here but have been given a separate section.

Rules: Value chains and supporting functions do not happen in isolation. They are always subject to an institutional context or business environment. These determine the power of buyers and sellers along the value chain. For example, by preventing (or enabling) monopolistic behaviour, regulations influence how economic benefits are distributed.

There are over-lapping mandates between DFM and DFO especially in locations where the MoU signed in 2016 between PO-RALG and MNRT is not well implemented because of a lack of funding. However, there are now

[18] https://tendampya.com/paid-clients-only/assessment-detailed-engineering-design-and-preparation-of-tender-documents-for-upgrading-of-kiranjeranje-namichiga-ruangwa-road-120-km-to-bitumen-standard-deadline-27-08-2018/

plans in the government to merge the two positions and all forest officers in the country would then be under TFS. This proposition has been endorsed at the parliamentary level and they are now working out the details[19].

The Forest (Amendment) Regulations, 2017, and methodology used to estimate the prices has been discussed in Section 3.2.2. Compared to royalties in 2015, the current prices have been increased by about 10%. Although this increase seems to be small many actors along the timber marketing chain consider the rate to be high and it is one of the reasons mentioned for selling at low prices. VLFRs are not obliged to follow these prices according to the regulations, but MSA team noted that they were using them as indicative prices for their wood products.

Checkpoints control timber movement in the country. The main gap at the checkpoints is a lack of objective verification of the timber load carried by truck.. The time involved at the checkpoints is high, causing major delays even if transporters have legal timber and proper documents. There is no fast-tracking system to control movement of timber*. Interventions could include harmonization of the laws to reduce confusion and review of laws, regulations in participatory ways and to develop simple tracking system to monitor timber trade*[20].

Regulations and Guidelines: A focus on CBFM and the Value Chain

A Land use plan (LUP) is an important step in the identification of specific land uses and to establish proper management modalities of resources for sustainable development in a village. Currently, land use plan development takes a long time and is costly. As a result only few villages including those in the cluster areas have approved land use plans. A quicker and cheaper approach to developing land use plans is needed to strengthen VLFRs. Several organisations, projects and initiatives have developed alternative LUP approaches including MJUMITA and Forestry Training Institute (FTI) as well as the Private Forestry Programme (PFP)[21].

In some locations (e.g. Handeni and Kilindi) the MSA Team was informed that all general land forests have been allocated to individuals leading to high forest degradation and deforestation as most of the owners produce charcoal in the forest allocated. A precondition to allocation of land is elaboration of the respective LUP, but that has not been implemented and the result is uncontrolled land use change, including illegal/informal forestry activities leading in many cases to deforestation and forest degradation.

Harvesting guidelines

Harvesting guidelines stipulate that, since harvesting will take place on village land and within declared village land forest reserves, the decision to harvest does not need to be approved by the District Forest Harvesting Committee, if it does not conflict with the approved management plan and bylaws. Revenues from harvesting

[19] Personal communication from William Nambiza (Embassy of Finland, Dar es Salaam), 17th November 2018.

[20] This issue is covered further elsewhere in the report and the policy framework is included in Annex 3 and details the relevant laws and regulations.

[21] 'Participatory mapping and planning tools developed for village land use': http://www.privateforestry.or.tz/en/resources/view/participatory-mapping-and-planning-tools-developed-for-village-land-use-pla

in village land forest reserves can be fully retained (100%) by Village Councils after taxation by the government and payment of technical services provided by district. The village councils, as the highest level of government in the villages will decide how much of the revenue will be reinvested back into forest management (such as forest patrols, monitoring, equipment and tools) and how much will be used for broader village development needs (such as education, health). For this to work, the share of benefits should be clearly agreed and documented in the management plan.

Hammering of timber

The hammer is an important item for monitoring and controlling transportation and trade. The Forest Act of 2002 requires timber to be hammered before being transported to prove its legality. There are two types of hammers, one for all forests and the other one with 'V' make designated for timbers from VLFRs. The District Forest Officer is a custodian of hammers that mark timber from VLFRs. In future there will be only one hammer that will be used to stamp timber from all forests[22]. The current approach of DFO staying with the hammers creates preventable bureaucracy because the majority of VLFRs are located in remote areas and the DFO is situated at district level in town requiring him/her to travel long distances. *If the policy of 'only one hammer' in a district will be implemented, the challenge will be amplified. This issue requires stakeholder discussions on the best approach to handle issues related to forest hammer*

Transportation of forest products

Wood production, transportation and trade are all controlled by rules and regulations. The National Forest Policy is under review and expectantly the current Forest Act and regulations will be reviewed subsequently to be in line with the new Policy. Currently, there are various laws, regulations, standards, social rules and behaviours that influence when, where and how exchanges take place.

Current TP situation: In order to transport forest products/produce (timber and non-timber forest products), a Transit Pass (TP) is required regardless of the distance or the ownership of the forest (private owned forests /plantation, VLFR & State). According to harvesting guidelines of 2017, DFOs issue harvesting licences and DFMs carry out the hammering and issue transit passes.

Field visits indicated that obtaining the TP for buyers getting timber from VLFRs entailed more bureaucratic difficulties compared to procuring the TP for buying timber from general land/forest outside the VLFR. Most timber buyers choose to harvest from general land rather than from community forest land due to the more rigorous monitoring mechanisms involved during harvesting in VLFR forests. For example, during harvesting, the VNRC are present to monitor what has been agreed/mark trees to be harvested and in addition they must take time to collaborate with the DFO as well as other actors. By contrast, there is no such close supervision/monitoring. when harvesting takes place outside of village/communal land forest reserve

[22] Interview with Mr D. Bwoyo, Assistant Director Forestry Development, Ministry of Natural Resources and Tourism

Timber export

Requirements include needing an export permit registration, certificate of timber grading, phytosanitary certificate, and to be registered as business entities to respective authorities (MNRT, BRELA, TRA, MoA).

Illegal and semi-legal forest sector activities

Illegal activities take the form of logging without documentation, logging in unauthorized areas, under-declaration of volumes leading to undervaluation and the use of invalid export documentation.

Asia and Middle East are currently the main importers of unprocessed and semi-processed timber products from Tanzania, with China the fastest growing importer of indigenous hardwoods. Unfortunately, there is no efficient system in place to ensure that the products are coming from legal/formal sources. Together with gradual transport infrastructure improvements, timber trade dynamics have changed in terms of increased volumes, changes in targeted species, greater private sector investment, and a higher proportion of illegal activities.

Shortfall in revenue collection

A considerable shortfall in revenue collection is as a result of the substantial illegal/semi-legal timber and wood trade. Rural communities, traders and the government have lost massive potential revenues to wasteful harvesting and processing, non-collection of royalties and under-valuation of forest products. According to studies such as (Traffic, 2007) and Timber Trade Flows (HTSPE, 2014), revenue lost by central and district governments due to the under-collection of royalties reached up to 96% of the total amount of potential revenue due. At a central government level, it was tentatively estimated that nationwide losses of revenue to the Forestry and Beekeeping Division amounted nationally up to USD 60 million annually due to the under-collection of natural forest product royalties in the districts.

Some District Council budgets would have increased several times over if all potential timber revenues were actually collected. Substantial revenue losses were also apparent prior to and during shipment. For example, the trade statistics show that China imported ten times more timber products from Tanzania than appear on Tanzania's own export records. This suggests that Tanzania collected only 10% of the revenue due from these exports (Traffic, 2007).

FLEGT – VPA Process

'EU Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan': In response to global concerns about the negative impacts of illegal logging and timber trade, the European Union agreed on the FLEGT Action Plan in 2003. The aim of the Action Plan is to improve governance and reduce illegal logging by strengthening legal forest management; improving governance and encouraging trade in legally sourced timber. Measures in the Action Plan are designed to increase both the demand for legal timber and the supply of legal timber.

The area that is probably of most relevance to FORVAC is the '*Voluntary Partnership Agreements (VPA) and Timber Licencing Scheme and a Timber Legality Assurance Systems (TLAS)'.* In accordance with the EU FLEGT Action Plan, Voluntary Partnership Agreements (VPAs) are bilateral trade agreements between the EU and a country that exports timber, and the countries involved in VPAs are called partner countries. Through the VPA agreement, both parties commit to actions aimed at preventing trade in illegal timber.

Each partner country has to develop and implement a timber-licensing scheme and a Timber Legality Assurance System (TLAS) as its basis. The purpose of the TLAS is to monitor and verify legal compliance along the supply

chain from forest to port or market, so that timber is being produced legally and that illegal timber cannot enter the supply chain.

Timber exports from the partner country to the EU must comply with the requirements of the timber licensing scheme and TLAS. The FLEGT TLAS covers the following five main components:

i) Legality scope
ii) Supply chain control
iii) Verification
iv) Licensing
v) Independent auditing

FLEGT and Tanzania: Specific recommendations for Tanzania (HTSPE, 2014)[23] state that forest management and protection, as well as access to forestry products; and the institutional capacity in law enforcement need substantial strengthening in order to curb illegal harvesting and trade in forest products. A more recent report (van der Linde, 2017) assesses whether measures included in the EU FLEGT Action Plan could be implemented in Tanzania with the aim of reducing illegal logging, strengthening law enforcement and contributing to good forest governance.

The study concludes that a range of measures exists that could be implemented in Tanzania and that these measures would have a positive contribution to the forest sector and forest governance. It also highlights a strong presence of the development community in country and that this community is willing to support forest sector initiatives aimed at improving forest governance.

A series of recommendations are provided on the development of a Timber Legality Assurance System (TLAS) within Tanzania (relevant excerpts here):

- Recommendation 3: Strong consideration must be given to the development of a TLAS system for Tanzania. A TLAS is one of the measures, which can make the strongest contribution to the reduction of illegal logging and also strengthen legal compliance and enforcement.
- Recommendation 4: Successful implementation of a TLAS is dependent on strong political will and the buy in from government, private sector and civil society. Such buy in can be fostered by means of appropriate capacity building, raising awareness and employing effective communication strategies.
- Recommendation 31: Design and develop the verification component of a TLAS for Tanzania. The first step would be to develop a verification framework document that considers the institutionalisation of verification as well as provides for the methodology and operation thereof through protocols, procedures and other supporting documents.

[23] This report appears to have been written by HTSPE according to the title page but as this is unclear please see this link to the document: https://europa.eu/capacity4dev/public-flegt/blog/new-timber-report-timber-trade-flows-within-and-eastern-and-southern-african-countries

FLEGT and FORVAC: A continuous development of forest law enforcement is included under the duties of MNRT and TFS. The United Republic of Tanzania (URT) also works to set up and implement the national forest policy and other relevant policies e.g. concerning trade. These policies also refer to roles of local communities and involvement of the private sector in Tanzanian forestry, forest industry and trade in Tanzania and out of the country.

As highlighted in a number of studies, *Tanzania would benefit from the implementation of elements from the EU FLEGT Action Plan and the VPA process. These elements could be used to develop forest law enforcement, good forest governance and trade of legally sourced timber. FORVAC will contribute to the development of these FLEGT elements in the context of forest value chains development in the programme clusters/districts.*

The 'rules' section (3.3.3) as a whole reflects many of the issues included in FLEGT so these topics are covered in the relevant areas in this section.

Standards

The main purpose of grading standards is to establish and maintain an acceptable uniformity in products from different mills, so that a given grade will represent the same quality and be usable for the same purpose, regardless of the nature of the raw materials from which it was derived or the mill by which it was produced. Grading provides both manufacturers and users with known values that can be used as a basis for price setting. A grading standard is based on the assumption that the products are to be used in the dimensions in which they were graded, consequently conversion of any kind after grading will alter the size defect ratio.

PFP in collaboration with Tanzania Bureau of Standards (TBS) developed standards for Pinus[24]. Although this is a good achievement, it cannot be used to grade wood products from natural forests. *An opportunity exists for FORVAC to support the development of standards for timber from natural forests for the purpose of developing a marketing system of natural forest products. The fact that there are many timber species in natural forests means that the focus should be on a few popular species and some lesser-known timber species to begin with.*

Forest Governance in Tanzania

Governance and the environment are high on the current political and development agenda in Tanzania. The National Strategy for Growth and Reduction of Poverty II (NSGRP II) includes "governance and accountability" as one of three outcome-based clusters. In spite of this priority focus, the governance situation is still a major challenge, and the effects are becoming more serious undermining long-term prospects for sustainable hardwood trade. There is a strong demand for just a few commercial species with a high risk for overexploitation.

It is recognized that Tanzania has a fairly advanced policy and institutional framework that could lead to far more sustainable and equitable forest management. Over the past 15-20 years, there has been considerable

[24] TBS (Undated). Tanzania Standard method and specifications for strength-grading of Pine sawn wood for structural use, DRAFT

development of key instruments and tools for forest governance, including revised forest and land policy and legislation, participatory land use planning initiatives and various decentralization reforms.

Forest management is severely disadvantaged by deficiencies in public sector capacity. A mismatch between central/local government forestry staffing and forestry revenue targets is evident. Lack of harmonization of policies and regulations, dual ministry mandates, including the interpretation of annual revenue targets and line management complexities, restrain effective governance highlighting the importance of joint planning and a clear protocol for the sharing of roles and responsibilities among high level government actors.

A well-functioning participatory forest management is a possible solution for enhancing limited public sector capacity but this is still undeveloped in Tanzania. There is a strong potential for participatory forest management given the large areas of unreserved forest and the range of possible economic incentives under different models of management (TRAFFIC, 2007).

There is an urgent need to address the governance shortfalls; during the field visits the MSA Team discussed practical governance and implementation of regulations with different stakeholders. In most cases there was clear evidence of misunderstanding, misinterpretation, unclear roles and responsibilities, in addition to a lack of resources to implement governance in a proper and efficient manner. Possible interventions in this area are examined in section 5.

Climate Change Impacts

Climate variability and climate change were found to be key drivers of risk and vulnerability for forest-dependent communities (Lwanga-Ntale, 2016). This was attributed to the heavy reliance of the communities on exploitation of trees and other forest products, exacerbated by growing population pressure which strains the environment thereby leading to the loss of biodiversity, rapid deterioration in land cover, and a significant decrease in the available water due to the destruction of catchments areas.

Climate change issues and environmental sustainability need to be proactively addressed through community resilience building by raising awareness on implementing PFM in a holistic sense, emphasizing adequate and inclusive land use planning, which must include agroforestry and agriculture issues related to deforestation, and forest and land degradation. It is evident that households become less vulnerable when people's economic situation improves, thus enhancing resilience to climate change induced natural hazards. *FORVAC could promote and apply best practices in land use and PFM, aiming at preventing degradation that further aggravates impacts of climate change.* Although the main focus of FORVAC is on tangible income generation from forest products (wood and non-timber products)

It is anticipated that other projects and initiatives activities within Tanzania (rather than FORVAC) could consider potential REDD+ and Voluntary Carbon Markets interventions, as well as other payments for environmental services from well managed forests.

Timber supply chain

The supply of timber as observed in the field (Figure 2) can be from VLFRs, Non-reserved forests in the village, private woodlots, plantations and imported. Other actors along the chain are shown in Figure 2.

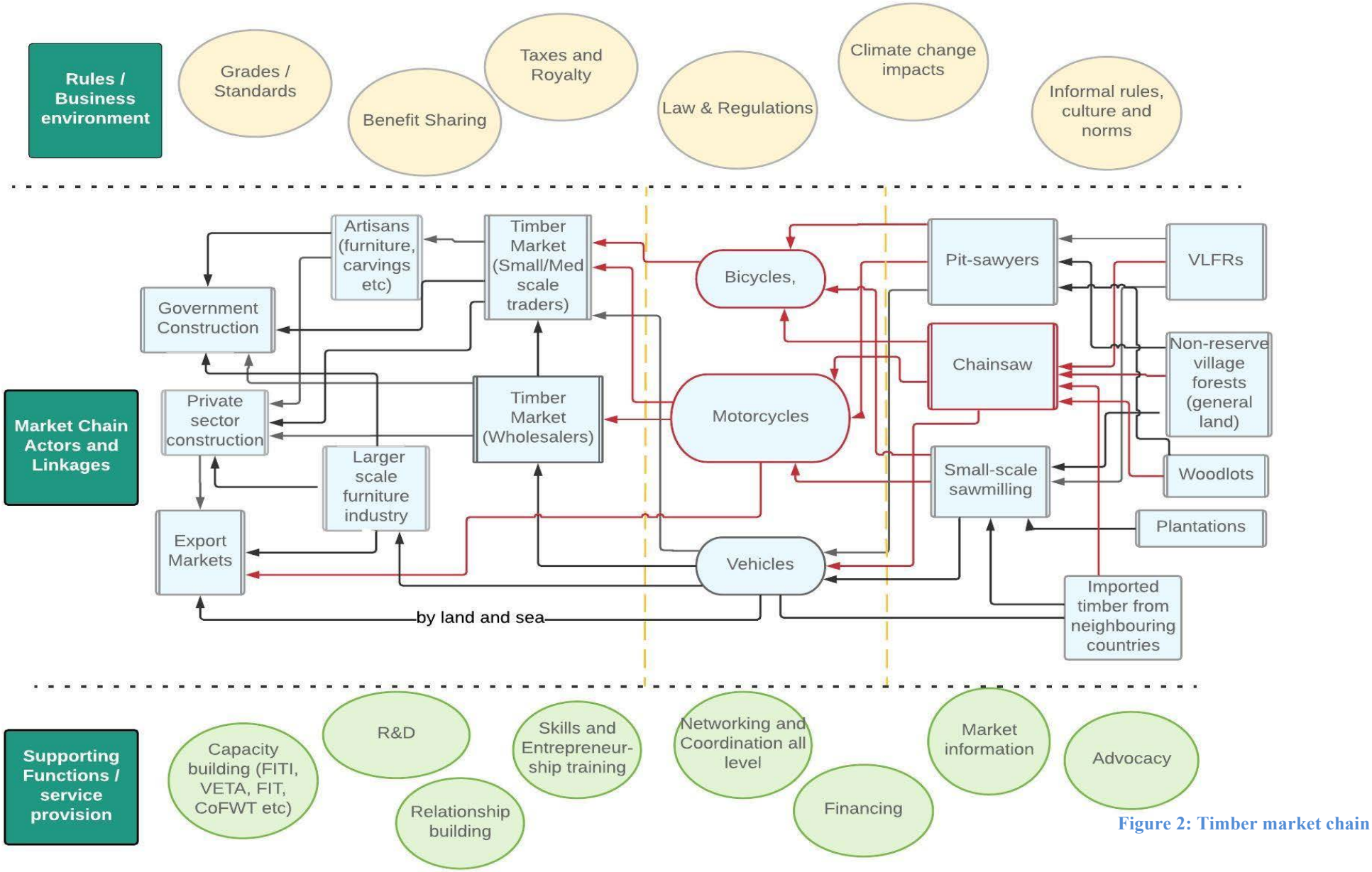

Figure 2: Timber market chain

3.2.5 Competitive Analysis of the Wood Product Market

The following diagram (figure 3) shows the competitive analysis of the wood market using Porter's Five Forces model in the context of hardwood sourced from the natural forest in Tanzania.

Porter's Five Forces Analysis is a well-known tool that helps users to understand the forces that shape competition within an industry[25]. The strength of five important forces that affect competition are examined in figure 3:

i) **Threat of New Entrants** - The easier it is for new companies to enter the industry, the more cutthroat competition there will be. Factors that can limit the threat of new entrants are known as barriers to entry. In this case, the barriers to entry are high.
ii) **Power of Suppliers** - This is how much pressure suppliers can place on a business. If one supplier has a large enough impact to affect a company's margins and volumes, then it holds substantial power. In the analysis shown in figure 3 the illegal timber traders have a high level of power
iii) **Power of Buyers** - This is how much pressure customers can place on a business. If one customer has a large enough impact to affect a company's margins and volumes, then the customer hold substantial power. The government holds a significant amount of power in this model.
iv) **Availability of Substitutes** - What is the likelihood that someone will switch to a competitive product or service? If the cost of switching is low, then this poses a serious threat. There is a high threat from substitutes in the furniture sector from products sourced from countries such as China. There are also threats from other materials as well as softwood timber.
v) **Competitive Rivalry** - This describes the intensity of competition between existing firms in an industry. Highly competitive industries generally earn low returns because the cost of competition is high. There is a high level of competitive rivalry in the hardwood market but at the same time domestic supply cannot meet demand.

[25] Information on the Five Forces Model can be found here: https://www.investopedia.com/features/industryhandbook/porter.asp

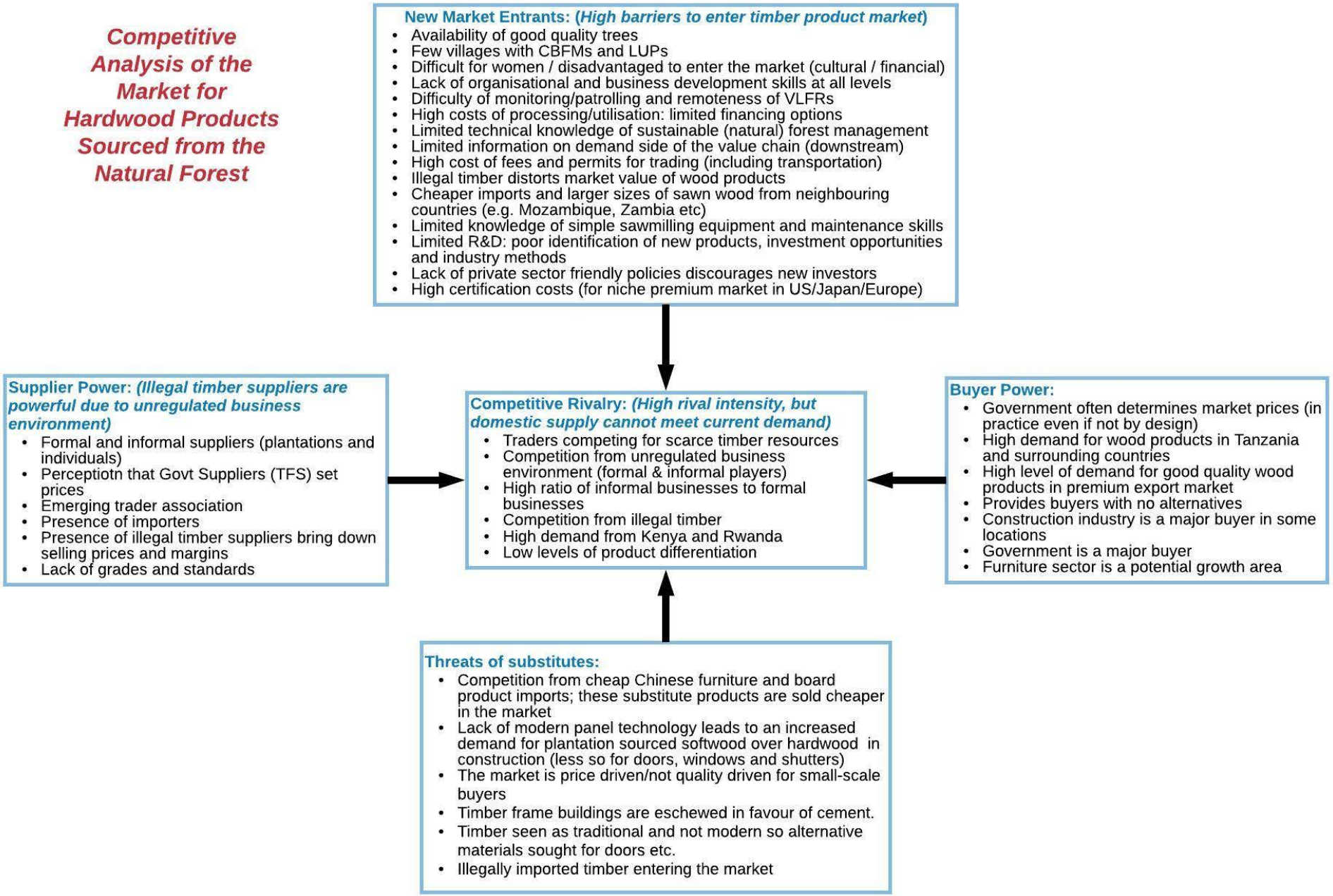

Figure 3: Competitive Analysis of the Market for Hardwood Products from the Natural Forest using Porter's Five Forces Model

3.3 Charcoal (and Briquettes)

3.3.1 Charcoal Market Chain/ Actors and Linkages

Identification of key roles and activities within the charcoal value chain from the natural forest (where different to wood products)

Value chain of charcoal from the natural forest[26]

The value chain of charcoal from natural forests can be described in three main nodes: (i) Forest resources and production, (ii) transportation, (iii) wholesaling, retailing and end-use.

Forest resources: In FORVAC clusters, resources for charcoal production are mainly found in general lands and village forest reserves. In general land, forests do not receive any management attention. The majority of the forest encountered is affected by fire and the revenues collected are not re-invested back to these forests to enhance their management. Village land forests are under the jurisdiction of the villages and with technical support from the district councils. The majority of the VLFRs in the FORVAC clusters had forest management plans. However, few had forest harvesting plans and therefore participatory forest resource assessments had not been conducted. However, most wood for charcoal production is harvested from forests that had FMP and FHP, although these were not properly followed. Forest fires, grazing and encroachment for agriculture were reported during focus group discussions by the MSA team with district officers. This means that there were inadequate value addition activities on the resource base.

HRBA inclusion i.e. involvement of women and disadvantaged groups in management of forest resources was reported in the following levels: at least three women should be among members in the village councils (VCs) and Village Natural Resource Committees (VNRCs) and some women were involved in forest patrols. These are vital decision-making organs at village level on resource management. That means forest resources management decisions e.g. harvesting of trees for charcoal are, to some limited extent, inclusive.

Wood harvesting for charcoal: There was no value addition activities reported at this node. Simple tools (Panga, axes, and in some places chain saws) were used to fell trees. The heights of the remaining stumps were of various sizes meaning that tree felling did not observe an optimal height to facilitate natural regeneration. Logs were cut into billets but are arranged in kilns without being seasoned. Wood seasoning is used to reduce moisture content and improve recovery rates.

Wood harvesting is an activity that is dominated by men with the reason given that it was a tedious operation and done in remote areas, limited women involvement.

Charcoal Production: Charcoal production was done in places where wood resources were abundant to reduce time for piling the billets into kilns. *Traditional Earth Mound Kilns predominate in all the FORVAC Clusters reducing efficiency, recovery and sustainability of charcoal production. Therefore value addition could influence*

[26] This information was gathered both through the MSA team fieldwork but also as a result of one of the consultants being a member of the Charcoal Task Force.

the type of technology used. In addition, some of producers were not keen on monitoring kilns during carbonization leading to high amount of ashes and wood not turning to charcoal.

To some extent women (e.g. in Handeni) with capital were involved in production of charcoal.

On-site marketing: Some charcoal was sold at production sites. Some producers pack the charcoal in bags of various sizes. Other producers reported not having enough money to buy bags. Prices of bags ranged from TZS 500 to 1000. Although packaging materials are an important value addition to charcoal at this node, the types and quality of packaging materials was not an important element. Most stakeholders reported that the use of package materials that would enable the identification of charcoal produced from sustainable source would be a very important intervention at this node. Both men and women were involved in on-site marketing.

Transportation: In the FORVAC clusters charcoal was reported to be transported using motorcycles, bicycles and vehicles. If shorter distances are to covered then bicycles are used, for longer distances (e.g. towns, municipalities, cities (e.g. Dar es Salaam, Kilimanjaro and Mombasa), motorcycles and vehicles were the main transportation modes. Mode of transport and distance covered when sending the charcoal to the market or end users determined charcoal value. Value addition at this node could be improved by transporting charcoal to big cities and Zanzibar to fetch high prices compared when sold at production sites.

At this node more women were actively involved compared to men.

Wholesaling: Wholesalers are found in towns and cities and conducted by men and women. They are very important in the value chain because their role is to stock charcoal in large quantities for the purpose of increasing availability to end users and retailers. Stocking improves prices and consequently value of charcoal.

Retailing: This node was mainly observed in town, municipalities and cities. Value addition activities were mainly through repacking into smaller quantities (tin, plastics buckets, and plastic bags) for purpose of meeting need to various customers depending on their incomes. This activity was dominated by women.

End user: According to FBD (2018) about 70% of the households in Dar es Salaam use charcoal as the first choice cooking fuel. *Value addition activities could include promoting efficient utilisation of charcoal.* Survey results in Dar es Salaam showed that few households currently use efficient cooking stoves, which impact on the sustainability of resources. This implies that majority of charcoal produced, even in FORVAC clusters, are not sustainably utilised in town and cities.

TaTEDO[27] has an ongoing project called 'Business and Market Development for Scaling Up Supply of Improved Cooking stoves in Tanzania' which centres on Kilimanjaro and Dar es Salaam regions. The project is a continuation of efforts to implement TaTEDO's strategy for scaling up production and marketing of renewable and efficient energy products, practices and technologies. The objective of the project is to scale up business and market of locally produced improved cook stoves through market networks development to meet basic

[27] http://www.tatedo.org/our-work/projects

and productive energy needs of customers in the six districts of Tanzania. The target markets for this business are households, institutions and small and micro enterprises.

Export: Charcoal export is illegal in Tanzania. However, charcoal is traded outside the country to countries such as Kenya and indirectly to locations such as the Comoros (via Zanzibar). Value addition was on fetching higher prices in Zanzibar and Mombasa and therefore increasing the value of charcoal traded. Export of charcoal was carried out by both men and women.

Charcoal Value Chains

The supply of charcoal as observed in the field (Figure 4) can be from VLFRs, non-reserved forests in the village, private woodlots particularly black wattle and plantations. Other actors along the chain are shown in the figure below. Most charcoal is transported using motorcycles which evades fees, royalties and therefore do not have required documentations.

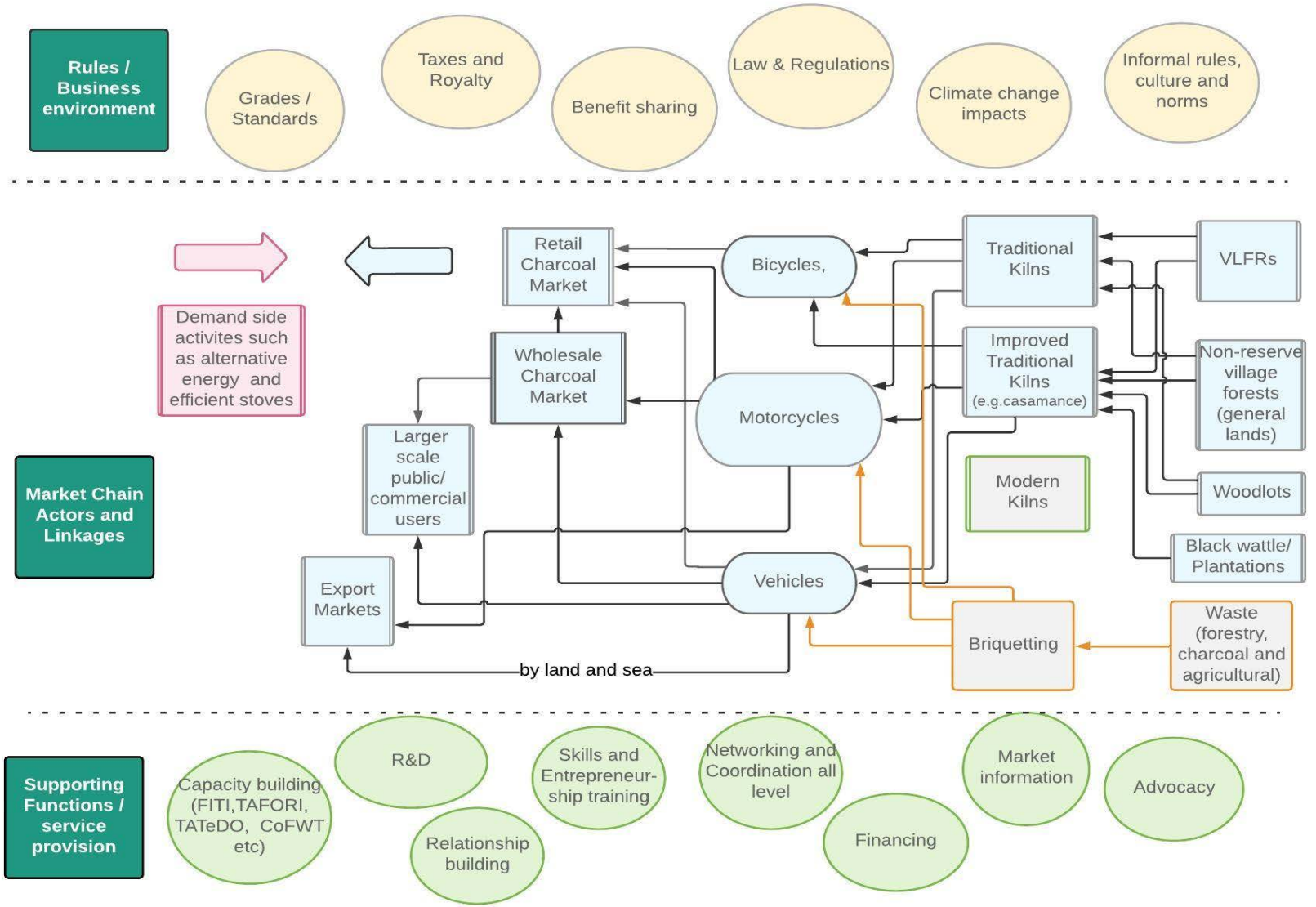

Figure 4: Charcoal market chain

3.3.2 Supporting Functions

The key focus of this area of investigation is to assess what supporting functions (and rules) are hindering the core market function and to understand how they affect the poor and disadvantaged. Following the previous section, information that also relates to charcoal from the wood product market section (3.2) will not be repeated here.

The charcoal value chains in the districts visited (especially in Handeni and Songea) were predominantly either illegal or semi-legal, almost totally unregulated, and open to any and all who wish to participate in it. The harvesting is characterised by; a multitude of commercial players, a large number of institutional (village and district) and policy players operate with no comprehensive, unified national, regional, district or local coordination complicating monitoring activities. The coordination of District and village level governing institutions is very important as a supporting function for the charcoal value chain development. The coordination hub is supposed to consist of the offices of DFM/DFO. *The DFM/DFO offices can be facilitated by the FORVAC Cluster Coordinator to network harvesting areas, transporters, wholesalers, retailer and authorities at village, district and national level. Charcoal producers, transporters and wholesaler associations could be promoted and be key players to curb illegal charcoal and ensure sustainability of the harvesting and business. Illegal harvesting control and improved revenue collection and law enforcement coordination can be achieved through: increase information sharing and communication, increase participation in decision making and implementation of the plan, use of existing network, promote joint patrols between stakeholders and increase regular feedback meeting. Other support functions may include capacity building, R&D and market information access.*

Application of technology and skills in both supply and demand sides is low. For example, on the supply side, forest harvesting for charcoal was unsustainable. Various key issues were observed e.g. producers who are harvesting trees for charcoal typically do not consider whether species could have other valuable uses such as medicine and timber. Almost all types of tree species were harvested. Kilns used were traditional in almost all areas visited by the MSA team. Business skills were low causing the majority of the harvesters to receive poor economic returns compared to intermediaries in most of the areas that charcoal is produced in. *Business skills training and business development services (BDS) as well as training on harvesting techniques, product specific processing and manufacturing require attention in the cluster regions.* Some stakeholders such as WWF/TaTEDO project are shortly going to start briquetting using saw dust waste in Songea and Appropriate Rural Technology Institute (ARTI) is working on solar equipment and energy serving stoves in Dar es Salaam. However, *there is no database of who is doing what to facilitate marketing of products produced by the communities.*

Analysis of financing and funding

As for timber

Analysis of transport/infrastructure:

As for wood products, the charcoal marketing system, among other factors depends on transport/ infrastructure. The challenges of transportation system are as described in Section 3.2.2. Charcoal transport is organised by cartel or monopolistic traders with almost similar costs on vehicles hiring. For example, hiring a lorry to transport 100 bags of charcoal from Handeni to Dar es Salaam markets costs TZS 700,000 to 900,000 per trip (fuel and driver allowance inclusive). A transit pass (TZS 7700 for a small lorry; TZS 15,400 larger lorry)

paid to TFS has to be shown at checkpoints. The checkpoints are inefficient and delay transportation therefore increasing costs along the chain. Improved communications between checkpoints could reduce waiting time in the checkpoints. *The MSA team noted that there is a WWF supported experiment on developing software to track information between checkpoints but not implemented. This is one of the areas FORVAC could consider as a possible intervention to improve transportation.*

Communications and linkages within the Market System

In Tanzania, there is only one "sustainable charcoal" project[28]. Communications including advertising, promotions, branding and online promotion on charcoal are primarily in the domain of the Kilosa SDC project. *The sustainability of this model is unclear and so it could have a larger impact on the market sector, were FORVAC to consider developing other options such as increased use of remnants sustainable harvesting (upper branches, unsuitable bole sections), as well as by-products from wood processing and fast-growing woodlots.*

Charcoal is generally produced unsustainably but there are some area specific activities that implement technologies on efficient charcoal utilisation. Critical mass creation at all levels is one of the gaps and addressing this is crucial to influence mind-set changes along the chain. The Section 3.2.2 the MSA team findings on wood also relate to this area. Corruption is rampant, bureaucracy is huge and *boda boda* vehicles are actively involved in the charcoal trade although most of them do not follow regulations. The options identified in Section 3.2.2 on wood are also relevant here*. Supporting development and implementation of long-term curricula at tertiary level on marketing and business development could be among focal areas of FORVAC.*

3.3.3 Rules

Many actors have rules and regulations that aim to control charcoal trade. The rules include: Harvesting Guidelines of 2016, Forest Regulations of 2017, Surface and Marine Transport Regulatory Authority (SUMATRA) Regulations and Traffic Regulations.

The SUMATRA regulations prohibit transportation of charcoal bags using bicycles and motorcycles. Charcoal bag transportation should be in (a minimum of) four tyre vehicles. However, most trade is conducted via motorcycles. An operation between November 2016 and January 2017 impounded 582 motorcycles transporting charcoal between Kisarawe and Bagamoyo[29].

According to Table 4, traders are now paying more than compared to the past. CESS is charged and the rate varies between districts. For example, SULEDO is paying TZS 3000 per bag, other cluster districts were between 3% and 5% of what of royalty. Apart from annual registration of the charcoal (TZS 261,00 per year) traders also

[28] 'Transforming Tanzania's Charcoal Sector' implemented by TFCG/MJUMITA and supported by SDC

[29] Mr Majid, TFS License Manager as quoted in https://www.dailynews.co.tz/news/enforcement-of-ban-on-charcoal-ticks-off.aspx

need to obtain a license for conducting forest products' business. Charcoal yards (mainly used by wholesalers in town) are required to pay similar amount of money annually. The numerous fees and permits were reported to significantly reduce charcoal turnover (including from VLFRs). A direct result of illegal charcoal is the forfeiture of huge income by the Central Government.

	Forest Regulation of 2015	Forest Regulation of 2017
Maximum weight (kg)	90	50
Royalty (TZS per bag)	14,200	12,400
Annual registration	n/a	TZS 261,000

Table 4: Some important changes between 2015 and 2017 Regulations

Charcoal from black wattle does not pay royalties and so acts as a major competitor in markets with charcoal from natural forests. This may be because it is seen as a more sustainable source of charcoal.

Appropriate interventions could include: training on existing laws and regulations, organising traders including motorcycles and networking to enhance control and management, harmonize regulations and fees and influence discussions to ensure VLFRs generate profits in the business as incentive for sustainable management. In addition, most rules and regulations use legal language and so presumably are not well understood by local producers and traders.

Certification and Standards

Currently, there are no certification activities on charcoal in Tanzania. The focus would be for the national market and without the potential for export (as in wood) it is more about legality and sustainability than trade. A challenge as an option for charcoal certification is that there is no service provider on the ground with experience on charcoal to facilitate delivery. However, information to assist making decision to recommend this option is scanty in the field and in literature. *To understand whether FSC certification is an option for FORVAC on charcoal, it is suggested that there is a need to undertake a cost-benefit assessment of FSC demand and supply for VLFR sourced charcoal.*

The main purpose of grading standards is to establish and maintain an acceptable uniformity of products. In charcoal sub-sector grading can involve grouping into various characteristics such as species used, calorific value, sizes etc. These types of grading can provide both producers and users with known values on which to base on identification and pricing. PFP in collaboration with Tanzania Bureau of Standards (TBS) developed standards for Pinus. Although this is a very good achievement, the grades cannot be used for charcoal produced from natural forests. *This is an opportunity for FORVAC to facilitate development of standards for charcoal from natural forests for purpose of developing marketing system of natural forest products*. The mangrove charcoal standard in Vietnam[30] is an example of standards developed exclusively for charcoal. Grading could be important because traditionally producers/ traders/ retailers usually struggle to inform customers of the species used in making the charcoal.

[30] http://vdeltafuel.com/products/mangrove-charcoal-grade-a/150.html

3.4 NTFP (other than charcoal) Market Screening

The main focus of the NTFP market screening was to gather sufficient market information to enable the MSA team to assess the key market constraints and opportunities. It is anticipated that once the FORVAC Cluster Coordinators are recruited then the potential for NTFPs in the programme locations can be investigated. One limitation during the MSA team fieldwork was that much of the village level information was gathered at district level and the officers tended to have a fairly low level of knowledge about the potential markets for NTFPs other than honey. The NTFPs that were focused on included beekeeping and bamboo. To a lesser extent ecotourism, then fruits (including strychnos), mushrooms and herbs were also discussed.

Beekeeping: The National Beekeeping Policy of 1998 emphasises modernising beekeeping practices through the introduction of modern beehives to maximize production of honey and beeswax, and to increase export earnings (URT, 1998). However, traditional beekeeping activities continue to be the main practice in the cluster districts and they focus largely on honey production with some areas including beeswax production. There is room to improve beekeeping by introducing existing innovations on beekeeping as well as extraction of other bees' products including wax, royal jelly, venom and propolis. Harvesting of these higher paid products would diversify livelihood activities and unlock market chains of bees' products. These products also have a high demand as nutritional supplements, as well as in pharmaceutical and cosmetic industries nationally and internationally.

Beekeeping officers exist at district level as well as national organisations such as the Honey Council and the Tanzania Beekeeping Development Organization (TABEDO) (both requiring capacity building) plus supporting NGOs such as WWF. *One option for FORVAC could be to support the beekeeping market actors through focusing on organisational development and business skills development rather than providing capacity building on processing skills*.

Tropical bamboos are self-regenerating so there is a potential for various uses including energy (Hossain *et al*., 2015). Bamboo is a strong income generator in countries such as China and Vietnam and to a lesser extent Ghana and Ethiopia. There are about 1480 species worldwide, and 11 species are found in Tanzania, figure 5 below shows the distribution of bamboo in Tanzania.

Bamboos have short rotation ages and some are commercially mature in 4 to 5 years. The entire bamboo plant, including stem, branch and rhizome, can be used with limited wastage. Figure 5 below shows the various products that can be harvested from bamboo. For example, within up to 30 days of growth, shoots can be used to make food, between 6 to 9 months weaving can be produced, after 2 to 3 years toothpicks, laminates and boards can be manufactured and after 3 to 6 years bamboo can be used in the construction sector. Bamboo remains productive for more than 50 years; 1 hectare can produce about 20 to 30 tonnes of wood resources (in total). Its high heating value also makes it an efficient fuel. The calorific value of bamboo is similar to that of wood.

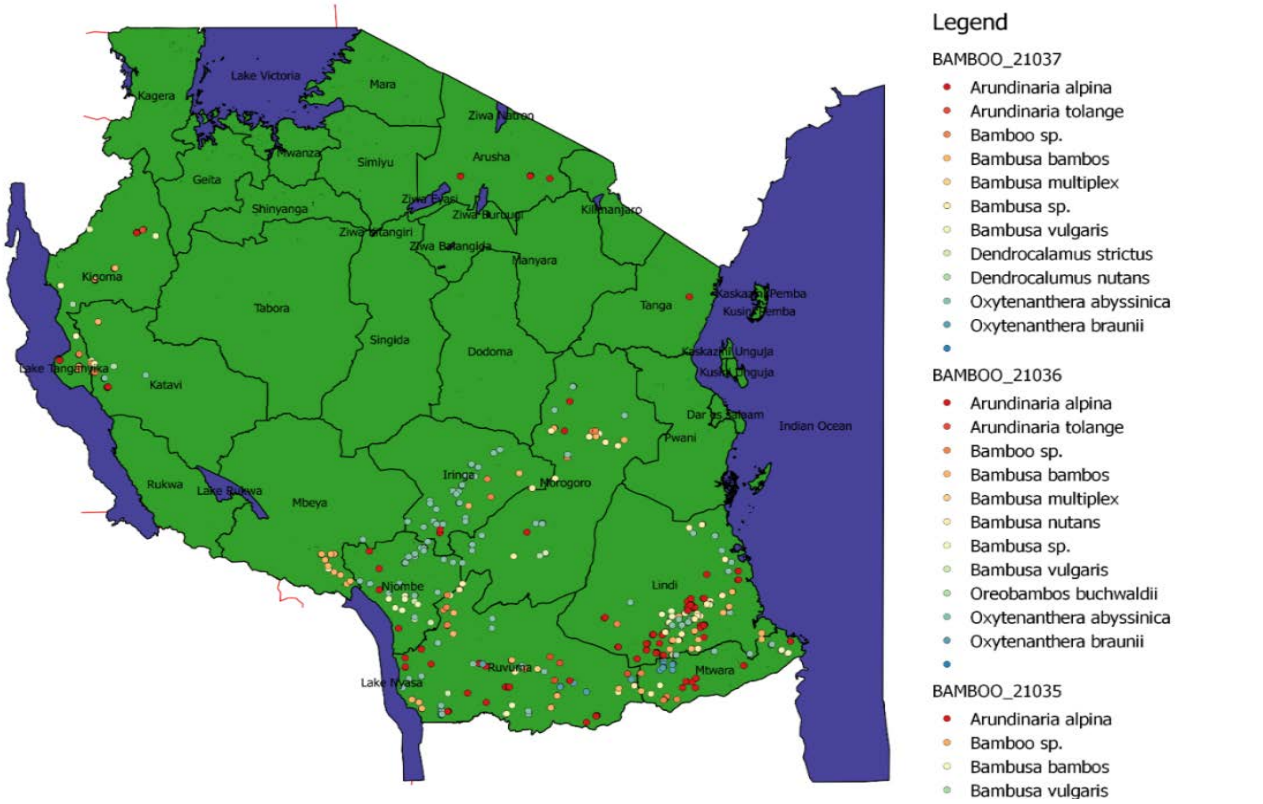

Figure 5: Bamboo distribution in Tanzania, Lyimo (2018)

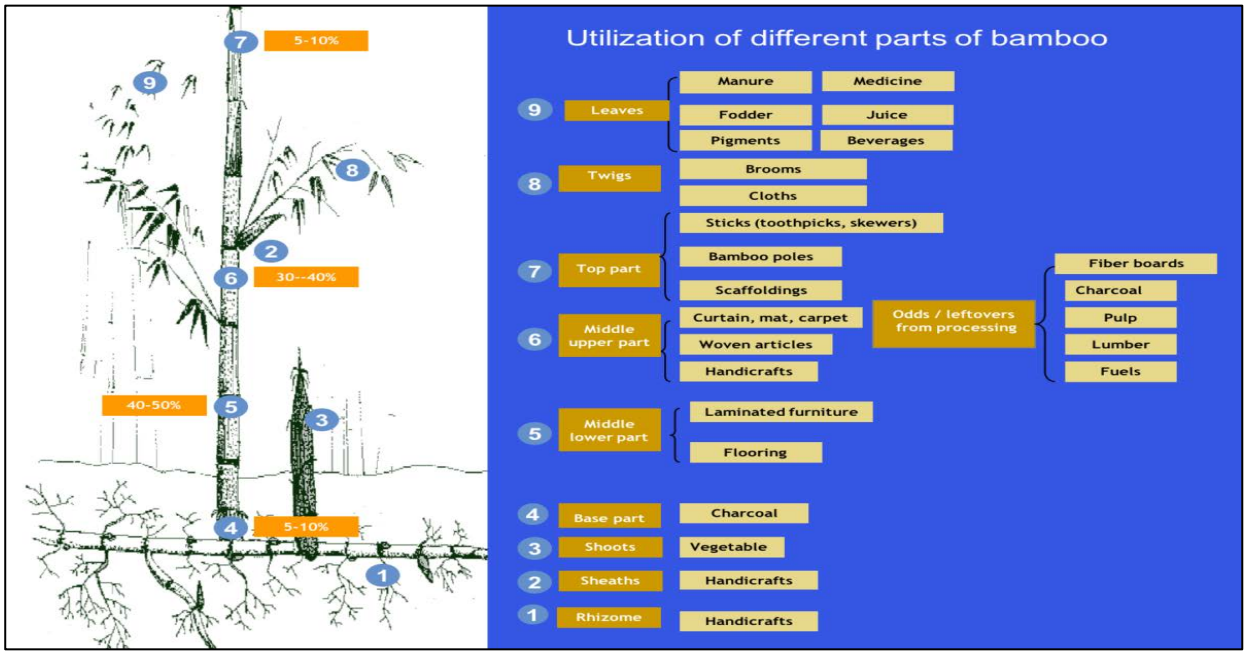

Figure 6: Bamboo potential utilisation[31]

[31] http://pacificbamboo.org/research/examining-bamboo-industries/

Bamboo is drought resistant, survives in semi-arid areas and grows in locations with an annual rainfall of between 350 and 800 mm and at a 300–1500 m altitude. The 11 species in Tanzania endure average annual temperatures of between 20 and 27°C, with monthly average daily maxima of 30 to 36°C and minimal of 7 to 17°C. These are typical conditions prevailing in the FORVAC cluster areas. *Therefore, there is a very high possibility to pilot production of products from existing bamboo together with promotion of bamboo domestication in the cluster area for improving diversification livelihood activities*. It has been proven that HRBA can be incorporated in bamboo production and one example is from Vietnamese bamboo toothpick production methods[32]

Indigenous fruits: There are various indigenous fruits, mushrooms and nuts in the cluster districts. According to Akinnefesi *et al.* (2014), Miombo woodlands are known to have over 75 indigenous fruit trees, which bear edible fruits. Fruits are considered rich in minerals and vitamins, sold for cash income and constitute important food sources during famines and or emergencies. Currently, there are significant efforts to domesticate the fruit tree species and produce at commercial level for job creation and incomes. Some fruits tree species were identified during discussions in the field such as *Strychnos cocculoides*, *Sclerocarya birrea* and *Uapaca kirkiana* by stakeholders (especially in Namtumbo) as priority species for commercial production also in other cluster areas where miombo flourish (See also Akinnefesi *et al.*, 2006*). However, further assessment to determine existing potential for commercial production, marketing and domestication as well as the inclusion of women and disadvantaged sections of the community is needed.*

There were other NTFPs in the cluster area but the MSA team was unable to get detailed information that could assist in this analysis. It is important for the cluster coordinator to investigate them and propose options for FORVAC. The other limitation was due to a stronger focus on wood and then charcoal in this assignment.

3.4.1 NTFP Market Chain/ Actors and Linkages

Supporting Functions

Beekeeping, when compared to other NTFPs seems to be better organised as there are two apex organisations that link to stakeholders. The apexes include Tanzania Honey Council (THC) and Tanzania Beekeeping Development Organization. The headquarters of THC is in Dar es Salaam and TABEDO is in Dodoma. TABEDO received financial support from TaFF and THC and is private sector oriented. The THC has more resources in terms of finance and personnel compared to TABEDO. Both have members countrywide and THC is a member of TABEDO. Their purpose is to provide beekeepers with markets on bees' products and services. There are many actors already involved in capacity building on beekeeping including TFS and FBD. The knowledge and capacity of extension officers with regards to processing for value added products (as well as honey) varies considerably between districts and clusters but even where this is more advanced the focus is on honey and beeswax. There is a high demand for honey products.

There is some market actor crossover between timber, charcoal and bamboo sector so this would be a synergistic and efficient approach. Some stakeholders including TFS, CoFWT and private sector have shown an

[32] https://cgspace.cgiar.org/handle/10568/64381

interest in investing in bamboo. TFS has planted 95 ha in Kibaha District to experiment on domestication. The species planted are *Bambusa bambos*, *Bambusa vulgaris* and *Dedrocalamus* spp. TFS has shown some interest in investing on toothpicks and VAC development including developing a market for toothpicks. This would help earn quick returns required to obtain community buy-in to the project. Other activities could be furniture and light construction for projects such as bandas etc.

All equipment required for processing the NTFPs products can be manufactured at a comparatively low cost compared to the wood sector.

Rules

The National Tourism Policy and Beekeeping Policy (Year) supports modernisation of the sub-sectors. Other NTFPs are supported by some sections in the policy, laws and regulations. The incentives are recognised by the Forest (Amendments) Regulations of 2017 although they are for products in the forest reserves. Bamboo is currently in class I and II for royalties. However, the fees and permits are not payable for VLFR sourced material but they could be supported to organise their products, package and bylaws.

3.4.2 NTFP Potential

A socio-economic study in the previous project (NFBKP II, 2014) found that timber and non-timber forest products (NTFP) have a wide range of uses for the poor: these include poles and grass used for house-building, firewood, tree and other forest species used for food and medicine, and use of forests for mushroom collecting, beekeeping and hunting. One significant finding was that the majority of the poor do not rely on use of forest products from VLFR, although there are exceptions including traditional beekeepers, mushroom collectors, and those people living in hamlets adjacent to a VLFR. This is because VLFRs were far from village centres, and some of the poor people did not know where the reserve is or even that it exists. Instead, the majority of them depend on trees in open areas, which they have the right to use.

The findings from the MSA team for NTFP support the argument for including woodlots for timber and/or bamboo and/or fruit processing as well as considering the option of multipurpose woodlots and agroforestry (possibly linking to soil conservation and agriculture)

3.5 Cluster overview

3.5.1 Socio economic

Unfortunately the socio-economic data is incomplete and several dates are unknown as it was dependent on getting information from the districts by the end of this MSA assignment. *FORVACs National Forest Management & Value Chain Expert is continuing to follow up on gathering this information and it is anticipated that this is information that will be kept up within the programme in future, especially when the Cluster Coordinators are in situ.*

However, the information that is available shows the type of data that can be used for socio-economic baseline information. Indicators could include:

- Land Area (ha)
- Number of Wards
- Number of Villagers
- Population (male/female)
- Community Forest Based Management (including total area, total number including as a separate measure those with LUPs)
- Joint Forest Management/GVT forest reserves (number and area)
- Income per capita
- VICOBA (total number of groups and members)
- Active women's groups (total number of groups and members)
- Savings and Credit Cooperative Organisations (SACCOs) (total number of groups and members)
- Agricultural Marketing Co-operative Society (AMCOs) (total number of groups and members)
- Active Youth Economic Groups (total number of groups and members)
- HIV/AIDS (this information may be available for males and females)
- TASAF Beneficiaries (this information may be available for males and females). TASAF beneficiaries are a significant indicator as the recipients are poor and vulnerable households. TASAF can also be used to help target FORVAC beneficiaries.

FORVAC CLUSTER SOCIO-ECONOMIC INFORMATION (To be completed)									
Socio economic parameters		**Namtumbo**	**Songea**	**Mbinga**	**Nachingwea (2018)**	**Ruangwa**	**Liwale (2016)**	**Handeni**	**Kilindi**
Land Area (ha)		201,949.70		359,300		204,826	3,838,000		
Number of Wards		21		29		21	20		
Number of Villages		72		121		89	79	91	102
Populations	Female	103,304			92,082	67,815	47,353	139,428	118,666
	Male	98,334			86,382	63,265	44,027	137,218	118,167
	Total population	201,638	126,047	235,969	178,464	131,080	91,380	276,646	236,833
Community Forest Based Management	Area (ha)						398,962	28,430	20,712
	Number of CBFM (see below for CBFM with LUP)	7				18	29	16	22
	Number of CBFM with LUP						20	3	
Joint Forest Management/GVT forest reserves		3NFR with 95,000ha				1 NFR with 1,250 ha	1NFR with total area 98,440ha	9 NFR with 22,000ha	

Other Economic development issues: The only information available for these indicators is from Nachingwea as follows:

Income per capita: 80.63USD/yr

VICOBA: 58 groups with 968 members

Active women's groups: 3 groups with 348 members

SACCOs: 12 groups with 1401 members

AMCOs: 15 groups with 7,428 members

Active Youth Economic Groups: 5 groups with 156 members

Table 5: Socio Economic Data

The following benefit sharing table is adapted from the Joint Forest Management Guidelines (Policy and Planning Division, 2013).This table illustrates how villages are expected to undertake a range responsibilities (and costs) in controlling, managing and reporting, but it is unclear where some of the sources of income come from to balance these responsibilities.

Productive Forests (Terrestrial and Mangrove)			Issues
Community Responsibilities (Conditional on receipt of benefits)		**Community Benefits (Conditional on fulfilment of responsibilities)**	
Participate in preparation and implementation of the JMA		41% of profit gain from carbon is paid to the communities, the remaining part to go to the owner of the forest	According to our information, no profit in the formal market (i.e. 41% of 0)
Patrolling and enforcing laws stipulated in the forest management plan		32% of fines retained in the village from offences committed in the VFMA, the remaining part to go to the owner of the forest	0% to Villages if no fines, only costs
Enrichment planting of appropriate and favored timber species		19% of timber royalty fee is paid directly to village government and the remaining is paid to the owner of the forest	According to our information, no timber is sold based on royalty fees, due to illegal competition
Conduct village meetings to discuss general forestry issues quarterly and monthly VNRC meetings.		46% of the net revenue from confiscated forest products goes to Village Government and the other 54% goes to TaFF/District Council. The confiscated equipment and tools are remitted to relevant forest authorities	0% to Villages if no confiscation of forest products, only costs
Submit quarterly implementation and monitoring report to the owner of the forest		Employment opportunities in various Forest activities	Paid by whom?
Prevention, controlling and fighting fire in VFMA		Access to forest for beekeeping activities using appropriate technology	How to finance appropriate technology?
Supervising harvesting operations including identification of harvesting areas and resource assessment		Access to forest for collection of vegetables, mushrooms, medicinal plants (without damaging the plant), fibers, thatching and fodder grass collection, dead fuel wood and fruits. Also right of way, attending ritual areas, bamboo wine taping and water access for irrigation and domestic use basing on regulations governing the forest use	If not direct income, a wide range of benefits
Manage tree nurseries and plant trees in their farm lands		Access to fishing and hunting will be done in accordance with relevant laws and regulations and any benefits accrued from these activities	Any payments for managing tree nurseries?
Report on revenue collection and expenditure to the village assembly quarterly		35% of research, entry, camping, installation of transmission towers and filming (permits) fee goes to the Village Government and the remaining part to go to the owner of the forest	No secure source of income
Prepare and keep proper forest management records		Tangible benefits unclear	Costs only?

Participate in protecting and controlling illegal activities along water sources and environment inside and outside the forest		Tangible benefits unclear	Costs only?
Participate in all meeting related to forest management		Tangible benefits unclear	Costs only?
Ensure forest boundary beacons and signs are not removed or destroyed		Tangible benefits unclear	Costs only?

Table 6: Village JFM Responsibilities

3.5.2 Cluster Specific Information (including Village Selection Criteria)

The information in the following tables was gathered from the MSA Team fieldwork that selected districts within the FORVAC cluster areas. (It was not possible to visit all districts in t

Land ownership and user rights need to be considered before progressing on site selection. *T promote self-sustaining private sector supporting services so a careful evaluation of existing r be an early task when the FORVAC Cluster Coordinators are appointed.*

Given the varied situations in the different FORVAC districts, a stepped approach as indic interventions within each cluster could be considered i.e. depends on the criteria such as sim availability of resource, sufficiently trained/availability of extension officers, whether the harvesting or need to function as watersheds (i.e. Mbinga), availability of service providers NGOs) and extent of existing private sector.

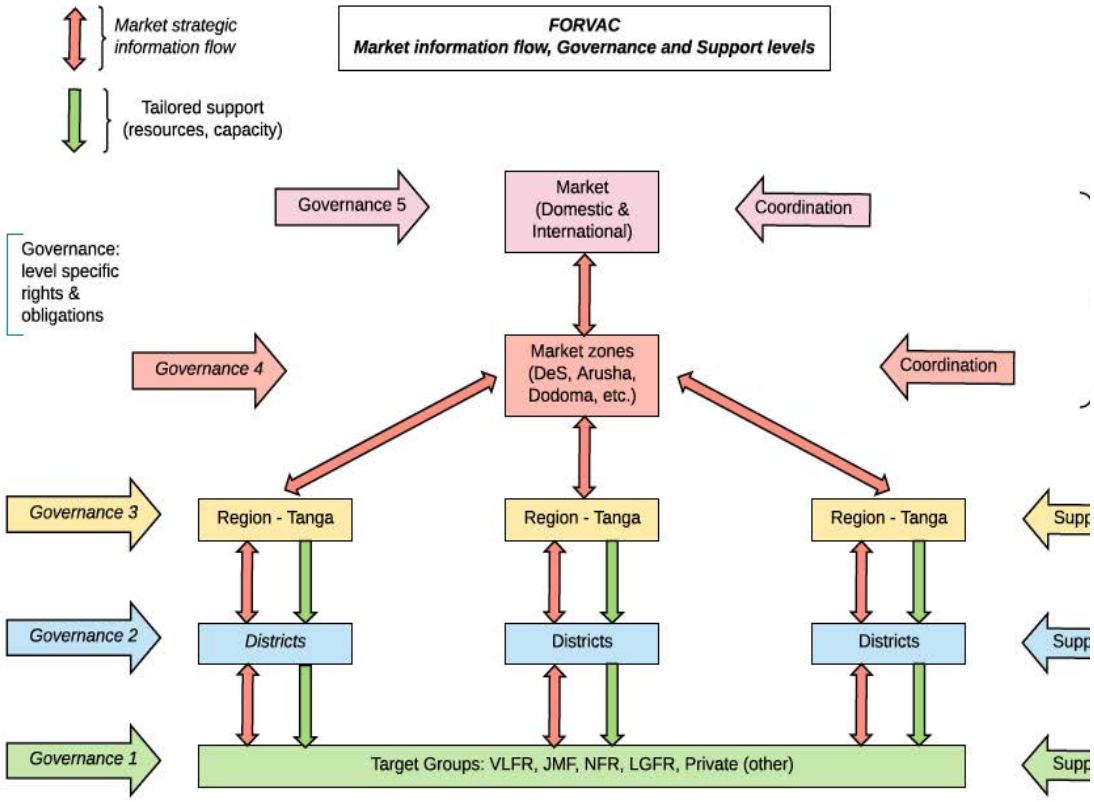

Figure 7: Market information flow, governance and Supp

The results from the MSA team include the following suggestions:

- *To include Nyasa District due to the value adding opportunities, new road and number compared to neighbouring Mbinga)*
- *To include the SULEDO CBFM which would allow for a pilot approach and larger scale also comparatively easy to access the site from the FORVAC central office.*
  - *If this is agreed, then FORVAC could consider basing the cluster office in Kilindi for log*

As a general approach to select village sites FORVAC could incorporate lessons learned and good practices from previous experiences in CBFM, particularly (but not limited to) MFA supported initiatives such as NFBKP II, LIMAS, and others. This will provide additional elements for identification and selection of villages.

As an example, the MSA Team suggest the following concrete actions could be developed with a focus on boosting the VLFR wood market development initiatives based on current experiences (see box below). The activities described below would fit into the Income Generating Activity (IGA) intervention detailed in section 5.1. below. Districts' active involvement and support is fundamental in this approach.

Box: A brief example of how the part of the Income Generating Activity (IGA) Intervention for Wood Products outlined in Section 5 could be implemented.

Tanga region. *Objective*: Improve VLFR wood market system among Villages in Handeni-Kilindi, including SULEDO VLFR. ***Context*:** SULEDO is currently harvesting and selling logs and timber to local and central markets, at small scale. SULEDO has the capacity to process timber using an improved ding-dong sawmill. SULEDO also owns a woodmizer band sawmill that is currently not working due engine breakdown.

Action: Preliminary identification of Villages, through a MoU, establish modalities, roles and responsibilities. The woodmizer sawmill could be re-habilitated and, together with the circle sawmill, provide sawmill services to several VLFR, as a cluster sawmill, run by VLFRs for VLFRs, on a business basis. They could be able to supply higher volumes to different markets at a lower cost (economy of scale). Support is likely to be needed to strengthen marketing, negotiation, selling skills, relationship building, financing as well as (improved) wood quality. Location of production unit(s) and additional investments (such as low cost drying kiln, less USD 2000) could be discussed and agreed in consensus based on specific business plans.

Lindi Region. *Objective*: increased number of VLFRs and wood volume to access wood processing facilities and market access, also outside the FSC context.

Action: Based on the experiences from MCDI work with VLFRs in the region, provide support focusing on strengthening the interaction, collaboration and mutual support between the VLFRs, to take a more proactive role in the market development according to their capacities and potentialities. Support is likely to be needed in organisational management, financing, relationship building, HRBA as well as in marketing, negotiation and selling skills, and (improved) wood quality. Location of production unit(s) and additional investments to be discussed and agreed in consensus through MoUs, applying business plan modality already implemented by MCDI.

Ruvuma region. *Objective*: increase the flow of formal/legal timber from VLFRs to the timber yard(s) in Songea, and other markets.

Action: Based on the experiences from various initiatives working with VLFRs in the region, identify villages to strengthen interaction, collaboration and mutual support between VLFRs, to take a more proactive role to increase wood supply according to their capacities and potentialities. Support will be needed in organisational and financial management, relationship building as well as in marketing, negotiation and selling skills, and (improved) wood quality. Location of production unit(s) and additional investments to be discussed and agreed in consensus through MoUs.

3.6 HRBA Considerations and Target Beneficiaries

The context of HRBA in Tanzania and an explanation of the approach can be found in Annex 5.

FORVAC may be able to actively seek to transform elements of Tanzanian society by addressing discriminatory legislation, norms and practices that are impacted by the wood and (selected) NTFP sectors. At the very least it should always aim to *do no harm* in all activities. FORVAC is by its nature at least a Human Rights sensitive project for several reasons. It is focusing on beneficiaries in remote and disadvantaged areas, improving their access to services and livelihoods from their forests. The Project document defines that FORVAC will embed a pro-poor approach in all project activities by ensuring inclusive participation in training, extension and communication, business support and using a pro-poor monitoring systems and guidelines. FORVAC is also working with the State (the duty bearer) to improve capacities of extension staff. It will also work to improve the coherence of different policy sectors and legislation, promote openness and transparency of development policy and cooperation and emphasize the ownership and accountability of communities.

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. The outcome can only be assumed, not guaranteed. This recognises that resources can be limited, and resource sharing is not yet perfect. However, the state has the obligation to support and empower its people's right to development, via enacting legislation, production systems, etc., and international signatories have the obligation to provide assistance to support these. This doesn't mean that rights holders can demand perfect achievement of their rights immediately. The State has the obligation to prepare a strategy for *progressively* achieving universal access.

The human rights principles as specified by MFA Finland (2016) include the following cross-cutting criteria:

- Universality, Interrelatedness and Indivisibility
- Equality and Non-discrimination
- Participation and Inclusion
- Accountability
- Transparency

Universality, Interrelatedness and Indivisibility: Human rights apply to everyone. In application of a Human Rights-Based Approach (HRBA) there ought to be indivisibility of rights. Since there are finite resources available for development, decisions must be taken as to where to invest, this does bring the dilemma of whose rights will be satisfied when there are many competing priorities.

Equality and Non-discrimination: This should be a major focus of the work of FORVAC. Different potential stakeholders will be identified prior to any activity, and efforts will be taken to ensure that all relevant stakeholders will be included, without discrimination.

Participation and Inclusion: Who participates and how? FORVAC has set targets for the involvement of women in VFRCs. The Declaration on the Right to Development notes that "active, free and meaningful" participation is needed. Participation of various groups is referred to in many other Conventions. FORVAC should seek active and meaningful participation and empowerment of all stakeholders, not just mere consultation and passive participation in meetings. Active, free and meaningful participation requires a concrete opportunity to express demands and concerns and influence decisions. This relies on providing information through multiple channels

(see the FORVAC Communication Plan), enabling participation in transparent and inclusive processes, and strengthening the capacities of individuals and civil society to engage.

Accountability: Who are the duty-bearers? An important element of HRBA is that rights-holders should be able to claim their rights, and justice from duty bearers - usually the State. This is made difficult due to the many types of actors in the value chain, as well as the risk of corruption, and the weak government control over the illegal timber and forest products trade. The rights holders may also face barriers to justice, such as the physical distance from government and courts, weak literacy, the lack of access to information about their rights, how to enforce their rights and where to turn to for help. FORVAC will need to train the duty-bearers at different levels on their responsibilities.

Transparency: This is vital to ensure that the population is well informed regarding the means to be used to achieve their rights to use forest resources. Beneficiaries (and particularly women and youth, who are often excluded) need to be aware of their rights and responsibilities (under national law) with regard to participation, decision-making, natural resource management, tenure and governance. Involvement of the Village Natural Resource Committees, as well as other groups in the value chain (such as producers, traders, processing companies) with adequate representation of all groups at all stages of procurement, construction and management, is an important step for transparency. In addition, public information sessions and public audits improve the information sharing and minimise risks. A range of information and communication methods will improve the transparency of the project activities.

Impact and sustainability are also considered to be important aspects of the HRBA, as without these, the efforts will be wasted. Functionality and sustainability of CBFM and JFM is a challenge in Tanzania. Usually there has been considerable project-based support provided by external donors for the costly and time-consuming processes of Land Use Planning, especially in order to support broad consultation and participation. Without external funding the process often is less participatory. This is a dilemma, as it is clear that the Government is reluctant to provide the financial and technical support to the more costly HRBA sensitive procedures – yet without them, there are risks for long-term sustainability as some groups may feel excluded.

The FORVAC Project Documents described a socio-economic assessment of poverty, inequality and vulnerability conducted in future FORVAC districts in 2014. The assessment showed that poor and extremely poor people faced significant barriers to participate actively in village decision-making and PFM process and activities. A recent FAO report (Lwanga-Ntale, 2016) found that there are five key social protection issues that relate to FORVAC's area of work. Firstly that forest-dependent communities in Tanzania face extreme poverty, risk and vulnerability, mostly due to their remote rural location, and practice of subsistence agriculture as the main form of livelihood. Second, the policies, institutions, legal frameworks, and governance of the forestry sector still work in disfavour of poorer communities, notwithstanding the efforts that successive governments have made to promote the concept of community forestry. In addition, the third set of issues, there is a high incidence of informality in the forest sector, which is mainly due to the expansion of illegal logging activities, charcoal burning, and encroachment of forests for crop farming. Fourth, links are made between, on one hand, risk, poverty and vulnerability and on the other hand deforestation and forest degradation. Finally, there is little or no evidence to suggest that deliberate social protection provision exists in any recognisable form for forest dependent communities, either specifically for the communities or in the context of wider national programming.

The HRBA of FORVAC is being mainstreamed throughout the program activities. Targeted actions could be developed for groups needing support via specific activities e.g., if groups are facing specific disadvantages to achieve their rights to forest-based livelihoods, specific targeted activities can be implemented.

The following challenges, with direct implication in HRBA, were identified and still remain to be addressed within the FORVAC context:

Governance

- The process of establishing VLFR and ensuring forestry management requires on-going district level support to communities as well as a shift from a 'top-down' style of district forestry management.
- Bylaws, management plans, harvesting plans etc. have not been finalised for all villages.
- Multi-sectorial approach required to address issues confronting management of VLFR & potential for revenue generation.
- District Forestry/Natural Resource/Beekeeping Officers do not have the skills to conduct effective community sensitization/mobilization in relation to HRBA.
- Land use conflicts are a problem in VLFR, and there is an urgent need for adequate VLUPs.
- The governance capacity of VNRC needs to be strengthened. Illiteracy is an issue that affects women and older members.
- Women are members of VNRC but in lower numbers than men.
- Conflict exists between village government and VNRCs (typically with the village chair person). This is exacerbated by lack of transparency over income from fines / sales of timber.

Rights

- Low levels of awareness exist within communities about PFM; in some villages the majority of villagers (especially the poor) have little or no knowledge about the VLFR in their community.
- Where VNRC members have not been trained they lack understanding about rights or clarity over VLFR laws; this problem is exacerbated in communities where by-laws have not been approved.
- People in neighbouring villages lack understanding of rights and entitlements associated with VLFR.

Inclusion

- There are barriers to the poor participating in forest management decision-making or from benefiting from IGA schemes. This is significant exclusion because the poor (below basic needs poverty line) are the majority of the population of most villages.
- Women lack empowerment to participate in village decision-making.
- There is a need to strengthening Voices and Accountability
- Downward accountability from district government to communities is weak.

Livelihoods and Business

- Skills on pro-poor community business/livelihoods development are limited within district natural resource sections.
- 'Elite capture' of benefits from the NFBKPII at community level is a significant concern.
- The poor do not have access to capital to start or maintain an IGA.
- Poor women do not have access to capital to start or maintain and IGA
- The extreme poor (below food poverty line) do not have the capacity to engage in PFM
- Beekeeping, an opportunity for IGA but there is extensive evidence of failure related to donation of hives by NGOs

4 Understanding systemic constraints

The system constraints include understanding why the key functions and rules are underperforming. These issues are largely elaborated in section 3 but some additional points are included in Annex 6 as well as a district level assessment carried out as part of the focus group meetings in the fieldwork carried out by the MSA team.

It is clear that one of the major constraints regarding any effort to develop a sustainable forest related market system is governance and law enforcement. Forestry governance has a pivotal role in determining the development outcome of sustainable forest management and forest product trade, especially in a country like Tanzania, with a large natural resource base and a policy environment heavily influenced by the forces of administrative decentralisation, market globalisation, political democratisation, rural empowerment and infrastructure development. In an ideal scenario, good governance at all levels helps ensure forest product trade provides broad-based and equitable benefits in line with national and local development goals, without compromising forest integrity (TRAFFIC, 2007).

The villages are investing resources and time in fulfilling all requirements necessary to become and maintain the VLFR status, but the enabling and facilitating policy and regulatory environment for VLFR activities to generate social and economic benefits, is not yet efficiently implemented. This is despite the potential of the market for wood from the natural forest.

An additional factor is that management and law enforcement authorities remain under-capacitated and poorly supervised. For example, reported timber exports from Tanzania to all destinations during a three-year period ending in 2005 totalled around 19,300 m^3, whilst import statistics from one destination alone, China, showed a considerably higher value, exceeding 108,500 m^3 (TRAFFIC, 2007).

Another key element is the low (political & economic) priority of the sector. That has many expressions, e.g. in HRBA, incentives, capacity building, governance, etc.

Risks and assumptions

For FORVAC to successfully enable the environment for sustainable forest management and development of value chains there are some risks and assumptions that should be clarified as shown in figure 8 below

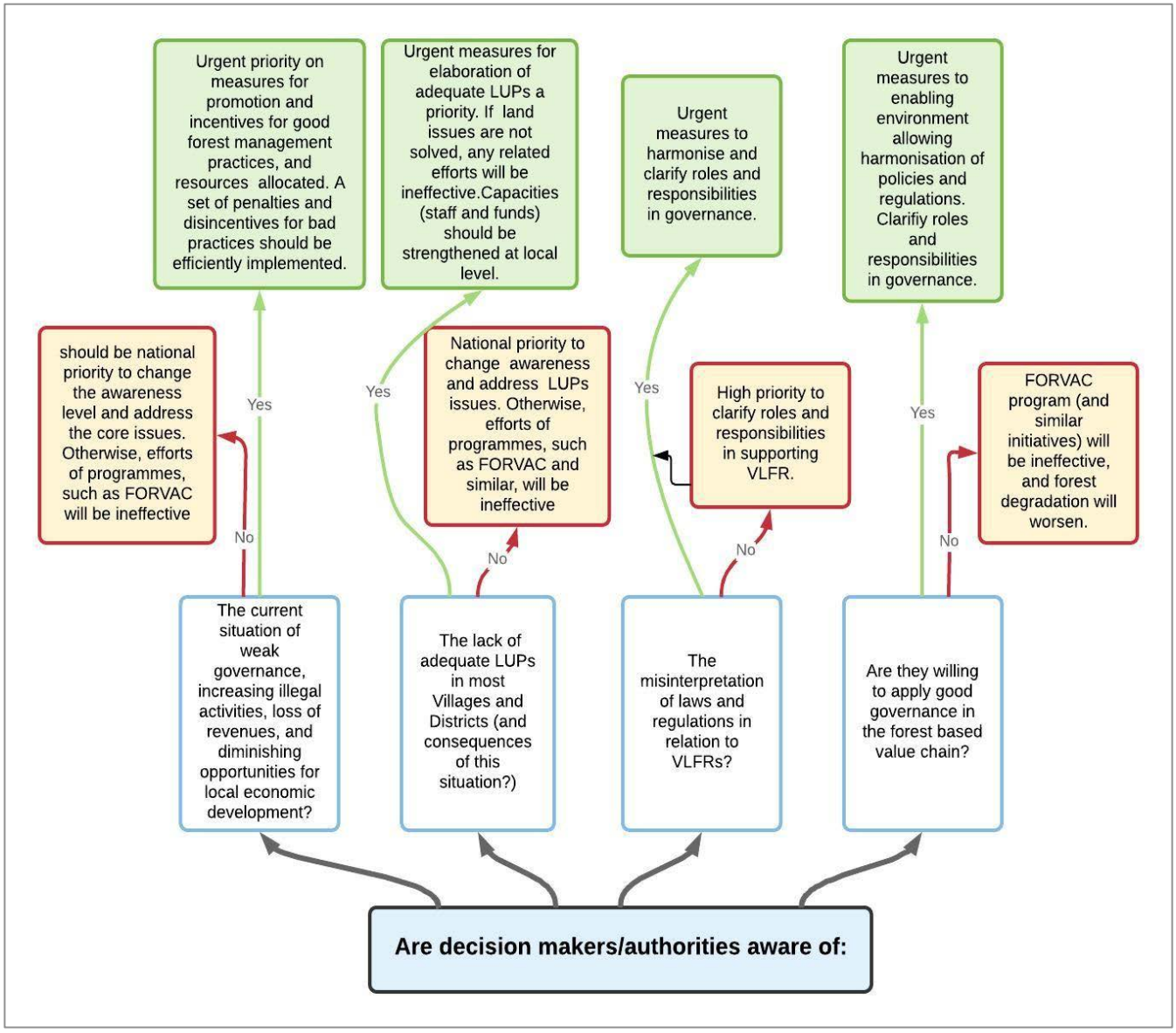

Figure 8: Risks and Assumptions

4.1.1 Market Stakeholder Relationships

Understanding the interactions of the different institutions and organisations that FORVAC needs to interact with to implement FORVAC activities could help the programme management to develop their relationships. The key interactions are shown in the figure 9 below:

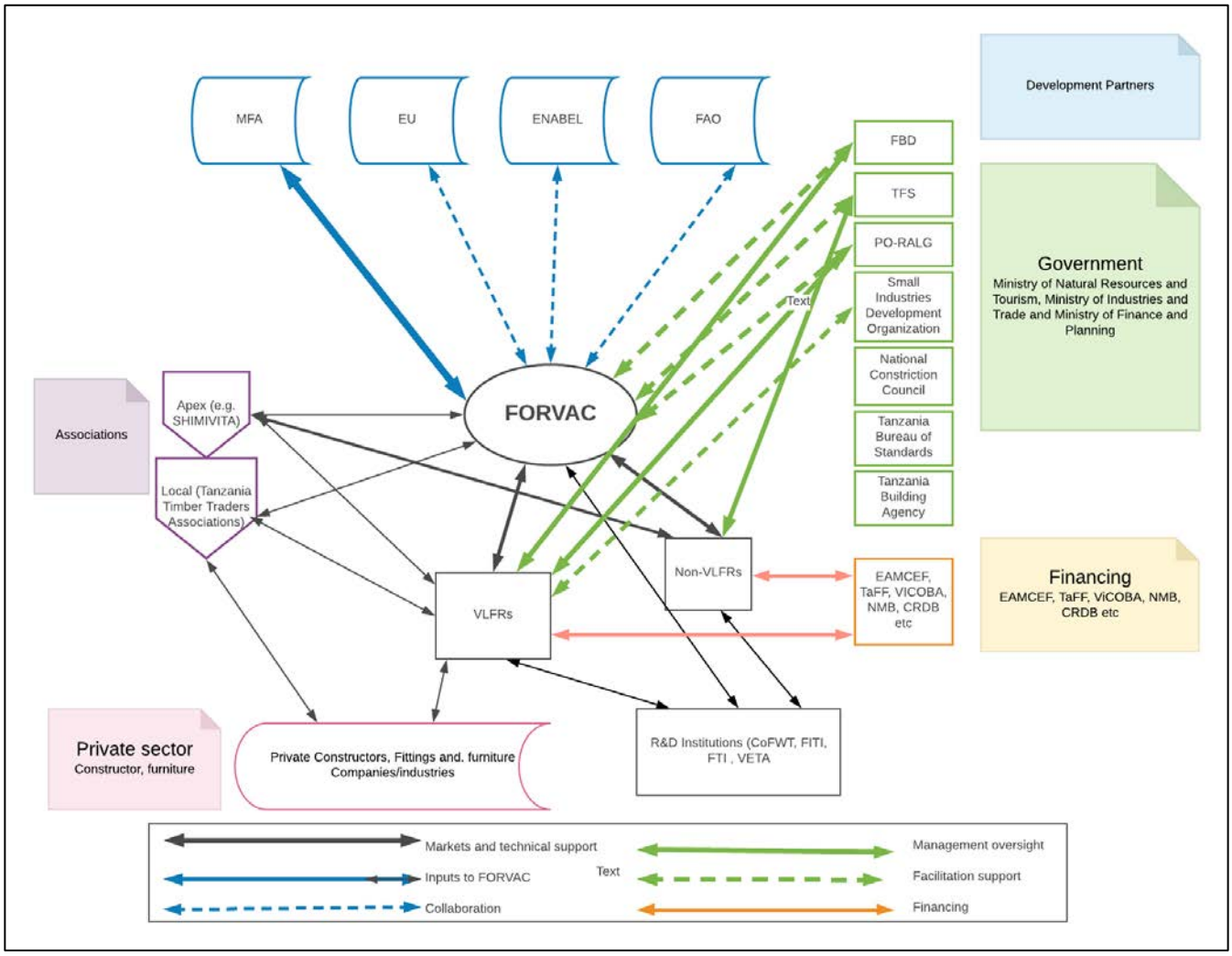

Figure 9: FORVAC Stakeholder Interactions

5 Proposed Interventions

All interventions are planned to, as far as is practicable, to use and build upon existing approaches and methodologies. Interventions also aim at sustainability in the long-term outside of FORVAC inputs.

In order for improvements in the market system to be sustainable, they should not depend on the on-going support of FORVAC or another external facilitator as shown in figure 10 (HEKS/EPER, 2015). This is why it is essential that the implementation strategy of the programme is devised around the time-bound nature of the interventions and a planning ahead for the withdrawal of the support occurs. The diagram below shows how the facilitation approach plays out over time.

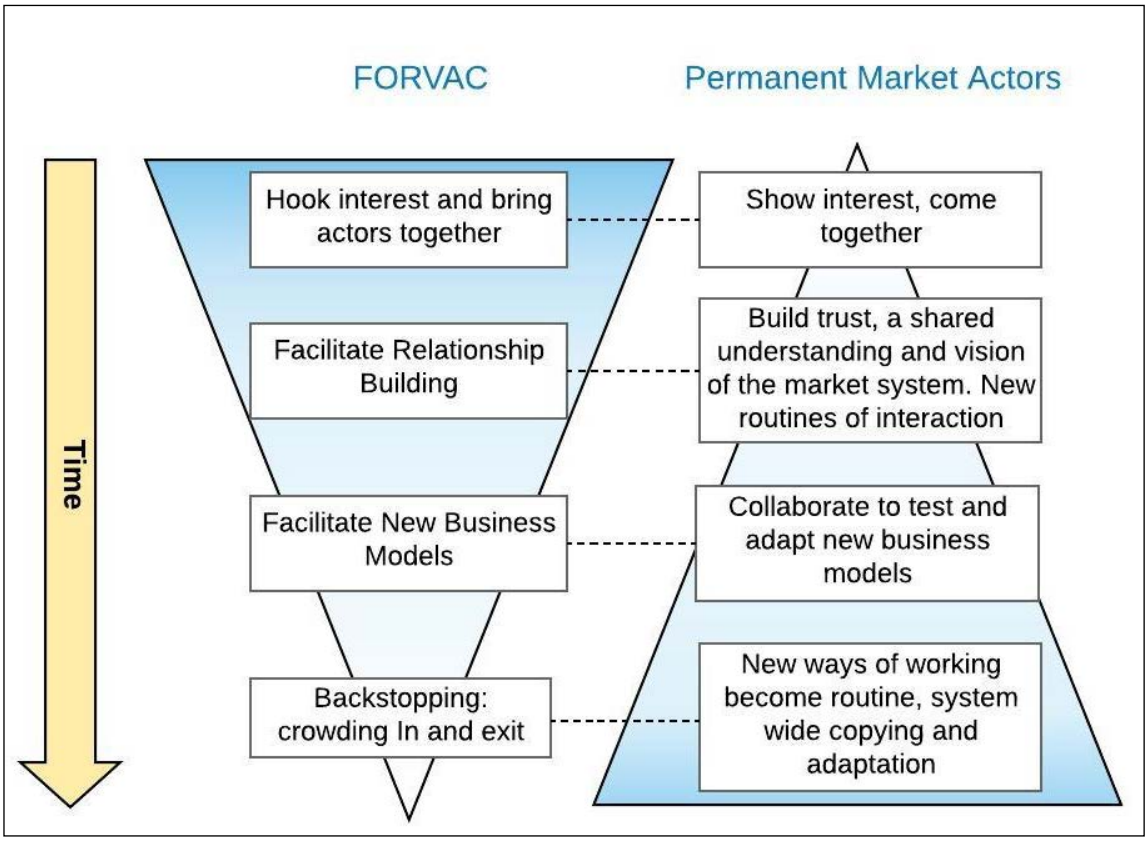

Figure 10: Timing of Interventions and Exit Strategy *(HEKS/EPER, 2015)*

The larger scale potential interventions that have been identified are outlined below in sections 5.2 and 5.3 according to FORVAC Outputs 1) Improved value chains and increased private sector involvement in community and government and 2) Improved capacities, monitoring systems, legal and policy frameworks in the forest sector.

In addition to the proposed interventions, there are five themes that the MSA team felt would be intrinsic to a successful implementation of FORVAC. These are:

1) Capacity Building
2) Relationship Building
3) Information Sharing
4) Good governance[33]
5) HRBA

As these topics cut across every proposed intervention they are outlined separately below as well as service provision which would also be needed for any interventions (partly due to the small size of the FORVAC full-time staff)

5.1 Overarching Themes

5.1.1 Capacity building

FORVAC has a clear emphasis on capacity development in both outputs: 1) Improved value chains and increased private sector involvement in community and government forests; 2) Improved capacities, monitoring systems, legal and policy frameworks in the forest sector; at various forms and levels, aiming at strengthening the implementation efficiency and enhancing the basis for sustainability post-Programme.

A theory of change of an intervention is a description of a sequence of events that is expected to lead to a particular desired outcome. It includes the identification of the underlying assumptions and is often used interchangeably with intervention logic. Capacity building is often the main instrument in a programme's theory of change.

In brief, capacity development is the improvement of the ability of people, organisations, institutions and society to manage their affairs successfully. It comprises improvements in one or more of the following domains:

- Individual knowledge and skills
- Systems (methods, routines, procedures)
- Structures (authority, rights and duties, communication)
- Infrastructure and equipment (hard and software)
- Work environment
- External factors

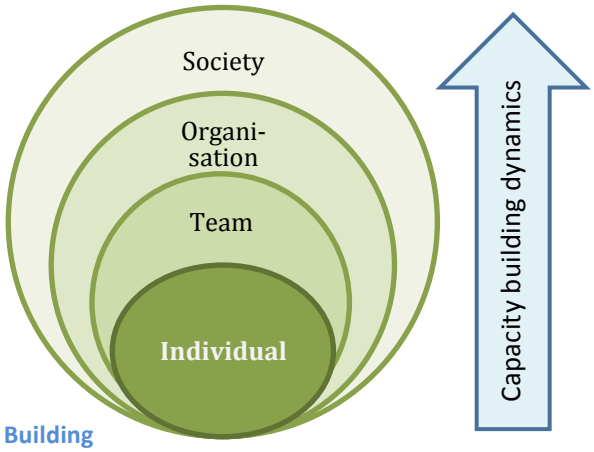

Figure 11: Capacity Building

Transfer of Knowledge is most often a component of a capacity development effort. In general, the working method is just as important as the content of the knowledge. Transfer of knowledge can have several direct purposes. One of the most common is to increase the competence level of an individual or a group.

[33] According to MFA Finland, Good Governance Principles include, e.g.: participation, rule of law, transparency, responsiveness, effectiveness, efficiency and accountability.

Competence is more than mere knowledge however, it also entails the application of the new knowledge or skills and the desire and drive to implement new knowledge and skills acquired. Competence is thus primarily gained by hands on working experience and problem-solving.

Capacity development and transfer of knowledge, within FORVAC, is expected to address the different needs at beneficiary level (implementing entities and key stakeholders), therefore the first step in the process is a detailed needs assessment to establish the current situation and the necessary changes, followed by an elaboration of tailor-made capacity development interventions. In principle, the specific interventions will be of different kinds, depending on the needs and resources.

Capacity development may include, but not be limited to, the following activities:

- On the job training
- Thematic workshops and seminars
- Learning by doing
- Case studies
- Training of trainers
- Study visits
- Thematic networking
- Tailor-made training programmes
- Coaching and mentoring

While there is no simple typology that can be used for capacity development, there are three important dimensions of capacity development processes that will be fundamental for the success of the interventions:

- The complexity of the capacity or performance strived for;
- The adequacy of the capacity building process; and
- The responsiveness of the beneficiaries.

Figure 12, below represents a capacity development intervention (or series of interventions), aiming at providing desired impact.

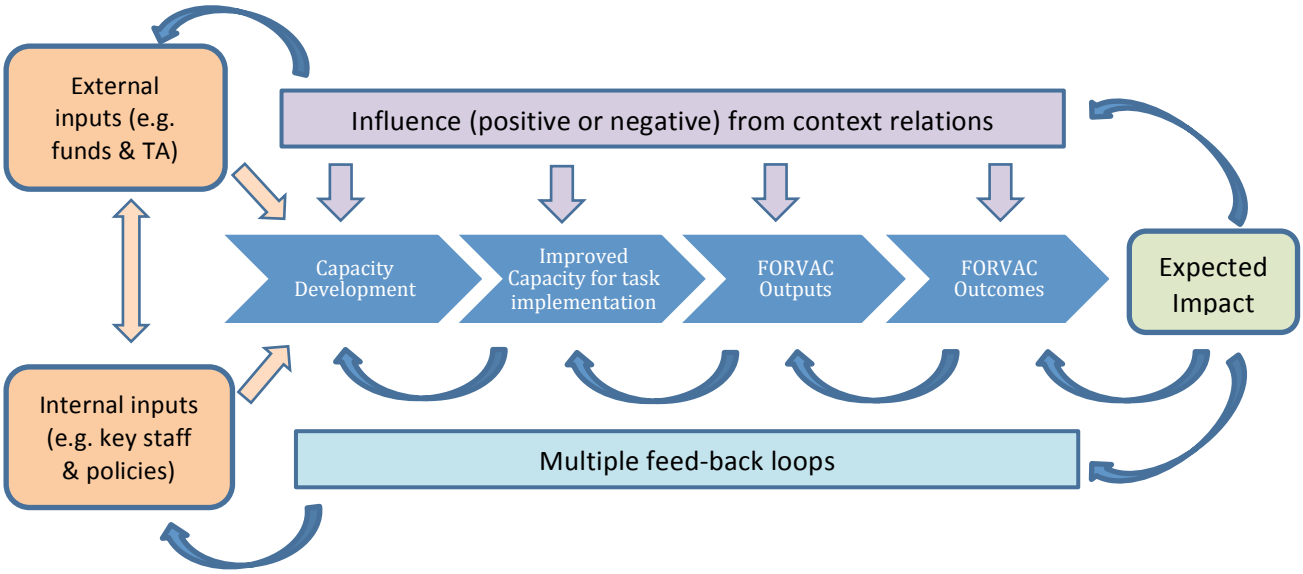

Figure 12: Illustration of a capacity development intervention (or series of interventions)

In FORVAC it is envisaged that capacity building will need to be done at all levels and for all interventions and some guidance on the approach is provided as follows:

- To conduct a tailored needs assessment at the start of each intervention detailing 'What, How, and especially Why' capacity building (including training) is needed. This needs assessment should also ensure that HRBA issues are incorporated and to identify the optimum way to reach and include the beneficiary target groups such as youth under 25 years (with a particular focus on single mothers and pregnant girls) and other vulnerable groups.
- HRBA to be integrated at all stages/levels
- Aim to expand on existing material rather than introduce new methodologies
- To ensure that, where appropriate, all skills training include enterprise development. For example if training is provided in sawmilling, kiln construction, etc., then business skills development should be included whether at village level, district level or above; particularly where private sector is involved.
- District Officers (in a range of departments) could be trained in enterprise development; for example even if beekeeping product training is not provided by FORVAC then the District Beekeeping Officer could still be trained in business development skills. It is important that a wide range of district staff are developed in entrepreneurship skills both to capacity build in this area and because it is one route for the communities to access finance through district funds via the use of proposals. It is also anticipated that joint training across ministry divides will assist in relationship development.
- Examples of training needed at each level includes
  - Villages (VNRCs), with focus on:
    ⇒ Awareness, empowerment, and commitment, based on a good understanding on their role in VAC development.

⇒ Technical and managerial skills including production, forest management and harvesting plans, rights and legal issues, financial and business skills, product development, etc.

- Districts, with focus on:
  - ⇒ Project cycle management in relation to their supportive role to villages (VNRC) and other VAC actors in towns;
  - ⇒ Resource management including training on simplified land use planning procedures, participatory forest assessment, forest management and harvesting plans in VLFRs;
  - ⇒ Top up training for district extension officers;
  - ⇒ Training of Trainers (ToT): Business development skills including development of proposals (together with target groups) to access funds for priority actions to promote sustainable VAC development

- Private Sector to improve both technical and business skills (including proposals) at a range of levels and potentially to include trade associations.
- Other target groups (at village and district levels) such as vulnerable groups, to realise IGA options.
- Information, communication/dissemination, extension support.
- Curriculum development (particularly related to market systems approaches and business development skills) at higher education facilities[34].

5.1.2 Relationship Building

The MSA team found that there were poor or weak relationships and networking in the market systems as well as between various types of stakeholders with many having a 'silo' approach. These weak relationships can be horizontal i.e. relationships between the different ministries at district officer level or vertical i.e. between market actors such as producers and traders.

It is anticipated that every intervention is likely to require some relationship building and some guidance on what this could consist of is included below:

- Networking and understanding potential roles and opportunities in the VC development;
- Developing business linkages, searching of benefits through associations, group efforts, etc.;
- Exchange of experiences and strategic information for integrated and/or coordinated initiatives;
- Promoting business-oriented action platforms aiming at formalising business areas and/or organisations for timber, NTFP and NWFP;

A central tenet for FORVAC is to position themselves as a catalyst for the transformation of the market systems so relationship building should be an important programme element.

[34] Note that vocational training schools curricula are set at ministerial level so could be difficult to influence.

5.1.3 Information / communication

In addition to the below, the reader is referred to the FORVAC Communication Plan.

Assess the needs for information for different purposes and levels to ensure a well-functioning market system and the successful realisation of FORVACs outputs. It will be essential to raise awareness among data producers and users, on the importance of quality data/information for specific purposes at local as well as at higher level. The promotion of good planning and monitoring practices, based on quality data, will create informed decision-making at various levels.

Examples of types of input could include:

- Developing a self-sustaining market information system framework. This could include developing and introducing an easy-to-use database to specify supply and available traders/demand by districts/villages and assists communities to have adequate market information (demand, price level etc.).
- Special attention to adequate dissemination of clear information about regulations, roles and responsibilities, regarding main stakeholders, as a key step to promote good governance:
  - A clear legal framework (laws, policies, regulations, procedures and guidelines) should be communicated, well-understood, implemented and monitored; and
  - The implementation of the legal framework should be evaluated and adjusted to improve efficiency in forest management and VAC development. A potential entry point for this would be the Forest Working Group in the Tanzania National Business Council.

5.1.4 HRBA

As a finding of MSA team during this assignment, it is proposed that particular attention should be given to the following issues:

- Health & Safety considerations in harvesting, processing and trading;
- Land based rights;
- Gender Based Violence;
- Targeted activities for Pregnant Girls, Single Mothers, Youth (under 25 years) and the disadvantaged (people with disabilities or long-term sickness) – this could aim for 50% of beneficiaries to be from these focus groups. If this beneficiary group needs to be narrowed down further then one indicator could be to use TASAF recipients.
- Integrate target beneficiaries in all activities;
- Work to strengthen the understanding of duty bearers of their responsibilities regarding human rights compliance;
- Improved information and communication, to ensure transparency and the ability to participate in FORVAC activities; and
- Clarified lines of accountability and information on how to complain if there is a problem.

In the operationalisation of HRBA in FORVAC, we suggest the integration of the NFBKP II Socio-Economic Assessment (SEA) findings and recommendations (updating and complementing if necessary). The NFBKP II SEA

indicated that alongside the management of forest resources and development of business and income generating activities, the PFM process involves significant change to forest ownership, rights, and power relations. District-level support is needed to help build governance processes and develop benefit sharing mechanisms.

Addressing the challenges

To enhance gender equality, it is necessary to promote women's empowerment and rights with special focus on interventions in forestry and forest-related business and equal access to land and natural resources (NR). Active participation of women in CBFM is critical for achieving socio-economic empowerment of communities. Some mechanisms and efforts to integrating gender aspects and ensuring female inclusion in FORVAC are, e.g.:

- Increased number of women in decision making committees;
- Confidence-building to encourage active participation;
- Gender specific productive Income Generating Activities (IGA), e.g. honey, mushrooms, herbs and plant nurseries;
- Targeting existing community savings groups to establish IGA, business skills training, etc.;
- Ensure gender neutral benefit-sharing from timber & NTFP sales; and
- Strengthen institutional mechanisms for protection of women's rights through awareness campaigns;
- Train and deploy female forestry professionals.

We would recommend that FORVAC places particularly attention on ensuring gender sensitive Service Providers (specified in ToR/contracts) are selected, including a disaggregated approach to gender and the vulnerable such as disabled or HIV/AIDS sufferers in reporting. When information material is produced, meetings, workshops or trainings are conducted, or monitoring carried out, FORVAC needs to ensure that women are represented and their voices heard.

A close **interaction between Communities and Districts** is crucial when it comes to design and approval of efficient bylaws and PFM procedures. Specific categories of people shall be targeted for inclusion in village-level sensitization processes and discussions (e.g. poor men and women, pregnant single mothers, elderly, female widows, female heads of household). Enforcing regulations on forest resource use is an important tool to ensure "do no harm" and equal opportunities.

As soon as the District Cluster Coordinators are in place, a local in-depth situational analysis should be carried out, in order to plan an adequate HRBA inclusion and operationalization based on the specific contexts and needs at local level. The aim is to integrate cross-cutting issues in planning, implementation, as well as in M&E.

Considerations and Actions related to the Integration of HRBA issues may include, e.g.:

- Assess the potential of women economic empowerment in VACs, as owners, workers and entrepreneurs;
- Tackle VAC from the gender equality & employment perspective; consider experiences from e.g. AgriProFocus (Gender VAC - Practical Toolkit to integrate a Gender Perspective in agricultural VAC development).
- Establishment of a Living Lab pilot (TANZICT) in one of the District Cluster offices following lessons learnt in PFP, emphasising:
    - ⇒ realisation of HRBA as a development result;

⇒ inclusive, participatory and non-discriminatory development processes, which transparently enhance accountability; and

⇒ enhanced capacities of rights-holders, duty-bearers and other relevant responsible actors.

- Scrutinize, update and publish the draft guidelines "Helping the poor to benefit from PFM" (under preparation by MNRT/FBD) to guide PFM facilitators (GoT, NGOs or private sector), to spread PFM benefits as widely as possible.
- Consolidate the pro-poor and HRB training materials used in NFBKP II to educate forestry authorities and local persons.
- Establish a communication/extension strategy using pro-poor and HR aspects as a core message to create awareness and empower people. Sustainable forestry practices should be continuously promoted to safeguard diversity of forests as source of livelihoods, employment and environmental services.
- Socio-economic assessments in new villages to be included in FORVAC, following the model from NFBKP II.
- Pay attention to bioenergy issues (charcoal/fuelwood), promoting options such as woodlands management for sustainable fuelwood production.

5.1.5 Service providers

FORVAC is expected to promote and implement a high number of interventions in many different thematic and geographical areas. Consequently, it is foreseen that a close collaboration with a number of partners and service providers will be required. The Programme Document highlights the following assumption: "A sufficient number of qualified service providers available to provide services to the communities and producer groups in various topics and themes".

Service providers (SP) will be identified and engaged depending upon the specific needs related to the expected outputs and activities within FORVAC. In general, services will be needed along the whole value chain from forests to markets covering different thematic areas, such as: Technical assistance and services to communities and districts; Governance; Management and business development related to wood and non-wood based forest product value chains; Organisational and human resource development; etc.

The work plans should clearly indicate the activities to be carried out by service providers under the supervision and guidance of the FORVAC technical assistance team. In principle, there are two types of service provisions: Services within the responsibilities of the service provider (e.g. District staff and staff from government institutions or agencies); Services contracted ad hoc (e.g. private SP, NGOs, academia, etc.)

Service Providers will be engaged based on specific TOR and agreement modalities (e.g. MoUs, contracts, etc.). Service providers to be contracted should be selected based on open, competitive tenders applying selection criteria assessing the quality and cost of the service using quality-cost based selection criteria.

As a general rule aiming at sustainability in provision of services, whenever feasible, official service providers (districts and institutions) should be encouraged and promoted through institutional strengthening and capacity building.

The Programme exit strategy should include the necessary steps in the transition from ad hoc service provision (with external support) to regular services to be provided by districts, institutions and others (including private sector) according to their areas of responsibilities, such as extension services to communities and forest owners. In this regard, the recipients of services need to assume the cost of these services.

It is anticipated that a wide variety of service providers will be needed considering different sectors (private, public, NGOs, academia, etc.), and the different purposes and levels (local, district, region, national) that will be required. The mix of service providers will vary according to cluster and the following aspects should be taken into consideration:

- Establishment of criteria for SP identification/selection aiming at strengthening the base for sustainability of services post-programme. Suggested criteria could include:
  - Experienced in working with the target group (i.e. so can deliver a service appropriate to the beneficiary level);
  - Willing to deliver the service in project cluster areas (if appropriate);
  - Currently working in the service area (has sufficient knowledge of service area);
  - Already using an HRBA appropriate approach (or willing to include this upon receiving training);
  - If possible/relevant have existing materials for service delivery or that can be adapted i.e. training manuals, existing phone apps, etc.; and
  - Promote and strengthen local/regional service providers.
- The selection of a service provider should include an assessment of whether any existing private sector operator or niche will be disadvantaged (or whether they can be included in the service delivery).
- Ensure that an exit strategy is used from the start and that all interventions will be self-sustaining by the end of the project.

Table 7 provides some indications of the type of service provision that is needed as well as possible providers. Please note that this is not an exhaustive examination of service providers and is limited by the stakeholders visited by the MSA team. It is anticipated that a thorough search for possible service providers is carried out as part of the tasks carried out by the FORVAC team as well as in the training needs assessment activities. Annex 1 details a number of potential service providers covering different thematic and geographical areas, as well as different levels (communities, districts, etc.).

Type of Service Provision	Type of Provider	Example Provider (s)	Further Criteria (if needed)	Location Specific
Governance and regulations	Institutions: Legal and Policy framework officers	FBD, TFS, PO-RALG	Information is targeted to recipient level	National, Regional and District levels
FORVAC's role and modalities	FORVAC partners	Members of SC, District staff, TA-team	Alignment with national priorities	National, Regional and District levels
Information dissemination and extension	Communication specialists	Communication staff (Government. Institutions, NGOs, Private); FORVAC-TA	Focus on networking and synergies	All levels
Organisational and financial strengthening	Various; Tailored support	NGOs, Private, Institutions; FORVAC-TA	Differentiate Village and District levels	Community and district level
Project cycle management	Various; Tailored support	NGOs, Private, Institutions, FORVAC-TA	Focus on best practices	Community, district and institutional level
Planning (LUP, FMP, HP)	Various; Tailored support	District staff, NGOs, Private, Institutions, FORVAC-TA	Simplified planning	Community and district level

Business planning	Various; Tailored support	District staff, NGOs, Private, Institutions, FORVAC-TA	Simplified planning	Community and district level
Harvesting operations, logging	Various; Tailored support	Technical service providers (Training institutes, NGOs, FORVAC-TA)	Low impact focus	Community and district level
VAC development (Timber, NTFP, NWFP)	Various; Tailored support	District staff, NGOs, Private, Research institutions, FORVAC-TA	Focus on best practices and HRBA	All levels
Marketing & commercialisation	Various; Tailored support	District staff, NGOs, Private, Institutions, FORVAC-TA		All levels

Table 7: Summary of preliminary types of service provision

5.2 Interventions (Thematic Areas Output 1)

The Output 1 focuses on "Improved value chains and increased private sector involvement in community and government". Some examples of activities identified in this Output, related to Market System development, are as follows:

- Facilitate establishment/expansion of CBFMs and facilitated negotiations and support for JFM benefit sharing guidelines.
- Support to CBFM and JFM activities based on established VLUPs, FM plans. Train/educate communities on their rights and benefits of sustainable forest management, develop necessary manuals/training materials.
- Selection of VACs to be developed (from production to end-consumer) incl. business potential and feasibility assessment
- Development of financial tool for feasibility calculations, business planning and handbook for VLFR products and training of staff
- Assessment of the demand, supply and prices of forest products in domestic and international markets, including lesser known species
- PPP options for private sector involvement in production forest management
- Support in marketing activities promoting products and services related to PFM
- Capacity building in PFM, LUP, laws and regulations related to VAC

The following suggestions of options in table 8 are grouped under a few thematic areas, to be further developed when the Cluster Coordination Units are in place, and a close interaction with stakeholders is established. It is anticipated that each proposed intervention will need to be further developed along the lines of a concept note. Workshop(s) with potential FORVAC partners could then be facilitated to develop cluster (and/or national) specific approaches and a road map developed.

Thematic area	Intervention
Enterprise / Innovation centres	• Establishment of a regional/district platform for collaboration and interaction, to address local specific production and market interventions. Could be an integrated point for training, storage, sales point, Business Development Services, monitoring, etc. Possible node for a market information system; • Fund raising for new value adding activities. Could include grants and loans from existing service providers (such as TFF) as well as via VICOBAs/VS&L/SACCO. • At VLFR/village level support cluster/group/association/cooperative initiatives with processing and storage facilities, in addition to training as well as capacity building in timber, charcoal and NTFPs and other local specific options. The value addition services included would be situation and context specific e.g. if it is a location where there is sufficient commercially viable timber and no district level sawmills then a multi-group small sawmill could be installed (financed by locally available funds with a contribution from FORVAC for larger scale interventions) within an producer group alliance; • At District/Region level support linkages to industry, e.g. Fundi training in saw doctoring and equipment maintenance; Identification, selection, and training in use new/adequate technology. Showrooms and collaboration between traders, sawmillers, carpenters and other wood processors/users. • Assess possible collection centre/sales and information points outside of Dar es Salaam (or in other main market cities, e.g. Dodoma, Arusha); Could be promoted as PFM market centres. • Base for networking and exchange of strategic market information, connecting supply with demand, and identifying areas of partnerships (multi- and bilateral); FORVAC's MIS could be a starting option for information platform. • Consider options for linking in with existing producer networks such as MJUMITA.
Income generating activities **(Business plans and business skills development in all areas)**	**Wood products** • Value adding of traditional and lesser known species, e.g. consider Mafinga processing industry to further develop Songea cluster products and potentially sell to Dodoma or Dar es Salaam. Starting with primary industry then secondary, e.g. plywood, veneer, particle board, etc., introducing lesser known species. • Cost-efficient options for improved recovery rates (higher timber volume from less log volume). • Assist communities to improve the quality of timber harvested from community forests and link their production with market (demand) • Cooperation with Tanzania Forest Industries Federation (SHIVIMITA) to map needs for improvements in the private sector involvement in forestry and timber trade in areas manages under PFM. • Facilitate market/supply including demand analysis for the forestry production in the project areas.

	• Provide traders with information of available timber (tree species, quantities/qualities, dimensions) and processed wood product (consider a market development campaign. • To understand whether FSC certification is an avenue that should be taken by FORVAC or to ascertain whether they should to collaborate with MCDI and Sound and Fair, it is suggested that there could be a need to undertake a cost-benefit assessment of FSC demand and supply (including for controlled wood) for PFM sourced timber. An alternative approach would be to use the FSC Tanzania standard for sustainable forest management as well as develop an alliance of timber trading groups within a FORVAC district. This alliance could later achieve a group FSC Forest Management (FM) and Chain of Custody (CoC) certificate if the market outlook warranted it and a return on investment could be achieved. ➢ Also consider FSC Controlled Wood Certification to ensure widest possible potential market access; Identify and promote potential Niche products. • Assess the regulations to include limitations to promote sustainable harvesting (including Annual Allowable Cut) for the highest value and most over harvested species from the natural forest e.g. Mkuruti (*Babhia kirkii*), Mkurungu (*Pterocarpus tinctorius*), Paurosa (*Swartzia madagasearensis)* and Mpingo (*dalbergia melanoxylon)*
	Charcoal (Links to charcoal specific intervention in output 2 below) • Support functions could be capacity building, R&D and market information access. This could include relationship-building activities such as association development/strengthening (see further information in section 5.3. • Assess the regulations to include limitations to promote sustainable harvesting approach and developing a grading scheme as well as devising a robust chain of custody system. • Assess cost-efficient options for increased efficiency, e.g. improved / modern kilns, packaging, marketing, and aiming at improved recovery rates. • Consider demand side interventions such as alternative energy and efficient cook stoves • More focus on increased wood utilisation (charcoal production) from harvesting operations. • Consider options for multi-purpose woodlots (including fuelwood/charcoal products), working opportunities for vulnerable groups in plant nurseries, etc. • Consider charcoal from wood alternatives including a briquetting and assessing charcoal options from bamboo.
	NTFP and NWFP • Wide search for NTFP and NWFP opportunities at district/cluster level with special attention to local conditions (constraints and potentials). ➢ Focus should be on products with a high existing or potential profit margins. This would also engage the interest of young entrepreneurs, particularly if they are

	also viewed as innovative. ➢ Consider options such as mushrooms, fruits, and herbs. • Assess the production and market development options for both native and exotic bamboo species. • Promote linkages and opportunities for artisanship or craftsmanship with focus on vulnerable groups. • Consider whether a focus on building enterprise development capacity for beekeeping is sufficient in some areas/situations rather than focusing on product transformation (which could be carried by other partners) • Consider integrated alternatives based on field/Village context, e.g. ➢ Traditional ones, such as charcoal, bee-keeping, medicinal plants, etc. ➢ Woodlots for multipurpose uses (including bamboo and fruit trees), e.g.: fodder trees & shrubs, fuelwood/charcoal, soil conservation, agroforestry, raw material for artisans, etc. ➢ Special attention to include vulnerable groups in economic activities ➢ Evaluate access to special niches, such as eco-tourism, artisan market places, furniture & joinery, etc.
Research Based Interventions	• Research based assessments ➢ A study could be developed which would benefit from the long history of SULEDO as a CBFM and the existence of sample plots. This could examine the benefits and disadvantages of CBFMs including a cost-benefit analysis. There is a question for some stakeholders whether villages have sufficient capacity to manage VLFRs in a sustainable and economic manner. ➢ Cost benefit analysis of illegal trading. To carry out a cost benefit analysis of revenue losses from illegal activities at a pilot site. At the same time investigating the use of penalties and incentives and how these could be developed. The high fees and taxes required in the timber, charcoal and beekeeping sectors make it difficult for small-scale market actors to make a profit when trading legally. • FORVAC could support the development of standards for timber from natural forests for purpose of developing marketing system of natural forest products as part of a lesser known timber species approach

Table 8: Intervention Options under FORVAC Output 1

5.3 Interventions (Thematic Areas Output 2)

The Output 2 focuses on "Improved capacities, monitoring systems, legal and policy frameworks in the forest sector". The main activities identified in this Output, related to Market System development, are the following:

- Comprehensive Capacity Development of relevant stakeholders and development of training materials including both HRBA topics and using an HRBA lens to develop the overall approach.
- Development of a self-sustaining (by end of programme) Market Information System and monitoring systems to fit in with the on-going Management Information System activities.

- Facilitation of interaction between FBD, TFS, DDFO and villages and within/between private sector actors and other stakeholders.
- Harmonisation of PFM practices with regional and central policies
- One approach could be to include promotion and incentives for best practices, and penalties and disincentives for bad and illegal practices.
  - Market penalties/disincentives can be materially-orientated (i.e. money), socially-orientated or purpose-orientated (i.e. political), as well as the related motivations. For example, fees & permits are considered to be high and reduce profitability. There are currently no incentives and no differentiation between size and type of producer and distance; a key cause for illegal and semi-legal market.

The following suggestions of options in table 9 are grouped under a few thematic areas, to be further developed when the Cluster Coordination Units are in place, and a close interaction with stakeholders is established.

Thematic area	Proposed Intervention
Rules and Regulations (governance)	***See also section 5.3.1., which details the proposed intervention more comprehensively*** • Aim to use the Forest Working Group under the Tanzania National Business Council as a springboard to manage and develop change in the rules and regulations. • Harmonise and clarify fees and royalties charged from natural forest and plantation, as well as from VLFR and other forest reserves. • Review, update, promote and apply relevant forest management and harvesting guidelines • Clarify and agree on efficient administration of harvesting hammer and tracking system (study and pilot) • Promote best practises and good governance, with special focus on targeting illegality and unsustainable practices. • Review, update, promote and apply relevant guidelines regarding NTFP and NWFP. • Promote information sharing and communication, including campaigns with focus on forest governance
Charcoal specific intervention (rules and regulations)	• DFM/DFO officers could be facilitated by the FORVAC Cluster Coordinator to network harvesting areas, transporters, wholesalers, retailer and authorities at village, district and national level. • Charcoal producers, transporters and wholesalers associations could be promoted and become key players to curb illegal charcoal and ensure sustainable harvesting and improved business practice. This could be trialled as a pilot activity in one district. • Illegal harvesting control and improved revenue collection and law enforcement coordination can be achieved through: ➢ Formalising the charcoal sector including creation and/or development of associations ➢ Education on sustainability issues

	➢ Increased information sharing and communication ➢ Increased participation in decision making and implementation of the plan ➢ Use of existing network ➢ Support implementation of MoU between PO-RALG and MNRT (including patrols) ➢ Increase regular feedback meetings • Establish areas (and MoUs) to show practical examples of applied best practices in charcoal management, and experience exchange, in different stages of the charcoal VAC.
Development of PFMs	• Prioritise preparation of Village Land Use Planning (VLUP). A key area of (FORVAC) Programme support, aiming at enabling the environment for value chain development, is to address the lack of VLUPs. The main steps in this regard could include the following: ➢ Building capacity aiming at raising awareness, empowerment, commitment and skills, with focus on local leaders (at village level) and local officials (at Ward and District level). ➢ Creating simple and practical land-use plans, aiming at formalizing specific uses of different areas within village land, distinguishing between individual and communal use areas, based on participatory community surveys to record basic socio-economic and natural resources data, and potentialities for local economic development, including value chains. ➢ Setting up registries and demarcating parcels and areas for different land uses, in consensus with neighbours. ➢ Settling disputes in coordination with permanent dispute-resolution tribunals to be established at different levels. In most cases, Village land committees are able to resolve the majority of disputes relatively quickly. • Elaboration of Forest Management Plans, including Forest Resource Assessments and Harvesting Plans • Promotion of CBFM and registration of VLFR, based on priority criteria established in consensus with Districts and Villages, and focusing on potentialities for VAC development and income generating activities. • Develop local skills (Districts and VNRCs) in planning process: Land use plans, Management plans, Harvesting plans, Harvesting operations, Commercialisation, Monitoring and Reporting. • Establish areas (and MoUs) to show practical examples of applied best practices, and experience exchange, in different stages of Forest Management, and VAC development.
Financing	• Identify funding options (at local, regional and central levels) with focus on strengthening local stakeholders and priority actions, such as: ➢ Training and capacity strengthening according to specific needs

	➢ Need to improve technology in line with government policies (industrialisation) and use grants and funds. • Assess what is available and support stakeholders to build capacity to develop proposals, including business and investment plans. • Put emphasis on small-scale industrialisation, particularly with groups of artisans, and local skilled groups. It is likely the Tanzania Forest Fund (TaFF) will move towards encouraging this type of grant in early 2019. • Assess accessibility and requirements from banks (Postbank, NMB, etc.), in relation to Business plans and business skills development; Investments in e.g.: ➢ Operations/production ➢ Transformation/value addition ➢ Promotion/commercialisation • Establish or identify funds for promotion of innovative initiatives, e.g. awards, scholarships, etc. Could be within the Corporate Social Responsibility that many companies are implementing. • Promote Partnerships: Public-private; Public-Community; Private-Community, and all three partners.

Table 9: Intervention Options under FORVAC Output

5.3.1 Rules and Regulations (governance)

Developing Forest Law Enforcement

National level:

- 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 and areas allocated to JFM.
- Awareness raising/training on development of Timber Legality Standards.
- Improvement of efficiency in timber checkpoints and transport monitoring system:
  - ➢ Support measures to establish and install electronic devices at the checkpoints to monitor the movement of timber (electronic wood tracking system). In this context review the feasibility of the electronic timber tracking system introduced and piloted by TRAFFIC in the checkpoints of Kibiti, Vikindu, Ikwiriri, Nangurukuru and Nyangao.
- Setting up a system/procedure (illegal logging information system, the information dashboard for reporting illegal activities) for communities and the private sector to provide information on illegal activities to the forest authorities.

Project clusters/districts level:

- Awareness raising/training on development of Timber Legality Standards.
- Apply the illegal logging information system/dashboard (involving communities and the private sector as informants) to the project districts.

- To reduce a number of checkpoints, in selected district(s) work towards a pilot merging of TFS and District council checkpoints.

Developing Forest Governance

- In cooperation with a relevant service provider, facilitate translation into Kiswahili and disseminate in the districts and FORVAC villages any land, forestry trade and PFM related regulations and guidelines in a format and style that is appropriate for the each type of stakeholder.
- Facilitate discussion on benefit sharing in CBFM/JFM.
- Assist 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.
- Support to Independent (third party) Forest Monitoring (IFM) to ensure the effective implementation of laws and regulations relating to forest management, with the overarching objective to reduce illegality and corruption in the forest sector, and to promote transparency and sustainable forest management.
- Support TFS to develop guidelines for private sector involvement in natural forest management.
- Support measures to enhance transparency of TFS and LGA planning meetings and the setting of revenue collection, and harvesting targets.

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Annex 1: Key Stakeholder Organisations and Projects

This list of stakeholders includes:

1. Stakeholders and actors in the market system within FORVAC context
2. Main actors and collaborators at local level
3. Possible synergies and potential collaborators/service providers

1. Stakeholders and actors in the market system within FORVAC context

Actors/S-Holders	**Roles / responsibilities**
Ministry of Natural Resources and Tourism	Overall coordination of the forestry sector, undertaking the following functions: 1. Develop sector policy, legislation and guidelines; 2. Monitor the development of the sector; 3. Oversee trees and forests outside gazetted areas and in private lands; 4. Promote participation of S-holders in forestry and forest industries development; 5. Create enabling environment for collaboration with National, Regional and International institutions in forestry development; 6. Support national capacity building in forest education, research and extension services; 7. Provide leadership in resources mobilization; 8. Establish entities and mechanisms that streamline forest and forest industry management; 9. Ensure compliance with national and international standards and guidelines; 10. Develop collaborative mechanism with relevant entities; 11. Ensure inter-ministerial coordination and compliance on all forest matters; and 12. Promote partnership with private sector.
Key sector ministries (e.g. Lands, Energy, Water, Environment, Agriculture)	These ministries perform activities, which have direct impact to the sector. They will:- 1. Provide alternative energy sources; 2. Ensure proper land use management plans; 3. Oversee compliance of environmental impact assessment; 4. Harmonize extension services, training and research; 5. Ensure management of water catchment forests; 6. Collaborate in climate change adaptation, mitigation and landscape restoration; 7. Ensure enforcement of forest laws; and 8. Promote sustainable agriculture practices.
Government Institutions, e.g. TAFORI, Police, TRA, Finance Inst.	1. Coordinate and collaborate in provision of extension services, training and research; 2. Ensure forest law enforcement; 3. Assist in monitoring and evaluation; 4. Provide support in collection and dissemination of information; 5. Assist in licensing of industries and trade in forest products; 6. Provide support in forest conservation and management; and

Actors/S-Holders	Roles / responsibilities
	7. Create enabling environment in forest investments.
Authorities and Executive agencies, such as Tanzania Forest Services Agency (TFS), Eastern Arc Mountains Conservation Endowment Fund (EAMCEF), Tanzania Tree Seed Agency (TTSA), and Tanzania Forest Fund (TaFF)	1. Manage national forest reserves ; 2. Undertake extension services; 3. Ensure supply of quality forest products and services; 4. Issuing licenses, permits, certificates and ensure compliance on forest products utilization; 5. Provide forest law enforcement; 6. Conduct monitoring and evaluation; 7. Establish and manage natural and forest plantations, and apiaries; 8. Collect forestry revenues; 9. Provide quality tree seeds and other propagating materials; 10. Develop institutional capacity in terms of human resource, finance and infrastructure; 11. Develop collaborative mechanism with relevant entities; and 12. Create income generating opportunities.
PO-RALG Local Governments (Regional, Districts; Wards)	1. Coordinate and provide extension services; 2. Undertake revenue collection; 3. Manage local government forest reserves; 4. Ensure forest law enforcement; 5. Establish new local government forest reserves; 6. Promote tree growing; 7. Support communities in establishment and management of village land forest reserves; 8. Collaborate with central government in management of national forest reserves; 9. Undertake monitoring and evaluation; 10. Ensure capacity building and awareness for staff and local communities; and 11. Promote partnership with private sector.
Local Communities	1. Sustainably manage forest resources in their area of jurisdiction; 2. Recognize and support traditional communities; 3. Participate in joint management of forests; 4. Participate in tree growing programme; 5. Provide farmer-to-farmer advice; 6. Collect revenues; 7. Formulate and enforce by-laws, and 8. Establish forest-based income generating activities.
NGOs, CBOs, Faith-based Institutions, Mass media and Political Parties	1. Create awareness and advocacy; 2. Facilitate technical assistance, training, research and technology transfer; 3. Provide financial support on forestry activities; 4. Promote gender participation and youth involvement in forestry; and 5. Sensitize investment in forest industry and trade.

Actors/S-Holders	Roles / responsibilities
Private sector	1. Invest in forest industry; 2. Create partnership in management of conservation areas; 3. Provide employment opportunities; 4. Transfer sound production and processing technologies; 5. Produce and add value on wood and NWFPs; 6. Conduct market research of forest products and services; 7. Conduct sustainable harvesting and utilization of wood and NWFPs; 8. Create awareness and support outreach programme; 9. Solicit funds for nvestment in forest industry; 10. Promote urban forestry and Eco-tourism development; and 11. Promote Public-Private Partnership arrangement in natural and forest plantations.
Research, Education, Training	1. Higher Learning Institutions particularly the College of Forestry, Wildlife and Tourism of Sokoine University of Agriculture provide professional education and research. 2. Training at technical and vocational levels is provided by the Forestry Training Institute (FTI) and Forest Industries Training Institute (FITI). 3. The Government has continued to strengthen forest research through TAFORI. 4. Vocational training institutions, such VETA, FDC and others

2. Main actors and collaborators at local level

Actors	Roles / responsibilities
Forestry and Beekeeping Division	Policy and regulation in forestry and bee resources; supervision of law enforcement; technical guidance, in charge of NFP, training institutions (FTI, FITI); coordination of the efforts in climate change mitigation. Revision of policies and strategies; technical guidelines, methodologies for harvesting and auctioning developed; capacity development and information management
Tanzania Forest Service (TFS)	In charge of central government forest reserves and bee resources in all land categories; collects revenue for FBD; markets forest and bee products. Clarification of royalty rate determination principles and mandates between TFS and districts; harmonisation of different acts to prevent illegal logging on general lands; forest governance
Regional Administration and Local Governments) District Council and District technical staff	In charge of forestry and other natural resources management, coordination and monitoring activities. Technical assistance/ extension services to VNRC's; Oversight that district councils are run based on democratic principles. Participation of district PFM teams in forestry and bee resources related activities; either through participating in forests resource assessments, village land use planning or

	monitoring activities in the village levels. Provision of site-specific knowledge and guidance
Village Councils and Village Natural Resource Committees, and producer groups.	VLFRs are under the VC jurisdiction and managed by VNRCs. Villagers can establish such institutional arrangements which can make business; e.g. cooperatives and companies. Monitoring and facilitation of CBFM for increased income and employment through value chain development. Responsible management of village forests. Income generation and benefit sharing
Entrepreneurs, traders' associations and business communities	Private businesses and entrepreneurs are active in the value chain from the communities and further process them into high quality timber, furniture and other products. Charcoal producers sell their products to the organised traders who deliver the products to the markets. NTWPs are harvested and sold in the local, district and national markets.
Service providers, such as NGOs, research institutions and their consulting companies	Provide services along the value chain from forests to markets. Improved skills and opportunities to provide assistance and services to the communities and districts. The Programme orientation to VLFR Governance and management and to wood and non-wood based forest product value chains will assist them to focus their organizational and human resource development activities to developing additional services to cater for the expanding market.

3. Possible synergies and potential collaborators/service providers

Possible collaborators / Service providers	**Current and/or potential roles/interventions**
BTC	BTC has also generated relevant experiences to share from the Beekeeping Programme in Kigoma Region; a replicable mode of sustainable beekeeping development; processing, packaging and marketing of bee products, doing business with traders, developing improved harvesting and pre-processing methods.

Possible collaborators / Service providers	Current and/or potential roles/interventions
CARE	A collaborative alliance with WWF focusing on Conservation and Livelihood interventions. CARE interventions include development issues, VSLA, climate/agriculture and conservation/agriculture to reduce shifting cultivation. Participatory Forest Management includes mainly CBFM in 6 villages (5 have LUPs and the final is in process). Recently, one village managed to harvest timber and earn more than TZS 50million. Gender is a cross cutting issue and they use the CARE framework for gender (on website)
Climate Change Impact and Adaptation Programme (CCIAM)	NORAD-supported research programme (2009-2015) with Sokoine University of Agriculture (SUA), University of Dar es Salaam (UDSM), Ardhi University (ARU), and Tanzania Meteorological Agency (TMA) and Norwegian University of Life Sciences (UMB). Some of the studies completed during CCIAM (e.g. on economic assessment of climate change impacts) offer relevant insights for the Programme.
Eastern Arc Mountains Conservation Endowment Fund (EAMCEF)	The Eastern Arc Mountains Conservation Endowment Fund (EAMCEF) is a Trust Fund that was established and functions as a long-term and reliable funding mechanism to support Community Development, Biodiversity Conservation and Applied Research Projects, which promote the biological diversity, ecological functions and sustainable use of natural resources in the Eastern Arc Mountains of Tanzania.
Empowering Communities through training on Participatory Forest Management, REDD+ and Climate Change Initiatives (ECOPRC)	A 5-year training programme (2012-2016, with a possible extension) funded by NORAD; beneficiaries current and future students of FTI and village and community leaders responsible for PFM, REDD+ and climate change initiatives; lessons, experiences and pre-tested packages for training members of village environment committees (VEC) and Village Natural Resource Management Committees (VNRCs) and all resource persons at village level.
Extractive Industries Transparency Initiative (EITI) and Tanzania Extractive Industries Initiative (TEITI)	TEITI pursues improved transparency of the extractives sector through increased public access to comprehensive, timely and quality information on Government revenue; increased disclosure of revenue allocation and spending; Increased accountability leading to reduced actual and perceived corruption; and institutionalisation and sustainability of EITI in Tanzania. Commissioned a Scoping Study of including forestry sector in Revenue Disclosure through TEITI

Possible collaborators / Service providers	Current and/or potential roles/interventions
Food and Agriculture Organization (FAO)	FAO have experience of intervening in many of the areas that FORVAC will be working in. Out of four priority areas, two are relevant for the programme: (i) Improving market access for increased incomes; (ii) Strengthening resilience to natural and man-made threats and crises such as climate change impacts; and unsustainable management of natural resources. FAO would potentially be willing provide FORVAC with a needs assessment with regards to social protection issues. They also have experience of working with TASAF as well as having a specific focus on youth based enterprise development.
Forest Development Trust, FDT	The Forestry Development Trust was established by the Gatsby Charitable Foundation in 2013 as an independent Tanzanian institution with a long term vision for development of the commercial forestry sector. In order to increase household income from timber resources in the short-term and increase asset valuations of timber resources in the medium term, the Trust aims to strengthen the ability and motivation of forest institutions (private and public) to provide services to growers that collectively improve wood volumes, quality and market access. Specifically, the Trust works to increase demand for, and supply of, an improved genetic resource base; increase demand for, and access to, improved input and output markets; and strengthen the enabling environment through sector insight and stakeholder coordination.
Forestry Training Institute (FTI) Olmotonyi, Arusha	FTI: is government owned organization under Ministry of Natural Resources and Tourism (MNRT) established in 1937 as a Forestry Training School. Since its establishment and particularly from the 1980s the Institute has grown in both size and quality. Its services have reached many countries in Eastern, Western, Central and Southern Africa. The Institute currently offers Basic Certificate (NTA 4) in Forestry, Technician Certificate (NTA 5) in Forestry and Ordinary Diploma (NTA 6) in Forestry as well as short courses and consultancies in environmental related fields including beekeeping and climate change.
Forest Industries Training Institute, (FITI) Moshi	FITI is a government owned organization within MNRT. The overall objective of the Institute is to train middle cadre workers needed in the running of state owned industry known as Tanzania Wood Industry Corporation (TWICO). It is registered by the National Council for Technical Education (NACTE). The Institute currently offers Basic Certificate (NTA 4) in Forest Industries Technology, Technician Certificate (NTA 5) in Forest Industries Technology and Ordinary Diploma (NTA 6) in Forest Industries Technology as well as short courses and consultancies in all environmental and wood industries.
Vocation Education Training Authority (VETA)	The mission of VETA is to ensure provision of quality Vocational Educational and Training that meets labour market needs, through effective regulation, coordination, financing and promotion in collaboration with stakeholders. VETA provides training through 29 vocational training centres and institutes that it owns. Also, it provides training to vocational teachers through its Vocational teachers Training College in Morogoro. VETA coordinates more than 700 VET institutions owned by other VET providers in the country, providing training in form of long courses, short courses and tailor-made courses. VETA conducts Labour Market Surveys to determine skills demanded by labour market.

Possible collaborators / Service providers	Current and/or potential roles/interventions
ICRAF programmes on value chain development	World Agroforestry Centre, ICRAF, has generated experiences and lessons from development of Non-Wood Forest Product value chains in Tanzania, including from identifying new Wood- and Non-Wood Based value chains; can be considered as a Service Provider / partner for e.g. provision of inputs in forest resource assessments and identifying new NWFP value chains
Kilombero and Lower Rufiji Wetlands Ecosystem Management Project (KILORWEMP)	Belgian Technical Cooperation (BTC) supports several community-based wildlife, wetland and beekeeping initiatives. KILORWEMP experiences in sustainable management of natural resources and improved local governance and coordination of environmental management systems will be valuable for the Programme; jointly with Kilombero Valley Teak Corporation has explored opportunities to develop a community oriented collaborative management scheme of an 8,000 ha block of KTVC forest. KILORWEMP has with NFBKP II reviewed miombo management and forest management planning standards.
Mainstreaming sustainable forest management in the miombo woodlands of western Tanzania	UNDP (2012-2017); strives to improve sustainable use and management of natural resources derived from Miombo woodlands and to strengthen the skills and capacities for Community Based and Joint Forest Management; the lessons learned will contribute to improving the sustainability of Miombo woodlands; valuable lessons and experiences that would be applicable in Programme area (e.g. miombo regeneration and silvicultural regimes); also promotion of sustainable charcoal production
Mama Misitu Campaign	Advocacy and awareness raising campaign facilitated by Tanzania Natural Resources Forum (TNRF) on governance and forest management ongoing in southern Tanzania (second phase 2012-2017); expected to improve transparency and accountability in the forestry sector and reduce illegal harvesting; has accumulated valuable lessons on addressing key governance issues in forest-adjacent communities and in awareness generation on economic value of forest resources.
Mpingo Conservation and Development Initiative, MCDI	MCDI works to conserve endangered forest habitats in East Africa by promoting sustainable and socially equitable harvesting of valuable timber stocks and other forest products. In particular it is involved in sustainable harvesting of the African Blackwood tree (Mpingo); has focus on timber and forest certification, combining REDD and CBFM, and benefit sharing with local communities; implements a FSC certificate for community managed natural forests with international market access for certified timber; both NFBKP II and LIMAS have used MCDI as a Service Provider in various forest planning and management assignments.

Possible collaborators / Service providers	Current and/or potential roles/interventions
Private Forestry Programme (PFP) – Panda Miti Kibiashara	Joint programme of MNRT and MFA working on the development of sustainable and high-quality tree growing and strengthening of private plantation –based forestry value chains. experiences in developing enabling policy development and in SME development and forestry value chains will be useful; the concept of developing on-site delivery models for vocational short- courses in forestry (PFP in collaboration with FTI, FITI and VETA) may be applicable for training of managers and users of VLFRs and other reserves; elements of a multi- stakeholder approach (PPP concept) shared by PFP and the Programme. The second phase of PFP is planned to begin in 2019.
SHIVIMITA	The Tanzania Forest Industries Federation, private sector, forest industry and other related bodies. SHIVIMITA is a member association, aiming at establishing relationships within the forestry sector with focus on developing long-term collaboration, as well as business-to- business cooperation promotion. Another objective is to increase the capacity of Tanzanian forest industry SMEs regarding effective business management, production and enterprise growth issues.
Sokoine University of Agriculture (SUA)	SUA is best known for offering courses and programmes widely in a field of Agriculture, Veterinary Science, Forestry, Animal Science, Wildlife Management, Tourism Management, Environmental Science, Food Science, Natural Resources, Nutrition, Rural Development, since its establishment. SUA has a strong focus on Technology Transfer and the Consultancy Section deals with all aspects and matters related to Technologies and Consultancy services. SUA has been offering consultancy and advisory services through the college-based consultancy wings. SUA is combining applied research in e.g.: Development of Bamboo value chain; Applied research in wood technology; Tailored training courses; Charcoal applied research; as well as Climate Change aspects.
Tanzanian Innovation Systems (TANZIS)	A joint programme of MFA and Ministry of Education, Science and Technology to develop Tanzania's innovation ecosystem. The Tanzania Innovation Support Programme (TANZIS) builds on activities, results and experiences of the Information Society and ICT Sector Development Project (TANZICT, 2011–2017). TANZICT provided experiences and approaches from the living labs concept in entrepreneurship training. Possibility for a partnership in Mtwara-Lindi regions in SME development and particularly in furniture industry would be useful in value chain development.

Possible collaborators / Service providers	Current and/or potential roles/interventions
Tanzania Forest Conservation Group, TFCG	TFCG is working on Tanzania's forests in different ways: Conservation; through training, dialogue and empowerment we provide individuals and local institutions with the skills and capacity to sustainably manage the forests around them. Development; promoting more sustainable livelihood options for people living near forests. Communication; working with the media, schools and local artists we encourage communication and learning about the forests. Advocacy; advocating for improvements in forest governance and policy at local, national and international levels. Research; improving knowledge and understanding of Tanzania's forests and how they can most successfully be conserved. Networking; working closely with many partners including local communities, local and national government, development partners, private sector, research institutions and other civil society organisations and networks.
Tanzania Forest Fund (TaFF)	TFF is a Conservation Trust Fund established by the Forest Act Cap. 323, as a mechanism to provide long term, reliable and sustainable financial support to Forest Conservation and Sustainable Forest Management (SFM) in the Country. TFF is a Public Fund which was made operational in July 2010 as a Not-for-Profit organization governed by Board of Trustees. The main intent of establishing the Tanzania Forest Fund is to mobilize and provide stable and long term sources of funding for conservation and sustainable management of natural resources in Tanzania.
Tanzania Natural Resources Forum, TNRF	TNRF is a collective civil society-based initiative to improve natural resource management and conservation in Tanzania by addressing fundamental issues of governance. TNRF promotes community based natural resource management (CBNRM) as the focus for strengthening citizens voice in the forestry, rangelands, wildlife and fisheries thematic areas across the country and at community level.
The Community Forest Conservation Network of Tanzania, MJUMITA	Locally known as Mtandao wa Jamii wa Usimamizi wa Misitu Tanzania (MJUMITA) is a network of community groups involved in Participatory Forest Management (PFM) in Tanzania. The network provides a forum for capacity building, advocacy and communication for these groups. The network has provided support to communities to demand and defend their forest rights where these are being threatened including in cases where private sector companies have attempted to take community forests.
The Institute for African Leadership (UONGOZI Institute)	"Uongozi" means leadership in Kiswahili, and inspiring and strengthening leadership is the core purpose of our organisation. Based in Dar es Salaam, Tanzania, UONGOZI Institute is dedicated to supporting African leaders to attain sustainable development for their nations and for Africa. Uongozi seeks to inspire leaders and promote the recognition of the important role of leadership in sustainable development: Leadership as the key to achieving sustainable development; The development of a leader requires specialised grooming; An African model of leadership is vital for achieving the most favourable development outcomes for Africa. The Institute is an independent government agency established by the Government of Tanzania and supported by the government of Finland.

Possible collaborators / Service providers	Current and/or potential roles/interventions
TRAFFIC, NGO	TRAFFIC has offices in three African countries, including Tanzania. Works co-ordinating wildlife trade action across Central, East and Southern Africa. Focuses on combating poaching and over-exploitation of natural resources. Forests are facing rampant levels of illegal logging and over-exploitation. TRAFFIC runs numerous projects in Africa, simultaneously assessing levels of wildlife trade, developing innovative approaches to tackling wildlife crime, and supporting transformative regulatory change that benefits wildlife and sustainable human development.
WWF Tanzania,	WWF Tanzania has been developing and promoting community forest concept with its local partners (MCDI, MJUMITA, District Councils) for over ten years. At the moment, WWF with MCDI have extended to community forestry to four districts in southern Tanzania: Tunduru and Namtumbo Districts in Ruvuma Region, and Kilwa and Rufiji Districts. WWF Finland has supported WWF Tanzania with MFA funded Partnership programme since 2013 as part of the WWF's regional forest programme. WWF Finland facilitated the engagement of the regional programme to the investors in 2014 which resulted in the cooperation with Finnfund. The joint value chain analysis of community forest was conducted in 2016. The work around tackling illegal timber trade focuses across Eastern Africa and is coordinated from the WWF's Tanzania's office.

Annex 2: Market Actors and Stakeholders Interviewed

Organisation	People met
MCDI, Kilwa	Jasper Makala, CEO
Nanjerinji Village	Village Council and Village Natural Resource Committee
Sound and Fair	James Laiser (Director) and Deogratius Ndossi (Site Manager)
Ruangwa	Departments (Planning, Community Development, Trade, Cooperative, Legal, Natural Resources including TFS at District level)
Namtumbo District	Departments (DFM and District Beekeeping Officer)
Songea	Mr Charles Africanus, Regional Natural Resource Officer
Nyasa	Boat making group
Plantation Forestry Programme	Michael Hawkes, CTA
Tanzania Forest Fund	Chairman of the Board (Prof R.C. Ishengoma)
Kilombero Teak Valley Copany (KVTC), Ifakaram	Hans Lemm, Chief Executive Officer
President's Office Regional Administration and Local Government, Dodoma	Mr Stanford Kwayu (PO-RALG) and Husna Kandoro (ALART)
VETA, Manyara	Mr Felix Simon Olenduki, VETA Principal Manyara
National Charcoal Taskforce Chairman met in Arusha	Prof J.F. Kessy, Principal College of Forestry, Wildlife and Tourism (CoFWT)
Forest Training Institute	Mr Kashidye Almas (ECOPRC Manager), Richard Gilliba (ECOPRC Training Coordinator), Juma Stephen, Dr Zakaria Lupala
Forest Industry Training Institute	Eng. F. Mnandi (Ag Principal), Cathbert Naburi (Tutor in Sawmilling and Ashiri Kilemile (Tutor Business Unit Manager)
Handeni District	Departments (Planning, Community Development, Trade, Cooperative, Legal, Natural Resources including TFS at District level)
Kilindi District	DFO and DFM
SULEDO	Zonal Executive Committee (Chairman, Secretary, Accountant and two members)
WWF	Mr Simon Lugandu, Dr Laurence Bwambo and Mwanjelwa
FAO	Flora Mnyamba, Consultant in Social Protection
Tanzania Wood Federation (TAWOFE Carpentry)	Pantaleo Banzi – Spokesman, Alfred Waidi -Chairman and Afred Ruta – Secretary
TFS (Timber utilization)	Mwanahamis Mapolu (Beekeeping Section), John S. Olom – Licensing Section and Selewin Regie - Licensing
Care International in Tanzania (Ada Estate Kinondoni)	Thabit Masoud - Director NR sector Christina John - Project Manager, CARE-WWF Alliance Marry Ndalu- Gender Specialist
Timber private sector and exporters	Mr Mzirai Director of MICO Import and Export Co. Ltd and member of National Tree Planting Committee and Chairman of Timber Exporters Association
Tanzania Honey Council	Linus Gadi – Chairman and Dr Othman Member
Food and Agriculture	Geofry Bakanga – National Natural Resource Management Officer

Organization of the United Nations	and Ajuaye Sigallah - National Programme Officer, Value Chain Development and Youth Employment)
Sales contact for SULEDO	Ibrahim
Mama Msitu, Arusha	Mr Siang'a
TFCG/MJUMITA	Mr Charles Meshack and Theron Morgan-Brown
National Construction Council	Dr Matiko Samson Mfuri Chief Executive Officer and Moses Laurence
TAFORI	Dr Siima Bakengesa (for Director General) Dr Pilly Kagosi (Senior Research Officer) and Neuman Amanzi
SUA	Prof F. Makonda, Head Department of Forest Engineering and Wood Sciences Prof G. C. Kajembe – Forest Resource Governance
Holtan construction company	Rober Scheltens, Chief Executive Director
(Paula enterprises) working with whole value chain	Hashim Gao
Scan Tanzania Co.Ltd/Chamber of Commerce	John Nkupama, General Manager Scan Tanzania
Sound and fair marketing	Lisa Tom
TIMBER private sector and exporters	Ben Sulus

Annex 3: National Policy Framework for Forest Policy Implementation

Since the late 1980's Tanzania has been in the process of developing a policy framework for Community Based Natural Resources Management (CBNRM). The importance to engage in citizen participation is recognized as a key feature of its long-term development and poverty reduction strategy (referred to as MKUKUTA). The policy of Decentralization by Devolution (D*D) has been seen as of key importance to pass more responsibility to the appropriate decision making level: the Local Government Authorities (LGA), both at district and village level.

The following laws have acts that can be used to support CBFM:

- National Forest Policy 1998 (under review)
- National Forest Programme
- National Beekeeping Policy 1998 (under review)
- Wildlife Policy (2007)
- Land Policy (1997)
- Environment Policy of 1997
- Forest Act No 14 of 2002
- Forest regulation of 2004
- Beekeeping Act No 15 of 2002
- Environment Act of 2004
- Land Act No 4 of 1999
- Village land Act No 5 of 1999
- Land use planning Act No 6 of 2007
- The Wildlife Conservation Act of 2009
- Environment Act No of 2004
- The Local Government (District Authorities) Act no 7 of 1982

Local Government Policy (1990): The policy, Act (1982) and Village Land Act (1999): under the Local Government Policy, part of the Local Government Reform Program (LGRP), the aim is for all sectors to devolve responsibility for sector management to the lowest appropriate authority, the local government both at district and village level. The Local Government Authority Act 7 and 8 (1982), empowers the Village Government to create functional committees[35]. The formation of these committee institutions follows the laid down sector legislation and the similarity in the process is outlined and harmonized in 6 basic, but universal steps to achieve CBNRM and the District Facilitation Teams (DFT) are mandated to support this process (see table 1).

[35] In this case for communities to manage natural resources like wildlife (WMA), wetlands (WUG), forests (CBFM and JFM) and fisheries (BMU),

Legal Mandate/Obligations of Districts to CBNRM

a. Providing extension services.

b. Leading other agencies in the implementation of this policy in their areas of jurisdiction.

c. Formulating and enforcing by laws (in line with sector Act).

d. Providing technical support and conservation education to villages.

e. Preparing sound physical and development plans.

f. Promote wise use and engage communities and user groups in sustainable investments (micro-projects).

National Lands Policy (1995) (NLP): The main objective is to promote and ensure wise use of land, guide allocations, prevent degradation and resolve conflicts over boundaries and land use zones. On the issues related to environmental management, this policy is one of the major guiding principles to local authorities. Village Councils are responsible for looking after village lands on behalf of the Village Assemblies. Villagers hold rights called "customary right of occupancy " which means that if they have lived on the land for many years they have rights to it. The policy tries to protect the environment and natural resources. It reserves village lands and some communal areas for conservation purposes (e.g. forests on village land).

For the bottom-up planning of NRM the following aspects are of importance:

Land Use Planning (LUP): The Land Act favours a participatory land-use management approach whereas villages land use management committees (VLUM) prepare Village land Use Plans (VLUP) which once approved by the village assembly (VA) and registered by central levels, should provide improved tenure security and the possibility to enact by laws on land use, however, use of NR on land such as trees, water and wildlife, are still governed by sector user rights, and need to be applied for separately. The Land Use Planning Act, No. 6 of 2007 creates the National Land Use Planning Commission (NLUPC) in charge of consolidating national and zonal LUPs. Land Use Planning authority is vested at the Village, Ward, District and Regional levels.

LUP Procedures Similarity to 6 Steps to CBNRM

a. Establish a Village LUP Committee
b. Establish village boundaries, update previous LUP and maps.
c. Undertake Participatory Resource Assessment and resource use map.
d. Prepare LUP (with 5-10 year projections to safeguard population growth and needs).
e. Prepare by laws.

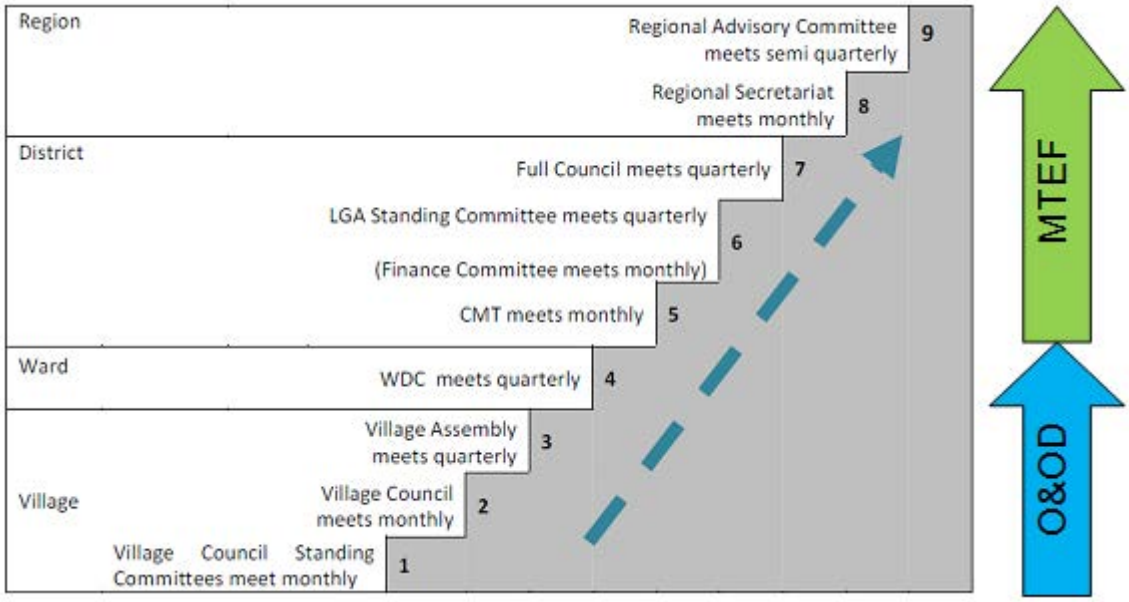
Although procedures to ensure devolution vary, they can be summarized in 6 basic steps:

The 6 Universal Steps to CBNRM (AFM Manual, 2013):

a. Prelude: Natural Resource inventory included in District Register and Village issues minutes to participate in CBNRM.
b. Step 1: Form a user group or CBO (i.e. either through VNRC or CBFMG, BMU, AA, WUG/A, etc).
c. Step 2: Measure resource site boundary and mark on PRA sketch map or LUP.
d. Step 3: Undertake participatory resource assessment, identifying site threats & future resource needs (eg through O&OD or LUP).

e. Step 4: Develop site management plan integral to Village Development Plan (VDP) and part of Land Use Plan (LUP).
f. Step 5: Incorporate sustainable/wise use principles into village by-laws, secure District Council approval.
g. Step 6: Gazettement, licensing or authorisation of user rights or joint management agreements (eg WMA).
h. Post-Facto: Village implements micro-projects as per management plan.

Bottom-up Planning: Government planning cycle calls, each year for a planning process that starts with a Participatory Rapid Appraisal (PRA) technique known as Opportunities and Obstacles to Development (O&OD)36 at the village level. This is designed to take stock of the VLUP, assess progress made last year, identify new development issues and pass these up the administrative ladder from CBO to District Council for inclusion in the District Development Plans (DDP). Here in the LGA, the O&OD process gives way to the Medium-Term Expenditure Framework (MTEF), a means by which projects enter the DDP for funding approval by District Council, and upward transmission to PMO-RALG, sector ministry and finally, Parliamentary approvals. For CBNRM to work, this process must be made more effective, consultative and functional. The toolkit is well described in the PO-RALG (2013) AFM Manual for Participatory Forest Management and Sustainable Wetlands Management Program.



In summary: it can be noticed that despite efforts to harmonize, the NRM policy framework suffers from its complexity, the multiplicity of individual sector policy documents and regulations, and the lack of capacity in LGA to enforce these effectively at all levels, especially village and district level. This produces overlapping responsibilities, lack of harmonization and at some levels confusion for decision-making. The situation is further

[36] In line with the LGRP, the O&OD process was initiated in 2002 to facilitate community people to plan , implement and own their community plans with the aim of shifting the planning process from top-down to bottom-up. The O&OD is presently embedded within the LGRP II framework and recognized as a core process to promote citizens' participation in local development and accountable and transparent local governance.

compounded by a low political support for CBNRM evidenced by a low (less than 0.5%) budget allocation for NRM in the DDP and by delays at District Council and Central Ministry in issuing or gazetting user rights.

Institutional framework

NRM policies are being implemented under a complex institutional framework, of which the following are relevant to this project:

The Ministry of Natural Resources and Tourism (MNRT): plays a leading role in NRM, with the vision: *"To conserve natural and cultural resources for the benefit of Tanzanian's while leading in contribution to the economy".* The MNRT Strategic Plan (2013-16), aims at *"Sustainable conservation of natural and cultural resources and development of tourism for the well-being of the nation".* The medium term plan of the MNRT is to create a conducive environment for participation of stakeholders in conservation of wildlife, forestry and wetlands, tourism and beekeeping, both inside and outside of protected areas. The plan addresses duplication of efforts between local and central government levels, and aims at greater synergy between sector policies.

President's Office - Regional Administration and Local Government (PO-RALG): Under Local Government Policy, PO-RALG has a unit for Sector Coordination of D*D., The devolved, institutional framework involves 5 levels whose roles and responsibilities, which are well elaborated in the PO-RALG (2013) AFM Manual for Participatory Forest Management and Sustainable Wetlands Management Program:

a. **Regional Secretariats (RS)** are responsible for promoting the implementation of DeNRM in their Districts, coordinate, synchronizing and consolidating planning, budgeting and reporting, in line with national guidelines. They also scrutinize and consolidate district work plans, budgets, physical and financial reports for formal submission to PO-RALG, and onward to Treasury and donor. They monitor and evaluate District implementation, consolidating M&E Reports for PO-RALG, and provide technical support to their Districts. Inter-district coordination takes place at the level of the Regional Coordination Committee (RCC) chaired by the Regional Commissioner, attended by DEDs, DCs, District Council Chairman and Members of Parliament.

b. **Local Government Authorities (LGA)** are mandated to implement the D*D policies as related to Decentralized Natural Resource Management (DeNRM). The District Council is the LGA political driver and decision-making body that must ensure that natural resources are taken into consideration in all Village (VDP) and District Development Plans (DDP). The Councillors are the ones that allocate funding according to economic and bio-diversity importance of the resource but are often influenced by other political development agendas which are perceived more important to poverty reduction than NRM. They are supported by a technical advisory body, the District Facilitation Team (DFT), made up of specialists in the various sectors. District Councils, through the appropriate District Consultative Committee (DCC), supervise the implementation of all plans for development in their respective areas; they approve by-laws made by the village councils and co-ordinate plans, projects and programmes for the villages within their area of jurisdiction. Apart from the DCC, there are committees for finance, administration and planning; education, health and water; and economic affairs and environment. The District Councils are empowered to pass bylaws applicable for the whole district, which is submitted, to the regional officer who will comment and then submit the draft bylaws to the central level for approval. The same applies for approval of CBO registration and granting of user rights.

c. **The Ward Development Committee (WDC)** includes a Councillor representing the) and chairpersons of all village councils within the ward. The WDC is responsible for political agendas and developing general

development plans for the villages in the ward and must manage conflicts in NR use, disasters and environmental related activities within its ward. The Councillor sits in the Council Management Committee and is the political lobby asking for financial for support for his/her constituency.

d. **Village Government:** Implementation of plans and policies is undertaken at village government and user group level, supported by technical officers from the District and ward extension staff. The Village Council (VC) is the political over-sight, entitled to propose their own by-laws but these must first be adopted by the policy body, the village assembly, and must be in conformity with the sector legislation and policy, before being submitted to the District Council for approval. Other NRM activities at village level include the O&OD process to get development issues on to the DDP, development of Village Land Use Plans (VLUP) and implementation of CBNRM management plans through investments in micro projects and monitoring and supervision of by laws.

e. **User Groups:** Under CBNRM policies, these institutions for Community Based Organizations (CBOs) are the governing body that oversees its members rights, duties and obligations as laid out in their Constitution, by laws, management plans and legal stipulations of their user rights (For more details on CBO's is referred to § 1.3.2). This complex institutional system with its multiple layers and political agendas is far from functioning smoothly yet, compounded by the fact that D*D under LGRP II has not taken off as planned. The delays between formulating by laws at village level and getting them finally approved at district or central level, to give only one example, are protracted and information does not always flow as it should, causing difficulties in enforcing VLUP and CBNRM management plans. Similarly the 6 step processes towards securing user rights in CBNRM are fraught with technical misunderstandings, bureaucratic and political delays.

Government NRM Institutions

The national Decentralization by Devolution (D*D) institutional framework, supports the following relevant actions at each of the administrative levels:

- **At central level**, support to the MNRT as NRM leader and to PO- RALG as coordinator of D*D, and relevant CBNRM sector line ministries to improve technical support, M&E and contribute to policy review. Bottlenecks may however arise from the unclear mandate and different perceptions of each other's mandate to supervise and coordinate development activities in line with policies of CBNRM. MNRT has well trained officers and has consistently supported the identification and formulation process. In 2010, MNRT created Tanzania Forest Services (TFS) which is now a semi-autonomous organization which operates independently. There is the question if the creation of self-financing executive agencies in forestry will result in the lowering of community-based management as a priority, since revenues are now being generated from managing government reserves and from managing resources on village lands which Village Land Forest Reserves are not.

At PO-RALG, the supervision of the decentralized processes is a core activity of the DSC Unit which has imited in capacity. To date the organisation has focused mainly on the sectors of education, health, water, agriculture and roads, with more than 85% of government grants going to these areas. Natural resources sectors have no earmarked funds (at present) and are being accorded lower priority within PO-RALG. The project now has an opportunity to present evidence of the importance of natural resources to local communities economic

development and poverty reduction, whereby raising its profile and showing the way forward for "green growth".

- **At regional level**, The Regional Administration is owned by the Government of Tanzania under PO-RALG. The Regional Administration set-up was established and exists under the Regional Administration Act; No; 19 of 1997 and works through the Regional Secretariat, which is mandated to supervise, monitor and coordinate development activities in line with the policies and guidelines of the sectorial ministries and has also the mandate to engage in different initiatives with LGA and the private sector in the region. The RAS's office is consolidating and supervising reporting, planning and budgeting, giving technical support to the districts, when emphasis is on NRM and its importance in NRM as well as local economic development. One of the main constraints the regional office has, is a lack of financial resources to be able to backstop the districts and provide technical and enforcement support. More recently there have been some moves to re-strengthen the Region after recognizing the need for more backstopping support to districts. However, the role of the regions remains highly dynamic varying between a small, advisory office that compiles district reports and a more energetic administration that is also involved in backstopping and building district capacities.

- **At district level**, support to the Village Councils is the on-going activity by the District Technical Team (DTT)/District Facilitation Team (DFT). It is their relevant technical functions to guide communities to plan, and then to supervise, support, monitor and consolidate their activities, guided by sector policy and the D*D processes. The DFT then mainstream the community needs and plans in the District Development Plans (DDP) and to ensure this is participatory, they use the LGA planning tool called "Opportunities and Obstacles to Development" (O&OD). This processes is a Participatory Rapid Appraisal (PRA) tool for bottom-up planning. However, the O&OD process is cumbersome, protracted and costly and there is no guarantee that the VDP will be accepted by the District Councils. Often, unless the Village Government involve local Councillors or WEO, to lobby on their behalf, communities can be disenfranchised, and political agenda override the allocation or prioritization and top-down decisions prevail as to what enters the DDP. The low political priority accorded to NRM to have low budgets are often less than ……. of the district funds. The allocation of such low importance and therefore of resources to NRM, suggests perhaps a low perception and appreciation by the political leaders of the value of NR to poverty reduction.

The District Councils have to address the technical staff requirements (and funding) to support future field implementation. The District Executive Director (DED) is the administrative arm of the DFT, the warrant holder and oversight supervisor that the DDP is implemented as approved by Council. Normally for NRM projects, the DED delegates the coordination to one of the NRM officers as District Focal Person (DFP). The level of staffing of the districts can be seen from the table below. The districts are not fully staffed in all the areas of NRM specialization, and there is not always at a senior nor village extension level sufficient capacity to ensure quality coordination. Besides, all the officers at district level have multiple tasks, often addressing other (non NRM related) duties assigned by DED or Council. Staff rotation in districts is another issue and the recent split of Songea and Mbinga districts into 2, means that staff capacity has been reduced by 50% per district due to sharing of positions. The level of seniority is also an important factor; if NRM officers are not high in the seniority rank, this is likely to further affect their capacity to assume a proactive role, especially when it comes to lobby the Council for resources for investment in NRM. In addition to providing extension services to communities on NRM, districts are also often called upon to manage district NR reserves. Despite these multiple roles districts are provided with limited resources to carry out their responsibilities. In the forestry

sector harvesting licenses are issued and royalties collected by districts however the only revenue that remains locally is the 5% cess, or surcharge, that they are allowed to levy on the royalty. This is a very small sum, Reforms in the natural resource sector that have resulted in greater rights to communities have led to greater potential for revenues for villages but with no parallel increase in district revenues. Where for example 25% of hunting revenues is returned to the District, Councillors often allocate this to other priority areas, and not at source. This situation has sometimes been blamed for making districts uninterested in promoting CBNRM.

Technical Staff Levels of NRM Capacities in the Districts

- **At ward level: T**he Ward Development Committee (WDC) approve the inclusion activities, including NRM into the Village Development Plans (VDP). However, they are motivated by political aspirations of the Councillor or local Member of Parliament (MP) and must assure alignment with the party manifesto. Often, NRM is seen as a low priority and its contribution to incomes, livelihoods and poverty reduction are often taken for granted, that NRM projects get relegated as low priority.

- **At village level**, the user groups all compile their various needs and plans into the village development plan (VDP), supported by inputs from the relevant participatory processes of O&OD, VLUP and CBNRM management plan. Here they must compete during the Village Assembly meetings for priority, given that resources are limited, and often NRM are seen as "God Given". The village Council, supported by the Village Natural Resource Committee (VNRC) and the District Facilitation Team (DFT), is supposed to backstop and protect the rights of the CBOs/VNRC. The DFT are also supposed to facilitate both the VLUP and O&OD process so that, amongst others, the NRM matters enter the VDP and are mainstreamed in the District Development Plans (DDP).

Annex 4: Classification of Tree Species and Fees

Classification, Fee Rates For Permits, Licences or Certificate or Felling Trees, Collecting Forest Produce and Other Services

PART I - CLASSIFICATION OF TREE SPECIES

A. Classification of tree species from non-plantations forests.

CLASS	BOTANICAL NAME	TRADE VERNACULAR NAME
I A	*dalbergia melanoxylon*	- e. a. blackwood, vernacular, mapingo, mugembe
	diospyros ebenum/mespiliformis	- ebony, mgiriti, msindi, mnumbuhi, mkulvi.
	combretum stuhimanii	- peramwitu, mguruwe, mkwaya
	olea all spp.	- loliondo, mchiyo, mshisho, brown olive, mzira, e. a. olive, mtagala, mwalambo, mkimba, - kubwa
	afzelia quanzensis	- afzelia, mkora, mkongo, mafu, mfuru
	entandophragma all spp.	- mrie, mongo, muwondo, mbokoboko, mkalikili
	milicia excelsa	- mvule, mkongola, iroko
	khaya anthotheca	- mkangazi, mwamiovu
	juniperus procera	- cedar, mtarakwa, mwangati
IB	pterocarpus all spp.	- mninga, mkula, mngubi, mtumbati mtoni, mkurungu, mninga maji.
	millettia stulhmanii	- pangapanga, mpande
	beilschimeidia kweo	- mfimbo, mkweo, mkanta
	brachylaena huillensis	- muhuhu, mhugwe, mkarambati
	mangrove all species	- mikoko
	swartzia madagasearensis	- paurosa, ksanda, msekeseke
	allanblackia stulhmanii	- mkimbo
	breonadia salicina	- adina, mgusia, mdogowe, mgwina
	cephalosphaera usambarensis	- mtambara, mtambaa
	fagaropsis angolensis	- mtua, mkunguni, mtongoti
	hagenia abyssinica	- hagenia, mwanga, liziluzi
	brachystegia tamaridhoides	- mseni
	makhamia all spp.	- mtalawanda
	newtonia all spp.	- mshashita, mdadauka, mkufi mpung, newtonia
	ocotea usambarensis	- camphorwood, mkulo, mseri, muheti, maasi
	ozoroa insignis	- mwembe pori
	pericorpsis angolensis	- mbaga, muwanga, afromosia

CLASS	BOTANICAL NAME	TRADE VERNACULAR NAME
	baphia kirkii	- balphia mkuruti, mkuranga.
	brachystegia all spp.	- mtundu, myombo, mkuti
	julbernadia all spp.	- muba, mvuva, mtondo, mtondoro, mwangati, msima, mgombo, muwa, mpanate.
IIB	*parinari curatellifolia*	- mubule, mule, msambula, msaula
	podocarpus all spp.	- mse, msisimu, mtokosi
	syzgium cummnii	- mzambarau, mvengi
	vitex keniensis	- mfudo
	berchamia discolour	- bird plun, mgandu, mnago, mkuni, okoo nyabumbu.
	minusopsis kumei	- muhulu, mgoma
	chrysophyllum spp.	- mberimberi, mfu-mulembelembe
	burkea africana	- bukea, mkarati, magando, msangala
	albizia all spp.	- mfurangi, mtanga, mdurasi, mvimbafuru, mukinga, omurere, mshai, mboromo, mhenge.
	erythropleum guineense	- bangawanga, mjeringwe
	spirostachys africana	- misanda, mwavi, mbaraka, mkarati, mkola.
	ambygonocarpus angolensis	- msaraka, muharaka, mwaraka.
	acacia nigrescens	- mkambala, mtambara, muhama.
IIIB	*morrus lastea*	- e. a. mulberry, kumbu, mkuzufunta
	filcalhoa laurifolia	- filcalhoa, iseta, muta
	casipourea malosana	- pillar wood, ndiri, msadora
	lovoa brownie/ swynnertonii	- nkoba, (uganda walnut), msau, mukusu, kilimanjaro mahnogany
	cordyla africana	- codyla, mroma, mgwata
	erkebergia ruppeliana	- musizi, msisi, riwe, msimbi, ol-mikump
	sterculia all spp.	- mhozya, mluze, mgude, mfune, mkweanyani, mguwa, moza, mkweranyani, mkwelangedere, mbalamwezi, dengi, mperamusi, mpalamusi, mwingirangi, mkungulanga.
	xymalos monospora	- mburumo, dimu, mkalikisumu, lemonwood
	fauzea all spp.	- mifuka, msisi, lisega
	rapanea rhododendroides	- rapanea, mlimang'ombe, mwasa, mshiwizo, kidongashawa.
	pteleopsis myrtifolia	- mwindi, mnepa, mparu, mgofu, makwenzi
	bombax rhodognaphalon	- msufi-mwitu, mfume
	fagara amanuensis	- amani satin wood, mfarakumbi, mfuakumbi
	maesopsis eminii (in natural forests)	- muhumula, msila
IVB	all tree species not listed in the proceeding class i.e. others	

PART II - FEES, TREE VOLUME TABLES AND TARIFF TABLES

A. Fees payable on non-plantation produce and where the produce is cut and removed by the licensee from **Government owned forest reserves and general lands**, as in Part I (Except Sandalwood)

S/N	Classes	royalty per cubic meter (standing tree volume) (TZS)	
ITEM 1: LOGS			
(1)	class IA	291,500.00	
	class IB	260,000.00	
(2)	class II	195,000.00	
(3)	class III	146,000.00	
(4)	class IV (other species not listed above)	97,200.00	
ITEM 2: POLES OF NON PLANTATIONS FOREST SPECIE			
(a)	5 cm but not more than 10 cm diameter at butt each	1,650.00	
(b)	Over 10 cm but not more than 20 cm diameter at butt each	2,400.00	
ITEM 3: WITHIES			
	a stem or branch under 5 cm diameter at butt end (per score of 30 withies)	4,000.00	
ITEM 4: FIREWOOD			
(a)	firewood by quantity obtained from natural forests (per stacked cubic meter from dead branches and off cuts)	6,500.00	
(b)	firewood obtained from planted standing tree (per stacked cubic meter)	6,500.00	
ITEM 5: CHARCOAL			
	fees for a bag of charcoal (50 kg per bag)	12,500.00	
ITEM 6: FIBRES			
	Quantity license for fibres and Raffia (Umondo, Ukindu and grasses) per kg or part thereof	200.00	
ITEM 7: TREE SEED AND SEEDLINGS			
(a)	tree seed: tree seeds of all types (species) shall be sold according to the catalogue issued by the tanzania tree seed agency, Morogoro.		
(b)	christmas tree: fee for christmas tree shall be shs. per running meter or part thereof.	1,500.00	
(c)	seedlings: fees for seedlings		

	(i) bare seedlings	300.00	
	(ii) potted seedlings	400.00	
	(iii) non-ornamental bare rooted	600.00	
	(iv) ornamental potted.	1,500.00	
ITEM 8: MANGROVE PRODUCE			
(a)	all mangrove trees of over 20 cm diameter over-back at 1.3 meters above ground shall be considered as logs and fees shall be as in item i, class ib.	241,000.00	
(b)	mangrove poles. Fee shall be as follows:		
diameter class	diameter at butt	Rate per Score of 20 poles	Rate per Pole
class I	15 - 20 cm	30,000.00	1,900.00
class II	10 - 14.9 cm.	24,000.00	1,500.00
class III	5 - 9.9. cm.	18,000.00	1,200.00
class IV	below 5 cm.	12,000.00	900.00
ITEM 9: BARK FROM FOREST PLANTATION TREES			
(a)	wattle bark for tannin		
(i)	bark - per stacked cubic meter.	4,600.00	
(ii)	price of wood left after debarking shall be sold at the rates of firewood or poles as in item 2 and 4 above		
(b)	other barks including medicinal barks. The rate shall be TZS per Kg.	1,500.00	
ITEM 10: BAMBOO FROM NATURAL FOREST AND PLANTATION			
diameter Class	diameter at butt	Rate per Score of 20 poles	Rate per Pole
class I	above 5 cm.	16,000.00	900.00
class II	below 5 cm	10,000.00	600.00
ITEM 11: GUMS AND RESINS			
	fee rates shall be per kg	750.00	
ITEM 12: MEDICINAL PLANTS			
(a)	stem & roots per kg.	750.00	
(b)	leaves, flowers, splits etc per kg.	500.00	
ITEM 13: NON WOOD FOREST PRODUCTS SHALL BE SOLD PER KG			
(a)	allanblankia fruits	200.00	

(b)	baobab fruits/pulp	50.00	
(c)	tamarindus indica fruits	200.00	
(d)	mushroom	200.00	
(e)	other wild fruits not in (a, b, c) above	100.00	
ITEM 14: NON-PLANTATION FOREST PROCESSED PRODUCTS FEES NOT POSSESSING HARVESTING LICENSE OR RECEIPT FROM REGISTERED DEALER SHALL BE:			
(a)	carvings (from 11kg up to 15 kg)	2,300.00	
(b)	mpingo carvings (for every additional kg above 15 kg)	4,600.00	
(c)	other carvings (for every additional kg above 15 kg)	3,000.00	
(d)	door shutters per piece	50,500.00	
(e)	door and window frames per piece	51,800.00	
(f)	cup boards per piece	50,000.00	
(g)	chair and stool per piece	17,250.00	
(h)	wooden school desk per piece	17,250.00	
(i)	bed per piece	20,000.00	
(j)	wooden office/dining table per piece	25,000.00	
(k)	1 set of wooden coach per set of 3 to 6 pieces	30,000.00	
(l)	Any additional piece	20,000.00	
(m)	Basket/Mats per kg	1,700.00	
(n)	Other wooden small items per piece	1,700.00	

Other Fees applicable in Government forests

Application for Harvesting trees in plantations and Natural forest:			
(i)	companies with or without contracts with the Government	205,000.00	
(ii)	medium harvesters (with sawmills having breakdown, edger and resaw or with efficient technology		
	(a) 1-1000m^3	180,000.00	
	(b) 1001-5,000m^3	187,500.00	
	(c) above 5,001m^3	195,000.00	
Transit pass application fees:			
(i)	for a 7 ton vehicle or below	7,700.00	
(ii)	above 7 ton vehicle	15,400.00	
Grading and export certificates fees			
I. grading / inspection fees			
(a) for commercial consignments (registered dealer)			
consignment whose value exceeds USD 300.00 will be considered as commercial consignment.			
(i)	grading fee for commercial consignments such as timber and other forest products for export shall be for a consignment not exceeding 20 m3.	153,400.00	
(ii)	Fees for inspection of carvings/handcrafts, tanning, gum, Jatropha oil, sandal wood products and other forest products for export shall be for a consignment not exceeding 20 tons.	153,400.00	
(b) for non-commercial consignments			
consignment whose value is less or equal to USD 300 will be considered as non-commercial consignment			
(i)	grading fees for timber and other forest products for export as gift, personal effects and sample (per consignment).	11,100.00	
(ii)	fee for inspection of tannin, gum, jatropha oil, sandal wood products and other forest product for export (per consignment) except item 14 (a).	8,700.00	
ii. export certificate fees			
(i)	export certificate fee for commercial consignment	150,500.00	
(ii)	export certificate fee for non- commercial consignments (per consignment) except item 14 a.	11,000.00	
iii. importation charges			
for commercial consignment (registered dealer)			
inspection/ handling fee for commercial consignment of 20m3		115,000.00	
for non-commercial consignments			
inspection/ handling fee for non- commercial consignments whose value is less than USD 300 (per consignment)		44,200.00	
Fees for registration of forest produce dealers and traders for each site per year			
a	trees	270,000.00	
b	timber (for pit sawyers in productive natural forest)	256,000.00	
c	timber yard	256,000.00	

d	logs	256,000.00	
e	poles	256,000.00	
f	withies	64,000.00	
g	sawmill capacity of up to 5,000 m3 per year	512,000.00	
h	sawmill capacity of up to 5,001 -10,000 m3 per year)	1,000,000.00	
i	chipboard mill	1,000,000.00	
j	hardboard mill	1,000,000.00	
k	plywood mill	1,000,000.00	
l	pulp and paper – mill	2,000,000.00	
m	match box factory	1,000,000.00	
n	impregnation plant	512,000.00	
o	briquettes plant:		
	(i) production capacity 0 - 10 ton/day	50,000.00	
	(ii) production capacity 11 - 25 ton/day	100,000.00	
	(iii) production capacity > 25 ton/day	150,000.00	
p	small curio shops (forestry products)	256,000.00	
q	micro curio shops (forestry products)	100,000.00	
r	exporters of Forest products	512,000.00	
s	importers of forest products	512,000.00	
t	charcoal	256,000.00	
u	firewood	256,000.00	
v	furniture mart (Small)	256,000.00	
w	furniture mart (micro)	100,000.00	
x	wood works factory (Small)	384,000.00	
y	woodworks factory (micro)	150,000.00	
z	carpentry per bench	50,000.00	
z	other Forest Products / Produce Dealers	130,000.00	
NOTE: Micro enterprise is the business with less than 5 employees and operates with a turnover of less than TZS 5,000,000.00. Small enterprise is a business with staff between 5 - 49 and operating with a turn over between TZS 5,000,000.00 - TZS 200,000,000.00			
Forest road service fees (Vehicles not covered under item 7)			
	Capacity of Vehicle		
A	Less than 1 ton	1,450.00	
B	1 - 3 tons	2,200.00	
c	3 - 5 tons	3,000.00	
d	5 - 10 tons	5,900.00	
e	>10 tons	7,400.00	
LMDA (Logging Miscellaneous Deposit Account) charges in plantation forest. The fees are charged to cater silvicultural activities and road maintenance in Forest Plantations.			
a	Silviculture fee per m3 of Teak logs	5% of the sale value	
b	Road fee per m3 of Teak logs	5% of the sale value	
c	Silviculture fee per m3 of softwood logs	8,900.00	

d	Road fee per m3 of softwood logs	8,900.00	
e	Silviculture fee per m3 of Eucalyptus logs	8,900.00	
f	Road fee per m3 of Eucalyptus and other hardwood	8,900.00	

Annex 5: The HRBA Context in Tanzania

A Human Rights Based Approach (HRBA) integrates the norms, principles, standards and goals of the international human rights system into development plans and processes. It is closely linked to national and international legal responsibilities, and identifies rights-holders and duty-bearers. *Rights-holders* are those who can legitimately claim a right – and *duty-bearers* are almost always government bodies, who are responsible for not getting in the way of the realisation of the right (respecting the right), not allowing others to interfere with the realisation of the right (protecting the right), and facilitating the realisation of the right (fulfilling the right).

Some of the relevant legal grounds (to which Tanzania is a signatory) are:

- Universal Declaration of Human Rights (1948)
- International Covenant on Civil and Political Rights (1966)
- International Covenant on Economic, Social and Cultural Rights (1966)
- The Convention on the Elimination of all forms of Discrimination Against Women (1980)

Under the Universal Declaration of Human Rights, the health and safety of employees comes under Article 6 (the right to life), Article 23 (the right to just and favourable conditions of work), and Article 25 (the right to health); child labour comes under Articles 6 and 26 (right of protection of the child and right to education). The Convention on the Elimination of all forms of Discrimination Against Women (CEDAW) has been ratified by Tanzania (signed in July 1980 and ratified in August 1985). CEDAW is the most comprehensive international agreement on the basic human rights of women, and is the only international instrument that comprehensively addresses women's rights within political, civil, cultural, economic, and social life. The right to freedom from discrimination against women in rural areas is of particular relevance in the context of FORVAC (CEDAW article 14.2).

The relevant legislation of Tanzania regarding a HRBA are those relating to land tenure (such as the National Land Policy, 1997, the Land Act, 1999, and the Village Land Act, 1999), and the general equality – such as the issues mentioned in the Constitution (1977). The Constitution defines that all citizens are equal and are entitled to freedom of discrimination and equal treatment, irrespective of their sex, tribe, place of origin, religion, political opinion or station in life. However, while the Constitution prohibits gender-based discrimination, the country's legislation doesn't always reflect this. Despite the efforts that successive governments have made to promote the concept of community forestry, the policies, institutions, legal frameworks, and governance of the forestry sector still work in disfavour of poorer communities

In addition, the UN Guiding Principles on Business and Human Rights, and the Women's Empowerment Principles are of relevance, for those parts of the value chain considering processing, and the right to decent working conditions, including occupational health and safety. Small scale enterprises may not explicitly regard health, safety, and child labour issues as "human rights" issues, but they should address them through individual health, safety, and labour measures.

Traditionally donors supported a needs-based approach to development. The 'right to development' or 'rights-based' approach to development assists the poor or marginalised to assert their own rights to existing resources, and to share these more equally. Rights always signify responsibilities and obligations, whereas needs do not. A human rights-based approach focuses attention on those groups who lag behind. It should be noted that HRBA is not the same as gender equality and social inclusion (GESI), although GESI is a supportive element of a HRBA.

Annex 6: Additional System Constraints

The following table summarises some of the key system constraints that were identified in the findings. Where constraints are identified throughout the forest product market sector they have been grouped together in this section and only separated if the issues are specific to wood, charcoal or NTFPs. Due to time constraints this is not a comprehensive list of constraints but is provided as additional guidance for FORVAC.

Intervention Area	Type of Market Actor/Stakeholder	System Constraint	Comments
Income Generating Activities (IGA)/Relationship Building	Business operators (traders, etc.)	Business operators are dependent on adequate market information and relationship building. This is necessary for example for: • Private businesses and entrepreneurship development; • Establishment of collaboration with communities and to further process their products adding value/quality (timber, furniture and others); • Producers sell their products to organised traders who deliver products to the markets;	Lack of adequate information and capacity building prevent business developments such as: • Uncertain environment for investments in forest VAC; • No facilitation of partnership in business development; • Do not stimulate creation of employment opportunities; • Do not stimulate improved wood production and processing technologies; • Adequate market research of forest products and services; • No stimulation for sustainable management and harvesting, and utilisation of wood and NWFPs; • Difficult to create awareness and business development environment; • No stimulation for investment in the forest value chain; • No stimulation to promote Public-Private Partnership arrangements in natural and forest plantations.
Development of	Local Government (regions, districts,	Good quality and relevant information is necessary at District level to provide the expected services, such as:	Due to lack of proper information and shortage in resources (funds and staff), LGA:

PFMs/Capacity Building	wards)	• Guidance and facilitation of development processes; • Provide support and training through extension services; • Undertake revenue collection; • Ensure law enforcement; • Support LUPs; Undertake proper planning, implementation, monitoring and reporting of actions and results	• Have extremely limited extension services; • Insufficient revenue collection due to weak law enforcement, and low supervision capacity; • Low capacity to proper management of local government/national forest reserves; • Limited resources, and unclear procedures, to support communities in establishment and management of VLFR; • Weak collaboration with central government in management of national forest reserves; • Unable to undertake adequate LUPs and proper monitoring and evaluation; • Unable to provide proper capacity building and awareness for staff and local communities;
Development of PFMs	Community level information management.	Villages and VNRCs are expected to: • Ensure sustainable forest management in their area of jurisdiction; • Support community development; • Promote joint management of forests and tree growing actions; • Provide farmer-to-farmer advice; • Collect revenues; • Formulate and enforce by-laws; Establish forest-based income generating activities.	Lack of adequate information at community level, effects for e.g. in: • Villages have very low capacity to realise the full potential from their natural resources; • VLFRs are under the VC jurisdiction and managed by VNRCs, with lack of business experience and continuity; • Villages have potential to establish arrangements for developing business; e.g. through cooperatives, enterprises, etc. However, currently the majority of VLFRs are totally dependent of a few service providers managing businesses on behalf of the VLFRs. Influence and active participation from the Villages is limited; • Monitoring and facilitation of CBFM for increased income and employment through value chain development is also extremely limited (only a few exceptions are visible); • Responsible management of village forests is

			still a challenge, and need to be more efficient. However, the limited benefits generated from forest activities seem to be shared properly
Information / Communitication	DFOs and DFMs and knowledge management	Zonal/District offices are supposed to maintain databases on law enforcement and relevant forest related value chains which are expected to feed into the mega-database at TFS headquarters. The database is expected to store information on export, import, domestic production, dates, species, volume, payments, products and licensees and can provide information depending on the query. Monthly, quarterly and annual reports are expected, as well as briefs on special operations.	• Uncertain access to relevant database, (apart from NAFORMA figures) • Lack of routines or procedures to divulge relevant and accurate information regarding the database; • In general, the collection and use of relevant information and basic statistics is a challenge; • There is no proper Management Information System with adequate information useful for strategic forest market development; • Information available is scattered, non-systematic, and not well compiled and analysed for proper and informed decision-making.
Forest Products (Rules)	Village Land Use Planning (VLUP)	The VLUP is the most important tool, together with the forest management plan, for an adequate management of the local resources.	• During the field visit, the MSA Team noted that only an insignificant number of Villages in the (8) Programme districts have proper VLUP • Consequently, one of the key areas of (FORVAC) Programme support, aiming at enabling the environment for value chain development, is to address the lack of VLUPs.
Wood Products (market chain/actors and linkages)	Registered Timber Traders	Timber traders don't buy hardwood timber/logs from village forests, because of high prices (applying government prices, licenses etc)	• Timber yards are well-stocked with hardwood coming from unknown sources; • In some occasions the traders argued that the timber is old (from previous years harvesting), in spite of evidence of fresh timber • Traders could negotiate with VLFRs on pricing, if the guidelines were followed: there is no supervision from DFO/DFM regarding timber sources and pricing
Development of PFMs	DFOs and DFMs (sawmilling operations)	Sawmills appear to be operating with raw material from other sources than VLFR or GFR.	• No supervision of sawmills, although likely that the sources are not legal • VLFRs are not able to sell their products because they (often) follow government

			reference prices (which doesn't apply to VLFR) and cannot compete with the illegal/semi-legal suppliers
Income Generating Activities (Charcoal)	Registered Charcoal Traders	Charcoal selling has reduced over the past few years, due to formal pricing system.	• The cost details presented by the charcoal traders (including all royalties, licences, etc.) are higher than the price for selling the charcoal • The only way to remain in business is having access to illegal/semi-legal sources.

System Constraints at District Level

The following table shows specific challenges and possible interventions identified by District Officers as part of the MSA team fieldwork. This links to the information shown in section 3.6.

District	Challenges	Possible Interventions
Handeni	• There are sufficient NR staff for TFS & District Council (4 DOF and 1 DBKO plus 10 DFMs and 6 TFSBKOs), the problem is the lack of resources (funds) for carry out necessary activities. • VLFRs suffering from unfair (illegal/informal) competition from timber coming from land use change (converted forest land into farm land). There is an ongoing process in which general land is being converted into farmland. Apparently, all general land in Handeni has been distributed to Villages, subsequently forest land has been converted to individual farm plots of 50 ha or more. • Cumbersome and costly process to establish well-functioning VLFRs • Lack of resources (funds) at district level is a major obstacle to provide adequate support/services to forest communities. • Sawmills are probably operating with wood coming from the converted forest land (through illegal/informal channels), without control or supervision from the authorities (no action or data is collected on this). • Lack of incentives to promote best practices and dis-incentives to prevent bad practices (weak law enforcement) for supply and demand	• Facilitation for linking the community based producers to buyers, it was identified that lack of potential buyers as well as clear agreements are demoralising the community on community-based forest management. Consequently some of the villages have started converting forests to agriculture land. • There is a potential market for charcoal, therefore this is suitable cluster for sustainable charcoal facilitation as it is close to cities such as Tanga, Arusha, Dodoma, Zanzibar and Dar.

Kilindi	• Although harvesting is on progress there is no land use plans. • There is a very high number of land use conflicts • Other skills lack include business skill, monitoring and evaluation	• Facilitation for linking community to the buyer, it was identified that lack of potential buyer as well as clear agreements demoralize community on community-based forest management as the results some of the villages start converting forests to agriculture land. • There is a potential market for charcoal, therefore this is suitable cluster for sustainable charcoal facilitation as it is close to Cities like Tanga, Arusha, Dodoma, Zanzibar and Dar.
Ruangwa	Not identified	There is a potential for increasing business around bamboo species in the District
Liwale	Not identified	Not identified
Nachingwea	Not identified	Not identified
Namtumbo	• The fact that a sawmill is operating in the area and the VLFR are not able to find buyers indicates that the source of timber is from National Forest Reserves and/or illegal/informal sources • 2 VLFR with harvesting plans but without interested buyers • Capacity building at district and group level is needed to unlock the market chain for beekeeping products.Lack of adequate beekeeping technology/equipment to increase productivity and commercialisation • NR officer numbers are insufficient • In general, lack of resources (funds for adequate equipment and logistic resources/transport) • Lack of strategic business-related communication (information, dissemination)	Women are more involved in processing therefore beekeeping value addition activities should target women.
Songea	Not identified	Not identified

Mbinga	• Lack of resources caused CBFM failure plus the community forest didn't have land use plan so it couldn't progress. • NR staff are insufficent for (Council & TFS) Why understaffed? Sub division of district caused staff reduction, so some staff shifted to Mbinga town council plus new district of Nyasa needed people. For TFS, they distribute according to natural resource so as more plantation this reduced staff further	• Establish a pilot area in the district for beekeeping or learning, model site. People are coming far to the district so maybe in two areas within the district • Maybe form a team of people around one ecotourism Officer inc cultural officer etc. • Need to involve other stakeholders such as active people in the villages and involve these people in training (i.e along the lines of leader farmers) • Consider PES

Annex 7: MSA Team and TOR

Key dates were as follows:

- Inception meeting with Competent Authorities (2nd November)
- Submission of Inception Report (5th Nov)
- Mid assignment progress meeting with Competent Authorities (16th November)
- End of Assignment Feedback meeting with Competent Authorities (12th December)
- Submission of Draft Report (13th December)
- Receipt of CTA and Competent Authorities comments on Draft Report (17th December)
- Submission of Final Report (21st December)

Team composition:

Name	Position	Comment
Liz Betser	International Team Leader	42 days input
Juhani Härkönen	FORVAC Value Chain Development Advisor	10 days input (focus on FLEGT)
Jorge Maluenda	International Forester	32 days input
Jumanne Abdallah	National Consultant	42 days input
Alex Njahani	FORVAC Forest Management Expert	Available throughout the assignment
Emmanuel Msoffe	FORVAC National Programme Coordinator (part-time)	Available when position of National PFM Coordinator for FBD allowed during desk based part of the assignment.

Market Systems Analysis (Terms of Reference)

Project number and title	P34809P001 / Forestry and Value Chains Development Programme (FORVAC)
1. Background	Forestry and Value Chains Development (FORVAC) aims to contribute in increasing economic, social and environmental benefits from forests and woodlands while reducing deforestation. The expected outcome of FORVAC is: *improved forest-based income, livelihoods and environmental benefits*. The outcome will be achieved through the following outputs: 1) Improved value chains and increased private sector involvement in community and government forests: - Potential commercial and other benefits in the forest-based value chains realized through responsible private sector involvements in the Village Land Forest Reserves (VLFR) under the Community Based Forest Management regime (CBFM). - Private sector investors increasingly involved in forest reserves managed by TFS. 2) Improved capacities, monitoring systems, legal and policy frameworks in the forest sector: - Improved capacities at all levels to plan, support, manage and monitor the CBFM and forest value chains, including operational forest extension, communication services and functional monitoring systems as well as improved and harmonized legal and policy frameworks to guide and improve sustainable forest management and trade procedures. The implementing agency of the programme is the Forest and Beekeeping Division (FBD) of the Ministry for National Resources and Tourism (MNRT), in close cooperation with Tanzania Forest Service (TFS) and the President's Office Regional Administration and Local Government

	(PO-RALG). Private sector organizations engaged in forest and non-forest products harvesting, processing, and marketing will have a key role in the implementation of this intervention. The Programme will support commercialization and added value under the PFM regime in three clusters: Tanga cluster (Handeni and Kilindi districts), Lindi cluster (Liwale, Ruangwa and Nachingwea districts), and Ruvuma cluster (Namtumbo, Songea and Mbinga districts).
2. Objectives of the consultancy	Lead team in conducting a Market Systems Analysis (MSA) including socio-economic study for existing PFM in FORVAC districts: • Review existing Village Land Forest Reserves (and other CBFM activities where relevant) in the eight FORVAC districts to establish current development status and requirements. Recommend villages FORVAC should focus on including relevant justifications • Review of VLFR timber pricing (Timber Pricing study) in relation to TFS royalty rates and mapping of key market constraints. This should also include the review of the applicable mode of selling either stumpage or selling processed timber. • Review of demand, supply and prices of forest products in domestic and international markets, including lesser known species • Map / define existing and potential value chains (both timber and NWFP) • Collection of socio-economic data which contributes to establishing baseline information The findings will contribute to the design of the programme during the inception phase. At the same time, the study will integrate with the MIS system (tbd) and establish baseline data for later programme monitoring.
3. Scope of the consultancy	A Market Systems Analysis (MSA) including business environment (including access to finance), potential for sector growth, market systems map, value chain structure and performance (from producer to consumer), constraints (production, processing & trade), strategic interventions, etc. A Gendered Market Analysis (GMA) included within the MSA so the project interventions incorporate these considerations. Study to be designed to be the start of a continued and more comprehensive review of market system analyses over the course of FORVAC. The scope will include, but not limited to: • Definition and listing of key market constraints/barriers, recommended measures to reduce these barriers • Royalty determination, review of existing royalties and procedures • Number of private producer groups and their members engaged in wood and NWFP harvesting, processing and marketing (aggregated as per products/ district/ year/ gender) • Number of forest-harvesting contracts managed in VLFRs (species, volumes sold and unit prices) per villages/ district/ year • Existence of timber and NWFP processing (sorted according to legal/illegal, year of process initiation, processing type/technology, district location, ownership, gender, etc.) • Matrix of a minimum of 20 timber species (thereby including lesser known species), market niche, knowledge gaps, current prices, volumes sold and their market potential in domestic and international markets • Socio-economic baseline data to be aggregated by gender according to: o Household poverty; employment in timber & NWFP; etc. o Relevant stakeholders participating in the formation process and their views reflected in the establishment outcome o Income through retention when TFA is in place to promote sustainable forest management o Benefits to communities through JFMA agreements
4. Expected	Inception Report (detailed work plan and a comprehensive description of the approach and

deliverables	methodology). Draft report and feedback meeting to be delivered in-country (by 15th December) Final Completion Report (text approx. 40 effective pages + Annexes) of the consultancy tentatively with the following contents: - Executive Summary - Abbreviations & Acronyms - Introduction (Background, Methodology) - Content of the Market System Analysis including socio-economic study and an HRBA focus - Current status of the existing VLFRs in the programme district - VLFR timber pricing in relation to TFS royalty rates, mapping of market constraints - Demand, supply and prices of forest products in domestic and international markets, including lesser known species and an overarching competitive analysis - Mapping /definition of existing and potential value chains (both timber & NWFP) - Socio-economic data contributing to establishing baseline information - Conclusions - Recommendations about: o VLFRs to be involved in the programme o Market development in the programme document during the inception phase. o Organisational strengthening with focus on sustainable forest management. o Integration with MIS system (tbd) and establish baseline data for later programme monitoring.
5. Timing of the Consultancy in the field and reporting	• Consultancy period 22 October 2018 to be 15 December 2018: • Under the leadership and guidance of the Team Leader, the team will produce and present an Inception Report (detailed work plan and description of approach and methodology) by the end of the first in-country week in Tanzania. • Final Completion Report of the consultancy will be submitted to the programme after reception of comments from FORVAC, before 31 January 2019.

FCG