

SYNTHESIS OF PRIVATE COMMERCIAL FORESTRY STAKEHOLDER RECOMMENDATIONS ON THE DRAFT NATIONAL FOREST POLICY

**Submitted by private sector commercial forestry stakeholders based in the Southern
Highlands as an input to the policy review process**

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Final version following validation workshop held 18 August

This synthesis report on improving commercial forestry in Tanzania is based on perspectives and information provided by private commercial forestry actors from the Southern Highlands. It was produced as result of a series of consultative meetings held during July and August 2017 and attended by representatives of SMEs, Associations such as UWAMBA, SAFIA, NOFIA and SHIVIMITA, Wooden pole enterprises, Plantations and wood processing, Tree Growers Associations, Medium scale tree growers, Tree grower service providers and Timber traders and transporters including raw pole suppliers. Participants reviewed the draft revised National Forest Policy dated October 2016 (URT, 2016). The meetings were facilitated by the Forestry Development Trust.

EXECUTIVE SUMMARY

The Forestry and Beekeeping Division of the Ministry of Natural Resources and Tourism is in the process of revising the 1998 Forest Policy, including consultations with stakeholders around the country.

Commercial forestry is a major economic activity and significant contributor to government revenue and employment, and a supplier of raw material and wood products for numerous industries. However, the potential for the sector to contribute more is immense and, judging from the experience of some other countries such as Uruguay, worth additional public policy investments.

During July and August 2017, commercial forestry stakeholders from the private sector in the Southern Highlands reviewed the draft forest policy to provide suggestions for improvement. A validation and synthesis workshop was held on 18 August to enable stakeholders from diverse backgrounds in commercial forestry review recommendations from grouping workshops and to develop an overall paper summarizing key policy issues to be forwarded to the National Forest Review Team.

The private sector forestry actors who attended these meetings included all scales of tree growers, wood processing enterprises, integrated forestry companies and the service industry. This document summarises their policy review dialogue and inputs. The Forestry Development Trust helped to independently facilitate this process. The scope of this paper is limited to inputs from stakeholders operational in the Southern Highlands only, and focused on wood products from planted forests.

Recommended policy issues which emanated from the validation and synthesis workshop in regard to commercial forestry in Tanzania included:

POLICY RECOGNITION OF COMMERCIAL FORESTRY AND PRIVATE SECTOR ACTORS

Despite the big contribution from the commercial forestry sector to the social, economic and environmental goals of the country, the sub-sector is not fully recognized nor promoted. Stakeholders feel that there is need to ensure that the Forest Policy effectively recognizes and promotes the role of commercial forestry (and specifically the diverse private sector) in supporting the economic, social and environmental goals of Tanzania.

FOREST PLANTATION DEVELOPMENT POLICY ISSUES

These policy issues embraced issues related to forest lands, extension and outreach services, fire, pest and diseases. Due to the current shortage of land for plantation establishment and the fact that Government has idle land suitable for afforestation under TFS, LGAs and communities, stakeholders are keen to collaborate with the government in the efficient use of the land through PPP arrangements. Furthermore, fire continues to be a major problem in Tanzania's forest plantations. Stakeholders were of the opinion for Government to set up a national forest fire management organization to harmonize fire monitoring, detection, prevention and suppression. To curb potential and current incidences of forest pests and diseases, it was recommended that the government shall establish a national pests and diseases monitoring unit with an efficient information dissemination system. Other issues recommended were for the Government to support the private sector and other players in production of high quality seed locally in order to make the country self-sufficient in future. It was also echoed that

performance of the forest extension service in the country is poor and presence of extension officers is not felt on the ground. Therefore, the Government shall revitalize and strengthen the extension service and capacitate TGAs as future extension service providers.

FOREST INDUSTRY DEVELOPMENT POLICY ISSUES

Shortage of wood raw materials, lack of capital, old technology, inadequate professionals, and poor business environment were major cries from stakeholders. Stakeholders recommended that the Government shall continuously evaluate quantity and quality of industrial raw material available on farms and in public forests and use the information for periodic assessment of raw material supply against national demand for wood products. Also, it was recommended that Government should subsidize the cost of machinery imported for the purpose of processing, value addition and manufacturing products from waste and forest residues. It was also recommended that the government facilitates the development of quality standards and grading rules for key wood products traded in the country. Review of curricula or introduction of new ones in our institutions to address human resource inadequacies was also voiced by stakeholders.

INDUSTRY-WIDE ENABLING CONDITIONS

In Tanzania, the private sector in forestry is not well organized and lacks sector-wide strong governance structures to promote internal dialogue and sector representation. Secondly, the sector is at its infancy and needs to be nurtured to become stronger and better organized for it to significantly contribute to the national economy. It was recommended that the Government shall facilitate and promote formation of legal associations to represent the interest of the commercial forestry sector and establish a forum for dialogue and consultations. Other cross-cutting policy recommendations included the need for the Government to create a stable and conducive investment climate for commercial forestry by providing incentives for the establishing public-private-partnerships in the primary production, processing, value addition and marketing of wood and non-wood forest products. More so, the Government should make available grants and other forms of financial incentives to support the commercial forestry sector in recognition of the sector's immense contribution to the national economy. In addition, it was observed that since in areas where commercial forestry is practiced, the road infrastructure is not adequate and in most cases in poor state, it was recommended that the Government should continue to upgrade and improve the road infrastructure in these areas. Emphasis on forest research was also vivid among stakeholders. Therefore, it was recommended that the Government should increase financial allocations to research institutes in order to enhance capacity for research work in forestry.

1 BACKGROUND

The Forestry and Beekeeping Division (FBD) of the Ministry of Natural Resources and Tourism (MNRT) is in the process of revising the 1998 Forest Policy. The initial draft policy was produced in 2004 followed by subsequent revisions in 2010 and 2016. The Food and Agriculture Organisation of the United Nations (FAO) is assisting facilitate the review, which has included establishment of a Task Force and stakeholder consultations on the latest policy draft published in 2016 (FBD, 2017). This consultation process will cover a diverse agenda (e.g. natural forest conservation, community-based forest management, climate change and commercial forestry) and include zonal meetings across the country.

Commercial forestry is a major economic activity (e.g. over 60,000 households plant trees in the Southern Highlands) and is a significant contributor to government revenue and employment, and a supplier of raw material and wood products for numerous industries. Private sector play a growing role in commercial forestry, including all scales of tree growers, wood processing enterprises, integrated forestry companies and the service industry.

During July and August 2017, commercial forestry stakeholders from the private sector in the Southern Highlands engaged in a process to review the draft forest policy. This document summarises their policy review dialogue and inputs. It is intended to inform the Task Force and MNRT on key issues and recommendations to be considered during the policy reform process.

The scope of this paper is limited to inputs from stakeholders operational in the Southern Highlands only, and is also strongly focused on wood products from planted forests.

The Forestry Development Trust (FDT) helped to independently facilitate this process. FDT has been in operational in Tanzania since 2013 and has established diverse stakeholder relations and gathered a wealth of practical experience in helping develop a competitive, inclusive and resilient commercial forestry sector. The approach used for eliciting commercial forestry stakeholder inputs and dialogue, including a list of those involved, is included in Annex 1.

The following four sections present commercial forestry stakeholder inputs on priority policy issues, covering overall recognition, plantations, processing industry and sector-wide enabling conditions. Each section is arranged to provide:

1. An overview of the policy issue, with rationale from the perspective of private stakeholders;
2. Supporting information from Tanzania, including context from private sector and development programmes including FDT and PFP;
3. Relevant experience from other African countries (including Ghana, Kenya, Nigeria, South Africa, Uganda, Zambia and Zimbabwe) and Uruguay; and
4. Recommendations to the policy review team (acknowledging that some may be dealt with outside the Forest Policy *per se* given wider sector linkages – e.g. land, finance, infrastructure).

Disclaimer: views expressed in the document are not necessarily shared by Forestry Development Trust.

2 FOREST POLICY RECOMMENDATIONS

2.1 POLICY RECOGNITION OF COMMERCIAL FORESTRY AND PRIVATE SECTOR ACTORS

Stakeholder views

Commercial tree growing contributes considerably to the national economy through income generation, creation of jobs in rural areas, production of raw material for industries and numerous environmental intangible benefits such as soil and water conservation, rehabilitation of degraded forests and amelioration of climate. Commercial forestry can also help reduce the pressure on Tanzania's remaining natural forests by meeting domestic and export demand for some wood products.

Generally, despite the socio-economic contributions from commercial forestry, the subsector is neither fully recognized nor promoted in the current draft policy. Community and private forests are considered under one section, whereas in reality the two groups have distinct roles and needs and should be addressed separately in policy statements and directions. Stakeholders feel that **the Forest Policy should more effectively recognize and promote the distinct role of commercial forestry (and private actors) in supporting the economic, social and environmental goals of Tanzania, and to outline a set of strategies on how this subsector will be promoted and supported.**

Tanzanian context

Private sector, ranging from individual woodlots to industrial plantations, dominate tree planting by area and rate of expansion. Indufor (2011) estimated 80,000 to 140,000 ha village and farm plantations in Tanzania. FDT (2016) undertook forest plantation mapping using remote sensing and secondary data to estimate a higher area planted by small and medium tree scale tree planters in the Southern Highlands, between 160,000 and 175,000 ha. Tree growing is a major economic activity; FDT (2015) estimated more than 60,000 small and medium scale tree growers in the Southern Highlands.

Small and medium scale tree growers represent 68% of the total planted area in the Southern Highlands (233,500 to 257,600 ha), highlighting how public and private industrial plantations cover a much lower area. Considering the economy and population expected growth, the forecast wood demand will surpass plantations supply by about 2,2 million m³ by 2030. This is an equivalent to a deficit of productive plantations of about 7,000 to 8,000 ha assuming final harvest of about 300-400 m³ per ha. Most of these plantations will be established on private land or possibly through public-private partnerships.

The private sector similarly dominates an evolving forestry industrial sector which is made up of five major value chains, i.e. sawmills, plywood, pulp and paper, utility poles and furniture and joinery. There is an emerging veneer production enterprise which utilizes small diameter Eucalyptus logs. Forest industries generate significant employment in rural areas, estimated at 80% of the jobs across the entire value chain that collectively create 20-30,000 man years (PFP, 2016).

Forest industries also pay various taxes to the government. Between 2011/2012 and 2013/2014, the Tanzania Forest Service collected a total of 108.7 billion revenue (PFP, 2016) including income tax (TZS 81.53b), local government cess (TZS 2.2b) and VAT (TZS 17.99b).

Most of the forest industries share similar challenges: obsolete machinery, old technology, low efficiency in wood processing and harvesting, inadequate knowledge of industry, financing and marketing strategies (Indufor, 2011; PFP, 2014). Despite the challenges, however, the wood industry accounts for nearly half of the recorded sector's contribution to the national GDP (MNRT 1998; NFP 2001-2010). This contribution alone should be sufficient for the government to recognize and provide support and financial incentives to the industry. This is particularly the case when considering key national development documents, including:

- Sustainable Industrial Development Policy (1996 - 2020), placing specific emphasis on promotion of Small and Medium industries through various measures.
- National Five Year Development Plan 2016/17 – 2020/21 (FYDP II), whose theme is “Nurturing Industrialization for Economic Transformation and Human Development”.
- Integrated Industrial Development Strategy (2025), which builds on FYDP II by nurturing the transition between micro, small, medium and large enterprises, including industrial concentration (Micro Manufacturing Enterprise Parks) at rural or district levels.
- National Economic Empowerment Policy (2004), which requires sectorial ministries to create a favorable business environment for investment and economic growth.

Recommendations:

Stakeholders recommend the inclusion of policy clauses to address the following:

- **Adequately define and distinguish the commercial forestry sector as a unique stakeholder group, within which are distinguished ‘commercial tree growers’ and ‘forestry industries’, and clear forest ownership defined to distinguish community and private forest ownership.**
- **An appropriate framework for guiding the commercial forestry sector be put in place and Government to provide incentives and support needed for the development of the sub-sector.**
- **The Government in recognition of the contribution made by commercial forestry to the national economy shall establish a desk to deal exclusively with matters affecting the sub-sector.**

Experience from other countries

Uganda provides an example of explicit policy recognition for the commercial forestry sector (Box 1).

Box 1. **Uganda** Forest Policy - recognising stakeholder diversity and supporting commercial plantations

“The government of Uganda recognizes that a wide range of people have a stake in the forest sector, people whose interests are not being fully addressed, and whose roles and responsibilities need to be defined and coordinated in the implementing legislation.

The many interested parties identified in the policy include: • Forest resource producers (farmers, commercial tree growers and forest owners); • Forest resource users (both commercial consumers, and

the majority of the urban and rural poor who depend on firewood and other forest products for subsistence); • Forest resource processors (charcoal makers, pitsawyers, sawmillers, artisans and traders); and • The concerned general public; Government and non-government organizations and individuals involved in providing services of management, training, research and support.”

“Profitable and productive forest plantation businesses will be promoted. The private sector will play the major role in developing and managing commercial forest plantations. This may either be through large-scale industrial plantations on government or private land, or through small scale plantations on farms. The role of government will be to support and regulate this development.”

The case of **Uruguay** highlights how policy shifts enabled transformational change (Box 2). This is particularly relevant given the potential of Tanzania’s commercial forestry subsector.

Box 2. Sector transformation through policy change – the case of **Uruguay’s forestry sector**

In the 1980s, Uruguay’s domestic wood product consumption of 2 million tonnes per year outstripped production of 1.3 million tonnes, creating pressure on indigenous forest and leaving Uruguay as a net importer of wood. Following a new forest law passed in 1987, Uruguay reversed this situation. In 2013, Uruguay earned USD570 million exporting wood products, making up more than 6% of its total export earnings. Total forest cover doubled to 10% in 2010, with indigenous forest cover increasing by more than 6.5% from 719,000 ha in 1990 to 766,000 ha in 2010, while plantations increased 30-fold from 31,000 ha in the 1980s to 978,000 ha in 2010. Employment has increased fivefold since 1989.

The success of the new legislation can be attributed to recognition of the high barriers of entry to the commercial forestry sector, and the designs of mechanisms to overcome these. These included: creating 3.6 million ha of forestry priority zones; national tax exemptions; import tariff exemption for inputs and capital goods; public investment in infrastructure to support transport to market for wood products; subsidies between 20 and 50 percent of the cost of planting; and soft credit to finance forestry investment in establishment, harvesting and small scale value addition.

The success of the policy allowed Uruguay to eliminate subsidy payments in 2005, without detriment to further investments. Uruguay now has a dynamic forestry sector of domestic and foreign firms producing a diverse range of products for consumption in-country and export to numerous partners.

Box 3. Distinguishing and defining community and private forests – **Kenya, Uganda and Nigeria**

The Kenya Forest Policy defines "Community forests" as forestland that is lawfully held, managed or used by specific communities while "Private forests" include forestland held by any person under any freehold or leasehold tenure and any forest owned privately by an individual, institution or body corporate for commercial or non-commercial purposes and hence addressed separately. Similarly, Forest Policies of Uganda and Nigeria deal with these forests separately.

2.2 FOREST PLANTATION DEVELOPMENT POLICY ISSUES

2.2.1 LAND AVAILABILITY AND ACQUISITION

Stakeholder views

Shortage of raw material for forest industries is a major drawback to industrial operations with most factories operating at only 40-50% of their installed capacity. These shortages will escalate and there is imminent danger that the country will not be able to meet demand for forest products from local sources. Land acquisition for large afforestation programs has become problematic due to the lengthy legal and administrative processes involved. Due to the current shortage of land for plantation establishment and the fact that Government has idle land suitable for afforestation under Tanzania Forest Service, stakeholders are keen to collaborate with the government in the efficient use of the land. Stakeholders feel that **the Forest Policy should promote the establishment of more plantations and efficient management of existing resources, including allocating some public plantation land for management by private sector under forest concession or Public-Private Partnership arrangements.**

Tanzanian context

Ngaga (2011) highlighted that a total area available for all government plantation expansion was about 72 000 hectares some of which is still idle, and that private investors are constrained by land shortage and unclear land tenure in some areas. The problem is compounded by lack of District Framework Plans and Village Land Use Plans in many districts and villages. A district and village land use planning is critical to correct the un-availability of information regarding land for appropriate investment in private forestry at various scales. PFP (2016) also recommend that land use planning should be undertaken to avoid losing important opportunities for investment.

In Tanzania, Private Public Partnerships (PPP) arrangements are in line with the National Public Private Partnership Policy (2009) but needs to be customized for forestry. Other forms of PPP arrangements such as Private-Private, Private-Community, or Public-Public could also be considered. The draft Tanzania Forest Service Investment Policy of 2015 states that, "Where there are limited resources within the Agency that are required to execute investment activities, TFS should engage competent private sectors through PPP proposed in the investment policy." The policy also commits to put in place an enabling environment to allow participation of the private sector. PFP (2015) emphasized that rules, regulations and guidelines for forest concessions in government forest reserves and plantation forest reserves should be harmonized and well-defined.

Recommendations

Stakeholders recommend the inclusion of policy clauses to address the following:

- **Government shall review the land acquisition process for land for forestry and other uses and make it simpler and more efficient in order to encourage investments. Land use planning shall receive more attention so that Villages can allocate areas for different purposes including afforestation. Laws for land acquisition shall be followed strictly to minimize malpractices and corrupt deals.**

● In order to increase area under industrial forest plantations, the Government shall implement PPP arrangements with the private sector by (a) allocating on lease basis suitable forest reserves for afforestation through forest concession arrangements, and (b) allocating degraded forest areas. A legal framework will be drawn to guide the PPP process and protect the interests of all parties.

Experience from other countries

Box 4: **Uganda** Forest Policy – supporting establishment of commercial forest plantations

“The government will create a positive investment climate to encourage private investment in commercial forest plantations. The government will also set out priority areas for the development of fuel wood, timber and carbon storage plantations in different areas of Uganda, concentrating fuel wood priorities in peri-urban areas.

Strategies for the implementation of this policy statement will include:

- *Strengthen legal agreements between government and private investors for use of the Forest Reserves, and review forest and tree tenure rules, to encourage development of commercial forest plantations.*
- *Review the Investment Code to better accommodate large industrial forest plantation developments.*
- *Progressively divest the management of existing commercial plantations on Forest Reserves to the private sector.”*

In addition, the policy covers a strategy to “Introduce competitive bidding for harvesting concessions in government plantations, to improve transparency, to increase revenues to government and reflect the real values of the resource.”

In Uganda, the National Forestry Authority has mobilized the private sector to establish over 60,000 ha of high quality plantations on public land in 10 years. The process is guided by a strict legal framework which defines entry qualifications, ownership, and duration of lease, payments and management procedures. An incentive scheme based on strict performance criteria has been put in place as well as a technical support team to advise tree growers and monitor progress in the field. The private sector in Uganda is composed of a mixture of local and external investors of different sizes. Organized local communities are considered favourably in the scheme and individual investors can get allocations of 5-10 ha of land for plantation establishment if they meet the set requirements. This process, apart from enhancing productivity of idle land through afforestation, helps Government to protect forest land from invasion by squatters and subsequent loss of biodiversity through fires, charcoal burning and other human activities. The government earns revenues from land leases as prescribed in legal agreements.

Box 5. **Zimbabwe** Forest Policy (2016)

One among strategies in the reviewed draft Zimbabwe Forest Policy is to *“continue to promote private sector participation and investment in the establishment and management of commercial forest plantations through appropriate forest management arrangements and incentives.”* The Zimbabwe case is interesting as communities are involved in PPP arrangements (i.e. PPCP). *“Encourage public-private-community partnerships in the forestry sector.”*

Box 5. **Ghana** Forest Policy statements

“The government will develop systems and incentive packages to support public, private sector and community investment in reforestation and forest plantation development in degraded priority forest.”

“Promote public-private sector partnerships and investment in forestry sector.”

Box 6. **Kenya** Forest Policy (2015) statement

“There is need to establish long-term management arrangements such as concessions and joint management agreements and promote public/private sector partnership in plantation development.”

“The Government will promote private sector and community participation in the establishment and management of commercial forests on public, private and community land.”

Box 7. **Nigeria** Forest Policy statement

“States and communities should guarantee tenure rights to individuals and private investors for forest plantation development at agreed terms.”

2.2.2 NATIONAL FOREST DEFINITION

The national forest definition in the draft National Forest Policy states, *“Forest is an area of land covering at least 0.5 hectares, with a minimum tree crown cover of 10% or with existing tree species having the potential of attaining more than 10% crown cover, and with trees which have the potential or have reached a minimum height of 5.0 meters at maturing.”* This seems to suggest that the country is well covered by forests while in actual fact large areas have been deforested and degraded and are now covered by shrubs and secondary vegetation of low commercial value. There is great need for landscape restoration in large areas.

The above definition limits investments in plantation establishment especially under the CDM procedures. Areas covered by bush and shrubs cannot be converted into commercial plantations as these are classified as forests under the above definition. Forest Stewardship Council forest certification rules (FSC) would not allow these areas to be afforested as they are now defined as forests. Stakeholders would like this definition amended to reflect the true situation. The UNFCCC definition is more appropriate and should probably be adopted: (1) Land area of 0.05 to 1ha; (2) Tree crown cover of 10-30%; and (3) Tree height of 2.5 meters.

Recommendations

Stakeholders recommend the inclusion of a policy clause to address the following:

- **A suitable national forest definition that takes into consideration the interests of all stakeholders will be developed and agreed.**

2.2.4 LAND TAX

Stakeholder views

The last review of land rents increased the annual rates from TZS 200 to TZS 1000 per acre. The increase in rent five-fold is considered too high for commercial forestry especially for the large plantation companies with thousands of hectares under plantations. Land rent is charged for the total area under lease and not the area covered by plantations. Rent also covers conservation zones and riverine forests left untouched in order to conserve biodiversity. Where plantations are within Municipal boundaries, rent is charged at the Municipal rate which is considered punitive. Stakeholders feel that **the Forest Policy should review the rates charges for forest plantations to incentivize tree planting and create a level playing field.**

Tanzanian context

African Forestry has previously voiced concerns about unfair playing field in tax compliance, including the recommendation to not charge forestlands under conservation as land rent as an incentive to forest managers/owners (AF, 2016, 2017).

Recommendations

Stakeholders recommend the inclusion of policy clauses to address the following:

- **The Government shall adjust land taxes for forest plantation areas so that they are similar to those charged to National Parks and Game reserves in recognition of the important part played by commercial forests in conserving biodiversity, reducing soil erosion and protecting water sources.**
- **Land tax shall be charged only for areas being used for commercial purposes. Conservation areas and areas awaiting planting shall not bear any tax.**
- **Land tax for small scale tree planters shall be charged at harvest in order to reduce financial burden on small scale tree growers.**

Experience from other countries

In Uganda, land rent charged by the National Forest Authority for Government forest land rented to investors ranges between UGX 8000 for land 50 km from Kampala and UGX 30,000 within 50 km.

2.2.4 FIRE PROTECTION

Stakeholder views

Forest fires continue to pose a big threat to plantations and woodlots in the country. Strategies need to be in place to ensure that future losses due to forest fires are minimized. There is no coordinated fire management plan in the country and the system for detecting and suppressing forest fires is grossly inadequate. The Municipal Fire Brigade charges TZS 2 million per plantation in order to be on standby in case of forest fires. This is considered expensive especially by small and medium scale tree planters. Stakeholders feel that **the Forest Policy should ensure sufficient capability at local and national levels to prevent, mitigate and manage fire as the major risk facing plantation management.**

Tanzanian context

Fire is a major problem in Tanzania's forest plantations. In the period 2005-2009, close to 6,000 ha were destroyed by fire, most of it in Sao Hill (2,160 ha) and in Kilombero valley (3,300 ha). During 2009/10, a total of c. 3,900 ha were affected by forest fires (Kiangi, 2010; Mussami 2010). According to a recent report by Working on Fire on setting Integrated Fire Management guidelines for Tanzania, urgent need for integrated fire management is necessitated by the rapid expansion of plantations and woodlots especially in the Southern Highlands. The lack of proper planning for forestry investments makes it difficult to implement proper fire management strategies. Their review of the current forest policy also highlighted the need to harmonise policies given the use of fires for agricultural land management, and fires management in National Parks and Game Reserves.

Recommendations

Stakeholders recommend the inclusion of policy clauses to address the following:

- **Government in collaboration with relevant bodies and organizations shall set up a national forest fire management organization to harmonize fire monitoring, detection, prevention and suppression.**
- **Training in fire management shall be organized at District and village level in collaboration with the private sector and other stakeholders.**
- **District Councils shall supply vital equipment and tools to village stand by gangs to ease in fire suppression.**
- **By laws relating to grass and forest fires shall be reviewed and made more effective.**

Experience from other countries

Box 8. South Africa – collaborative pests and disease management.

Lessons should be learned from South Africa where the government and private sector have formed a formidable national fire monitoring and suppression system. Special teams have been trained to deal with forest fires with the national armed forces standing by to assist in case of national fire calamities.

2.2.5 PESTS AND DISEASES

Stakeholder views

Although the country has been lucky with forest pests and diseases to date, with only a few outbreaks having occurred (e.g. cypress aphid, woolly aphids, Eucalyptus chalcid), there is no guarantee that incidents will not happen in future. Stakeholders feel that **the Forest Policy should ensure sufficient capability to detect and react to pests and disease as one of the key risks facing the industry.**

Tanzanian context

Historically, Tanzania has suffered from serious pest outbreak, most notably resulting in the decimation of cypress plantations. Evidence from other countries suggests a gradual spread of several pests and disease, and is expected to be a gradually increasing risk to Tanzania, especially given the potential effects of climate change which may alter the range of pests and diseases. TAFORI's mandate includes a focus on pests and disease, but there lacks sufficient monitoring and response capacity at all levels.

Recommendations

Stakeholders recommend the inclusion of policy clauses to address the following:

- **The government shall establish a national pests and diseases monitoring and response unit with an efficient information dissemination system and national spread.**
- **Government will strengthen research capacity in pests and diseases at local research institutes and universities.**
- **Farmers and tree growers will be trained in identification of symptoms of diseases and pests.**

Experience from other countries

In South Africa and Zimbabwe, integrated pest management and tree breeding to develop resistance characteristics are central to dealing with the significant risk of forestry pests and disease.

Box 9. South Africa – collaborative pests and disease management

In South Africa, the tree protection cooperative was formed through a multi stakeholder forum including the private sector, government and research institutes. The cooperative works closely with the Centre for Excellence in Tree Health Biotechnology which operates under the umbrella of Forest and Agricultural Biotechnology Institute (FABI). The institute monitors presence and level of threat posed by pests and diseases and through research and international collaboration designs appropriate response measures to reduce impact of the threats.

2.2.6 TREE IMPROVEMENT AND PLANTING MATERIAL

Stakeholder views

The commercial forestry sector is currently heavily reliant on poor quality planting material from a very narrow range of commercial species. The key species planted are *Pinus patula* and *Eucalyptus grandis*. The lack of locally available quality planting stock affects woodlot and plantation productivity and quality and leads to reliance on imported improved seed. The limited species diversity in commercial use exposes the country to grave danger in case of severe disease or pest outbreak. Stakeholders feel that **the Forest Policy should ensure the multi-stakeholder tree improvement research program currently underway is sufficiently resourced and coordinated for long-term sustainability, and to ensure availability of quality seed by enabling private sector roles in seed production and distribution.**

Tanzanian context

Collaborative work on tree improvement in the Southern Highlands was started by FBD in 2013. A public-private Tree Improvement Research Working Group was formed and developed a Tree Improvement Strategy for the Southern Highlands. This has led to the establishment of species trials with public and private partners covering all the ecological zones in the Southern Highlands. Breeding populations have been developed for the two dominant species. The trials will yield valuable information on alternative species to be introduced. Plans are in place to establish clonal and seed orchards of Eucalyptus and Pines in suitable locations. In order to make improved seed available on a sustainable basis, a seed company has established itself to import and distribute seeds to tree growers.

Recommendations

Stakeholders recommend the inclusion of policy clauses to address the following:

- **Government shall increase financial allocations towards collaborative tree improvement research and capacity building.**
- **Government shall promote use of high quality planting material through subsidies on imported seed and other inputs.**
- **Government will support the private sector and other players play roles in the production and distribution of high quality seed locally in order to make the country self-sufficient in future.**

Experience from other countries

Box 10. **Nigeria** – private sector roles in seed supply

“The private sector has a major role to play in the collection and distribution of tree seeds and planting stock. The Government will help to build capacity in the private sector to enable effective seed supply and marketing, and develop mechanisms to ensure high standards and quality control. Develop capacity for the supply and distribution of tree seed through the private sector. Ensure that the special needs of the different ecological zones for seed supply and nursery management are met. Establishment of seed orchards and banks. Encourage the improved breeding of indigenous trees species.”

2.2.7 INFORMATION, EXTENSION AND OUTREACH

Stakeholder views

Performance of the forest extension service in the country is poor and presence of extension officers is not felt on the ground. This is at a time when attention is required in introducing new and improved seed and to train tree planters and nursery operators on best management practices in order to achieve higher productivity. Stakeholders feel that **the Forest Policy should ensure Government revitalize and strengthen the forestry extension service including sufficient financial and manpower resourcing.**

Tanzanian context

Technical guidelines on plantation establishment and management have been produced by MNRT (FBD, 2017), with information from the guide used to produce and circulate videos and pamphlets in Kiswahili. Government, private sector and programmes such as FDT and PFP promote and deliver training on best nursery and plantation establishment practices. Through the support of PFP, tree growers have been organized into Tree Growers Associations with an apex body in place. TGAs hold good prospects to provide extension service to their members, but require significant capacity building.

Recommendations

Stakeholders recommend the inclusion of policy clauses to address the following:

- **Government shall revitalize and strengthen the extension service and provide public extension staff with skills and equipment necessary for the job.**
- **Government shall ensure that extension services are extended to village level where tree planting takes place. This will include capacitating TGAs in terms of skills, knowledge and facilities needed for extension services.**

Experience from other countries

The Uganda forest policy provides examples of explicit policy support for forestry extension (Box x).

Box 11: **Uganda's** objective and strategies to support farm forestry

“Tree-growing on farms will be promoted in all farming systems, and innovative mechanisms for the delivery of forestry extension and advisory services will be developed.

The government will provide extension and advisory services that support farmers, communities, organizations and entrepreneurs in the conservation and sustainable management of forests and in the development of farm forestry.

The government recognizes the strong unmet demand for farm forestry advice across the country, and the need for professional services. These services will be developed within the national framework, to include advocacy and monitoring by the Ministry responsible for forestry, and service delivery through decentralized, farmer-driven mechanisms, to increase the integration of forestry in rural livelihood strategies.

2.3 FOREST INDUSTRY DEVELOPMENT POLICY ISSUES

2.3.1 RAW MATERIAL SUPPLY

Stakeholder views

There is insufficient raw material from public plantations to efficiently run sawmills and incentivize investment in improved processing machinery. This is due to a combination of poor quality, low and declining volumes in block allocations, and governance shortfalls in the allocation process. Stakeholders feel that **the Forest Policy should ensure longer planning horizons for raw material supply, and for processors of all scales who invest in more efficient technology to be assured of sufficient quantity and quality raw material.**

Tanzanian context

The existing public plantations have historically not been efficiently managed. The planting materials were of low quality and most silvicultural operations were neglected. This has resulted in low quantities and quality of raw material for the industry (URT, 1998). Combined with a gap in public plantation planting until relatively recently, there is a shortage of raw material for forest industries and most of the mills are running at only 40-50 percent of the installed capacity (Indufor, 2011). The allowable cut for Sao Hill Forest Reserve, the largest industrial plantation in the country has been reduced from the initial 1.2 million m³ per year in 2005 to currently around 700,000 m³. 964 harvesting permits were issued against a volume of 700,300 m³. With 60% of this volume being allocated to long term industrial contracts during the 2015/16 financial year, the rest of the volume was allocated to 800 small and medium enterprises mostly receiving only 200 m³. At this level, SMEs can only operate for 2 months and close for the rest of the year (PFP, 2016).

The current log allocation system also creates room for middlemen ('brief case' saw millers who have no industries) to obtain forest allocations for speculative purposes. Such saw millers take advantage of scarcity of raw material and sell their forest allocations at exorbitant prices which in turn increases price of timber in the market.

Private forests are the prospective raw material supply source to the industry. However, most of the forests, especially those from non-industrial private forest owners, lack management plans and are harvested at a short rotation to meet household needs. PFP (2016) recommended for a comprehensive management plan to be made for each individual woodlot to ensure realistic harvesting rotations and reasonable forecasts of supply volumes and hence appropriate marketing strategies.

Recommendations

Stakeholders recommend the inclusion of policy clauses to address the following:

- **MNRT shall carry out pre-qualification for all industries based on installed capacity and operational efficiency in order to select a few viable mills for licensing. The selected mills shall be allocated adequate wood resources from public plantations to operate at full capacity throughout the year.**

- The Ministry shall allocate pre-qualified mills raw material on the basis of a 3-5 years licensing period to enable industries plan efficient production, marketing as well as financing options.
- The Government shall continuously evaluate quantity and quality of industrial raw material available on farms and in public forests and use the information for periodic assessment of raw material supply against national demand for wood products. This information will be made available to stakeholders in the forestry sector.
- Government shall promote tree planting and proper management of forest resources in the country by all stakeholders (TFS, the private sector and small and medium scale tree planters) in order to improve forest quality and productivity and to alleviate shortage of industrial logs.
- Government shall promote efficient harvesting and processing of logs, value addition and economic utilization of waste.

Experience from other countries

Box 12: **Uganda's** objective and strategies to support forest products processing industries

"A modern, competitive, efficient and well-regulated wood and non-wood processing industry will be promoted in the private sector. The private sector will play the major role in developing and managing the forest products processing industries and will capture the potential for value addition through high quality processing.

The role of government is to facilitate and regulate these activities. The government will develop and a strong regulatory framework which will control illegal practices, monitor best practice, measure environmental and social impacts and collect dues. The government will also create a positive investment climate to encourage private investment in the processing industry. Strategies for implementation of this policy statement will include:

- *Introduce competitive bidding for harvesting concessions in government plantations, to Improve transparency, to increase revenues to government and reflect the real values of the resource.*
- *To introduce performance bonds for harvesting contractors, to improve best practice and to ensure responsible management.*
- *Improve regulations of concessions including development of harvesting and processing standards, social and environmental impact assessments and the collection of dues.*
- *Optimize royalty rates and fees to reflect the economic values of forest resources and yet provide adequate incentive for private investment"*

2.3.2 INDUSTRIAL OUTPUT AND EFFICIENCY

Stakeholder views

The forest industry is dominated by manufacturing units with old and obsolete machinery and equipment. Use of poor technology affects industrial productivity and results in quality of products, including very rough timber surface and large dimensional variances. Stakeholders feel that **the Forest Policy should provide the necessary incentives and technical support to enable processors to constantly transition towards more efficient technology.**

Tanzanian context

An estimated 78% of the technology used for saw milling in the Southern Highlands is low technology, mobile sawmills ('ding dongs'), also responsible for an estimated 51% of the saw mills processing wood from government forests (PFP, 2016). This technology has a recovery of only 25- 35% compared to more recently installed modern band saws which have a recovery of 38 -40%. This low recovery compared to nearly 50% in well run sawmills is mainly due to poor maintenance of saws and ancillary equipment.

The government is promoting technology upgrades in the wood industries in order to enhance efficiency and productivity. New rules in 2017 for raw material allocations from government forests stipulate that no log allocations will be allowed for mobile saw benches (Ding Dongs) which are wasteful and dangerous to operate. More efficient circular and band saws are being recommended as replacement for the Ding Dongs. Limited efforts to upgrade saw milling equipment are under way with Band saw technology from India, China and United States. The PFP is in the process of installing 2 -3 training sawmills in the Southern Highlands with the aim of promoting more efficient sawmilling technologies.

Upgrading industrial technology requires knowledge on suitability of machinery to the local circumstances, supply of spares locally and availability of technicians with knowledge on maintenance. There is a big shortage of technicians and artisans to serve the wood industries. Courses currently being offered at Vocational Training Centers are not tailored to deal with mechanical issues unique to the wood industries. In order to deal with this gap, VETA should incorporate courses on mechanical wood industries in the learning curriculum and expose students to lengthy practical sessions in the industries.

Recommendations

Stakeholders recommend the inclusion of policy clauses to address the following:

- **Government shall offer technical advice to SMEs on choice of and procurement appropriate technology available for more efficient operations.**
- **The MNRT will collaborate with the relevant government agencies in order to have technical training in operations of wood industries incorporated in the VETA curriculum at certificate and Diploma levels as a means to alleviate the current acute shortage of technicians and artisans in the forestry sector.**
- **The Ministry recognizes and supports current efforts by PFP to introduce technical training in various fields into the FITI and VETA curriculum.**

Experience from other countries

Box 13: Uganda's strategies to support forest products processing industries

- *Reduce inefficiency and wastage through use of appropriate processing machinery, research, new technology and waste utilization.*
- *Promote value addition through high quality secondary and tertiary processing and limiting exporting of raw material.*
- *Encourage new forest products and markets including artisanal wood and non-wood products."*

2.3.3 TRADE AND MARKETS FOR WOOD PRODUCTS

Stakeholder views and Tanzanian context

Weak markets and under-developed wood processing industries are major constraints to the expansion of forest plantations (Indufor 2011). Low quality products and uncompetitive prices do not incentivize potential customers and investors in establishment of forests. The situation is compounded by lack of market information to guide the industrial sector as well as potential buyers. Trade data for Tanzania is very scattered and conflicting (Mwamakimbullah, 2015).

Plantations are not supplying adequate volume of logs to meet demand for wood products and the quality of the raw material is not good enough to meet quality expectations for local and export market. This undermines competitiveness of our products.

There is need to develop quality standards for key products produced for both domestic and export market. The Tanzania Bureau of Standards (TBS) has developed a number of timber- related standards which can be accessed through the TBS website. A few of the standards are cited here below:

- a) TZS 81:2009, Paper and board – Determination of grammage;
- b) TZS 256: (Part 1) 2009, Timber – Determination for coniferous sawn timber (cypress and pine) – Part 1: Sizes of sawn and planed timber;
- c) TZS 657: 2011, Glossary of terms used in timber industry;
- d) TZS 661: 2011, Copper/chromium/arsenic composition for the preservation of timber – Methods for timber treatment; and
- e) TZS 686: 2011, Wood poles and blocks for power and telecommunication lines – Specification.

Most of these standards cover a narrow range of standard requirements and need a lot of improvements. MNRT in collaboration with TBS and private sector needs to work together to establish the remaining standards and to improve quality of existing ones. At the moment, timber standards are available only for sawn wood for export market and none exist for the domestic market. Similarly, there is no standard for logs, an omission which needs urgent attention. Both existing standards and those to be developed should be comprehensive and harmonized with regional standards (EAC, COMESA, SADC).

Illegal logging of timber has been reported in many parts of the country while cross- border smuggling of wood products has been identified as a problem. These two factors tend to distort market prices.

Recommendations

Stakeholders recommend the inclusion of policy clauses to address the following:

- **Government will curb illegal timber business by the development and implementation of a national chain of custody system to track the movement of forest products for local and export markets.**
- **Government will facilitate the establishment and operationalization of the Timber Auction floor.**
- **Government will develop and apply quality standards and grading rules for key wood products to ensure that only products meeting and exceeding the standards are traded in the market.**
- **Government will commission market studies, analysis and dissemination to stakeholders, including new opportunities for trade in wood products in the local and export market.**

Experience from other countries

Box 14: **Kenya** policy statements - chain of custody

“Develop and implement a national chain of custody system to track the movement of forest products for local and export markets.”

Box 15: **Nigeria** policy statements - grading and log tracking

“Develop grading rules and apply these rules to ensure the production of value added high quality forest products acceptable in local and international market.

Develop certification process for SFM that includes effective log tracking to ensure the acceptability of export wood products in the international market.”

Box 16: **Zimbabwe** policy statements - certification

“Encourage the adoption of standardization and certification system to increase the competitiveness of Zimbabwean wood products regionally and internationally.”

2.3.4 IMPROVING BUSINESS ENVIRONMENT FOR WOOD PRODUCTS

Stakeholder views and Tanzanian context

Stakeholders feel that a number of issues are negatively affecting the business environment:

Harmonization of forest license fees and levies: The Ministry is currently charging for the following licenses and levies: Saw mill license; Assessment fee; Wood products trade registration (for producer and distributor); Transit passes; District Council Cess; VAT; LMDA; and TFF Levy. These charges are considered exorbitant and are making the cost of wood uncompetitive. The taxes should be reviewed and especially VAT on standing trees. VAT should be levied on processed wood products and not on raw material for industry.

TFS Barriers, Police Road Blocks and Weigh Bridges: Numerous TFS barriers, Police checks and Weigh Bridges are causing big delays in the transport system resulting in high transport cost. Trucks can only do 1-2 round trips a week from Mafinga to Dar es Salaam instead of 3-4 before checks were intensified. MNRT has also issued regulations stopping movement of wood products at night and this reduces the volume of goods reaching the market

Trade registration: It is now a requirement that a producer intending to transport timber to the market must be registered by TFS. The recipient of the timber (distributor) must also be registered by TFS. Original copies of the registration and a photograph of the producer and distributor must accompany each load of timber delivered. This process is causing untold problems in the market as producers can only use one truck at a time to deliver to a distributor. In case of disagreements between supplier and distributor, cargo cannot be diverted to another buyer due to these restrictions.

Recommendations

Stakeholders recommend the inclusion of policy clauses to address the following:

- **MNRT shall review all the rules and regulations governing the operations of the wood industry and remove all trade barriers in order to smooth trade in wood products and enhance competitiveness.**
- **Government shall review taxes applied to the forestry sector including charges for levies, permits, licenses and District Council cesses with a view of streamlining the system for efficiency. Taxes and other charges shall be reviewed to make wood products competitive in the local and export markets.**
- **The MNRT shall assist businesses in wood products to grow by providing market information and nurturing SMEs through training in business management and development.**

Experience from other countries

Box 17. **Uganda** Forest Policy – public role in creating conducive business environment

“The role of government will be to support and regulate this development. It will put in place a regulatory framework, which will control illegal practices, monitor best practice, measure environmental and social impacts, and collect dues. The government will create a positive investment climate to encourage private investment in commercial forest plantations.”

2.4 INDUSTRY-WIDE ENABLING CONDITIONS

2.4.1 PRIVATE SECTOR COORDINATION AND SECTOR DIALOGUE

Stakeholder views

In Tanzania, the private sector in forestry is not well organized and lacks strong sector-wide governance structures to promote internal dialogue and sector representation. The private forest sector is at its relative infancy and needs to be nurtured to become stronger and better organized for it to significantly contribute to the national economy. In this regard, the sector needs to develop structures and systems that take into consideration the diversity of actors, including small enterprises operating informally. Meetings between stakeholders and the government are rare which encourages an individual approach to solve issues. Stakeholders feel that **the Forest Policy should promote the strengthening of sector coordination involving the private sector and creation of a national consultative forum for national dialogue and debate on matters that affect the commercial forestry sector.**

Tanzanian context

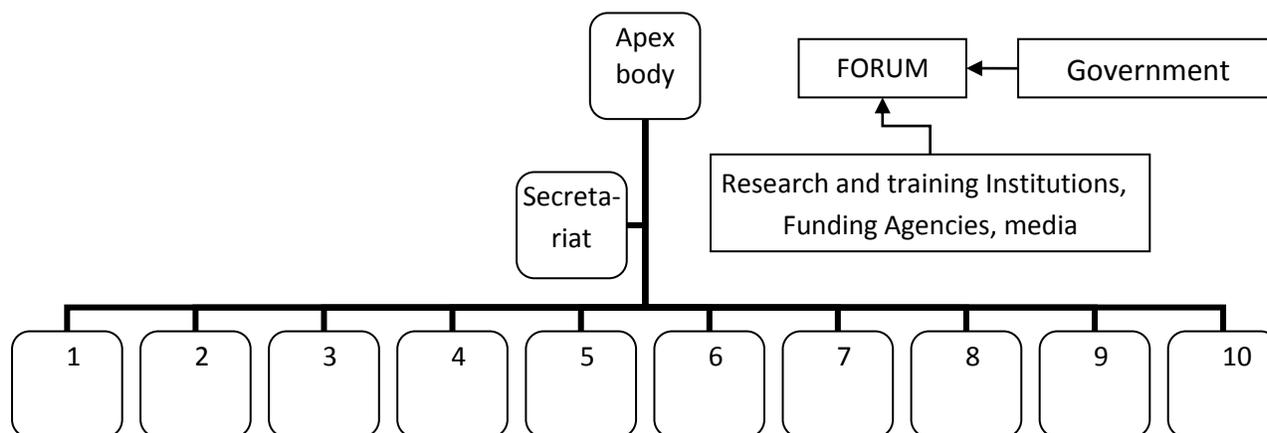
In Tanzania, the private sector in forestry is currently represented by various associations such as SAFIA (Southern Forest Industries Association), NOFIA (Northern Forest Industries Association), UWAMBU (Umoja wa Wavunaji Miti Bundi), UWASA Umoja wa Wavunaji Sao Hill) with SHIVIMITA (Federation of Timber Industries Association) as the umbrella body. Two associations exist with tree grower and plantation company membership, the Tanzania Tree Growers Association and Forestry Tanzania. These associations are however relatively weak and not well organized to deal with sector-wide issues and to promote internal dialogue and sector representation.

Mwamakimbullah (2016) recommended a structure to represent the private sector in Tanzania (Figure 1). The apex body could be composed from the national product/business line associations such as the Tanzania Sawmillers Association, Tanzania Wood Preservers Association, Tanzania Tree Growers Association, etc. Alternatively, each of these Associations could be organized in such a way that the interests of small, medium and large-scale actors who are members are also taken into consideration through their fair representation in the apex body. Within each national product/business line association, committees would be formed to represent the strata in them. For example, there should be committees to represent large, medium and small-scale tree growers in the Tanzania Tree Growers Association. Gender equity and social inclusion would need to be secured.

In addition, a platform or forum is recommended where the private sector could engage with the Government on bilateral issues. At such a forum, the Government could table policy and strategic issues while the private sector could present business and operational issues. Discussions between parties should aim at reaching consensus and win-win solutions.

For operationalizing day to day activities of the apex body, Mwamakimbullah (2016) recommends a competitively recruited national secretariat answerable to a Board/the apex body. The Annual General Meeting should be the supreme organ of the Association.

Figure 1. Proposed organization structure of the Tanzania private forestry sector



Key:

1-Tanzania Tree Growers Association, 2- Tanzania Transporters and Traders of Forest Products, 3- Tanzania Wood Working Federation, 4- Sawmillers Association of Tanzania, 5- Tanzania Wood Preservers Association, 6- Tanzania Panel Manufacturers Association, 7- Tanzania Association of Building Contractors, 8- Tanzania Association of Charcoal Producers and Traders, 9- Tanzania Network of Forest-related CBOs and NGOs 10- Community-Based Forestry Association.

Recommendations

Stakeholders recommend the inclusion of policy clauses to address the following:

- **Government shall facilitate and support formation of a strong association to represent the forestry sector with chapters representing specific product/business lines or value chains.**
- **Government shall establish a national forestry forum for dialogue and consultations and facilitate at least two meetings a year to deliberate on forestry issues.**
- **Industry associations shall be represented in various bodies performing specific functions affecting the forestry sector such as the LMDA, Tanzania Forest Fund, and Ministerial Advisory Committee.**
- **Government shall ensure that good governance prevails in the commercial forestry sector, ensuring that fairness, transparency and openness are practiced in all dealings in the forestry sector.**

Experience from other countries

Uganda, Nigeria and South Africa provide examples on how the private sector and the government can collaborate (Boxes 3, 4 and 5 respectively).

Box 18: Uganda Forest Policy – sector coordination and national consultative forum

In Uganda, the policy provides for a forest sector co-ordination structure that will be developed to provide a forum for sector-wide planning and co-ordination. This draws representation from central government ministries involved in the forest sector, local governments, the private sector and civil

society. Such a structure ensures that a coordinated and balanced sectoral approach is maintained, as government's direct involvement in the sector is redefined and reduced, and the role of the private sector and civil society is increased. This co-ordination structure is to be supported by a professional body, which will be developed using resources drawn from the sector's stakeholders. Its staffing and operations will reflect the evolving needs for sector co-ordination.

In addition, the policy provides for a national consultative forum to allow the public, international partners and all interested parties to contribute to a regular debate on the forest sector, to improve sector coordination and inform national priorities.

The policy also includes the strategy, *“Strengthen private sector organizations to improve communications, access to market information and technical collaboration in the plantation industry.”*

Box 19: Nigeria Forest Policy – sector coordination and national consultative forum

In Nigeria, the policy provides for the establishment of the National Forestry Development Committee, the highest statutory advisory body on forest issues. It is composed of all State Directors of Forestry, Heads of department of Forestry in the Universities, Director of Forestry Research Institute of Nigeria, some NGOs, representative of private sector in Forestry and other relevant CBOs. The Federal Director of Forestry is the Chairman of the Committee. The Committee is to be supported to meet twice in a year to review the implementation of the NFP.

A national consultative forum is also to be developed to allow the public, international partners and all stakeholders to contribute to a regular debate on the forest sector to improve sector coordinators and inform national priorities.

Box 20. South Africa – sector coordination and national consultative forum

In South Africa, ‘Forestry South Africa’ represents all actors in the sector. They also have a forum, the ‘Commercial Forestry Liaison Forum’ where forestry associations and the government meet to draw an annual action plan. Thereafter, they meet quarterly to discuss accomplishments and challenges and synergistically draw strategies to address the challenges.

2.4.2 PROVISION OF FINANCIAL MECHANISMS AND INCENTIVE SYSTEMS FOR COMMERCIAL FORESTRY DEVELOPMENT

Stakeholder views and Tanzanian context

In Tanzania, the private sector in forestry is not well organized and lacks strong sector-wide governance structures to promote internal dialogue and sector representation. The private forest sector is at its The development of the forest sector in Tanzania has been dominated by dependence on donor financing, and sectoral self-financing mechanisms have remained undeveloped. Financial mechanisms in place do not effectively promote long-term investment by private actors (Ngaga 2011). Potential financing mechanisms include provision of bank soft loans, tax incentives and carbon finance. Tax incentives have been used in many countries to get the private plantation sector off the ground, generating jobs and increasing forest products both for local and export markets. Nations with growing private forest plantations have done so through offering tax incentives to private forest plantation investors. This has worked well in Uruguay, Brazil, Asia-Pacific Countries, Costa Rica, Guatemala, Chile and many more. Waving of, for example, income tax or VAT to a level which is acceptable by both sides, could boost the initiative of developing private forest plantations in the country (PFP, 2014). The tax structure should factor in the long-term nature of forestry investment so as to avoid unrealistic taxations.

Tree growing takes a long time, sometimes more than 20 years. Tree farmers need funds to finance tree planting and management. Tree farmers also need money to finance their household expenses as they wait for trees to mature. It is common knowledge that farmers are harvesting woodlots and plantations earlier than the maturity date in order to raise funds to pay for essentials.

On the other hand, upgrading industrial technology in order to enhance productivity and efficiency requires money for importation and installation of machinery and equipment. SMEs operating below capacity for a long time have not been able to accumulate capital to purchase new equipment.

Borrowing from banks and SACCOs has proved difficult due to high interest rates in excess of 20% and very short repayment period. Collateral is also needed in order to secure the loans. Although land is available which can be used for collateral for forest planters, often the land is un-surveyed and not registered. Cost of land survey and issuance of title deeds has become lengthy and expensive. Traditional title deeds are also not readily accepted by banks as collateral.

Stakeholders would like to see strategies that would assist farmers and industrial operators gain access to appropriate funding systems which take into consideration the long rotations and the need for intermediate payments before the final harvest. Financial incentives granted by the government in recognition of the tangible and intangible benefits contributed by commercial forestry to the economy would help to spur expansion of this sub-sector.

Recommendations

Stakeholders recommend the inclusion of policy clauses to address the following:

- **Government will create a stable and conducive investment climate for commercial forestry by providing incentives for establishing PPPs in the primary production, processing, value addition and marketing of wood and non-wood forest products.**
- **Government will make available grants and other forms of financial incentives to support the commercial forestry sector in recognition of the sector’s huge contribution to the national economy.**
- **The Tanzania Forest Fund shall be expanded to cater for the needs of the commercial forest sub-sector. Alternatively, a Forest Plantation and Industrial Development Fund shall be established to provide funding specifically to the private forest sector.**
- **Government shall establish a special ‘window’ in a suitable Development and Investment bank in the country to finance forest plantations and industrial development by the private sector. This facility shall accommodate special needs including long rotations associated with tree growing.**
- **Government shall subsidize the cost of machinery imported for the purpose of processing, value addition and manufacturing products from waste and forest residue.**
- **Government will streamline the system for land registration including lowering land survey and other costs to enable land owners access title deeds. Traditional Title deeds shall be recognized as collateral by financial institutions and Government shall do the needful to clear any misunderstandings on this matter with the banking sector.**

Experience from other countries

Box 21: **Nigeria** Forest Policy statement (2006):

“Government will further strengthen the financing of small scale forestry and wood processing enterprises in order to address the constraints to private sector investment.”

Box 22: **Zambia** Policy statement

“Create a stable and conducive investment climate for forestry industries development by providing incentives for the creation of public private partnerships in the production, value addition and marketing of wood and non-wood forest products and services with relevant authorities.”

Box 23: **Uganda** Policy statement

“Promote innovative financing mechanisms, such as a Forestry Fund, and fiscal incentives in order to encourage investment and ensure sustainable sources of operational and reinvestment funds.”

2.4.3 RURAL INFRASTRUCTURE

Stakeholder views and Tanzanian context

In areas where commercial forestry is practiced, the road infrastructure is not adequate and in most cases in poor state. Investigations by FDT indicate that prices for wood products obtained from areas with poor roads are heavily discounted compared to those obtained from accessible areas. Future wood supplies for industries will come from commercial plantations and woodlots. It is important that road density and quality in all key tree growing areas are upgraded in order to cope with future demand. Examples of such areas include Kilolo, Mufindi, Njombe, Ileje, Rungwe just to mention a few. This will improve accessibility and efficient extraction of logs from these areas.

Similarly, roads in forest reserves are in poor state and become impassable during the rainy season. Logging and transport of logs from public forests becomes expensive due to heavy tear and wear on forest vehicles. Road maintenance and construction of new roads should be financed through the LMDA. Use of LMDA is controlled by TFS without any inputs from the industry players. Setting of priorities on use of the fund often goes against the wishes of the industry.

Industries are suffering from inadequate electric power supply to mills and at times the quality of electricity is poor. In order to produce at the required capacity, adequate power is needed as this will reduce operational costs and result in competitive products. Provision of electricity in villages will encourage investments in processing plants near source of raw material which will in turn improve the economics of the sector.

Revitalizing the performance of the railway system (TAZARA) is critical to the performance of the wood industries. It is cheaper to transport by rail compared to trucks and there are fewer barriers and obstructions while using the railway system. Improvement of the TAZARA rail system will benefit the sector as transport of sawn wood, utility poles and other products can be transported to Dar es Salaam, the largest market more efficiently and cheaply. Export of wood products will be made easier with a working rail system as goods can be railed straight into the port ready for shipping. A similar call to re-invigorate TAZARA services to reduce transport cost and hence the price of forest products at the final market was made in a study by PFP (2016). Unfortunately TAZARA is performing sub-optimally due to financial and management problems as well as inadequate rolling stock. These issues need to be addressed.

Harbour operations need to be streamlined in order to deal with export of timber and other products. In the past, delays at the harbor have resulted in ships sailing away without cargo resulting in costly legal process and compensation to shipping liners for 'dead freight'

Recommendations

Stakeholders recommend the inclusion of policy clauses to address the following:

- **Government shall continue to upgrade and improve the road infrastructure in rural areas especially areas with good business prospects such as forest plantation areas.**

- The operations of the TAZARA Railway system shall be reviewed and improved in a manner that will allow forest industries transport wood products to Dar es Salaam which is the largest market.
- Electricity shall be made available to rural areas especially where industrial activities are envisaged. The government will ensure that regular and high quality power is supplied to customers.
- Government in collaboration with other stakeholders will ensure that internet and telephone connectivity is efficient in order to enhance business development.
- Government in collaboration with other stakeholders shall ensure that all harbors operate efficiently in order to facilitate efficient export of forest products and importation of industrial inputs.

2.4.4 SUPPORT TO FORESTRY RESEARCH

Stakeholder views and Tanzanian context

Currently, research institutions are operating at very low capacity due to inadequate funding. TAFORI and TTSA are not able to deliver on mandates due to shortage of funds and expertise. This is at a time when intense research is required to solve many problems facing the forestry sector. The country needs to increase productivity in plantations to meet national demand for wood products. At the same time tree planters are not able to access adequate volume of seed of the required quality. Tree pests and diseases are on the increase and yet the country does not have adequate facilities to monitor presence and rate of spread for diseases and pests. The impact of climate change on growth of forests is not well understood as tree planters pray for divine intervention due to prolonged drought and wild fires.

Forest industries have for a long time relied on production of sawn wood as the only industrial activity. Research is needed in new products to meet market demand and make industrial operations more profitable. Answers to these questions will only be obtained through well planned and funded research.

Stakeholders are also concerned about the current forestry research agenda and whether it is relevant to national needs. Stakeholders wish to be involved in deciding the scope of research programs which should address practical problems faced by the forestry sector. The other concern is in regard to output from the forestry research institutions which to date have little to show in terms information dissemination of research findings which is relevant and usable by stakeholders.

Recommendations

Stakeholders recommend the inclusion of policy clauses to address the following:

- **Government shall Increase financial allocations to research institutes in order to enhance capacity for research work in forestry.**
- **Forestry research shall be demand driven and stakeholders shall be given opportunity to decide on research agenda.**

- The private sector shall be encouraged to support forestry research through grants and other financial instruments including contracting research institutions to carry out investigations in particular fields.
- Government will promote collaborative research involving a cross section of partners including government organizations, private sector, national and international institutions.
- Research facilities for forest products shall be established with a view of increasing the range of products especially value added products reaching the market.

Experience from other countries

Box 24: **South Africa** - CSIR collaboration and partnerships

The CSIR's mandate encourages it to cooperate with entities in the public and private sector. They recognize that a collaborative approach to research will lead to better outcomes and innovations.

Complex problems require a multidisciplinary approach to resolve. Partnerships can play a key role in broadening the capabilities required to resolve these challenges.

CSIR works with a range of organizations, companies, education institutions, government departments and state-owned entities in all of our focus areas: energy, health, industry, defense and security, as well as the natural, built and digital environments.

The CSIR contributes to the vision of an integrated, prosperous and peaceful Africa and contributes to innovation in Africa, tackling continental societal challenges by collaborating with African partners on science, engineering and technology.

2.4.5 TRAINING AND EDUCATION

Stakeholder views and Tanzanian context

There is shortage of professional and sub- professionals with practical knowledge in commercial forestry. This is because commercial forestry is not taught at University or college level. Due to benefits of commercial forestry to the economy, it is recommended that universities and colleges include this subject in the teaching curriculum and include practical field work as a major component of the course.

It has been observed that Universities and colleges are not adequately funded by the government and this affects teaching especially exposing students to practical work. Research also suffers due to shortage of funds.

Stakeholders have voiced concerns due to shortage of artisans and technicians for the wood industries. Urgent attention is needed in training this cadre of employees. Specialized training should be organized at Vocational Training Centers with practical sessions in the wood industries.

Training of workers and supervisors has been ignored for a long time. Such training can help to raise productivity and cut costs while ensuring that jobs are done safely. Vocational Training Centers in collaboration with the private sector should plan regular and implement courses for workers. Workers who attend should be awarded competency certificates as a morale booster and a way of recognizing specific competencies.

Recommendations

Stakeholders recommend the inclusion of policy clauses to address the following:

- **Universities and colleges shall plan and implement practical courses in commercial forestry in order to produce man power for this growing sector.**
- **Government will increase funding to universities and colleges with a view of improving teaching and enabling the institutions to carry out research as mandated.**
- **MNRT in collaboration with the private sector will work with the relevant authorities in order to commence training of industrial technicians, artisans, fitters and forest workers.**
- **Universities and other forestry education institutes shall incorporate commercial forestry as a subject in the teaching curriculum.**
- **Government shall organize specialized technical training and industrial exposure for SME operators and assist them to gain access to appropriate technology in wood processing.**

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ANNEX 1. Private commercial forestry stakeholder engagement: approach and participants

In order to enhance inputs and increase the level of participation of commercial forestry stakeholders in the government-led process of reviewing the Forest Policy, FDT engaged two senior forestry consultants to facilitate the process and summarize policy review recommendations proposed by the stakeholders.

Key stakeholders in the sector were grouped into categories based on area and scale of operation:

1. Wood Processors
 - *Small-scale wood enterprises*: including mobile saw benches, ‘ding-dongs’, etc.
 - *Medium-scale wood enterprises*: sawmills, veneer manufacturers, furniture industries and other value addition industries, as well as associations such as UWAMBA, SAFIA, NOFIA and SHIVIMITA.
 - *Wooden pole enterprises*: Treated pole manufacturers and traders.
2. Integrated forestry companies
 - *Plantations and wood processing industries* including Sao Hill Industries, Mufindi Paper Mill, TANWAT, New Forest Company and KVTC, as well as the Tanzania Chamber of Commerce and associations representing these industries such as African Forestry.
3. Tree Growers
 - *Tree Growers Associations*: Two members per district and member of the TGA Apex body.
 - *Medium scale tree growers*: A sample of rural and urban-based growers and investors, including church organizations and linked industries such as Tea and Tobacco growers.
4. Service industry
 - *Tree grower service providers*: Nursery operators, plantation contractors and seed distributors.
 - *Timber traders and transporters including raw pole suppliers*.

In addition, local studies and policies from other African countries were also visited to gather issues relevant to our policy.

Policy review workshops

One-day policy review workshops were held for each of the sub-groups. The workshops were held in Mafinga and Njombe to enable attendance by a large number of tree growers and participants from forest industries. A list of participants in each of these groupings is included below.

A validation and synthesis workshop was held in Mafinga on 18th August to enable stakeholders to review a draft paper derived from the earlier meetings with specific stakeholder groups, to be forwarded to the National Forest Review Team during the Zonal meeting for the Southern Highlands. The meeting also worked to agree on the process to engage effectively with the ongoing policy review process.

Table. List of private commercial forestry participants during policy review workshops (signed versions available)

Date	Participants category	Sn	Name of participants	Company/organisation	Place
19.06.2017	Small Wood Industries Enterprises	1	Oscar M. Kaduma	Mufindi by Products	Mafinga
		2	Nelson M. Betson	Edda Saw mill	
		3	Anyelwisye N. Mahenge	Mena Wood	
		4	Aziz E. Feer	Aziz E. Feer	
		5	Mariam S. Mbarouk	Marium Mbarouk	
		6	Fred N. Sentam	Sentam Timber	
		7	Jeniffer Kimario	Kimario Timber	
		8	Farida M. Haule	Farida Haule	
		9	Yona Mwakanjuki	Paulyona Timber	
		10	Mary Zablon Simba	Wambi Timber	
		11	William Mgowule	Manhattan Investment	
		12	Vitus Mponzi	Mufindi Wood Plantations	
		13	G. K Mosh	MUET	
20.06.2017	Medium Wood Industries Enterprises	1	Mussa Magelanga	TABEA	Mafinga
		2	Constantine Christine	KOMAS	
		3	Elfas Kaboda	Benon Saw Mill	
		4	Halid Sheketo	Halid Entreprise	
		5	Castory Sanga	Green Timber	
		6	Leonard Mahenda	Qwihaya General Traders	
		7	Seleman Mwenda	CF Saw Mill	
		8	Beruto K. Baruma	BEKAN Company	
		9	Damas C. Ng'umbi	DARODESHEDEA	
		10	Henry Lukaminga	Ihembe Timber	
21.06.2017	Medium Tree Growers, Tobacco and Tea growers	1	Owden Mwaikema	WATCO	Mafinga
		2	Fr. Arnold Ngolle	KILOCHA TEA FARM	

Date	Participants category	Sn	Name of participants	Company/organisation	Place
		3	Rick Ghau	JILANJO LM	
		4	Mr. Matekeleza	Matekeleza and Company	
		5	Method Changa	Method Changa	
		6	Kasian Chang'a	MTC	
		7	Joseph R. Ng'umbi	Joseph Ng'umbi	
		8	Cheddy Ng'umbi	Cheddy Ng'umbi	
		9	Hawad Rashid	Hawad Rashid	
23.06.2017	Pole and Timber Preservers	1	Daniel Msigwa	Msigwa Logistics	Mafinga
		2	Julius S. Sangija	SHEDA General Enterprise	
		3	Leonard Mahenda	Qwihaya General Traders	
		4	Abdallah Mashombo	Uyole Investment	
		5	John Mwauri	Sao Hill Industries Limited	
04.07.2017	Industrial Plantation Companies	1	Lionel Dlamini	New Forests	Mafinga
		2	Victor Kimey	Green Resources Limited	
		3	Antery Kiwale	TANWAT	
05.07.2017	Small Tree Growers, Tree seed supplier	1	Yohana S. Kikungwe	TGA	Njombe
		2	Junus K. Mhanje	TGA	
		3	Kastory M. Timbula	PFP	
		4	Laban S. Mgimba	TGA	
		5	Lukas N. Payovela	TGA	
		6	Ezekiel Sanga	TGA	
		7	Juhani Pekkala	PFP	
		8	Steven Sallu	Jambe Agro	
		9	Venance W. Mhanzi	TGA	
		10	Jerda E. Kikoti	TGA	
		11	Adriano E. Mmehwa	TGA	
		12	Lucy O. Ngailo	TGA	

Date	Participants category	Sn	Name of participants	Company/organisation	Place
		13	Dominicius A. Mganwa	TGA	
		14	Lazarus Mbillinyi	TGA	
		15	Peter Mbengwa	TGA	
		16	Happy Nyato	TGA	
		17	Filoteus Lwekela	TGA	
		18	Raymond O. Haule	TGA	
18.08.2017	Validation and Synthesis Workshop	1	Willy Mgowole	Halidi Enterprise	Mafinga
		2	Owden Mwaikela	Wakulima Tea	
		3	Rick Ghau	Jilanjjo	
		4	Matekelza Chang'a	Matekelza	
		5	Kasian Chang'a	Mufindi Tea	
		6	Yohana Kikungwe	TGA	
		7	Kastory Timbula	TGA	
		8	Laban Mgimba	TGA	
		9	Lazarus Mbillinyi	TGA	
		10	Jerida Kikoti	TGA	
		11	Happy Nyato	TGA	
		12	Lucas Payovela	TGA	
		13	Lucy Ngailo	TGA	
		14	Ben Sulus	SHIVIMITA	
		15	Alphonse Kipande	Manhattan Enterprises	