



UNITED REPUBLIC OF TANZANIA
MINISTRY OF NATURAL RESOURCES AND TOURISM

FORESTRY AND BEEKEEPING DIVISION

**ACTION PLAN FOR THE NATIONAL
ENGINEERED WOOD SECTOR DEVELOPMENT
FRAMEWORK (2021-2031)**

JULY, 2021



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LIST OF ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
BOT	Bank of Tanzania
CBOs	Community-Based Organisations
EWP	Engineered Wood Product
FDT	Forestry Development Trust
FITI	Forest Industries Training Institute
FWG	Forestry Working Group
GDP	Gross Domestic Product
HIV	Human Immunodeficiency Virus
MDF	Medium Density Fibreboards
MNRT	Ministry of Natural Resources and Tourism
MoEVT	Ministry of Education and Vocational Training
MoFP	Ministry of Finance and Planning
MoIT	Ministry of Industry and Trade
MoL	Ministry of Lands
NACTE	National Council for Technical Education
NEEC	National Economic Empowerment Council
NEMC	National Environmental Management Council
NGOs	Non-Governmental Organisations
OSHA	Occupational Safety and Health Authority
PFM	Participatory Forest Management

PME	Participatory Monitoring and Evaluation
PO-RALG	President's Office-Regional Administration and Local Government
PPRA	Public Procurement Regulatory Authority
SDL	Skills Development Levy
SIDO	Small Industries Development Organisation
SMEs	Small and Medium Enterprises
TADB	Tanzania Agricultural Development Bank
TanTrade	Tanzania Trade Development Authority
TBS	Tanzania Bureau of Standards
TCB	Tanzania Commercial Bank
TIB	Tanzania Investment Bank
TNBC	Tanzania National Business Council
VETA	Vocational Education and Training Authority

FOREWORD

Her Excellency, Samia Suluhu Hassan, President of the United Republic of Tanzania chaired the 12th Tanzania National Business Council (TNBC) meeting in 26th June, 2021 that endorsed the National Engineered Wood Sector Development Framework 2021-2031. The aim of the framework is to enable Tanzania to become a competitive producer and trading nation of engineered wood products (EWP_s) in domestic, regional, and international markets. This economic ambition will be achieved through; promoting and attracting both local and foreign investment in engineered wood, enhancing productivity in the sector, building institutional and human resource capacity, ensuring adequate supply of quality raw materials and promoting economic inclusion.

The Ministry of Natural Resources and Tourism (MNRT), as the lead ministry, resolved to prepare an action plan for the National Engineered Wood Development Framework. The plan is expected to ensure effective coordination among actors in the development of the engineered wood sector and realisation of intended outcomes to optimise the utilisation of available resources, among others. However, the realisation of the framework's intended outcomes is dependent on the collaborative efforts and engagement of all forestry sector stakeholders.

In view of this, the Ministry of Natural Resources and Tourism calls upon all forestry stakeholders to provide necessary support and cooperation to ensure that the action plan is well implemented. This can be efficiently achieved if there are proper mechanisms to coordinate actors in the engineered wood sector. Hence, the action plan outlines responsibilities of all actors in the sector and ensures synergy in the implementation of engineered wood development initiatives.



Dr. Allan H. J. Kijazi

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MINISTRY OF NATURAL RESOURCES AND TOURISM

ACKNOWLEDGMENT

Following the endorsement of the National Engineered Wood Sector Development Framework 2021-2031 by the 12th Tanzania National Business Council (TNBC) meeting which was held on 26th June, 2021, the Ministry of Natural Resources and Tourism (MNRT) formed a taskforce, consisting of members with diverse academic and professional backgrounds including forestry, economics, finance, investment, business development and public policy development, to develop the action plan. Furthermore, the Forestry Development Trust (FDT) provided financial support and extra input on the engineered wood product value chains.

In this regard, the Ministry acknowledges the contribution of each and every one who participated in this important national development initiative. We are grateful to all experts who provided inputs during the preparation of this Plan. We appeal for continued engagement and support during the implementation of this plan. The Forestry and Beekeeping Division and the entire MNRT Management guarantee their continued cooperation and engagement with private sector stakeholders through public-private dialogues. Likewise, it is our expectation that the TNBC Forestry Working Group will continue to demonstrate its remarkable contribution towards the transformation of the Tanzania Forestry Sector.



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SECTION ONE

INTRODUCTION

1.0. BACKGROUND INFORMATION

The Government, in collaboration with key stakeholders, is determined to transform the forestry sector through the development of the engineered wood sector, which has demonstrated its potential economic and social impact in the country. In this regard, the Ministry of Natural Resources and Tourism (MNRT), in collaboration with the Tanzania National Business Council (TNBC) Forestry Working Group (FWG) and Forestry Development Trust (FDT), prepared the National Engineered Wood Sector Development Framework (2021-2031). Guided by Vision 2025 and the National Forest Policy (1998), the overall goal of the framework is to promote the development of the engineered wood sector to increase its contribution to economic growth that leads to increased income, job creation and improved wellbeing of people engaged in the engineered wood industry. In addition, the government will benefit through increased revenues, foreign exchange earnings and improved balance of trade.

In line with the mission, the outcome (purpose) of the framework is to achieve a transformed engineered wood products industry which is inclusive, competitive, technologically capable, environmentally friendly (i.e., attention to climate change issues), prioritizes gender, youth and people with disabilities and considers future sustainability. The outcomes of the framework implementation are characterized by type and number of actors, capacity utilization, efficiencies achieved and growth in trade volume. Appropriate indicators and targets have been designed to aid in the tracking of performance throughout the implementation of the framework. The action plan provides the link between the outcomes and focus areas for implementation to generate the expected results.

Specifically, the framework focuses on five objectives which, if attained, will generate the desired outcomes. These objectives are:

- I. Promoted wood investments for enhancing forest sector economic contribution.
- II. Enhanced productivity in the engineered wood sector.
- III. Ensured adequate and sustainable supply of raw materials for engineered wood industry.
- IV. Enhanced institutional and human resource capacity to manage the engineered wood sector, and
- V. Enhanced engagement of vulnerable groups in the engineered wood sector.

The expectation is for these objectives to be realized in the period of ten years (from 2021 to 2031). The immediate emphasis is on the targeted deliverables for the period till 2025, which are critical for instilling confidence among stakeholders on the performance and prospects of the industry. The implementation of these objectives and targets will be guided by the action plan. The plan stipulates the issues to be addressed, interventions, targets, and activities to be implemented. It also provides an estimation of the financial resources needed to implement the action plan and responsible actors. In tracking the implementation of the action plan, the timeframe has been indicated for realizing the expected outputs and outcomes and means of verification to ensure the discipline of accomplishment and timeliness among the key actors.

It is indeed a collective effort that requires connected thinking, commitment among key actors, discipline of action, consistency during the implementation phases, focus and determination that is facilitated by unquestionable and effective coordination. In addition, there will be participatory monitoring and evaluation (PME) mechanism to ensure collective responsibility and accountability among actors in the engineered wood sector.

1.1. Main Objective of the Action Plan

To provide stepwise guidance on how to effectively and efficiently implement the National Engineered Wood Sector Development Framework (2021-2031).

1.2. Specific Objectives of the Plan

- a) To ensure effective coordination among actors for the development of engineered wood sector;
- b) To ascertain the intended outcomes of developing the engineered wood sector; and
- c) To optimize the utilization of human, physical and financial resources in the development of the engineered wood sector.

1.3. Scope of the Action Plan

The Action Plan mainly focuses on the entire engineered wood sector value chain and major issues covered in the National Engineered Wood Sector Development Framework (2021-2031). It specifically focuses on; availability and accessibility of quality raw materials, growth of investment in engineered wood, promotion of high value addition chains in the engineered wood sector as well as enhancement of recovery rate. The action plan emphasizes issues or areas from other sectors which have influence on the success of the EWP industry. These issues have been referred to in the National Engineered Wood Sector Development Framework (2021-2031). Specific reference will manifest in detailed activities and parties responsible for implementation.

1.4. Major Expected Results

This section summarizes the expected results from the implementation of the National Engineered Wood Sector Development Framework (2021-2031). The summary covers three key results areas namely: impact, outcomes and objectives supported by their respective indicators and targets. The details of all the

results are found in the implementation matrix attached to this action plan. The implementation of this action plan is expected to produce several socio-economic benefits to the country in a period of 10 years as summarized below:

Benefit 1: Contribution to GDP

Forest sector contribution to the GDP will increase from the current 3.2% to 8% by 2031.

Benefit 2: Job Creation

Creation of direct and indirect employment opportunities at the processing stage for women, youth, and people with disabilities.

For instance: In five regions i.e., Iringa, Dar es Salaam, Dodoma, Njombe and Kilimanjaro, direct and indirect employment in the commercial forest sector is estimated to increase from 140,835 to 403,000, and therefore expand income generating capacities. Inclusivity will be boosted as engineered wood firms are expected to increase employment of women from current 20% to 60%.

Benefit 3: Income Generation

Projected increase of farmers' average profit/m³ per hectare from TZS 4,471,040 to TZS 10,071,040.

Benefit 4: Business Growth and Returns

Evidence shows that full realization of the EWP industry's potential promises higher profitability to processors, traders, and services providers.

For instance: A processor's profit/m³ may rise from TZS 51,891 to TZS 56,988 for veneer production, TZS 269,005 for plywood production and TZS 442,247 for blockboards production. The wholesaler's profit/m³ is projected to increase from TZS 21,117 to TZS 123,365 for plywood production and from TZS 21,117 to TZS 238,821 for blockboard production.

Benefit 5: Government Revenue

The government revenue will increase by at least 20% from the current level.

For instance: Government revenues/m³ are expected to increase from the current base of TZS 51,891 to TZS 269,006 for plywood production, to TZS 442,247 for blockboard production and to TZS 56,988 for veneer production, respectively.

Benefit 6: Favourable balance of trade

Tanzania is expected to record growth in trade volume, both in quantum and monetary terms, driven by expansion of local markets and exports of engineered wood products.

It is through growth in trade volume that Tanzania will improve the trade balance. For instance, the current trade balance for plywood is TZS -4,980,000,000; TZS -10,715,000,000 for Medium Density Fibreboards (MDF) and TZS -1,977,200,000 for particle boards. Given the desire to see the government increase its expenditure on locally manufactured wood products and the drive to increase export earnings from East African Community (EAC) and Southern African Development Community (SADC) countries, Tanzania will not only improve the balance of trade but also increase its foreign exchange earnings.

Benefit 7: Rural Industrialisation

It is important to note that promotion of the EWP value chain supports rural industrialization and promotes the vibrancy of local economies in which the EWP value chains are operating.

The expansion and modernization of the industry will generate outcome level targets resulting from higher capacity utilization (at least 75% by 2031) and higher efficiencies due to adoption of quality technologies and standards as well as stable supply of quality raw material. Increasing the number of actors in the EWP value chains, implies adding more tree growers (90,000 by 2031) and processors (252 by 2031); hence, the EWP Industry will not only be more inclusive but also more competitive.

SECTION TWO

SITUATIONAL ANALYSIS

2.0. Overview

This section briefly presents the engineered wood sector opportunities and challenges that later guided the development of chapter three. The section focuses on key areas for engineered wood sector development including availability of raw materials, markets, land for engineered wood investments, and engineered wood technological advancement. Other areas include human resource and institutional capacity, and presence of a favourable business enabling environment.

2.1. Opportunities for Engineered Wood Investments

Opportunity 1: Raw material supply

The average log utilization in the forest sector is mainly in the timber industry and is estimated at 33%, while the other 67% is considered waste and left unutilized. On the other hand, EWP processing (e.g., veneer peeling) can utilize 75-80% or more of the log. Also EWP processing can utilize waste (off cuts, chips, and saw-dust) from timber industry. Hence, by utilizing raw materials more efficiently, including utilization of the current waste, the engineered wood industry will increase the available/utilizable raw materials. Yet, there is still the challenge of ensuring that the industry receives adequate and quality raw materials. This emphasizes the importance of Tanzania promoting more tree farming and increasing productivity of plantations and woodlots as the current stock of raw materials (soft wood) may deplete if not continually replenished. The engineered wood industry also promotes environmental conservation by utilising soft wood harvested from forest plantations and woodlots rather than

hardwood from natural forests.

Opportunity 2: Market availability

Tanzania has a deficit balance of trade in engineered wood products and is a marginal player in regional and international markets. Meanwhile, it is the main importer of EWPs. There is a considerable market for EWPs in countries like India, Ethiopia, Kenya, Zambia, Uganda (except MDF) and South Africa (except MDF) as they are net importers of EWPs. In Tanzania, the construction industry is picking up and the furniture industry has begun to veer into using engineered wood technologies for furniture such as doors. The aforementioned trend demonstrates a notable domestic, regional and international market for EWPs.

2.2. Key Challenges Facing the Engineered Wood Sector

Key Challenge1: Lack of industrial park clusters

The integrated processing model is vital in promoting efficient utilization of residuals/wastes from engineered wood as it connects the timber and engineered wood industries. The integrated processing model is feasible only when there are industrial park clusters because they efficiently connect the two types of forest industries, however none of them currently exists. It is therefore important to build industrial park clusters to promote easy accessibility of less-costly raw materials for engineered wood industries as well as efficient tax administration. Currently, there is land allocated for industrial parks in Mufindi district and Njombe region.

Key Challenge 2: Low technological advancement

There is inadequate technological capacity for engineered wood investments. This limits the ability to fully maximise the log potential, as well as the capacity of the sector and as a result inhibits involvement of local investors in the engineered wood sector. On average, the log utilization capacity in the engineered wood sector is currently at 50%, and the expected minimum average log utilization rate is at 80%. Furthermore, there is slow uptake of local investors in engineered wood processing and trade mainly due to high importation

costs of engineered wood technology and an inadequate national capacity for production. For instance, engineered wood SMEs are required to pay non-refundable Value Added Tax (VAT) of 18% on imported engineered wood technology.

In this case, there is a need to provide fiscal incentives such as zero rating of VAT to promote the adoption of efficient engineered wood technologies while simultaneously building local capacity to produce EWPs. The same approach was used in the agricultural and beekeeping sectors whereby VAT on capital goods is zero-rated. It is evident that technological advancement in the sector will increase employment opportunities by 26%.

Key Challenge3: Inadequate human resources and institutional capacity

There is inadequacy in skilled human resources for engineered wood investment. This calls for the strengthening of training institutions especially the Forest Industries Training Institute (FITI) and Forest and Wood Industry Training Centre (FWITC). These training institutions, among others, may be strengthened in terms of their financial and human resource capacity. The government may review the skills development levy sharing structure to include FITI and FWITC to sustainably strengthen their financial capacity.

Moreover, there is a need to strengthen research and development (R&D) capacity for engineered wood to boost investment promotion. In this case, research institutions such as TAFORI and SUA should be empowered to carry out EWP research and development to promote engineered wood production and investment and diversity of EWPs. In addition, R&D capacity is fundamental in furthering the diversity of tree species that are ideal raw materials in the engineered wood sector.

Key Challenge 4: Inconducive business environment for engineered wood investment

There is an inconducive business enabling environment for promotion of engineered wood investments. Currently, raw material supply is subjected to multiple taxes and fees which lead to relatively low productivity and less competitiveness in the engineered wood industry. For instance, standing trees are

subjected to VAT of 18%, CESS of 5% and other fees collected by the Ministry of Natural Resources and Tourism. It is therefore important to facilitate a conducive business enabling environment by establishing an affordable tax structure for engineered wood investment promotion. This includes, among others, zero-rating of VAT on standing trees, reduction of CESS from 5% to 3% and accomplishing the review of Forest Regulations of 2020 (GN 627).

Based on the "fiscal implications" study that were conducted to support the development of the National EWP Sector Development Framework, it is evident that zero-rating of VAT on standing trees will cause the government an average loss of TZS 3,985,949 per annum from each EWP firm, but it will collect an average of TZS 19,756,800 of VAT per annum from each firm across the value chain. Moreover, the annual average production of each firm will increase from 185m³ to 343m³ and log demand will increase from 341m³ to 655m³. Equally, based on the aforementioned studies, it was evident that if forest products CESS is reduced from 5% to 3%, annual average CESS collection will increase from TZS 1,107,227 to TZS 1,201,288 from each firm. Subsequently, it is important to improve the business enabling environment to raise the engineered wood sector's contribution to the economy.

SECTION THREE

ISSUES, OBJECTIVES AND INTERVENTIONS

3.0. Overview

This section aims to summarize issues, objectives and interventions which will be implemented in a period of ten years. The section outlines five issues, five objectives, and 25 interventions. The interventions are the means of achieving the objectives. The objectives focus on the entire EWP value chain, productivity and capacity to manage the sector. They also focus on promoting economic inclusion in the engineered wood sector.

3.1. Issues, Objectives and Interventions

Issue 1: Low investment in the engineered wood sector

Objective: Promoted engineered wood investments to enhance the forest sector's economic contribution.

Key Target: Increase in engineered wood industries from 22 to 252 by June, 2031

Interventions

- a) Develop industrial park clusters for EWP initially in Mufindi, Kilolo and Njombe followed by lake zone and Kilimanjaro;
- b) Create a conducive fiscal environment for engineered wood investments by removing VAT on standing trees, eliminating double charging and reducing CESS from 5% to 3%;
- c) Review of Forest Regulations (GN 627) with the aim of reducing or eliminating nuisance fees to enhance engineered wood investment growth;

- d) Promote public-private partnership arrangements in the engineered wood sector;
- e) Facilitate availability and accessibility of relevant, appropriate, convenient and affordable financing options for the EWP industry;
- f) Ensure availability of land for expanding engineered wood investments in areas with no industrial parks; and
- g) Promote trade development for engineered wood products.

Issue 2: Low productivity in the engineered wood sector.

Objective: Enhanced productivity in the engineered wood sector.

Target: 54% increase in engineered wood firms adopting efficient technologies; and expanded utilization capacity to 80% by June 2031.

Interventions

- a) Provide fiscal incentives including zero-rating of VAT to encourage adoption of efficient imported engineered wood technologies;
- b) Disseminate information on the availability, accessibility and usage of efficient engineered wood technologies; and
- c) Build and enhance local capacity to develop affordable engineered wood technologies.

Issue 3: Inadequate availability of quality raw materials for engineered wood industries.

Objective: Ensured adequate and sustainable supply of raw materials for the engineered wood industry.

Targets: Increase in planted forest area for raw material supply from 325,000ha to 540,000ha by June, 2031.

Interventions

- a) Provide extension services to small tree growers;

- b) Promote tree growing and regeneration;
- c) Promote expansion of plantations through public-private partnerships;
- d) Ensure compliance of the technical order by woodlots and forest plantations; and
- e) Promote agro-forestry system among tree growers.

Issue 4: Inadequate capacity to manage the engineered wood sector.

Objective: Enhanced institutional and human resource capacity to manage the engineered wood sector.

Targets

- a) Improve the capacity of four (4) forestry training and research institutions by June 2031 and
- b) Strengthen inter-sectoral coordination, stakeholders' participation and co-operation at national and global levels annually.

Interventions

- a) Enhance the financial capacity of the Forest Industries Training Institute (FITI) and Forest and Wood Industries Training Centre (FWITC);
- b) Mainstream engineered wood programmes in the curricular of the forestry training institutions;
- c) Strengthen the capacity of institutional research on availability of quality raw materials, diversity of EWPs and engineered wood technologies;
- d) Promote inter-ministerial coordination for the growth of investment in the engineered wood sector; and
- e) Promote strategic communication among key actors in the engineered wood sector.

Issue 5: Low economic inclusion in the engineered wood sector.

Objective: Enhanced engagement of vulnerable groups in the engineered wood sector.

Targets

- a) 40% increased participation of women, youth and people with disabilities in the engineered wood sector; and
- b) 100% support of people living with HIV/AIDS by June 2031.

Interventions

- a) Encourage and support women, youth and people with disabilities to participate in all aspects of engineered wood sector development and management;
- b) Create a conducive environment for people living with HIV/AIDS to participate in the engineered wood sector economy; and
- c) Pro-actively support initiatives that address social barriers to economic inclusion for women and youth.

SECTION FOUR

IMPLEMENTATION PLAN AND RESULTS MATRIX

4.0. Overview

This section delves into objectives, targets, interventions, activities, performance indicators, timeframes, resources and responsible actors. It lays out the logical connection and flow of the aforementioned aspects to guide the implementation process. All these are summarized in the results matrix which links the objectives, targets, interventions, activities, performance indicators, outcome indicators, baseline data and means of verification.

4.1. Implementation Plan

The following matrix presents the implementation plan to be accomplished within a period of ten years: -

TABLE 1: IMPLEMENTATION PLAN

S/N	Objective	Target	Intervention	Activities	Performance Indicator	Timeframe	Resources in TZS (in millions)	Responsible Actor(s)
1	Promoted engineered wood investments for enhancing forest sector economic contribution.	Increase in engineered wood industries from 22 to 252 by June 2031	Develop industrial park clusters for EWP initially in Mufindi (2), Kilolo (1) and Njombe (1) followed by lake zone (1), and Kilimanjaro (1)	Conduct feasibility studies on areas suitable for industrial park clusters.	Functional industrial park clusters.	Annually by 2031	3500	PO-RALG, PMO-Environment, MNRT, MoFP, MoIT, MoL

S/N	Objective	Target	Intervention	Activities	Performance Indicator	Timefram e	Resources in TZS (in millions)	Responsible Actor(s)
			Create a conducive fiscal environment for engineered wood investments by removing VAT on standing trees, eliminating double charging and reducing CESS from 5% to 3%.	<p>campaigns and CEOs' roundtable meetings to attract private capital in the industrial park clusters.</p> <p>Analyses of the national Cost of Doing Business Survey and address issues affecting the EWP Industry.</p> <p>Conduct inter-ministerial meeting with the Ministry of Finance and Planning on the zero-rating of VAT on standing trees.</p> <p>Conduct inter-ministerial meeting with the President's Office- Regional Administration and Local Governments on CESS reduction from 5% to 3% and its administration.</p> <p>Develop single payment window for taxes, fees and levies payments.</p>	<p>Adoption of the findings from the national Cost of Doing Business Survey.</p>	<p>2025 and 2030</p>	<p>200</p>	<p>MNRT, EWP Actors</p>

S/N	Objective	Target	Intervention	Activities	Performance Indicator	Timefram e	Resources in TZS (in millions)	Responsible Actor(s)
			Review the Forest Regulations (GN 627) with the aim of reducing or eliminating nuisance fees to enhance engineered wood investment growth.	Review Forest Regulations as per GN 627 to allow and ensure accessibility of low-cost raw materials for engineered wood industries.	Functional, affordable fee structure on raw material purchase.	Annually	200	MNRT, MoIT, MoFP and PO-RALG
			Promote public-private partnership arrangements in the engineered wood sector.	Develop the forest sector public-private partnership guidelines and procedures.	Functional forest sector public-private partnership guidelines and procedures.	2022	200	MNRT, MoL PO-RALG and Private Sector
			Facilitate availability and	Review Forest Act for comprehensive public-private management and promotion in the forest sector.	Functional reviewed Forest Act.	2023	200	MNRT
				Establish new or utilize existing credit guarantee scheme for SMEs to drive	Functional credit	2022	200	MNRT, MoF, Financial Institutions,

S/N	Objective	Target	Intervention	Activities	Performance Indicator	Timefram e	Resources in TZS (in millions)	Responsible Actor(s)
			accessibility of relevant, appropriate, convenient and affordable financing options for the EWP industry.	growth in the engineered wood industry and utilize emerging opportunities from climate change agenda. Establish start-up programme to financially support infant engineered wood firms.	guarantee schemes. Functional start-up programme	2024	1000	PO-RALG, MNRT, MoF, Financial Institutions, private sector associations, CBOs and, NGOs
				Develop credit windows for forestry within Tanzania Agricultural Development Bank (TADB), Tanzania Commercial Bank (TCB) and Tanzania Investment Bank (TIB) and other financial services providers (e.g. commercial banks, leasing companies).	Functional credit windows for forestry.	2022	100	MNRT, FSPs, Financial Sector Regulators
				Develop monetary mechanisms to attract capital flow in the engineered wood sector from the financial institutions.	Functional monetary mechanisms .	2023	200	BOT

S/N	Objective	Target	Intervention	Activities	Performance Indicator	Timefram e	Resources in TZS (in millions)	Responsible Actor(s)
			Conduct research and innovations for relevant, appropriate, convenient and affordable investment and financing options for EWP industry.	Proportion of utilized investment and financing models.	2023	100	FSPs, FinTech, MNRT, BoT, Private sectors	
			Ensure availability of land for expanding engineered wood investments in areas with no industrial parks.	Provide title deeds or certificates of occupancy for engineered wood industrial areas.	Proportion of engineered wood industrial areas with title deeds or certificates of occupancy.	2031	500	MNRT, MoIT, MoFP, MoL, PO-RALG, NGOs, CBOs and Private Sector
				Prepare village land use master plan for engineered wood investment.	Land use master plan in place.	2025	800	MNRT, MoIT, MoFP, MoL, PO-RALG, NGOs, CBOs and Private Sector
				Evaluate land-based investment models (e.g. build, operate and transfer; joint venture, etc.) for engineered wood industry	Proportion of recommended land-based investment models utilised.	2023	200	MNRT, MoIT, MoFP, MoL, PO-RALG, NGOs, CBOs and Private Sector

S/N	Objective	Target	Intervention	Activities	Performance Indicator	Timefram e	Resources in TZS (in millions)	Responsible Actor(s)
	Promote trade development for engineered wood products.	Develop National Engineered Wood Trade Strategy.	Functional National Engineered Wood Trade Strategy.	2022	400	MNRT and MIT, MoFP, NBS, Private Sector		
		Mainstream engineered wood trade in TanTrade strategic plan to provide market information to at least 70% of engineered wood investors by June, 2025.	Proportion of engineered wood investors accessing market information.	2023	60	MNRT, MoIT and TanTrade		
		Develop EWP quality standards.	Functional EWP quality standards.	2022	500	MNRT, TBS, TanTrade and Private Sector		
		Integrate the National Public Procurement laws and regulations with EWP trade growth to encourage local purchase of engineered wood products by 65% by June, 2031	Proportion of public procurement of locally produced EWP to total EWP public procurement.	2024	200	MNRT and PPRA		
		Establish EWP Trading Centre in Mafinga.	Operational EWP Trading Centre.	2023	1500	MNRT, MIT, PO-RALG and Private Sector		
	Subtotal 1						10,580	

S/N	Objective	Target	Intervention	Activities	Performance Indicator	Timeframe	Resources in TZS (in millions)	Responsible Actor(s)
2	Enhanced productivity in the engineered wood sector enhanced.	54% increase in engineered wood firms adopting efficient technologies; and expanded utilization capacity to 80% by June 2031.	Provide fiscal incentives including zero-rating of VAT to encourage adoption of efficient imported engineered wood technologies.	Conduct inter-ministerial meeting on zero-rating VAT on imported engineered wood technologies.	VAT on imported engineered wood technologies zero-rated	2022	10	MNRT and MoFP

S/N	Objective	Target	Intervention	Activities	Performance Indicator	Timefram e	Resources in TZS (in millions)	Responsible Actor(s)
		Build and enhance local capacity to develop affordable engineered wood technologies.	Advocate for SDL revenue sharing structure for engineered wood technology development. Allocate land for 5 engineered wood assembly plants in Mufindi (1) and Kilimajaro (1) by 2025; lake zone (1) by 2027 and Bagamoyo industrial area (2) by 2030.	Functional SDL revenue sharing structure. Number of operational engineered wood assembly plants.	2022	200	MNRT, MoFP and MoEVT	MNRT, Mol, MoIT, TIC and Private Sector
			Mainstream wood development initiatives in FITI, SIDO and VETA strategic plans and delivery as a matter of priority.	Number of institutions prioritizing and developing engineered wood technologies	Annually by 2024	400	MNRT and MoEVT, SIDO	MNRT and PO-RALG
3	Subtotal 12	Ensured inadequate and unsustainable supply of raw materials for engineered wood industry.	Planted forest area or raw material supply increased from 25,000ha to	Establish forest extension service centres in ward executive offices.	Proportion of tree growers served by the centres.	5,030	5000	MNRT, PO-RALG

S/N	Objective	Target	Intervention	Activities	Performance Indicator	Timefram e	Resources in TZS (in millions)	Responsible Actor(s)
	\$40,000ha by June, 2031.			Develop mechanism for attracting private extension service providers.	Proportion of tree growers served by private extension service providers.	2024	200	MNRT, RALG, NGOs, and Private Sector
				Develop certification standards for forest extension service professionals.	Proportion of certified extension service professionals.	2023	400	MNRT
				Establish e-platform for forest extension service provision.	Proportion of tree growers connected to the e-platform.	2024	500	MNRT, RALG, NGOs and Private Sector
	Promote tree growing and regeneration.			Establish eight (8) germplasm supply centres.	Number of germplasm supply centres.	2024 (2); 2026 (2); 2028 (2) and 2031 (2)	3600	MNRT, RALG, NGOs and Private Sector
				Establish 840 ha of tree seed orchards.	Coverage of tree seed orchards in ha.	2031	4100	MNRT, RALG, NGOs and Private Sector

S/N	Objective	Target	Intervention	Activities	Performance Indicator	Timefram e	Resources in TZS (in millions)	Responsible Actor(s)
				Conduct inventory assessment on raw materials availability for engineered wood industries.	Inventory assessment report in place.	2025	500	MNRT, RALG, NGOs, and Private Sector
				Develop and scale risk management solutions and models (e.g. special insurance product for forest plantations and tree growing).	Proportion of forest plantations and woodlots covered by the insurance scheme.	2023	500	MNRT and Insurance Companies and other FSPs
				Facilitate the development of fire management plans by forest plantations and woodlots.	Proportion of plantations and woodlots with fire management plan.	Annually by 2031	500	MNRT, RALG, NGOs, and Private Sector
				Establish participatory fire management committees.	Proportion of woodlots served by the committees.	Annually by 2031	200	MNRT, RALG, NGOs, and Private Sector
				Establish fire funds to strengthen wildfire management capacity of tree growers and village governments.	Functional Forest Fire Fund.	2026	500	MNRT, RALG, NGOs, Development

S/N	Objective	Target	Intervention	Activities	Performance Indicator	Timefram e	Resources in TZS (in millions)	Responsible Actor(s)
			Orient tree growers on integrated fire management guidelines.	Proportion of tree growers that comply with the guidelines.	Annually by 2031	1000	MNRT	Partners and Private Sector
			Facilitate tree growers to develop forest pest and disease management plan.	Proportion of woodlots and plantations that comply with the plan.	Annually by 2031	1000	MNRT, RALG, NGOs, and Private Sector	PO-CBOs,
			Promote plantation expansion through public-private partnerships.	Planted government forest area in acreage under public-private arrangement.	Annually by 2022	200	MNRT, RALG, MoL, CBOs, NEMC, NGOs, Financial Institutions and Private Sector	

S/N	Objective	Target	Intervention	Activities	Performance Indicator	Timefram e	Resources in TZS (in millions)	Responsible Actor(s)
			Ensure technical order compliance by woodlots and forest plantations.	Translate technical order in Kiswahili version for distribution to tree growers by June, 2022. Conduct awareness programmes on technical order to tree growers annually by June 2022. Orient forest extension professionals on technical order and its compliance by June, 2022.	Compliance level of technical order by woodlots and forest plantations.	Annually by June, 2022	150	MNRT, PO-RALG, Development Partners, CBOs and NGOs, Private Sector
			Promote agro-forestry system among tree growers.	Conduct inter-ministerial monitoring and evaluation meetings between MNRT and Po-RALG on technical order compliance annually. Develop agro-forestry guidelines and be translated in Kiswahili version by June, 2023. Conduct awareness raising programmes on agro-forestry to tree growers and communities with tree growing potential annually by June, 2023.	Change in the number of farmers practicing agro-forestry systems from 4 million to 15 million.	Annually by June, 2023	300	PO-RALG, MNRT, MoA, Development Partners, CBOs, NGOs, Private Sector, General Public

S/N	Objective	Target	Intervention	Activities	Performance Indicator	Timeframe	Resources in TZS (in millions)	Responsible Actor(s)
			Orient extension professionals on agro-forestry and its management annually by June, 2023.	Conduct inter-ministerial monitoring and evaluation meetings among PO-RALG, MNRT and Ministry of Agriculture annually by June 2023.				MNRT, MoFP and MoE
							18650	
4	Enhanced institutional and human resource capacity to manage the engineered wood sector.	Subtotal 3	Improve the capacity of our (4) forestry training and research institutions by June 2031.	Review SDL sharing structure for vocational and technical training institutions to address FITI and FWITC budget deficit by June, 2022.	Proportion of actual SDL revenue received against the allocated SDL revenue.	Annually by June, 2022	100	Proportion of allocated SDL revenue on FITI and FWITC budget.

S/N	Objective	Target	Intervention	Activities	Performance Indicator	Timefram e	Resources in TZS (in millions)	Responsible Actor(s)
	Mainstream engineered wood programmes in the curricular of the forestry training institutions.	Facilitate the registration of engineered wood curricular at NACTE or VETA.	Number of established engineered wood programmes.	2025	500	MNRT, MoEVT CBOs, NGOs and Private Sector		
	Strengthen the institutional research capacity on availability of quality raw materials,	Integrate engineered wood product and technological development in the national apprenticeship programmes.	Functional engineered wood product and technological apprenticeship programmes development	Annually by 2031	200	PMO, MNRT, PO-RALG and Private Sector		
		Train tutors on engineered wood products and technology.	Tutor-student ratio in the engineered wood programmes.	Annually by 2031	1000	MNRT		
		Integrate engineered wood product development in the national research agenda.	Adoption rate of EWPs research findings.	2025 and 2031	200	MNRT and COSTECH		
		Prepare international EWP development conference.	Number of conferences.	Annually by 2031	2000	MNRT, Development Partners, CBOs, NGOs		

S/N	Objective	Target	Intervention	Activities	Performance Indicator	Timefram e	Resources in TZS (in millions)	Responsible Actor(s)
		diversity of EWP s and engineered wood technologies.		Conduct orientation programmes on EWP development and marketing to 250 forestry researchers.	Proportion of trained forestry researchers engaged in engineered wood research and development	Annually by 2031	1000	MNRT, CBOs and NGOs
				Develop facilitation mechanism for innovating quality and diversified tree seeds with short rotation cycle of at most 8 years.	An average rotation cycle and productivity of tree species.	2024	200	MNRT
		Strengthen inter-sectoral coordination, 'takeholders' participation and cooperation		Facilitate establishment and operationalization of apex body for private sector associations.	Functional forest private sector council.	2023	500	MNRT, PO-RALG, Development Partners, CBOs, NGOs and Private Sector

S/N	Objective	Target	Intervention	Activities	Performance Indicator	Timefram e	Resources in TZS (in millions)	Responsible Actor(s)
	at national and global levels annually.	in engineered wood sector.	Facilitate implementation of bilateral and multilateral agreements on EWP development.	Number of engineered wood development programmes and projects.	Annually by June, 2031	1500	MNRT, Molt, Development Partners, CBOs, NGOs and Private Sector	
			Conduct one orientation programme to 146 tree growers' associations on EWPs.	Proportion of tree growers' associations that have adopted EWP development agenda into their plans.	Annually by June, 2031	1000	MNRT, CBOs, NGOs and Private Sector	
				Average compliance level of OHS standards.	Annually by June 2031	1000	MNRT, OSHA, CBOs and NGOs	
			Facilitate 80% compliance of Occupational Health and Safety (OHS) standards in the engineered wood sector.	Functional joint economic council.	Annually by June 2031	3000	PMO, MNRT and Ministry Responsible for Foreign Affairs	
			Establish Tanzania-Vietnam joint economic council	Functional inter-ministerial	Annually by June, 2031	300	MNRT	
			Promote strategic communication among key	Establish inter-ministerial dialogue platform for engineered wood sector development.				

S/N	Objective	Target	Intervention	Activities	Performance Indicator	Timeframe	Resources in TZS (in millions)	Responsible Actor(s)
		actors in the engineered wood sector.	Continuously facilitate the operations of the Tanzania National Business Council (TNBC) Forestry Working Group.	dialogue platform.	Functional TNBC Forestry Working Group.	Annually by June 2031	2500	MNRT, Development Partners, CBOs, NGOs and Private Sector
			Develop communication strategy for stakeholder engagement and reporting.	Functional communication on strategy.	June, 2023	100	MNRT, CBOs, NGOs, Private Sector	
	Subtotal 4					15,100		
5	Enhanced engagement of vulnerable groups in the engineered wood sector.	Participation of women, youths and people with disability in the engineered wood sector increased by 10% by June 2031.	Encourage and support women, youths and people with disabilities to participate in all aspects of engineered wood sector development and management.	Conduct awareness and support programmes for women-based associations.	Proportion of trained and supported gender-based associations that have incorporated women participation in engineered wood sector as an agenda.	Annually by June, 2031	1000	MNRT, NEEC, CBOs, NGOs and Private Sector

S/N	Objective	Target	Intervention	Activities	Performance Indicator	Timefram e	Resources in TZS (in millions)	Responsible Actor(s)
				in the private sector forest associations.	empowerment unit.			and Private Sector
				Integrate women, youth and people with disabilities participation agenda in the engineered wood sector in the National Economic Empowerment Council (NEEC) plans.	Proportion of implemented programmes as per NEEC annual plans.	Annually by June, 2031	200	MNRT, PO-RALG and NEEC
				Create conducive environment for people living with HIV/AIDS to economically participate in the engineered wood sector.	Conduct three awareness raising programmes to eliminate stigma in the engineered wood sector.	Reduction in reported stigma incidences.	1000	MNRT, Ministry Responsible for Health, CBOs, NGOs and Private Sector
					Facilitate provision of financial support to people living with HIV/AIDS in the sector.	Persons living with HIV/AIDS are 100% supported.	1800	MNRT, CBOs, NGOs and Private Sector
	Subtotal 5						4,300	
	Grand Total						53,660	

SECTION FIVE

RESULTS MATRIX

The following matrix presents the results to be achieved within a period of ten years. It shows the outcome that will be achieved after efficiently attaining the performance indicators:-

TABLE 2: RESULTS MATRIX

S/N	Objective	Target	Intervention	Performance Indicator	Outcome Indicator	Baseline Data	Means of Verification
1	Promoted engineered wood investments for enhancing forest sector economic contribution	Increase in engineered wood industries from 22 to 252 by June 2031	Develop industrial park clusters for EWP initially in Mufundi, Kiloilo and Njombe, followed by lake zone and Kilimanjaro.	Functional industrial park clusters	Change in employment in the forest sector	1,500,000	Annual Progress Reports, Labour Study Survey and Trade Performance Assessments

S/N	Objective	Target	Intervention	Performance Indicator	Outcome Indicator	Baseline Data	Means of Verification
			Promote public-private partnership arrangements in the engineered wood sector	Average purchase of raw material	Average processors' income	TZS 100,400/m ³	Average government revenue collection

S/N	Objective	Target	Intervention Indicator	Performance Indicator	Outcome Indicator	Baseline Data	Means Verification	of
	Promote trade development for engineered wood products	Promote trade development for engineered wood products	Functional national engineered wood trade strategy Proportion of engineered wood investors accessing market information Functional EWP quality standards	Proportion of public procurement of locally produced EWP to total EWP public procurement	Recovery rate in EWP production	50%	Progress reports and surveys	
2	Productivity in the engineered wood sector enhanced	54% increase in engineered wood firms adopting efficient technologies; and expanded utilization capacity to 80% by June 2031	Provide fiscal incentives including zero-rating of VAT to encourage adoption of efficient imported engineered wood technologies Disseminate information on the availability, accessibility and usage of efficient	Functional affordable tax and fee structure on the transferred technology	Recovery rate during log harvesting	70%	Functional e-platform Operational engineered wood technological support centres	

S/N	Objective	Target	Intervention	Performance Indicator	Outcome Indicator	Baseline Data	Means of Verification
		engineered wood technologies		Functional revenue structure	SDL sharing		
3	Adequate and sustainable supply of raw materials for engineered wood industry ensured	Increase in planted forest area for raw material supply from 325,000ha to 540,000ha by June, 2031	Provide extension services to small tree growers	Proportion of tree growers served by the centres	Change in utilisation rate of installed capacity	42%	Progress reports and surveys

S/N	Objective	Target	Intervention	Performance Indicator	Outcome Indicator	Baseline Data	Means of Verification
		Promote tree growing and regeneration		Number of germplasm supply centres Coverage of tree seed orchards in ha Proportion of forest plantations and woodlots covered by the insurance scheme Proportion of plantations and woodlots with fire management plan Proportion of woodlots served by the committees Functional forest fire fund Proportion of tree growers that comply with the guidelines Proportion of woodlots and plantations that comply with the plan Promote plantation expansion through public-private partnerships			

S/N	Objective	Target	Intervention Indicator	Performance Indicator	Outcome Indicator	Baseline Data	Means of Verification
		Ensure technical order compliance by woodlots and forest plantations	Compliance level of technical order by woodlots and forest plantations				
		Promote agro-forestry system among tree growers	Change in the number of farmers practicing Agro-forestry systems from 4 million to 15 million				
4	Institutional and human resource capacity to manage the engineered wood sector enhanced	Improve the capacity of four (4) forestry training and research institutions by June 2031	Enhance the financial capacity of the Forest Industry Training Institute (FITI) and Forest and Wood Industries Centre (FWIC)	Proportion of actual SDL revenue received against the allocated SDL revenue	Accessibility of engineered wood support and professional services	NA	Progress reports and surveys
				Proportion of allocated SDL revenue on FITI and FWIC budget	Diversity of tree species for EWP production	2	
				Mainstream engineered wood programmes in the curricular of the forestry	Number of established engineered wood programmes	5	Regional markets for EWPs
					Functional engineered wood product and	2	

S/N	Objective	Target	Intervention	Performance Indicator	Outcome Indicator	Baseline Data	Means of Verification
		training institutions	technological apprenticeship programmes development	International markets for EWPs			
	Strengthen the institutional research capacity on availability of quality raw materials, diversity of EWPs and engineered wood technologies			Adoption rate of EWP research findings Number of conferences Adoption rate of conference deliberations Proportion of trained forestry researchers engaged in engineered wood research and development	An average rotation cycle and productivity of tree species	Functional forest private sector council Number of engineered wood development programmes and projects Proportion of tree growers, associations adopted EWP	

S/N	Objective	Target	Intervention Indicator	Performance Indicator	Outcome Indicator	Baseline Data	Means Verification of
	strengthened annually		development agenda into their plans	Average compliance level of OHS standards	Functional joint economic council	Functional inter-ministerial dialogue platform	Survey and progress reports
5	Engagement of vulnerable groups in the engineered wood sector enhanced		Promote strategic communication among key actors in the engineered wood sector	Functional TNBC Forestry Working Group	Functional communication strategy	Perceived income growth of vulnerable groups	NA

S/N	Objective	Target	Intervention	Performance Indicator	Outcome Indicator	Baseline Data	Means of Verification
		100% support of people living with HIV/AIDS by June 2031	Create a conducive environment for people living with HIV/AIDS to participate in the engineered wood sector economy	aware and supporting the initiatives	Reduction in reported stigma incidences Persons living with HIV/AIDS are 100% supported		

SECTION SIX

MONITORING, EVALUATION AND REPORTING

Monitoring of the implementation of the action plan will be the overall responsibility of the Ministry responsible for Natural Resources and Tourism under the Forestry and Beekeeping Division. The National EWP Development Steering Committee (NEDSC) will be responsible for overseeing the successful implementation of this action plan. Reporting on the progress made is detailed in the framework.

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