THE UNITED REPUBLIC OF TANZANIA

MINISTRY OF NATURAL RESOURCES AND TOURISM

FORESTRY AND BEEKEEPING DIVISION




NATIONAL AGROFORESTRY STRATEGY II (2024-2031)

MARCH, 2024

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PREFACE

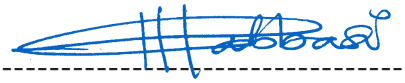
This is the second national agroforestry strategy (SNAS, 2021-2031) prepared in the country. The first national agroforestry strategy was prepared in 2004 and it was meant to cover up to the year 2025. The strategy was meant to act as one of the instruments for implementing the National Forest Policy of 1998 and other related land use policies in the areas of environment, agriculture, beekeeping, wildlife, and livestock. Following various changes that have occurred in the past 18 years in the sector, it was deemed necessary to revise the first strategy in order to incorporate new emerging issues.

The review has shown that several achievements have been attained in the course of implementing the first agroforestry strategy. Among those include the development of profitable and locally relevant resilient agroforestry technologies such as Conservation Agriculture with Trees (CAWT), Farmer Managed Natural Regeneration *(*FMNR*)* and Forest Garden; adoption of agroforestry by 8 million people, and the development of Agroforestry product value chain such as *Allanblackia* oil and *Cocoa* value chains. However, there was notable number of challenges which hinders the attainment of the projected goals. These include low capacity of the extension system on agroforestry issues, inadequate co-ordination and implementations of agroforestry across sectors and inadequate and unsustainable financing mechanisms for agroforestry research and development.

This second strategy therefore is geared towards providing ways to address the listed challenges but as well providing ways to accommodate new emerging issues in the sector. Thus, it provides strategies and targets that will contribute in the attainment of the four national forest policy areas, namely; forest land management, forest-based industries and products, ecosystem conservation and management, and institutions and human resources, as well as addressing cross-cutting issues of HIV/AIDS, gender and governance. Due to its multiple nature, and in order to ensure success in the implementation of this strategy, a list of potential stakeholders has been provided with their roles and responsibilities.

The Ministry of Natural Resources and Tourism (MNRT) calls upon all stakeholders including development partners to support for the development and

implementation of this strategy. MNRT will continue to provide the necessary guidance and support for successful implementation of this strategy so as to ensure achievement of the agreed goals, objectives and targets. We welcome investments in Agroforestry especially in support of smallholder farmers.



Dkt. Hassan A. Said
Permanent Secretary
Ministry of Natural Resources and Tourism

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The development of the Second National Agroforestry Strategy (SNAS) (2021-2031) document is an outcome of the consultative process undertaken by the Ministry of Natural Resources and Tourism (MNRT) in 2021-2022 through Tanzania Forestry Research Institute (TAFORI). This process started by a review of the first national agroforestry strategy which was undertaken by a consultant from FAO in 2021. The MNRT through TAFORI formed a Task Force constituting of Dr. Siima Bakengesa from Tanzania Forestry Research Institute (TAFORI), Dr. Anthony Kimaro from World Agroforestry Centre (ICRAF)– Tanzania, Dr. Chrispinus Rubanza from UDOM and Mr. Thaddeus Mbowe from Vi-Agroforestry–Tanzania in March 2021. The experts worked very closely with the Forestry and Beekeeping Division-MNRT to make sure that among others the new strategy aligned very well with the goals of the National Forest Policy of 1998 and its implementation strategy of 2021-2031.

In the course of preparation of this strategy, a number of group specific consultative workshops were held to allow inputs from key stakeholders. These include; TAFORI Management, Forest and Farm Facility National Advisory Committee, National Agroforestry Symposium, and Agricultural Non-State Actors Forum (ANSAF) platform. One national consultative workshop was held on 17-18 February, 2022 at TAFORI Headquarters in Morogoro to validate the final draft. In all the meetings, participants were drawn from various ministries, departments and agencies (MDAs), local government authorities (LGAs), research and academic institutions, civil society organizations, the private sector and non-government organizations (NGOs).

The Ministry of Natural Resource and Tourism (MNRT) acknowledges the contribution of each and every one in this commendable work. Dr. Revocatus Mushumbusi, the Director General - TAFORI we thank you for supervising the work and Dr. Ezekiel Mwakalukwa from SUA and Mr. Geofrey Bakanga– Natural Resources Advisor in the Food and Agriculture Organization of the United Nations (FAO) Country Office, I thank you for guiding the process. FAO through Forest

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Mr. Deusdedit K. Bwoyo
Director
Forestry and Beekeeping Division
Ministry of Natural Resources and Tourism

LIST OF ACRONYMS AND ABBREVIATIONS

A/R	Afforestation- Reforestation Initiatives
AFRI100	African Forest Landscape Restoration Initiatives to restore 100 mill ha (and Tanzania's commitment to restore 5.2 million ha) by 2030 Africa RISING Africa Research in Sustainable Intensification for the Next Generation) Project
ANR	Amani Nature Reserve
ANSAF	Agricultural Non-State Actors Forum
ARLI	Africa Resilient Landscape Imitative
ASDS II	Agricultural Sector Development Strategy II (2015/2016-2024/2025)
ASLM	Agricultural Lead Sectoral Ministries
CBD	Convention on Biological Diversity
CBOs	Community-Based Organizations
CDC	Cashew Development Centre
CIDA	Canadian International Development Agency
CoAF	College of Agricultural Sciences and Fisheries Technology, SUA
COSTECH	Tanzania Commission for Science and Technology
DAACO	District Agroforestry Advisory Committee
DAF	District Agroforestry Focal Person
DED	District Executive Director
DFB	Directorate of Forestry and Beekeeping
DPs	Development Partners
ECOWAS	Economic Community of West African States
FAO	Food and Agriculture Organization of the United Nations
FBOs	Faith-Based Organizations
FFF	Forest and Farm Facility
FFPOs	Farm Forest Producer Organizations

FMNR	Farmer managed Natural Regeneration
FTIs	Forestry Training Institutes
GoT	The Government of Tanzania
Ha	Hectare
ICRAF	World Agroforestry Centre
IFAD	International Fund for Agricultural Development
IPM	Integrated Pest Management
LGA	Local Government Authority
LITA	Livestock Training Authority
M&E	Monitoring and Evaluation
MATIs	Ministry of Agriculture Training Institutes
MDAs	Ministries, Department and Agencies
MEAs	Multilateral Environmental Agreements
MJUMITA	Mtandao wa Jamii wa Usimamizi wa Misitu Tanzania
MLF	Ministry of Livestock and Fisheries
MNRP	Management of Natural Resources Programme
MNRT	The Ministry of Natural Resources and Tourism
MoA	the Ministry of Agriculture
MoAC	Ministry of Agriculture and Cooperatives
MoHCE	Ministry of Health, Elderly and Children
MoW	Ministry of Water
MRP	Minjingu Rock Phosphate
MUHAS	Muhimbili University of Health and Allied sciences
NAACO	National Agroforestry Advisory Committee
NAFORMA	National Forestry Resources Monitoring and Assessment of Tanzania Mainland
NAFRAC	Natural Forest and Agroforestry Centre
NAS	National Agroforestry Strategy

NASCO	National Agroforestry Steering Committee
NBPIS	National Beekeeping Policy Implementation Strategy (2021-2031)
NCDs	Non-Communicable Diseases
NDCs	Nationally Determined Contributions
NFP	National Forest Policy (1998), The Ministry of Natural Resources and Tourism.
NFPIS	National Forest Policy Implementation Strategy (2021-2031).
NGOs	Non-Governmental Organizations
NM AIST	Nelson Mandela African Institute of Science and Technology
NORAD	Norwegian Agency for Development Cooperation
NPK	Nitrogen, Phosphorus Potassium fertilizer
OMCI	IFAD's institutional Arrangement model: Oversight(O), Management (M), Coordination (C) and Implementation (I) functions
PES	Payment for Ecosystem Services
PFM	Participatory Forest Management
PFP	Private Forest Programme
PO RALG	Prime Minister's Office Regional Administration and Local Government
PRSP	Poverty Reduction Strategy Paper
PWD	People Living with Disabilities
REDD+	Reduced Emissions from Deforestation and forest Degradation plus the Conservation of forest Carbon stock, sustainable management of forests and enhancement of Carbon stocks
SADC	Southern African Development Community
SALM	Sustainable Agricultural Land Management
SDGs	Sustainable Development Goals
Sida	Swedish International Development Agency
SMEs	Small-Scale and Medium- Enterprises
SNAS	Second National Agroforestry Strategy
Sp.	Species (singular)

Spp.	Species (plural)
STGs	Small Tree Growers
SUA	Sokoine University of Agriculture
TACRI	Tanzania Coffee Research Institute
TaFF	Tanzania Forest Fund
TAFORI	Tanzania Forestry Research Institute
TALIRI	Tanzania Livestock Research Institute
TARI	Tanzania Agricultural Research Institute
TCCIA	Tanzania Chamber of Commerce, Industry and Agriculture
TCRP	Agricultural Climate Resilience Plan
TFS	Tanzania Forest Services Agency
™	Trade Mark
TPRI	Tropical Pesticide Research institute
TSCA	Tanzania Climate Smart Alliance
TTBP	Tanzania Tree Biotechnology Project
TV	Television
TZS	Tanzanian Shillings
UDOM	University of Dodoma
UDSM	University of Dar es salaam
UNCCD	United Nations Convention to Combat Desertification
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
URT	United Republic of Tanzania
US$	USD
USAID	United States Agency for International Development

VPO	Vice President's Office
VPO DoE	The Vice President's Office Division of Environment
WWF	World Fund for Nature
WWF	World Fund for Nature
Yara	One of Phosphatic fertilizer source

CHAPTER ONE

1.0 INTRODUCTION

1.1 Rationale for the Second Agroforestry Strategy

The Government approved the first National Agroforestry Strategy (NAS) (2004–2025) in 2004 for scaling up agroforestry interventions in the country. This strategy aimed to contribute to attainment of the objective of the National Forest Policy (NFP) of 1998 and other macro level national goals of the Tanzania development vision 2025 and other strategies such as the Tanzania poverty reduction strategy paper (PRSP), which aims to "reduce income poverty, improve quality of life and social well-being; and reduce vulnerability amongst the poorest groups". The Tanzania development vision 2025 aimed to attain "By 2025, a high-quality livelihood for all Tanzania's in terms of food security. In that regard, the first agroforestry strategy was framed to contribute to the attainment of these national goals through its vision to ensure that at least 4 million rural farming households adopt and benefit from agroforestry interventions in a sustainable manner by 2025.

The goal of the first agroforestry strategy was "by 2020, agroforestry technologies adopted and contribute to improved livelihood of 60% (from the overall figure of 4 million rural farm families) of resource-poor households", while the medium-term objective was "by 2010, at least 30% of rural household or 1.2 million households adopt 2 benefits from agroforestry interventions". Implementation of the first strategy to realize these goals has been through different programmes and projects conducted by both government ministries, agencies, and departments, NGOs, private sector and other stakeholders. While achievements have been attained, there have been recent developments in the forest sector that need to be addressed by revising targets and strategies set about 18 years ago. Following, the development of the National Forest Policy Implementation Strategy (NFPIS) 2021-2031 in May, 2021, it was found necessary to review the current NAS so as to align its goals, targets, and outcomes with NFPIS. The NFPIS aims to spearhead the implementation of NFP (1998) for the period of 10 years (2021-2031) including issues related to agroforestry. However, due to its multidisciplinary nature

(agroforestry), the strategies and targets set forth in the NFPIS are inadequate to address challenges facing the Agroforestry sub-sector as well as harnessing the great potential bestowed in it. In that regard, a standalone Second Agroforestry Strategy (NAS) 2021-2031has been developed to complement all issues related to the development of the Agroforestry sub sector in the country. The second NAS (2021-2031) among other issues addresses other emerging issues highlighted in the CCM Manifesto of 2020, Third National Five Years' Development Plan (2021/22-2025/26), National Environmental Policy, MNRT strategic plan including also line Ministries (MoA, MLF, PO-RALG, VPO-DoE), with their agencies e.g., TFS, TARI, TAFORI, TARILI and the National Vision 2025. In addition, the second NAS equally addresses International agreements such as the sustainable development goals (2030), Land degradation neutrality, national determined contributions(NDC) and land restoration targets.

1.2 Issues for Implementation

The second NAS (2021-2031) will guide all interventions under the nine components that were identified as essential in the first NAS (2004–2025), and other interventions in relation to the four policy areas, and three cross-cutting issues as highlighted in the NFPIS (2021-2031). The nine components include: Adequate and sustainable supply of diverse and quality germplasm; location specific and farmers' responsive technologies; capacity building; awareness; dissemination of participatory agroforestry technologies; networking with stakeholders; policy and legal framework; market and information access; and implementation, monitoring and evaluation. The four policy areas and three cross-cutting issues include: forest land management, forest-based industries and products, ecosystem conservation and management, institutions and human resources, HIV/AIDS, gender and governance.

1.3 Roles and Responsibilities of Key Stakeholders

The Ministry responsible for forestry will entirely monitor and evaluate the implementation of the second NAS (2021-2031). Sector Ministries will be engaged through joint implementation of interventions that require specific sector policy directives. Non-state actors and development partners will be engaged in building capacity in value chain interventions, financing and investing in sub-sector development initiatives. Local communities will be involved directly in

agroforestry development activities while the private sector is expected to play a significant role in enhancing the economic contributions of the Agroforestry sub-sector in the most sustainable manner.

1.4 Expected Results

The second NAS (2021-2031) is expected to spearhead the achievements of the NFP (1998) goal: "To enhance the contribution of the forest sector to the sustainable development of Tanzania, and the conservation and management of her natural resources for the benefit of present and future generations". Hence, expected results emanating from effective and efficient implementation of the strategy will lead to:

(i) Adequate and sustainable supply of diverse and quality germplasm,
(ii) Promotion of technologies that are responsive to farmer needs,
(iii) Build up capacity in agroforestry at various levels particularly at district levels,
(iv) Increase awareness about the social, economic, biological and environmental benefits (products and services) and options and technologies of agroforestry available for use,
(v) Increase level of involvement of farmers in technology development,
(vi) Formation of a platform for scaling up agroforestry activities and sharing experiences among stakeholders,
(vii) Harmonisation of policies and legal framework to attract and facilitate investment in AF activities,
(viii) Build capacity of local marketing institutions in order to improve access to market information services, provide market skills (*e.g.,* processing, storage, packaging price) to extension team and farmers and create favourable policy and legal environment, and
(ix) Development of database for effective monitoring of AF activities in the country.

It is expected that, effective and efficient implementation of the strategy would lead to; sustainable supply of forest/agroforestry products and services, increased employment opportunities and foreign exchange earnings, and enhanced ecosystem stability.

CHAPTER TWO

2.0 SITUATION ANALYSIS

2.1 Overview

As part of the process of developing the Second NAS (2021-2031), situation analysis was done involving review of the implementation status of the first NAS (2004–2025); in-depth empirical review, and consultations with key stakeholders in the country. The review aimed at establishing status of implementation of different agroforestry interventions in the country, and the basis of formulating new strategies and targets of the second NAS (2021-2031). The nine components that were identified as essential in the first NAS (2004-2025) and four main policy areas and three cross-cutting issues as highlighted in the NFPIS (2021-2031) have been considered during the analysis. These areas were analysed based on the existing policies, strategies, and legal frameworks that support agroforestry implementation in the country as well as international frameworks.

2.2 Implementation Status of the First National Agroforestry Strategy 2004- 2025

The first NAS (2004-2025) was published in 2004 with a vision of reaching at least 60% of the 4 million rural households by 2020; and half of this target to be achieved by 2010. Analysis of achievements and challenges noted during the implementation of the first NAS (2004-2025) based on the nine interventions that were put forward in the 2004 detailed in sections 2.2.1-2.2.9.

2.2.1 Adequate and Sustainable Supply of Diverse and Quality Germplasm

The review revealed that inadequate supply of tree seeds, seedlings and other propagation materials as the most important constraints forth adoption and scaling up of Agroforestry in Tanzania. In addition, the capacity of government to run centralized tree nurseries and seed centres was noted to be limited and thus could not meet demand for tree germplasm in the sustainable manner. The four tree seed Centres located at Morogoro, Iringa, Shinyanga and Lushoto had

no capacity to produce and distribute tree seeds to the entire country. Despite the limited information on the availability of the different tree germplasm. To overcome these constraints, it was proposed to review and possibly reduce process the prices by requesting subsidy from the Government. Other approaches include more involvement of other partners such as the private sector in production of tree germplasm materials and their distribution to farmers instead of relying to the Government only. Other approaches include sub-contracting Private Companies, NGOs and large-scale farmers to produce seeds in bulk. It is also suggested that, the existing Tree Seed Centres depending on operationalization could open satellite seed distribution centre in some districts by harnessing collaboration with The Local Government Authorities such as the District Councils and Regional Administration Governments. Other efforts include encouraging all institutions involved in agroforestry to establish decentralised seed production units to ensure adequate supplies; as well as establishment of Agroforestry Development Fund for scaling AF interventions in the country.

Following the approval of the first NAS (2004-2005) in 2004, several achievements have been attained including adequate supply tree seeds, tree seedlings and other propagation materials to the farmers:

- Four (4) Tree seed Centres were established in Morogoro, Iringa, Lushoto and Shinyanga for production and distribution of tree seeds. These centres have been integrated into TFS.
- The MNRT, through TFS centres and Forest Plantations in different locations and zones of Tanzania, have continued to support establishment of tree nursery infrastructures such as shade, tree seeds, and provision of tree seedlings to farmers, institutions the general public.
- The LGA mandate Departments for instance Department of Natural Resources in each district support tree nursery activities to back up national tree planting targets and to supply both tree seeds and seedlings to farmers, farmer groups, and institutions to support agroforestry and other afforestation/ reforestation (A/R) initiatives.
- NGOs such as Vi Agroforestry and ICRAF had continued to supporting satellite tree nurseries through production and distribution of both tree seeds and seedlings to farmers, farmer groups and institutions in the project sites.

- Projects being implemented by both Government and Private institutions, Training institutions (MATI, LITA), Research institutions (*e.g*., TAFORI, TARI, TACRI, TALIRI), Higher Learning Institutions (*e.g*., SUA- based Botanical Garden and horticultural units), NGOs and partners (e.g. ICRAF through Gene bank and Africa RISING), Lead Foundation (FMNR), WWF; have continued to support production and distribution of tree germplasm materials such as tree seeds and seedlings. In addition, these institutions support both individual and group Small-Scale Tree Nursery Producers and entrepreneurs through supply of proven fruits and trees germplasm for enhanced and wider scaling in Tanzania.
- Production of high-quality tree seedlings of high value commercial species (*e.g*., Eucalyptus, *Pinus* spp., *Cedrella odorata*, *Milicia excelsa, Khaya anthotheca, Pterocarpus angolensis* etc.); as well as introduction of tree biotechnology have advanced in the country with generous support of programmes such as Forest Trust Fund (FTF), Tanzania Tree Biotechnology Project (TTBP), and Private Forest Programme (PFP).
- Tree seed orchards have been established by different institutions (*e.g.,* NAFRAC, TAFORI, TARI, TALIRI, TACRI, etc.).
- LITA Centres (*e.g*., Morogoro, Tengeru), TALIRI Centres (*e*.g. Mpwapwa, Mabuki; Kibaha- based Vikuge Pasture Seed Centre, etc.) further strengthen the supply pastures and forages (grasses, legumes, shrubs, trees) for enhanced agroforestry interventions.

2.2.2 Location Specific and Farmers' Responsive Technologies

It was noted that in the past, on–farm technology development activities were usually conducted without adequate farmer's characterization thus leading to poor involvement of farmers in the technology development process. Also, the AF technology spectrum was narrow and it was tested in a few locations. Furthermore, farmers were poorly involved in technology development process that in part led to lack ownership of the technology under implementation. To overcome these constraints, participatory implementation of the projects by involving all potential stakeholders at the different stages of technology implementation by encouraging both on-farm and on station validation and testing across diverse agro-ecological zones while harnessing 'the best bet technologies' of the proven mature technologies.

Following the approval of the first NAs (2004-2025) in 2004, attained achievements in the area of technology development to suite farmers' specific needs and the requirements of a particular agro-ecological zone. Farmers continued to practice different agroforestry technologies (Table 1). According to URT (2015), scatted trees in grasslands and trees on farm representing different forms of agroforestry technologies contribute to a significant growing stock of vegetation corresponding to 154,700 ha of mixed cropping, 1,521,100 ha of wooded crops, 5,045,400 ha of herbaceous crops; and between woodlands 2,530,900 to 35,997,300ha of woodlands. This further supports the fact that, about 45 % of the agricultural landscape in East Africa has over 10% tree cover suggesting for adoption of agroforestry technologies across the different agro-ecological zones.

Table 1: Main Agroforestry technologies in Tanzania

Name	**Descript of the technology**
Conservation Agriculture with Trees (CAWT)	CAWT is an agroforestry technology that combines the principles of Conservation Agriculture with Agroforestry. It involves the integration of crop friendly trees, mainly high value agroforestry tree species and nitrogen fixing trees into the crop land with Conservation Agriculture practices.
Home-gardens (Traditional multi-strata/ layer Agroforestry technology in the tropics)	Multi-strata agroforestry technology comprises a combination of shade trees and crops around homesteads; livestock may or may not be present. It is also known as shaded perennial-crops system when established away from home and with no livestock integration. Main types of home gardens in Tanzania include: *'Chagga' home garden*: a mixture of trees in the upper strata/ layer, banana in the middle layer and crops (Yams and Taro) in the lower strata in Arusha and Kilimanjaro regions.
	• *'Ntambo' home garden, of 'Matengo'ethinic of Mbinga represented by a mixture of coffee and trees (e.g. Grevillea, Eucalyptus* spp*., etc., and fruit trees) planted on bench terraces close to homesteads for sustainable land management (SLM) practices.*
	• *'Nyarubanja' system, a coffee-banana- combinations of the 'Haya'* ethnic group of Kagera region based on SLM practices.

Fertilizer trees and Fertilizer trees / Mineral fertilizers Combinations	• Intercropping of leguminous nitrogen- fixing tree/shrub species with cereals, mainly maize and sorghum, for soil fertility improvement and enhanced climate change adaptation and Strengthen crop and tree seed centres by opening both national and satellite seed distribution centres. Tree species tested and promoted include *Gliricidia sepium, Sesbania sesban*, *Tephrosia vogelii, etc.* • *Improved soil fertility through combined use of fertilizer trees (e.g., G. sepium* and mineral fertilizer sources such as both nitrogen- enriched Minjingu Mazao™, *and non-nitrogen enriched Minjingu Rock Phosphate (MRP) targeting both nitrogen and phosphorus (e.g., MRP)).*The tree' leaf biomass represents a good source of organic manure mostly supplying N with P and K being supplied from the mineral fertilizers
Improved fallow	Fast-growing, preferably leguminous trees, woody species planted, growing during fallow phases between cropping years for soil fertility improvement, land restoration and of the wood products. Species suitability vary with locality and objectives. Preferable tree species include *Acacia* spp., *Sesbania sesban*., *Gliricidia sepium*, etc.
Silvo-pastoral systems	The integration of tree/pasture farming in livestock production systems such as '*Ngitili* '(north western Tanzanian Sukuma traditional *in situ* natural regeneration agro-silvopastoral technology) and '*Olalili* 'or '*Alalili*, a Maasai *in-situ* natural regeneration traditional silvo-pastoral technology).
Fodder bank	Tree/shrub species planted and retained deliberately for production of livestock fodder as a component of grazing land management. Common tree species include *G. sepium*, *S. sesban*, *Acacia* spp*. (A. tortilis*, *A. polyacantha*, *A. nilotica), Leucaena* spp. (*L. diversifolia*, *L. esculaenta*).
Woodlots	The planting of short rotation plantations of fast-growing trees species on farmlands for timber, woodfuel, poles, and land rehabilitation. Tree species tested and validated include *Mellia azedrach*, Acacia spp. (*e.g*., *A. tortilis*, *nilotica*., *A. polyacantha*)
Taungya system	Involves intercropping crops during the early stages of tree establishment especially during year one and year two before canopy closure commonly practiced in plantation forests.

Boundary planting	Planting tree/shrub species along farm boundaries. Preferred tree species include *G. robusta, T. grandis*, *Leucaena* spp., *Eucalyptus* spp. The trees form boundaries and shelter belts.
Contour hedgerows intercropping	Integration of trees/shrub on contours for stabilisation of contour bands, soil and water conservation, soil fertility improvement, production of fodder and wood. The technology has been adopted widely on sloping landscapes for instance in Babati, East and west Usambara, etc.
Famer- Managed Natural Regeneration (FMNR)	FMNR involves management of natural regeneration in semi-arid areas (*e.g*., Dodoma, Shinyanga, etc.). Suitable species include *nitrogen-fixing trees*).
Spice crops /tree and beverage crops /tree Agroforests	Tree-based spice production systems (*e.g*., black pepper, Cardamom, Cocoa, vanilla, cloves) involves the integration of trees to provide shade and growing support for spice crops such as cinnamon (*Cinnamomum zeylanicum*), black pepper (*Piper nigrum*) Cocoa offer multiple benefits.
Production and Use of non– wood products	Production, processing, value addition of on-wood forest products (*e.g.* Honey, wild fruits, medicinal plants) under Api-agroforestry; Parklands (Baobab (*Andasonia digitata*), Tamarind (*Tamarindus indica*); Allanblackia oil in Amani, Tanga and Ifakara, Morogoro.

2.2.3 Capacity Building

It was noted that capacity building to implement and manage agroforestry was low at all levels represented by inadequate numbers of qualified scientists; not well-informed policy– makers. In order to scale the different agroforestry interventions and make impact at a national scale, efforts should be made to strengthen capacity in the different agroforestry specialities at district levels focusing on Agricultural (Crops and Livestock), and Forestry Field Extension Staff for enhanced technological transfer. Furthermore, agroforestry discipline should be promoted at both tertiary and Higher-Level Training institutions to foster high number of scientists with agroforestry speciality.

Achievements attained since approval of the first NAS (2004-2025) in 2004in Capacity building include:

- Capacity building done/ strengthened at different levels: farmers, Researchers and Extension Officers.
- Training and dissemination materials have been produced by the government and partners, and distributed to potential stakeholders.

- Two farmers' Training Centres on Agroforestry and organic farming practices have been established.
- Integration of agroforestry themes among Research institutions (*e.g.*, TAFORI, TARI), Higher learning institutions, NGOs (*e.g.*, ICRAF, Vi Agroforestry, etc.).

Apart from the Agroforestry courses being taught at Olmotonyi Forest Training Institute (FTI), Arusha. Other tertiary level training institutions (*e.g.*, Ministry of Agricultural Training Institutes (MATIs), Livestock Training Authorities (LITAs)and Universities, incorporate limited number of agroforestry courses in their curricula thus leading to graduates of limited agroforestry background translated through less capacity of the LGA Extension Officers to adequately support agroforestry interventions. The second NAS (2021-2031) advocate for mainstreaming of agroforestry issues across curricula of tertiary and higher-level training institutions.

2.2.4 Awareness

It was noted that there was low awareness about the social, economic, biological, and environmental benefits of agroforestry, as well as low awareness on agroforestry options and technologies available for use. Establishment of demonstration plots at village and district levels to foster technological transfer among farmers, LGAs staff, leaders and policy makers for enhanced awareness on agroforestry. Preparation and distribution of agroforestry training and extension materials (*e.g.*, brochures, posters) among potential agroforestry stakeholders is highly advocated in the second NAS (2021-2031).

Achievements attained on awareness creation and raising on agroforestry since approval of the first NAS (2004-2025) include:

- awareness creation on agroforestry among the local communities, Leaders, Policy- makers, NGOs on Agroforestry mainly through exchange visits, mass media, production and distribution of learning materials (*e.g.*, leaflets, brochures, brochures, posters).
- two National Agroforestry and Environmental workshops were organized since 2006 and four agroforestry symposia were held.
- Partners such as Vi-Agroforestry, have organized National Agroforestry Forum annually for over 10 years to increase awareness of Agroforestry technologies to various stakeholders.

2.2.5 Dissemination of Participatory Agroforestry Technologies

Many of the developed agroforestry technologies being not well known among stakeholders including farmers. Farmers had limited information on existed Agroforestry technologies and options; possibly associated to low adoption of the different agroforestry technologies.

Achievements made on dissemination and participatory agroforestry technology transfer following the approval of the first NAS (2004-2025) in 2004 include:

- Agroforestry technologies including mixed cropping, intercropping, rotational woodlots, FMNR, fertilizer trees for fertility improvement disseminated.
- Product processing and value addition have been promoted.

2.2.6 Networking with Stakeholders

It was noted that although agroforestry was implemented in the country by several Government institutions and agencies, NGOs, projects and private companies in individual projects in different parts of the country, here has been limited sharing of experiences among agroforestry stakeholders, as well as lack of coordination of agroforestry activities at national and community levels.

Achievements made since approval of the first NAS (2004-2025) in 2004 in the area of Networking with stakeholders include:

- Establishment of Agroforestry-related networks and umbrella platforms (*e.g.*, MJUMITA, MVIWATA, FFPOs, Tanzania Natural Resource Forum (TNRF), Tanzania Climate Smart Alliance (TSCAA).

2.2.7 Policy and Legal Framework

Role of gender on forest and agroforestry including land ownership not well advocated in the existing legislations for instance land and forest policies and legislations. Harmonisation of the policies and legislations is of high relevance for enhanced involvement of the different agroforestry stakeholders such as the private sector in management of agroforestry enterprises.

Achievements made with respect to integration of agroforestry in the existing policy and legal frameworks since approval of the first NAS (2004-2025) in 2004 include:

- Agroforestry has been integrated into policy frameworks across sectors such as NFPIS (2021-2031), NBPIS (2021-2031), National Climate Change Response Strategy (2021-2026), National Determined Contributions (NDC) strategy, Agricultural Sector Development Programme Phase II (ASDP II, 2017/18 – 2027/28), and Agriculture Climate Resiliency Plan (2014-2019). Agroforestry has also been integrated in the draft National Action Programme to Combat Desertification (UNCCD – NAP, 2021), National Strategic Campaign on Environmental Conservation and Sanitation (2021–2026), Climate Smart Agriculture Guideline (URT 2017), and Guidelines for Mainstreaming National Action Programme to Combat Desertification into Sectoral Policies Plans and Programmes (URT, 2014), and the Livestock Sector Development Programme of 2011.
- However, agroforestry is not well pronounced in these documents as a land use system for improving food and nutrition security; building resilience of cropping systems, intensifying and diversifying agricultural productivity, landscape restoration and combating desertification, production of wood and non-wood forest products, and climate change adaptation and mitigation and a component in the management of pastures, grazing lands and rangelands.
- Agroforestry- based technologies are included in restoration and conservation programmes for Tanzania as strategies to meet the 5.2 million ha restoration targets under the African Forest Landscape Restoration Initiative (AFR100). Agroforestry is one of the Sustainable Agriculture Land Management (SALM) promoted in Africa for restoring a mosaic of degraded landscape while providing livelihood and climate change adaptation and mitigation benefits to small-scale farmers

2.2.8 Market and Information Access

Access to markets and market information systems were one of the most essential factors for a successful scaling of agroforestry interventions in the country. Marketing of different agroforestry products such as wood, seed, fruits, and medicinal herbs has seen identified as an incentive to farmers for adoption of agroforestry technologies. It was targeted that by 2010 rural farmers must have access to competitive local and export markets for agroforestry inputs and outputs.

It was then proposed that actions to build capacity of local marketing institutions in order to improve access to markets and market information systems essential. In addition, ensured market skills (*e.g.*, processing, storage, packaging) and the related value addition represent one of the essential criteria for improved markets of agroforestry products and services. These include partnership
between small holder farmers and traders in the form of contractual arrangements was to be encouraged to allow farmers to enjoy assured markets while buyers benefit from assured supply at specified quantity and quality.

Achievements made in the area of market and information access since approval of the first NAS (2004-2025) in 2004 include:

- Development of value chains of some high value Agroforestry products mainly by the private sector and linking farmers to local and international markets. Allanblackia oil value chain has been developed in partnership between Amani Nature Reserve (ANR), Novel Developments Tanzania and ICRAF.
- Cocoa- and Coffee-based value chains have been developed by private partners and are benefiting more than25,000 and 400,000 farmers, respectively, in Tanzania.

2.2.9 Implementation, Monitoring and Evaluation

Implementation, Monitoring and Evaluation was limited by lack of baseline data, lack of information on programme impact, lack of facilitation and weak coordination among AF actors at central level.
Establishment of national database on agroforestry has been identified as of paramount importance.

Following the approval of the first NAS (2004-2025) in 2004, several achievements have been attained in the area of Implementation, monitoring and evaluation:

- Development of database for Agroforestry stakeholders was developed and strengthened through forums.
- Partnership at both nation and international scale was promoted through joint implementation of activities at project levels, for instance through ICRAF- Africa RISING Project, Lead Foundation t- '*Kisiki Hai*' and the associated FMNR initiatives; partnership with LGAs specifically District

Councils for implementation of Agroforestry institutions in partnership with donor Agencies such as WWF, NORAD, USAID, etc., in implementation of agroforestry.

- The NASCO Secretariat was formed to spearhead efforts on the development, promotion, Research and Development as well as scaling of agroforestry in Tanzania.

2.3 Issues for Intervention as per the four Main Forest Policy Areas

The first NAS (2004-2025) emphasized on the achievements of the National Forest Policy goal of "*enhancing the contribution of the forest sector to the sustainable development of Tanzania, and the conservation and management of her natural resources for the benefit of present and future generations*". The contribution was mainly through the attainment of issues raised under the four main forest policy areas, namely, forest land management, forest–based industries and products, ecosystem conservation and management, institutions and human resources; as well as the three cross cutting issues: HIV/AIDS and Health, Gender and Governance. Analysis of the implementation status of the current first NAS (2004-2025) revealed a number of challenges in respect of the nine intervention areas. Analysis of new intervention areas to address the identified challenges is presented. The intervention areas are also aligned to the four main forest policy areas. In addition, linkage to associated policies dealing with crop and livestock components of agroforestry is provided.

2.3.1 Forest Land Management

The goal of the forest land management policy area is to ensure sufficient forest area is maintained for sustainable supply of forest products and services. This is achieved through strategic interventions in the following three specific areas: central and local government forest reserves, unreserved forest lands, and private and community forestry. In line with these specific areas, policy statements accompanied with directives were formulated to promote sustainable management of forest land. Although neither the policy statement nor directive is specific to agroforestry, agroforestry issues are aligned to the forest policy under the private and community forestry (section 4.1.3) where the policy acknowledges limited capacity in the forestry sector to establish agroforestry systems. The forest policy (URT, 1998) also recognizes the contributions of Trees outside

Forests (ToF) on on-farm wood supply to reduce harvesting pressure of natural forests (*Policy Statement9*). However, the policy does not detail roles of trees (*i.e.*, ToF) in agricultural landscapes on conservation of agro biodiversity; restoration of degraded farmlands, enhanced soil fertility and crop productivity. Likewise, the National Beekeeping Policy encourages establishment of agroforestry systems on agricultural lands to diversify and increase employment and income options; and to conserve biodiversity through sustainable supply of bees' products (honey. Wax, propolis), and services such as pollination services. These linkages to Agroforestry are emphasized under the apiary management and the Beekeeping cross-sectoral policy areas.

In line with the National Forest Policy (NFP) of 1998 (URT, 1998), the National Forest Policy Implementation Strategy (NFPIS, 2021-2031) has been developed to strategize stakeholder's engagement in forest land management to ensure sufficient forest area is maintained for sustainable supply of forest products and services. The NFPIS (2021-2031) has several strategies promoting agroforestry and forest land management for sustainable supply of forest products and services. These include strengthening the management of natural forest resources and enhanced carbon stocks, promoting stakeholder's engagement in natural forest management, promoting tree growing and regeneration, and strengthening the management of forest plantations and woodlots. Agroforestry is aligned to these strategies through its contributions in meeting the following targets of the NFPIS (2021-2031): increased number of farmers practicing Agroforestry to 15 million; restoring 5.2 million ha of forest land, reducing annual deforestation rate by 70%, and increasing area under community-owned forest plantations/woodlots to 360,000ha. Similarly, the National Beekeeping Policy Implementation Strategy (NBPIS, 2021-2031) spells out strategies promoting the development of Api-agroforestry technology for production of bee products (*e.g.*, Honey, bee forage) and ecosystem services such as pollination services.

Contributions of agroforestry to strategies and targets identified in both NFPIS (2021-2031) and NBFIS (2021-2031) include establishment of woodlot and farmer-managed natural regeneration (FMNR) agroforestry-based technologies to curb high extent of annual deforestation of 200,000- 5000,000 ha taking place nation-wide (URT, 2015). Adoption of rotational woodlot Agroforestry- based technology

can produce wood for curing tobacco and wood fuel supply for instance, and has the potential to reduce some drivers of deforestation. Establishment of woodlot technology has also been recognized as a cost-effective and thus one of the sustainable approaches to supply wood fuel to curb deforestation. In addition, promoting FMNR has restored more than150,000ha of degraded land in semiarid central Tanzania. A comparable FMNR technology to the Western Tanzania Sukuma *Ngitili*traditional *in situ* natural regeneration vegetation conservation agro-silvopastoral technology, a comparable FMNR has demonstrated potential in supplying fodder, wood fuel in addition to other ecosystem goods and services. The traditional *in situ* natural regeneration agro-silvopastoral technology has restored 350 000 ha over the 18-year period between 1996 and 2004. Landscape restoration initiatives for instance through FMNR contributes positively to meeting country restoration targets of under the AFR100. Agroforestry contributes to the estimated 14.8% of 3.3 billion cubic metres of wood produced by Trees outside Forests (NFPIS, 2021-2031) (ToF).

Strategies and targets in NFPIS (2021-2031) are mainly linked to the role of the tree component of Agroforestry in producing both wood- and non-wood- based products, and contributing to the restoration of the forest land. Also, the NBFIS (2021-2031) include tree-based strategies to support production of beekeeping products and pollination services. However, analysis of interventions on ecological interactions of trees with crops and livestock under Agroforestry are inadequately emphasized in both the NFPIS (2021-2031) and the NBFIS (2021-2031) thus necessitating for elaborated details on the contributions of agroforestry on wood-based and pollination services through the second NAS (2021-2031). Apart from producing wood products on-farm, Agroforestry contributes to the management of forest land by intensifying crop production systems to reduce agricultural expansion; one of the main drivers of deforestation and forest degradation in Tanzania. Agroforestry enhances tree diversity, biodiversity; and intensifies both tree and the soil components through sustainable nutrient intensification (Africa RISING, 2022), and it has shown high potential elsewhere. Mechanisms through which Agroforestry contributes to sustainable cropping systems include enhanced soil fertility improvement, enhanced soil organic matter dynamics and nutrient use efficiency for soil and water/ moisture) (Africa RISING, 2022). However, less has been advocated in the NFPIS (2021-2031) as well as other sectoral policies

and strategies on sustainable management of the land resource harnessing agroforestry-based sustainable intensification technologies for land restoration and improving crops production, as well as enhancing climate resilience. The second NAS (2021-2031) spells out the role of agroforestry in sustainable intensification for enhanced soil health, resource (nutrient and moisture) dynamics, and crop productivity.

2.3.2 Forest–based Industries and Products

The forest-based Industries and products policy area aims at increasing value-addition, employment, government revenue, and foreign exchange earnings through sustainable forest based industrial development and trade. These objectives are achieved through strategic interventions in the five specific areas, namely: wood fuel, beekeeping, ecotourism, other non-wood-based industries and products; and trade of forest products and services. The forest policy supports sustainable wood production and efficient wood conversion technologies to meet the projected wood deficit of 39 million $m^3$by 2030. Integrated wood production strategies that involve industrial and non-industrial forest plantations (NIFP) should close this gap. Agroforestry as a NIFP strategy has the potential to produce the projected wood deficit in Tanzania. In the Southern highlands, Northern and Western Tanzania for instance, wood from NIFPs sources comes from woodlots, scattered trees on croplands, home gardens, and farm boundaries. These agroforests produce significant amount of wood for commercial (timber and poles) and domestic (wood fuel and construction materials). Intercropping *Grevillea robusta* in coffee home gardens in Northern Tanzania for example has been associated with both high coffee productivity) and timber from *G. robusta*. Similarly, establishment of woodlots of high value wood species such as *Eucalyptus* spp., *Pinus patula* and *Cupressus lusitanica* on farmlands in Southern Highlands of Tanzania and elsewhere in Tanzania have demonstrated high wood productivity and revenue. Also, at the global scale, teak (*Tectona grandis*) intercropping agroforests-based systems in Asia have produced high value wood while enhancing food and nutritional security, and household income by up to 40%. Woodlots established in farmers' farmlands in southern highlands of Tanzania and elsewhere represent a potential source of income. Other benefits of woodlots include charcoal briquettes from wood and crop residues (*e.g.*, twigs and stems), soil amendments from the use of wood-based materials and extracts

such as biochar and wood vinegar. These benefits are in line with the policy focus "*to increase the use of other non-wood-based forest products and increasing efficiency and value addition along the wood fuel value chain*".

Both the NFPIS (2021-2031) and the NBFIS (2021-2031) promote sustainable use and production of Non-wood forest products (NWFPs). The NWFPs include leafy vegetables, honey and other bees' products, gums and resins, mushrooms, spices, fruits, nuts, and herbal medicine. Both natural forests and different agroforests have the potential to produce NWFPs. Establishment of agroforests buffer the capacity for natural forests to produce NWFPs by supplying a surplus quantity. Domestication of high- value tree species for fruits and medicinal trees at NAFRAC Shinyanga and harnessing of cooking oil from *Allanblackia stuhlmannii* at Amani Nature Reserve (ANR)represent agroforestry interventions in Tanzania that promote sustainable use, processing and development of value chain of promising NWFPs. Most NWFPs such as Allanblackia oil and wild fruits, gums and resins have local and international markets, despite opportunities to exploit these markets being limited suggesting for a new venture. In addition, due to low production capacity; limited processing and package technology, there is a need for developing enabling environment in terms of developing appropriate policy framework and regulations to support development of promising agroforestry products such as Cocoa and Macadamia nuts. Implementation of the second NAS (2021-2031) should enhance processing, value addition and marketing of most of agroforestry- based NWFPs.

The NFIPS (2021-2031) detail strategies and targets for the development of wood-based industries and products, including NWFPs from indigenous forest products; as well as processing and value addition of NWFPs for increased employment opportunities and foreign exchange. However, wood based and NWFPs produced exclusively under Agroforestry are not adequately addressed in both the NFIPS (2021-2031) and the NBIPS (2021-2031), as well as other sectoral policies. These include, Cocoa, Spices, Allanblackia oil, etc. These products support rural livelihood and attract export earnings which are part of Agroforestry thus contributing to GDP in addition to the rest of the forestry sector. Spices, Allanblackia Oil, Cocoa, and Coffee represent high value agroforestry products. These products have high established value chain; employ and link over 8 million small-scale farmers to

local and international markets. These products contribute to forest exchange to the country. Cocoa for instance, is the first cash crop in Kyela district. In addition, the spice-based agroforests contribute to more than 50% of the total household cash-crop income of smallholder farmers in the East Usambara mountains of Tanga in northern Tanzania. Trend on production of high- value tree nuts such as Macadamia nut on farmlands for export, and collection and processing wild fruits from parkland agroforests (such as Baobab (*Adansonia digitata*) and Tamarind (*Tamarindus indica*) Parklands in semi-arid areas of Dodoma, Singida and Shinyanga regions is increasing. Efforts are needed to provide guidelines for sustainable production, harvesting practices, processing, value addition and marketing regulations that safeguard small-scale farmers, and the associated sustainable management of the tree resource. Specifically, farmer organisations and business associations need to be promoted; market legislation needs to be updated and enforced. In addition, cross–border trade needs to be legalized and promoted; and processing of agroforestry products for value addition needs to be promoted in rural areas. Partnership between small holder farmers and traders in the form of contractual arrangements would promote profitability of these forest-based enterprises. On the other hand, farmers would enjoy assured markets, while buyers would benefit from assured supply at specified quantity and quality. Strategies need to be in place to safeguard all value actors, especially small-scale farmers and role of gender for instance majority of women provide labour to produce and/or process agroforestry products.

2.3.3 Ecosystem Conservation and Management

The main objective of NFP (URT, 1998) is to enhance ecosystem stability through conservation of forest biodiversity, water and soil fertility. The National Forest Policy (1998) outlines three specific areas targeting this objective. These include: forest biodiversity conservation, integration of wildlife in forest management, and adoption of environmental impact assessment (EIA) for investments in forest lands. In addition, the policy emphasizes the incorporation of forest biodiversity conservation programmes in the management of natural forests and forest plantations, wetlands, national parks, marine parks and coastal forests.

Major threats to biodiversity loss, according to the National Biodiversity Strategy and Action Plan (URT, 2020) include agriculture expansion and urban

growth. Biodiversity is also threatened by other underlying issues including overexploitation, pollution, invasive alien species, exploration and extraction of oil and gas, climate change, genetic erosion, poverty, political and social instability in neighbouring countries. Biodiversity is also threatened by culture and beliefs, inadequate awareness and knowledge, and inadequate policy, legal and institutional response. To address these challenges, the NFIPS (2021-2031) developed strategies and targets to strengthening of biodiversity research, information dissemination, involvement of other stakeholders, and management of forests ecosystems for conservation of biodiversity and other ecosystem services using the approved management plans. About 20 Forest Nature Reserves (NFRs) covering867,449 ha; about 1.4 million ha of gazetted catchment forests, and wildlife management areas (WMA) have incorporated the concepts of biodiversity and ecosystems conservation in their management plans. Furthermore, the coordination between forest and wildlife authorities has been improved to a large extent and EIA is being conducted prior to investments in the forest areas.

The NFPIS (2021-2031) has set targets and strategies to combat biodiversity loss and other forest ecosystems management-related challenges linked to deforestation and forest degradation. However, the role of agroforestry in intensifying crop production systems and improving soil fertility, and reducing agricultural expansion have not been documented. Agroforestry is an eco-friendly land-use system that provides a number of ecosystem services which sustain productivity of forest and agricultural systems, and contribute to climate change mitigation and adaptation. These include carbon sequestration, soil fertility improvement, microclimate amelioration, land restoration, provision of pollination services, biodiversity conservation, Integrated Pest Management (IPM), and improving air and water quality. Agroforestry provides diverse habitats for a variety of birds, insects and animal species; facilitating the integration of Apiculture and IPM in agriculture. For example, agroforestry tree species such as *Tephrosia vogelli.* and Neem tree (*Azadirachta indica*) are used for pest control. Intercropping *Sesbania sesban* with maize in Tabora is known to suppress noxious weed (*Striga* weed) as a result of improved soil fertility and the disruptive effects of trees (*S. sesban*). As a climate resilient strategy, agroforestry ameliorates microclimates to improve agroecosystem resilience and sustains crop productivity under the changing

climate. However, further research and training is needed to generate knowledge to inform policies and scaling operations on the role of agroforestry in pollination services, IPM, organic farming; and in providing climate resilient and nature-based solutions for landscape restoration and sustaining food production across sectors (Forest, Agriculture, Livestock and Land). Among other issues, the second NAS (2021-2031) has been developed to leverage these gaps while contributing to conservation of forest biodiversity and agrobiodiversity.

2.3.4 Institutions and Human Resources

The policy area is meant to ensure that national capacity is available to manage and develop the forest sector, including Agroforestry interventions, in collaboration with other stakeholders and across sectors. Specific areas of policy focus include policy analysis and planning; legal and regulatory framework; strengthened capacity of the local government, forestry research, agriculture and forestry training institutions. Other areas that need to be strengthened include the nation extension services, non-governmental organizations (NGOs) such as Faith Based Organisations (FBOs), Community Based Organisations (CBOs), the private sector, local communities, and financing institutions (both the national and international stakeholders).

Following the approval of NFP (1998) there have been notable achievement in research and capacity building on Agroforestry.

Although implementation of NFP (1998) addresses coordination issues, a clear chain of command in managing forest resources between the central and local levels is still lacking. Also, there is inadequate number of skilled workforce in the forest sector to address forestry related issues including NWFPs and agroforestry. There is inadequate staffing (1,932 foresters compared to 9,000 professionals needed) to sustainably manage forests in Tanzania. Analysis of staff capacity during the first NAS (2004-2025) revealed inadequate capacity in the extension systems and among farmers to implement agroforestry-based interventions. As part of promoting effective sectoral and inter sectoral collaborations in agroforestry, the second NAS (2021-2031) has set strategies and targets to strengthen the capacity of both Forest and Agricultural extension officers on Agroforestry.

2.3.5 Cross cutting issues

The development of the Agroforestry sub-sector is influenced by crosscutting issues related to health, gender and governance, that were not considered during the development of NFP (1998). Main health issues are Human Immunodeficiency Virus (HIV)/Acquired Immune Deficiency Syndrome (AIDS) and the current increase of Non-Communicable Diseases (NCDs).

2.3.5.1 HIV/AIDS and Non-communicable diseases

Mainstreaming HIV/AIDS awareness programmes in forestry and agroforestry in particular would enhance the sustainability and productivity of the forestry sector by reducing the impacts of HIV/AIDS and stigma among the sector workforce and the surrounding communities. Agroforestry contributes to combating HIV/AIDs prevalence through the provision of diverse and nutritious diets throughout the year, even to smallholder farming households in rural areas. Indigenous fruits contribute to about 42% of the natural food basket of rural households in the Southern African region. The production of high- value wild fruits is higher during the crop growing seasons, a time when most rural households are food insecure. By supplying wood fuel, Agroforestry reduces the use of environmentally and healthy risky energy sources such as the smoky cow dung manure and *Euphorbia* spp. (e.g., *E. tirucalli*) for cooking. In addition, medicinal trees act as natural pharmacies among income-poor and smallholder farmers who cannot afford high medical costs. Mainstreaming of HIV/AIDS and NCDs issues for improved health, sustainability and productivity in agroforestry workforce have been prioritized by the second NAS (2021-2031).

2.3.5.2 Gender and Marginalized People

Integration of gender issues may promote economic inclusiveness in the forestry sector and social welfare. However, the sector is male-dominated while most women are engaged in the primary production phases such as tree nursery management and tree planting, crop farming and livestock production. Engagement of marginalized groups or disadvantaged people is an emerging social welfare issue in different sectors in Tanzania including agroforestry. In Tanzania, marginalized groups include people living with disabilities (PWD); with chronic ailments such as HIV and AIDS; communities living within the forest,

youths, children, women, elderly people (both men and women), and single headed households.

The second NAS (2021-2031) enhances communities dwelling within and adjacent to the forests and forest reserves for enhanced access of forest-based products and services through the existing participatory forest management (PFM) arrangements. The second NAS (2021-2031) addresses the strategic needs of all community members to practice agroforestry and benefits from the same.

2.3.5.2 Governance

Maintaining culture of accountability and transparency is often insisted to prevent corruption events or incidences in the society. Accountability and transparency aspects have been promoted in the second NAS (2021-2031) to enhance good governance in agroforestry.

CHAPTER THREE

3.0 VISION, MISSION AND OBJECTIVES

3.1 Overview

This chapter consists of the Vision, Mission and Objectives of the second NAS (2021-2031). The Vision and Mission statements have been formulated while the Implementation Strategy has adopted objectives of the NFP.

3.2 Vision and Mission

3.2.1 Vision

Agroforestry systems contributing to diverse benefits to farming communities while conserving forest resources and sustaining the landscape and environment.

3.2.2 Mission

To effectively promote Agro forestry practices and technologies and adoption to farming communities for socio-economic improvement and environmental sustainability.

3.3 Objectives

3.3.1 Strategic statements

3.3.1.1 Goal

To enhance the contribution of Agroforestry sub-sector for optimal land productivity, sustainable intensification (SI) of the resources, and livelihood improvement while contributing to biodiversity conservation, environmental sustainability, climate change adaptation, mitigation and resilience of the ecological base in Tanzania.

3.3.1.2 Strategic objectives

The specific objectives are:

(i) Improved and sustained supply of diverse and quality tree germplasm suitable for the different agro-ecologies and landscapes for provision of the multiple ecosystem goods and services from the different Agroforestry systems.

(ii) Enhanced national capacity to manage and effectively develop Agroforestry practices in collaboration with other stakeholders on research, training, and provision of extension services.

(iii) Improved value addition, markets and access to market information systems of Agroforestry products and services within and outside the country.

(iv) Increased role of Agroforestry on enhanced land restoration, food security, climate change adaptation, mitigation and resilience of the ecological base for sustainable provision of agro-based ecosystem goods and services.

(v) Improved effective communication and networking among Agroforestry stakeholders within and outside the country.

(vi) Increased mainstreaming of HIV/AIDS and non-communicable diseases (NCDs) related issues in Agroforestry.

(vii) Enhanced gender mainstreaming and diversity across Agroforestry interventions.

(viii) Increased financing mechanisms and governance of the different Agroforestry interventions

3.4 Expected Outputs

Implementation of the second NAS (2021-2031) is expected in achieving its goal of contribution of Agroforestry for optimal land productivity, sustainable intensification of the resources, and livelihood improvement while contributing to biodiversity conservation, environmental sustainability, climate change adaptation, mitigation and resilience of the ecological base. Hence, effective and efficient implementation of the second NAS (2021-2031) will lead to:

(i) Adequate and sustainable supply of diverse and quality tree germplasm suitable for the different agro-ecologies and landscapes for provision of

multiple ecosystem goods and services from the different Agroforestry systems.

(ii) Strengthened national capacity to manage and effectively develop sustainable Agroforestry systems in collaboration with other stakeholders on research, training, and provision of extension services.

(iii) Improved value addition, markets and access to market information systems of Agroforestry products and services within and outside the country.

(iv) Increased role of Agroforestry on enhanced land restoration, food security, climate change adaptation, mitigation and resilience of the ecological base for sustainable provision of agro-based ecosystem goods and services.

(v) Improved effective communication and networking among Agroforestry stakeholders.

(vi) Mainstreamed HIV/AIDS and non-communicable diseases (NCDs) related issues in Agroforestry interventions.

(vii) Enhanced gender mainstreaming and diversity across Agroforestry interventions.

(viii) Increased financing mechanisms and improved governance of the different Agroforestry interventions and programmes.

CHAPTER FOUR

4.0 IMPLEMENTATION STRATEGY

4.1 Overview

This chapter consists of Strategic issues, Objectives, Strategies, Targets and Output indicators. Issues presented were developed from stakeholders' consultations and situation analysis in Chapter 2. The Strategic issues, Objectives, Strategies, Targets and Output indicators have been aligned with the four core NFP areas, namely, forest land management, forest-based industries and products, ecosystem conservation and management; and institutions and human resources. In addition, cross-cutting issues that comprise HIV/AIDS, gender and governance, and climate change have been incorporated into the strategy.

4.2 Issue: Inadequate and Unsustainable Supply of Diverse and High-Quality Germplasm and Other Inputs

Objective 1: To promote adequate and sustainable supply of diverse and quality tree germplasm and other inputs suitable for the different agro-ecologies and landscapes for provision of multiple ecosystem goods and services from the different Agroforestry systems.

Strategies for Supply of Diverse and High-Quality Germplasm and Inputs

i. Strengthen crop and tree seed centres by opening both national and satellite seed distribution centres;
ii. Create sustainable farmer-based production, delivery and marketing systems of indigenous and improved germplasm;
iii. Promote natural regeneration as a source of climate resilient planting materials;
iv. Strengthen supply of adequate and quality agro-inputs to farmers; and
v. Strengthen nature-based solutions.

Targets for Crop and Tree Seed Centres

i. At least 10 000 champion farmers trained on seed collection and

seedlings production of key Agroforestry tree species by June 2031;

ii. At least 3 000 champion farmers trained and supported to engage in marketing of seeds and seedlings of key Agroforestry tree species by June 2031;

iii. At least 100 satellite (*i.e.*, farmer-based) tree seed collection and distribution centres established by June 2031;

iv. At least 10 000 Agroforestry practitioners are trained on natural regeneration options as a seed source by June 2031;

v. Actors in indigenous and improved germplasm value chain increased from 7 to 20 by June 2031;

vi. Tree germplasm supply centres increased from 7 to 15 by June 2031;

vii. Tree seed orchards increased from 160 ha to 1 000 ha by June 2031;

viii. Tree seed banks increased from 1 to 3 by June 2031;

ix. Botanical gardens increased from 8 to 15 by June 2031;

x. Historical/special sites of Agroforestry recognized by UNESCO increased from 2 to 10 by June 2031;

xi. Fifty (50) Bamboo plantations established by June 2031;

xii. Two (2) Double agro-input centres established by June 2031;

xiii. At least 60 % of Agroforestry farmers received inputs in time by June 2031; and

xiv. Ten (10) nature-based solutions are strengthened by June 2031

Output indicators for Crop and Tree Seed Centres

i. Number of national crop and tree seed collection and seedling distribution centres;

ii. Number of Satellite (*i.e.*, farmer-based) crop and tree seed collection and seedling distribution centres;

iii. Number of champion farmers involved in commercial seed collection and production of high-quality tree and fruit tree seedlings;

iv. umber of farmers trained and supported to engage in marketing of seeds and seedlings of key Agroforestry tree species;

v. Number of actors in indigenous and improved germplasm value chain;

vi. Number of Agroforestry practitioners trained on seed collection, seedlings production and natural regeneration as a source of planting materials;

vii. Number of Germplasm supply centres;
viii. Number of Tree seed orchards;
ix. Number of Tree seed banks;
x. Number of Botanical gardens;
xi. Number of Historical/special sites of Agroforestry recognized by UNESCO;
xii. Number of Bamboo plantations; and
xiii. Number of agro-input centres.
xiv. Number of strengthened nature-based solutions

4.2 Issue: Inadequate Capacity in Research and Provision of Training and Extension Services

Objective 2: To strengthen and sustain human resources capacity in Agroforestry for effective research, training and provision of extension services

Strategies for Strengthening Human Resources

i. Promote and build capacity in Agroforestry research;
ii. Strengthen Agroforestry training in secondary and tertiary education levels;
iii. Promote Agroforestry research and extension linkages; and
iv. Facilitate networking with national, regional (East Africa, SADC, ECOWAS) and international Agroforestry organizations.

Targets for Human Resources

i. Increase in Agroforestry research human resource base from 40 to 150 by June 2031;
ii. Establish Agroforestry researches and research human resource database by June 2024;
iii. Establish Agroforestry researchers and practitioners' platforms and forums by June 2025;
iv. Encourage Forest Training Institutions (FTIs), Agriculture Training Institutions (MATIs), and Livestock Training Authorities (LITAs)

and higher learning institutions for curricula review and incorporate Agroforestry courses into their curricula by June 2027;

v. Strengthen capacity of Agriculture and Forest Extension Officers on Agroforestry by June 2028;

vi. Develop Agroforestry communication and information dissemination materials for Forest, Crops and Livestock Extension Officers/workers; and farmers by June 2024;

vii. Facilitate establishment of national, regional and international Agroforestry research and extension linkages forums by June 2026;

viii. Establish and strengthen Agroforestry centres of excellences from 2 to 5 by June 2031; and

ix. Six affiliations with international Agroforestry originations established by June 2030.

Output Indicators for Human Resources

i. Number of Agroforestry research human resource base;

ii. Functional human resource data base in place;

iii. Number of National Agroforestry Platforms and Agroforestry forums;

iv. Number of courses, curricula and programmes on Agroforestry offered by FTIS, MATIs, LITAs and higher learning institutions;

v. Number of Forestry, Crops and Livestock Extension Officers trained in Agroforestry;

vi. Number of Agroforestry communication and information dissemination materials for Forestry, Crops and Livestock Researchers, Extension Officers/workers and farmers;

vii. Number of national and international Agroforestry research and extension linkages, platforms and forums;

viii. Number of Agroforestry centres of excellences established, operationalised and strengthened; and

ix. Number of affiliations with international Agroforestry, Crop and Livestock originations established.

4.3 Issue: Inadequate Value Addition, Marketing and Market Information for Agroforestry Products

Objective 3: To promote value addition, markets and access to market information of Agroforestry products.

Strategies for Value Addition, Marketing and Market Information

i. Initiate Agroforestry products market centres;
ii. Enhance value addition of selected Agroforestry products;
iii. Promote Agroforestry Farmer Organizations and business associations;
iv. Promote market penetration of Agroforestry products; and
v. Establish linkage with companies/groups dealing with Agroforestry products.

Targets for Value Addition, Marketing and Market Information

i. Establish 10 Agroforestry branded centres by June 2028;
ii. Establish 5 cottage industries for selected Agroforestry products by June 2025;
iii. Encourage at least 10 FFPOs to have Agroforestry Product Market centres by June 2026;
iv. Agroforestry certified crops increased from two (2); (*i.e.*, Coffee and Cocoa) to 10 by June 2031; and
v. Facilitate FFPOs platform formulation by June 2025;

Output indicators for Value Addition, Marketing and Market Information

i. Percentage of Agroforestry branded centres;
ii. Number of Agroforestry Products Market Centres by each FFPOs;
iii. Number of cottage industries for selected Agroforestry products;
iv. Number of certified crops (Coffee and Cocoa);
v. Number of linkages with private sector

4.4 Issue: Untapped potentials on the roles of Agroforestry in Climate Change Adaptation, Mitigation and Resilience Initiatives and Mechanisms

Objective 4: To promote the role of Agroforestry for land restoration, carbon sequestration and carbon offsets, climate change adaptation, mitigation and resilience initiatives and mechanisms

Strategies for potentials on the roles of Agroforestry in Climate Change Adaptation, Mitigation and Resilience Initiatives and Mechanisms

i. Enhance climate change adaptive, mitigation and resilient mechanisms through *in situ* natural regeneration approaches;
ii. Facilitate uptake of climate resilient Agroforestry technologies;
iii. Promote Agroforestry-based landscape restoration approaches; and
iv. Scale carbon inventories, popularise and exploit market opportunities for carbon sequestration in mixed cropping and other Agroforestry systems.

Targets for potentials on the roles of Agroforestry in Climate Change Adaptation, Mitigation and Resilience Initiatives and Mechanisms

i. Farmers practicing farmer-managed natural regeneration for land rehabilitation increased by 30% by June 2031;
ii. At least three climate resilient technologies for each agro-ecological zone identified, documented and deployed for uptake by June 2025;
iii. Farmers practicing Agroforestry increased from 4 million to 15 million by June 2031; and
iv. Agroforestry-based carbon offset projects increased by 20% by June 2031

Output indicators for potentials on the roles of Agroforestry in Climate Change Adaptation, Mitigation and Resilience Initiatives

i. Percentage of farmers practicing farmer-managed *in situ* natural regeneration (FMNR) for land rehabilitation;
ii. Number of climate resilient technologies for each agro-ecological zone identified, documented and deployed for uptake;
iii. Number of programmes, forestry and land restoration strategies, and action plans integrating Agroforestry; and

iv. Percentage of Agroforestry-based carbon offset projects;

4.5 Issue: Inadequate Communication of Agroforestry technologies and Networking on Agroforestry

Objective 5: To strengthen effective communication of Agroforestry technologies and networking among Agroforestry stakeholders.

Strategies for Communication of Agroforestry technologies and Networking on Agroforestry

i. Promote information exchange among Agroforestry stakeholders;
ii. Promote and institutionalise Agroforestry stakeholders' platforms and forums;
iii. Develop and maintain database for Agroforestry stakeholders;
iv. Promote mass awareness campaigns on Agroforestry related technologies;
v. Promote farmers' involvement in technology development, use and dissemination; and
vi. Forge multi-stakeholders' engagement in Agroforestry, including Private-Public Partnerships.

Targets for Communication of Agroforestry technologies and Networking on Agroforestry

i. Agroforestry dissemination action plan developed by June 2024;
ii. Agroforestry forum conducted annually from June 2024;
iii. Database and maintenance of Agroforestry stakeholder developed and maintained by June 2024;
iv. Mass awareness campaign conducted annually at national and LGA levels from June 2024;
v. Farmers involved in development and dissemination of Agroforestry technologies increased by 25% by June 2031;
vi. Interventions using Private-public partnership approaches on key Agroforestry mature technologies and products increase by 30% by June 2031;

Output indicators for Communication and Networking on Agroforestry

i. Number of Agroforestry forums awareness campaigns conducted annually

ii. Number of functional databases for Agroforestry stakeholder in place;
iii. Number of mass awareness campaign conducted annually at national and LGA levels;
iv. Percentage of farmers involved in the development and dissemination of Agroforestry technologies;
v. Percentage of interventions using Private-public partnership approaches on key Agroforestry mature technologies and products; and
vi. Percentage of Interventions using Private-public partnership approaches on key Agroforestry mature technologies and products.

4.6 Issue: Inadequate Integration of HIV/AIDS and Non-Communicable Diseases (NCDs) Issues in Agroforestry Related Interventions

Objective 6: Mainstreaming HIV/AIDS and Non-communicable diseases (NCDs) in Agroforestry.

Strategies for Integration of HIV/AIDS and Non-Communicable Diseases Issues in Agroforestry Related Interventions

i. Increase in awareness of the contributions of Agroforestry to human health, food security, nutrition and herbal medicine and their influence in maintaining the immune system and reducing disease transmission;
ii. Promote inclusion of high nutritive value crops and trees (including wild fruits and herbal medicinal plants) in Agroforestry systems;
iii. Promote integration of medicinal crops/ plants and trees in Agroforestry systems; and
iv. Promote researches on the integration of HIV/AIDS and non-communicable diseases issues in Agroforestry.

Targets for Integration of HIV/AIDS and Non-Communicable Diseases Issues in Agroforestry Related Interventions

i. At least ten (10) communication products on the roles of Agroforestry in improving human health and reducing disease transmission developed and disseminated by June 2024;
ii. At least eight (8) high nutritive value crops and trees (including wild fruits

and herbal medicinal plants) domesticated in Agroforestry systems by June 2030;

iii. At least 3 000 Agroforestry practitioners trained on medicinal crops/ plants and indigenous trees in Agroforestry by June 2029; and

iv. At least ten (10) Researches on the HIV/AIDS and non-communicable diseases issues in Agroforestry carried-out by June 2031.

Output indicators of Integration of HIV/AIDS and Non-Communicable Diseases Issues in Agroforestry Related Interventions

i. Number of communication and dissemination products on Agroforestry and human health;
ii. Number of domesticated wild foods and indigenous medicinal trees;
iii. Percentage of Agroforestry practitioners plant crops and trees with high nutritive values and medicinal therapeutic properties;
iv. Number of researches on the HIV/AIDS and non-communicable diseases issues in Agroforestry carried-out; and

4.7 Issue: Inadequate Measures to Mainstream Gender and Diversity in Agroforestry

Objective 7: Mainstreamed gender and diversity in Agroforestry interventions

Strategies for Mainstreaming Gender and Diversity in Agroforestry

i. Encourage participation of women, youth and people with disabilities in Agroforestry interventions, including value chains;
ii. Advocate for land and tree tenure systems that enhance engagement of women and youths in Agroforestry interventions;
iii. Advocate for Agroforestry land rights for marginalized groups especially women, youths and people with disabilities; and
iv. Increase marginalized groups' access to institutional and technical support related to extension services, inputs and financial services for Agroforestry and membership in farmer groups.

Targets for Mainstreaming Gender and Diversity in Agroforestry

i. At least 30% of people practicing Agroforestry by 2031 are women, youth

and marginalized groups by June 2031;

ii. Documented and/or amended land and tree tenure systems and land rights limiting engagement of women, youth and marginalized groups in Agroforestry by 2027;

iii. Participation of women, youth and marginalized groups in Agroforestry based value chain is increased by 10% by June 2031.

iv. Marginalized groups' access to institutional and technical support related to extension services, inputs and financial services for Agroforestry and membership in farmer groups increased by 30 % by June 20931.

Output indicators for Mainstreaming Gender and Diversity in Agroforestry

i. Proportion of women, youth and marginalized groups practicing Agroforestry;

ii. Proportion of women, youth and marginalized groups participating in Agroforestry- based value chains;

iii. Number of documented and/or amended land and tree tenure systems and land rights limiting engagement of women, youth and marginalized groups in Agroforestry;

iv. Percentage of participation of women, youth and marginalized groups in Agroforestry based value chain.

4.8 Issue: Inadequate Governance Mechanisms Within Sectors and Institutions.

Objective 8: To enhance effective coordination and governance within the Agroforestry sub-sector.

Strategy for Governance Mechanisms Within Sectors and Institutions

Promote transparency, accountability and rule of law within Agroforestry and reduce corruption incidences.

Targets for Governance Mechanisms Within Sector and Institutions

i. Awareness on, and the use of regulations governing production, harvesting and sales of on-farm timber, charcoal and other Agroforestry products increased by 30 % by June 2031;

ii. At least five (5) Anti-corruption strategies for Agroforestry products developed and implemented by June 2028; and
iii. At ten (10) Capacity building/strengthening programmes on good governance among Agroforestry stakeholders conducted by June 2031.

Output indicators for Governance Mechanisms Within Sector and Institutions

i. Percentage of corruption incidences along the Agroforestry product value chains;
ii. Percentage of Agroforestry practitioners practicing Anti-corruption strategies and regulations for Agroforestry products; and
iii. Number of capacity building/ strengthening programmes on good governance among Agroforestry stakeholders

4.9 Issue: Inadequate Agroforestry Financial Mechanisms

Objective 9: To strengthen Agroforestry financial mechanisms

Strategies for Agroforestry Financial Mechanisms

i. Promote investors, small-scale and medium-scale enterprises (SMEs) and farmers to invest in Agroforestry;
ii. Establish traditional donor funding mechanisms supporting Agroforestry;
iii. Establish mechanisms to reduce financial risks associated with Agroforestry;
iv. Promote insurance services created for safeguarding actors against losses in Agroforestry investment, and
v. Promote and ensure timely availability of sufficient financial resources to support Agroforestry services.

Targets for Agroforestry Financial Mechanism

i. Share of lending to investors, small-scale and medium enterprises (SMEs) and farmers to invest in Agroforestry increased by 50% by June 2030;
ii. At least five (5) traditional donor funding mechanisms supporting Agroforestry established by June 2026;
iii. At least six (6) Mechanisms to reduce financial risks associated with Agroforestry established by June 2028
iv. At least ten (10) Insurance services created for safeguarding actors against

losses in Agroforestry investment promoted by June 2028; and

v. Timely availability of sufficient financial resources to support Agroforestry services promoted and ensued by 30 % by June 2025.

Output indicators for Agroforestry Financial Mechanism

i. Number of financial resources to support Agroforestry services and increase in the percentage of loan disbursed to investors on Agroforestry;
ii. Number of functional traditional mechanisms to reduce financial risks associated with Agroforestry in place;
iii. Number and diverse mechanisms to reduce financial risks associated with Agroforestry;
iv. Number of insurance services created for safeguarding actors against losses in Agroforestry investments; and
v. Percentage of timely availability of sufficient financial resources to support Agroforestry services.

CHAPTER FIVE

5.0 IMPLEMENTATION ARRANGEMENTS

5.1 Roles and Responsibilities of Stakeholders

Agroforestry is multidisciplinary and thus attracts stakeholders from different sectors, sub-sectors and disciplines. Table 5.1 summarises roles of key stakeholders identified during the development of this strategy. These stakeholders and others will be engaged to support implementation of the second NAS (2021-2031). The MNRT through National Agroforestry Advisory Committee (NASCO) will coordinate and engage all stakeholders to fulfil their roles in the development of Agroforestry agenda in Tanzania.

Table 5.1: Roles and Capacity Assessment of Agroforestry Stakeholders in Tanzania

Stakeholder	Role (s) and Responsibility (s)
Government	
Ministry responsible for Forests and Forestry Resources	☐ Implementation of interventions that require specific sector and sector-wide policy directives ☐ Develop and influence legislations, policies, regulations, guidelines, programmes and strategies on deliberate integration and retention of trees on-farm and the agricultural landscape ☐ Advise on policy harmonisation and alignment of Agroforestry with legislations, policies and priorities in the forest sector ☐ Coordinate and support cross-sectoral collaborations and multi-stakeholder engagement in Agroforestry ☐ Lead M&E, learning, verification on Agroforestry ☐ Law enforcement and awareness creation that promote Agroforestry ☐ Facilitate national capacity building in Agroforestry education, research, marketing, and extension services ☐ Mobilising financial resources for the implementation of Agroforestry strategy

Stakeholder	Role (s) and Responsibility (s)
Ministry responsible for Agriculture	□ Mainstream Agroforestry issues into the agricultural legislations, policies, regulations, directives, programmes and strategies □ Allocate resources (human and financial) for Agroforestry □ Promote Agroforestry as a Sustainable Agroforestry Land Management (SALM) practices for land rehabilitation, soil fertility improvement, improved crop productivity, and climate resilience
Ministry responsible for Livestock and Fisheries	□ Facilitate national capacity building in Agroforestry education research, marketing, and extension services
Ministry responsible for Environment	□ Mainstream Agroforestry issues into the cross-cutting legislations, policy frameworks, regulations, guidelines, programmes and strategies on environmental management
Ministry responsible for Water	□ Develop and provide strategic direction on sustainable management of catchment areas, water basins regulations linked to Agroforestry including riparian Agroforestry systems
Ministry responsible for Regional Administration and Local Government	□ Mainstreaming Agroforestry at district levels □ Oversee Agroforestry scaling and extension □ Support M&E, learning, verification and reporting □ Allocate resources (human and financial) for Agroforestry interventions
Tanzania Forest Services Agency (TFS)	□ Mainstreaming and implementation of Agroforestry at zonal levels, □ Support Agroforestry extension, capacity building at all levels. □ Law enforcement on trees and tree products in agricultural landscapes □ Scaling of Agroforestry technologies □ Allocate resources (human and financial) on Agroforestry interventions

Stakeholder	Role (s) and Responsibility (s)
Village Governments	☐ Coordinate Agroforestry interventions/activities implemented at village level ☐ Formulate and enforce by-laws sustainable management of forestry and Agroforestry resources ☐ Promote and support communities to establish and manage Agroforestry farms
Research and Training Institutions	
	☐ Coordination of Agroforestry research activities ☐ Agroforestry training and capacity building at all levels, including developing Agroforestry courses, manuals and guidelines ☐ Conduct research and publish scientific knowledge on Agroforestry to inform policy and other users ☐ Participate in awareness creation ☐ Resource mobilization for Agroforestry research and development ☐ Promote best practices in Agroforestry
Civil Society Organizations (CSOs) – Non-government Organizations (NGOs), Community Based Organizations (CBOs) and Faith- Based Organizations (FBOs))	
	☐ Carrying out advocacy, lobbying and awareness creation ☐ Capacity building strengthening; extension services ☐ Scaling and adoption of Agroforestry technologies ☐ Resource mobilization for Agroforestry development and promotion ☐ Link Agroforestry farmers to inputs and outputs markets ☐ Financing and investment in development initiatives
Farmers and Farm Forest Producer Organizations (FFPOs)	
.	☐ Support collaborations and multi-stakeholder engagement at all levels ☐ Facilitate development of Agroforestry based-value chains ☐ Support M&E, learning and reporting Resource mobilization for Agroforestry
Private Sector	

Stakeholder	Role (s) and Responsibility (s)
	▯ Support development of Agroforestry based-value chains ▯ Facilitate and support inputs and outputs markets for Agroforestry products ▯ Support M&E, learning and reporting ▯ Support scaling and adoption of Agroforestry technologies
Media	
	▯ Awareness raising on Agroforestry
Development Partners	
	▯ Provision of technical and financial support to Agroforestry development

5.2 Institutional Arrangements

Both the Ministry of Natural Resource and Tourism (MNRT) and the Ministry of Agriculture (MoA)formed NASCO which was mandated to coordinate and monitor the implementation of the first NAS (2004-2025). The MNRT hosted the NASCO secretariat. The NASCO is a Lead Agency that provides oversight functions. The National Agroforestry Advisory Committee (NAACO) in the Second NAS (2021-2031) has replaced the NASCO in the First NAS (2004-2025).

The NAACO supports management role that include coordinating, planning and budgeting; provision of technical and implementation support; as well as monitoring and evaluation (M&E); reporting, communication and knowledge management (IFAD, 2017). The MNRT through the Forest and Beekeeping Division (FBD) is the lead Ministry responsible for providing oversight functions of the Second NAS (2021-2031). It is anticipated that by working closely with Agroforestry Line Ministries (AFLMs). Institutional arrangements for the implementation of the Second NAS (2021-2031) is depicted in Fig. 2. Implementation of the second NAS (2021-2031) will use the existing framework for the Forest Policy Implementation. The MNRT will appoint Focal Person for Agroforestry issues in the Secretariat responsible for the Forest Policy Implementation Strategy.

Coordination functions refer to mechanisms put in place to facilitate interactions both between project stakeholders and with other complementary or potentially competing initiatives to build partnerships and explore opportunities for

collaborations and harmonization of approaches (IFAD, 2017). Agroforestry goods and services such as carbon sequestration, land restoration, soil fertility improvement, food and bioenergy supply, biodiversity conservation, etc.; cut across several sectors within the government administration systems and in the private sector, including NGOs. Therefore, effective implementation of the second NAS (2021-2031) requires involvement of different stakeholders in the public and private sectors. Coordination functions of the second NAS (2021-2031) will be carried out by the MNRT through NAACO following refocusing of its operations to Oversight, Management and Coordination roles across the public and private sectors. The NAACO will be hosted by the Directorate of Forestry and Beekeeping (DoFB) and it will be the implementation arm of the MNRT with respect to Agroforestry development in Tanzania.

5.2.1 National Agroforestry Advisory Committee (NAACO)

The National Agroforestry Advisory Committee (NAACO) under the Directorate of Forest and Beekeeping of the MNRT is mandated to provide management and coordination functions of the Second NAS (2021-2031). The MNRT is responsible for establishing NAACO and is responsible to overseeing its operations in collaboration with AFLMs. The NAACO will meet twice a year physically or virtually. This section describes the structure and terms of reference of NAACO.

5.2.1.1. Composition for NAACO

Members of the NAACO will be drawn from the public and private sectors. The public sector members will come from the Directorates, Departments and/or units of the AFLMs providing the identified roles. Private sector members will be representatives of business partners, NGOs and Farmer organizations with interest and being actively involved in Agroforestry research and development. In addition to drawing members from different sectors and partners. Adoption of NAACO within the Lead Ministry will strengthen its role in coordinating public and non-state stakeholders of Agroforestry in Tanzania. The Chairperson of NAACO will be the Director of Forestry and Beekeeping (DoFB) while members represent technical officers from the following institutions and organizations:

- 1 MNRT – DFB
- 1 TARI-Tumbi

- 1 TAFORI
- 1 TFS
- 1 University – (SUA, UDSM, UDOM or NM-AIST)
- 1 Representative from FTIs and MATIs.
- 1 Representative from each of the AFLMs (PO – RALG, MoA, MLF, MoW, VPO-DoE)
- 1 Representative from Farm Forest Producer Organisations (FFPOs) e.g. MJUMITA, MVIWATA
- 1 Representative from the private sector dealing with Agroforestry
- 1 Representative from NGOs promoting Agroforestry in Tanzania

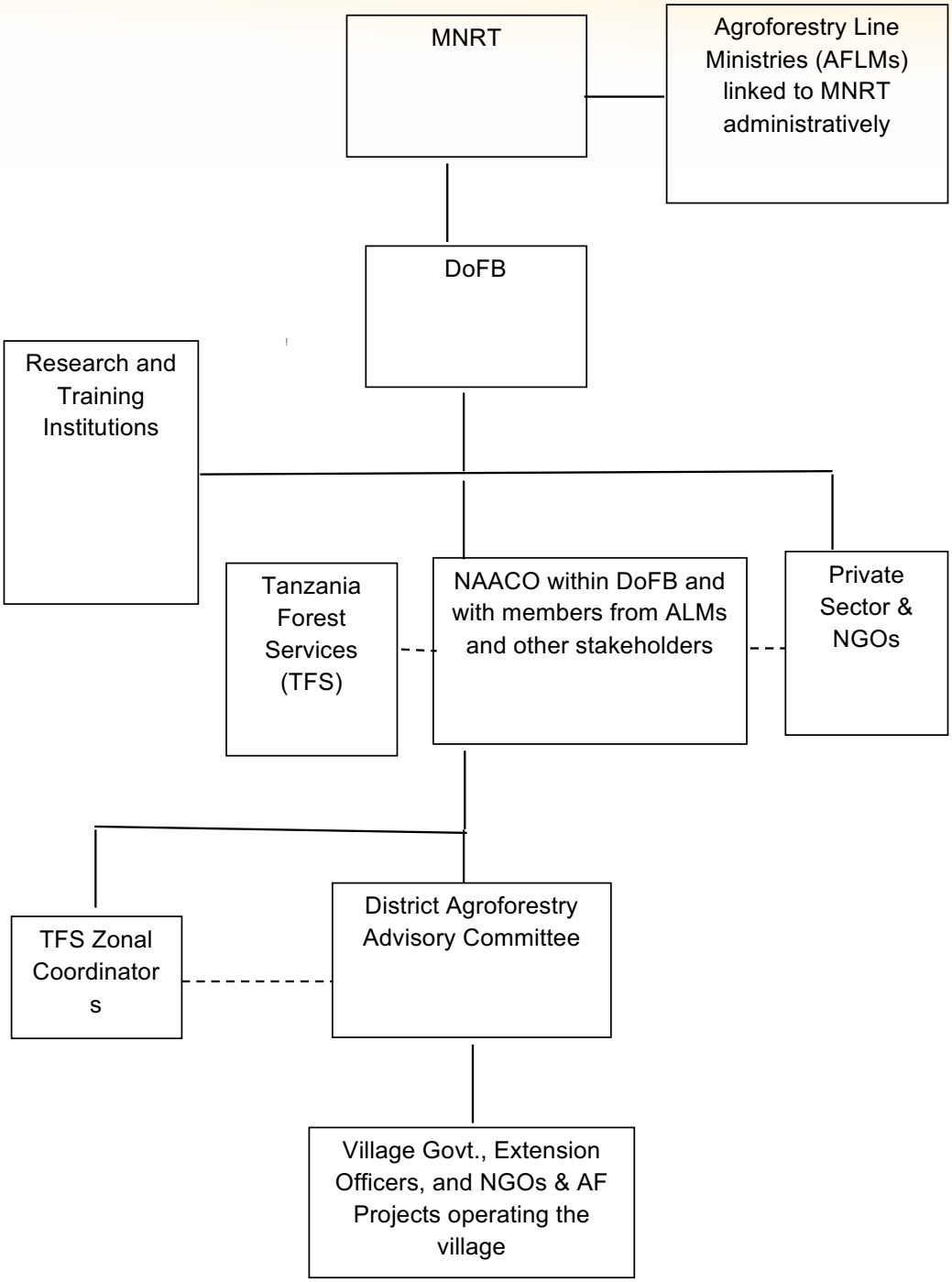

Figure 2: Institutional Arrangements for the NAS in Tanzania

5.2.1.2 The terms of reference (ToR) for NAACO

- Provide guidance on harmonization and alignment with government policies and regulations to create the enabling environment for Agroforestry development
- Oversee strategy implementation
- Monitor and evaluate the strategy
- Link with district Agroforestry focal persons/District Agroforestry Advisory committees
- Link with district Agroforestry focal persons/District Agroforestry Advisory committees (DAACO)
- Review biannual performance reports on Agroforestry strategy emanating from district Agroforestry focal person (DAF)
- Compile annual performance reports on Agroforestry strategy implementation for submission to the government, donors and the public at large (e.g., National Agroforestry Forum)
- Organize and co-ordinate annual national Agroforestry forum to provide a platform for knowledge sharing among stakeholders, advocacy and lobbying
- Network with regional and international organisations
- Solicit funds from internal and external sources
- Undertake any other AF issues of national interest

5.2.1.3 Terms of Reference for the NAACO Secretariat

The NAACO secretariat will be provided by the National Agroforestry Focal Person (NAF) to be appointed by the MNRT/DoFB to oversee the Second NAS (2021-2031) implementation activities. Functions of the NAF include:

- Act as a Secretary to NAACO and assist it in fulfilling its terms of reference
- Liaise closely with the Chairperson of the NAACO and convene meetings twice a year
- Publish and disseminate strategy implementation information among stakeholders
- Organise and conduct Monitoring and Evaluation of the Second NAS (2021-2031).

- prepare bi-annual and annual reports based on information received from the Districts and submit them to the NAACO.

5.2.2 District Agroforestry Advisory Committee (DAACO)

The District Agroforestry Advisory Committee (DAACO) will be the implementation arm of the Second NAS (2021-2031) at the LGA level. The committee will work directly under the supervision of DED and will have advisory, coordination, and monitoring roles, and will compile reports from all Agroforestry stakeholders operating in the district for submission to the NAACO Secretariat through the District Council shall be chaired by the District NRM/Forest officer as the District Agroforestry Focal Person (DAF). Members of DAACO will be representative of AFLMs and the Private sector (Business partner, NGOs, Farmers) operating in the district as listed below.

- 2 Representatives, one should be a Model Farmer and another from Farm Forest Producer Organisations (FFPOs) (Co-operatives, MVIWATA, MJUMITA etc.) in the LGA
- 1 Private sector representative (business partners)
- 1 Representative from NGOs/CBOs promoting Agroforestry in the LGAs
- 1 NGO/CBO representative
- 1 Private sector representatives
- 1 Councillor
- 1 Representative from the TFS Zonal Office

5.2.2.1 Terms of Reference for District Agroforestry Advisory Committee (DAACO)

Terms of reference for DAACO will be:

- Coordinate Agroforestry activities
- Promote and disseminate of the recommended technologies to farmers and farming households
- Liaise with the Regional Administration and the NAACO Secretariat on the implementation of the Second NAS (2021-2031)
- Ensure appropriate data collection, analysis, and dissemination among stakeholders
- Organize and supervise collection of monitoring data

- Advocate for integration of Agroforestry into district development plan and budget
- Mobilise resources from the public and private sources for implementation of the Second NAS (2021-2031)
- Carry out periodical training needs assessment
- Prepare bi-annual and annual reports on the implementation of the Second NAS (2021-2031)
- based on information received from Agroforestry stakeholders in the district
- Submit bi-annual and annual reports to NAACO Secretariat with copies to the District and region Administration.

CHAPTER SIX

6.0 FINANCIAL PLAN, MONITORING AND EVALUATION

6.1 Financing Plan for the Second NAS (2021-2031)

The implementation of the Second NAS (2021-2031) is estimated to TZS 104,000,000,000, mainly from the Government of Tanzania, private sector and international community. Detailed budget for each Strategic Objective as indicated in the log frame (Annex 1). Restructuring the second NAS (2021-2031) implementation in MNRT, government contributions will be sought through funding directed to the MNRT. Additional funds will come from stakeholders (Research Institutions, NGOs, the Private Sector, Development Partners, etc.) involved in implementing various issues identified in this strategy. Such information of Agroforestry related projects and budgets will be collected through the Monitoring and Evaluation system of this strategy and other M&E systems like ADRS. Innovative Fund from revenues of high value agroforestry products such as Coffee, Cocoa, Spices, and Vanilla will be instituted to support the implementation of the second NAS (2021-2031). Given the international recognition of Agroforestry on land restoration and Climate Change issues, funding for Second NAS (2021-2031) will also come from other additional financing mechanisms such carbon financing, NDCs, bilateral and multilateral environment funds such GEF and GCF.

6.2 Monitoring and Evaluation Framework

6.2.1 Overview

Monitoring is a systematic process of collecting, analysing and using information to track progress toward reaching the Second NAS (2021-2031) objectives and thus guide management decisions. It encompasses collecting and analysing information about inputs, processes, outputs and outcomes of the strategy during the implementation period. Evaluation is defined as the systematic acquisition and assessment of information to provide useful feedback about the implementation of the strategy. Evaluation focuses on examining the results chain (inputs, activities, outputs, outcomes and impacts), processes,

contextual factors and causality, in order to provide lessons learned and highlight significant achievements or the lack of achievements to inform future decisions regarding second NAS (2021-2031). In this context, the Monitoring and Evaluation (M&E) system for the Second NAS (2021-2031) will assess the progress towards achieving strategic objectives and outcomes, and document impacts and lessons derived from the Second NAS (2021-2031) implementation to inform adaptive management decisions during the implementation and future planning. The overall responsibility for M&E of the Second NAS (2021-2031) implementation lies within MNRT, the lead Ministry on Agroforestry development in Tanzania. The Ministry through AFP will coordinate, monitor and evaluate the implementation of NAS.

6.2.2 Monitoring of the Second NAS (2021-2031)

Monitoring of the Second NAS (2021-2031) will involve, among other issues, establishing the baseline and performance indicators for each intervention area. Progress on implementation of the activities and achievements of targets/ outcomes will be tracked biannually and synthesized to assess the progress in achieving planned outputs and outcomes. The existing monitoring systems in the forest and agricultural sectors (*e.g.*, ARDS) will be reviewed with time to incorporate questions to collect data on the second NAS (2021-2031) implementation from government institutions and non-state actors. This approach will facilitate integration of Agroforestry in government operations while collecting data from a wide range of stakeholders implementing Agroforestry activities. As part of M&E, all stakeholders will be required to submit biannual reports on Second NAS (2021-2031) implementation. The report will document activities conducted and their alignment with Second NAS (2021-2031) intervention areas (Table 4.1). The Second NAS (2021-2031) secretariat will compile the annual report for submission to the MNRT and other stakeholders to increase awareness and promote uptake of Agroforestry.

6.2.3. Evaluation of the Second NAS (2021-2031)

An evaluation task will be commissioned halfway, and at the end of the implementation period of this strategy to provide evidence-based information on the Second NAS (2021-2031) performance and to inform future plans. Both internal and external qualified individuals will be invited to evaluate performance

of the Second NAS (2021-2031) with respect to relevance, impact, effectiveness, efficiency and sustainability of interventions and the contributions of the intervention to the results achieved. The MNRT through NAACO will oversee the evaluation to ensure it provides evidence-based information that is credible, reliable and useful for future planning and review of NAS. The evaluation report will be submitted to the MNRT.

6.3 Monitoring and Evaluation Objectives and Guiding Principles

The section consists of M&E objectives and guiding principles. The M&E objectives have been divided into two groups: the overall objective and specific objectives.

6.3.1 Overall and Specific Objectives

The Overall Objective of M&E Framework is to guide an implementation of the Second NAS (2021-2031) through its Strategy. Specifically, M&E framework intends to:

i. Establish benchmark;
ii. Set targets and standards;
iii. Guide actors' participation in implementation and monitoring activities; and
iv. Control use of resources during implementation.

6.3.2 Guiding Principles

The M & E system will be guided by the following principles:

i. Developing capacity of M & E units or section;
ii. Harmonizing and aligning the framework with other government M&E systems;
iii. Adopting a result-based-approach;
iv. Flexibility in reversing M&E framework; and
v. Starting from the current situation.

6.4 Scope of Monitoring and Evaluation Framework

M&E framework outlays overall trends on the development of the forest sector and includes, but is not limited to, the following:

i. Assessment on the efficiency of input use and processes;
ii. Assessment on extent of attainment of outputs, outcomes and impacts of NAS; and
iii. Establishments of databases and reporting framework.

6.4.1 Performance Indicators

Performance indicators have been categorized into two groups, namely output indicators and outcome indicators. Output and outcome indicators (Table 6.1) also presents the baseline data and the verification sources.

Table 6.1: Performance Indicators for Monitoring and Evaluation Framework

Outcome indicator	Output indicator	Baseline	Source
Objective 1: To promote adequate and sustainable supply of quality germplasm and other inputs			
1. Strengthened crop and tree seed centres by opening both national and satellite seed distribution centres	Number of national crop and tree seed collection and seedling distribution centres	7	Reports from TFS, LGAs, CBOs, NGOs, and FFPOs
	Number of Satellite (farmer based) crop and tree seed collection and seedling distribution centres	-	Reports from TFS, LGAs, CBOs, NGOs, and FFPOs
	Number of champion farmers involved in commercial seed collection and production of high-quality tree and fruit tree seedlings	10 000	Reports from TFS, LGAs, CBOs, NGOs, and FFPOs
2. Created sustainable farmer-based production, delivery and marketing systems of indigenous and improved germplasm	Number of farmers trained and supported to engage in marketing of seeds and seedlings of key Agroforestry tree species	3 000	Reports from TFS, LGAs, CBOs, NGOs, and FFPOs

Outcome indicator	Output indicator	Baseline	Source
	Number of actors in indigenous and improved germplasm value chain	7	Reports from TFS, LGAs, CBOs, NGOs, and FFPOs
	Number Satellite (farmer based) tree seed collection and seedling distribution centres	100	Reports from TFS, LGAs, CBOs, NGOs, and FFPOs
	Number of Germplasm supply centres	7	Reports from TFS, LGAs, CBOs, NGOs, and FFPOs
	Number of Tree seed orchards	160 ha	Reports from TFS, LGAs, CBOs, NGOs, and FFPOs
	Number of Tree seed banks	1	Reports from TFS, LGAs, CBOs, NGOs and FFPOs
	Number of Botanical gardens	8	Reports from TFS, LGAs, CBOs, NGOs, and FFPOs
	Number of Historical/ special sites of Agroforestry recognized by UNESCO	10	Reports from TFS, LGAs, CBOs, NGOs and FFPOs
	Number of Bamboo plantations	1	Reports from TFS, LGAs, CBOs, NGOs and FFPOs
	Number of agro-input centres	-	Reports from LGAs, MoA, CBOs, NGOs, FFPOs and
3. Promoted natural regeneration as a source of climate resilient planting materials	Number of Agroforestry practitioners trained on natural regeneration options	4 000	Reports from TFS, NGOs, CBOs and FFPOs
4. Strengthened supply of adequate and quality agro-inputs to farmers	Number of agro-input centres	-	Reports from MoA, MLF, LGAs, Private Sector and FFPOs
	Percentage of Agroforestry farmers received inputs in time	-	Reports from MoA, MLF, LGAs, Private Sector and FFPOs

Outcome indicator	Output indicator	Baseline	Source
5. Strengthened nature-based solutions	Number of nature-based solutions strengthened	-	Reports from TAFORI, MNRT, TFS, LGAs, and CBOs, NGOs
Objective 2: To strengthen and sustain human resources capacity in Agroforestry for effective research, training and provision of extension services			
1. Promoted and built capacity in Agroforestry research	Number of Agroforestry research human resource base	40	Reports from TAFORI, MATIs, LITIs, TALIRI, Universities, NGOs, FFPOs
	Number of functional human resource data base in place	-	Reports from MNRT, MoA, MLF, NGOs, Universities and FFPOs
	Number of Agroforestry forums conducted	-	Reports from MNRT, MoA, MLF, NGOs, Private Sector and FFPOs
2. Strengthened Agroforestry training in tertiary and Higher learning institutions	Number of training institutes integrated and strengthened Agroforestry issues in their curricula	-	Reports from FTIs, MATIs, LITIs, NGOs, Universities and FFPOs
	Number of Forest and Agriculture Extension Officers trained in Agroforestry	-	Reports from FTIs, MATIs, LITIs, NGOs, NGOs, and FFPOs

Outcome indicator	Output indicator	Baseline	Source
3. Promoted Agroforestry Research and Extension linkages	Number of Agroforestry communication and information materials for extension workers and farmers	-	Reports from TAFORI, NGOs, NGOs, and FFPOs
	Number of national and international Agroforestry research and extension linkage forums	-	Reports from MNRT, MoA, MLF,FFPOs and NGOs
	Number of Agroforestry centres of excellence established and strengthened	2	Reports from MNRT, MoA, MLF and NGOs
4. Facilitated networking with national, regional and international Agroforestry organizations	Number of affiliations with international Agroforestry originations	-	Reports from MNRT, MOA, MLF and FFPOs
Objective 3: To promote value addition, market and access to market information of Agroforestry products			
1. Initiated Agroforestry products market centres	Percentage of Agroforestry branded centre	-	Reports from MNRT, MOA, MLF and FFPOs
	Number of Agroforestry Product Market centres by each FFPOs	-	Reports from MNRT, MOA, MLF and FFPOs
		-	

Outcome indicator	Output indicator	Baseline	Source
2. Enhanced value addition of selected Agroforestry products	Number of cottage industries for selected Agroforestry products	-	Reports from MNRT, MOA, MLF and FFPOs
	Number of private sector partners in Agroforestry value chain	-	Reports from MNRT, MOA, MLF and FFPOs
	Number of standards/ guidelines for each selected Agroforestry product	-	Reports from MNRT, MOA, MLF and FFPOs
	Number of functional frameworks for processed Agroforestry products in place	-	Reports from MNRT, MOA, MLF and FFPOs
	Number of certified crops (Coffee and Cocoa)	2	Reports from VPO, MNRT, MoA and MLF

Outcome indicator	Output indicator	Baseline	Source
3. Promoted Agroforestry farmer organizations and business associations	Number of functional FFPOs platform in place	-	Reports from MNRT, MOA, MLF and FFPOs
	Number of Annual Agroforestry Trade Fairs	-	Reports from MNRT, MOA, MLF and FFPOs
	Number of functional Agroforestry bulletins in place	-	Reports from MNRT, MOA, MLF and FFPOs
	Percentage of agriculture land under Agroforestry	17%	Reports from MNRT, MOA, MLF and FFPOs
	Number of annual mass campaigns to popularize Agroforestry; regional and national show cases and exhibitions on Agroforestry	-	Reports from MNRT, MOA, MLF and FFPOs
	Number of Functional regulations and guidelines supporting the development of Agroforestry-based products markets and brands	-	Reports from VPO, MNRT, MoA, MLF and FFPOs
	Number of inventories of farm forest producer's and agricultural organizations	-	Reports from MNRT, MoA, MoH, NGOs, Private Sector and FFPOs

Outcome indicator	Output indicator	Baseline	Source
4. Promoted market penetration of Agroforestry products	Number of farmer-managed, strengthened and established Agroforestry enterprises	-	Reports from MNRT, MoA, NGOs, Private Sector and FFPOs
	Number of private sectors engaged in Agroforestry value chains	-	Reports from MNRT, MoA, NGOs, Private Sector and FFPOs
	Number of local and international market platforms for Agroforestry-based products	-	Reports from VPO (DoE), MNRT, MoA, MLF,NGOs and Private Sector
	Number of Marketing Information Systems for Agroforestry products	-	Reports from VPO (DoE), MNRT, MoA, MLF,NGOs and Private Sector,
	Number of Marketing development mechanisms for Agroforestry products	-	Reports from VPO (DoE), MNRT, MoA, MLF,NGOs and Private Sector,
	Number of researches to identify commercial Agroforestry products	-	Reports from VPO (DoE), MNRT, MoA, MLF,NGOs and Private Sector,
5. Established linkages with companies dealing with Agroforestry products	Number of linkages with private companies	-	Reports from MNRT, MoA, Private Sector and FFPOs
Objective 4: To promote the role of Agroforestry for land restoration and climate change mitigation and adaptation initiatives			
1. Enhanced climate resilient natural regeneration approaches	Percentage of farmers practicing FMNR for land rehabilitation	-	Reports from VPO (DoE), MNRT, MoA,; TFS, LGAs, CBOs, NGOs and FFPOs

Outcome indicator	Output indicator	Baseline	Source
2. Facilitated uptake of climate resilient Agroforestry technologies	Number of Climate resilient technologies for each agro-ecological zone	-	Reports from TAFORI, TARI, SUA, CBOs, NGOs and FFPOs
	Percentage of farmers adopting climate resilient technologies	-	Reports from MNRT, MoA, PO-RALG; TFS, LGAs, CBOs, NGOs and FFPOs
	Number of farmers practicing Agroforestry	4 million	All stakeholders
3. Promoted Agroforestry-based landscape restoration approaches	Number of programs, forestry and land restoration strategies, and action plans integrating Agroforestry	-	Reports from VPO (DoE), MNRT, MoA; PO-RALG; CBOs, NGOs and FFPOs
	Number of stakeholders practising nature-based solutions	-	Reports from VPO (DoE), MNRT, MoA; PO-RALG; CBOs, NGOs and FFPOs
4. Popularized and exploited market opportunities for carbon sequestration in Agroforestry systems	Percentage of Agroforestry-based carbon projects	-	Reports from VPO (DoE), MNRT, MoA, PO-RALG; TFS, LGAs, CBOs, NGOs and FFPOs
	Percentage of farmers participating in Agroforestry carbon projects	-	Reports from VPO (DoE), MNRT, MoA, PO-RALG; TFS, LGAs, CBOs, NGOs and FFPOs
Objective 5: To strengthen effective communication and networking among Agroforestry stakeholders			
1. Promoted information exchange among Agroforestry stakeholders	Number of functional dissemination strategies	-	Reports from all stakeholders
	Number of conducted Agroforestry forums and awareness campaigns		

Outcome indicator	Output indicator	Baseline	Source
2. Promoted and institutionalized Agroforestry stakeholder forums	Number the conducted Agroforestry forums and awareness campaigns	-	Reports from all stakeholders
3.Developed and maintained database for Agroforestry stakeholders	Number of functional database for Agroforestry stakeholder	-	Reports from MNRT, MoA, MLF and MoH,
4. Mass awareness campaigns on Agroforestry	Number of the conducted mass awareness campaigns at national and LGA levels	-	Reports from VPO, MNRT, MoA, MLF, TFS, LGAs, CBOs, NGOs, TAFORI, Private sector and FFPOs
5. Promoted farmers' involvement in technology development, use and dissemination	Percentage of farmers involved in the development and dissemination of Agroforestry technologies	-	Reports from VPO, MNRT, MoA, MLF, TFS, LGAs, CBOs, NGOs, TAFORI, Private sector and FFPOs
6. Forged multi stakeholders' engagement in Agroforestry, including the private-public partnerships	Percentage of interventions using Private-public partnership approaches on key Agroforestry products	-	Reports from VPO, MNRT, MoA, MLF, TFS, LGAs, CBOs, NGOs, TAFORI, Private sector and FFPOs
	Number of active agriculture stakeholder's integrating Agroforestry	-	All stakeholders
	Number of programmes mainstreaming Agroforestry into policies of line ministries	-	Reports from Research institutions, Higher learning institutions, NGOs
Objective 6: To mainstream HIV/AIDS and non-communicable diseases in Agroforestry practices			

Outcome indicator	Output indicator	Baseline	Source
1. Increased awareness of the contributions of Agroforestry to human health and nutrition	Number of communication products on Agroforestry and human health	-	Reports from Research institutions, Training institutions, Higher Learning Institutions, NGOs,
2. Promoted high nutritive value crops, fruit trees and medicinal plants)in Agroforestry systems	Number of integrated high nutritive value crops, fruit trees and medicinal plants in Agroforestry	-	Reports from Research institutions, Training institutions, Higher Learning Institutions, NGOs,
3. Promoted medicinal plants in Agroforestry systems	Percentage of Number of famers integrating medicinal plants in Agroforestry		Reports from Research institutions, Training institutions, Higher Learning Institutions, NGOs,
4. Promoted researches on the integration of HIV/ AIDS and non-communicable diseases issues in Agroforestry	Number of research projects integrating HIV/AIDS and non-communicable diseases issues in Agroforestry		Reports from Research institutions, Training institutions, Higher Learning institutions, Ministries, NGOs and FFPOs
Objective 7: To mainstream gender and diversity in Agroforestry interventions			
1. Encouraged participation of women, youth and people with disabilities in Agroforestry interventions	Proportion of women, youth and marginalized groups practicing in Agroforestry	-	Reports from the Ministries, NGOs. FFPOs
	Proportion of women, youth and marginalized groups participating in Agroforestry	-	Reports from the Ministries, NGOs. FFPOs
2. Advocated for land and tree tenure rights enhancing engagement of women and youth in Agroforestry interventions	Number of documented and/or amended land and tree tenure rights advocating engagement of women, youth and marginalized groups in Agroforestry	-	Reports from the Ministries, NGOs. FFPOs

Outcome indicator	Output indicator	Baseline	Source
3. Advocated for Agroforestry land rights for marginalized groups especially women, youths and people with disabilities	Number of documented and/or amended Agroforestry land rights for marginalized groups especially women, youths and people with disabilities	-	Reports from the Ministries, NGOs. FFPOs
4. Increased marginalized groups access to institutional and technical support related to extension services, inputs and financial services for Agroforestry and membership in farmer groups	Number of researches on mainstreaming gender and diversity in Agroforestry	-	Reports from the Ministries, NGOs. FFPOs
	Percentage of participation of women, youth and marginalized groups in Agroforestry based value chains	-	Reports from the Ministries, NGOs. FFPOs
Objective 8: To enhance good governance within the Agroforestry Sub-sector			
1.Promoted transparency, accountability and rule of law within Agroforestry	Percentage of corruption incidences along the Agroforestry product value chains	-	Reports from the Ministries, NGOs. FFPOs
	Percentage of Agroforestry practitioners practicing good governance	-	Reports from the Ministries, NGOs. FFPOs
	Increase in the Percentage of Agroforestry stakeholders practicing good governance	-	Reports from the Ministries, NGOs. FFPOs
Objective 9:To strengthen Agroforestry financial mechanism			

Outcome indicator	Output indicator	Baseline	Source
1. Promoted investors, small scale enterprises (SMEs) and farmers to invest in Agroforestry	Percentage of loan disbursed to investors on Agroforestry	-	Reports from the Ministries, NGOs. FFPOs, Financial Institutions, Development partners, Private Sectors
2. Established Traditional donor funding mechanisms supporting Agroforestry	Number of Functional mechanisms to reduce financial risks associated with Agroforestry in place	-	Reports from the Ministries, NGOs. FFPOs, Financial Institutions, Development partners, Private Sectors
	Number and Amount of additional funds to support Agroforestry	-	Reports from the Ministries, NGOs. FFPOs, Financial Institutions, Development partners, Private Sectors
	Number of insurance services created for safeguarding actors against losses in Agroforestry investment	-	Reports from the Ministries, NGOs. FFPOs, Financial Institutions, Development partners, Private Sectors
3. Established mechanisms to reduce financial risks associated with Agroforestry	Number and Amount of financial resources to support Agroforestry services	-	Reports from the Ministries, NGOs. FFPOs, Financial Institutions, Development partners, Private Sectors

Outcome indicator	Output indicator	Baseline	Source
4. Promoted and ensured timely availability of sufficient financial resources to support Agroforestry services.	Percentage of loan disbursed to investors on Agroforestry	-	Reports from the Ministries, NGOs. FFPOs, Financial Institutions, Development partners, Private Sectors

6.5 Data Collection and Analysis

The main approaches for data collection will be the review of existing progress reports, field visits, fora and surveys. Data collected will be analysed and included into the national forest database.

6.5.1 Monitoring and Evaluation Reports

This section includes types of M&E reports, reporting schedule, reporting flows and feedback mechanisms. M&E reports are expected to provide feedback on the progress made in the course of implementing the Strategy and, inform the immediate and medium-term decisions to be made.

6.5.2 Types of M&E reports

The main M&E reports to be generated include the following: -

(i) Progress reports;
(ii) Reviews;
(iii) Evaluation reports;
(iv) Studies and surveys reports; and
(v) Policy review.

6.6 Reporting Schedule

The reporting schedule along with the types of M&E report is presented in Table 6.2.

Table 6.2: Reporting Schedule

Types of reports	Contents	Frequency
Progress reports	Consolidated reports on the progress on the utilization of resources and implementation of activities	Quarterly, semi-annual, annually.
Reviews	Report covering the progress made towards achieving milestones and targets	Semi-annual, annually
Evaluation reports	Reports including achievement of the Policy objectives, challenges, lessons learnt and recommendation for improvement.	Twice; Mid-term in 2026; and Final evaluation in 2031)
Studies and survey reports	Findings and recommendations for improvement on specific issues.	Occasional as per the need
Policy Review	Report showing overall achievements of the National Forest Policy objectives, challenges, lessons learnt and recommendation for improvement in next version of the Strategy.	After 10 Years

6.7 Reporting Flows

Institutions will be responsible for preparation of both periodic progress and performance reports on achievements of respective policy areas and forward to the Ministry for consolidation. Consolidated reports will be shared with stakeholders for records keeping and necessary actions. Various internal and external meetings will be conducted to share the progress made towards achieving policy objectives. Table 6.3 presents the schedule of meetings to track the implementation progress:

Table 6.3. Planned Meetings

S/N	Type of meeting	Frequency	Chairperson	Participants
1	Division Meetings	Monthly	Director of Forestry and Beekeeping	All staff of the Division at headquarters
2	Quarterly performance review meetings	Quarterly	Permanent Secretary	All Heads of Divisions and Sections
3	National Forest Advisory Committee	Quarterly	Selected Chairperson among members	Committee members
4	Annual review meetings	Annually	Permanent Secretary	Representative of all key stakeholders
5	Mid review	After five years	Permanent Secretary	Representative of all key stakeholders
6	End review	After ten years	Permanent Secretary	Representative of all key stakeholders

6.8 Feedback Mechanism

A feedback mechanism will be instituted between report producers and end-users. This will lead to sharing of achievements, experiences and challenges among stakeholders including identification of collective actions to address challenges. Moreover, the mechanism will improve quality and timely submission of reports.

6.9 Use of Monitoring and Evaluation Information

Stakeholders will use M&E reports for:

(i) Decision making;
(ii) Improving services delivery;
(iii) Improvement in policy implementation;
(iv) Demonstrated results as part of accountability; and
(v) Planning.

7.0 ANNEX

Annex 1: National Agroforestry Strategy II (2021-2031) Implementation Matrix

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
Objective 1: To promote adequate and sustainable supply of quality germplasm and other inputs	1.Strengthening crop and tree seed centres by opening both national and satellite seed distribution centres	At least 10 000 farmers are trained on seed collection and seedlings production of key tree species by June 2027	• Number of national crop and tree seed collection and seedling distribution centres • Number of Satellite (farmer based) crop and tree seed collection and seedling distribution centres	• Develop training manual and plan on seed collection and seedlings production of key tree species to farmers • Train farmers on seed collection and seedling production of key species	1 000	June, 2027	TFS, LGAs, CBOs, NGOs, NGOs, DPs and FFPOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
			• Number of champion farmers involved in commercial seed collection and production of high-quality tree and fruit tree seedlings				
	2. Create sustainable farmer-based production, delivery and marketing systems of indigenous and improved germplasm	At least 3 000 champion farmers trained and supported to engage in marketing of seeds and seedlings of key Agroforestry tree species by June 2027	• Number of farmers trained and supported to engage in marketing of seeds and seedlings of key Agroforestry tree species • Number of actors in indigenous and	• Develop training manual and plan • Train and support champion farmers to engage in marketing of seeds and seedlings of key Agroforestry	500	June, 2027	TFS, LGAs, CBOs, NGOs, Private Sector, DPs and FFPOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
			improved germplasm value chain	tree species			
		At least 100 satellite (farmer based) tree seed collection and seedling distribution centres established by June 2027	Number Satellite (farmer based) tree seed collection and seedling distribution centres	• Study to identify suitable sites to establish satellite seed collection and distribution Centre • Establish satellite (farmer based) tree seed collection and seedling distribution centres	1 000	June, 2027	TFS, LGAs, CBOs, NGOs, Private Sector, DPs and FFPOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
		Germplasm supply centres increased from 7 to 15 by June 2031	Number of Germplasm supply centres	• Study to identify suitable sites for establishing germplasm centre • Establish Germplasm supply centres	500	June, 2031	MNRT, TFS, PO-RALG, LGA, Private Sector, DPs TAFORI, CBOs and NGOs
		Tree seed orchards increased from 160 ha to 1 000 ha by June 2031	Number of Tree seed orchards	• Study to identify suitable sites for establishing seed orchard • Establish tree seed orchards	600	June, 2031	MNRT, TFS, PO-RALG, LGA, Private Sector, DPs, TAFORI and CBOs and NGOs
		Tree seed banks increased from 1 to 3 by June 2031	Number of Tree seed banks	Establish tree seed banks	1 000	June, 2031	MNRT, TFS, PO-RALG, LGA, Private Sector, DPs,

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
							TAFORI and CBOs/NGOs
		Botanical gardens increased from 8 to 15 by 2031	Number of Botanical gardens	• Study to identify suitable sites for establishing botanical gardens • Establish Botanical gardens	7 000	June, 2031	MNRT, SUA, TAFORI, NMT, MUHAS, TPRI, COSTECH and TFS
		Historical/special sites of Agroforestry recognized by UNESCO increased to 10 by 2031	Number of Historical/special sites of Agroforestry recognized by UNESCO	Identify, recognize and promote Historical/special sites of Agroforestry	4 000	June, 2031	MNRT, MoA, MLF, TFS, PO-RALG, LGA, Private Sector, DPs, TAFORI and CBOs and NGOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
		50 Bamboo plantations established by 2031	Number of Bamboo plantations	• Study to identify sites to establish bamboo plantations • Establish Bamboo plantations	4 000	June, 2031	MNRT, TFS, PO-RALG, LGA, Private Sector, DPs, TAFORI and CBOs and NGOs
	3. Promote natural regeneration as a source of climate resilient planting materials	10 000 Agroforestry practitioners are trained on natural regeneration options by 2027	Number of Agroforestry practitioners trained on natural regeneration options	Train Agroforestry practitioners are on natural regeneration options	500	June, 2027	TFS, NGOs, DPs and FFPOs
	4.Strengthen supply of adequate and quality	Increase in the percentage of Agroforestry farmers receive	Percentage of Agroforestry farmers receive inputs in time	Provide inputs to Agroforestry farmers	1 000	June, 2031	MoA, MLF, LGAs, Private Sector and FFPOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
	agro-inputs to farmers	inputs in time by 2031					
		Double agro-input centres established by 2031	Number of agro-input centres	Establish Double agro-input centres	1 000	June, 2031	MNRT, SUA, TAFORI, NMT, MUHAS, TPRI, COSTECH and TFS
	5.Strengthen nature-based solutions	10 nature-based solutions are strengthened by June 2030	Number of strengthened nature-based solutions	Facilitate strengthening of nature-based nature solutions	1000	June, 2030	MNRT, SUA, TAFORI, and TFS
Sub-total					**23 100**		
Objective 2: To strengthen capacity in research and provision of	1. Promote and build capacity in Agroforestry research	Increase Agroforestry research human resource base from 40 to 50 by	Number of Agroforestry research human resource base	Develop Agroforestry research human resource	2 000	June, 2031	TAFORI, MATIs, LITIs, TALIRI, Universities, and FFPOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
training and extension services		June 2031					
		Establish Agroforestry researches and human resource data base by June 2024	Number of functional human resource data bases	Develop Agroforestry researches and human resource data base	200	June, 2024	MNRT, MoA, MLF, Universities and FFPOs
		Establish Agroforestry researcher and practitioners' forum by June 2025	Number of the conducted Agroforestry forums	Establish Agroforestry researcher and practitioners forum	500	June, 2025	MNRT, MoA, MLF, CBOs, NGOs, DPs, Private Sector and FFPOs
	2.Strengthen Agroforestry training in secondary,	Encourage agriculture and forestry training institutes to	Number of training institutes integrated and strengthened Agroforestry issues	Facilitate Agroforestry training in FTIs, MATIs, LITAs,	1000	June, 2027	FTI's, MATIs, LITIs, Universities and FFPOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
	and tertiary education levels	integrate and strengthen Agroforestry issues into their syllabi by June 2027	in their curricula	Higher level institutions			
		Strengthen capacity of Agriculture and Forest Extension Officer son Agroforestry by June 2028	Number of Forest and Agriculture Extension Officers trained in Agroforestry	Facilitate, Build capacity of Agriculture and Forest Extension officers on Agroforestry	1 500	June, 2028	FTI's, MATIs, LITIs, NGOs, and FFPOs
	3. Promote Agroforestry research and extension linkages	Develop Agroforestry communication and information materials for extension workers and farmers by	Number of Agroforestry communication and information materials for extension workers and farmers	Prepare Agroforestry communication and information materials for extension workers and farmers	500	June, 2024	TAFORI, CBOs, DPs, NGOs andFFPOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
		June 2024					
		Facilitate establishment of national and international Agroforestry research and extension linkage forums by June 2026	Number of national and international Agroforestry research and extension linkage forums	Establish national and international Agroforestry research and extension linkage forums	500	June, 2026	MNRT, MoA, MLF,FFPOs, Private sector, DPs and NGOs
		Establish and strengthen existing Agroforestry centres of excellence from 2	Number of Agroforestry centres of excellence established and strengthened	Establish and strengthen existing Agroforestry centres of excellence	2 000	June, 2031	MNRT, MoA and MLF

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
		to 5 by June 2031					
	4.Facilitate networking with national, regional and international Agro forestry organizations	Six affiliations with international Agroforestry originations established by June 2030	Number of affiliations with international Agroforestry originations	Facilitate the establishment of Six affiliations with international Agroforestry originations	100	June, 2030	MNRT and MoA, MLF
Sub-total					**8 300**		
Objective 3: To promote market and access to	1. Initiate Agroforestry products market	Establish 10 Agroforestry branded centre by June 2028	Percentage of Agroforestry branded centre	Facilitate the establishment of Agroforestry branded centre	1 000	June, 2028	MNRT, MoA and MLF

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
market information of Agroforestry products	centres	Encourage at least 10 FFPOs to have Agroforestry Product Market centre by June 2026	Number of Agroforestry Product Market centre by each FFPOs	Facilitate the establishment of Agroforestry Product Market centre by each FFPOs	500	June, 2026	MNRT, MoA and MLF
		Advocate for premium pricing for Agroforestry products by June 2025	Number of functional premium pricing guidelines for Agroforestry	Facilitate implementation of premium pricing for Agroforestry products	600	June, 2025	MNRT, MoA and MLF
	2. Enhance value addition of selected Agroforestry products	Establish cottage industries for selected Agroforestry products by June 2025	Number of cottage industries for selected Agroforestry products	Facilitate the establishment of cottage industries for selected Agroforestry products	5 000	June, 2025	MNRT, MoA, MLF, NGOs, Private Sector, DPs and FFPOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
		Develop standards/guidelines for each selected Agroforestry product by June 2025	Number of standards/guidelines for each selected Agroforestry product	Facilitate the development of standards/guidelines for each selected Agroforestry product	100	June, 2025	MNRT, MoA and MLF
		Development of framework for processed Agroforestry products by June 2025	Number of functional frameworks for processed Agroforestry products	Facilitate the development of framework for processed Agroforestry products	100	June, 2025	MNRT, MoA and MLF
		Encourage and promote private sector engagement in Agroforestry value chains by June 2031	Number of private sector partners in Agroforestry value chain	Facilitate the promotion of private sector engagement in Agroforestry value chains	200	June, 2031	

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
		Agroforestry certified crops increased form 2 (Coffee and Cocoa) to 10 by 2031	Number of certified crops (Coffee and Cocoa)	Facilitate certification of Agroforestry crops	1 500	June, 2031	VPO (DoE), MNRT, MoA and MLF
	3. Promote Agroforestry farmer organizations and business associations	Facilitate FFPOs platform formulation by June 2025	Number of functional FFPOs platform	Formulate FFPOs platform formulation	100	June, 2025	MNRT, MoA, MLF, NGOs, Private Sector, DPs, and FFPOs
		Establish Annual Agroforestry Trade Fair by 2025	Number of Annual Agroforestry Trade Fair	Facilitate the establishment of Annual Agroforestry Trade Fair	400	June, 2025	MNRT, MoA, MLF, NGOs, Private Sector, DPs and FFPOs
		Establish Agroforestry bulletin by 2025	Number of functional Agroforestry bulletin	Facilitate the establishment of Agroforestry bulletin	250	June, 2025	MNRT, MoA, MLF, NGOs, Private Sector, DPs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
							and FFPOs
		Agriculture land under Agroforestry increase from 17% to 30% 2031	Percentage of agriculture land under Agroforestry	Facilitate the implementation and adoption of Agroforestry	10 000	June, 2031	MNRT, MoA, MLF, NGOs, Private Sector, DPs and FFPOs
		Conduct Annual mass campaigns to popularize Agroforestry and participation in regional and national show cases and exhibitions annually from June 2023	Number of annual mass campaigns to popularize Agroforestry and participating show cases and exhibitions	• Develop a plan for annual mass campaigns • Conduct Annual mass campaigns to popularize Agroforestry Participate in regional and national (Nanenane, Sabasaba, world	3 000	June, 2023	MNRT, MoA, MLF, NGOs, Private Sector, DPs and FFPOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
				food day) events annually			
		Regulation and guidelines supporting the development of Agroforestry-based products markets and brand by June 2026	Number of Functional regulation and guidelines supporting the development of Agroforestry-based products markets and brand	Develop regulation and guidelines supporting the development of Agroforestry-based products markets and brand	1 000	June, 2026	VPO (DoE), MNRT, MoA and MLF
		Establish an inventory of farm forest producer's and agriculture organization by 2031	Number of the conducted inventories of farm forest producer's and agriculture organization	Facilitate the establishment of an inventory of farm forest producer's and agriculture organization	150	June, 2031	MNRT, MoA, MoH, NGOs, DPs and Private Sector, FFPOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
	4. Promote market penetration of Agroforestry products	Strengthen and increase farmer managed Agroforestry enterprises by 2031	Number of strengthened and established farmer managed Agroforestry enterprises	Facilitate the establishment and promotion of farmer managed Agroforestry enterprises	100	June, 2031	MNRT, MoA, NGOs, Private Sector, DPs and FFPOs
		Encourage and promote private sector engagement in Agroforestry value chains by June 2031	Number of private sectors engaged in Agroforestry value chains	Conduct awareness campaigns and training for promoting private sector engagement in Agroforestry value chains	100	June, 2031	MNRT, MoA, NGOs, Private Sector, DPs and FFPOs
		Develop local and international market platforms for Agroforestry-based products by June 2026	Number of local and international market platforms for Agroforestry-based products	Facilitate the development of local and international market platforms for Agroforestry-based products	500	June, 2026	VPO (DoE), MNRT, MoA, MLF,NGOs, DPs and Private Sector

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
		Market information system for Agroforestry products established by June 2031	Number of Marketing Information System for Agroforestry products	Facilitate the establishment of Market information system for Agroforestry products	300	June, 2031	VPO (DoE), MNRT, MoA, MLF,NGOs, DPs and Private Sector
		Market development mechanisms for Agroforestry products developed by June 2031	Number of Marketing development mechanisms for Agroforestry products	Facilitate the development of market mechanisms for Agroforestry products	300	June, 2031	MNRT, MoA, Private Sector, DPs and FFPOs
		Researches to identify commercial Agroforestry products developed by June	Number of researches to identify commercial Agroforestry products	Conduct studies to identify commercial Agroforestry products	100	June, 2026	MNRT, MoA, Private Sector, DPs and FFPOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
		2026					
	5. Establish linkage with companies dealing with Agroforestry products	Linkages with at least 10 private companies established by June 2031	Number of linkages with private companies	Facilitate the establishment of private companies linkages	200	June, 2031	MNRT, MoA, Private Sector, DPs and FFPOs
Sub-total					**25 500**		
Objective 4: To promote the role of Agroforestry for land restoration and climate change mitigation and	1. Enhance climate resilient natural regeneration approaches	Farmers practicing farmer managed natural regeneration for land rehabilitation increased 30% by June 2031	Percentage of farmers practicing FMNR for land rehabilitation	Conduct awareness campaigns and training farmers to practice farmer managed natural regeneration for land rehabilitation	2 000	June, 2031	VPO (DoE), MNRT, MoA,; TFS, LGAs, NGOs, DPs and FFPOs
	2. Facilitate uptake of	At least three Climate resilient	Number of climate resilient	Identify, document and promote	500	June, 2025	TAFORI, TARI, SUA,

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
adaptation strategy	climate resilient Agroforestry technologies	technologies for each agro-ecological zone identified, documented and deployed for uptake by June 2025	technologies for each agro-ecological zone identified, documented	uptake of Climate resilient technologies for each agro-ecological zone			NGOs, DPs and FFPOs
		Farmers adopting climate resilient technologies increased by 30% by 2031	Percentage of farmers adopting climate resilient technologies	Conduct awareness campaigns and training farmers on climate resilient technologies	2 000	June, 2031	MNRT, MoA, PO-RALG; TFS, LGAs, NGOs, DPs and FFPOs
		Farmers practicing Agroforestry increased from 4 million to 15 million by 2031	Number of farmers practicing Agroforestry	Conduct awareness campaigns to adopt and training farmers on Agroforestry practices	5 000	June, 2031	All Stakeholders

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
	3. Promote Agroforestry -based landscape restoration approaches	Integrate Agroforestry into forestry and land restoration programs, strategies, and action plans of all stakeholders by 2028	Number of programmes, forestry and land restoration strategies, and action plans integrated Agroforestry	Conduct awareness campaigns and training farmers on the integration of Agroforestry into forestry and land restoration programs, strategies, and action plans of all stakeholders	1 000	June, 2028	VPO (DoE), MNRT, MoA, PO-RALG; NGOs, DPs and FFPOs
		Stakeholders practicing nature-based solutions increased by 20% by June 2031	Number of stakeholders practicing nature-based solutions	Facilitate stakeholders engagement in nature-based solutions	2 000	June, 2031	VPO (DoE), MNRT, MoA, PO-RALG; TFS, LGAs, NGOs, DPs and FFPOs
	4.Popularize and exploit market	Agroforestry-based carbon projects increased	Percentage of Agroforestry-based carbon projects	Facilitate the implementation of Agroforestry carbon	2 000	June, 2031	VPO (DoE), MNRT, MoA, PO-RALG;

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
	opportunities for carbon sequestration in Agroforestry systems	by 20% by 2031		projects			TFS, LGAs, NGOs, DPs and FFPOs
		Farmers participating in Agroforestry carbon projects increased by 20% by 2031	Percentage of farmers participating in Agroforestry carbon projects	Conduct awareness campaigns and training to farmers on Agroforestry carbon projects	2 000	June, 2031	VPO (DoE), MNRT, MoA, PO-RALG; TFS, LGAs, NGOs, DPs and FFPOs
Sub-total					**16 500**		
Objective 5: To strengthen effective communication and networking among Agroforestry stakeholders	1. Promote information exchange among Agroforestry stakeholders	Agroforestry dissemination strategy developed by June 2024	Number of functional dissemination strategy	Prepare and conduct Agroforestry Forum	500	June, 2024	All stakeholders
		Agroforestry Forum conducted annually from June 2024	Number of conducted Agroforestry forums and awareness	Prepare and conduct Agroforestry Forum	500	June, 2024	All stakeholders

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
			campaigns				
	2. Promote and institutionalize Agroforestry stakeholder forums	Agroforestry Forum conducted annually from June 2024	Number of the conducted Agroforestry forums and awareness campaigns	Prepare and conduct Agroforestry Forum	2 000	June, 2024	All stakeholders
	3. Develop and maintain database for Agroforestry stakeholders	Database and maintain of Agroforestry stakeholder developed and maintained by 2024	Number of functional database for Agroforestry stakeholder	Facilitate the establishment and maintenance of database of Agroforestry stakeholders	500	June, 2024	MNRT, MoA, MLF and MoH
	4. Promote mass awareness campaigns on Agroforestry	Mass awareness campaign conducted annually at national and LGA	Number of conducted mass awareness campaigns at national and LGA	Conduct mass awareness campaign on Agroforestry	1 000	June, 2024	VPO, MNRT, MoA, MLF, TFS, LGAs, NGOs, TAFORI,

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
		levels from June 2024	levels				Private sector, DPs and FFPOs
	5. Promote farmer involvement in technology development, use and disseminatio n	Farmers involved in development and dissemination of Agroforestry technologies increased by 25% by 2031	Percentage of farmers involved in the development and dissemination of Agroforestry technologies	Facilitate the involvement of farmers in the development and dissemination of Agroforestry technologies	1 000	June, 2031	VPO, MNRT, MoA, MLF, TFS, LGAs, NGOs, TAFORI, Private sector, DPs and FFPOs
	6. Forge multi stakeholders engagement in Agroforestry, including private-	Interventions using Private-public partnership approaches on key Agroforestry products increase by 30% by 2031	Percentage of interventions using Private-public partnership approaches on key Agroforestry products	Advocate for interventions using Private-public partnership approaches on key Agroforestry products	3 000	June, 2031	VPO, MNRT, MoA, MLF, TFS, LGAs, NGOs, TAFORI, Private sector, DPs and FFPOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
	public partnerships	Active agriculture stakeholder's engagement of to integrate Agroforestry during strategies reviews processes by June 2031	Number of active agriculture stakeholder's integrating Agroforestry	Advocate for agriculture stakeholder's engagement of to integrate Agroforestry during strategies reviews processes	1 000	June, 2031	All stakeholders
		Conduct case studies to build the justify the mainstreaming of Agroforestry into policies of line ministries by June 2031	Number of conducted case studies on mainstreaming of Agroforestry into policies of the line Ministries	Facilitate and conduct case studies to build the justify the mainstreaming of Agroforestry into policies of line ministries	2 500	June, 2031	TAFORI, TARI, TALIRI and Universities
Sub-total					**12 000**		
Objective 6: Mainstreaming HIV/AIDS	1. Increase awareness of the	Developed and disseminate communication	Number of communication products on	Facilitate the development and dissemination of	1 000	June, 2024	TAFORI, Universities, MATIs, LITIs,

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
and non-communicable diseases in Agroforestry practices	contributions of Agroforestry to human health, nutrition and medicine (crops and trees) and their influence in building the immune system and reducing disease transmission.	products on the roles of Agroforestry in improving human health and reducing disease transmission by 2024	Agroforestry and human health	communication products on the roles of Agroforestry in improving human health and reducing disease transmission			FTIs, NGOs, DPs and FFPOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
	2. Promote inclusion of high nutritive value crops and trees (including wild fruits) in Agroforestry systems	Domesticate wild fruits and medicine in Agroforestry systems by June 2030	Number of domesticated wild foods and indigenous medicinal trees	Conduct capacity building to Agroforestry practitioners on HIV/AIDS and non-communicable diseases and their linkages to Agroforestry	1 000	June, 2030	TAFORI, Universities, MATIs, LITIs, FTIs, NGOs, DPs and FFPOs
	3. Promote medicinal plants and indigenous trees in Agroforestry systems	At least 3 000 Agroforestry practitioners trained on medicinal plants and indigenous trees in Agroforestry by June 2029	Percentage of Agroforestry practitioners trained on medicinal plants and indigenous trees in Agroforestry	Advocate for Agroforestry practitioners to plant crops and trees with high nutritive values and medicinal properties	1 000	June, 2029	TAFORI, Universities, MATIs, LITIs, FTIs, NGOs, DPs and FFPOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
		At least 50% of Agroforestry practitioners plant crops and trees with high nutritive values and medicinal properties by June 2031	Percentage of Agroforestry practitioners trained on medicinal plants and indigenous trees in Agroforestry	Facilitate Agroforestry practitioners plant crops and trees with high nutritive values and medicinal properties	1 500	June, 2031	TAFORI, Universities, MATIs, LITIs, FTIs, NGOs, DPs and FFPOs
	4.Promote researches on the integration of HIV/AIDS and non-communicable diseases issues in Agroforestry	Researches on the HIV/AIDS and non-communicable diseases issues in Agroforestry carried-out by June 2031.	Number of researches on the HIV/AIDS and non-communicable diseases issues in Agroforestry	Conduct research on the HIV/AIDS and non-communicable diseases issues in Agroforestry carried-out	1 000	June, 2031	VPO, MNRT, MoA, MLF, MoH, NGOs, DPs and FFPOs
		Build capacity of	Percentage of	Facilitate capacity	500	June,	VPO, MNRT,

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
		at least 60% Agroforestry practitioners on HIV/AIDS and non-communicable diseases and their linkages to Agroforestry by June 2031	Agroforestry practitioners-built Number of Personnel built/ strengthened capacity on HIV/AIDS and non-communicable diseases and their linkages to Agroforestry	building on HIV/AIDS and non-communicable diseases and their linkages to Agroforestry		2031	MoA, MLF, MoH, NGOs, DPs and FFPOs
Sub-total					**6 000**		
Objective 7: To mainstream gender and diversity in Agroforestry interventions	1. Encourage participation of women, youth and people with disabilities in	At least 30% of people practicing Agroforestry by 2031 are women, youth and marginalized	Proportion of women, youth and marginalized groups practicing Agroforestry	Advocate for participation of women, youth and marginalized groups in Agroforestry	1 000	June, 2031	VPO, MNRT, MoA, MLF, MoH, NGOs, DPs and FFPOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
	Agroforestry interventions, including value chains	groups by June 2031	Proportion of women, youth and marginalized groups participating in Agroforestry- based value chains	Facilitate proportion of women, youth and marginalized groups participating in Agroforestry-based value chains	1 000	June, 2031	VPO, MNRT, MoA, MLF, MoH, NGOs, DPs and FFPOs
	2.Advocate for land and tree tenure rights enhancing engagement of women and youth in Agroforestry interventions	Documented and/or amended land and tree tenure rights and land rights limiting engagement of women, youth and marginalized groups in Agroforestry by 2027	Number of documented and/or amended land and tree tenure rights limiting engagement of women, youth and marginalized groups in Agroforestry	Facilitate the documentation of and amend land and tree tenure systems enhancing engagement of women, youth and marginalized in Agroforestry	1 500	June, 2027	NGOs and FFPOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
	3. Advocate for Agroforestry land rights for marginalized groups especially women, youths and people with disabilities	Documented and/or amended land and tree tenure rights and land rights limiting engagement of women, youth and marginalized groups in Agroforestry by 2026	Number of documented and/or amended Agroforestry land rights for marginalized groups especially women, youths and people with disabilities	Facilitate the documentation of and amend land and tree tenure systems and land rights limiting engagement of women, youth and marginalized groups in Agroforestry	1 500	June, 2026	NGOs, Private sector and FFPOs
	4. Increase marginalized groups access to institutional and technical support related to extension services,	Researches on mainstreaming gender and diversity in Agroforestry carried-out by June 2031	Number of research projects on mainstreaming gender and diversity in Agroforestry	Advocate for participation of women, youth and marginalized groups in Agroforestry based value chain is increased	1 000	June, 2031	VPO, MNRT, MoA, MLF, MoH, NGOs, DPs and FFPOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
	inputs and financial services for Agroforestry and membership in farmer groups						
		Participation of women, youth and marginalized groups in Agroforestry based value chain is increased by 10% by 2031	Percentage of participation of women, youth and marginalized groups in Agroforestry based value chain	Facilitate participation of women, youth and marginalized groups in Agroforestry based value chain	1000	June, 2031	VPO, MNRT, MoA, MLF, MoH, NGOs, DPs and FFPOs
Sub-total					**7 000**		
Objective 8: Enhance good governance	1. Promote transparency ,	Increased awareness and use of regulations	Percentage of Agroforestry practitioners using	Conduct awareness campaigns and promote the use of	500	June, 2031	VPO, MNRT, MoA, MLF, FFPOs, MoH,

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
within the Agroforestry Sub-sector	accountability and rule of law within Agroforestry and reduce corruption incidences	governing production, harvesting and sales of on-farm timber, charcoal and other Agroforestry products by June 2031	existing regulations	regulations governing production, harvesting and sales of on-farm timber, charcoal and other Agroforestry products			NGOs, DPs and FFPOs
		Anti-corruption strategies for Agroforestry products developed and implemented by June 2028	Percentage of corruption incidences along the Agroforestry product value chains	Facilitate the development and implementation of Anti-corruption strategies for Agroforestry products	500	June, 2028	VPO, MNRT, MoA, MLF, MoH, NGOs, DPs and FFPOs
		Increase capacity building on good governance among	Percentage of Agroforestry stakeholders with good governance	Facilitate capacity building on good governance among Agroforestry	500	June, 2031	

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
		Agroforestry stakeholders by June 2031	skills	stakeholders			
Sub total					**1 500**		
Objective 9: To strengthen Agroforestry financial mechanism	1. Promote investors, small scale enterprises (SMEs) and farmers to invest in Agroforestry	Share of lending to investors, small scale enterprises (SMEs) and farmers to invest in Agroforestry increased by 50 percent by June 2030	Percentage of loan disbursed to investors on Agroforestry	Design and pilot new financial products that promote access to Agroforestry e.g., lease financing for Agroforestry reducing equipment Increase access to financial services through the use of low-cost and innovative ICT delivery	1 000	June, 2030	VPO, MNRT, MoA, MLF, MoH, NGOs, Financial Institutions, Private Sector, DPs and FFPOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
				mechanisms			
	2. Establish Traditional donor funding mechanisms supporting Agroforestry	Traditional donor funding mechanisms supporting Agroforestry complimented by June 2026	Number and amount of additional funds to support Agroforestry	Facilitate to complement traditional donor funding mechanisms supporting Agroforestry	100	June, 2026	VPO, MNRT, MoA, MLF, MoH, NGOs, Financial Institutions, Private Sector, DPs and FFPOs
	3.Establish mechanisms accommodate risk management in Agroforestry	Mechanisms to reduce financial risks associated with Agroforestry established by June 2028	Number of Functional mechanisms to reduce financial risks associated with Agroforestry in place	Facilitate credit guarantee facilities to improve market terms and boost lending to Agroforestry SMEs Enhance revolving fund blending a credit line with grants for the	2 000	June, 2028	VPO, MNRT, MoA, MLF, MoH, NGOs, Financial Institutions, Private Sector, DPs and FFPOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
				manufacturing and distribution of Agroforestry Promote instruments (crop insurance, index-based) to reduce weather risks for Agroforestry farmers and SMEs			
		Increase insurance services created for safeguarding actors against losses in Agroforestry investment by June 2028	Number of insurance services created for safeguarding actors against losses in Agroforestry investment	Facilitate Increase insurance services created for safeguarding actors against losses in Agroforestry investment	500	June, 2028	VPO, MNRT, MoA, MLF, MoH, NGOs, Financial Institutions, Private Sector, DPs and FFPOs

Objectives	Strategies	Targets	Output indicator	Main activities	Resources (TZS) Millions	Time frame	Responsible Actor (s)
	4. Promote and ensure timely availability of sufficient financial resources to support Agroforestry services	Sufficient financial resources to support Agroforestry services obtained by June 2025.	Number and amount of financial resources to support Agroforestry services	Facilitate acquiring of sufficient financial resources to support Agroforestry services	500	June, 2025	VPO, MNRT, MoA, MLF, MoH, NGOs, Financial Institutions, Private Sector, DPs and FFPOs
Sub-total					**4 100**		
Grand Total					**104 000**		

Forest and Beekeeping Division,
Ministry of Natural Resources and Tourism,
Government Street, P.O.BOX 1351, Dodoma Tanzania
Email: dfob@maliasili.go.tz, Website: www.maliasili.go.tz