



THE UNITED REPUBLIC OF TANZANIA MINISTRY OF AGRICULTURE

NATIONAL ECOLOGICAL ORGANIC AGRICULTURE
STRATEGY (2022 - 2030)

3RD DRAFT



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ABBREVIATIONS AND ACRONYMS

AEZ	Agro-Ecological Zones
AfrONet	Africa Organic Network
ASA	Agricultural Seed Agency
ASDP	Agriculture Sector Development Programme
AU	Africa Union
CAADP	Comprehensive African Agriculture Development Plan
CAMARTEC	Centre for Agricultural Mechanization and Rural Technology
CBOs	Community Based Organizations
CCRO	Certificate of Customary Rights of Occupancy
CEDAW	Convention on the Elimination of all forms of Discrimination Against Women
CSA	Climate Smart Agriculture
CSOs	Civil Society Organizations
DPs	Development Partner
DREA	Department of Rural Economy and Agriculture
EA	Ecological Agriculture
EAC	East African Community
EAOPS	East Africa Organic Products Standards
FAB	Farming as a Business
FAO	Food Agriculture Organization
GOT	Government of Tanzania
ICS	Internal Control Systems
ICT	Information and Communication Technology
IEC	Information Education and Communication
INGOs	International Non-Government Organizations
IPCC	International Panel for Climate Change
KIHATA	Kilimo Hai Tanzania
LTPP	Tanzania Long Term Perspective Plan
NAP	National Agriculture Policy
NEOAS	National Ecological Organic Agriculture Strategy
NGOs	Non-Governmental Organizations

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NPGRC	National Plant Genetic Resources Centre
NTA	National Technical Award
PELUM	Participatory Ecological Land Use Management
PGS	Participatory Guarantee Systems
PLUM	Participatory Land Use Management
PPP	Public-Private Partnerships
SADC	Southern African Development Community
SAT	Sustainable Agriculture Tanzania
SDGs	Sustainable Development Goals
SDSC	Strategy Development Steering Committee
SDT	Strategy Development Team
SIDO	Small Industries Development Organization
TAFIRI	Tanzania Fisheries Research Institutes
TAFORI	Tanzania Forest Research Institutes
TALIRI	Tanzania Livestock Research Institute
TARI	Tanzania Agricultural Research Institutes
TDV 2025	Tanzania Development Vision 2025
TFRA	Tanzania Fertilizer Regulatory Authority
TMX	Tanzania Mercantile Exchange
TOAM	Tanzania Organic Agriculture Movement
TOSCI	Tanzania Official Seed Certification
TPHPA	Tanzania Plant Health and Pesticides Authority
UNFCCC	United National Framework Conventional on Climate Change
VAC	Village Adjudication Committee
VETA	Vocational Education Training Authority
VLC	Village Land Council
VLUMC	Village Land Use Management Committee
WHO	World Health Organization
WVG	World Vegetable Centre

DEFINITION OF TERMS (GLOSSARY)

Agriculture is an applied science which encompasses all aspects of plants and animals' production including crops, livestock rearing, fisheries, forestry, etc.

Organic Agriculture is defined as an integrated production management system which promotes and enhances agroecosystem health, including biodiversity, biological cycles and soil biological activity (FAO/WHO Codex Alimentarius Commission,2007).

Ecological Agriculture or sometimes termed as Agro ecology aims at growing healthy plants, livestock and fisheries with good defence capabilities, stressing pests and enhancing populations of beneficial organisms through enhancing habitat management both above ground and in the soil. These practices include conservation agriculture that promotes maintenance of a permanent soil cover, minimum soil disturbance, and diversification of plant species and agroforestry which is a dynamic, ecological-based, natural resources management system that through the integration of trees on farms and in the agricultural landscape diversifies and sustains production for increased social, economic, and environmental benefits for land users at all levels.

Ecological Organic Agriculture is a relatively new term which is used to describe a holistic system that considers a combination of more than one production entities (soil, water, air, sun) in an ecologically sound manner and promotes rational and sustainable use of inputs and conservation of environment.

Conventional agriculture is a production system heavily dependent on the use and or application of external synthetic inputs to boost crop and livestock production.

Conservation Agriculture is a sustainable approach to agricultural production which aims to protect soil from erosion and degradation, improve its quality and biodiversity, contribute to the preservation of natural resources, water and air, whilst optimizing yields.

Traditional farming is defined as a indigenous way of farming that involves the use of labor-intensive, traditional knowledge, tools, natural resources, organic fertilizer, and old customs and cultural beliefs of the farmers.

Agroforestry is the intentional integration of trees and shrubs into crop and animal farming systems to create environmental, economic, and social benefits.

Indigenous crops/seeds are seeds or crops whose origin are within the country. Case in Tanzania includes finger millet, nightshade (mnavu), sorghum

Traditional crops/seeds are Crops/seeds that originated outside Tanzania but have been domesticated and integrated as key cultural crops like maize, beans, green gram

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Traditional farming relies on the use of locally available non-synthetic inputs but for failure to subject the produce to certification procedures most of the agricultural products fail to meet organic standards in national and international markets. Also, some of traditional farming practices pose threats to natural resources, biodiversity and environment. Fortunately, many indigenous farming applications practiced in Tanzania are based on the concept of ecology drawing from the combined best traditional knowledge and practices without undue dependency on external inputs. Such attributes of indigenous farming practices call for measures of making some improvements of which ecological organic agriculture stands up to be the best option.

At present, the Ministry of Agriculture recognizes the ongoing initiatives taken by stakeholders who are engaged in the promotion of sustainable farming practices that address ecological matters and organic farming at large. The ecological actors have put their focus on addressing environmental conservation, sustainable utilization of natural resources and biodiversity. On the other hand, the organic farming actors are focusing on improving health, nutrition, food security, provision of safe food and opportunity for income generation based on the growing demand of organic commodities. Therefore, it is an opportune chance to have in place the National Ecological Organic Agriculture Strategy in order to strengthen for integration of ecological aspects with organic initiatives in agriculture in order to, amongst other things, improve crop and livestock productivity for sustainability of agriculture in the country.

It is my hope that this strategy will contribute towards achieving environmental resilience, combating climate change and sustainable crop and livestock production thus contributing to poverty reduction. This is in realization of the Tanzania Development Vision 2025 (TDV-2025) and the Agricultural Sector Development Program Phase II (ASDP II) 2017/2018-2027/2028 and the Agricultural Agenda 10/30. The expectation is that the strategy shall act as a guiding tool for using environmentally sound farming techniques in the production and management of crops, livestock and fisheries with minimum or reduced degradation of productive resources. The government is determined to fully fulfill the objectives of this strategy in collaboration with all actors in the value chains of various commodities incorporating farmers, academia and research, NGOs, the private sector, development partners, donor agencies and therefore, I hereby call upon all the stakeholders to take active part in supporting implementation of the National Ecological Organic Agriculture Strategy (NEOAS) 2022-2030.

Andrew W. Massawe
Permanent Secretary
Ministry of Agriculture

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Special thanks go to the African Union Commission for the guidance provided through EOA Action Plan (2015-2020) and EOA Strategic Plan (2015-2025) that entail to boost organic agriculture in Africa. Consequently, thanks to East African Community (EAC) and Southern Africa Development Community (SADC) for Ecological Organic Agriculture initiatives that have been implemented in member states used as one of the references to the development of this strategy. Since it cannot be possible to mention each and every one, the contributions made from all stakeholders to support the development of this strategy were recognized and mark the success of the EOA strategy we all see in Tanzania.

EXECUTIVE SUMMARY

The agriculture sector in Tanzania has been steady with enormous contribution to the livelihood of citizens and the nation at large. The current contribution of agriculture to the Gross Domestic Product is estimated at 26.1 percent (NBS, 2022). The agricultural productivity has been steady for more than a decade qualifying the country to few food exporters both regionally and internationally. With exception of wheat, edible oil and sugar that are being imported, although at declining rate, the country is self-sufficient in other crops with recent remarkable increase in export for fruits and vegetables.

Despite the voluminous increase in food production with significant contribution to foreign market, the safety of produced and consumed food is of paramount importance. Food safety relies on the safe means of production and the processing environment. Thus, safe food can only be qualified if it is produced and processed in healthy environment while considering sustainable utilization of resources. The agenda on food safety for human health and other fauna and desire to overcome irrational use of agricultural input while conserving ecosystem services has been the top priorities among nations for the past four decades. These are often proclaimed through various initiatives including organic agriculture, sustainable agriculture, sustainable resource utilization, healthy living and many others. In Tanzania, much of agricultural production is subsistence and could easily fit into all desired qualities of healthy food despite a small segment of growers particularly in the horticulture sector which has been abusing the inputs, compromising the suitability of the agricultural produce. Inefficiencies of working tools and established authorities to regulate the safe production and control of the product qualities specifically on Ecological Organic Agriculture, have been among critical setback to production of healthy food in safe environment. The first National Ecological Organic Agriculture Conference (NEOAC) held in 2019 realized the challenges and deliberated to the development of the "**National Ecological Organic Agriculture Strategy**" (NEOAS), the outcome of which is the present strategy.

The present strategy covers various aspects of ecological organic agriculture in Tanzania and the implementation modalities as well as the monitoring and evaluation. Preliminary coverage includes the basic information on various EOA initiatives in Tanzania, rationale, objectives of the current strategy, definition of terms and key policies and regulations considered in the development and implementation of the NEOAS. The situation analysis meant to present the current circumstances and facts on the ground whereby analysis of critical issues namely; the seed systems in EOA, soil health management practices, aspects of plant and animal health in relation to pesticide use and environmental safety, food processing and value addition, mechanization and marketing systems for EOA products has been undertaken. Furthermore, issues on research, training, technology transfer and coordination have been thoroughly covered. The cross-cutting issues inclusive of information management (development, access and sharing), capital

investments and finances, capacity building, awareness creation, women & youth empowerment, gender mainstreaming, Public Private Partnership (PPP) have also been well articulated followed by a SWOC analysis on EOA and a thorough dissect of stakeholders' roles and responsibilities. In addition, the strategic implementation plans have been drawn which includes the vision, mission, core values, priority areas and twelve key strategic objectives inclusive of their interventions.

Detailed assessment of the policies, legal and institutional framework that are meant to facilitate the implementation of the strategy is made. Various policies and strategies (categorized and cross cutting) which exists in Tanzania particularly the ones that aligns well with the present EOA strategy have been reviewed and presented for reference. Sequel to that, the regional initiatives and international agreements that are likewise aligned to the EOA have been explored and presented.

Detailed coverage of the implementation arrangements for the strategy have been made. These include the institutional arrangements, coordination, information and communication approaches as well as the implementation plans for each of the twelve strategic objectives. Additional details include the targets, performance indicators, activities, responsible institution(s) and the time frame during which effective implementation is expected. The sustainability of the strategy, resource mobilization and funding modalities have also been considered.

The last component of the strategy covers aspects of monitoring, evaluation and learning which are necessary for assessing the levels of accomplishment and the lessons learnt from implementing the strategy. The monitoring and evaluations will be executed under custodianship of the focal persons in the responsible ministry and the tools shall be developed as may be seen suitable. Following monitoring and evaluation, the lead ministry shall establish the platform and modalities for sharing the M&E findings and lessons learnt. The modalities to minimize risks and uncertainty during implementation of the strategy have been well-guided.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

Tanzania's economy is highly dependent on agriculture which employs about 61.5 (men 30.9 and women 30.6) per cent of the population and provides about 65 per cent of raw materials for manufacturing industries (MoA Budget Speech, 2022). The sector contributes approximately 26.1 per cent of the country's Gross Domestic Product (NBS, 2022) while playing a critical role in ensuring food and income security. This dependence of the country to agriculture makes its advancement vital in securing food and nutritional security, generating income, providing employment, and earning foreign currency. To address the mentioned challenges, the Government supports various initiatives to boost agricultural production.

Ecological Organic Agriculture (EOA) is among the initiatives being employed in the country to address environmental conservation, sustainable utilization of land and water resources and biodiversity. EOA through Organic Agriculture (OA) has also proved to generate income and employment as it was testified by farmers during the field consultation. Therefore, the significance of EOA in contribution to environmental conservation, the health of ecosystems, generating income and employment make it necessary to have policy instruments for its implementation in the country.

National Ecological Organic Agriculture Strategy (NEOAS) comes to ensure the effectiveness and implementing ecological organic agriculture initiatives and addressing critical development issues in Tanzania. It is geared to explore and utilize opportunities for developing ecological organic agriculture to contribute improvement of food an income security and completing to other ongoing agriculture initiatives.

National Ecological Organic Agriculture Strategy (NEOAS) comes to ensure the effectiveness and implementing ecological organic agriculture initiatives and addressing critical development issues in Tanzania.

1.2 Background

Most farmers in Tanzania, before and after independence, have been practicing low-input agriculture known as traditional farming with a strong bias towards organic principles (Taylor, 2006). Many indigenous farming practices are already based on ecology and

combine the best of traditional knowledge with support from ecological science and offers farmers in developing countries an opportunity to success (FAO, 2006).

Immediately after independence the government introduced a number of interventions that were aimed at speeding up rural and socio-economic development. Enhancement of food security and raising household income were set as priorities. Interventions included the introduction and intensive use of industrial fertilizers, pesticides, and hybrid seeds. Production increased tremendously, however, with time productivity began to decline which was attributed to, among other things, mismanagement of agricultural inputs. In addition, the price of agro-inputs continued to rise due to the introduction of trade liberalization and privatization policies. This increase led to a decline in the use of agricultural inputs particularly pesticides and gave rise to an increase in crop pests and diseases (Taylor, 2006).

The literature shows that first initiatives of EOA in the country were introduced by the Catholic Missionaries of Peramiho in 1898. Additionally, the initiatives aimed at supporting farmers to improve productivity through the establishment of organic gardens. The emphasis was on the use of organic manure, compost, wood ash and green manure to create a permanent soil fertility foundation (Bertram 1997).

With intention to assist farmers to address the problems associated with production and increase in agro-inputs prices, stakeholders including public and private institutions, Development Partners, donors, private companies, and NGOs launched sustainable, organic, and in some cases ecological farming initiatives. Most of these initiatives which are based on practices and principles, are embedded in ecological organic agriculture. In launching of these initiatives, NGOs such as EGAJ, Inades-formation Tanzania, PELUM-Tanzania, Sunhemp Seed Bank, ADP-Mbozi and Kilimo Hai Tanzania (KIHATA) were involved. However, some of the projects including SECAP-GTZ, Meatu Cotton Project, Hifadhi Mazingira (HIMA) and Babati Land Use Management Programme (LAMP) (Taylor, 2006) were implemented by the mentioned NGOs. With the aim to consolidate the efforts to promote organic agriculture, Kilimo Hai Tanzania (KIHATA) brought together various actors and initiated efforts to promote OA. KIHATA handled the organic sector until TOAM was established in 2005 and a strategic plan with five pillars to guide its future activities was developed. Since then, numerous NGOs operate in almost every region and play an important role in promoting organic agriculture as well as marketing in the country (Keldal-kwai, 2010).

Although terms such as conservation agriculture, agroforestry, and agroecology are not familiar to most players, they represent ecological practices including minimum tillage, mixed cropping, mixed farming, use of farm-yard manure, compost and green manure, terracing and mulching. These practices were employed in various areas of the country for many years to address diversification of livelihoods, adaptation to climate change, soil fertility and land use.

In the efforts of addressing farmers livelihoods the need to promote market access for organic products was addressed by Swede Corp (which was later incorporated into SIDA) through the Export Promotion of Organic Products from Africa (EPOPA) program in 1994. This was done to increase and diversify exports, while at the same time exposing the agricultural and agro-industrial sectors to environmentally sound farming techniques. In 2003 the first local certification body, a Civil Society Organization (CSO) named Tanzania Certification Association (TanCert) was established to support the certification of organic products for the export market but due to insufficient funding it later collapsed (Rosinger, 2013).

At present, various initiatives in ecological organic agriculture are taking place in various regions of Tanzania as it is elaborated through the situational analysis in chapter two, but among those, organic agriculture has proved to be more significant. This is because its connection to specific markets provides incentives to producers and necessitates documentation. It is important to note that over the years the number of certified organic farmers in Tanzania increased from 85,366 in 2009 to 148,607 in 2020 making it the 3rd in the world and certified agricultural land increased from 72,188 hectares in 2009 to 278,467 Hectares in 2020 making it the 2nd in Africa behind only Tunisia and the 31st in the world (FiBL,2021). The number of organic producers coupled with many others that are involved in various ecological practices in Tanzania necessitate the country to have frameworks by which they will be guided and assisted.

1.3 Rationale

One of the greatest challenges of our time is how to improve farming practices to meet the ever-increasing global food demand in a sustainable way. Although the industrialized or conventional approaches to farming are favoured by current policies and some market conditions, there are growing concerns about their long-term sustainability and pressure on planetary boundaries. For long-time food systems have been challenged by unsustainable practices due to increase of non-communicable diseases, deterioration of biodiversity particularly the agrobiodiversity and food diversification, therefore, agroecological practices is proposed to help accomplish a transition towards more sustainable food systems that promotes nutrient recycling, enhances soil health, substantially reduce use of external inputs, and promote biodiversity conservation. Likewise, agroecology target to improve the performance of farming practices while minimizing environmental impacts and reducing dependency on external inputs through integration of ecological principles.

The demand for organically produced agricultural commodities has been on the increase within the last two decades expanding market opportunities and new areas of investments that targets both international and local markets. Such increased demand has triggered interest of the Government, non-governmental organizations and private companies to fill

in the gaps. Despite the current National Agriculture Policy, 2013 article 3.21 recognizing the potentials and commercial values embedded in organically produced goods, and viewing it as a new potential window of opportunity to exploit towards enhancing the national and household incomes, it equally acknowledges the challenges facing this sub-sector including among others, undifferentiated market between conventional and EOA produced products on the internal market, the inadequate coordination among stakeholders, weak regulation and certification of organic products, high certification charges of organic products and inaccessible organic inputs such as seeds, pesticides and fertilizers. On the hand, the organic seeds have been one of the most challenging parts in organic subsector, therefore, there is a need for researcher to come up with breeder seeds and later foundation seeds treated with appropriate standard for organic agriculture that comply with the National seed certification institute.

The stated objective on promoting organic agriculture (article 3.21.2 of NAP 2013) targets on enhancing foreign earnings and household incomes from exportation of high value organic produce through increased supply of safe and organic produce to consumers. In addition, the policy statements (article 3.21.3) indicates that registration and availability of organic inputs shall be facilitated; also, the government shall facilitate accreditation of organic products in order to reduce certification costs. Furthermore, the initiatives for regulation and certification of organic products shall be promoted; and in collaboration with the private sector, effective coordination among stakeholders shall be enhanced.

The Livestock Policy, 2006, highlights plan for advocating minimum or completely ensuring no-use of industrial chemicals such as fertilizers, pesticides, antibiotics and other drugs following the increasing use and sometimes misuse of such chemicals resulting into human health hazards. One of the policy's objectives is to promote organically produced livestock products in order to exploit special market demands. The policy statements include promoting investment and creating awareness for encouraging organic livestock farming practice, strengthening technical support services in organic livestock farming, and ensuring the environment is conserved for sustainable livestock production. As stated in the Fisheries policy, 2015, its objective is ensuring effective management of fisheries resources through proper conservation, protection, and rational utilization for sustainable development.

The National Environmental Policy, 2021 acknowledges the continued different forms of land degradation including deforestation, loss of vegetation cover, soil erosion, soil pollution, deterioration of aquatic systems and loss of biodiversity. The policy statements include among others, promoting the integration of environmental issues in land use and management, promote restoration of degraded land, conservation of water sources, ecosystem-based approaches to the conservation of wildlife habitat and biological diversity, integrated practices in addressing deforestation, development and transfer of green affordable technologies and enhance regional and international cooperation on bio-safety issues.

At regional level, African Union developed a Strategic Plan (2015-2025) for the EOA initiative which was agreed by the head of states with the aim of promoting the use of EOA practices to contribute in solving challenges of food insecurity for a rapid growing population in continent. Therefore, AU encouraged the member states to start supporting the initiative due to the increase of healthy consciousness, improve biodiversity, and ecosystem services as well as income generation to the community due to increased market demand of organic products.

Yet, there is an increasing concern on how the different sectors will contribute to sustainable use of production resources aiming on promoting ecological sustainability and genetic security of agricultural products. Similarly, there is increased concern with the mismanagement of agricultural inputs such as pesticides, fertilizers, use of antibiotics and other mineral substances which translates to human health and environmental hazards. Issues on seeds, natural resource management and sustainability of agricultural production systems have also recently featured as main challenges that could be addressed by adopting EOA practices.

Therefore, in realization of the stated objectives and attaining success on the various given policy statements, it calls for having a guidelines and directives on how such foreseen targets will be achieved. Hence, a need for a strategy document on what, who, why, how, and when on issues related to EOA that shall stipulate ways and means to realise the stated objectives and the underlying policy statements in place. The proposed EOA strategy is anticipated to support the design of differential paths for agriculture and food systems transformation.

Therefore, NEOAS is a fundamental guiding tool for supporting the implementation of other sectoral policies for the next 8 years (2022 – 2030). It aims at enhancing operationalization of the agricultural sectors that are transforming into modern, commercial, highly productive, resilient, and competitive in the national and international markets. It also helps in protecting soils and water, promote biodiversity, and improve ecosystem services. The strategy will contribute to achieving sustainable food provision and poverty reduction hence, the realization of Tanzania Development Vision 2025 (TDV-2025) and Agriculture Sector Development Programme phase II targets. It will also be a guiding tool for sustainable crops, livestock and fish production. It envisages encouraging farmers to take part in practising EOA as a viable venture to improve food security and income at household to national level.

1.4 Approaches and Layout

Development of the National Ecological Organic Agriculture Strategy (NEOAS) was among the deliberations made in the first National Ecological Organic Agriculture Conference (NEOAC) held in 2019. The Ministries responsible with production and productivity in the agriculture sector which has been highly impacted with climate changes and environmental degradation resolved to have a strategic tool which could address

adaptation and mitigation measures. In 2021, The Ministry of Agriculture in collaboration with other stakeholders including the Ministry of Livestock and Fisheries, the Food and Agriculture Organization of the United Nations (FAO), SWISSAID, GIZ, the French Embassy to the United Republic of Tanzania, Tanzania Organic Agriculture Movement (TOAM), Sustainable Agriculture Tanzania (SAT) and Participatory Ecological Land Use Management (PELUM), formed the Strategy Development steering committee (SDSC) and its technical team (SDT) to develop the NEOA strategy.

The roles of implementing bodies and organizations under the Tanzania Organic Agriculture Movement (TOAM) umbrella were also explored to ensure that the strategy developed is practical and reflects the real situation on the ground. In addition, the NEOAS was developed taking into account the economic, political, and social realities on the continent in order to anchor the strategy firmly within the African context.

This strategy has been developed through mainly two processes. The deskwork review which included synthesis of literature and studies on EOA from available resources inside and outside Tanzania including case studies from neighbouring countries; and field consultations with EOA stakeholders reached in all Agro-Ecological Zones (AEZ) of Mainland Tanzania who are involved in various stages of EOA value chains. The field consultation task was carried in Singida, Simiyu, Mwanza, Ruvuma, Mtwara, Lindi, Mbeya, Songwe, Iringa, Njombe, Arusha, Manyara, Kilimanjaro, Katavi, Kigoma, Kagera, Tabora, Tanga, Morogoro, Pwani and Dar-es-salaam regions. Within these regions the SDT visited stakeholders in 44 districts who were classified as farmers (Both conventional and EOA producers), extensionists (public and private), decision-makers (Ministries and LGAs), politicians (Parliamentarians and Councilors), researchers (public and private), practitioners (Development partners and NGOs), processors and private companies.

Important lessons synthesized from deskwork review and field consultations were consolidated to generate the first draft of the strategy which was then shared to the SDSC and the Agriculture working group before presenting it to a wider stakeholder workshop where comments were received and incorporated to improve the 1st draft into the second draft of the strategy.

The 2nd draft was then submitted for ministerial procedures which included review by key ministerial departments and presentation to the Ministry of Agriculture management team. Comments from the ministerial processes improved the 2nd draft into the 3rd draft which was presented to stakeholders for final validation and finally submitted to the Ministry for final approval and signed by the Minister responsible for Agriculture.

This Strategy is organized into six chapters. Chapter One defines Ecological Organic Agriculture in Tanzania (EOA), Organic Agriculture (OA), Climate Smart Agriculture (CSA), EA, CA, it also, gives the background information on EOA, OA, CSA, EA and CA in the Country; the past and current initiatives of the country; livelihood benefits through organic agriculture; achievements and challenges that have been attained and faced; rationale of the strategy; and policy context. Chapter two details the Situational Analysis

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whereby results of analysed critical issues, SWOC and Stakeholders analysis are presented. Chapter Three addresses Strategic Plan where Vision, Mission, Priority Areas, Strategic objectives, Targets, Key Performance Indicators and Strategic Interventions (Activities).

Chapter Four presents the National, Regional and Continental Policies, Legal and Institutional Frameworks that align with the National Ecological Organic Agriculture Strategy (NEOAS 2022-2032). Chapter Five is the Implementation Arrangement which lays out institutional arrangement, coordination, information and communication arrangements, reporting management, implementation plan, monitoring and evaluation arrangements, sustainability strategy and resource mobilization and funding arrangements. Finally, Chapter six presents monitoring, evaluation and learning. Some issues related to M&E implementation plan, risk and uncertainties, reporting plan and result framework.

THIRD DRAFT

CHAPTER TWO

SITUATIONAL ANALYSIS

2.0 Overview

This chapter presents summary of the analysis of the situation of Ecological Organic Agriculture system in Tanzania mainland. Established findings on Critical issues, Stakeholders, Strength, Weakness, Opportunities and Challenge (SWOC) are presented in relation to environment; policy, legal and institutional framework; EOA practices, knowledge and awareness; EOA inputs; EOA researches; accreditation for certification of organic products; and market for EOA products. Identified key stakeholders are presented and analysed. Key stakeholders' analysis was necessary for the identification of key issues which are critical in meeting the expectations of stakeholders. The key stakeholders are categorized into Government Institutions; Non-Government Organizations; Development Partners and UN Agencies; Business Companies/Communities; Investors; Media and Farmers.

In addition, a review of relevant information and results of the analysis of cross-cutting issues in relation to the following aspects: financing, communication, education, awareness, capacity building and women and youth empowerment, research and systematic observation, gender mainstreaming, technology use, development and transfer and Public Private Partnership (PPP) are presented. The detailed situation analysis which provides a brief description of the EOA issues is presented.

2.1 Analysis of critical issues

2.1.1 EOA Inputs

Ecological organic agriculture inputs comprise of EOA seeds, pesticides, fertilizers and mechanizations. These are components without which expected productivity will be compromised. Agriculture in Tanzania is mainly practiced by smallholder farmers, that depend on rain for water provision in their agro-enterprise. This makes the smallholder farmers highly vulnerable to climate change as it has been identified in the ACRP, 2014. Climate change in Tanzania has resulted in prolonged dry spells, intra and intra spatial and temporal seasonal rainfall variations, compromised soil health, prevalence of insects' pests and diseases not recorded before, occurrences of new invasive weed species and loss of crop diversity with ultimate decline in productivity. It has also increased pressure on the use of resources like land and water to support agriculture production. These

impacts have affected both conventional and ecological producers alike and to ensure that production is achieved agro inputs and in this case, ecological sourced inputs are of profound importance as they provide sustainable, accessible and affordable solutions.

Ecological organic agriculture seeds and other generative resources

In agriculture, generative resources determine the quality and quantity of production. This was also noted throughout the field consultation where farmers highlighted seeds to be a critical subject in EOA advancement. Farmers declared that some of the indigenous varieties/breeds are resilient to the impacts of climate change and have some attributes that are superior to modern varieties/breeds advocated through conventional farming. For example, traditional maize varieties were found to have good milling quality, heavy seeds/ high weight flour resulting in the use of less amount of flour to cook *ugali*, very good taste, and resistance to pests and diseases and resilience to drought. Nevertheless, most of these seeds are late maturing and their yield is low to moderate. Most traditional seeds/landraces crops whose farmers tend to keep and manage their seeds were cereals and leguminous crops.

Discussions with researchers from the National Plant Genetic Resources Centre (NPGRC)¹ and the World Vegetable Centre (WVG)² revealed that some varieties are more resilient to drought and soil nutrient depletion. Research on these varieties would be very beneficial to promote their development and supply. They also stressed that local generative resources are the main source of germplasm for local research institutions. Their preservation is vital for future use and food sovereignty. NPGRC has a modern storage facility for genetic resources from various areas of the country and the center works in close collaboration with farming communities to identify these traditional seeds or landraces and preserve them.

Unfortunately, due to greater diversity of crops and other plants' varieties in the country, the storage facility's capacity is no longer enough resulting to decline in acceptance of new resources for storage and improper storage management. The center which is mainly externally funded (DPs and NGOs) faces insufficient funding which curtails its functions threatening the future availability of local genetic resources for use. To ensure storage of some farmer-managed seeds, the center encourages in-situ conservation which is mainly done by farmers. Some farming communities with help from DPs and NGOs have constructed community seed banks where storage is done using available and affordable techniques. The techniques are not always viable for maintaining the propagation qualities of the stored seeds.

¹ NPGRC is a national institute that collects, processes and preserve plant genetic resources in the country. The institute characterize, evaluate and sometimes multiply these resources as processes for preservation. It also does on-farm conservation and sometimes using community seed banks for farmer managed seeds. Seeds involved are mainly pumpkins, rice and maize. The institute encourages use of these seeds as a way for preservation.

² WVG is the SADC project hosted by the Government of Tanzania. The institute collect, characterize and preserve vegetable germplasm and other crop varieties. The WVG supports NPGRC functions but also are involved in research which mainly breeding and releasing of new lines.

As awareness on EOA continues to get consolidated and new markets for traditional foods with unique palate characteristics emerge, producers are in search of seeds to meet the market requirements. For example, through a traditional meals event, PELUM Tanzania discovered that, there is a number of people who prefer traditional cuisine which are highly enriched with nutrients, texture and flavors. However, sharing and trading of these traditional seeds has not been adequately covered by the Seed Act, 2003. Thus, farmers called for some improvement of regulatory frameworks to set better guidelines for traditional or farmer-managed seeds which will also recognize and provide mechanisms for conservation and preservation and permit them into the market. Nevertheless, stakeholders (both private and public) acknowledge the complications that may arise from the recognition of traditional seeds by formal mechanisms. Thus, stringent protection measures that will ensure these traditional seeds and generative resources are documented and published as farmer-managed seeds under the ownership of farmers' communities were called for.

Given the described situation, this strategy recognizes that there are traditional and/or farmer-managed seeds that owe their existence to local farming communities. These seeds should be preserved using modern technologies and conserved through in-situ and ex-situ techniques. Public and private support for preservation and conservation mechanisms is critical coupled with setting better regulatory frameworks for recognition, sharing and trading.

EOA soil health improvement techniques and fertilizers

Among the most highlighted challenges, by not only EOA farmers but also conventional farmers visited, were soil health (chemical, physical and biological) characteristics. EOA farmers and stakeholders alike narrated how poor soils is a concern and how it is addressed using various techniques. Practices like agroforestry, mixed cropping, intercropping and conservation agriculture have been proven to increase the productivity potential of soils as testified by farmers and practitioners like Tree for the Future in Tabora, SAT in Morogoro, ECHO in Arusha, FLORESTA and SJS organic farm in Mwanga. Although research data on practices used are scanty, practices identified above have been proven to be effective and farmers confirmed on their applicability and how they sustainably improved soil fertility.

To ensure sustainable use of farm lands, EOA farmers use mostly Farm Yard Manure (FYM), compost and green manure. Among these are farmers in Kigoma who have been trained by Jane Goodall Foundation on the use of Heap compost. These fertilizers were found to be used in various crop production situations but mostly by organic farmers. Some farmers like the Little Sisters of St. Francis use slurry from cattle dung to fertilize their vegetable gardens for environmental conservation and fertility maintenance of their farms. EOA farmers were also found to use bio-fertilizers and foliar boosters to improve health of their crops. The said techniques together with procedures for preparation were likewise well demonstrated by organic cotton producers supervised by GIZ and HELVETAS in the Central Agroecological Zone (AEZ). The need for bio-fertilizers has resulted in individuals,

some of them farmers, venturing into bio-fertilizer production and trade. Developers and traders of bio-fertilizers and foliar boosters were found in Arusha, Tanga, Mtwara and Morogoro in some cases, operating informally. By implication, extension and training preceded by research on the viability of these fertilizers and the zones in which they are most appropriate is vital to avoid blanket recommendations for fertilizers use on crops.

Coordination, extension and regulatory authorities involved in fertilizers, including foliar boosters are therefore required to direct attention to this growing venture considering its importance in addressing sustainability of soil and land management, reduction of cost of production and being affordable to farmers.

EOA pesticides and plant health

Plant health is among problems facing production of EOA products. insect pests, diseases and weeds have been increasingly attacking Agro-producers and EOA farmers are not exceptional. To address this, EOA farmers have generated various alternatives which were recorded during the field consultation. Most of EOA farmers were found to use ecological practices like crop rotation and furrow cropping to terminate pests' cycles in farms and mixed cropping and agroforestry with plants that have allelopathic characteristics like Neem tree.

It was also deduced that there is an increasing use of bio-pesticides and self-prepared organic pesticides among EOA farmers. This has been inspired by the need to meet certain markets, increased consciousness about human and ecosystem health and conservation of environment. An example may be given of farmers in Masasi supported by the SWISSAID project, who were well knowledgeable on diversity and ecosystem maintenance and how the use of naturally-derived pesticides would support existence of important organisms above and below soils that would in turn support fertility and pollination. The bio-pesticides used are mainly produced from plants and animals. Farmers use Neem oil from Neem tree-*Azadirachta indica*, Sodom apple fruits-*Solanum incanum*, and others. Some organic cotton farmers in Singida have been able to dry Sodom apple fruits and pack them for continued use. Although most of the raw materials for production of bio-pesticides were found to be abundant in farmers' locality there were increasing concern with the adequacy and reliability of the available quantities for possible commercial production. Discussion with environmental conservation stakeholders raised concern that commercializing of these bio-pesticides without developing their replenishment mechanism may in some way result in ecosystem imbalance.

To ensure sustainable production and use of bio-pesticides, research on sources, efficacy, rates, timing and frequency of application is essential as it was illustrated by researchers from TARI-Ukiriguru who are researching on the effectiveness of pest traps and molasses in cotton farms in Simiyu region. Analyses and identification of active ingredients responsible with suppressing insect pests, diseases and weeds will provide an avenue for manufacturers to produce bio-pesticides commercially to increase accessibility by farmers through EOA markets. Currently, most farmers acquire materials

for use through projects or private companies (e.g., organic cotton ginneries) which is not sustainable. The current modalities of processing EOA acceptable pesticides are highly varied and the effectiveness depends on the precision and keenness demonstrated by farmers during preparation of the concoctions and the growing conditions of the pesticide plants from which raw materials are obtained. Farmers further explained that the preparation of these bio-pesticide is labor-intensive and time-consuming.

The management of insect pests, diseases and weeds are among the proposed areas of research work in this strategy. the research on bio-pesticides should also be strengthened to include methods for preparation, packaging and use in line with other policy and legal frameworks that govern bio-pesticides and preservation of ecosystems.

Mechanization in EOA

To better farming activities and process products in EOA farming, farmers were found to use various farm implements, tools, machines and technologies. Some of these technologies were used during on-farm cultivation are rippers and subsoilers that ensure minimum tillage of land as well as jab planter during planting. It seemed that the processes of preparing inputs for use in EOA was found to be cumbersome and thus innovating new techniques for handling these functions would be beneficial for farmers and make EOA more accessible to women and youth.

2.1.2 Markets of EOA products

Most of the EOA-practicing farmers depend on EOA production for the income generation. Thus, market availability and access is a vital incentive to EOA. It was observed that lack of this incentives discouraged farmers who were already involved in EOA production Principally, market is the most sought-after incentive as it involves livelihood support to producers. Most farmers that were found to be connected to EOA markets for their produce persevered in production even with some production challenges. Most of these farmers were organic producers and they were connected to markets for organic cotton, coffee, cocoa, vegetables and fruits.

There is a growing export and domestic organic market in the country due to increased knowledge and awareness of consumers, especially those of middle and upper socio-economic status, on food safety and nutritional factors of the food products they consume. Furthermore, during the field consultation, marketers of organic products revealed that there is a growing demand for EOA products mostly in cities and urban centres mostly by the working class who have become more conscious of food safety. Despite the growth of the organic market, this opportunity is still untapped to its fullest potential. There is a need to strengthen the linkages among stakeholders to the market that offers premium prices for EOA products, the necessary motivation for farmers' engagement in producing organic products. It must be noted though that qualification of produce to fit into the EOA markets requires confirmation of suitability based on set standards, the process commonly regarded as certification.

Generally, any business related to food production can be certified. Certification of organic products is regarded as the market instrument which allows producers to access certain markets, both domestic and export ones. Certification requires a clear understanding of the standards, compliance, documentation, planning, and fee payments. Each standard has its requirements including legal (like TBS), market, regulatory, environmental and workers safety. In Tanzania, there are two types of certifications namely; Participatory Guarantee Systems (PGS) and third-party-Internal Control Systems (ICS). Most of the EOA farmers are certified under PGS and cannot afford third-party (ICS)

The process of certification takes long time and it is expensive which poses challenge to the development of the lucrative organic market. Hence, the high cost of certification could eventually slow down access to specific markets as the associated costs are passed on to farmers and consumers triggering price increases to unaffordable levels. As such, the private certification companies are mostly focused on the commodities that have secured large export markets neglecting others which could have significantly contributed to farmers' returns.

The discussion with one private organization responsible for certification revealed that the company has no plan to register accreditation for certification of organic products on the claim that the business volume for organic products is too low to pay back the required investments which will involve training auditors/inspectors and retaining them, accreditation fees and facilities. The scenario suggests the need for the Tanzania government to venture into certification centrally or through agencies to ease the costs and allow access to organic markets by farmers who cannot afford the costly venture through the private certification companies.

In order to improve the certification system in Tanzania, human capacity development in terms of skills and knowledge of conducting inspection and testing of EOA products is very important. Training institutions like universities should design Tailor-made short courses to groom expertise on this cadre and alleviate the mismatch between the market demand and certification requirement for the markets. Furthermore, local certification companies need to be empowered to match with the ever-increasing demand for EOA products. This may include review and benchmarking of EAOPS with international standards to avoid the necessity for double certification.

Weak links between points of supply and demand were also established. The point of production of most organic products are based in rural areas contrary to the lucrative, markets which are concentrated in urban centres. While EAO farmers in rural areas were complaining of limited market access and lack of recognition of the nutritional values associated with their produce at their respective local markets, the EOA markets in cities were complaining of inadequate supplies of the produce. Thus, the need to establish market linkages (networking) among producers and consumers requires deliberate efforts including the IT-based approach.

The marketer urged that there is huge potential for EOA products in the local market but there is no constant supply of EOA products to the market. On the other hand, Most EOA farmers claim to have limited marketing information for EAO products signifying the need to have specific EOA products.

2.1.3 Processing and value addition

The consultation team established that most EOA products are sold fresh due to limited avenues for processing except for spices which are the most processed to meet demands of certain markets. Another product found to be processed was coffee in Kagera at Ibosa village. Through consultation, it was deduced that limited knowledge of processing and value addition to preserving the nutritional qualities of EOA products was among the major challenges in accessing distant markets. Lack of access to processing machinery and knowledge for value addition aggravated the challenges hindering access to EOA (both inputs and products) markets by most products produced by small-holder farmers. Logistical issues like the negotiation for assured markets and product prices, transportation of produce, packaging, branding, marketing and storage, business licences and taxes all remain unresolved hurdles to EOA that requires dedicated undertakings.

2.1.4 Research, Training and technology transfer

An increase in farm productivity relies among other things, upon farmers' adoption of innovations resulting from research across the agriculture sector value chains. Field consultation revealed that despite numerous research and training conducted by stakeholders involved in ecological organic agriculture to farmers aimed at promoting agroecological practices, research gaps and limited skills are amongst key limitations hindering the development of EOA. Farmers testified that controlling new pests and diseases through ecological organic agriculture control methods is very challenging due to the limited effectiveness and inefficacy of the methods. This signifies the need to have more research on ecological organic farming solutions including ready-made formulation which has been tested and proved to work against the pests.

Furthermore, some pests are suspected to develop resistance against most of ecological organic agriculture control methods. Despite having diverse initiatives in knowledge and skills dissemination, farmers still face limited hand on techniques to make practical use of knowledge acquired through training on EOA practices.

Investing in research will promote the adoption of validated EOA practices, increase the effectiveness of organic inputs including manure and pesticides and increase the productivity of local seeds. Research geared to resolving challenges associated with production, processing and marketing along the EOA product value chain is scanty and funding is inadequate. During the field consultation, several challenges were identified including a lack of knowledge on EOA market requirements and processes, pests and diseases management and climate change all of which requires practical solutions through research. Dedicated research to establish local solutions that are relevant to

most of these local problems to allow easy access to local and international EOA product markets is paramount.

The field consultation revealed that most of the extension officers have limited knowledge and skills on EOA which signifies the need to have regular on the job training for extension workers. A lot of efforts have been invested to this effect by the Ministry of Agriculture in collaboration with SAT where EOA issues have been mainstreamed in agriculture training curricula for mid-college levels. More should be done on integrating EOA into the primary and secondary educational curricula of Tanzania. Furthermore, the establishment of ecological organic clinics and laboratories and training to manage them is essential. The stakeholders urged that utilizing village meetings and other local community forums assemblies to promote and disseminate the EOA knowledge and information to the communities is of paramount importance.

2.1.5 Coordination

Throughout the field consultation, the team was able to meet and witness ecological organic agriculture initiatives in different parts of Tanzania mainland. Stakeholders both public and private; producers, processors and traders; policymakers and researchers; politicians and practitioners; were found in all Agro-Ecological Zones of the country. They are involved in almost all crops, livestock and fisheries and operate at all stages along the whole value chain of certain agro-products.

The team found that initiatives made by stakeholders were sometimes replicated in the same areas. Other areas were also found to have challenges in EOA farm operation or production which had already solutions in other AEZ. Communication among stakeholders was found to be less than expected. It was also learnt that some of the challenges required different governing levels to come up with solutions.

The EOA, require mechanism of coordination's like conventional agriculture. Furthermore, EOA should have its recognized and well-established mechanisms for research and development, training and technology transfer, inputs systems, markets and value addition and planning and budgeting. To better serve ecological organic agriculture, the country should have a coordination system that will organize and provide directives, provide platforms for mapping stakeholders and sharing information, highlight priorities that should be researched and trained and connect EOA producers with respective markets. Coordination will also make use of experience from organizations like TOAM and SAT who have been involved in organizing stakeholders both farmers and private practitioners.

It is therefore important to have a coordination arrangement that will originate from the Ministry responsible for agriculture. This coordination arrangement will oversee the implementation of this strategy, provide guidance and ensure targets set forth are met.

2.2 Cross-cutting issues

These are pertinent issues established as challenges especially to smallholder farmers during consultative visits which cannot be resolved under one system of command but require multiple lines of governance. Most farmers fall short of important support to carry out their routine activities to enhance EOA practices. Lack of knowledge and limited resources to promote EOA production through Marketing Information System (MIS), clear financing mechanisms, capacity building, instruments for communication, awareness and education, women and youth empowerment and mechanisms for gender mainstreaming was obvious.

2.2.1 Marketing Information System and Entrepreneurship

Scanty information on markets including access and requirements, certification process and guidelines and regulations for EOA products curtails not only the realization of benefit from the sector but also the investment by potential entrepreneurs. Limited knowledge on marketing skills and access to marketing information affects certainty of engagement in EOA. Interviews with stakeholders in EOA sector revealed that poor linkage to markets for organic produces and complex certification issues continue to challenge farmers' confidence and zeal to produce and access reliable organic markets. As such, the organic products are sold at the same price as any conventional product in most of local markets. These are characterized by unreliable supply of products and consumers unavailability, price instability and ultimate fluctuation EOA product markets.

Marketing strategies for EOA products such as contractual farming, agricultural insurance, and EOA product certification are not easily accessible to stimulate investments in EOA and allow delineation between organic and conventional products for varied pricing. On the other hand, imparting farmers with knowledge on Farming as a Business (FAB) could help to minimize the marketing challenges including setting farm gate price in consideration of commodity health safety measures.

Available information through survey indicated that there is a huge potential in the local market for organic products but the products are not readily available in the market but at the same time, the few organic products are not fetching the attention of the market. This is a paradox that needs to be addressed for example who is producing what and who needs what? The use of media (social and mass) and Information and Communication Technology (ICT) applications could be helpful. Consequently, creation of local entrepreneurs' platforms especially among youth who may engage in supplying specialized products and services such as preparation and selling of organic manure and bio pesticides could promote EOA and product thereof. Imparting farmers with the entrepreneurial skills to support them to farm as a business and understand market requirements before start producing and other support business skills.

Having marketing systems in place could allow fair competition amongst buyers which deter market monopoly by a single or few buyers. Lack of locally available markets for organic produce that would recognize and absorb the small quantities produced

organically is a clear manifestation of the unavailability of a tool that could provide framework to unlock market potentials. These challenges and identified gaps could be sorted out with specific strategic interventions designed within this strategy. Businesses of AOA products need to be promoted through increased production, awareness to consumers, diversity of products and uncompromised access to markets.

2.2.2 EOA Financing

Limited financing of the EOA activities was established to be among the top challenges affecting investment in the sector. Farmers in the visited regions were found to have been affected by inadequate financing. As a result, most EOA activities are at small scale supported through farmers' own funding, some donor organizations, NGOs and a few companies mostly supported by Development partners. Securing loans from financial institutions is far from being possible due to the unstructured nature of EOA subsector and absence of policies instruments to foster its recognition and trust by lending institutions. This has not only affected production and productivity to scale but grossly affected the farmers' ability to mitigate the adverse impacts of climate change on their EOA business. Obviously, the climate change has posed unbearable shocks to crops and animals including excessively high temperature and prolonged drought spells that pushes farmers to require funds for boreholes and dams construction, purchase of equipment such as water pumps and construction of wells for clean water, projects that requires adequate funding.

Recent trend has shown that funding mitigation to climate change including response and redress actions in Tanzania has grown notably and will continue growing despite being less focused on EOA projects. Stakeholders in EOA believe that lack of national policies and strategies to promote EOA has contributed to it being overlooked or left out during implementation of climate change mitigation projects including access to funds from international bodies under bilateral and multilateral agreements on climate mitigation. Accessing climate finance particularly from international financing mechanisms is rather cumbersome and takes long which is exacerbated by inadequate capacity among stakeholders to prepare bankable proposals (NCCRS, 2021).

Nevertheless, EOA financing for Climate change of local initiatives was found in a few districts during the survey and were limited to project-based approach and ad-hoc calls for application. Notably, there is inadequate framework and mechanisms to finance climate change which generally suggests unreliability and lack of sustainability of such financing.

Therefore, it is of paramount importance to devise reliable funding mechanisms and processes that will sustain EOA activities and enhance the adaptation and mitigation of bad effect of climate change. Budgetary allocations by the GOT and collaborative funding with development partners alongside strengthening transparency and responsiveness to hazardous calamities to sustain EOA activities will help strengthen and stabilize the sectoral growth.

2.2.3 Capacity building

In the course of stakeholder consultation, the team analysed their capacity on EOA. This included knowledge on the support mechanisms, inputs, benefits, markets, practices and technologies. The general indication is that knowledge on EOA and its benefits is increasing among stakeholders but at a slow pace. Decision makers, for example, were found to be aware of the impacts of climate change and the need to rescue the situation but not informed enough that adoption of EOA would be among the ways to go. Capacity of stakeholders to apply different EOA technologies and practices is minimal. Stakeholders declared that the most important factor hindering capacity building was finance. Capacity building to farmers, decision makers, politicians and policy makers is essential to ensure sustainability of EOA farming and increase commitments in its advancement.

2.2.4 Communication, Education and Awareness

The importance of EOA is underlined by its potential contribution to national food security, sustainable food systems, maintenance of ecosystems services, foreign exchange earnings, gross domestic product and employment, in both formal and informal sectors. But due to inadequate information to support these facts as highlighted by stakeholders, adoption of EOA has been rather slow in most parts of the country. Farm Radio International declared that limited availability of EOA information and knowledge on the needed contents and limited feedback mechanism are the main challenges facing them for knowledge sharing through digital platform such as jingles and *uliza* (ask) platform and radios. In addition to that finding eligible personnel to provide EOA information for content creation is also challenging.

However, with the growing interest among the public and potential investors on ecological organic agriculture, there is need to provide more information on EOA such as information on agro-ecological methods, best practices, success stories, EOA standards and certification, how to find credible inspectors and market dynamics. As it is now, such wide spectrum of information is not available in consolidated form. Hence there is a need to collect and consolidate EOA information.

The validated information on EOA practices and other related services to be disseminated by using different communication platforms such as media, trade fairs, exhibitions, conferences and publications shall be systematically used to reach different segments in the public, while case studies, exchange visits and workshops to reach specific audiences.

2.2.5 Women and Youth Empowerment

Economic growth is determined by the productivity of its own determinants such as capital and labour. This strategy has posed a necessity to build capacities to women and youth through deliberate inclusive programs that are geared to ensure that women and youth

do not only engage in ecological organic agriculture as a new line of opportunities but remain champions of change for its positive development.

However, the agricultural activities particularly EOA are correlated with informal employment and employ several women who hold fewer land property rights than male farmers. Many people visited reported that a better access to land tenure among youth and women could enhance access to credit in agribusiness particularly EOA. Therefore, there is need to empower youth and woman to fully engage in EOA in order to enhance their productivity and the overall competitiveness of this niche. The utilization of innovative solutions offered by digital agriculture could also be an option to further attract more youth and women in EOA.

2.2.6 Gender mainstreaming

The Government has been making efforts in mainstreaming of gender issues into national policies, plans and strategies. The promotion of gender equality in the country is guided mainly by the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW), The AU Charter on Human and Peoples Rights, which is reinforced by the Protocol of the African Charter on Human and Peoples' Rights on the Rights of Women in Africa, the AU Gender and Climate Change Policy (2009); and the Southern African Development Community (SADC) Declaration on Gender and Development (1998). Tanzania has also signed other related international agreements such as the Declaration of Human Rights (1948), the Convention for the Rights of Children (1989) and the ILO Convention for the Elimination for the Worst Forms of Child Labour (1999).

Tanzania's National Vision 2025 as a long-term policy contemplates gender equity/equality as underlying principles: "In particular by the year 2025, racial and gender imbalances will have been redressed such that economic activities will not be identified by gender or race. All social relations and processes that manifest and breed inequality in all aspects of the society (i.e., politics, employment, education, and culture) will have been reformed".

The Government has put in place National Ecological Organic Strategy for mainstreaming gender in ecological organic agriculture with the objectives for ensuring gender consideration with the overall objective of ensuring that gender considerations are mainstreamed into national policies, programs and strategies related to organic agriculture. The strategy will ensure both women and men, including people with disabilities, have access to, participate in, contribute to, and hence benefit from organic agriculture initiatives. The Strategy provides a framework for gender considerations into four priority sectors that include agriculture, livestock, fisheries and water.

Despite significant progress from the above efforts by the Government and other stakeholders, there remain needs for increased mainstreaming of gender at all levels of Organic farming, interventions, including in policy, programs, strategies and activities using appropriate gender lens and mainstreaming instruments. Implementation of

National Ecological organic agriculture Strategy (NEOAS) for mainstreaming gender in EOA strengthened the engagement of various actors in across sectors and at all levels.

2.2.7 Public-Private Partnerships

Public-Private Partnerships (PPP) involves collaboration between the Government or Government agencies and private entities in finance, physical, and operations undertakings. Agriculture in Tanzania owes its success to PPP in various developmental projects operations and implementation, EOA included. During the field consultation, the team appreciated various interventions that were implemented through partnerships. An example of these was the use of government extensions by organic cotton ginneries, the training of teachers from agriculture training institutes on EOA by NGOs and many others. These initiatives witnessed during the consultation provided the basis that PPP is essential for advancement of EOA in the country. PPP accelerate adoption as both partners contribute toward the same intended goal and implementation of this strategy will not be different.

2.3 SWOC Analysis (Strengths, Weaknesses, Opportunities and Challenges)

Building on the cases studied during consultations with stakeholders, a SWOC analysis was done to determine the Strengths, Weaknesses, Opportunities and Challenges associated with EOA in Tanzania. Key issues pertaining to these in reference to EOA development are detailed below:

Strength

- i. Compatibility of EOA with the existing indigenous farming knowledge and practices;
- ii. Existence of various policies and policy instruments that support EOA implementation in Tanzania;
- iii. Political will and Government commitment to support EOA;
- iv. Availability and easy accessibility of arable land and rangeland;
- v. Growing interest by developed and developing nations in EOA and related activities;
- vi. Existence of research institutions that are willing and capable of collaborating in EOA activities;
- vii. Existence of umbrella organization facilitating EOA;
- viii. Availability of improved local crop varieties and breeds of livestock;
- ix. Existence of diversified production systems which integrate crops and livestock, a base for a circular production system;
- x. Growing demand for EOA products;
- xi. Existence of community seeds-based systems for conserving traditional varieties/species;
- xii. Dependency on naturally existing resources; and
- xiii. Presence of EOA modules incorporated in teaching curricula at mid-colleges (NTA level 4 to 6) and tertiary institutions (NTA level 7 to 10).

Weakness

- i. Weak coordination among stakeholders;
- ii. Limited awareness of the benefits of EOA;
- iii. Inadequate and irregular supply of EOA products to the market;
- iv. Limited technical expertise on EOA;
- v. Low investment in EOA research and extension services;
- vi. Inadequate of market incentives on EOA products due to lack of clear separation between EOA and conventional products;
- vii. Lack of incentives (farm, system, landscape) for sustainable land management;
- viii. Drudgery and time-consuming preparations of EOA inputs;
- ix. Lack of National standards governing EOA operation across the value chains;
- x. Lack of local certification bodies or agencies;
- xi. Lack of a mechanism for generating farm data by farmers, particularly the uncertified farmers, thus making it difficult to determine the state of EOA products in the country.
- xii. Limited promotion of local markets for EOA products

Opportunities

- i. Potential growth of the local and export markets;
- ii. Support from Government, development agencies and NGOs to promote ecological organic agriculture in Tanzania;
- iii. Growing global concern for the environment which presents EOA with a huge opportunity;
- iv. Health food conscious among the community; and
- v. Promotion of sustainable food systems.

Challenges

- i. Emergence of new pests and diseases;
- ii. High costs of certification;
- iii. Climate change impacts (drought, rainfall variability, floods);

2.4 ANALYSIS OF KEY STAKEHOLDERS

This section presents an analysis of stakeholders who have significant interest and influence on EOA by virtual of their position, capability, knowledge, scope of work or function, and the motivation, interests and patterns of behavior that work in favor or against EOA. Identification of the stakeholders should be based on legitimacy and functions of the stakeholder in relation to EOA. The analysis is presented according to six broader categories of stakeholders: Public institution, private institutions, Civil societies, Development Partners, Farmers and their organizations, and the Media.

The analysis considered key entities comprising each of the identified broader categories of stakeholders. The key entities covered in the analysis of the Public Institutions included Responsible Ministries, Regional and local government authorities, Research and academic institutions, government agencies and Regulatory Bodies. The entities covered

in the analysis of Private Institutions included buyers, exporters and processors of agricultural commodities, Input producers and suppliers, Manufactures and suppliers of agricultural equipment. The entities analyzed within the Civil Society included NGOs and Associations, Development Partners. The analysis of farmers and their organizations covered smallholder farmers, medium and large-scale farmers, and farmers' cooperatives.

Based on the analysis the section presents a summary of the roles and responsibilities of the stakeholders in relation to EOA. The summary also presents the interests and expectations of the stakeholders from the NEOAS as well as the specific roles the stakeholders are expected to play in delivering the strategy.

Table 1: Stakeholders analysis matrix

Stakeholders	Roles and Key responsibilities in EOA
Ministries responsible for Agriculture	The Central Government through the Ministries responsible for Agriculture: The Ministry of Agriculture; Livestock and Fisheries; Lands, Housing and Human Settlements Development; Water; Investment, Industries and Trade; Vice-Presidents Office – Environment; Prime Ministers’ Office - Regional Administration and Local Government; and Natural Resources and Tourism has been playing a major role in supporting EOA initiatives. Their emphasis is on increasing production and productivity for food security, nutrition and income generation. Based on the significant role of these institutions, majority of stakeholders proposed the ministries to put emphasis on creating enabling environment through formulation of reliable policy framework and consistently enact, review and undertake enforcement in order to promote investment in EOA; register EOA stakeholders to increase traceability and coordination; incentivize EOA products to trigger farmers’ adoption; facilitate innovative institutional arrangements amongst EOA stakeholders; building evidence through M&E in facilitation and enabling environment for EOA; observe and establish national quality standards and aligning them with the international standards; allocate funds into national budgets for EOA initiatives; and identify EOA lands.
President’s Office - Regional Administration	Regional Secretariats and Local Government Authorities are the administrative bodies embedded to farming communities at regional and district levels. They have been supporting EOA initiatives in their areas of reach by attracting organization to work with farmers

<p>and Local Government;</p>	<p>in order to improve production and productivity. In most cases, they are willing to continue supporting the EOA movements aimed on increasing production and productivity. For the purpose of enhancing EOA, stakeholders proposed Regional and Local authorities to incorporate EOA into their development plans; facilitate acquisition of agricultural land in collaboration with village councils and other development partners; provide necessary support services including roads, market centers, extension services and business support to agro-based entrepreneurs; develop and enact bylaws on EOA in consultation with other stakeholders; establish effective land use plans; support capacity building for farmer organizations; promote rural credit support framework and financial services; sensitize communities to build understanding on EOA; and ensuring adherence to rule of law for and by private sector working within the respective region or district.</p>
<p>Research institutions;</p>	<p>There are several research and academic institutions whose roles in relation to EOA are in areas of technology and skill development. Their emphasis has been focusing on mitigation measures against impact of climate change and resilience. Such institutions include TARI, TALIRI, TAFIRI, TAFORI, TPHPA. Based on stakeholders' comments, research institutions should engage on further research to develop appropriate EOA technologies; register and conserve indigenous technologies; and provide information and knowledge to the audience on EOA.</p>
<p>Universities and colleges</p>	<p>A number of public and private universities and colleges are operational in the country. Some of them have specific teaching programs which aim at developing experts in EOA. They expect this strategy will develop a coordination framework to mainstream efforts of these institutions in promotion agenda of EOA</p>
<p>Regulatory bodies</p>	<p>There are several institutions whose roles in relation to EOA are in the areas of product quality assurance and marketing. This category includes TFRA, TBS, TPHPA, TOSCI, and Crop boards. Some of them are commodity specific while others are responsible with agro-inputs and agricultural products. They have been focusing on ensuring adherence to commodity quality standards. In recognition of the important roles of such institutions, stakeholders proposed the regulatory bodies to continue or initiate registration of EOA related issues; enhance establishment of protocols governing indigenous varieties/breeds, organic inputs and certification; and liaise for strengthening quality assurance centers for EOA inputs.</p>

Government agencies	There a number of Government agencies who are engaged in manufacturing, multiplication and supply of agricultural machinery and inputs. These agencies have great potential for developing and supplying technologies for EOA. Such agencies include ASA, VETA, SIDO and CAMARTEC. According to stakeholders' opinions, these agencies need to extend their reach by facilitating availability of EOA inputs and related machinery; provide trainings on proper use of inputs & machinery; and support development of cost effective EOA technologies.
Development partners	A large number of development partners support development programs. There is growing interest among development partners to promote EOA. They are expecting this strategy to provide operational arrangements which define windows for development partners to support EOA in the country.
The Media	The media network is very well established in Tanzania. A large number of media is operating in the country including TV, Radio, News Papers, and online media. There are community radios and circular TV visibility in almost every district council. Moreover mobile phone coverage is almost available everywhere. These media instruments have huge potential of audience that this strategy can use for promoting EOA. Some of the media are currently focusing on promoting farming practices and dissemination of production and marketing information. They expect from this strategy a framework through which they can operate to provide relevant, accurate and reliable information about EOA.
NGOs	NGOs have been acting as pioneers of the EOA initiative in the country to complement government efforts to develop the Agriculture Sector. They have been supporting various projects and programs with an intention of enhancing food security and income through adoption of practices which improve productive resources for sustainable production. With respect to the roles of NGOs, stakeholders pointed out the organizations to continue supporting the government in issues ranging from institutional capacity building to other kinds of support including promotion of EOA technology development and use; advocating for policy reform; community awareness, mobilization and marketing; provision of financial and extension services; and enhancing availability of EOA inputs/machinery. NGOs have influenced remarkable development of EOA including adoption of EOA farming practices, preparation of EOA inputs, market access linkages, advocacy and awareness campaigns on EOA products and best practices in EOA have been

	<p>established. They expect from this strategy to develop program frameworks and initiatives which scale up best practices for wider impact. They also expect the strategy to develop coordination mechanism among EOA stakeholder for sharing and exchanging issues of EOA.</p>
<p>Buyers and exporters of EOA products</p>	<p>A number of companies are operating in the country buying and exporting organic products especially cotton, coffee, spices. Cocoa, fruits especially avocados, and pyrethrum. Some of the companies offer premium prices for organic inputs. They expect from this strategy to establish a legal and trade framework and guideline to enable the companies operate effectively through contract farming with farmers to guarantee reliable supply of quality organic products from farmers. They also expect the strategy to establish a framework of business operation which distinguish between conventional and organic products.</p>
<p>Processors of organic products and organic inputs.</p>	<p>Existing processing companies for EOA products are operating mostly on spices in Morogoro, Pwani, Ruvuma and Tanga. A new initiative for processing cassava flour is being established in Karagwe. The processing companies' expectation from this strategy is to promote farmers incentives to produce the raw organic products. They also expect the strategy to facilitate access to certification of organic products.</p> <p>A few companies and individuals are engaged in developing organic inputs technologies in processing. Their expectations from the NEOAS is to foster recognition of their products by standardization and regulatory authorities, and establishment of legal framework for processing and trading EOA inputs.</p>
<p>Supermarkets dealers</p>	<p>A few super markets selling organic products operate in Tanzania particularly in large cities. Some of the visited supermarkets during field consultation had in their stocks organic produce particularly fresh products. According to the supermarket managers, the local market for organic products is still dependent on elite and diplomatic societies. Their expectations from the NEOAS are to boost production and quality control of organic products to increase supply from producers. Also they expect the strategy to promote awareness of mainstream consumers on the benefits of organic products. They increase in consumer demands and supply of organic products will boost the economies of scale of organic product business which will influence decrease in the prices of</p>

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	organic products to consumers and be affordable to a wider section of the local population.
Input producers and suppliers. Agro Dealers, agents and traders	There are agro input dealers at all levels in the country from national, region, district and village levels. Most of them are trading conventional inputs. The expectations of agro dealers from the NEOAS strategy are to boost EOA farming production and promotion of EOA inputs. If these two ends of the supply chain of EOA inputs are developed it will be a business opportunity which the agro dealers will promptly capture. This will also require established legal and trade regulations for EOA inputs.
Certification Agencies	There are local (resident in the country) and international agencies entrusted and accredited for certification of crop products for specialized markets. Some agencies operating in Tanzania such as GreenCert are not yet accredited for organic products. Certification of organic products from Tanzania is done by companies from outside the country particularly Kenya and South Africa. Dependency on foreign (nonresident) companies for crop certification is claimed to be contributing to unreliable and expensive certification of organic products. The expectation of the resident certification agencies is that this strategy will promote EOA to boost the business volume of organic products to be profitable for the resident certification agencies to invest in the building their capacities to be accredited for certification of organic products.
Farmers' cooperatives are Mandated to aggregate farmers efforts for production, marketing and accessing services.	Cooperatives are Trusted membership bodies bringing together a large number of farmers. The cooperatives have infrastructures, operating systems, management and operational experiences and capacity to support members to access production and marketing services. They are responsible to facilitate implementation of national policies and regulations. They facilitate farmers to access inputs, extension, financial credit and markets. Therefore, they are key instruments for promoting EOA with greater and wider impacts. Their expectations from the NEOAS is establishment of guidelines, rules and legal framework for enabling them supporting both EOA and conventional farming practices without comprising any of the two practices.
The farmers are distinguished in two categories small holder and	The analysis of farmers is presented in two categories of farmers as different types of stakeholders in the NEOAS. This is because

<p>Medium/large farmers</p>	<p>their roles and expectation in the strategy are not necessarily the same.</p>
<p>Smallholder: In This analysis the definition of small holders, as adopted from FAO, 2015 definitions³ are those farmers whose land holding is smaller than 3 Ha. They depend on family labor and spend little or no financial investment in the farming operations. Farming is their livelihoods strategy and therefore, land is part of their life.</p>	<p>Smallholder farmers dominate the agricultural sector in Tanzania, cultivating 5.1million hectares annually, of which 85% is food crops. They contribute to over 75% of total agricultural outputs in Tanzania, producing mainly for home consumption, and using traditional technologies (Jamie, et al 2016)⁴. These are the primary role players for implementation of EOA practices. They are primary beneficiaries of EOA technology transfer and services. They are producers of EOA products. They are skilled and experienced in traditional crop production systems which are a building block for EOA technologies.</p> <p>Field consultation confirmed that smallholder farmers are motivated to engage in EOA because: EOA practices does not necessarily require financial capital, EOA practices build on traditional skills and farming systems; EOA practices is a farming system which increase productivity of the traditional practices and EOA farming is a food production system enabling them to have secure and reliable supply of a variety of nutritional foods and income; With EOA farming system some small holder farmers have been able to produce sufficient for their family and surplus for the market; As producers of staple foods, small holder farmers prefer to consume EOA products because are tastier, nutritious and safer.</p>
<p>AND</p>	<p>Expectations of small holder farmers from this strategy include: increasing access to effective and affordable EOA inputs and promotion of access to affordable and effective inputs for controlling diseases and pests; increasing access to appropriate technologies for providing water for production and access to capital/support for investing for developing water resources/systems for production; and promoting market access for EOA products.</p>

³<https://www.fao.org/3/i5251e/i5251e.pdf>

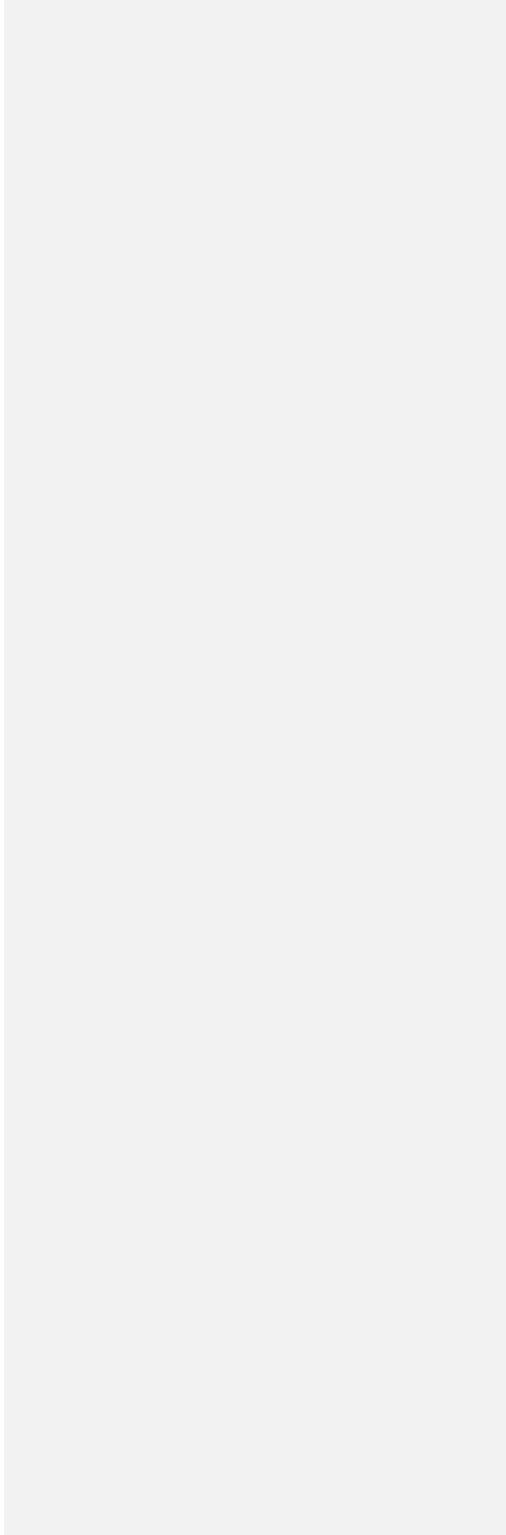
⁴<https://www.cgiar.org/sites/default/files/Working-Paper-Smallholder-Survey-Tanzania-May-2016.pdf>

<p>Medium Farmers:</p> <p>Their farm land holding is larger than 3ha. They use substantial financial investment to hire labor, purchase inputs and farm equipment.</p> <p>Farming and livestock keeping is one of the main livelihoods' strategies having more than one sources of incomes other than on farm.</p>	<p>Medium farmers have knowledge, skills, and experience in both traditional and conventional farming practices. Their farming system is mainly mono cropping on the relatively larger fields and diverse crops on relatively smaller fields particularly those closer to households. They invest financial resources substantially in crop and livestock production. They are targets beneficiaries/customers of financial institutions (World bank Group, 2016)⁵ who provide financial services in agriculture. They are reliable suppliers of farm products to buyers and processors because they produce large amounts of products and some aggregate produces from others for marketing; They are important customers of inputs and farming equipment. They are recipients of extension services and are active participants as pilot farmers for development and transfer of farm technologies.</p> <p>The motivation of medium farmers in EOA practices is mainly for producing commercial products that have promising markets. Some of the medium farmers consulted on the field are engaged in EOA practices for food security focusing on safe and nutritious products, and are dedicated custodians for rejuvenating vegetation of the community landscape and water sources. The medium farmers also prefer to consume EOA products because are tastier, nutritious and safer than conventional products. Explicitly they would produce food crops for their own consumption using EOA practice wherever it is possible and produce conventional products for the market only.</p> <p>Expectations of the medium and large from this strategy include: Increasing reliable availability of quality and effective EOA inputs in the market as well as availability of skilled labor to hire for preparing EOA inputs at farm gate; Increasing access to markets for EOA products particularly for export through reliable and affordable Certification services of Organic products.</p>
<p>Consumers</p>	<p>Foods that are cultivated without the application of chemical pesticides can be called organic foods. Organic foods are perceived to be healthy and environmentally safe, as chemical pesticides and fertilizers which could lead into the accumulation of residues are not used in their production. Some of the consumers consulted shared</p>

⁵https://www.findevgateway.org/sites/default/files/publications/files/bankers_guide_to_avcf_0.pdf, Staff of the World Bank Group,

	<p>their concerns over increasing incidences of non-communicable diseases which are a result of eating poor eating habits.</p> <p>Consumers expectation from this strategy include: Increasing access to diverse organic food which is affordable and reliable.</p>
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THIRD DRAFT



CHAPTER THREE

STRATEGIC PLAN

3.0 Overview

This chapter highlights the future position of EOA in the country, describing the Vision, Mission, Priority Areas, Core Values, overall goal of the strategy, Strategic Objectives and Strategic Interventions.

3.1 Vision

To be a leading ecological organic agriculture subsector for enhanced conservation of the environment, human health, food and nutrition security and national economic growth.

3.2 Mission

To advocate for and promote ecological organic agriculture interventions through networking and partnership in awareness raising, research, training, extension, production and market development of the EOA subsector for increased access to domestic and international markets.

3.3 Core Values

The NEOAS values are anchored around of sustainable ecological organic agricultural practices as follows:

- i. Enhance biodiversity in view of nature and sustainable development
- ii. Promote farming cultures that incorporate indigenous knowledge
- iii. Promote environmental conservation
- iv. Embrace fairness and justice to ecosystem
- v. Promote safe, nutritious, and healthy food
- vi. Protect nature and water sources

- vii. Enhance and protect indigenous and improved EOA seeds/breeds

3.4 Priority Areas

- i. EOA Inputs and other generative resources;
- ii. Marketing of EOA products;
- iii. Processing and value addition;
- iv. Research and development;
- v. Coordination;
- vi. Training and technology transfers;
- vii. Networking and partnership;
- viii. Cross-cutting issues;
 - a. Marketing Information System and Entrepreneurship;
 - b. EOA financing;
 - c. Capacity building;
 - d. Communication, education and awareness;
 - e. Women and youth empowerment;
 - f. Public Private Partnerships;
 - g. Technology development and transfer;
 - h. Gender mainstreaming.

3.5 Overall goal of the Strategy

Mainstreaming ecological organic agriculture into existing national framework for agricultural sector development in order to enhance sustainable environmental conservation for improved health, income and food security by 2030

3.6 Strategic Objectives

In a view of the priority areas identified, the following are the strategic objectives, strategic interventions, targets and key performance indicators to be reached by 2030:

- i. Enhance capacity of institutions for research, training and extension systems in developing and disseminating appropriate EOA technologies and practices.

- ii. Promote availability and accessibility of EOA inputs and appropriate farm machineries (tools, equipment and implements)
- iii. Strengthen Information and Communication Technology (ICT) system to access and disseminate appropriate EOA information.
- iv. Strengthen networking and institutional coordination framework
- v. Ensure compliance of standards and certification of EOA products at affordable cost
- vi. Facilitate development of EOA value chains
- vii. Strengthen conservation of traditional environmentally friendly practices.
- viii. Mainstream cross-cutting issues in EOA sub-sector
- ix. Facilitate acquisition and accessibility of financial resources for EOA investment
- x. Facilitate development and use of irrigation infrastructure in EOA production systems
- xi. Enhance availability, accessibility and utilization of land for EOA
- xii. Increase the business and trade volumes of EOA products in the national, regional and international markets.

3.7 Description of the Strategic Objectives

SO1: Enhance capacity of institutions for research, training and extension systems in developing and disseminating appropriate EOA technologies and practices.

Rationale

Research, training institutions and extension services, in combination are the drivers for farmers to acquire skills and knowledge through adoption of new technologies and enhancing indigenous knowledge that works better to improve social well-being. Research and Development (R&D) is important for agribusiness because it provides powerful knowledge and insights to farmers, leading to improvements of an existing agricultural processes that may increase efficiency and reduce costs. It also allows agribusiness to develop new products and services that will survive and thrive in competitive markets.

However, from the training institutes which produces extensionists to train farmers, It is essential for the strategy to set modalities for resourcing, capacity building and equipping training institutes on EOA practices and technologies.

Consequently, efficient extension systems help farmers to incorporate the latest scientific advances and developed technologies into their daily operations. The results of

enhancing their operations with these technologies increase efficiency and can also lead to reduced food contamination and maintain ecosystem.

In agriculture, scientists actively seek to discover procedures that will increase livestock and crop yields, improve farmland productivity, reduce losses due to pest and diseases, develop more efficient equipment, and increase overall food quality. While agricultural extension service offers technical advice to farmers and supply them with the necessary inputs and services to support their agricultural production. It provides information and new ideas to farmers developed by agricultural research stations. Extension services plays a crucial role in boosting agricultural productivity for food security, improving rural livelihoods, and pro-poor economic growth.

Despite of existing research, training and extension services institutions, knowledge, and practices for EOA is still limited among farmers and other stakeholders while increasing agricultural productivity remains a central concern of developing countries like Tanzania. A transformed agricultural research system helps to achieve sustainable food and income security for all agricultural producers and consumers, particularly for resource-poor households, whether they are in rural or urban areas.

Furthermore, EOA research and extension services have not been equipped fully in terms of resources particularly human and finance. In addition, there is a weak link between research and extension systems, hence low prioritization of EOA issues in research and extension service provision. With emerging challenges results from climate change such as new pest and diseases which do not respond to the current treatment, research sector will help to come up with solution to reduce impact on production.

Strategic Intervention:

- i. Develop multi-disciplinary research, training and extension approaches and initiatives in support of EOA
- ii. EOA different research initiatives conducted by various institutions is validated and harmonized
- iii. More EOA information and knowledge needed by value chain actors through demand-driven, multi-disciplinary, gender sensitive, and participatory research are disseminated.
- iv. Need based EOA training to stakeholders to improve production and enhance markets is conducted.
- v. Extension services on EOA to farmers strengthened
- vi. Research institutions capacitated to carry out EOA researches
- vii. EOA demonstration plots/farms developed and implemented.

SO2: Promote availability and accessibility of EOA inputs and appropriate farm machineries (tools, equipment and implements)

Rationale

Availability of EOA inputs at the right quantity, quality, place and timely is fundamental for EOA development. Currently, there is a limited promotion, supply and research on EOA inputs like machinery, pesticides, fertilizers and seeds which can be used. Few farmers are using organic fertilizers and other inputs in crop production due to low purchasing power, low supply, distance from the source and low motivation due to unstable markets of EOA products. Furthermore, crop production in Tanzania is not fully mechanized. Farmers are using simple farming tools such as hand hoe and few are using machinery. Poor land preparation and crop management affect the performance of crop and yield due to lower use of agricultural machinery led to farmers having small plots of land and increased costs of production per unit area.

In that regard, the strategy will provide enabling environment for crop mechanization along the value chain, increase availability and accessibility of farm machinery and implements, pesticides, fertilizers and seeds. The strategy will also initiate support to the existing small manufacturers and investors to manufacture a wide range of good quality tools and implements, and form agriculturally based service centres that absorb labour displaced by mechanizing farm operations and reduce the rural to urban migration.

Therefore, the strategy will help to kick start vibrant market and supply systems to increase the availability and accessibility of farm machinery and agricultural inputs. This strategy aim to inspire the private sector to invest in innovating and producing sufficient farm machinery and organic inputs.

Strategic interventions

- i. Production, supply and use of EOA inputs and machinery promoted.
- ii. EOA breed/fingerlings/seed systems strengthened
- iii. Institution capacities (public and private) engaging in EOA inputs and machinery strengthened.
- iv. Appropriate use of EOA inputs advocated and promoted.
- v. Collection and conservation of germplasm promoted.
- vi. Use of appropriate agricultural mechanization technologies in EOA production promoted.

S03: Strengthening Information and Communication Technologies (ICT) system for dissemination of appropriate EOA information.

Rationale

Information is an essential component for effective operation and decision making at all levels in any sector. It plays role in conveying different kinds of facts and messages needed for use in important matters. However, development of the information and communication technologies (ICT) has greatly taken a significant role in all modern aspects including the agriculture sector worldwide. ICT have changed the

way people interact with each other while conducting businesses and how they manage different affairs.

The application of ICT in agriculture, commonly termed as e-agriculture is seen as an emerging field focusing on the enhancement of farm production and productivity. In the context of EOA, ICT is used to encompass all information and communication technologies including devices, networks, mobiles, services, and applications. Various dissemination tools have so far been adopted for use through knowledge databases like M-Kilimo; publications; Information Education and Communication (IEC) materials like brochure, fliers, newsletters, animations, videos, and social media in addition to other pre-existing aids such as fixed telephones, televisions, radios and satellites. This mean, ICT has expanded the scope of information access through mobile or smart phones, tablet, personal computers and will progressively deploy more advanced devices based on technological advancement.

Despite of the advancement in information dissemination and access, the majority EOA stakeholders particularly smallholder farmers are still constrained with limited interaction to the reliable counterparts along the respective EOA value chains. Such limitations are due to inadequate access to modern communication technologies amongst the most resource poor EOA farmers and rural communities at large in the country. The following interventions are set to achieve the stated objective: -

Strategic Interventions:

- i. Enabling environment such as regulatory framework and ICT solutions that respond to the needs of smallholder farmers and other stakeholders in the EOA value chains enhanced and promoted.
- ii. Awareness of EOA value chain actors of potential ICT-based solutions and their prospective added value enhanced.

SO4: Strengthening networking and institutional coordination framework

Rationale

Strengthening networking and institutional coordination is important to allow access to opportunities that organizations and or any other EOA partners might not be able to locate on their own. Networking has the potential of providing insights into relevant information on the potentials of EOA. Therefore, improving institutional coordination and networking enhances the exchange of information, advice, and recommendations.

There is imbalance in management and planning capacities of nascent EOA institutions: Hence, efforts will be made to establish, strengthen and support these institutions' organizational capacities; as well as equip their professionals with skills and competences to promote EOA in Tanzania and to expand geographic reach and influence of EOA activities. Networks and movements in Tanzania as the EOA Forum of Agricultural

Research institutions, national organic movements, regional organic movements, and partners such as governments, farmers, private sector, civil society among others will be engaged to optimize impact, leverage experiences and expand geographic reach and influence of EOA activities in the country.

Institutional strengthening will increase the capacity or ability of EOA institutions and implementing partners to perform their functions. This will ultimately improve governance in the area of the environment, sustainability and development of EOA.. The focus will be on enhancing the institutional set-up, its environmental, gender, sustainable development and related interventions and development with an intention of detecting weaknesses in networks, avoiding duplication of efforts, impoverished understanding and implementation of legislation and policy and a need for better EOA knowledge management and dissemination.

Strategic Interventions:

- i. Networking among EOA stakeholders strengthened, promoted and coordinated for knowledge and technology development, solicitation of funding opportunities as well as market access.
- ii. National and International stakeholder's forums/workshops/conferences for sharing information of EOA strengthened, supported and promoted.

SO5: Ensure compliance of standards and certification of EOA products at affordable cost

Rationale

In general, any business directly involved in food productions can be certified, including seed producers, seed suppliers, farmers, food processors, retailers and restaurants. Certification is essentially aimed at regulating and facilitating the sale of EOA products to consumers. In that case, certification of EOA products is viewed as market instrument, which allows producers to reach a certain market both domestic and export markets. Requirements for EOA certification varies from country to country and generally involve a set of standards for growing, storage, processing, packaging and transporting of EOA products. Furthermore, certification of EOA requires clear understanding of the standards, compliance, documentation, planning, record-keeping and fee payments incurred by the actors who want to be certified. In many cases, EOA standards are formulated and overseen by the government.

Despite of efforts of stakeholders in certifying producers under Participatory Guarantee System (PGS) which is based on the active participation of stakeholders and are built on a foundation of trust, social networks and knowledge exchange still constrained by lack of national organic standards and certification schemes, high cost of certifications, lack of supporting transparent auditing and verification systems as well as lack of national organic mark/ seal which align with the TBS quality standards.

Therefore, this strategy is aimed at ensuring EOA value chain actors comply with the standards and certification of EOA products at the affordable cost to meet the requirement of domestic and export markets through establishment of National Organic Standards and certification schemes; facilitating development of national organic mark/seal that will be aligned with TBS standards; strengthening auditing and verification systems through establishment and cost sharing of laboratory tests for EOA products within the country, equitable access of certification agencies, inspections and verification of organic standards and products along the value chains. To attain this objective, the following interventions will be implemented;

Strategic interventions:

- i. National EOA products standard aligned and benchmarked with international standards developed and promoted.
- ii. Capacity of OA value chain actors on compliance of standards and certification of products enhanced

SO6: Facilitate development of EOA value chains*Rationale*

Tanzania is endowed with a wide range of agro ecological zones and diverse range of farming systems. A number of Ecological Organic (EO) products produced in the farming systems have been registered. Several Projects for certified organic products including business firms for export and the local market operate in Tanzania. There is a high prospect for more EOA products to be registered in future. The value chain nodes of organic products are functioning. However, the business trade volumes for EOA products are still low. This is due to challenges impending business growth in the EOA value chains which include: Inability to meet certification requirements, noncompliance to quality standards, inadequate knowledge and skills for production and processing of EO products, limited availability of production services and inputs and fragmented coordination of the value chain actors. In order to increase the business viability of the EOA value chains these challenges need to be addressed. The following interventions will be implemented:

Strategic interventions:

- i. Capacity of EOA producers and processors on production techniques and quality compliance strengthened.
- ii. Out-grower models of EOA producers and processors to enhance economies of scale in trading and certification process strengthened.
- iii. Cooperatives and associations' competitiveness and capacity for profitable business engagement in the value chain enhanced and strengthened
- iv. OA farmers supported with affordable certification cost

SO7: Strengthening conservation of traditional environmentally friendly practices.

Rationale

Farmers in Tanzania have been using local available knowledge to develop practices mainly to adapt to the ever-changing climate such as Chaga Home Garden Production System, Ngitili System, Ngoro Farming System. Most of these practices though unknowingly have assisted farmers to maintain sustainable productivity from their farming activities. These traditional environmentally friendly practices are cost effective, readily available and accessible to farmers and locally proved to be suitable to certain agro-ecological zones.

This strategy should objectively intend to clearly identify and select these practices according to respective agro-ecological zones and farming systems, document and set systems to ensure sustainability and knowledge transferring mechanisms. To attain this objective, the following interventions will be implemented;

Strategic interventions

- i. Traditional environmentally friendly practices enhanced.
- ii. Traditional environmentally friendly practices up scaled in different societies.

SO8: Mainstream cross-cutting issues in EOA sub-sector

Rationale

The level of involvement of cross-cutting issues in EOA is inevitable. Cross-cutting issues such as gender, youth, health issues (HIV and AIDS and COVID-19), nutrition, climate change issues and people with special needs are of the utmost important to the EOA. Participation of youth and gender balance in agribusiness is still noteworthy and therefore this strategy needs to empower them to effectively participate in EOA and ensure sustainable agriculture sector growth. Here also, peoples' health especially HIV/AIDS and COVID-19 poses threats in the sustainable engagement in EOA value chain because they may have adverse direct or indirect health issues resulting into reduced manpower in the sector. Furthermore, implementation of awareness programmes to sensitize the farmers on climate change impacts and ways to mitigate. Cross-cutting issues will be deeply mainstreamed by emphasizing their recognition and application of mitigations measures and practices in all interventions.

Strategic interventions:

- i. Capacity building to youth, women, and people with disabilities along the EOA value chain provided and strengthened;
- ii. Sensitization/awareness on HIV/AIDS and COVID-19 in the EOA subsector created and promoted

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- iii. Environmental Conservations and rational utilization of natural resources on EOA interventions mainstreamed
- iv. Nutrition and value addition interventions on EOA mainstreamed

SO9: Facilitate acquisition and accessibility of financial resources for EOA investment

Rationale

Smallholder farmers play an important role in contributing to the economic growth of many countries, creating income and job. Although farmers and numerous business entrepreneurs are the main drivers of economic growth, face failure to acquire and access financial resources due to lack of financial knowledge and how to raise adequate capital. Loans for smallholder farmers particularly for agricultural investment have been minimal because of difficult collateral requirements, high interest rates, on financial institutions providing loans and bureaucracy in getting loans.

Notably, the significance of financial sector on agricultural development projects has been recorded in large scale commercial farmers unlike the small-scale farmers who often ventures in EOA activities. It imperative that, financial institutions establish financial access conditions that are conducive for small scale growers including those practicing EOA. Alternatively, farmers need to be encouraged to form Savings and Credit Societies that may guarantee their members on loans solicitation without the need of immovable assets as collateral for investment in EOA.

In achieving the objective that aim to facilitate acquisition and accessibility of financial resources for EOA investment, continuing engaging financial institutions, international funding agencies and other role players through funded projects to allow implementation of EOA activities for a realized contribution to improve livelihood of stakeholders.

Strategic interventions:

- i. Financial schemes to facilitate EOA activities established.
- ii. EOA activities through knowledge on financial access and management supported
- iii. EOA Fund to strengthen and sustain capacity building to farmers established
- iv. Private sector engaging in financial investment of EOA activities strengthened
- v. EOA co-operative services to farmers strengthened

SO10: Facilitate development and use of irrigation infrastructure in EOA production systems

Rationale

The field case studies revealed that reliable availability of water for production was necessary for EOA farming systems to be successful. Apart from ensuring continuous production around the year, reliable availability of water increase effectiveness of EOA practices. Preparation of all types of organic manure and pesticides require substantial amount of water. Well balanced soil moisture facilitates maintenance of soil health and reduces susceptibility of crops to diseases and pests that are favorable in water stressed conditions. Therefore, in the current situation of climate change characterized by increased drought and unreliable rainfall, success of EOA farming will continue to be a nightmare without appropriate irrigation systems to provide supplementary water on crop fields.

Strategic interventions

- i. Appropriate irrigation systems suitable for EOA production identified.
- ii. Suitable irrigation systems for EOA established
- iii. Use and management of irrigation systems for EOA production promoted
- iv. Sustainable use of water and agricultural land under EOA well managed

SO11: Enhance availability, accessibility and utilization of land for EOA

Rationale

EOA targets to use land sustainability through appropriate practices and avoidance of input with negative impacts to the land. Consequently, land improvement strategy is a continuous process. As search hired/rental land is unsuitable for EOA activities. The information obtained during consultation visit revealed great lacking on the land availability and accessibility for proper utilization under EOA. It is essential for EOA farming to be distinguished from conventional agricultural farming based on their requirement for soil healthy, environmental safety and ecosystems maintenance processes.

Certification of EOA products require adherence to GAP from land management input utilization and other requirement for crop production management. As such the land require for EOA activities should be particularly set/allocated to allow fitting of the product into market requirements.

This strategy should therefore engage stakeholders to ensure there is land identified, mapped and demarcated for EOA production. This land should be accessible and

infrastructure invested for suitability to production of ecological organic products. To attain this objective, the following interventions are proposed:

Strategic interventions:

- i. Enabling land availability, accessibility and utilization for EOA established.
- ii. EOA clusters established and supported
- iii. Effective/detailed land use plans for EOA established
- iv. Regulations that minimize conflicts on land use among actors established

SO12: Increase the business and trade volumes of EOA products in the national, regional and international markets.

Rationale

Research and market analysis studies revealed the growing demand for EOA commodities as a result of increased awareness on consumption of healthy and safe food. Findings from the studies show increasing demand for organic products in the high- and middle-class markets. Companies and consumers who are willing to offer premium prices for EOA products are increasing. This is an indication of a promising future for the sector to contribute to the increase in business and trade volumes. On the other hand, Tanzania is one of the countries globally with the largest organic area and with a large number of farmers growing EOA products by default. Therefore, the country has a high potential for EOA subsector to contribute for economic growth in line with national economic growth aspirations in the Tanzania Long Term Perspective Plan (LTPP) 2011/12 – 2025/26.

In order to realize the business potentials of EOA, there is a need to address the challenges in growth of the subsector in the country, regional markets such as EAC and SADC and international levels beyond regions. Key challenges facing value chains in the subsector include low volumes produced, low quality and unreliable supplies of EOA products, limited capacity for certification of EOA products required in the potential markets and undeveloped business among the value chain actors.

Government intervention on business transaction is always imperative. This is because of tax review to increase trading across the region and beyond. For example, tax reductions/ lowering of duties on exports/reduction of taxes on inputs used to produce goods for export to make them cheaper/increase their demand/to reduce cost of production. Improve /adopt modern technology in order to increase the volume of goods for exports.

Strategic Intervention:

- i. Develop and strengthen local market for EOA products
- ii. Promote linkage and access to market information for EOA

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- iii. Promote investment and trade to tap local, regional and international market opportunities
- iv. Develop products to suite local and external market requirements
- v. Tax reforms to harness trade advantages related to EOA products advocated

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CHAPTER FOUR

POLICIES, LEGAL AND INSTITUTIONAL FRAMEWORK

4.0 Overview of the available Policies, Legal framework, Strategies and programmes

The preparation of this NEOAS considered key existing policy and legal institutional framework in Tanzania. Reference was made to the Tanzania Development Vision 2025; as elaborated in the National Five Year Development Plan III (2021/22 – 2025/26) which aims at competitive led export growth; CCM Election Manifesto (2020-2025) and Sector Policies, Strategies and programmes such as National Agriculture Policy (2013), National Environmental Policy, 2021, Small and Medium Enterprise Development Policy (2002), National Employment Policy (2008), National Climate Change Response Strategy 2021, Climate-smart Agriculture guidelines 2017, National Investment Promotion Policy (1996), Agriculture Sector Development Programme phase two (ASDP II- 2017/18 – 2027/28), Agenda10/30 which aims at growth of Agriculture Sector at 10 percent and increase export revenue from the current One billion US Dollar to Five Billion US Dollar at 2030, The Africa Agenda 2063-“**The Africa We want**” which focuses among others on Increasing incomes, Jobs and decent work, agricultural productivity and production, health and nutrition and Social security and protection including Persons with Disabilities. the context also cover International, Regional and domestic Laws including but not limited to The Constitutional of United Republic of Tanzania of 1977 and its amendment, The Environmental Management Act of 2004, The Food Security Act of 1991, The Standard Act, Cap 130 and its Regulations, The Plant Protection Act of 1997, The Seeds Act of 2005 and other domestic laws related to EOA The Universal Declarations of Human’s Rights of 1945, The International Covenant on Economic, Social and Cultural Rights (1966) and African Charter on People and Human’s Right of 1981. NEOAS is also reflected on Sustainable Development Goals (SDGs, 2015-2030) that emphasis on Protection, restoration and promotion of sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

4.1 Policy context

The development of National Ecological Organic Agriculture Strategy (NEOAS 2022-2030) is aligned to a number of National, Regional, Continental Policies and Development Frameworks as outlined hereunder.

4.1.1 National Policies

Tanzania Development Vision 2025

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Tanzania's development aspirations are outlined in the Tanzania Development Vision 2025 (TDV 2025) which was developed in the late 1990s to guide economic and social development efforts up to the year 2025 targeting food self-sufficiency and food security, access to quality primary health care for all and competitive economy among others.

National Five-Year Development Plan III (2021/22 – 2025/26)

The NEOAS is aligned to the National Five-Year Development Plan III (FYDP III). FYDP III builds on Tanzania Development Vision and aim to transform agricultural sector and commercialize it consistently with considerations of Climate Smart Agriculture (CSA) that farmers are incentivized to invest beyond food security needs, sustainably increase productivity and incomes, adapt and build resilience to climate change, and where possible reduce and/or remove greenhouse gas emissions.

National Agriculture Policy, 2013

The NEOAS is aligning to National Agriculture Policy (NAP 2013) which promotes: registration and availability of organic inputs to farmers; accreditation of organic products in order to reduce certification costs; regulation and certification of organic products; and agricultural practices that sustain the environment and collaboration with the private sector, effective coordination among stakeholders to be enhanced.

National Livestock Policy, 2006

Organic livestock farming is among the specific key policy issues addresses by National Livestock Policy, 2006. It is an emerging concept of agricultural production advocating minimum or non - use of industrial chemicals such as fertilizers, pesticides and drugs which are all in tandem with the present NEOAS. The concept was developed to counteract the increased use and sometimes misuse of such chemicals resulting into human health and environmental hazards. One of the policy's objectives is to promote organically produced livestock products in order to exploit special market demands. Specifically, the Government: In collaboration with other stakeholders will promote investment and create awareness encourage organic livestock farming practice; and will strengthen technical support services in organic farming

National Fisheries Policy, 2015

The NEOAS is aligning with the national Fisheries Policy, 2014 Since the Policy promotes collaborative and ecosystem approach to fisheries management and establishment of an authority to deal with conservation and protection of fisheries resources and environment in marine and fresh water areas. In addition, the policy guides fostering investments in sustainable manner as well as equitable and secure access to fisheries and aquaculture resources for food, income and employment and thus contribute to poverty reduction. Thus, development of NEOAS is aligning with the National Fisheries Policy, 2015.

National Water Policy, 2002

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National Water Policy, 2002 seeks to improve the management and conservation of ecosystems and wetlands. It directs to have in place appropriate principles and procedures for managing the quality and conservation of water resources, as well as improve and protect the ecological systems and wetlands. Similar requirements are prioritized in the current NEOAS.

National Environmental Policy, 2021

The NEOAS also aligns with National Environment Policy, 2021, since the policy addresses environmental concerns associated with chemicals management whereby improper use, handling and disposal of industrial chemicals and pesticides as a challenge. To address this challenge, the policy promotes collaboration with stakeholders to continue to make more efforts particularly strengthening institutional capacity for sound management of chemicals; increasing public awareness on the safe use of chemicals; and strengthening enforcement of legislation related to chemical management

Agriculture Marketing Policy, 2008

One of the key objectives of Agriculture Marketing Policy, 2008 is to mainstream environmental matters in all agricultural marketing related interventions. Therefore, the implementation of the policy and legal framework promotes environmental conservation and management by all stakeholders; and advocates for awareness to agricultural marketing stakeholders on environmental conservation and management. The current market liberalization is envisaged to have positive effects through opening up new export markets for activities that are environmentally friendly, including production of organic or specialty products for markets with premium prices based on fulfilling certain environmental management practices. The NEOAS is therefore in line with the Agriculture Marketing Policy as it seeks to address marketing of products in environmentally friendly manner while banking on stakeholders for effective implementation.

4.1.2 Regional Policies

Agriculture and Rural Development Policy for the East African Community, 2006

The overall objective of the Agriculture and Rural Development Policy for the East African Community, 2006 is to attain food security through increased agricultural production, processing, storage and marketing. Therefore, EAC through members states promotes: development and sustainable utilization of marine and inland aquatic resources; research and development of traditional food crops and food processing; development of regional referral laboratories for food quality assurance and certification; appropriate use of agricultural inputs; and sustainable use and management of natural resources (soil, water, fisheries and forest) in order to conserve environment. These have been critically considered in the development of the present NEOAS.

4.1.3 Continental Policies and Frameworks

Comprehensive Africa Agriculture Development Programme (CAADP) results framework (2015-2025)

The present NEOAS is aligned to the Comprehensive African Agriculture Development Plan (CAADP) Results framework and the Malabo declaration. In aligning itself to the Malabo declaration on CAADP and commitment to accelerate Agricultural Growth and transformation for Shared Prosperity and Improved Livelihoods and on Nutrition Security for Inclusive Economic Growth and Sustainable Development in Africa by Heads of States and Government of the African Union meeting in June 2014, the EOA Initiative through its sixth implementation strategies will contribute to the realization of the commitments to the Principles and Values of the CAADP Process, to enhance investment finance in Agriculture, to ending hunger by 2025, to halving poverty through inclusive agricultural growth and transformation, boosting intra-African trade in agricultural commodities and services, enhancing resilience of livelihoods and production systems to climate variability and other related risks as spelt out in the seven priority areas of the declaration. To be restructured focusing on relevant components to Malabo declaration to our strategy.

The Africa Agenda 2063- “Africa we want”

Environmentally sustainable and climate resilient economies and communities is among the agenda for Africa 2063. Bio-diversity, conservation and Sustainable natural resource management, Water security and Climate resilience and natural disasters preparedness are the key priority areas of this goal which are in tandem with the present NEOAS. The Africa agenda of 2063 on *Africa we want* reveals Africa as a major partner in global affairs and peaceful co-existence and therefore emphasize on building partnerships as one of the critical areas addresses by this strategy. Africa takes full responsibility for financing her development Goals through African capital markets, Fiscal systems, development assistance and public sector revenue to bring about sustainable financing development. Another important goal in this context is on a high standard of living, quality of life and well-being for all citizens. This goal considers Incomes, jobs and decent work, Poverty, inequality and hunger, Social security and protection, including persons with disabilities

4.1.4 Development Framework

UN-Sustainable Development Goals-SDGs

The UN-Sustainable Development Goals (SDGs) aim to transform the world targeting developed and developing countries. They are universal call to actions to end poverty and inequality, protect the planet on environment and climate, and ensure that all people enjoy health, justice and prosperity. The NEOAS aligns with a number of UN-Sustainable Development Goals that include; Goal number one on End poverty in all its forms everywhere; Goal number two on End hunger, achieve food security and improved nutrition and promote sustainable agriculture; Goal number three on ensuring healthy lives and promote well-being for all at all ages and Goal number eight on Promoting

sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. Other goals are number twelve to ensure sustainable consumption and production patterns; Goal number thirteen on taking urgent action to combat climate change and its impacts; Goal number fourteen on Conserve and sustainably use the oceans, seas and marine resources for sustainable development; Goal number fifteen to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss. Goal number seventeen is about on strengthening the means of implementation and revitalizing the global partnership for sustainable development and other related goals under SDGs.

4.2 The Legal framework (Policies, Strategies and Programmes)

The operation of companies, Governments, and citizens in Tanzania are governed by rules, rights and obligations set forth in a system of legal documents called a legal framework. Documents in the legal framework include International and domestic's constitution, legislation, policies, regulations, guidelines and contracts. Various operations in the agricultural sector in Tanzania are governed by laws and policies inclusive of Land laws reinforced through the agricultural and other laws such as The food Security Act of 1991, The Plant Protection Act of 1997, The Plant Healthy Act of 2020, The Environmental Management Act of 2004, The Land Act Cap, 113, and the Village Land Act Cap, 114 and The Standard Act Cap 130 and its Regulations.

A regulatory framework that protects both private sector and farmers, as well as a framework that sets the rules governing the provision of goods and services in the agriculture sector, will be adequately articulated in view of NEOAS implementation. Consequently, appropriate institutions, both private and public, will be set up to implement key regulatory functions including bylaws in respective areas. Along with other policy and legal frameworks, the listed policies, strategies and programs will be referred during the implementation of this strategy.

4.2.1 Policy framework

In this context, a policy framework includes the country's vision 2025 and regulatory institutions as follows: National Agriculture Policy 2013 (NAP 2013); Tanzania Beekeeping Policy 1998; National Water Policy 2002; National Environmental Policy 2021; National Livestock Policy 2006 and National Fisheries Policy 2015. Others are Agriculture Marketing Policy 2008; Small and Medium Enterprise Development Policy 2003; National Trade Policy 2003; Sustainable Industries Development Policy SIDP (1996-2020) and National Investment Promotion Policy 1996. It also includes National Irrigation Policy 2010; National Micro Finance Policy 2017; National Employment Policy 2008; Youth Employment Development policy (2007); Nationally Determined Contributions 2021 (NDCs 2021) and Land Degradation Neutrality 2018 (LDN 2018).

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Regulatory agencies include the Tanzania Bureau of Standards (TBS); Tanzania Medical and Drug Authority (TMDA), Occupational Safety and Health Authority (OSHA).

4.2.2 Strategy framework

The NEOAS has been designed to align the following strategies: National Climate Change Strategy 2012; National Climate Change Response Strategy 2021; and National Environmental Master Plan for Strategic Interventions 2022-2032. Other strategies are National Invasive Species Strategy and Action Plan 2019-2029; Climate-smart Agriculture guidelines 2017 and Agriculture Climate Resilient Plan; National Adaptation Program for Action (2007) and the Guidelines for Integrated and Participatory Village and Land Use Planning, Management and Administration in Tanzania 2020. Guidelines for Preparation of Environmental Action Plan for Sectoral Ministries and Local Government Authority 2010; and the National Horticultural Development Strategy 2022 are also included in the list.

4.2.3 NEOAS Programmes

Programme is a set of related projects and activities, managed in a coordinated fashion and under a structure that allows for the delivery of outcomes and leads to realization of intended benefits Programmes are usually long term, and sometimes spanning in years, therefore, the following are programmes considered during development of this strategy: Agriculture Sector Development Programme phase two (ASDP II); National Organic Agriculture Development for Tanzania 2009-2015 (NOADP 2009-2015); Tanzania Livestock Master Plan 2017-2022 and Agriculture sector Environment Action Plan. Experience gained during implementation of these programmes will possibly have a bearing effect in realization of the goals targeted by the current NEOAS.

CHAPTER FIVE

IMPLEMENTATION ARRANGEMENT

5.0 Overview

This chapter outlines Institutional arrangement, Coordination, Information and Communication approach, Reporting Management and Implementation Plan. It also including Sustainability Strategy and Resource Mobilization and Funding Plans. It describes the implementation arrangement of the NEOAS mainly through existing institutional structures.

The chapter is based on the implementation arrangement to mainstream EOA interventions as discussed earlier in Chapter Three. It should be noted that almost all EOA activities have been running depending on individual efforts or certain institutions' interventions without a particular tool to guide their implementations.

To strengthen and support the EOA sub-sector, it is necessary to seek for solutions to regulate the implementation of this strategy using the existing national policy framework. This chapter uses information gathered during field excursion and the situation analysis on EOA to develop proposals that would improve the institutional structures and implementation arrangements, to enhance its effectiveness and development of EOA.

Consequently, this chapter details on how strategic interventions prescribed in chapter three should be executed considering the existing institutional framework, challenges and weaknesses highlighted in chapter two. The success in resolving these challenges will rely entirely on the strengths and opportunities narrated in chapter two.

5.1 Institutional Arrangement

A wide range of stakeholders has been involved in the formulation of NEOAS and will continue participating during the implementation phase. The implementation of NEOAS will adopt the existing Government systems while acknowledging the Public Private Partnership (PPP) arrangement. The management of this strategy will be under the Ministries responsible for the agriculture sector. These Ministries will have the mandate to establish rules and guidelines to supervise the implementation, monitoring, evaluation and coordination of all activities of the strategy. In this regard, the Ministries responsible for the Agricultural sector in collaboration with the PO-RALG will facilitate resource mobilization, oversees the implementation of the strategy and ensure institutional coordination among various EOA actors. They will further facilitate the provision of EOA extension support for effective dissemination and adoption. Likewise, these Ministries will create awareness amongst EOA stakeholders to influence their involvement in ecological organic farming for increasing production, productivity and conserving environment. Also,

the government will strengthen units under the ministerial headquarters to deal with EOA issues. Furthermore, the Ministry of Agriculture and the Ministry Livestock and Fisheries will be responsible for the provision of training/education and awareness campaigns in crops, livestock and fisheries sub-sectors including inputs access and utilization, processing and marketing of EOA and promoting capacity building on the benefits and use of EOA products. The Ministry will be responsible for monitoring, reporting and verifying EOA in crop, livestock and fisheries sub-sector.

Public institutions (academic and research), regulatory bodies and agencies such as Universities and Colleges, TARI, TALIRI, TFRA, TBS, Crop bodies, TAFIRI, TAFORI, TPHPA, ASA, VETA, SIDA, TOSCI and CAMARTEC will take the role in areas of technology and skill development on EOA through training and research. Furthermore, the institutions will oversee EOA product quality assurance and marketing including registration of EOA-related issues; enhance the establishment of protocols governing indigenous varieties/breeds, organic inputs and certification. Liaison for the establishment of accreditation centers for EOA products, engagement in manufacturing, multiplication and supply of agricultural machinery and inputs shall be facilitated through these institutions.

The participation of the non-state actors was the first task in developing NEOAS and the strategy has been developed through collaborative efforts among public and private representatives who formed the national strategy steering and development teams capitalizing on the PPP philosophy. The role of the private sector does not stop at the strategy designing phase but it becomes even more important in the implementation of the strategy for realization of the stated objectives and their strategic interventions. The private sector such as NGOs, INGOs, CSOs, and companies involved in EOA will undertake the interventions to complement the Government efforts in the implementation of this strategy. These non-state actors will participate in activities such as input supply, community mobilizations and strengthen on EOA practices, financial services, marketing, technological development, storage and extension services. The non-state actors are also expected to invest in the EOA sector and execute most undertakings along the agricultural value chain.

Development Partners have been playing a vital role in supporting the development of the EOA subsector in the country through the provision of funds and technical assistance. It is, therefore, expected that development partners will continue with their support to complement the implementation of the NEOA Strategy through financing and vital advice with reference to EOA international policies geared to the improvement of land production and productivity.

Media bodies which also comprise mass media will be involved in the awareness creation of EOA through information publication and knowledge transfer to the public and, dissemination of business opportunities. They will facilitate linkages amongst EOA stakeholders across the entire value chains in the country. Documentation of success

stories, challenges, opportunities and key lessons learnt under EOA implementation shall be a continuous responsibility of media bodies.

5.2 Coordination

Successful implementation of the EOA strategy and improved performance of the agriculture sector will depend on both vertical and horizontal coordination. Vertical coordination implies interaction between responsible Ministries with decision-making powers and other EOA stakeholders while horizontal coordination implies inter-ministerial interactions in dealing with EOA issues. This will include ensuring coordination with other Agricultural sector-related ministries, Institutions, Development partners, Agencies, and other stakeholders such as farmers and their associations/organizations. To make the coordination effective and efficient, the government will have to play a regulatory role by focusing in preparing, reviewing, and putting in place appropriate instruments for the agriculture industry, monitor their uses, and ensure participation of all stakeholders through the national platform, stakeholder cooperation and association/organization, research findings, available technical support services, early warning system, different professional fora and the agriculture marketing system.

5.3 Information and Communication approach

Information and Communication approach is developed to facilitate key stakeholders to implement the strategy to deliver the intended results. It comprises of the description of the type of information, communication structure, and information management units. The types of information which will be communicated among key stakeholders regularly include operational information, Monitoring and Evaluation (M&E) reports, documentation of success stories, challenges, opportunities and key lessons learnt.

The communication structure for the strategy includes the EOA focal person at the Ministry responsible for Agriculture, EOA focal persons at region and district levels, and EOA focal persons for key stakeholders who are actively implementing the strategy. A dedicated information management team will be established under the EOA unit with the role to collect, process and disseminate EOA information. The collected and processed information will be subject to scrutiny before being shared with the wider public/audience.

The team at the Ministry will be developing operational and action plans which will be communicated back and forth through dedicated focal persons. Likewise, the M&E reports will be compiled and communicated as appropriate. It will also establish tailor - made information to share with specific groups. Furthermore, the team will consolidate information and upload it to the EOA portal located on the Webpage of the Ministry responsible for Agriculture. Television, radio programs, newspaper and documentaries will also be used as means for sharing information to the public.

5.4 Implementation Plan

Table 2: Implementation plan

TARGET	PERFORMANCE INDICATOR	ACTIVITIES	RESPONSIBLE INSTITUTIONS/ORGANIZATION	Time frame 2022/23-2029/30
SO1: Enhance capacity of institutions for research, training and extension systems in developing and disseminating appropriate EOA technologies and practices.				
SI.1.1 Develop multi-disciplinary research, training and extension approaches and initiatives in support of EOA				
I) 100 institutions with EOA interventions reached by 2027	Number of institutions with EOA interventions	i. Identify research and training institutions to implement EOA	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, DPs, Donors	2022/23-2029/30
		ii. Identification of research gaps and challenges across the EOA value chain through mapping of challenges	Government and agencies, Research institutions, NGOs, CBOs, CSOs, private sectors, DPs, and donor	2023/24-2025/26

		iii. Conduct research on the EOA identified challenges in collaboration with lead farmers	Government and agencies, Research institutions, NGOs, CBOs, CSOs, private sectors, DPs, and donor	2023/24-2027/28
		iv. Create of Awareness on EOA to research and training institutions	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, DPs, Donors	2022/23-2029/30
		v. Conduct needs assessment for the research and training institutions	Government and Agencies, Academic and research institutions, NGOs, private sector, DPs, Donors	2022/23-2029/30
		vi. Develop EOA initiatives/approaches	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs, Donors	2022/23-2029/30
<p>SI.1.2 Disseminate EOA information and knowledge needed by value chain actors through demand-driven, multi-disciplinary, gender sensitive, and participatory approaches.</p>				

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500 service providers identified and commissioned to disseminate ICE materials to farmers by 2027	Number of service providers	i. Identify relevant service providers and audience	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, media, DPs, Donors	2022/23-2029/30
1,000,000 Information Communication and Education materials prepared, printed and disseminated by 2027	Number of ICE materials	ii. Design and prepare knowledge materials in soft and print media.	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, media, DPs, Donors	2022/23-2029/30
3,000,000 practitioners along the EOA value chain received and gained knowledge on EOA practices by 2027.	Number of practitioners along the value chain access information	iii. Disseminate relevant EOA materials through online and print media	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, media, DPs, Donors	2022/23-2029/30
SI.1.3 Conduct training needs for EOA stakeholders to improve production and enhance markets.				

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1,000,000 Stakeholders reached by 2027	Number of stakeholders	i. Conduct training needs assessment for EOA stakeholders	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs, Donors	2022/23-2029/30
	Number of trainings	ii. Conduct training based on stakeholders need	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs, Donors	2022/23-2029/30
SI.1.4 Validate and harmonize different EOA research initiatives conducted by various institutions				
200 EOA research initiatives validated and harmonized by 2030	Number EOA initiatives	i. Review existing EOA research initiatives	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs, Donors	2022/23-2029/30
		ii. Identify challenges that require research	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private	2022/23-2029/30

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			sector, farmers, DPs, Donors	
		iii. Share research findings among stakeholders	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, media, DPs, Donors	2022/23-2029/30
SI.1.5 Extension services on EOA to farmers strengthened				
5,000 extension officers capacitated on EOA by 2030	Number of extension officers	i. Conduct training to extension officers annually on EOA	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, media, DPs, Donors	2022/23-2029/30
3,000,000 farmers reached by 2027	Number of farmers	ii. Conduct trainings through Farmer Field School to reach farmers	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, media, DPs, Donors	2022/23-2029/30
SI.1.6 Research institutions capacitated to carry out EOA researches				

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50 research institutions capacitated by 2030	Number of capacitated research institutions	i. Identify institutions conducting EOA research	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs, Donors	2022/23-2029/30
	Number of persons developed for EOA research	ii. Develop human resources for EOA research	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, DPs, Donors	2022/23-2029/30
	Number of key research areas supported	iii. Provide support to key research areas	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs, Donors	2022/23-2029/30
	Type and number of infrastructures developed	iv. Develop infrastructure for EOA research	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs, Donors	2022/23-2029/30
SI.1.7 EOA demonstration plots/farms developed and implemented.				

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<p>1,000 EOA demonstration farms developed and adopted by 2027</p>	<ul style="list-style-type: none"> • Number of demonstration farms • Number of farmers practicing EOA 	<ol style="list-style-type: none"> i. Mobilize and sensitize farmers ii. Identify areas for demonstration farms establishment iii. Develop demonstration farms iv. Validate relevant EOA technologies and practices v. Conduct farmer field days vi. Conduct survey to determine adoption 	<p>Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, media, DPs, Donors</p>	<p>2022/23-2029/30</p>
<p>SO2: Promote availability and accessibility of EOA inputs and appropriate farm machineries (tools, equipment and implements)</p>				
<p>SI.2.1 Production, supply and use of EOA inputs and machinery promoted</p>				

<p>50 factories or plants (small, medium and large) producing EOA inputs by 2030</p>	<p>Number of factories or plants</p> <p>Types of machinery adapted</p>	<ul style="list-style-type: none"> i. Identify small, medium and large factories producing and supplying EOA inputs ii. Evaluate the existing capacity on farm machineries used in production of EOA inputs iii. Improve existing on-farm technologies iv. Promote industrialization of EOA farm technologies v. Promote establishment/ construction of new factories through PPP/stakeholders vi. Support and facilitate procurement of farm machineries vii. Introduce initiatives for massive production of EOA inputs raw materials 	<p>Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs, Donors</p>	<p>2023/24-2029/30</p>
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Quantity of EOA inputs supplied to farmers by 2030	Quantity of EOA inputs supplied	<ul style="list-style-type: none"> i. Promote and support the production and supply of different types of EOA inputs ii. Study the existing supply capacity and demand for production of EOA inputs. iii. Support and promote investments for input production iv. Create awareness to farmers on available EOA inputs v. Capacity building on utilization of EOA inputs to farmers 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs, Donors	2022/23-2029/30
SI. 2.2 Strengthen EOA breed/fingerlings/seed systems				

<p>200 Institutions/associations (crops/livestock/fisheries) strengthened to produce EOA seeds/breeds and fingerlings by 2030</p>	<p>Number of institutions/associations producing and supplying EOA seeds/breeds and fingerlings</p>	<p>i. Undertake inventory of existing institutions/association/ society involved in production and conservation of EOA genetic materials ii. Support existing institutions /organizations to function efficiently in production and supply of seeds/breeds and fingerlings iii. Establish monitoring system for seeds/breeds at risk to be conserved iv. Enhance availability, accessibility and acquisition of seeds, breeds and fingerlings to farmers v. Promote and create awareness on utilization of seeds, breeds and fingerlings</p>	<p>Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs, Donors</p>	<p>2022/23-2029/30</p>
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<p>500 Farmer groups strengthened to produce seeds/breeds and fingerlings by 2027</p>	<p>Number of farmer groups producing seeds/ breeds and fingerlings</p>	<ul style="list-style-type: none"> i. Facilitate training of trainers' programme for farmers on seeds/breed/fingerlings ii. Develop Training of Trainers programme for farmers iii. Sensitize and formulate farmer groups iv. Train farmers on seeds/breed/fingerlings production on their respective groups. v. Promote and create awareness on EOA farming vi. Establish, strengthen and control farmers group on EOA seeds/breeds recording system 	<p>Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors</p>	<p>2022/23-2029/30</p>
<p>SI.2.3 Institution capacities (public and private) engaging in EOA inputs and machinery strengthened.</p>				
	<p>Number of institutions strengthened</p>	<ul style="list-style-type: none"> i. Build capacities of institutions in 		<p>2022/23-2029/30</p>

200 institutions engaging in EOA inputs and machinery strengthened by 2027	Number of machineries availed to institutions engaging in EOA	<ul style="list-style-type: none"> ii. Mobilize resources for EOA iii. Train personnel in institutions engaging in EOA on inputs and machinery production iv. Facilitate procurement of machinery facilities for practical training on production of EOA inputs 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	
SI.2.4 Appropriate use of EOA inputs advocated and promoted.				
1,000,000 farmers use EOA inputs appropriately by 2027	Types of inputs and number of farmers applying EOA inputs	<ul style="list-style-type: none"> i. Create Inventory of EOA inputs existing and established ii. Establish number of farmers using EOA inputs iii. Establish the level of input usage by farmers 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30

	Guideline on use of EOA inputs in place	<ul style="list-style-type: none"> i. Develop guidelines for appropriate use of EOA inputs ii. Dissemination of guidelines to farmers 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
	Number of farmers aware of appropriate use of EOA inputs	Promote and create awareness on appropriate use EOA inputs through dissemination of brochures use of media, farmers field school etc	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
SI.2.5 Collection and conservation of Germplasm promoted.				
1,000 accessions collected and conserved through gene bank and community seed bank by 2025	Number of accessions collected and maintained	<ul style="list-style-type: none"> i. Prepare/ advocate gene bank conservation guidelines ii. Establish and strengthen <i>in-situ</i> and <i>ex-situ</i> germplasm 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30

		conservation programmes		
		<p>iii. Establish incentive mechanism for promoting conservation of seeds/breeds that are endangered/extinct</p> <p>iv. Facilitate finalization of National Plant Genetic Resources Act</p>		
100 community seed banks established by 2030	Number of community seed banks	<p>i. Facilitate establishment of community seed banks</p> <p>ii. Promote and strengthen the established community seeds banks.</p>	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
20 associations for in-situ	Number of associations	iii. Facilitate establishment of	Government and Agencies, Academic	2022/23-2029/30

conservation of animal breeds established by 2030		associations for in-situ conservation of animal breeds	and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	
SI.2.6 Use of appropriate Agricultural mechanization technologies in EOA production promoted.				
1,000,000 farmers using appropriate Agricultural mechanization technologies by 2030	Number of farmers using appropriate agricultural mechanization technologies	Promote usage of an appropriate agricultural mechanization technologies to farmers	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
20 appropriate agricultural mechanization technologies promoted by 2030	Number of agricultural mechanization technologies in place	i. Identify agricultural mechanization technologies ii. Promote the appropriate agricultural mechanization technologies	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
S03: Strengthening Information and Communication Technologies (ICT) system for dissemination of appropriate EOA information.				
SI.3.1 Enabling environment such as regulatory framework and uptake of ICT solutions that respond to the needs of smallholder farmers and other stakeholders in the EOA value chains enhanced and promoted.				

10 EOA information and communication platforms initiated by 2027	The number of EOA information and communication platforms initiated.	<ul style="list-style-type: none"> i. Identify existing EOA information and communication platforms ii. Strengthen EOA information and communication platforms 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
SI.3.2 Awareness of EOA value chain actors of potential ICT-based solutions and their prospective added value enhanced. Awareness of EOA value chain actors				
5,000,000 actors reached by 2027.	Number of EOA actors of potential ICT-based solutions reached	<ul style="list-style-type: none"> i. Identify EOA actors utilizing ICT-based solutions ii. Establish inventory of potential ICT-based solutions on EOA iii. Disseminate potential ICT-based solutions on EOA actors 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
5 ICT based solutions available by 2027.	Number of ICT solutions available	<ul style="list-style-type: none"> i. Identify ICT-based solutions for promoting EOA ii. Establish and strengthen ICT-based solutions for promoting EOA 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30

SO4: Strengthening networking and institutional coordination framework				
SI.4.1 Networking among EOA stakeholders strengthened, promoted and coordinated for knowledge and technology development, solicitation of funding opportunities as well as market access.				
Networking among EOA stakeholders strengthened by 2027	Well-functioning stakeholders' networks Number of EOA stakeholders identified Number of EOA stakeholders capacitated	<ul style="list-style-type: none"> i. Identify and map EOA stakeholders ii. Identify EOA existing networks iii. Identify gaps among EOA stakeholders' networks iv. Build capacity among EOA stakeholders v. Share available initiatives or experience vi. Identify the roles and responsibilities of each stakeholder within the networks. vii. Set governing bylaws 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
Networking among EOA stakeholders promoted by 2027	Number of networks promoted Type of promotion materials developed and disseminated	<ul style="list-style-type: none"> i. Develop promotion materials on knowledge and technology development, solicitation of funds and market access. 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30

	<p>Number of promotion materials developed and disseminated</p> <p>Business model developed and disseminated</p>	<p>ii. Identify existing opportunities among stakeholders within networks.</p> <p>iii. Develop and disseminate a business model for tapping the identified opportunities.</p> <p>Pursue developed business model and contents to promote the relationship among EOA stakeholders within the networks.</p>		
<p>Networking among EOA stakeholders coordinated by 2027</p>	<p>Number of networks coordinated</p>	<p>Strengthen the EOA coordination unit within the ministry of Agriculture</p> <p>Enhance coordination among EOA stakeholders within their network.</p>	<p>Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors</p>	<p>2022/23-2029/30</p>

SI.4.2 National and International stakeholder forums/workshops/conferences for sharing information of EOA strengthened, supported and promoted.

At least one conference/forum/workshop conducted annually	Number of conferences /forums /workshops organized and conducted	<ul style="list-style-type: none"> i. Organize and conduct conference/forum/work ii. Mainstream EOA commemoration in the National Farmers exhibition (NaneNane) and international (World Food Day) 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
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SO5: Ensure compliance of standards and certification of OA products at affordable cost

SI.5.1 National OA products standard aligned and benchmarked with international standards developed and promoted.

National Standards developed by 2025	OA OA product standards in place	<ul style="list-style-type: none"> i. Convene stakeholders meeting to validate needs for NOAPS ii. Develop a proposal to TBS for the need of establishing National Organic Agriculture Products Standards (NOAPS) 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
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		iii. Establish a national committee for the development of NOAPS	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
		iv. Prepare NOAPS and circulate the draft amongst the various interests concerned for critical review and suggestions for improvement	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
OA quality mark/seal established by 2025	OA mark/seal available and used	Develop a national organic mark/seal	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
SI.5.2 Capacity of OA value chain actors on compliance of standards and certification of products enhanced.				
1,000,000 OA value chain actors capacitated by 2030	Need assessment conducted	i. Conduct capacity needs assessment for value chain actors	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private	2022/23-2029/30

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	1,000,000 value chain actors capacitated	ii. Provide support to value chain actors based on the identified needs and priorities	sector, farmers, DPs and Donors	
1,000,000 OA value chain actors certified by 2030	Number of OA value chain actors certified in PGS and ICS	i. Facilitate certification of OA value chain actors in PGS and ICS ii. Monitor compliance on the OA standards.		
Government unit/department for EOA coordination strengthened	Department/unit has capacity to regulate certification	iii. Build the capacity of EOA coordination unit to regulate certification	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
SO6: Facilitate development of EOA value chains				
SI.6.1 Capacity of EOA producers and processors on production techniques and quality compliance strengthened				
1,000,000 EOA producers and processors capacitated by 2027	Number of producers and processors capacitated	i. Conduct value chain analysis for EOA commodities to select priority value chains	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
	Number of physical and online hubs established	ii. Train producers and processors on		2022/23-2029/30

		production, processing and packaging techniques and compliance (certification, tax, standards)		
		iii. Establish investment schemes for EOA producers and processors towards markets		2022/23-2029/30
		iv. Construct processing and packaging physical and online hubs		2022/23-2029/30
6.2 Out-grower models of EOA producers and processors to enhance economies of scale in trading and certification process strengthened.				
3 out grower model sustainability operating in EOA value chains	Number of functioning out grower models	i. Identify and catalogue available out-grower opportunities	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
		ii. Train EOA producers and processors for better capability towards out-grower trade negotiations		2022/23-2029/30

		iii. Connect producers and processors to private sector supporting entities for accessing tailor-made services of loans, charges and auctions.		2022/23-2029/30
6.3 Cooperatives and associations' competitiveness and capacity for profitable business engagement in the value chain enhanced and strengthened				
500 cooperatives and associations strengthened by 2030	Number of cooperatives and associations capacitated	i. Conduct capacity need assessment to strengthen market for cooperatives and associations' products	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
		ii. Capacitate cooperatives and associations (human resource, infrastructure and capital) to better address EOA markets		2022/23-2029/30
6.4 OA farmers supported with affordable certification cost				
1,000,000 farmers	Number of farmers	i. Conduct SWOC analysis on available	Government and Agencies, Academic	2022/23-2029/30

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supported by 2030	Number of OA standards and certification Institutes capacitated	certification mechanisms	and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	
30% of certification cost reduced 2027	Percentage of certification cost reduced	ii. Develop capacity for local OA standards and certification institutes to align with international recognized standards and certification requirements		2022/23-2029/30
		iii. Connect producers and processors to financial institution through setting customized schemes to attain required standards and certification requirements		2022/23-2029/30
S07: Strengthening conservation of traditional environmentally friendly practices.				
SI.7.1 Traditional environmentally friendly practices enhanced.				
20 environmentally friendly practices	Number of environmentally friendly practices	i. Identify and document environmentally friendly practices	Government and Agencies, Academic and research institutions, NGOs,	2022/23-2029/30

enhanced by 2027		ii. Facilitate improvement of the environmentally friendly practices to be adopted by the practitioners along the EOA value chain through training	CBOs, CSOs, private sector, farmers, DPs and Donors	
SI.7.2 Traditional environmentally friendly practices up scaled in different societies.				
20 environmentally friendly practices up scaled by 2027	Number of environmentally friendly practices	<ul style="list-style-type: none"> i. Identify and document the best environmentally friendly practices ii. Identify and map areas for upscaling environmentally friendly practices iii. Conduct training to farmers on the environmentally friendly practices in the new areas iv. Sensitize practice of identified environmentally friendly practice to practitioners along the EOA value chain 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30

SO8: Mainstream cross-cutting issues in EOA sub-sector				
SI.8.1 Capacity building to youth, women, and people with disabilities along the EOA value chain provided and strengthened				
2,000,000 youth empowered by 2030	Number of youths	i. Identify targeted youths	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
		ii. Conduct need assessment		
		iii. Develop tailor-made programs for youths' groups		
		iv. Provide support to youths engaged in tailor-made programs.		
3,000,000 women empowered by 2030	Number of women	i. Identify targeted women	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
		ii. Conduct need assessment		
		iii. Develop tailor-made programs for women' groups		
		iv. Provide support to women engaged in tailor-made programs		

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500,000 people with disabilities empowered by 2030	Number of people with disabilities	i. Identify people with disabilities	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
		ii. Conduct need assessment		
		iii. Develop tailor-made programs for people with disabilities		
		iv. Provide support to people with disabilities engaged in tailor-made programs		
SI.8.2 Sensitization/awareness on HIV/AIDS and COVID-19 in the EOA subsector created and promoted;				
3,000,000 actors aware of HIV/AIDS and COVID-19 consequences by 2027	Number of actors	i. Prepare and disseminate HIV/AIDS and Covid-19 publications	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
Awareness Campaigns conducted by 2027	Number of campaigns	ii. Organize awareness campaigns on HIV/AIDS and Covid-19	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30

SI.8.3 Environmental Conservations and rational utilization of natural resources on EOA interventions mainstreamed;				
100 Institutions practicing environmental conservations by 2030	Number of institutions	i. Identify institutions relevant to EOA and create awareness of environmentally friendly conservation practices	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
		ii. Support institutions to develop and implement institutional environmental smart management plans		
500,000 stakeholders trained on rational allocation and utilization of natural resources by 2030	Number of stakeholders	i. Identify stakeholders ii. Undertake training on rational allocation and utilization of natural resources iii. Advocate use alternative energy resources (renewable and non-renewable energy)		2022/23-2029/30
SI.8.4 Nutrition and value addition interventions on EOA mainstreamed.				

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500,000 households trained on nutrition and value addition in EOA products	Number of households	i. Conduct need assessment	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
		ii. Provide nutrition education to households		
500,000 households capacitated on viable value addition technologies	Number of households capacitated	i. Identify households to be supported ii. Provide support to households on viable value-addition technologies	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
SO9: Facilitate acquisition and accessibility of financial resources for EOA investment				
SI.9.1 Financial products to facilitate EOA activities established				
Five effective financial products in each of the agro ecological zones developed by 2030	Number of effective financial products	i. Identify the existing financial products in each of the agro ecological zone	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
		ii. Support development of new effective financial products		
		iii. Advocate for establishment of conducive environment to		

		support development of effective financial products		
SI.9.2 EOA activities through knowledge on financial access and management supported.				
1,000,000 stakeholders acquired knowledge on financial access and management by 2030	Number of stakeholders	i. Identify stakeholders to be supported	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
		ii. Conduct need assessment		
		iii. Facilitate trainings on financial access and management to EOA stakeholders		
		v. Prepare and disseminate financial management materials to stakeholders		
		v. Promote community saving and lending schemes		
SI.9.3 EOA Fund to strengthen and sustain capacity building to farmers established				

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Fund established by 2030	Availability of fund	i. Form stakeholders' committee for coordinating Fund establishment	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
		ii. Sensitize EOA stakeholders to establish EOA Fund		
		iii. Mobilize funds from stakeholders		
SI.9.4 Private sector engaging in financial investment of EOA activities strengthened				
500,000 private companies/individuals engaged by 2027	Number of private companies/individuals	i. Identify Private Companies engaging in EOA activities	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
		ii. Conduct need assessment		
		iii. Facilitate workshops and trainings on EOA to Private Companies and Individuals		
SI.9.5 EOA co-operative services to farmers strengthened.				
3,000,000 farmers reached by 2027	Number of farmers	i. Identify cooperatives needs for capacity building	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private	2022/23-2029/30
		ii. Establish farmers' cooperatives		

		iii. Facilitate training on EOA to farmers in cooperatives	sector, farmers, DPs and Donors	
500 cooperatives strengthened	Number of cooperatives	<ul style="list-style-type: none"> i. Train cooperative leaders on good governance, financial management and marketing ii. Train cooperatives members on their rights and responsibilities iii. Support and link cooperatives to access funds 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
SO10: Facilitate development and use of irrigation infrastructure in EOA production systems				
S.I.1. Appropriate irrigation systems suitable for EOA production established.				
Supplementary water requirements for 10 different EOA farming systems established by 2024	Number of EOA farming systems with known water requirement for irrigation	<ul style="list-style-type: none"> i. Conduct analysis on crop water demand for major crops in EOA farming systems ii. Undertake soil water analysis in EOA farms 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30

		iii. Analyze rainfall characteristics in EOA farming areas		
S.I.2. Suitable irrigation systems for EOA established				
Five types of suitable irrigation systems established by 2027	Number of irrigation systems	i. Identify different types of water sources for irrigation in EOA farms ii. Identify irrigation technologies suitable for each particular EOA farming system, based on available source of water and cost benefit analysis iii. Mobilize funds for irrigation systems	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
S.I.3 Use and management of irrigation systems for EOA production promoted				
1,000,000 farmers practicing EOA using irrigation to supplement water requirements by 2027	Number of farmers	i. Identify water user groups ii. Train farmers on water management practices iii. Formulate water use by laws governing water usage	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
S.I.4 Sustainable use of water and agricultural land under EOA well managed.				

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200 water user groups established under EOA by 2027	Number of farmer groups	<ul style="list-style-type: none"> i. Sensitize formulation of farmers irrigation associations ii. Train farmers on water and land management skills 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
SO11: Enhance availability, accessibility and utilization of land for EOA				
SI.11.1 Enabling land availability, accessibility and utilization for EOA established.				
Enabling environment for land availability and access ensured in each of the EOA agro-ecological zones by 2030	Existing workable systems for land availability and access	<ul style="list-style-type: none"> i. Orient Land use planning authorities to delineate on EOA ii. Build the capacity of PLUM team, village council, Village land use conflict resolution organs and communities and other stakeholders on EOA iii. Identify existing forms of land access iv. Reinforce and operationalize village land use management organs v. Train Village Leaders, VAC, 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30

		VLUMC Committee, VLC members, Influential leaders on land rights vi. Create awareness to the communities on land rights vii. Facilitate meetings at district level		
1,000,000 acres accessed and utilized on EOA activities by 2030	Number of acres	i. Integrate EOA into village land use plan ii. Facilitate provision of CCRO	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
SI.11.2 EOA clusters established and supported.				
100 EOA clusters established by 2030	Number of clusters	i. Identify and demarcate EOA lands ii. Identify and select suitable area for EOA iii. Allocate and demarcate land in clusters for EOA	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
SI.11.3 Effective/detailed land use plans for EOA established.				

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Land use plans in areas practicing EOA in place by 2027	Number of locations equipped with land use plans	<ul style="list-style-type: none"> i. Conduct detail village land use plans ii. Enforce the land use plan iii. Support land use management iv. Support youth, women and special groups to access and or own EOA land 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
SI.11.4 Regulations that minimizes conflicts on land use among actors established				
Regulations to minimize conflicts in place by 2027	Written regulations in place	<ul style="list-style-type: none"> i. Facilitate village meetings to develop bylaws relating to EOA ii. Develop by laws to enforce land use plan iii. Support land organs to supervise enforcement of bylaws 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
SO12: Increase the business and trade volumes EOA products in the national, regional and international markets				
SI.12:1 Develop and strengthen local market for EOA products				
100 markets for EOA products developed and strengthened	Number of EOA markets developed	<ul style="list-style-type: none"> i. Conduct market analysis ii. Reform marketing systems 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private	2022/23-2029/30

		<ul style="list-style-type: none"> iii. Capacitate EOA value chain actors to meet analyzed market demands. iv. Facilitate development and strengthen market for EOA by 2030 	sector, farmers, DPs and Donors	
SI.12:2 Promote linkage and access to market information for EOA				
1,000,000 producers linked to existing and potential markets by 2030	Number of producers linked	<ul style="list-style-type: none"> i. Create and support consumer base ii. Facilitate establishment of consumers association iii. Identify existing markets iv. Facilitate producers to be linked to existing and potential market by 2030 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
Market information accessible to EOA stakeholders by 2030	Number of stakeholders accessing Market information.	<ul style="list-style-type: none"> i. Identify existing market information system ii. Support existing market information system iii. Facilitate accessibility of 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30

		market information to EOA stakeholders		
SI.12. 3 Promote investment and trade to tap local, regional and international market opportunities				
500,000 investors participating in local and international market by 2030	Number of investors on EOA	<ul style="list-style-type: none"> i. Facilitate investment forums ii. Develop policies and regulations that favor investment and trade iii. Facilitate supportive function of Private Sector Desks v. Align OA products with TMX 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
SI.12.4 Develop products to suite local and external market requirements				
List of products suit local and external markets by 2030	Availability of product required in the markets	<ul style="list-style-type: none"> i. Develop a database of products that suit local and external market ii. Conduct Laboratory test for the products to confirm product compositions and issue appropriate certificates iii. Facilitate compliance to institutes responsible for 	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30

		<p>product analysis and certification</p> <p>iv. Set product standards requirements</p> <p>v. Facilitate quality packaging and branding of products</p>		
List of market requirements for EOA products	Gazetted requirements for EOA markets	Identify market requirement for EOA product	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30
SI.12.5 Tax reforms to harness trade advantages related to EOA products advocated				
Relevant taxes to reflect special consideration of EOA reviewed by 2030	Gazetted tax review in favour of EOA	<p>i. Identify types of taxes charged</p> <p>ii. Identify agencies responsible for taxation</p> <p>iii. Conduct training and meetings with stakeholders on taxation laws</p> <p>iv. Review taxation system EOA products along the value chains</p>	Government and Agencies, Academic and research institutions, NGOs, CBOs, CSOs, private sector, farmers, DPs and Donors	2022/23-2029/30

		(processing machineries, import duties, packaging materials,) v. Facilitate tax reforms related to EOA product by 2025 vi. Train tax payers for tax compliance vii. Identify challenges facing tax payers	
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THIRD DRAFT

5.4 Sustainability Strategy

The EOA strategy is attached to the existing national, regional and continental needs and priorities. This institutionalisation and mainstreaming of EOA into policies, programmes and frameworks create a natural sustainability strategy as these structures will outlive the individual projects to be implemented.

The various existing and new continental and national organic and ecological institutions and Networks like TOAM, NOARA, NOAMs, IFOAM, FARA, AfrONet and other NGOs with EOA leaned visions and missions will continue to promote the EOA concept and initiatives and therefore including them from the EOA inception is vital. The strategy will be to mobilise as many of these networks and institutions in the country to buy into and maintain interest and support for the EOA concept.

Financial sustainability of EOA which currently relies heavily on external funding will depend on the success of the implementation of the 'Malabo declaration'. The strategies for EOA would be twofold:

- To closely monitor and push for our government to allocate 10% of the national budget to Agriculture and rationally elaborate the proportion allocated for promoting EOA initiatives in terms of research and product development.
- To initiate product differentiation strategy in markets for EOA farm inputs and produce for communicating the unique qualities of products and hence developing a strong value proposition thus making the services and or produce attractive to a target market. This will ensure self-sufficiency of EOA in a self-regulating market with benefits reaching the farmers.

5.5 Resource Mobilization and Funding Arrangements

This strategy needs funds for implementation to become substantial for community development and sustainability. This will require commitments from: Government through budget allocations based on the Maputo Declaration i.e., 10% of annual national budgets; Development Partners through both basket funding and direct project/programme support; Private Sector actors, including NGO, Business companies and farmers. Other source of fund includes,

- Tap into Ecotourism- by providing tourism services like taking visitors to visit tourist attractions that include a contribution to local EOA development in the fee. Or even providing tours / visits to competent local EOA producers, processors, and markets. This will facilitate buffer zones as well as the creation of the GMO-free areas in Africa.
- Fees from organized events i.e. farmers' markets, EOA dinners, Organic food days, localized conferences to link to markets could be used to fund some EOA initiatives.

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- Profiling of EOA champions and using their influence to help in fundraising, for example Hon. Dr. Jakaya Kikwete, and others.
- Raising funds from the Certification/PGS of Africa organic produce.

The Funding Area:

To implement this Strategic plan successfully, the collected funds should cover the following budget areas;

1. Research, Technology Development and Dissemination

The budget under research shall mainly cover inventorying on-going research in all EOA aspects such as inputs, technologies, marketing, building capacity of researchers, establishing and strengthening inter and intra collaborative linkages between mainstream agricultural research and organic agriculture institutions.

2. Ecological organic agriculture education and training

Budget under education and training shall mainly cover integration of ecological organic farming into education curricula at all levels of education along the value chain actors; supporting training institutions with organic farming materials, methodologies and infrastructure; and supporting in-service training of agriculture extension agents.

3. EOA Technological support

The budget under EOA technology support shall cover establishment of genetic resource management systems; soil fertility and ecosystems management; rural and infrastructure development; mobilizing alternative rural finance; and certification/quality control.

4. Post-harvest handling, storage and value addition

Budget under post-harvest and value addition shall mainly cover making available and affordable appropriate agricultural technologies that are scientifically-based for post-harvest handling, storage and value addition.

5. Standards, Certification and Accreditation

The budget under standards and certification shall cover awareness creation, establishment and implementation of a certification system for production, processing, transportation and marketing of organic products and enforcement of the organic agriculture standards.

6. Sustainable use of Natural Resources and Conservation of Indigenous Knowledge

The budget under sustainable use of natural resources shall cover initiatives that ensure sustainable use of natural resources for current and the future generations.

Table 3: Proposed Budget for 2022 – 2030

S/N	Budget Line/Funding Area	Amounts
1.	Research, Technology Development and Dissemination	
2.	Organic agriculture education and training	
3.	Agriculture production and technology support	
4.	Post-harvest handling, storage, and value addition	
5.	Standards, certification, and accreditation	
6.	Market development and promotion	
7.	Sustainable use of Natural Resources and Conservation of Indigenous Knowledge	

CHAPTER SIX

MONITORING, EVALUATION AND LEARNING

6.0 Overview

The chapter describes the tracking of implementation of the planned interventions and subsequently takes corrective measures on the implementation strategy. In achieving the process of Monitoring, Evaluation and learning this chapter gives directions and description on Result framework, Monitoring and Evaluation Arrangements, Risks and Uncertainties, Reporting Management and Reporting Plan.

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6.1 Result framework

Table 4: Result Framework Matrix

Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions		
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8			
Develop multi-disciplinary research, training and extension approaches and initiatives in support of EOA	100 institutions with EOA interventions reached by 2027	Number of institutions with EOA interventions	Annual Progress Reports, Administrative Records	Sept, 2023	30											TOAM
Disseminate more EOA information and knowledge needed by value chain actors through demand-driven, multi-disciplinary, gender sensitive,	500 service providers identified and commissioned to disseminate ICE materials to farmers by 2027	Number of service providers	Annual Progress Reports, Administrative Records	Sept, 2023	100											TOAM
	1,000,000 Information Communication	Number of ICE materials	Annual Progress Reports,	Sept, 2023	180,000											Academic Institutions

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions	
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8		
and participatory research.	and Education materials prepared, printed and disseminated		Administrative Records												
	3,000,000 Farmers received and gain knowledge on EOA Practices by 2027	Number of farmers practicing	Annual Progress Reports, Training Reports. EOA actors progress reports.	Sept, 2023	1,000,000										
Conduct need based EOA training to stakeholders to improve production and enhance markets.	1,000,000 Stakeholders reached by 2027	Number of stakeholders Number of trainings	Annual Progress Report, Training Reports	Sept, 2023	500,000										Academic Institutions

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions	
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8		
Validate and harmonize EOA different research initiatives conducted by various institutions	200 EOA research initiatives validated and harmonized	Number EOA initiatives	Annual Progress Report, Administrative Records	Sept, 2023	30										Research Institutions
Extension services on EOA to farmers strengthened	10,000 extension officers capacitated on EOA by 2025	Number of extension officers	Annual Progress Report, Training Reports	Sept, 2023	200										President's Office - Regional Administration and Local Government
	3,000,000 farmers reached by 2027	Number of farmers	Annual Progress Report, Administrative Records	Sept, 2023	200,000										President's Office - Regional Administration and Local Government

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions	
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8		
Research institutions capacitated to carry out EOA researches	50 research institutions capacitated by 2027	Number of research institutions	Annual Progress Report, Administrative Records	Sept, 2023	10										Research Institutions
EOA demonstration plots/farms developed and implemented.	1,000 EOA demonstration farms developed and implemented by 2027	Number of demonstration farms Number of farmers practicing EOA	Annual Progress Report, Administrative Records	Sept, 2023	100										President's Office - Regional Administration and Local Government
Production, supply and use of EOA inputs and	50 factories or plants (small, medium and large) producing	Number of factories or plants	Survey Report, Survey	Sept, 2023	10										Input producers and suppliers. Agro Dealers, agents and traders

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions		
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8			
machinery promoted.	EOA inputs by 2027															
	Quantity of EOA inputs supplied to farmers by 2030	Quantity of EOA inputs supplied	Survey Report, Survey	Sept, 2023	XXX											Input producers and suppliers. Agro Dealers, agents and traders
Strengthen EOA breed/fingerlings/seed/ systems	200 Institutions/associations (crops/livestock/fisheries) strengthened by 2027	Number of institutions/associations	Annual Progress Report, Administrative Records	Sept, 2023	5											Farmers' cooperatives/groups
	500 Farmer groups strengthened by 2027	Number of farmer groups	Annual Progress Report, Administrative Records	Sept, 2023	50											Farmers' cooperatives/groups
Institution capacities (public and private) engaging in EOA inputs and	200 institutions engaging in EOA strengthened by 2027	Number of institutions	Annual Progress Report, Administrative Records	Sept, 2023	30											Research Institutions

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions	
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8		
machinery strengthened.															
Appropriate use of EOA inputs advocated and promoted	1,000,000 farmers use EOA inputs appropriate by 2027	Number of farmers Types of inputs	Annual Progress Report, Administrative Records	Sept, 2023	250,000										President's Office - Regional Administration and Local Government
Collection and conservation of Germplasm promoted.	1,000 accessions collected and conserved through gene bank and community seed bank by 2025	Number of accessions	Annual Progress Report, Administrative Records	Sept, 2023	100										President's Office - Regional Administration and Local Government
	100 community seed banks established by 2030	Number of community seed banks	Survey Report, Survey	Sept, 2023	10										President's Office - Regional Administration and Local Government

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions	
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8		
Use of appropriate Agricultural mechanization technologies in EOA production promoted.	1,000,000 farmers using appropriate Agricultural mechanization technologies by 2030	Number of farmers	Survey Report, Survey	Sept, 2023	150,000										President's Office - Regional Administration and Local Government
	20 appropriate agricultural mechanization technologies promoted by 2030	Number of technologies	Survey Report, Survey	Sept, 2023	5										Research Institutions
Enabling environment such as regulatory framework and uptake of ICT solutions that	10 EOA information and communication platforms by 2027.	Number of platforms	Annual Progress Report, Administrative Records	Sept, 2023	3										MoA, TOAM

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions		
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8			
respond to the needs of smallholder farmers and other stakeholders in the EOA value chains enhanced and promoted.	One (1) EOA information and communication systems by 2027.	Number of systems	Annual Progress Report, Administrative Records	Sept, 2023	0											MoA, TOAM
Awareness of EOA value chain actors of potential ICT-based solutions and their prospective added value enhanced	5,000,000 actors reached by 2027.	Number of actors	Annual Progress Report, Administrative Records	Sept, 2023	965,500											MoA, TOAM
	5 ICT based solutions available by 2027	Number of ICT solutions	Annual Progress Report, Administrative Records	Sept, 2023	2											MoA, TOAM
Networking among EOA stakeholders strengthened, promoted and	100 Institutions strengthened for knowledge and technology	Number of institutions	Annual Progress Report, Administrative Records	Sept, 2023	60											TOAM

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions	
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8		
coordinated for knowledge and technology development, solicitation of funding opportunities as well as market access.	development by 2027														
Networking among EOA stakeholders strengthened, promoted and coordinated for knowledge and technology development, solicitation of funding opportunities as well as market access.	Networking among EOA stakeholders strengthened by 2027	Number of EOA stakeholders identified	Annual Progress Report, Administrative Records	Sept, 2023	XXX										TOAM

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions	
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8		
		Number of EOA stakeholders capacitated	Annual Progress Report, Training Reports	Sept, 2023	XXX										Academic Institutions
		Well-functioning stakeholders' networks	Annual Progress Report, Administrative Records	Sept, 2023	XXX										TOAM
	250 solicitation of funding opportunities and coordination of EOA activities by 2027	Amount of funding solicited and activities executed	Annual Progress Report, Administrative Records	Sept, 2023	50										TOAM
	500 EOA stakeholders linked and coordinated for market access by 2027	Number of stakeholders coordinated for market access	Annual Progress Report, Administrative Records	Sept, 2023	80										TOAM

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions		
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8			
National and International stakeholder's forums/workshops/conferences for sharing information of EOA strengthened, supported and promoted.	At least one conference/forum/workshop conducted annually	Number of conference/forum/workshop Number of reports/proceedings	Annual Progress Report, Administrative Records	Sept, 2023	1											TOAM
	Networking among EOA stakeholders promoted by 2027	Number of networks promoted	Annual Progress Report, Administrative Records	Sept, 2023	1 networking platform annually											TOAM
		Type of promotion materials developed and disseminated	Annual Progress Report, Administrative Records	Sept, 2023	xxx											

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions	
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8		
		Number of promotion materials developed and disseminated	Annual Progress Report, Administrative Records	Sept, 2023	Repeated pg 98										
		Business model developed and disseminated	Annual Progress Report, Administrative Records	Sept, 2023	TBD										
	Networking among EOA stakeholders coordinated by 2027	Number of networks coordinated	Annual Progress Report, Administrative Records	Sept, 2023	TBD										TOAM
National EOA products standard aligned and benchmarked with international standards	National EOA Standards developed by 2025	EOA standards in place	Annual Progress Report, Administrative Records	Sept, 2023	0										TOAM

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions		
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8			
developed and promoted.	EOA quality mark/seal established by 2025	EOA mark available and used	Annual Progress Report, Administrative Records	Sept, 2023	0											TOAM
Inspection and verification systems strengthened Establish domestic certifying bodies for inspection, verification and certification.			Annual Progress Report, Administrative Records	Sept, 2023	0											
Capacity of OA value chain actors on compliance of standards and certification of products enhanced.	1,000,000 OA value chain actors capacitated by 2030	Number of OA value chain actors capacitated	Survey Report, Survey	Sept, 2023	150,000											Academic/ Research Institutions, Stakeholders, DPs
	1,000,000 OA value chain	Number of OA value chain actors certified	Survey Report, Survey Certification reports	Sept, 2023	TBD 150,000											Certification Agencies

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions	
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8		
	actors certified by 2030														
Capacity of EOA producers and processors on production techniques and quality compliance strengthened.	1,000,000 EOA producers and processors capacitated by 2027	Number of producers and processors capacitated	Annual Progress Report, Administrative Records	Sept, 2023	150,000										Academic/ Research Institutions, Stakeholders, DPs
Out-grower models of EOA producers and processors to enhance economies of scale in trading and certification process strengthened.	3 out grower model sustainably operating in EOA subsector value chains	Number of functioning out grower models	Annual Progress Report, Administrative Records	Sept, 2023	1										TOAM

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions		
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8			
Cooperatives and associations' competitiveness and capacity for profitable business engagement in the value chain enhanced and strengthened	500 Cooperatives and associations strengthened	Number of cooperatives and associations capacitated	Annual Progress Report, Administrative Records	Sept, 2023	80											TCDC
	1,000,000 farmers supported by 2030	Number of farmers supported by 2030 Number of OA Standards and certification Institutes capacitated	Survey Report, Survey	Sept, 2023	???											Certification Agencies
Traditional environmentally friendly practices enhanced	20 environmentally friendly practices enhanced by 2027	Number of environmentally friendly practices	Annual Progress Report, Administrative Records	Sept, 2023	5											PELUM

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions		
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8			
Traditional environmentally friendly practices up scaled in different societies.	20 environmentally friendly practices up scaled by 2027	Number of environmentally friendly practices	Annual Progress Report, Administrative Records	Sept, 2023	5											PELUM
Capacity building to youth, women, and people with disabilities along the EOA value chain provided and strengthened	2,000,000 youth empowered by 2030	Number of youths	Survey Report, Survey	Sept, 2023	130,000											Academic Institutions, Stakeholders,
	3,000,000 women empowered by 2030	Number of women	Survey Report, Survey	Sept, 2023	500,000											Academic Institutions, Stakeholders
	500,000 people with disabilities empowered by 2030	Number of people with disabilities	Survey Report, Survey	Sept, 2023	TBD											Academic Institutions, Stakeholders

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions	
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8		
Sensitization/awareness on HIV/AIDS and COVID-19 in the EOA subsector created and promoted	3,000,000 actors aware of HIV/AIDS and COVID-19 consequences by 2027	Number of actors	Annual Progress Report, Administrative Records	Sept, 2023	TBD										Stakeholders
	Awareness Campaigns conducted by 2027	Number of campaigns	Annual Progress Report, Administrative Records	Sept, 2023	TBD										Stakeholders
Environmental Conservations and rational utilization of natural resources on EOA interventions mainstreamed	100 Institutions practicing environmental conservations by 2030	Number of institutions	Survey Report, Survey	Sept, 2023	30										PELUM, SAT
	500,000 stakeholders trained on rational allocation and utilization of	Number of stakeholders	Survey Report/ Training Reports, Survey	Sept, 2023	TBD										Academic Institutions

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions	
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8		
	natural resources by 2030														
Nutrition and value addition interventions on EOA mainstreamed	500,000 trained on nutrition and value addition in EOA products	Number of trainings	Survey Report/ Training Reports, Survey	Sept, 2023	50,000										MoA, TNFC
	500,000 incapacitated on viable value addition technologies	Number of trained technologies	Annual Progress Report, Training Reports, Administrative Records	Sept, 2023	20,000										Research Institutions
Financial schemes to facilitate EOA activities established.	Five effective financial schemes in each of the agro ecological zones	Number of effective financial schemes	Survey Report, Survey	Sept, 2023	1										

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions	
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8		
	developed by 2030														
	User friendly loan access regulations in the financial schemes established by 2030	Set of user-friendly regulations	Survey Report, Survey	Sept, 2023	TBD										
EOA activities through knowledge on financial access and management supported	1,000,000 stakeholders acquired knowledge on financial access and management by 2030	Number of stakeholders	Annual Progress Reports, Administrative Records/ Survey Report, Survey	Sept, 2023	150,000										
EOA Fund to strengthen and sustain capacity building to farmers established	Fund established by 2030	Availability of fund	Annual Progress Reports, Administrative Records/ Survey	Sept, 2023	TBD										TOAM

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions	
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8		
			Report, Survey												
Private sector engaging in financial investment of EOA activities strengthened	500,000 private companies/individuals engaged by 2027	Number of private companies/individuals	Annual Progress Reports, Administrative Records	Sept, 2023	20,000										TOAM
EOA cooperative services to farmers strengthened.	3,000,000 farmers reached by 2027	Number of farmers	Annual Progress Reports, Administrative Records	Sept, 2023	250,000										TCDC
	500 cooperatives strengthened	Number of cooperatives	Annual Progress Reports, Administrative Records	Sept, 2023	80										TCDC
Available water sources suitable for EOA	10 types of water sources identified by 2024	Number of water sources	Annual Progress Reports, Administrative Records	Sept, 2023	TBD										NiRC

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions	
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8		
production established.															
Suitable irrigation systems for EOA established	Five types of suitable irrigation systems established by 2027	Number of irrigation systems	Annual Progress Reports, Administrative Records	Sept, 2023	TBD										NiRC
Use of irrigation systems for EOA production promoted	1,000,000 farmers practicing EOA using irrigation to supplement water requirements by 2027	Number of farmers	Annual Progress Reports, Administrative Records	Sept, 2023	50,000										NiRC
Sustainable use of water and agricultural land under EOA well managed	200 water user groups established under EOA by 2027	Number of water user groups	Annual Progress Reports, Administrative Records	Sept, 2023	0										NiRC

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions		
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8			
	250 farmer groups capacitated to manage agricultural land under EOA by 2027	Number of farmer groups	Annual Progress Reports, Administrative Records	Sept, 2023	0											MoA, MLF
Enabling land availability, accessibility and utilization for EOA established.	Enabling environment for land availability and access ensured in each of the EOA agro-ecological zones by 2030	Existing workable systems for land availability and access	Survey Report, Survey	Sept, 2023	XXX											MoA, MLF, SAT, PELUM
	500,000 farmers accessed and utilized land on EOA activities by 2030	Number of farmers	Survey Report, Survey	Sept, 2023	300,000											MoA, MLF, SAT, PELUM

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions		
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8			
EOA clusters established and supported	100 EOA clusters established by 2030	Number of clusters	Survey Report, Survey	Sept, 2023	10											TOAM
Effective/detailed land use plans for EOA established.	Land use plans in areas practicing EOA in place by 2027	Number of locations equipped with land use plans	Annual Progress Reports, Administrative Records	Sept, 2023	0											MoA, MLF
Regulations that minimizes conflicts on land use among actors established	Regulations to minimize conflicts in place by 2027	Written regulations in place	Annual Progress Reports, Administrative Records	Sept, 2023	XXX											MoA, MLF
Develop and strengthen local market for EOA products	100 markets for EOA products developed and strengthened	Number of EOA markets developed	Annual Progress Reports, Administrative Records	Sept, 2023	15											MoA, MLF, TOAM
Promote linkage and access to market	1,000,000 producers linked to existing and	Number of producers linked	Survey Report, Survey	Sept, 2023	200,000											MoA, MLF, TOAM

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions		
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8			
information for EOA	potential markets by 2030															
	Market information system accessible among EOA stakeholders by 2030	Number of stakeholders accessing Market information.	Survey Report, Survey	Sept, 2023	xxx											MoA, MLF, TOAM
Promote investment and trade to tap local, regional and international market opportunities	500,000 investors participating in local and international market by 2030	Number of investors on EOA	Survey Report, Survey	Sept, 2023	150,000 operators											MoA, MLF, TOAM
Develop products that are well suited to local and external	List of products suit local and external markets by 2030	Availability of product required in the markets	Survey Report, Survey	Sept, 2023	20											MoA, MLF, TOAM

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Strategy	Target	Key Performance Indicator	Data Source and Collection Methods	Baseline		Indicator Target Value								Responsible Institutions	
				Date	Value	Y 1	Y 2	Y 3	Y 4	Y 5	Y 6	Y 7	Y 8		
market requirements	List of market requirements for EOA products	Gazette requirements for EOA markets	Survey Report, Survey	Sept, 2023	XXX									MoA, MLF, TOAM	Deleted: Gazetted
Tax reforms to harness trade advantages related to EOA products advocated	relevant taxes to reflect special consideration of EOA reviewed by 2030	Gazette tax review in favour of EOA	Survey Report, Survey	Sept, 2023	TBD										Deleted: Gazetted

6.2 Monitoring and Evaluation Arrangements

The NEOAS will be monitored by the NEOAS task force under the supervision of a focal person appointed by the Permanent Secretary, Ministry of Agriculture. The detailed log framework which includes Output and Outcome indicators and Targets for Strategic Objectives will be the basis for monitoring progress. The Monitoring process will help to track the performance of the Strategic Plan in terms of inputs, activities, expected outputs and outcomes so as to determine whether the NEOAS implementation is on course and also to assess how much is being achieved as impact. Therefore, monitoring of the NEOAS will provide regular updates of the progress made in implementation in relation to the set objectives.

The implementing team of the strategy will undertake both internal and external monitoring, evaluation and learning. There will be both mid-term and end of period monitoring and evaluation participatory approach. The monitoring activities will involve systematic and regular data collection, processing, analysis, and reporting of the stakeholders' findings. The monitoring and evaluation will primarily be used to compare planned targets against achievements. This is an important tool which will enable both the custodian and stakeholders to detect deviations from the target plan in time and make the necessary corrections.

In order to monitor NEOAS effectively, actions will be taken in response to what is measured and reported. In this regard, if monitoring shows that the Strategic Plan is off track, appropriate interventions will be taken or the implementation strategies will be revised accordingly. Therefore, the NEOAS will be a living document that will require adjustments as objective conditions change. Monitoring will also be essential for providing information that is required for accountability purposes. The achievement of the objectives of the NEOAS will be measured through a set of designed performance indicators.

The following will be done to ensure the effective and efficient in implementation, monitoring and evaluation of all EOA Subsector: -

- i. Stakeholders implementing NEOAS shall share/submit quarterly and annual progress reports to the NEOAS focal person;
- ii. NEOAS focal person will coordinate quarterly monitoring of NEOA implementation in collaboration with NEOAS task force and produce a report;
- iii. NEOAS task force meeting will review progress of NEOAS implementation, consolidate and produce an annual report;
- iv. Stakeholders' workshop/meeting/platform for sharing information, reviewing NEOAS progress and validate annual report will be conducted annually; and

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- v. Mid-term evaluation of NEOAS will be conducted in 2025 and evaluation in early 2031.

6.3 Risk and uncertainties

During the implementation of the NEOAS, risks are expected that may affect implementation and achievement of the set goals. These risks and uncertainties include:

- i. Insufficient funding for NEOAS implementation.
The success of the implementation depends on the timely availability of adequate funds allocated to implement the plan from both the Government as well as Development Partners;
- ii. Difficultness of changing farmers' mindset

6.4 Reporting Management

This will involve reporting management of the performance in compliance to the progress towards attainment of the strategy objectives. The reporting plan will detail on the type of reports, recipients, frequency of reporting and responsible institutions. This will be done by the ministry responsible for agriculture and will comprise submitted technical and financial reports in form of progress reports. Annual progress reports will be submitted by each implementing organization to the responsible ministry from which the country report shall be developed for sharing with national and international stakeholders as well the general public. Annual monitoring and evaluation reports will be established based on regular monitoring work undertaken among stakeholders led by the responsible ministry **Table below** further elaborates the plan.

Commented [MM2]: Local government reporting should be illustrated

Table 5: Reporting Plan

Type of Report	Recipient of the Report	Frequency	Responsible
Quarterly progress reports	Ministry of Agriculture	Quarterly	Head of implementing unit
Annual progress reports	Ministry of Agriculture	Annually	Head of implementing organization
Annual M&E reports	Stakeholders	Annually	PS & Heads of implementing organizations

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National report on implementation of the Strategy	National stakeholders	Annually	Permanent Secretary, Ministry Responsible for Agriculture
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REFERENCES

ANNEXES

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**Ecological Organic Agriculture will ensure we have food for
today and tomorrow while conserving the environment.**

MINISTRY OF AGRICULTURE
P.O.Box 2182, 40487, Dodoma
Telegram: "Kilimo Dodoma"
Tel: +255 (026) 2321407/2320037
Fax: +255 (026)2320037
Email: ps@kilimo.go.tz
www.kilimo.go.tz