

THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF AGRICULTURE FOOD SECURITY AND COOPERATIVES



NATIONAL AGRICULTURE POLICY

DRAFT

DAR ES SALAAM

FEBRUARI, 2013

ABBREVIATIONS AND ACRONYMS

ASLM's	Agricultural Sector Lead Ministries
ASDS	Agricultural Sector Development Strategy
ASPs	Agricultural Service Providers
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
CORDEMA	Client Oriented Research and Development Management Approach
FSR	Farming Systems Research
GDP	Gross Domestic Product
HIV/AIDS	Human Immune Deficiency Virus/Acquired Immunodeficiency Syndrome
ICT	Information and Communication Technology
IPM	Integrated Pest Management
LGA's	Local Government Authorities
MAFC	Ministry of Agriculture Food Security & Cooperatives
MT	Metric Tonnes
NARS	National Agricultural Research Systems
NGO's	Non Governmental Organizations
NIMP	National Irrigation Master Plan
NSGRP	National Strategy for Growth and Reduction of Poverty
QDS	Quality Declared Seed
SACCOS	Savings and Credit Cooperative Societies
SACAS	Savings and Credit Associations
SACCAR	Southern African Centre for Cooperation in Agricultural and Natural Resources Research
SME's	Small and Medium Enterprises
SPS	Sanitary and Phyto-Sanitary
SUA	Sokoine University of Agriculture
TACRI	Tanzania Coffee Research Institute
TORITA	Tobacco Research Institute of Tanzania
TOSCI	Tanzania Official Seed Certification Institute
TPRI	Tropical Pesticide Research Institute
TRIT	Tea Research Institute of Tanzania
ZARDIs	Zonal Agricultural Research Development Institutes

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FOREWORD

The importance of agricultural sector in the economy need to be over-emphasised based on its relationship between its performance and that of key economic indicators like GDP and employment. Since this relationship is there to stay for some time to come, justifies the argument that any attempts to improve living standards of the people must give particular attention to increased production and productivity in the agricultural sector.

National Agriculture Policy revolves around the goals of developing an efficient, competitive and profitable agricultural industry that contributes to the improvement of the livelihoods of Tanzanians and attainment of broad based economic growth and poverty alleviation. The Government is committed to bring about *green revolution* that entails transformation of agriculture from subsistence farming towards commercialization and modernization through crop intensification, diversification, technological advancement and infrastructural development.

In this endeavour, the government recognizes the paramount importance of the private sector as the engine of growth and thus the business environment shall be improved in order to catalyse the participation of private sector in agricultural development. Further reforms are also required in order to spearhead the already existing policy reforms in the agricultural sector that envisage greater involvement of private sector in agricultural production, processing, marketing and the provision of support services.

In view of recent development such as the promotion of bio-fuel and global food crisis, that has resulted into escalating food prices, this has posed a new challenge and an opportunity for farmers to increase production and productivity. Given the country's favourable climate, suitable land resources and availability of labour, there is no doubt that bio-fuel production have the potential to provide the much needed energy for use in Tanzania and surplus for sale in regional and international markets. However, despite the potential benefits of bio-fuel, there are concerns that bio-fuel development if not properly managed could bring about several challenges including converting the land currently used for food crop production into bio-fuel crop production thus posing a new threat to national food security. Since bio-fuel crops often requires large swaths of land to be cleared for land to be converted into bio-fuel production, such conversion if not properly managed may result into habitat destruction of biodiversity and environment at large. In light of this critical concern, actions shall be taken to address trade-offs and opportunities for the development of bio-fuel production in the country.

The National Agriculture Policy therefore aims at addressing challenges that continue to hinder the development of the agricultural sector which include low productivity of factors of production; over dependence on rain-fed agriculture; inadequate agriculture support services; poor infrastructure; weak agro-industries and low quality of agricultural produce; inadequate participation of private sector; and environmental degradation and diseases. A conducive policy environment is required for effective participation of all actors in the sector in order to tap existing capabilities and potentialities so as to revitalise the development of the sector. There shall be a policy shift towards increased investment in agriculture and greater involvement of private sector in the production and provision of support services to the farming community.

A participatory process between government and other stakeholders was adopted in the formulation process and therefore the policy is a product of inputs received from different stakeholder consultation workshops. I would like to take this opportunity to emphasize government commitment towards continued cooperation with the major actors in the development of the agricultural sector.

The National Agriculture Policy is indeed a tool for facilitating the attainment of NSGRP objectives, Tanzania Development Vision 2025 that envisages raising the general standards of living of Tanzanians to the level of a typical medium-income developing country by 2025 and meeting the Millennium Development Goals.

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CHAPTER ONE

1.0 INTRODUCTION

A review of the National Agricultural and Livestock Policy of 1997 was undertaken in conjunction with different policy changes taking place at the global, regional and national levels that have impact on the development of the agricultural sector. In formulating the National Agriculture Policy of 2013, all other related policies in the development of agriculture have been linked.

1.1 Challenges and Opportunities

1.1.1 Challenges

The main challenges facing agricultural sector in Tanzania include among others the following:

i) Low productivity of factors of production

One of the critical weaknesses in agriculture is low productivity of land, labour and capital. This is caused mainly by inadequate finance to obtain productivity enhancing inputs, low returns to labour due to inadequate knowledge and skills; low use of labour saving technologies and low use of improved farm inputs such as quality seeds, fertilizers, chemicals and pesticides.

ii) Over dependence on rain fed agriculture

Recent statistics show that yield response to irrigation is about twice to thrice higher when compared to yields from rain fed agriculture. However, irrigation in Tanzania is underdeveloped, exposing the agriculture industry to high variability of rainfall from season to season.

iii) Inadequate agricultural Support Services

Many technological innovations such as improved seeds, use of fertilisers, appropriate implements, rain water harvesting and post harvest technologies are yet to be adopted by majority of smallholder farmers. This is a result of inefficient technology dissemination, low use and adaptation of improved technologies. With no serious land constraint, efforts to increase smallholder agricultural production can include both technologies to expand area under cultivation and/or intensification of the existing cultivated areas.

iv) Poor rural infrastructure

Improved infrastructure such as rural roads, railways, markets, communication facilities, water supply, storage, transportation and electrification are a precondition to successful expansion of agriculture. However, rural roads, railways, markets, communication facilities, water supply, storage, processing facilities and electrification are largely underdeveloped.

v) Weak agro-industries and poor linkages within the value chain of agricultural produce

Value addition through processing of agricultural crops would not only create more employment opportunities and income but also reduce rural urban migration, especially if

processing industries are established in rural areas. However, agro-processing industries in Tanzania are underdeveloped.

vi) Low quality of agricultural produce

Most of the agricultural products fetch low market prices due to low quality resulting from underdeveloped value chains.

vii) Inadequate participation of the private sector

Private sector participation in agri-business in the country remains modest. The inherent risks associated with agriculture make it unattractive to private sector entrepreneurs who are unable to exploit existing opportunities in the agricultural sector.

viii) Other problems such as environmental degradation, diseases (such as HIV/AIDS)

Agricultural development is heavily dependent on a properly managed environment. However, improper agricultural practices are contributing heavily to environmental degradation, decreasing land productivity and even threatening future sustainability of the industry.

The high prevalence of diseases such as HIV/AIDS and waterborne diseases are adversely affecting the development of the agricultural sector. The disease incidences reduce the agricultural labour force in the sector and cumulative health problems increase household vulnerability to food and livelihood insecurity, which deepen their poverty levels.

1.1.2 Opportunities

Despite the existing challenges, the agricultural sector has a number of opportunities that if utilized effectively will lead to increased production and productivity and thus act as a basis for poverty alleviation in rural areas. The main opportunities include:

- i) Abundant natural resources (land, water) and different agro-ecological zones;
- ii) Comparative advantage in the production of various crops including non-traditional crops;
- iii) Expanding domestic, regional and international market opportunities for various agricultural commodities. Tanzania can take advantage of global food crisis to expand production of major food crops for the export market;
- iv) Growth of agribusinesses and medium to large-scale farms provide opportunities for creating partnerships with small farmers as well as creating a more dynamic rural jobs market;
- v) Considerable number of existing agricultural research institutions for development of agricultural experts and technologies;
- vi) Existence of favourable policies for agricultural development; and
- vii) Existence of institutional reforms for improving efficiency and effectiveness in the provision of public services.

These constraints and opportunities also form the basis for the formulation of the National Agriculture Policy.

1.2 Policies with Bearing in the Development of the Agricultural Sector

Agricultural policy in Tanzania has been evolving to reflect macro economic policy changes from centrally planned to a market led economy. The first agricultural policy that was formulated in 1983 during the centrally planned economy was reviewed in 1997 to accommodate macro and sectoral policy reforms of mid eighties and nineties that focused on market led economy. Since then, a number of macro and sector specific reforms that have a bearing on agriculture have taken place. These include fiscal and monetary policies at the macro level and a number of sector specific policies.

1.2.1 Sector policies

Land Policy of 1995

The Land Policy of 1995 has many good features that will promote and ensure a secure land tenure system to encourage the optimal use of land resource for agricultural development and facilitate broad based socio-economic development without endangering the ecological balance in the environment. It legalizes the sale of property in Tanzania while promoting and supporting markets in land. This shall foster investment in agriculture by the private sector and foreign investors and provide incentive for local communities to invest in land development. The policy and law promotes equitable distribution and access to land for all citizens such as the removal of gender imbalance in land ownership and sound management of land resources. It also emphasizes the need to survey and demarcate land, expedite allocation and titling as well as facilitate preservation and conservation for sustainable development.

The National Environmental Policy of 1997

The National Environmental Policy has a strong link with sustainable agriculture and food security with a focus on continuous conservation of the environment especially by reducing soil deterioration, preserving water catchments and mitigating actions that foster environmental deterioration. The policy aims at ensuring sustainable environmental conservation for ensuring security and equitable use of resources for meeting the basic needs of present and future generations without degrading the environment or risking the health or safety of people.

National Forestry Policy of 1998

The National Forestry Policy aims at fostering sustainable forest management, preservation of biodiversity and conservation of water catchments and prevention of soil erosion. The policy emphasizes the involvement of local communities, private sector and government in ensuring better and sustainable management and use of forest resources.

The Local Government Reform Policy of 1998

The Local Government Reform Policy aims at devolving responsibility for socio-economic development and public service provision in the jurisdiction of the Local Government Authorities. Other functions include facilitation and maintenance of law and order and on issues of national importance such as agricultural development.

National Micro-Finance Policy of 2000

The National Micro-finance policy aims at achieving widespread access to micro-finance throughout the country – both in urban and rural areas. Since credit is a major impediment to agricultural development, the policy focuses on the provision of low-cost, affordable financial services to households, small-scale farmers, small and micro-enterprises in rural areas as well as in urban areas.

Gender Policy of 2000

The National Gender Policy put emphasis on incorporation of gender issues in all national development activities. The policy observes that over 90.4 percent of the active women in Tanzania are engaged in agriculture related activities. Women produce over 70 percent of the country's food requirements. Yet, despite their unequivocal role, female producers are excluded from ownership of land and other resources, the means of production and even the products of their own labour.

The Rural Development Policy of 2001

The Rural Development Policy provide linkages between individual sectoral policies for rural development by providing a framework for coordination with a focus on harmonizing and coordinating the various sector approaches in order to bring about changes in rural areas using a multi-sectoral approach that is central to bringing about rural development. This calls for institutionalizing an effective co-ordination mechanism to foster co-operation among the different government organs, private sector, civil society and other stakeholders.

National HIV Policy of 2001

The National HIV Policy recognizes that HIV/AIDS is a national pandemic and indeed a global disaster that is eroding the agricultural labour force. It kills and threatens the survival of the people, affecting the most active and productive members of the population hence having devastating social and economic consequences. HIV/AIDS has severe effects on agricultural development through loss of active labour; time for caring the sick, depletion of savings which could otherwise be invested in agriculture and overall decline in productivity.

Co-operative Development Policy of 2002

The Co-operative Development Policy of 2002 provides a framework for restructured cooperatives to operate on economically viable basis. The Government recognizes the great potential co-operatives have in the provision of implements, technologies, information and their role in improving social and economic conditions of small producers engaged in agricultural production.

The National Trade Policy of 2003

The National Trade Policy is explicit on promoting agricultural marketing activities. The policy focuses on rationalization of the tariff structure, adopting fair taxation system, upholding standards to enhance competitiveness and promoting market linkages and agricultural exports.

Water Policy of 2002

The Water Policy recognizes that Tanzania's agriculture is risky in part because of the unpredictability of rainfall and the subsequent calamities of droughts, floods or poor harvest.

The water policy endeavours to ameliorate this problem by explicitly recognizing the role that irrigated agriculture can play in enhancing agricultural production and food security in the country.

National Information and Communication Technology Policy (2003)

The National Information and Communication Technology Policy is both cross-sectoral and sectoral policy in its own right. The ICT Policy recognizes the need for ICT in agricultural development for enhancing productivity and profitability. The coordination of trade links and e-markets as well as the deployment and development of a nationwide ICT system to support farmers, traders and other actors to foster enterprise, entrepreneurship and innovativeness is a pre-requisite for sustainable economic development.

The National Energy Policy of 2003

The National Energy Policy is explicit on its resolve to promote agricultural development through the supply of efficient and affordable energy. It encourages energy efficiency use in irrigation, agro-processing and the search for alternative, more-affordable energy sources such as solar, wind and biogas for the development of the agricultural sector.

The National Empowerment Policy of 2004

The National Empowerment Policy aims at ensuring that the majority of Tanzanian citizens have access to opportunities and participate effectively in economic activities in all sectors of the economy.

The National Livestock Policy of 2006

The National Livestock Policy aims at developing the livestock industry that contributes to the improvement of the well being of the people by improving food security and rural incomes. It also focuses on promoting draught animal power, farming of various crops for compounding feedstuffs and biogas utilization.

National Employment Policy of 2008

The National Employment Policy of 2008 aims at ensuring effective utilization of the labour force in rural areas by improving agricultural production and productivity. The policy identifies areas for creation of rural jobs, establishment of agri-business and farming enterprises and thereby reduces rural-urban migration.

Agricultural Marketing Policy (2008)

The Agricultural Marketing Policy recognizes the need for the development of efficient, effective, flexible, accessible and equitable agricultural marketing system as a pre-requisite in fostering market-oriented agriculture's contribution in income generation, job creation, foreign exchange generation, providing balance between rural and urban areas, supplying food to all at affordable prices and strengthening linkages with the manufacturing industry.

National Youth Development Policy of 2009

The National Youth Policy recognizes the importance of the agricultural sector as the largest employer in the economy. There is however inadequate infrastructure to capture the participation of youth in contributing to the agricultural labour force. This makes the sector unattractive to young men and women who migrate to urban areas where they remain either un-employed or under-employed. The policy therefore focuses on the development of mechanisms for promoting labour intensive infrastructure and creating conducive environment for effective participation of youths in agriculture as stipulated in the Rural Development Strategy and Agricultural Sector Development Strategy.

Public Private Partnership (PPP), Policy (2009)

The Public Private Partnership Policy aims at promoting private sector participation in the provision of resources for PPP arrangements in term of investment capital, managerial skills and technology. The policy will facilitate creative and innovative approaches in stimulating private sector engagement in specific PPPs in the agricultural sector.

National Irrigation Policy 2010

National Irrigation Policy emphasizes sustainable availability of irrigation water and its efficient use for enhanced crop production, productivity and profitability that will contribute to food security and poverty alleviation. The National Irrigation Policy is anticipated to foster private sector participation in irrigated agriculture through increased investments.

1.2.2 Macro Policies

At the macro-policy level, the Government has designed a medium term National Strategy for Growth and Reduction of Poverty - NSGRP (MKUKUTA) that aims at achieving the Tanzania Development Vision (TDV 2025). All these changes do have impact on agricultural development hence necessitates the re-orientation of agricultural policies as a motive towards attaining the goals set forth in NSGRP and TDV 2025. It is against this background that the formulation of the National Agriculture Policy was initiated in conformity with reforms taking place in the agricultural sector and in the public service. The earmarked macro and sectoral policies will be implemented in tandem with this policy in order to bring about synergies in the development of agriculture and the economy as a whole.

Furthermore, the policy recognizes the existence of regional and international conventions and commitments with a bearing in the development of the agricultural sector. The most significant ones include the Millennium Development Goals (MDG's) for reducing hunger and poverty by half by 2015. Others include the EAC Food Security Action Plan, African Union's (AU) Abuja Declarations (2006) which calls for mobilisation of resources for implementing priority food security interventions and the Maputo Declaration (2003) that commits Member States to allocate at least 10 percent of their national budgetary allocations to agriculture and rural development.

1.2.3 Rationale and Justification for Policy Formulation

The rationale for the formulation of the National Agriculture Policy is a result of the fact that the agricultural sector operates in a macro and global economy where changes at these levels have a bearing on the agricultural sector. At the national level there have been major changes in the national policy framework resulting from the implementation of Tanzania Development Vision (TDV – 2025), the Poverty Reduction Strategy Paper (PRSP) and the National Strategy for Growth and Reduction of Poverty (NSGRP I & NSGRP II).

The macro policy framework focuses on developing an efficient, modern, commercial, competitive and profitable agricultural industry that contributes to the improvement of the livelihoods of Tanzanians and attainment of broad based economic growth and poverty alleviation. In order for the country to meet the NSGRP, Long-term Perspective Plan, Five Year Development Plan and TDV-2025 goals, the agricultural sector has to grow at, at least 6 per cent. This is based on the fact that, Tanzania's agriculture is the driving force of the country's economy and therefore the development of agriculture is of paramount importance.

Despite of this,, the growth rate of agricultural sector has over the past decade has an average of 4.4 percent indicating a stagnant growth.

In order to address the stagnating growth, a number of reforms such as KILIMO KWANZA Resolve, Tanzania Food Security Investment Plan, Southern Agriculture Growth Corridor of Tanzania, Feed the Future Programme, Bread Basket Initiative etc. has been initiated to complement speedy implementation of ASDP. The reforms aim at creating an enabling environment for ensuring household food security, improving agricultural productivity, profitability, farm incomes and alleviating rural poverty. These initiatives will lead to the re-orientation of approaches for public private partnership in the development of the sector focusing on scaling up investment as a move towards modernizing small, medium and large-scale farming for increased productivity and profitability, promotion of off-farm activities such as small and medium size enterprises with particular emphasis on agro processing.

While focusing on increased production and productivity is important based on the fact that Tanzania is part of the global economy, there is need for re-orientation of policies to take advantage of existing market opportunities. Recent development in the production of bio-fuel, contract farming and related issues necessitates the deployment of mechanisms for regulating the sector in order not to jeopardize production. The National Agriculture Policy also takes cognizance of other important issues such as the emergence of organic farming, risk mitigation and youth involvement in agriculture. These issues are important in spearheading the process of agricultural transformation and modernization.

At the regional level, Tanzania is a member of regional trading arrangements that include revived East African Community (EAC) and Southern Africa Development Community (SADC). There is emerging opportunity for increased regional trade with emphasis on eliminating intra-regional barriers to trade and a move towards intra-regional cooperation in standardization, quality management, metrology and testing. Both the EAC and SADC trade protocols call for members to harmonize their SPS measures with international standards and to seek synergies in building up regional capacities in SPS management. The process of regional standards harmonization and collaborative capacity building offer considerable opportunities for Tanzania in its efforts to build a modern and sustainable system of standards, which can facilitate economic growth, industry competitiveness and expanded trade in agricultural products.

The transformation of agriculture to modern and commercial sector is a pre-requisite for increasing Tanzania's trade in agro-products within the region. As part of the agreements, there is need for harmonization of standards and mutually recognized certification marks or other means of quality conformity assessment that facilitate intra-regional trade. Addressing tariff barriers on intra-regional trade progressively shall improve the logistics for intra-regional trade, national systems for food distribution being modernised. Demographic change and income growth increasingly demand for high value food products and this has potential for greater intra-regional food trade. Although misalignment or over-zealous enforcement of quality, food safety and agricultural health standards could inhibit Tanzania's intra-regional trade, there are possibilities that standards if under-enforced might permit some trade, which may even result in cross boarder transmission of plant pests and diseases.

A central challenge is to set standards and conformity assessment procedures that are appropriate for domestic and regional markets. Harmonization of standards provides an upgrade from domestic standards while maintaining a level of certain international standards or those of major trading partners.

At the international level Tanzania's main trade partner is the European Union (EU). For trade with Europe, producers and exporters face an increasingly stringent set of official and private standards combining good hygienic practices, safe use and storage of pesticides, other environmental management requirements, worker safety and other social standards. In both the fresh produce and cut flower industries these and other standards are embodied in company and industry protocols for example EURO-GAP to which suppliers are being required to comply with and gain audited certification. Depending on pre-existing circumstances, obtaining and maintaining such certified compliance may require growers and/or exporters to modify their facilities, alter their technologies; upgrade their management systems, undertake additional testing and increase record keeping. Obtaining and maintaining compliance with private standard protocols require considerable investment that is considered worthwhile as it opens new market opportunities and thereby yielding efficiencies.

Furthermore, there exists global level policy development like the Millennium Development Goals (MDG's) to which Tanzania has to abide to in order to fit in the global economy. It is on the basis of global, regional and national policy reforms that the National Agriculture Policy has been formulated to take on board these developments.

CHAPTER TWO

2.0 PERFORMANCE OF THE AGRICULTURAL SECTOR

Agriculture is the mainstay of the Tanzanian economy contributing about 24.1 percent of GDP, 30 per cent of export earnings and employs about 77.5 percent of the total labour force. There has been an overall increase of agricultural GDP growth rates of five-year moving average of about 3.92 per cent (2001 - 2011). Over the past decade, the agricultural sector grew at an average rate of 4.35 per cent.

The rate of growth in agriculture is higher than the average annual population growth rate of 2.6 percent implying growth in incomes. However, the average agricultural growth rate of 4.4 percent is insufficient to lead to significant wealth creation and alleviation of poverty given the very low level of agricultural development. Attaining poverty alleviation requires annual agricultural growth rate of about 6 to 8 percent.

By definition the agricultural sector is comprised of the crops, livestock and forestry & hunting sub sectors. However, agriculture in this policy, agriculture refers to crop production taking in account the synergies with other closely related policies like livestock, marketing and irrigation. On average, crop production contributed about 17.4 per cent of GDP in 2011 and grew by 3.5 percent while livestock production contributed about 3.7 per cent of the GDP and grew by 3.9 per cent. Forestry and hunting contributed about 2.5 per cent and grew by 3.5 per cent (Economic Survey 2011).

Generally, food crops account for about 65 percent of agricultural GDP while cash crops account for about 10 percent. Maize is the most important crop accounting for over 20% of agricultural GDP. Agricultural export crops have been growing at about 6 percent while food crops have been growing at 4 percent. Food and cash crops account for about 70 percent of rural incomes. During the formulation of the National Agriculture Policy, a holistic approach has been adopted in order to move away from the concept of food and cash crops towards agricultural commodities encompassing the two concepts as some food crops are also used for cash earning hence there is no demarcation on whether such crops are cash and/or food crops.

The National Agriculture Policy also takes into account the existence of huge potential and opportunities for development of the agricultural sector. Whereas 44 million hectares of land are suitable for agricultural production and that only 10.8 million hectares (24 percent) are cultivated mostly in subsistence agriculture, which consists of smallholders operating between 0.2 and 2.0 hectares and thus smallholder farmers are unable to produce according to prevailing market signals. Potential exist for expansion of agricultural area under cultivation for small, medium and large-scale farming in areas with available land for expansion while intensive farming shall be applied in densely populated areas with the aim of commercializing agriculture.

CHAPTER THREE

3.0 VISION, MISSION AND OBJECTIVES OF THE NATIONAL AGRICULTURAL POLICY

3.1 Vision

An agricultural sector that is modernized, commercial, highly productive and profitable; that utilizes natural resources in an overall sustainable manner and acts as an effective basis for inter-sectoral linkages by the year 2025.

3.2 Mission

To facilitate the transformation of the agricultural sector into modern, commercial and competitive sector in order to ensure food security and poverty alleviation through increased volumes of competitive crop products.

3.3 General Objective

To develop an efficient, competitive and profitable agricultural industry that contributes to the improvement of the livelihoods of Tanzanians and attainment of broad based economic growth and poverty alleviation.

3.4 Specific objectives

The specific objectives are to:

- i) Increase production, productivity and profitability from utilization of the factors of production (land, labour and capital);
- ii) Enhance national food security through production of sufficient quantity and quality of food;
- iii) Improve agricultural processing with a view to add value to agricultural products and create jobs;
- iv) Enhance production of quality products in order to improve competitiveness of agricultural products in the markets;
- v) Increase foreign exchange earnings from exportation of agricultural products;
- vi) Provide enabling environment to attract private sector investment to take advantage of existing comparative and competitive advantages;
- vii) Strengthen agricultural support services (research, extension and training);
- viii) Strengthen inter-sectoral coordination and linkages to increase efficiency and effectiveness;
- ix) Protect and promote integrated and sustainable utilization of agricultural lands; and
- x) Promote implementation of cross cutting issues in agricultural undertakings.

CHAPTER FOUR

4.0 NATIONAL AGRICULTURAL POLICY ISSUES

4.1 Agricultural Support Services

4.1.1 Research and Development

Agricultural research system has continuously been re-oriented to focus on client-oriented research by exploring practical and affordable options for engaging a broad range of individuals and institutions capable of contributing to sustainable livelihoods for the majority of Tanzanians.

4.1.1.1 Issues

- i) Low integration of formal and informal agricultural knowledge systems;
- ii) Weak coordination of research activities and poor research linkages with key stakeholders both local and international;
- iii) Inadequate involvement of the private sector and weak Public Private Partnership in agricultural research services;
- iv) Inefficient management of research; and
- v) Inadequate financing for agricultural research

The major challenge is on how to work with a diverse spectrum of smallholder producers and entrepreneurs to develop farming systems that perform reliably and consistently in improving yield stability and safeguarding the productivity of land, labour and capital.

4.1.1.2 Objective

Agricultural research services strengthened in order to enhance productivity, competitiveness and profitability of the agricultural sector.

4.1.1.3 Policy Statements

- i) The agricultural research system shall be reformed to enhance the participation of a wide spectrum of stakeholders in identifying and setting research priorities;
- ii) A semi autonomous institution shall be established to regulate and coordinate agricultural research agenda;
- iii) Initiatives aimed at arresting agro-biodiversity deterioration shall be supported;
- iv) The Government in collaboration with other stakeholders shall participate in funding and management of crop research;
- v) National research agenda shall be regulated and coordinated;
- vi) Indigenous knowledge shall be integrated into scientific research;
- vii) Public Private Partnership in research activities shall be facilitated;
- viii) In collaboration with R & D institutions, research on irrigation and development of appropriate smallholder agricultural mechanization and agro-processing technologies shall be promoted;
- ix) A Research outreach arm for providing technology to farmers shall be developed; and

- x) The Government shall conserve in a sustainable way the productivity potential of crop germ plasm and related biodiversity in the existing agro-ecosystem such that it is not endangered by introduction of genetically engineered plants.

4.1.2 Plant Breeders Rights

Plant variety protection involves the protection of new plant varieties that are yet to be commercialized, distinct from existing varieties, uniform in their main characteristics and stable over years for those characteristics. The introduction and operationalization of plant variety protection system in the country aims at creating conducive environment for seed production and trade through promotion of plant breeding activities, Intellectual Property Rights (IPR) and introduction of improved plant varieties for agricultural development.

4.1.2.1 Issues

- i) Inadequate knowledge on intellectual property rights for public and private plant breeders in the country;
- ii) Lack of awareness on Intellectual Property Rights; and
- iii) Low participation of local and foreign bodies in seed production and breeding.

4.1.2.2 Objectives

Plant breeding and availability of improved plant varieties for agricultural development in the country promoted.

4.1.2.3 Policy Statements

- i) Public awareness on intellectual property rights shall be promoted;
- ii) Intellectual Property Rights and research initiatives shall be facilitated and protected; and
- iii) Local and international bodies shall be facilitated to participate in breeding and seed production.

4.1.3 Biotechnology and Bio-Safety

Biotechnology has been used for a long time in areas such as tissue culture applications, characterization of germ plasm using molecular marker techniques and in disease diagnosis. In view of the fact that people are averse by use of biotechnology since it may also come with risks, this technology need bio-safety measures to minimize them.

4.1.3.1 Issues

- i) Limited public awareness on biotechnology and bio-safety issues;
- ii) Limited engagement in modern/alternative research techniques and new areas for better solutions for example areas of genetic engineering;
- iii) Bio-safety regulation that do not facilitate genetic engineering research and development;
- iv) Limited physical infrastructure to develop/use and handle bio-safety aspects and risks involved; and
- v) Inadequate trained human resource and limited facilities for the management of biotechnology.

4.1.3.2 Objective

Production, productivity and profitability from utilization of biotechnology techniques increased.

4.1.3.3 Policy Statements

- i) Development and application of biotechnologies that address national priorities shall be promoted in line with the National Biotechnology Policy and Bio-safety Framework;
- ii) New and emerging research areas that promise to mitigate low production and productivity in agriculture such as Genetically Modified Organisms shall be promoted;
- iii) Public awareness on biotechnology applications, benefits, risks and environmental implications shall be enhanced; and
- iv) The Government shall protect in a sustainable way the productivity potential of crop germ plasm and related biodiversity in the existing agro-ecosystem such that it is not endangered by introduction of genetically engineered plants.

4.1.4 Human Resource Development

Agricultural transformation requires an effective and productive human resource in the agricultural sector for generation and diffusion of technology. There is need for a major shift towards introduction of new generation of farmers who shall be equipped with the necessary skills to revamp agriculture. While professionalism and expertise will be taken seriously, agricultural skills and knowledge will be imparted at various levels in the education system.

4.1.4.1 Issues

- i) Inadequate institutional capacity and insufficient manning levels;
- ii) Weak research-training-extension-farmer linkages;
- iii) Inadequate participation of private sector in providing agricultural training; and
- iv) sufficient government financing for the agricultural training services

4.1.4.2 Objective

Human resources in agriculture strengthened in order to respond to agricultural development needs.

4.1.4.3 Policy Statements

- i) The Government in collaboration with the private sector shall strengthen human capacity development in agricultural related activities;
- ii) The Government in collaboration with other stakeholders shall strengthen research-training-extension-farmer linkages;
- iii) Farmers shall be empowered through training on new techniques as well as new approaches focusing small farmers, women and men to enable them to reach levels of adequate productivity and self-sustainability;
- iv) Graduates in agricultural related fields shall be motivated to become professional farmers; and

- v) The Government in collaboration with Academic and Research Institutions shall create linkages with farmers in the adoption of new technologies.

4.1.5 Agricultural Extension Services

Extension services are crucial in supporting poverty reduction in rural areas and market competitiveness for commercial agriculture in the domestic and global markets. It enables producers to realise increased production and productivity through accessibility to information for marketing and other support services essential for agricultural development. The transformation of agricultural extension services is important in order to impart the right tools, knowledge and skills as well as ensuring farmers adhere to Good Agricultural Practices.

4.1.5.1 Issues

- i) Lack of strong research-extension-farmers linkage
- ii) Weak supervision and insufficient manning levels;
- iii) Low participation of private sector in extension services delivery;
- iv) Lack of service delivery performance standard and regulations;
- v) Poor living and working conditions; and
- vi) Insufficient knowledge regarding technological advancements and weak coordination of agricultural extension services.

4.1.5.2 Objective

Agricultural extension services strengthened in order to increase production, productivity and profitability.

4.1.5.3 Policy Statements

- i) Extension services shall be transformed to ensure provision of quality services with increased private sector participation;
- ii) Farmers' education and publicity shall be strengthened for effective linkage and dissemination of technologies and information;
- iii) Participatory approaches and gender aspects shall be promoted in the provision of extension services using an integrated single delivery system approach;
- iv) Specific commodity extension services shall be promoted and strengthened; and
- v) The Government shall ensure adherence to performance standards, regulations, supervision and accountability.

4.2 Technical Support Services

4.2.1 Irrigation Development

Irrigation is essential for better crop yields and production. It mitigates vagaries of weather, which is becoming more frequent and intensive because of global climate change. Currently, the area under improved irrigation is about 331,490 hectares, which is about 3.9 percent of the high-to-medium irrigation potential of 7.1 million hectares. For high potential alone, the irrigated area is 12 per cent, and about 1 per cent of the total potential. The farming households that use irrigation are less than 5 per cent.

The main challenge is on how to exploit the existing high – medium potential area of 7.1 million hectares as well as creating an enabling environment for the private sector to develop mechanized medium and large-scale irrigated farms.

4.2.1.1 Issues

- i) Inadequate private sector capacity and funding for irrigation development
- ii) Inadequate sector co-ordination and holistic integrated planning in water resource utilization;
- iii) Weak irrigators' organizations to undertake overall irrigation water management and infrastructure maintenance; and
- iv) Low production and productivity in constructed irrigation schemes

4.2.1.2 Objective

Crop productivity and profitability enhanced in irrigated agriculture in a sustainable manner in order to ensure food security and poverty reduction.

4.2.1.3 Policy Statements

- i) Public and Private Sector participation in irrigation development in the country shall be promoted;
- ii) Irrigation development shall be regulated to ensure high productivity and sustainability;
- iii) The development of water harvesting techniques in an economically efficient, socially acceptable and environmentally responsive manner shall be enhanced;
- iv) An effective cost sharing and cost recovery mechanism for the development of irrigation in the country shall be established;
- v) Irrigation schemes with special focus on high value crops (vegetables, fruits and flowers) shall be promoted;
- vi) Irrigator's organization shall be strengthened to ensure effective management of their irrigation schemes and full participation in Integrated Water Resources Management; and
- vii) Water use efficiency and drainage shall be promoted to enhance water productivity and minimize salinity in irrigation schemes.

4.2.2 Agricultural Mechanization

Farm machinery, implements and equipment are important tools for increasing area under production. Despite its importance, the utilization of farm machinery and implements in the country is very low with about 64 percent of farmers using the hand hoe, 24 percent draught animal power and 12 percent tractors.

4.2.2.1 Issues

- i) High costs of agricultural machinery and implements and low purchasing power of most farmers;
- ii) Insufficient comprehensive agro-mechanization packages and non-compatibility of mechanical technologies to local conditions;

- iii) Inadequate quality control mechanism for agricultural machinery and implements; and
- iv) Inadequate trained operators, mechanics and little after sales services to agricultural machinery and implements.

4.2.2.2 Objective

Efficient utilization of farm machinery, implements, equipment and agro processing machines promoted.

4.2.2.3 Policy Statements

- i) Conducive environment for private sector participation in agricultural mechanization shall be created;
- ii) Efficient utilization of agricultural machinery implements, equipments and tools shall be promoted, particularly among small scale farmers, women and men;
- iii) Utilization of agro-mechanization packages and mechanical technologies to local conditions shall be promoted;
- iv) Quality of agricultural machinery, implements, equipment and tools shall be regulated and quality standards enforced;
- v) In collaboration with private sector, Provision of training programmes for different levels on farm machinery and other processing machines will be strengthened together with after sales services facilities.

4.3 Agricultural Lands

Tanzania is endowed with about 44 million hectares of arable land out of which 10.8 million hectares; equivalent to 24 percent is under crop production. However, the existing land tenure system is not conducive for long-term investment. The transformation of agriculture can only take place where land tenure system is favourable for all categories of investors. Furthermore, the protection of premium lands for agricultural development is crucial for increased long-term benefits.

Insecurity of land tenure has led to decline in the productive capacity of agricultural land because of non-sustainable land use practices. Such practices have led to land degradation, notably soil erosion causing adverse changes in hydrological, biological, chemical and physical properties of soils. Inappropriate land husbandry practices are among the main causes of low soil productivity in the country.

4.3.1 Issues

- i) Inadequate enforcement of land laws, regulations and by-laws;
- ii) Land conflicts and inadequate titling of land for agricultural investment;
- iii) Delays in issuance of title deeds;
- iv) Absence of detailed land use plans at district and village levels; and
- v) Insecurity of agricultural land especially in premium areas.

4.3.2 Objective

Integrated and sustainable utilization of agricultural lands promoted and protected.

4.3.3 Policy Statements

- i) Public awareness on existing policies, laws and legislation on land shall be promoted;
- ii) The Government shall enforce laws and legislation to enhance land resource management;
- iii) The government shall enhance mechanisms for conflict resolution particularly in areas facing chronic land conflicts;
- iv) The government shall promote gender-equitable land tenure governance and seek to eliminate those that are discriminatory or exclusionary;
- v) The Government shall ensure agricultural lands are protected against encroachment as well as promote sustainable agricultural land use plans; and
- vi) The Government shall ensure availability of land for agricultural investment.

4.4 Agricultural Inputs

Tanzania acknowledges that increased use of modern inputs (fertilizers, agrochemicals, seeds, farm implements etc) is a pre-requisite for achieving sufficient agricultural productivity and growth to meet economic development, poverty reduction and food security goals.

4.4.1 Issues

- i) Weak quality control mechanism for inputs;
- ii) Weak input procurement and distribution system;
- iii) Non involvement private sector in multiplication of breeders and foundation seeds to enable more supply of improved seeds;
- iv) Low utilization of modern inputs in agricultural production; and
- v) Underdeveloped input manufacturing industry.

4.4.2 Objective

Utilization of productivity enhancing inputs increased in a cost-effective, financially sustainable and environmentally sound manner.

4.4.3 Policy Statements

- i) The Government shall enforce laws and regulations to safeguard farmers from the supply of substandard inputs;
- ii) Input production, procurement and distribution shall be promoted;
- iii) Private sector participation in multiplication of pre-basic and basic seeds shall be promoted;
- iv) Domestic production, multiplication and distribution of agricultural inputs shall be promoted to involve both public and private sector;
- v) Farmers shall be supported to access modern inputs; and
- vi) Agro-chemical and fertilizer manufacturing industry shall be developed.

4.5 Crop Pests and Diseases

Prevalence of crop pests and diseases is creating a great economic risk to crop development. On average, about 30 to 40 per cent of overall total crop production is lost annually due to pre- and post-harvest losses. The losses are even higher in case of outbreak pests that can inflict up to 100 per cent crop losses if not controlled. Market needs call for appropriate local pest management options compliant with Good Agricultural Practices (GAP) to ensure export standards, environmental protection and bio-safety, which are critical requirements in international trade.

4.5.1 Issues

- i) Inadequate capacity for pest surveillance, pest risk analysis and bio-security measures;
- ii) Weak pest monitoring and control mechanisms;
- iii) Limited management options for pests and diseases; and
- iv) Weak sanitary and phyto-sanitary services.

4.5.2 Objective

Production of quality products in order to improve competitiveness of agricultural products in the markets enhanced.

4.5.3 Policy Statements

- i) Pest and disease surveillance, system and control mechanisms shall be strengthened;
- ii) The Government shall collaborate with neighbouring countries, International Organizations and other institutions dealing with plant health services in combating pests and diseases outbreaks;
- iii) Pest free areas shall be protected from introduction of pests of quarantine importance; and
- iv) The Government shall strengthen sanitary and phyto-sanitary, quarantine and plant inspectorate services.

4.6 Development of Agricultural Commodities

Agricultural commodity production in Tanzania has traditionally been dominated by few commodities which were mainly for exports namely coffee, cotton, cashew nuts, tobacco, tea, sisal, sugarcane and pyrethrum. However, other crops have become equally important in local and export markets in their ability to generate national income and farmers' earnings. A number of these crops have found market outlets in regional and international markets. These crops include but are not limited to spices, fruits, oil seeds, pulses, vegetables, flowers, medicinal plants of commercial value and bio-fuel crops. Additionally and lately food crops, particularly cereals have become as important as traditional commodities owing to food shortage in regional and international markets and therefore offer additional opportunities for our economy.

There is need to focus on the development of agricultural commodities that have comparative and competitive advantage locally, regionally and internationally. There are unfolding

opportunities, which compel us to take strategic measures in order to take advantage of those opportunities.

4.6.1 Issues

- i) Low product quality, weak regulatory framework and enforcement of standards for agricultural products;
- ii) Insufficient forward and backward linkages in production, processing and marketing activities;
- iii) Over reliance on peasant agriculture and low private sector investment;
- iv) Inadequate support for new/speciality products; and
- v) Low returns on agricultural investments.

4.6.2 Objective

Enabling environment to attract private sector investment to take advantage of existing comparative and competitive advantages created.

4.6.3 Policy Statements

- i) Commodity standards to meet national and international market requirements shall be promoted and regulated;
- ii) The Government shall promote commodity supply chains and regulate contract farming while ensuring that the rights of farmers, particularly small scale farmers women and men, are duly respected;
- iii) Transformation of small scale production to modern and commercial farming shall be enhanced;
- iv) Market penetration and expansion in domestic, regional and international markets including niche markets for speciality products shall be promoted;
- v) Private sector investment in medium and large scale production, processing and marketing shall be facilitated to enhance job creation; and
- vi) Mechanisms for reducing transaction costs in production of crops shall be developed.

4.7 Food Security and Nutrition

Food security is one of the overriding agenda in the country with emphasis on meeting NSGRP, EAC Food Security Action Plan and MDG goals and targets. Overall, the country is self-sufficient in most years with food self-sufficiency ratios of about 95%. However, there are areas, which experience frequent food shortages due to unfavourable weather conditions and low incomes.

4.7.1 Issues

- i) Recurrence of food shortages;
- ii) Substandard food imports;
- iii) Low production of food crops to meet domestic food demand and surplus for export;
- iv) inadequate knowledge on good nutrition;

- v) Inappropriate food management and inequitable intra-household food distribution and social discrimination among family members; and
- vi) Inadequate mechanisms for targeting food assistance for vulnerable groups.

4.7.2 Objective

National food security and nutrition enhanced through production, accessibility and utilization of sufficient quantity and quality of food.

4.7.3 Policy Statements

- i) Production of food crops according to agro-ecological zones shall be promoted;
- ii) Production of food crops to meet domestic demand and surplus for export shall be promoted;
- iii) Food imports that are consistent with internationally acceptable safety and quality standards shall be regulated;
- iv) Production and utilization of crops with high nutrient content in areas experiencing nutritional problems shall be promoted;
- v) Knowledge on good nutrition shall be promoted;
- vi) The Government shall strengthen and expand food storage structures to enhance food stability; and
- vii) Mechanisms for continuous monitoring and assessment of food security and nutrition at all levels shall be strengthened and measures to ensure food availability, accessibility and utilization promoted.

4.8 Agricultural Marketing

Agricultural market infrastructure is crucial for the development of agricultural commodities and stimulating agricultural production. Furthermore, the whole set of supportive infrastructure from production, transportation, storage and processing is vital in enhancing agricultural marketing.

4.8.1 Issues

- i) Inadequate product quality standards inspectorate mechanisms at various levels;
- ii) Weak enforcement of agricultural marketing regulations;
- iii) Inadequate agricultural marketing infrastructure;
- iv) Inadequate agricultural marketing risk management;
- v) Lack of well organized primary, secondary and tertiary markets; and
- vi) Inadequate agricultural market information systems

4.8.2 Policy statements

- i) Capacities of agricultural marketing actors shall be enhanced in meeting quality, grades and standards for the domestic, regional and international markets;
- ii) The government in collaboration with other stakeholders shall promote the establishment of Price Stabilization Funds;

- iii) The government, in collaboration with farmers, groups, association and cooperative societies, shall enforce regulations governing utilization of designated buying posts and centers for agro-products;
- iv) The government in collaboration with other stakeholders shall strengthen and upscale Warehouse Receipt System as a basis for operationalization of Commodity Exchange;
- v) Collection, analysis, storage and dissemination of agricultural marketing data shall be strengthened at all levels.

4.9 Agro-Processing

The majority of crops in the country are marketed in raw form with little or no value addition. Agro-processing provides an opportunity for increasing incomes and creating jobs through expansion of forward and backward linkages in the economy. In light of this, development of agro-enterprises has the potential for providing employment through activities such as handling, packaging, processing, transportation and marketing of food and agricultural produce. Economic growth in the rural areas is largely led by the growth of commercial agro-industries that are efficiently run and responsive to evolving market demands with an added advantage of stemming the acceleration of rural urban migration.

4.9.1 Issues

- i) Deterioration of agricultural products;
- ii) Limited supply of rural energy;
- iii) Inadequate infrastructure for handling and transportation of perishables;
- iv) Inadequate supply of raw materials for agro-processing industries; and
- v) Inappropriate machinery and technology.

4.9.2 Objective

Agricultural processing improved with a view to add value to agricultural products and create employment.

4.9.3 Policy Statements

- i) Rural agro-processing shall be promoted in collaboration with Ministry of Industry and Trade;
- ii) The Government shall enhance supply of alternative sources of rural energy;
- iii) Mechanisms for handling and transportation of perishables shall be developed;
- iv) Production of sufficient quantities of agricultural produce to meet processing requirements shall be promoted;
- v) The Government shall ensure quality control, enforce standards in processing, packaging and transportation of agricultural produce; and
- vi) The Government shall facilitate importation and production of machinery for agro-processing that meet required standards.

4.10 Financing Agriculture

Agricultural financing is an important element in the modernization and development of the agricultural sector. However, public and private sector agricultural financing in Tanzania is

low. Unavailability of long-term financing has limitations in terms of investment for medium and large-scale farming. As a result Tanzanian agriculture is characterised by smallholder producers who are unable to borrow from financial institutions due to lack of collateral.

Viability and increased efficiency of agricultural undertakings depend among other things on the scale of operations. This calls for concerted efforts to ameliorate this situation and make agriculture more attractive for investment by all farmers based on their scale of production.

4.10.1 Issues

- i) Difficulty in obtaining loans to finance long term investments in agriculture;
- ii) High interest rates, low return from agriculture relative to other sectors and long payback period; and
- iii) Inadequate awareness on loans and repayment terms and high costs for management of loans by financing institutions.

4.10.2 Objective

Inter-sectoral coordination and linkages strengthened in order to increase efficiency and effectiveness to ensure short to long-term financing of agriculture.

4.10.3 Policy Statements

- i) The Government shall strengthen Financial Institutions and financial intermediaries (rural banks, SACCOS) to make them responsive to agricultural development financial needs;
- ii) The Government in collaboration with other actors shall facilitate accessibility of finance to farmers and other actors in the agricultural sector focusing on the financial needs of women and youths to foster social equity; and
- iii) Mechanisms for creating awareness on loans and loans repayment terms shall be strengthened.

4.11 Agricultural Information Services

Agricultural information is a vital tool in agricultural development. However, the collection and dissemination of information to various actors is inefficient and this calls for a well coordinated system in order to have an efficient mechanism for sharing information related to agriculture on a timely basis.

4.11.1 Issues

- i) Unreliability and unavailability of agricultural information at all levels;
- ii) Inadequate participation of private sector in the collection, processing and dissemination; and
- iii) Conflicting and inconsistent information from various sources

4.11.2 Objective

Agricultural information coordination and linkages strengthened in order to increase effectiveness of agricultural information services.

4.11.3 Policy Statements

- i) Mechanisms for collection and dissemination of agricultural information and data shall be strengthened;
- ii) The Government in collaboration with private sector shall enhance the participation of a wide spectrum of actors in the collection, analysis and dissemination of agricultural information and data; and
- iii) The Government in collaboration with other stakeholders shall coordinate data collection, analysis and dissemination.

4.12 Risk Management in Agriculture

The agricultural sector has a variety of risks, which occur with high frequency. Multiple risks are threatening farmers' livelihoods and incomes and thus undermining the viability of the agricultural sector and its potential to reduce poverty.

4.12.1 Issues

- i) Reduced crop production as a result of weather changes, pest and diseases (production risks);
- ii) Production cycles that stretch over long periods of time (financial risks);
- iii) Unpredictability and wide input and output price volatility (market risks); and
- iv) Unexpected changes in regulations that influence farmers activities and failure to respond to changing market conditions.

4.12.2 Objective

Crop production, productivity and profitability increased through risk mitigation mechanisms.

4.12.3 Policy Statements

- i) Early Warning Systems for provision of timely warning signals on climatic variability and change shall be strengthened;
- ii) Alternative risk management mechanisms and risk mitigation in agriculture shall be promoted and regulated;
- iii) The Government in collaboration with private sector shall support efforts to improve market intelligence to keep pace with changing market conditions and requirements;
- iv) Introduction of crop insurance shall be encouraged and promoted; and
- v) Commodity Warehouse Receipt System shall be promoted.

4.13 Youth Involvement in Agriculture

Youths in Tanzania provides an opportunity for increased economic development particularly in agriculture the main economic activity in rural areas. According to the Integrated Labour Force Survey (2006), youths constitute about 65% of the total labour force that is key for

increased agricultural production and productivity. Youths require equitable access to productive resources that provide a solid economic and material base for their development.

4.13.1 Issues

- i) Limited access to productive resources;
- ii) lack of entrepreneurial skills among youths;
- iii) Poor rural infrastructure;
- iv) limitation on equity of resource allocation and capital accessibility;
- v) Inadequate social services in rural areas leading to increased rural urban migration; and
- vi) Drudgery of agriculture due to limited access to labour saving technologies (mechanized agriculture).

4.13.2 Objective

Enabling environment to attract youths in agricultural production promoted.

4.13.3 Policy Statements

- i) Accessibility to productive resources including labour saving technologies (mechanisation equipments), surveyed land, irrigation infrastructure shall be facilitated;
- ii) The Government in collaboration with private sector shall create conducive environment for youth to settle in rural areas through improvement of social services, rural infrastructure and promotion of rural development;
- iii) In collaboration with Ministry responsible for Education and Vocation Training the incorporation of agriculture in the education and VETA curricula shall be promoted in order to create awareness to youth's participation in agricultural development and provide agribusiness skills;
- iv) The Government in collaboration with the private sector, civil societies, youths organizations and business community shall promote the culture of entrepreneurship among youths; and
- v) Equitable access to land and other productive resources shall be promoted.

4.14 Farmers Organizations

Farmers' organizations in the form of associations, cooperatives and groups are important vehicles for farmers to lobby for policy changes that may help to improve their bargaining power in the input and output markets. Farmer groups also provide an avenue for cost reduction of various services such as cost effective delivery of loans, inputs, extension services and market information. However, these institutions are weak in managerial skills and are not member based.

4.14.1 Issues

- i) Lack of strong farmer groups/associations;
- ii) Limited knowledge and skills in organisation and business management;
- iii) Poor leadership in farmers organisations; and
- iv) Few members in farmer organisations.

4.14.2 Objective

Viable and sustainable farmers' organisations in rural areas promoted.

4.14.3 Policy Statements

- i) Formation of viable and sustainable farmer organisations to strengthen their bargaining power and competitiveness shall be facilitated;
- ii) The Government in collaboration with other stakeholders shall ensure farmers organisation are equipped with organisational, leadership, entrepreneurship knowledge and skills;
- iii) Group cooperation and rural entrepreneurial skills development particularly to women and youths shall be supported;
- iv) Mechanisms for ensuring good organisational leadership shall be strengthened; and
- v) Farmer organizations shall be regulated and supervised.

4.15 Organic Agriculture

Organic foods are products derived from certifiable farm management systems using land husbandry techniques and biological and manual methods instead of synthetic inputs. Many farmers by default produce organic products since most of them do not use chemicals. The commercial value of organic products depends upon a clearly established marketing channel and reliable certification mechanism for organic production systems.

Since Tanzania has different agro-ecological zones and abundant land suitable for production of various crops, organic farming is another window of opportunity that can be exploited towards enhancing national and farm incomes. However, production and productivity of organic farming is usually low.

4.15.1 Issues

- i) Inadequate coordination among stakeholders;
- ii) High certification costs;
- iii) Weak regulation and certification of organic products; and
- iv) Inadequate and inaccessibility of organic inputs e.g. pesticides and fertilizers

4.15.2 Objective

Foreign earnings and household incomes increased from production and exportation of high value organic crops and increased supply of safe and quality organic produce to consumers.

4.15.3 Policy Statements

- i) Registration and availability of organic inputs to farmers shall be facilitated;
- ii) The Government shall facilitate accreditation of organic products in order to reduce certification costs;

- iii) Initiatives for regulation and certification of organic products shall be promoted; and
- iv) In collaboration with private sector, effective coordination among stakeholders shall be enhanced

4.16 Urban Agriculture

Urban agriculture and peri-urban is a vital aspect of food security and employment creation, broaden tax base, beautification of cities and serves as supplementary source of income of the urban dwellers. Urban agriculture can be practiced in areas inside the cities (intra-urban) or in areas outside the city (the peri-urban) areas. This type of agriculture can be practiced in different forms such as home gardening, open space production or container gardening depending on available land and purpose. Due to limited and unsecured land for urban agriculture, most of the urban dwellers tend to carry out short-term crop production dominated by vegetable crops whereby over 90% of the leafy vegetables are produced within and around cities.

4.16.1 Issues

- i) Inadequate supportive mechanisms for urban and peri-urban agricultural practices;
- ii) Weak regulatory framework for urban and peri-urban agriculture.

4.16.2 Objectives

Production, productivity and profitability of urban agriculture increased in accordance with acceptable standards for both environmental protection and public health assurance.

4.16.3 Policy Statements

- i) Supportive mechanisms for undertaking urban and peri-urban agriculture shall be developed;
- ii) Regulatory framework for urban and peri-urban agriculture shall be developed; and
- iii) Good Agricultural Practices for urban and peri-urban agriculture shall be promoted.

4.17 Bio-Fuel Crop Production and Utilization

Of recent, there has been renewed interest in bio-fuel crop production particularly liquid bio-fuels, in Africa and the rest of Africa. Over the last 5 years or so, this has mainly been in response to significant rise and volatility of oil prices as well as the campaign for increased production and use of renewable energy to meet the concerns on climate change. In Tanzania, there is a big rush for bio-fuel crop production and that various investors are applying for investment in bio-fuel crop production and processing. They intend to use vast amount of land in the production of bio-fuel crops including jatropha, oil palm, castor bean for bio-diesel and sugarcane for bio-ethanol and co-generation.

4.17.1 Issues

- i) Competition for land and labour resources being converted from food crops into bio-fuel crop production;
- ii) Loss of biodiversity resulting from conversion of large swaths of natural habitats into monoculture bio-fuels crop production areas;
- iii) Lack of designated areas for bio-fuels production;
- iv) Lack of designated agricultural produce for bio-fuels production; and
- v) Inadequate awareness of public on potential impact of bio-fuel crop production in the environment and national food security.

4.17.2 Objective

Sustainable utilization of agricultural resources in particular land, water and biodiversity ensured in the production and use of bio-fuels while guaranteeing food security to the nation.

4.17.3 Policy Statements

- i) In collaboration with Ministry responsible for Energy, production of bio-fuel crops where it competes directly with the national food security interests shall not be allowed;
- ii) Production of bio-fuel crops shall be allowed only where there are minimum negative impact on the environment; and
- iii) Cereals and edible oil seeds shall only be used in the production of bio-fuel at times when there is surplus production.

4.18 Policy Formulation and Management

Policy formulation and management is the obligation of the government. This core function involves participation of stakeholders in the formulation and implementation of the policy. The capacity for policy analysis is a prerequisite for carrying out this important function.

4.18.1 Issues

- i) Inadequate capacity for sector policy analysis, monitoring & evaluation;
- ii) Ineffective analytical capability; and
- iii) Limited financial and material resources.

4.18.2 Objective

Effective policy formulation and management systems enhanced.

4.18.3 Policy Statements

- i) The Government shall utilize the information obtained through monitoring & evaluation and policy analysis for policy development and review;
- ii) The Government shall promote policy dialogues for articulation of sector priorities within the Macro-Policy Framework and decisions into sector specific actions and monitor the impact of sector policy reforms on rural development; and

- iii) Analytical capability for policy analysis and review shall be strengthened.

4.19 Legal and Regulatory Framework

The legal framework is essential for the development of agriculture and the enforcement of standards, rules and regulations and hence is crucial for development of a competitive sector. The current legal and regulatory framework do not provide necessary provisions that ensure effective and efficient development of the agricultural sector and efficient delivery of services as demanded in the changing crop industry towards a competitive and modern sector.

4.19.1 Issues

- i) Inadequate legal and regulatory framework; and
- ii) Inadequate enforcement of agricultural standards.

4.19.2 Objective

An efficient legal and regulatory mechanism ensured.

4.19.3 Policy Statements

- i) Legal and regulatory framework for efficient agricultural development shall be prepared and strengthened;
- ii) The Government shall streamline legal and business procedures to attract investment in the agricultural sector; and
- iii) The Government shall enforce existing laws and regulations for improvement of standards of agricultural products.

CHAPTER FIVE

CROSS-CUTTING ISSUES

4.20 Environment

Agricultural development is strongly dependent on environmental resources such as land, forest, air, water and other resources. The sustainable utilization of these resources is vital for the growth and sustainability of the sector. Although, the intensification of agriculture exerts pressure on natural resources it also contributes to natural carbon pool. Increasing agriculture's contribution to climate change mitigation should entail efficient crop systems. However, agriculture is vulnerable to the effects of climate change and that change in rainfall patterns and increase in temperatures normally shortens the growing seasons and reduce crop yields. There is a scientific consensus that concentration of greenhouse gases, human-driven emissions of carbon dioxide and land-use changes are the processes primarily responsible for climate change in our region. Climate change is also an attribute of unsustainable farming methods and systems including deforestation, land clearing and/or bush fires.

The challenge is on how to reduce short to long-term effects of climate change and thus minimize the impact of climate change on agricultural production.

4.20.1 Issues

- i) Increased variability and changes to drought and floods;
- ii) Unsustainable farming methods and systems;
- iii) Altered range and incidence of pests and diseases;
- iv) Increased heat shock/stress and reduced grain quality/nutrient content;
- v) Global warming as result of increased CO₂ and other Greenhouse gases concentrations in the atmosphere;
- vi) Unavailability of reliable methodologies for measuring and monitoring carbon sequestration in agriculture sector; and
- vii) Weak enforcement of laws and regulations.

4.20.2 Objective

Agricultural practices that sustain the environment promoted.

4.20.3 Policy Statements

- i) In collaboration with relevant Ministry, coordination of sustainable environmental early warning and monitoring systems shall be ensured;
- ii) The Government in collaboration with other stakeholders shall strive to improve adaptation measures to climate change effects and deal with all the risks involved;
- iii) Public awareness on sustainable environmental conservation and environmental friendly crop husbandry practices (sustainable agriculture) shall be promoted
- iv) The Government shall enforce environmental laws and regulations that minimize environmental degradation as of result of agricultural activities;

- v) Activities that enhance the carbon storage capacity such as conservation agriculture and agro-forest shall be up-scaled;
- vi) Public awareness on the opportunities of agriculture as potential carbon sink and mechanism to benefit from carbon market shall be established;
- vii) Efficiency use of renewable natural resources shall be strengthened

4.21 Gender

The majority of Tanzanian farmers are women who constitute the majority of agricultural labour force. Over 90.4 per cent of active women in Tanzania are engaged in agricultural activities, producing about 70 per cent of the country's food requirements. They are also actively involved in the production of cash and household activities. Most of these jobs involve strenuous, manual and highly time consuming.

4.21.1 Issues

- i) Inadequate skills and knowledge;
- ii) Inequitable access to productive resources;
- iii) Inappropriate technologies; and
- iv) Inappropriate social - cultural practices and beliefs

4.21.2 Objectives

Participation of both men and women in the production of goods and services in the agriculture promoted while ensuring that benefits are equitably shared.

4.21.3 Policy Statements

- i) The Government shall facilitate equal access to land to both men and women;
- ii) Development and utilization of appropriate labour saving technologies to relieve men and women from laborious and time consuming tasks shall be promoted;
- iii) Participation of men and women in decision making to improve their access to productive resources shall be enhanced; and
- iv) Awareness creation and sensitization of communities on negative cultural attitudes and practices shall be promoted in collaboration with Ministry of Community Development Gender and Children.

4.22 HIV/AIDS and Water Borne Diseases

High prevalence of HIV/AIDS and water borne diseases has a devastating impact on agriculture since they target the most economically active layers of the society. Caring for the sick consumes not only household savings, but also the time farmers need for agricultural activities.

4.22.1 Issues

- i) Loss of labour through illness and caring for the sick;
- ii) Inadequate awareness on the impact of the disease among farmers;
- iii) Increased costs for medical treatment; and

- iv) Decline in household asset base.

4.22.2 Objectives

Awareness on HIV/AIDS, malaria and water borne diseases in agricultural areas created to lessen adverse effects of the diseases on the development of the sector.

4.22.3 Policy Statements

- i) The Government shall ensure integration of HIV/AIDS in training curricula in all agricultural institutes;
- ii) The Government in collaboration with non-state actors and Ministry of Health shall create awareness to agricultural communities on the impact of HIV/AIDS, malaria and water borne diseases;
- iii) Extension packages given to farmers shall contain HIV/AIDS and malaria messages;
- iv) Production and utilization of labour saving technologies in agricultural undertakings shall be promoted; and
- v) Utilization of nutritious foods to HIV/AIDS affected populations shall be promoted.

4.23 Employment and Decent Work in Agriculture

Agriculture and agribusiness are crucial drivers of rural economic growth in Tanzania and instrumental for the enhancement of food security, reduction of poverty and overall improvement of human well-being. The Government recognizes the importance of decent employment in agriculture and its central role for the achievement of sustainable agricultural growth and rural development. Economic growth will have a fast and long-term impact on poverty alleviation if the created employment potential will enable poor people to raise their income, either through reduced unemployment or underemployment or higher returns to labour. As poor people mainly rely on labour to earn their livelihoods, the creation of more and better employment opportunities in agriculture for both women and men is essential for the reduction of poverty.

4.23.1 Issues

- i) Inadequate employment opportunities in agriculture are driving people away especially youth;
- ii) Poor working conditions in agricultural employment (e.g. low pay, informality, low job security and no social protection) are driving youth away;
- iii) High incidence of child labour in the agricultural sector, especially its most harmful forms;
- iv) Low labour productivity, particularly of women and youth, due to low skills base, limited access to or ownership of financial and natural resources such as land, and limited access to information, markets and adequate infrastructure, as well as lack of training opportunities, vocational education, etc.;
- v) Weak enforcement of labour related legislation in rural areas; and
- vi) Weak inter-institutional collaboration for effective promotion of decent employment in agriculture. .

4.23.2 Policy Statements

- i) Up-to-date age and sex-disaggregated information on employment and labour productivity related issues in rural areas shall be promoted;
- ii) On-farm and non-farm rural activities shall be promoted as engines of growth, innovation and attractive in terms of jobs for both women and men, in line with decent work concepts;
- iii) Junior Farmer Field and Life Schools (JFFLS) and Young Farmers' Associations (YFAs) shall be promoted;
- iv) Capacity to address child labour in agriculture shall be strengthened;
- v) Awareness on the benefits of productive youth employment and child labour prevention in agriculture shall be created;
- vi) Business models that provide opportunities for small-scale producers towards aggregation of produce and developing backward and forward linkages shall be promoted, targeting in particular rural women and youth;
- vii) A labour and legal enforcement framework for protection of workers and employers in the agricultural sector and the informal rural economy shall be enhanced;
- viii) Employment and decent work in agriculture shall be mainstreamed and integrated into agriculture sector development strategies and programmes

4.24 Infrastructure Development

Agricultural development depends heavily on good infrastructure, such as roads, communication, energy and marketing facilities. Good infrastructure is essential for movement of agricultural produce, goods and services to and from rural areas that are vital stimulants to the development of the rural economy. Infrastructure developments particularly in rural areas are vital determinants of transaction costs in agriculture and hence absence of good infrastructure in turn affect sector competitiveness. Passable roads, adequate energy, efficient communication and marketing infrastructure are important in stimulating agricultural growth and development in rural areas.

4.24.1 Issues

- i) Inaccessibility of rural areas due to poor rural roads;
- ii) Poor communication facilities that hamper exchange of information within rural areas;
- iii) Inadequate rural electrification; and
- iv) Inadequate market infrastructure.

4.24.2 Objectives

Rural infrastructure improved to reduce transaction costs that affect agricultural growth and competitiveness.

4.24.3 Policy Statements

- i) Rural road connectivity for improved agricultural development shall be facilitated in collaboration with Ministry of Infrastructure and PMO-RALG;

- ii) Conducive environment for Public Private Partnerships in infrastructure development particularly in rural areas shall be created; and
- iii) Availability and accessibility to rural electrification, water, communication and market infrastructure shall be facilitated.

4.25 Information and Communication Technology (ICT) in Agriculture

The application of Information and Communication Technology (ICT) in agriculture is increasingly important. E-Agriculture is an emerging field focusing on the enhancement of agriculture and rural development through improved information and communication processes. It involves the conceptualization, design, development, evaluation and application of innovative ways to use Information and Communication Technologies (ICT) in the rural domain, with a primary focus on agriculture.

4.25.1 Issues

- i) High cost of Information Communication Technology;
- ii) Inadequate web-linked data bases;
- iii) Inadequate participation of private sector in ICT in rural areas; and
- iv) Inadequate coordination of trade links and e-markets.

4.25.2 Objectives

A national wide ICT system to support agricultural development enhanced.

4.25.3 Policy Statements

- i) Participation of a wide spectrum of actors in ICT for agricultural development shall be enhanced in collaboration with Ministry responsible for Communication, Science and Technology;
- ii) Utilization of Information and Communication Technology (ICT) for increased efficiency in information sharing in the agricultural sector shall be promoted; and
- iii) Optimal use of existing and expansion of ICT capacity and infrastructure in order to reduce ICT access gap between the rural and the urban areas shall be ensured in collaboration with Ministry responsible for Communication, Science and Technology and in partnership with the private sector.

CHAPTER SIX

5.0 INSTITUTIONAL FRAMEWORK FOR POLICY IMPLEMENTATION

A wide spectrum of actors shall be responsible for the implementation of the National Agricultural Policy. The various actors in the sector include public, private and civil society institutions. The functions of each group are as follows:

5.1 Public Sector Organizations

5.1.1 Agricultural Sector Lead Ministries

The Agricultural Sector Lead Ministries (ASLMs) which constitute of the Ministry of Agriculture Food Security and Cooperatives (MAFC); Ministry responsible for Livestock and Fisheries Development; Ministry responsible for Industries Trade and Marketing; and Prime Ministers Office-Regional Administration and Local Government (PMO-RALG), shall oversee the implementation of the National Agricultural Policy at local Government level. The emphasis of the Agricultural Sector Lead Ministries shall be to provide the facilitating environment for the growth of private sector activities.

Their roles shall include:

- i) Providing and supervising the implementation of regulatory services for sector development;
- ii) Monitoring the performance of private and public agricultural sector support services with the aim of improving their quality to ensure competitive markets;
- iii) Formulating and reviewing sectoral policies and monitoring the overall performance of agricultural sector;
- iv) Contributing to the development and promotion of improved agricultural practices;
- v) Promoting private sector's role in primary production, processing, marketing and the provision of support services; and
- vi) Promoting farmers organizations for empowering farmers, developing their advocacy and lobbying capacity and participation in service delivery and resource mobilization.

The Agricultural Sector Lead Ministries are constrained by several factors that need to be addressed.

- i) Inadequate manpower and skills for policy formulation and analysis, monitoring and enforcing policies, standards and regulations;
- ii) Inadequate performance standards and a framework for assessing performance of service providers, together with lack of facilities for enforcing standards and regulations;
- iii) Erosion of institutional culture for good governance;
- iv) Inadequate mechanisms for institutional coordination among various ministries, and between central ministries and the LGAs;
- v) Inadequate counterpart funding for development programs; and

- vi) Shortage of financial, human and technical capacity to generate, manage and disseminate accurate information on agricultural production.

5.1.2 Other Ministries

Other ministries are crucial in linking the agricultural sector with the economy.

The Vice President's Office (VPO) shall be responsible for overseeing government's response to environmental issues that are highly relevant to the implementation of the policy.

The Prime Minister's Office (PMO) shall be responsible for the coordination of government business including policies and the issues that cut across ministries and institutions. PMO through Tanzania Investment Centre in collaboration with Agricultural Lead Ministries shall prepare incentive packages for agricultural sector investments and advocate for a more favourable environment for investment.

The Ministry responsible for Finance shall be responsible for mobilizing resources for funding the agricultural sector both bilateral and multilateral support for the sector. Through fiscal policy, the ministry will rationalize, harmonise and monitor taxes in the agricultural sector a critical factor in ensuring incentives for increased production and processing. The ministry shall also coordinate and monitor the implementation of the National Strategy for Growth and Reduction of Poverty (NSGRP) as well as hasten the privatization of agricultural parastatals for increased private sector productivity

The Ministries responsible for infrastructure development shall oversee improvements infrastructure, like roads, that are critical enablers of the development of the sector as they provide the practical infrastructure for improving the flow of goods and services. The Ministries shall also provide backstopping to LGAs for building and maintaining district and feeder roads. The ministry shall also be directly responsible for the construction, maintenance of regional and trunk roads for facilitating crop input and output marketing.

The Ministry responsible for Communication, Science and Technology shall oversee the development and appropriate use Information and Communication Technologies (ICT) in the rural areas focusing on sustainable development of the agricultural sector.

The Ministry responsible for Lands and Human Settlements Development has fundamental responsibilities relating to access to and use of land. The Ministry shall facilitate improved land accessibility for agricultural investment; provide, land adjudication, registration services and issue title deeds for commercial agriculture.

The Ministry responsible for Community Development, Gender and Children shall cover aspects of community empowerment and gender mainstreaming. These are two crosscutting issues which shall have great significance in the implementation of the National Agricultural Policy. The ministry is also responsible for coordinating NGOs' activities some of which are active in the development of the agricultural sector.

The Ministry responsible for Education and Vocation Training shall facilitate establishment of formal coordination of agricultural training system that fits in the national education and training system from primary, vocation, adult education, secondary and post secondary agricultural education and training.

The Ministry responsible for Health and Social Welfare shall help keep farmers and all others stakeholders working in the agricultural sector healthy and productive through preventive and clinical services. Among other responsibilities the Ministry shall sensitize rural communities on good nutrition, diseases such as HIV/AIDS, malaria and waterborne diseases, and problems such as alcoholism and drug abuse, which have a significant impact on agricultural production.

The Ministry responsible for Labour and Employment has the mandate to attract and empower youths to undertake rural jobs, start rural-based agribusiness and become farming entrepreneurs. Through this, the current rural-urban migration shall be minimized while at the same time nurturing rural based commercial agricultural entrepreneurs.

The Ministry responsible for Natural Resources and Tourism is an essential partner to the sector. Its activities in supporting sustainable management of forest resources especially through Participatory Forest Management (PFM), involve the same communities and farmers. Forestry production is also necessary to provide fuel for agricultural processing in rural areas. MNRT is also responsible for catchment's management, beekeeping, biodiversity, germ plasm conservation and wildlife management. These represent natural resources management (NRM) activities that interact directly with many different aspects of agriculture. Of particular importance is the management and protection of wetlands.

The Ministry responsible for Home Affairs shall support the enforcement of agricultural sector legislation.

The Ministry responsible for Justice and Constitutional Affairs shall dispenses justice as the need arise to protect life and property and as an arbitrator in disputes and conflicts. Respect for law and order is a fundamental condition for agricultural development.

Presidents Office - Public Service Management shall hasten transformation of Public Service to a more performing and dynamic meritocracy as well as hasten Public Sector Reform Programme to create conducive environment for human resources development.

The Ministry responsible for foreign affairs shall be responsible for ensuring economic diplomacy with particular reference to attract investors and bring about new technologies in the development of agriculture.

5.1.3 The Regional Secretariats

The Regional Secretariats are being streamlined under the Local Government Reform Programme whose focus is to create conducive environment for Local Government Authorities (LGA's) to operate efficiently, assist LGAs in capacity building, provide technical support to LGA's and monitor the performance of LGAs. The Regional Secretariats shall facilitate technical coordination between the sector Ministries and the LGAs.

5.1.4 Local Government Authorities

LGAs have a critical role in the growth of the sector because they directly interact with actors at community levels and thus responsible for the improvement of rural livelihoods. The roles pertaining to agricultural sector development include:

- i) Promoting social and economic development;

- ii) Designing and implementing sector plans;
- iii) Supervising the implementation of laws, acts and regulations relevant to the sector;
- iv) Supervising and coordinating the delivery of extension services;
- v) Mobilizing resources (financial, human and facilities/equipment) for local development programmes;
- vi) Administration of villages for the purpose of stimulating sustained development; and
- vii) Land administration, land use planning and management for effective and sustainable land utilization.

5.1.5 Other Public Institutions

Other public institutions shall play important research and training roles in the sector. Their mandates fall into four main categories:

- i) Conducting long and short-term training to meet professional needs in the sector including specific tailor-made training programmes for various clienteles. Both the professional and short courses shall in future be demand-driven;
- ii) Conducting research as guided by the National Agricultural Research Master Plan, and implementing outreach programmes as one way of disseminating research results;
- iii) Providing advisory services to the Government and the private sector through consultancy and other means; and
- iv) Setting academic standards in agricultural training Institute through institute registration accreditation and curricula.

5.2 Parastatal Organizations

Parastatals such as the National Environmental Management Commission (**NEMC**), Tanzania Bureau of Standards (**TBS**), Tanzania Official Seed Certification Institute (**TOSCI**) and the Tanzania Food and Drug Agency (**TFDA**), shall continue to play critical public roles. These include setting, monitoring and enforcing standards for the quality of agricultural inputs and products to ensure the safety of humans and the environment.

5.3 Academic and Research Institutions

Several academic and research institutions play important research and training roles in the agricultural sector. They have mandates to conduct long and short-term training to meet professional needs in the sector, including specific tailor-made training programmes, conduct research as guided by the National Agricultural Research Master Plan and implement outreach programmes as one way of disseminating research results; and provide advisory services to the Government and private sector through consultancy and other means. These institutions provide demand-driven training through both professional and short-term courses in policy formulation, analysis, strategic planning and management, agribusiness management, entrepreneurial skills and business management.

5.4 Commodity Boards

Agricultural Commodity Boards for coffee, cashew-nut, cotton, sisal, tea, sugarcane and pyrethrum were established by Acts of Parliament for the purpose of performing regulatory functions for specific crops on behalf of the Government. During the implementation of the National Agriculture Policy, the Commodity boards shall perform the following:

- i) Formulate and implement development strategies for their respective industries;
- ii) Provide regulatory services to promote good quality products;
- iii) Finance research and extension services for the respective industry;
- iv) Disseminate relevant information to stakeholders in the industry; and
- v) Promote production, value addition and marketing of their respective crops.

5.5 Private Sector Organizations

While public organizations play a facilitating role, the private sector is directly involved in productive activities that contribute towards raising net incomes and improving livelihoods. These include farmers, traders, processors, importers, distributors, other individuals and organizations involved in the sector for profit motive. Since the private sector is the main engine of growth, it is the objective of this policy to provide favourable environment for effective participation of private sector organizations.

5.5.1 Farmers

Farmers are a very broad category of actors ranging from small-scale subsistence crop producers comprising of more than 90 per cent of farming population to medium and large-scale farmers.

This policy is ultimately aimed at creating conducive environment for all farmers to transform the sector from subsistence to modern commercial agriculture while maintaining their ability to ensure that they are not only food secure but also make a surplus for their development. It also aims at empowering farmers to articulate their needs.

5.5.2 Farmers' Organizations

Farmers' organizations in the form of cooperatives, associations or groups are important means through which farmers are empowered. The Agriculture Council of Tanzania (ACT) and Tanzania Chamber of Commerce, Industry and Agriculture (TCCIA) as well as *Mtandao wa Vikundi vya Wakulima Tanzania* (MVIWATA) are some of the organizations that represent farmers' interests. The most important roles for farmers' organizations include:

- i) Providing services such as information, inputs, credit and procurement of produce;
- ii) Collecting and disseminating marketing information to members;
- iii) Conducting membership education;
- iv) Providing training on technical and organizational issues;
- v) Lobbying and advocacy on behalf of their members; and
- vi) Participating in the processes of policy formulation, programme planning and implementation.

5.5.3 Agribusiness

Agribusiness group is comprised of small, medium- and large-scale actors who play critical roles in the sector such as importers, wholesale distributors and retail suppliers of crop inputs, farm produce buyers, transporters, processors and exporters of crop produce.

The success of the sector shall depend on active participation of this group in facilitating commercial activities through timely provision of services, especially after the withdrawal of Government from these activities.

5.5.4 Financial Institutions

Financial institutions are very important for the development of the agricultural sector as they will be providing financial services to farmers for increased investment into the sector. Amongst such institutions include Commercial Banks, Microfinance Institutions (MFIs) and non-bank financial institutions such as National Social Security Fund (NSSF). The Government shall create conducive environment to attract financial institutions to provide financial support to the agricultural sector.

5.5.5 Civil Society Organizations (CSOs)

Civil Society Organizations are a diverse group of actors, comprising both local and international Organizations. Community-based organizations (CBOs) are also emerging as important players especially with the present emphasis on participatory approaches. The most critical roles of NGOs and CBOs include:

- i) Providing extension and credit services;
- ii) Lobbying and advocacy for policy changes and development;
- iii) Funding community-based interventions; and
- iv) Providing public services on a contract basis.

5.5.6 Other Service Providers

Other actors fall under both public and private sector institutions that provide specific services that are critical to the sector. These are:

- i) The media, which is crucial for information dissemination and public education;
- ii) Public and private land surveyors, who survey and demarcate lands and thereby facilitate the process of providing legal titles of land ownership, These services are essential for the implementation of the Land Acts; and
- iii) Legal service providers shall play an important role in litigation including drawing up and overseeing the enforcement of contracts. As commercial agriculture develops, the demand for such services shall grow and it will be important to expand their provision to the rural areas.

CHAPTER SEVEN

6.0 CONDUCTIVE ENVIRONMENT FOR POLICY IMPLEMENTATION

Conducive macroeconomic stability is a prerequisite for the implementation of the National Agriculture Policy and a powerful tool for agricultural profitability and growth. While agricultural undertakings are usually prone to risks, efforts for reducing and mitigating risks and challenges facing the sector is a necessity. The major challenge is on how to reduce inefficiencies in banking systems that might raise lending interest rates to levels that are unattractive to the sector. There is need therefore to have efficient banking systems with lending rates that reflect the real opportunity cost of capital.

Despite the reforms in the agricultural sector tax regime, there are still taxes, levies, fees and high energy tariffs that are applied both at macro and micro-economic levels that has an effect in the sector profitability. Fair returns to producers and traders in the sector shall require continuous review and reforms of taxation and non-taxation system in order to increase profitability and investment in the sector.

6.1 Legal Framework

Reviewing, Harmonization and Publicizing Agricultural Legislation

Production, marketing and processing transactions in the agricultural sector must comply with established standards in order to protect the interests of different actors in the sector. A Legal Framework shall be put in place to ensure compliance to standards through formulation of legislation and /or regulation.

6.2 Monitoring and Evaluation

Monitoring and evaluation is essential for improving the implementation of the National Agriculture Policy. M & E shall provide an assessment of the effect and impact of the policy on implementation. The overall responsibility for monitoring the sector policy lies within the Ministry responsible for crop development. However, the Ministry shall work in close collaboration with ASLMs, key ministries with synergies with the agricultural sector, public and private institutions and the private sector.

Presidents' Office, Vice President's, Prime Minister's Office and Ministry of Finance shall play a vital role in the assessment of the policy performance. A more focused systematic and well-defined reporting system that delineates functions of different actors in the course of policy implementation and strategic intervention for evaluation shall be developed.