REPUBLIC OF ZAMBIA

(FINAL DRAFT)

MINISTRY OF AGRICULTURE AND CO-OPERATIVES

THE NATIONAL AGRICULTURE POLICY

2012-2030

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Acronyms

AgSAG	Agriculture Sector Advisory Group
AU	African Union
CAADP	Comprehensive Africa Agriculture Development Programme
COMESA	Common Market for Eastern and Southern Africa
CPs	Cooperating Partners
CSO	Civil Society Organisations
FSP	Fertilizer Support Programme
FISP	Farmer Input Support Programme
FNDP	Fifth National Development Plan
GDP	Gross Domestic Product
GRZ	Government of the Republic of Zambia
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
JASZ	Joint Assistance Strategy for Zambia
MDGs	Millennium Development Goals
MLF	Ministry of Livestock and Fisheries
MACO	Ministry of Agriculture and Cooperatives
MoFNP	Ministry of Finance and National Planning
NAP	National Agriculture Policy
NEPAD	New Partnership for Africa's Development
NDPs	National Development Plans
PAF	Performance Assessment Framework
PRBS	Poverty Reduction Budget Support
SADC	Southern African Development Community
SNDP	Sixth National Development Plan
ZCC	Zambia CAADP Compact

Executive Summary

Following various stakeholder observations on the National Agriculture Policy (NAP 2004-2015), MACO launched its review in 2010. The review was to culminate in the preparation for the Revised NAP 2012-2030. Literature review, limited participatory consultations, and written submissions were employed as the basis for obtaining stakeholder input in developing proposals for demand-driven agriculture policy and an inclusive coordination of its implementation.

The review of NAP 2004-2015 has revealed that:

a) Zambia has in general liberalised the economy and that the emerging stable macroeconomic environment is attracting significant private sector investment, resulting in GDP growth rates greater than 6% per annum;
b) The performance of the agriculture sector has been below expectations in that the growth rate of the sector at 1.5% is less than the population growth rate of 2.8% and the CAADP target of 6%; exports mainly consist of primary products and the total value is increasing at a decreasing rate; poverty and food insecurity are still high among those who depend on agriculture;
c) The agriculture sector reform programme has not yet been fully and consistently implemented and as a result, private sector investment and the sector growth rates are relatively low. Therefore, there is need to ensure that complementary sector policies are implemented and to improve the legal environment to attract significant private sector investment;
d) Improved sector coordination through creation of viable and effective partnerships among GRZ, private sector, NGOs, community-based organisations, and donors are important for agriculture development;
e) Inefficient, inadequate and expensive credit is constraining agriculture sector growth as farmers cannot obtain appropriate inputs, machinery and equipment to increase production. In Zambia, some out-grower schemes provide successful models for increasing access to inputs and extension services;
f) Zambia needs to quickly strengthen research and extension services to enhance productivity and competitiveness to enable her to take advantage of the huge opportunities that are emerging in national, regional and international agriculture markets;
g) Demand-driven integration of production with processing and value-adding strategies and technologies are important for agriculture development;
h) Globalisation and the eventual elimination of subsidies imply that there is urgent need to increase small scale farmer productivity and integrate into the production and supply chains.

In summary, Zambia stands on the verge of agriculture prosperity but there are a number of weaknesses that need to addressed to improve the performance of the agricultural sector. These include:

(i) low agricultural productivity among small scale farmers;
(ii) inefficient input and output agricultural markets;
(iii) decreasing rate of growth of agricultural exports;
(iv) poor small scale farmer access to productive agricultural resources and services to increase production; and
(v) the weak public and private sector capacity to facilitate planning, resource mobilisation, implementation, monitoring and evaluation of agricultural policy and regulatory provisions.

In line with the national economic vision 2030, the derived agriculture vision is:

> ***"A Competitive and diversified agricultural sector driven by equitable and sustainable agricultural development"***

The mission of the agricultural sector is:

> ***"To facilitate the development of a competitive, diversified, equitable and sustainable agriculture sector"***

The core values of the agricultural sector are:

1) Equitable development of the agriculture sector;
2) Stable and consistent interpretation and implementation of the agricultural policies, decisions and regulations;
3) Creation of economically sound agribusiness and public services opportunities;
4) High ethical public sector and business standards;
5) Promotion of production to meet the changing needs and desires of domestic and international markets;
6) Sustainable utilisation of the natural resources and the environment.
7) Efficient delivery of agricultural services

The goals of the agricultural sector are:

(i) To increase the annual growth rate of the real GDP;
(ii) To increase the value and growth rate of crop exports;
(iii) To contribute to reduction of poverty and food insecurity in rural and urban areas.

The objectives of NAP 2012–2030 are to:

(i) Promote sustainable increase in agricultural productivity of major crops with comparative advantage;
(ii) Continuously improve agricultural input and product markets so as to reduce marketing costs of agribusiness, including small-scale farmers and farmer groups;
(iii) Increase agricultural exports to preferential markets at regional and international levels;
(iv) Improve access to productive resources and services for small-scale farmers, especially women and young farmers, in outlying areas to enable them to increase production of staple foods, including fruits and vegetables, for own consumption and the surplus for income generation;
(v) Continuously strengthen public and private sector institutional capabilities to improve agricultural policy implementation, resource mobilisation, agriculture research, technology dissemination, and implementation of regulatory services.

The revised NAP 2012-2030 provides policy recommendations and action areas to enable agribusiness to produce and commercialise in an environment with clear rules that are predictable and stable, with the government focusing on facilitating, supporting and providing incentives for productive activities.

It is important to note that no one institution has capacity to implement the proposed action areas. The revised NAP 2011-2030 marks the beginning of strong partnership and teamwork between farmers, agribusiness, public sector, civil society, and development partners. Each partner is expected to integrate the implications of the revised NAP 2011-2030 objectives in their strategic plans and work plans. Timely and sustained implementation of the various action areas shall lead to significant increase in production, exports, and reduction of food insecurity and poverty, especially among those who predominantly depend on agriculture. This will ensure that Zambia utilises the massive agriculture potential as a way of significantly contributing to the realisation of the national economic vision 2030.

Implementation of the revised NAP requires efficient utilisation of both national and donor resources. At the same time, the government and cooperating partners will mobilise funding from both domestic and external sources. The government and other partners will make their funding commitments once detailed and prioritised investment programmes and budgets have been developed. In addition, private sector contribution shall come from commercial banks, financing institutions facilitated by government, and out-grower schemes. It is hoped that commercial banks shall overcome their administrative deficiencies and fears to increase agriculture credit on affordable terms.

It is recognised that there are both capital and human capacity limitations within the public sector and therefore it will be important to share NAP 2012-2030 implementation responsibilities with all key stakeholders. Therefore, MACO shall focus on the core-functions and encourage the other stakeholders to supplement the efforts on the basis of comparative advantage. In areas where there is a clear case of market failure, the government shall enlist the input of all stakeholders in designing and implementing transitory institutions and or arrangements to address the constraints.

PART I: REVIEW OF THE NATIONAL AGRICULTURE POLICY 2004-2015

1. INTRODUCTION

1.1 Background

Approximately 58% (42 million hectares) of the land in Zambia is of medium to high crop production potential. In 2004, only 14% of total arable land was utilised for crop production. Therefore, the prospects for increasing the expanse of cultivated land and the volume of agricultural production are very high.

Farm land is obtained through two main land tenure systems, customary and leasehold. While the customary system accounts for 94% of farmland, the leasehold system accounts for only 6%, with title deeds being issued for a renewable period of 99 years. However, out of the estimated 1.5 million small scale farmers, only 3% have title deeds. The lack of title deeds, in many cases, discourages small scale farmers from adopting a sustainable, long-term land management approach. As a consequence, they are unable to access loans using the land as security.

In addition to the vast expanse of arable land, Zambia also has extensive surface and underground water resources which can be used to irrigate nearly 2,750,000 hectares of which 423,000 hectares is readily available for development. Based on the Ministry of Agriculture and Cooperatives (MACO) estimates in 2004, only 155,912 hectares (37%) of the readily available land was actually irrigated. The factors affecting the utilisation of irrigation potential include inadequate access to long-term credit, poor extension services, inadequate involvement of farmers in management of irrigation projects, poor understanding of farming systems; dependence on government and donor assistance; marginalisation of marketing and production support services; inadequate efforts in the strengthening of relevant institutions, and poor land tenure arrangements.

In 2010, the population of Zambia was approximately 13,046,508 persons with an average annual growth rate of 2.8%. Nearly 61% of the population lives in rural areas where they are predominantly engaged in the production of crops, especially staple foods (Table 1). Despite previous interventions, agriculture production is still dominated by small scale farmers who mainly depend on their own labour and the hoe technology to meet subsistence needs. However, labour availability is constrained by the high prevalence of HIV/AIDS in Zambia (15%), which results in loss of progressive farmers and staff. This has adverse implications for productivity.

Table 1: Types of Farmers in Zambia

Characteristics	Small Scale Farmers	Medium Scale Farmers	Large Scale
Number of farmers	792,212	20,728	2,052

Farm size (Ha)	Less than 5	5 to 20	More than 20
Crops grown	Food	Food/cash	Cash
Type of production	Subsistence and occasional sales	Commercial	Commercial

Source: CSO [2001]

Despite the fact that approximately 80% of the producers of food are women, they face gender-based constraints, such as inequalities in access to land, credit, services, training, extension services, and representation in policy-making and planning. As a result, women do not adequately respond to the opportunities being created by the liberalised environment.

Between 2004 and 2015, the objectives of the National Agricultural Policy (NAP 2004-2015) were to:

1) Ensure national and household food security through all-year round production and post-harvest management of adequate supplies of basic foodstuffs at competitive costs.
2) Contribute to sustainable industrial development by providing locally produced agro-based raw materials.
3) Increase agricultural exports thereby enhancing the sector's contribution to the national balance of payments.
4) Generate income and employment through increased agricultural production and productivity.
5) Ensure that the existing agricultural resource base is maintained and improved upon.

1.2 Public Investment in Agriculture Development

The Government has declared agricultural development as a priority in poverty reduction and food insecurity and is committed to increasing the agriculture budget. Between 2004 and 2010, the agriculture budget allocations varied between 5% and 8% of the total national budget (Table 2), indicating that Zambia has yet to comply with the 2003 AU (African Union) Maputo Summit decision of allocating at least 10% of the budget. In 2011, the Government signed the Comprehensive Africa Agriculture Development Programme (CAADP) compact and reaffirmed the commitment to allocate at least 10% of the national budget to agricultural development.

Table 2: Annual Agricultural Budget Allocations (K billions)

Item Description/Year	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
National Budget	5,988	7,267	7,730	9,054	13,761	15,279	16,718
Agric Budget (MACO & MLF)	237	330	457	663	787	1,074	1,134
Agric in other Ministries	67	83	65	71	104	189	84
Total Agric (GRZ)	304	412	523	734	890	1,263	1,218
Donor Budget (Agric & Forestry)	62	108	200	405	339	159	N/A
Total Agric (GRZ+Donors)	366	520	722	1,139	1,230	1,422	1,218
FRA	47	59	140	151	80	100	100

FISP	98	140	184	205	187	435	430
% Agric (GRZ)	5	6	7	8	6	8	7
%Agric (GRZ+Donor)	6	7	9	13	9	9	7
%Donor in Total Agriculture Budget	17	21	28	36	28	11	N/A
% FRA in Total Agriculture Budget	16	14	27	21	9	8	8
% FISP in Total Agriculture Budget	32	34	35	28	21	34	35

Source: MACO (2010)
MLF = Ministry of Livestock and Fisheries
GRZ = Government of the Republic of Zambia
FRA = Food Reserve Agency
FISP = Farmer Input Support Programme

In terms of utilisation of the agriculture budget, FRA and FISP allocations varied from 62% in 2006 to 30% in 2008. These variations relate to the changing number of target beneficiaries and the costs of implementing the subsidies. The Government believes that the bias in the agriculture budget allocations to FRA and FISP is needed to address the high level of poverty among small scale farmers. However, the Government welcomes some of the recommendations to minimise market distortions and improve targeting and general management of these social programmes.

Over the years, donor support to agriculture development increased from 17% in 2004 to 36% in 2007. In subsequent years, donor support to the sector has been declining. At the same time, some out-grower schemes are increasing support to provision of selected public services, such as extension services and research. However, both donors and the private sector are concerned about frequent changes in policy interpretation, marginalisation of the core government services in the agriculture budget, and crowding out of the private sector from providing commercial services.

1.3 Contribution of the Agricultural Sector

The agriculture sector is expected to make significant contribution to economic growth and reduction of food insecurity and poverty. NAP (2004-2015) emphasised market liberalisation and promotion of private sector development while accommodating the social obligations of the Government in addressing the high level of poverty among small scale farmers. This section presents a summary of the contribution of the agriculture sector to the increasing growth of the GDP, development of efficient agricultural input and product markets, increasing agricultural exports, and reduction of poverty and food security.

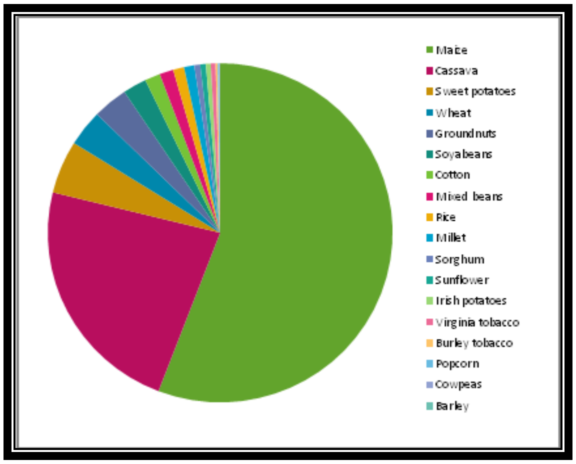
1.3.1 Agriculture Gross Domestic Product (AGDP)

Maize and cassava dominate crop production (Figure 1). Even though there is a general upward trend, crop production varies from year to year due to the effects of climate change, such as droughts and floods that lead to reduction in crop yields (Figures 2). The agriculture sector contributes to climate change through gas emissions and unsustainable production practices, such as shifting cultivation practices that result in approximately 2.4% deforestation per year, and using late fires to clear land, etc. Therefore, the agriculture sector will promote production practices that minimise contribution to climate change, such as conservation farming, tree planting, etc.

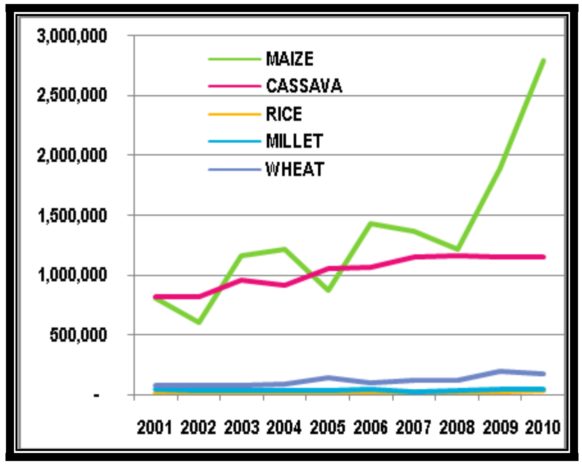
It is estimated that crops contribute approximately 65% of the Agriculture GDP (Figure 3). Between 2004 and 2009, the agriculture share (crop, livestock, fisheries and forestry) of the GDP decreased from 15% to 12.5% at an annual average rate of approximately -3.82%. The decrease in agriculture GDP was largely due to the relatively higher growth rates in other sectors of the economy, especially the mining sector. Over this period, the average annual agricultural sector growth rate of 1.3% was lower than the population growth rate (2.8% in 2010) and the targeted growth rate of at least 6% per year in the Millennium Development Goal 1 (MDG1) and CAADP needed to reduce food insecurity and poverty.

In view of the fact that the current crop varieties have high potential yields (Table 3), the slow agriculture sector growth rate is attributed to low productivity (output per unit of inputs), especially among small scale farmers who obtain only 25-50% of the yields of the large scale farms. The causes of low productivity include inadequate resources for the purchase of inputs, use of inappropriate farming practices that lead to soil degradation, rainfall variations, and the failure to fully develop the irrigation potential. As a result, low productivity leads to high per unit production costs, consequently constraining the sector's ability to contribute to growth, increased exports and employment, and reduced levels of poverty and food insecurity.

Figure 1: Crop Production Shares 2010 Figure 2: Trends in Production
of Staple Crops

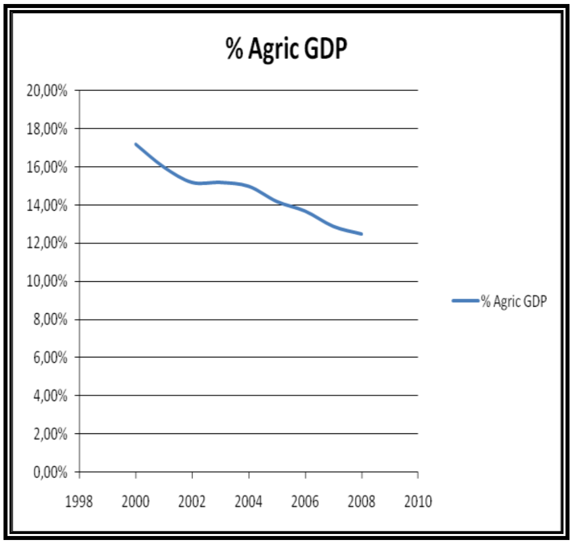


Source: MACO [2010]



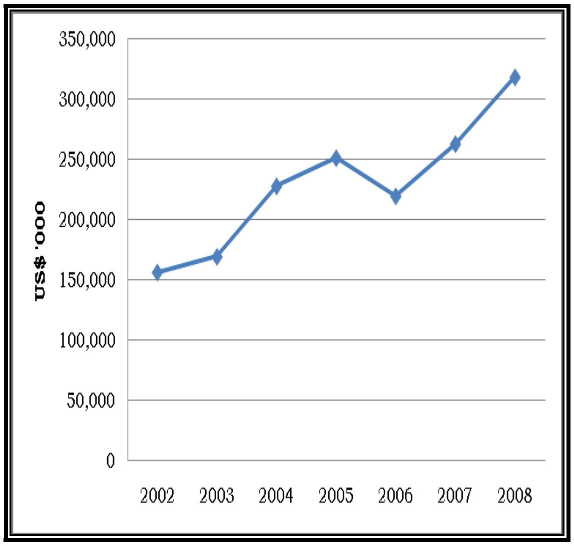
Source: MACO [2010]

Figure 3: Trends in Agriculture GDP



Source: MACO [2010]

Figure 4: Trends in Agricultural Exports



Source: Zambia Export Board [2009]

Table 3: Trends in Yield/Hectare for Selected Crops 2004-2008

	Expected Yield tons/Ha	Trend of Average Crop Yield tons/Ha						
Crop/Year		**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Maize	7	1.93	1.04	1.82	1.57	1.31	1.68	2.25
Sorghum	0.5	0.52	0.33	0.48	0.4	0.41	0.54	0.81
Millet	0.6	0.67	0.47	0.69	0.38	0.75	0.79	O.85
Paddy Rice	4	0.95	0.73	0.97	0.91	0.95	1.35	1.44
Wheat	7	6.12	6.13	5.51	6.04	5.81	5.70	6.33
Cotton	2.5	1.19	0.88	0.78	0.61	0.66	0.84	0.85
Soya bean	3	1.65	1.38	1.31	1.42	1.75	1.84	1.80
Groundnut	2	0.60	0.46	0.58	0.37	0.49	0.56	0.61
Sunflower	2	0.45	0.26	0.38	0.31	0.39	0.47	0.49
Beans (dry)	1	0.40	0.46	0.51	0.43	0.75	0.56	0.77

Source: CSO/MACO [2010]

Note:Expected cassava yield rate has been estimated at 11.7 mt/ha nationally. This constant yield is applied every year.

1.3.2 Increasing Agricultural Exports

Zambia has a relatively small population (13,046,508 people in 2010) and therefore the domestic market cannot absorb significant increase in crop production without the market collapsing. In order to unlock the huge agriculture potential, Zambia has to secure access to regional and international markets.

The value of agricultural exports increased from US$ 156,907,680 in 2002 to US$ 318,758,970 in 2008, i.e., 103% increase (Figure 4). In 2009, the major agricultural exports were mainly primary products (69%) consisting of sugar (24%), cotton lint (19%), tobacco (10%), coffee (6%), soyabeans (4%), maize (4%), marigold (3%), fuzzy cotton (3%) and paprika (3%). In addition, Zambia also exports horticulture (16%) and floriculture (13%) products. Most of the agricultural exports to go to the EU and USA, where preferential trade agreements have been the driving force, such as the Lome Convention and the African Growth and Opportunity Act (AGOA).

The major concerns with regards to increasing agricultural exports are:

- Zambia has not yet fully utilised the export quotas in the EU and USA. In addition, Zambia has yet to utilise the other trade agreements with India, China, SADC, COMESA, etc.
- The total value of agricultural exports has been increasing at a relatively slower rate due to lack of affordable capital to reinvest in the sector and import appropriate inputs, including new planting material.
- That unless there is improvement in production and marketing efficiency, Zambia may not hold on to her market share at the expiry of preferential trade agreements and/or when trade is liberalised.
- The predominance of export of primary products implies that Zambia has good prospects for the development of a vibrant agro-processing industry in line with the requirements of the target markets.

1.3.3 Increasing Access to Agricultural Inputs and Product Markets

The Government recognises the important role of the private sector in developing stable markets for inputs and primary products and investment in value-addition and bulking to generate large volumes for transportation over long distances. Therefore, a number of incentives have been implemented to encourage private sector investment. For example, removal of customs and duty on most agricultural machinery and equipment; capital expenditure allowance of 20% for the first five years on farm improvements, etc. However, private sector investment is still constrained by the following factors:

a) *Incomplete Agriculture Market Liberalisation*

In subsectors with minimum market distortions, the private sector response has been good leading to significant increases in soya bean and wheat production as many commercial farmers have reallocated resources from maize production. In many cases, private sector investment is constrained by frequent changes in policy interpretation and implementation, market distortions emerging from the government involvement in supplying subsidised fertilizer and seed and maize marketing; policies that favour trading and not value addition, biased development tax concessions that do not favour small scale processing, inadequate and inappropriate advice and market information, and lack of knowledge and skills to identify reliable markets and efficiently manage processing plants.

b) Inadequate Agricultural Credit

Private sector investment is also constrained by lack of appropriate credit facilities to acquire equipment and other inputs. Farmers complain about scarce and expensive agricultural credit, with interest rates of 20% to 30%, and the bias towards the larger corporate sector where the administration costs are relatively low. Farmers are also concerned about the predominance of short term loans, the lack of long term loans, and the commercial banks' delays in processing loan applications. On the other hand, lending institutions are concerned about the high risks in the agriculture sector and weaknesses and delays in the legal processes to address violation of contracts. This points to a possible case of market failure and therefore, the Ministry of Finance and National Planning is coordinating consultations to develop a sustainable rural credit institution.

c) Inappropriate Legislation and Regulations

The private sector operates efficiently in an environment with appropriate, consistent and enforceable legislation and regulations. While the private sector appreciates the progressive legislation on plant breeder's rights that has provided the necessary incentives to release new varieties, many agricultural laws and regulations are not appropriate for private sector development. For example, the Agricultural Credit Act of 2003 requires strengthening to facilitate quick redress for credit defaulters. Similarly, the Agricultural Lands Act of 1994 requires strengthening to shorten the land allocation and title deed processing period. Furthermore, the Agricultural Products Levy Act of 1994 requires amendment as it could be abused, while the Agricultural Fertilizers and Feeds Act of 1994 requires amendment to recognise fertilizer blends and other forms of fertilizer and to establish an institution to monitor grades and standards. In addition, the private sector is also concerned about the lengthy and weak enforcement of laws and regulations as it discourages many institutions from seeking legal action. The private sector is concerned about the unfair competition emanating from subsidised government programmes such as FRA and FISP in the buying of maize and supply of fertilizer and seed.

d) Poor Roads and Infrastructure

Farmers are located throughout the country and, for transporting their product to buyers, often depend on a few transporters who charge high fares to offset the high cost of depreciation and limited competition. Good rural roads and market infrastructure are needed to take inputs to farmers on the one hand and to deliver products to consumers at the lowest cost on the other hand. In view of the fact that infrastructure development is expensive, there is strong justification to focus on farm blocks and resettlement schemes as centers of agricultural development.

1.3.4 Reducing Food Insecurity and Poverty

Small scale farmers produce most of the staple foods consumed in Zambia and some of the export crops and yet many experience high levels of poverty and food insecurity.

a) Food Insecurity

The overall objective of the NAP 2004-2015 was to reduce the high levels of malnutrition and stunting which stand at 20% and 54% respectively. The high level of malnutrition and stunting indicate that while government efforts focus on achieving self-sufficiency in staple foods, there is inadequate emphasis on production of complementary food crops (such as vegetables, fruits and legumes). Similarly, there is inadequate capacity to prepare nutritious meals to ensure balanced diet. In addition, food production is not evenly distributed among households, thus many households do not have adequate access to food, especially among communities with little purchasing power.

b) Poverty

At 64%, Zambia's poverty level is high, with the agricultural sector being the main source of employment (72%) and income for most Zambians, especially women who constitute 65% of the rural population. Therefore, measures to accelerate agriculture sector growth must ensure that the benefits reach small scale farmers to enable them to raise their incomes and standard of living.

c) Increasing Access to Fertilizer and Improved Seeds

Among small scale farmers, high levels of food insecurity and poverty arise due to inadequate access to productive resources and services. In this regard, the Government has been subsidising fertilizer and seed and maize marketing through the Farmer Input Support Programme (FISP) and the Food Reserve Agency as a way of encouraging small scale farmers to increase productivity of maize, the major staple food.

FISP and FSP have been instrumental in increasing the number of farmers using fertilizer and hybrid seed and have in general contributed to increased maize production and rural purchasing power among some of the beneficiaries. However, MACO-FISP is criticised for consuming approximately 31% of the agriculture budget, thereby marginalising the provision of other supportive agriculture services; crowding out the private sector and failing to facilitate the creation of a liberalised fertilizer market to provide adequate and timely amounts of fertilizer to all farmers; bias towards maize production even in areas with no comparative advantage, perpetuating the use of compound D even if it is clear that there are soil variations within and across farms; indirectly blocking the development of a decentralised and competitive fertilizer blending industry in that MACO-FISP prefers to buy the relatively more expensive fertilizer (compound D) than the generally cheaper fertilizer blends (up to 40% cheaper in Malawi); excluding lime as a part of the package on farms with acidic soils; failure to facilitate the establishment of an independent fertilizer regulatory institution to monitor fertilizer grades and standards; and weak extension services to improve the efficiency of fertilizer use to increase productivity; failure to encourage local mining of some of the nutrients for fertilizer production; and the restrictive tender qualifications as suppliers are required to have at least 25% of the stock ready for distribution in the country.

d) Increasing Access to Staple Food Markets

The Food Reserve Agency (FRA) was established to ensure national food security and incomes of farmers by maintaining a sustainable national strategic food reserve through purchasing of agricultural crops from small-holder farmers who are located in economically disadvantaged areas in the country. Even though the FRA has injected vast funds in rural areas (K1.3 trillion in 2010), the following concerns have been raised: poor management of procurement procedures, delayed payment to farmers, limited outreach to outlying areas, uneconomic back-and-forth movement of goods to central storage and at times back to production areas; and poor management of stocks resulting in high losses.

The FRA is also seen as a major source of market instability in that operations have been extended to all parts of the country in contradiction of the original mandate; uniform price of maize is paid with no regard to the comparative advantage and financial import and export parity prices. As a result, the private sector is discouraged from providing strong commercial services, including the establishment of an efficient agricultural commodity exchange to reduce marketing risks on price as well as demand and supply. FRA is also criticised for accumulating stocks without well-defined programmes to contribute to the reduction of food insecurity among the most vulnerable people such as school children, poor expecting mothers, and poor old people; and similarly, to contribute to the promotion of value addition as a way of increasing the demand for staple foods.

1.4 Institutional Capacity of Public and Private Sector

The organisational setup for innovation, research and extension includes public institutions that mainly depend on government funding, private companies, seed companies, large farms, out-grower schemes, and trusts that are mainly funded through donor grants and small government allocations. Over the years, publicly funded research has been adversely affected by inadequate funding, poor coordination, limited number of high level scientists (PhD and MSc), and lack of sociologists and agricultural economists. As a result, very little research and development is being undertaken.

Even though the government has many extension workers, many farmers continue to use crop production practices that lead to soil degradation e.g.

unsustainable land preparation, continuous mono-cropping, shifting cultivation practices that result in approximately 2.4% deforestation per year, and using late fires to clear land. Many extension workers have limited exposure and access to new technologies meant to increase production, storage services and facilities meant to reduce post-harvest losses, skills to prevent and control of major diseases and pests, and knowledge of agricultural markets. Even when extension workers have the required knowledge and skills, they are often constrained by inadequate funding.

The private sector players also have inadequate knowledge and skills to enable them identify opportunities and to develop and implement efficient agribusiness operations. Skills are particularly inadequate in the identification of viable markets and processing industries. It is therefore not possible to meet the requirements of the market and the emerging processing industries have to depend on expensive expatriates.

1.5 Summary of the Key Issues

Zambia has in general liberalised the economy and the emerging stable macroeconomic environment is attracting significant private sector investment, resulting in GDP growth rates greater than 6% per annum. However, the performance of the agriculture sector has been below expectation in that:

a) The agriculture sector reform programme has not yet been fully and consistently implemented and as a result, private sector investment and sector growth rates are relatively low. Hence there is need to ensure that complementary sector policies are implemented and the legal environment is improved to attract significant private sector investment.
b) Poor rural roads and infrastructure result in high cost of transportation of inputs and products and therefore reduce the net incomes and discourage farmers.
c) Improved sector coordination through creation of viable and effective partnerships among GRZ, private sector, NGOs, community-based organisations, and donors increases the pool of available resources for agriculture development.
d) Inefficient, inadequate and expensive credit is constraining agriculture sector growth, as farmers cannot obtain appropriate inputs, machinery and equipment to increase production.
e) Zambia needs to quickly strengthen research and extension services to enhance productivity and competitiveness to enable her to take advantage of the huge opportunities that are emerging in national, regional and international agriculture markets.

f) Globalisation and the eventual elimination of subsidies imply that there is urgent need to improve the productivity of small scale farmers and integrate them into the production and supply chains.

In general, the poor performance of the agriculture sector is due to: (i) low agricultural productivity among small scale farmers; (ii) inefficient input and output agricultural markets; (iii) decreasing rate of growth of agricultural exports; (iv) poor small scale farmer access to productive agricultural resources and services to increase production; and (v) weak public and private sector capacity to facilitate planning, resource mobilisation, implementation, monitoring and evaluation of agricultural policy and regulatory provisions. The main issues facing the agriculture sector are summarised in Box 1.

Box 1: Summary of the Key Issues Affecting Performance of the Agriculture Sector

Low agricultural productivity

- Inadequate access to appropriate extension messages on sustainable crop production
- Inadequate access to appropriate agricultural inputs, including fertilizer, seed, herbicides, animal and appropriate mechanical power and equipment
- Reduced availability of labour due to prevalence of HIV/AIDS prevents timely completion of key farm tasks
- Lack of affordable and accessible agricultural financial services for farmers, especially for small scale farmers without land title deeds to provide the required collateral
- Low investment in irrigation encourages dependence on uncertain rainfall, resulting in frequent variations in yield.
- Inadequate public and private sector research and extension services constrain development of appropriate technologies and delivery of extension messages to increase production

Inefficient input and output agricultural markets:

- Poor rural market infrastructure increases the cost of providing agricultural services, especially in outlying areas
- Inadequate, or lack of, market information, including ICT, to enhance agricultural trade and communication
- Weak backward and forward linkages between agriculture and other sectors, i.e., low value addition
- Bias towards maize has weakened the diversification drive
- Government distortions in the fertilizer and maize markets through FISP and FRA, respectively, discourage private sector investment
- Weak marketing institutions serving small scale farmers have failed to adequately organise farmers to pool their procurement of inputs and marketing of products to reduce per unit cost
- Inadequate utilisation of regional and international markets to enable the country to fully develop the agricultural sector, especially in view of rising demand for staple foods and oil seeds in the regional markets
- Low competitiveness of agricultural products as a way of holding on to and/or expanding international market shares at the expiry of some preferential trade agreements and general trade liberalisation

Decreasing growth rate of agricultural exports:

- Inadequate utilisation of regional and international markets to enable the country to fully develop the agricultural sector, especially in view of rising demand for staple foods and oil seeds in the regional markets.
- Predominance of primary products is a constraint as relatively low value products cannot be transported over long distances
- Inadequate capacity to implement appropriate phytosanitary services to meet international market requirements.

Poor small scale farmer access to productive agricultural resources and services:

- Inadequate access to purchased inputs due to low purchasing power
- Crop production is largely rain-fed and is vulnerable to weather-related fluctuations leading to frequent crop failure and food insecurity.
- Low utilisation of irrigation in crop production.
- Bias towards maize and neglect of other crops like fruits and vegetable and legumes to enrich the diet and the soil nutrients.
- Small scale of operation due to reliance on outdated equipment and unsustainable land preparation practices.
- Low number of small scale farmers accessing credit due to lack of title deeds to land.
- FRA uniform pricing of maize adversely affects the production and marketing of other crops with relatively higher margins.

Weak public and private sector capacity to facilitate creation of the enabling environment, planning, resource mobilization, implementation:

- The agricultural sector reform programme has not yet been fully and consistently implemented and therefore, adversely affects profitability and investments
- Inadequate legal and regulatory framework regarding market conduct, contracts, ownership rules and property rights, and grades and standards, etc, discourage private sector investment
- Inadequate government budget allocations and donor support to public investment in key public goods, such as research, extension and infrastructure has adversely affected productivity and competitiveness.

- Poor working relationship with cooperating partners has reduced the pool of available resources
- Most of the agriculture budget is biased to FISP and FRA to support maize production and has weakened diversification
- Weak institutional capacity and reluctance to work with the private sector/NGOs as effective partners in delivering services
- Government and special interest groups do not have adequate data and information to enable them to make informed decisions on subsidies and measures to protect them from outside competition
- Inadequate integration of gender issues at all levels of agriculture development constrains full participation
- High level of HIV/AIDS among some of the key players in the agricultural sector constrains the availability of required labour at various levels

PART II: REVISED NATIONAL AGRICULTURE POLICY 2012-2030

2. REVISED NATIONAL AGRICULTURE POLICY 2012 - 2030

In line with the implementation period for the national Vision 2030, the revised NAP 2012-2030 shall be implemented from 2012 to 2030. Over this period, the agricultural sector will strive to make maximum contribution to the macro targets that have been specified in the national vision.

2.1 Vision, Mission, Core Values and Goals

According to the Ministry of Finance and National Planning (2006), the Zambian people's economic development vision is to become:

"A Prosperous middle income nation by 2030"

In order to be among the prosperous countries, Zambia needs to increase the Gross National Income (GNI) per capita to more than US$3,946.[1] To attain this vision, Zambia has set the following socio-economic targets:

- to attain and sustain annual real growth of 6% (2006-2010), 8% (2012-2015), 9% (2016-2020), and 10% between 2021 and 2030;
- to attain and maintain a moderate inflation rate of 5%;
- to reduce national poverty head count to less than 20% of the population;
- to reduce income inequalities measured by a Gini coefficient of less than 40;
- to provide secure access to safe portable water sources and improved sanitation facilities to 100% of the population in both urban and rural areas;
- to attain education for all; and,
- to provide equitable access to quality health care to all by 2030.

Vision of the Agriculture Sector:

"A Competitive and diversified agricultural sector driven by equitable and sustainable agricultural development"

Mission of the Agriculture Sector:

[1] Lower middle income countries category is from US$ 999 to US$3,946. Since Zambia wants to be prosperous, it was assumed that the appropriate target category is the upper middle income (more than $3,946). In Africa, only a small number of countries have already attained the upper middle income status: Algeria, Seychelles, Botswana, Gabon, Libya, Mauritius, South Africa, and Tunisia.

"To facilitate the development of a competitive, diversified, equitable and sustainable agriculture sector"

Core Values of the Agriculture Sector:

1) Equitable development of the agriculture sector to reduce food insecurity and poverty;
2) Stable and consistent interpretation and implementation of the agricultural policies, decisions and regulations;
3) Creation of economically sound agribusiness and public services opportunities;
4) High ethical public sector and agribusiness standards;
5) Promotion of production to meet the changing needs and desires of domestic and international markets;
6) Sustainable utilisation of the natural resources and the environment;
7) Efficient delivery of agricultural services.

Goals of the Agriculture Sector:

(i) To increase the annual growth rate of the real crop GDP;
(ii) To increase the value and growth rate of crop exports;
(iii) To contribute to reduction of poverty and food insecurity.

2.2 National Agriculture Policy Objectives 2012-2030

The objectives of NAP 2012–2030 are to:

(i) Promote sustainable increase in agricultural productivity of major crops with comparative advantage;

(ii) Continuously improve agricultural input and product markets so as to reduce marketing costs and increase profitability and competitiveness of agribusiness;

(iii) Increase agricultural exports as a way of fully utilising the preferential markets (regional and international) and increase contribution to foreign exchange earnings;

(iv) Improve access to productive resources and services for small scale farmers, especially women and young farmers.

(v) Continuously strengthen public and private sector institutional capabilities to improve agricultural policy implementation, resource mobilisation, agriculture research, technology dissemination, and implementation of regulatory services.

The key issues and selected examples of the action areas are discussed in the following subsections.

2.2.1 *Promote Sustainable Increase in Crop Productivity*

Sustainable increase in productivity shall be obtained through:

- Promoting environmentally friendly farming systems such as conservation farming, aforestation, and the use of green manure and lime;
- Encouraging farmers to use relatively cheaper sources of soil nutrients, including fertilizer blends, inorganic fertilizers, and liquid fertilizers as a way of reducing the cost of production and encouraging optimal application of fertilizer;
- Strengthening capacity building for small scale farmers on the appropriate crop husbandry practices to minimise the costs, increase production and reduce post-harvest losses;
- Strengthening the capacity of farmer organisations, including cooperatives, to provide appropriate agricultural services to their members, such as pooling produce to generate adequate volumes needed by processors and exporters;
- Working with the Ministry of Lands to increase the number of farmers with title deeds as an incentive for them to adopt sustainable land management practices and enhance the collateral value to enable them to access credit;
- Promoting adoption of efficient use of available water resources for irrigation in areas where it is economically viable;
- Promoting expansion of production of oil seed crops (soybean, sunflower, groundnuts) in rotation with food grains as a way to reduce fertilizer costs on the one hand and increase farm yield, incomes and consumption of protein rich food crops on the other;
- Promoting production of fruits and vegetables as a way of encouraging consumption of balanced diet, increasing incomes and diversifying income sources.

2.2.2 *Improving Efficiency of Agricultural Input and Product Markets*

Agricultural input and product markets shall be improved through:

- Strengthening capacity of agriculture stakeholders to enable them to effectively engage the Ministry of Works and Supply and MoFNP to improve rural roads in order to reduce the cost of providing agricultural services, especially in settlement schemes and areas with comparative advantage and significant production growth rates;
- Improving rural storage and strengthening capacity of small scale farmers to reduce post-harvest losses;
- Strengthening the capacity of farmer groups, including cooperatives, to enable them provide efficient services in production, marketing and processing to their members;
- Strengthening market information, including ICT(Information and Communication Technology), to enable the market to function efficiently;

- Promoting agro-processing and value addition for major food and industrial crops with consistent surplus as a means of expanding market opportunities and increasing incomes of farmers;
- Encouraging decentralised production and marketing of alternative sources of soil nutrients, such as fertilizer blends, liquid fertilizer and inorganic fertilizer.

2.2.3 Increasing Agricultural Exports

Sustainable increase in agricultural exports shall be achieved through:

- Strengthening capacity of farmer groups to enable them to continue to meet preferential market requirements, such as price, quantity and quality needs of the market;
- Enhancing the capacity of small scale farmers to understand operations of contract farming and the benefits of selling at a relatively lower price to large and stable markets;
- Strengthening capacity of agriculture stakeholders to lobby for increased access to preferential markets;
- Strengthening capacity of agriculture stakeholders to lobby Ministry of Finance and National Planning and preferential markets as a way to improved incentives and enhance commercial viability of export crops;
- Sustainably increasing productivity of crops with comparative advantage as a way of utilising regional markets (COMESA and SADC), especially in view of rising demand for staple food and oil seed crops in the regional markets;
- Broadening the diversification drive to other crops and product lines, especially those products with rising demand on domestic and international markets (US, EU, China, India and other markets), including niche products (tropical fruits and organic products), as a way of providing profitable alternatives to farmers engaged in production of products with volatile markets, such as maize, and declining markets due to health issues (such as tobacco);
- Continuous monitoring of the activities of trading partners to prevent unfair practices, e.g. non tariff barriers.

2.2.4 Improve access to productive resources and services for small scale farmers in outlying areas to enable them to increase crop production and incomes and reduce food insecurity.

Food insecurity and poverty among poor small scale farmers shall be reduced through:

- Promoting environmentally friendly farming systems such as conservation farming, aforestation, and the use of organic manure to ensure long-term productivity and viability;
- Promoting increased use of relatively cheaper sources of soil nutrients, including organic fertilizers, fertilizer blends and liquid fertilizers as a way

to reduce production costs and make staple food crops competitive on local and international markets;

- Promoting production and consumption of crops that enrich the soil (soybean, groundnuts) in rotation with food grains as a way to reduce fertilizer costs and increase yield and farm incomes, as well as consumption of protein rich food crops;
- Promoting production and consumption of fruits and vegetables to enhance the diets and diversify income sources;
- Promoting appropriate farm mechanisation hire services for small scale farmers who do not have access to machinery and equipment as way to increase cropped area and overcome labour constraints arising from HIV/AIDS;
- Increasing the area under irrigation as a way of increasing yields, promoting intensification and reducing rainfall-related production variations;
- Working with the Ministry of Lands to increase the number of farmers with title deeds as an incentive to adopt sustainable land management practices and enhance the collateral value for accessing credit;
- Strengthening capacity of farmer groups, including cooperatives, to enable their members to produce adequate volumes for efficient marketing;
- Facilitating access to affordable loans to farmer associations and groups;
- Reforming the operations of FISP and FRA to minimise market distortions and sharpen targeting as a way of enabling Zambian products to compete in domestic and the regional markets.

2.2.5 Strengthen Public and Private Sector Institutional Capabilities

Public and private sector institutional capabilities shall be achieved through:

- Strengthening interpretation, implementation and monitoring of agricultural policies and regulatory provisions so as to enhance the investment climate;
- Strengthening early warning information and crop forecasting data and analysis to enhance emergency preparedness and management of strategic food reserves;
- Strengthening the legal and regulatory framework as a way to guide both private and public sector activities;
- Increasing and realigning of the agriculture budget based on short and long-term priorities emanating from the joint stakeholder planning processes;
- Strengthening the working relationship with agriculture cooperating partners, NGOs, private sector and other stakeholders so as to increase their support to the sector;
- Strengthening prevention and management of HIV/AIDS in the agriculture sector;
- Strengthening integration of gender issues at all levels of agricultural development in line with national, regional and international agreements;
- Working with MoFNP in developing alternative public-private sector credit delivery channels for affordable agricultural credit, especially for small scale farmers;
- Strengthening institutional capacity to provide appropriate research, extension services and phytosanitary regulations for major crops as a way of increasing productivity and competitiveness and reducing weather-related risks;
- Facilitating continuous review of the regulatory framework for research and adaptation of potential technologies, including biotechnology, to enable the country to utilise the best technologies to compete;
- Subcontracting the private sector/NGOs to assist in providing some of the research, extension, and regulatory services;
- Strengthening farmer groups, including cooperatives, so that they can assist in the transfer of new technologies and reduction of the production and marketing costs.

3. IMPLEMENTATION FRAMEWORK OF THE NAP 2012-2030

3.1 Participatory Implementation

The overriding objective of NAP 2012-2030 is to accelerate reduction of food insecurity and poverty. It is important to note that no one institution has the capacity to implement the proposed action areas and therefore strong partnerships with agribusiness (farming communities, input suppliers, traders, producers, and financial institutions), the Civil Society Organisations (CSOs) and the development partners (Donors, SADC, COMESA and CAADP) are needed. Each partner is expected to integrate the implications of the revised NAP 2012-2030 objectives in their strategies and work plans.

3.2 Commitments

The effectiveness in reduction of food insecurity and poverty depends on the level of commitment of the various stakeholders. Zambia CAADP-Compact consultations obtained very clear commitments from the various agriculture stakeholders. Since the Government has endorsed the recommendations for implementation of the CAADP compact, it will also be the basis for implementation of NAP 2010-2030 agriculture vision and objectives.

3.2.1 The Government of Zambia

The Government shall ensure that vulnerable populations have the opportunity to contribute to and benefit from agricultural growth as the best way of achieving sustainable food security and to reduce the vulnerability of households to economic and climatic shocks that often erode assets, coping mechanisms, and deepen poverty, hunger, and malnutrition.

The Government recognises the roles of the various agriculture stakeholders and therefore NAP 2012-2030 shall be implemented in partnership with other stakeholders. Key stakeholder representatives shall be involved in developing five-year strategic plans and joint work plans, coordinating implementation, monitoring and evaluation of the emerging impacts.

The Government is also committed to improving the quality of national agriculture budget expenditures and harmonisation of external financing and technical assistance to boost production and productivity in line with some of the recommendations in the Poverty Reduction Budget Support (PRBS), the Performance Assessment Framework (PAF) and the National Aid Policy. In this regard, the Ministry of Finance and National Planning announced on January 18, 2011, that Government will increase and sustain agriculture budget to at least 10% of the national budget in line with 2003 AU-Maputo Declaration of the Heads of State and Government.

3.2.2 Cooperating Partners' Commitments

The Cooperating Partners have reconfirmed their commitment to the Aid Policy and Joint Assistance Strategy for Zambia (JASZ) and concede that achieving the MDGs and meeting Zambia's Vision 2030 requires increases in the volume and quality of development assistance. Therefore, development partners shall align and scale up assistance to the sector to fund the priority programmes and projects emanating from the agriculture sector's five-year strategic plans and the annual work plans, as well as CAADP priority investment programmes. In line with the National Aid Policy, the development partners shall provide indications of future aid to the sector based on five-year sector development plans, programmes and projects.

3.2.3 African Union and Regional Partners' Commitments under the Maputo Declaration

The African Union through NEPAD (New Economic Plan for African Development), SADC, COMESA and the other regional partners are committed, through the Maputo Declaration, to support Zambia in defining priority programmes that will allow the country to meet the agriculture sector objectives. In this regard, some of the recommendations emanating from Zambia CAADP Compact shall be included in the comprehensive sector strategy and annual work plans. It is expected that the African Union, COMESA, SADC and other regional partners will support Zambia in its efforts to mobilise financial and technical support aimed at identifying the priority areas, preparing bankable projects, mobilising funding and implementing the projects.

3.2.4 Commitments of the Private Sector and Civil Society

The private sector - which includes producers, traders, processors, input suppliers and financial institutions - and the civil society are committed to partnering with the Government and People of Zambia in establishing profitable enterprises and providing services that will have measurable impact on efforts to increase economic growth and reduce poverty levels in the country. These actors will ensure increased participation and accountability of their constituents in the implementation process.

3.3 Coordination, Oversight and Implementation Capacities

The overall coordination and oversight of the implementation of the revised NAP 2012-2030 will be provided by the Agricultural Sector Advisory Group (AgSAG) composed of all key stakeholders in the agricultural sector. As one of the major stakeholders, MACO is the Secretariat to the AgSAG. In order to ensure effectiveness and efficiency of the AgSAG and the Secretariat, the Government is committed to implementing some of the recommendations of the Performance Enhancement Programme (PEP) for the period 2011-2013. This will entail appropriate capacity building for the key stakeholders.

With regard to implementation modalities, the Government will drive the development of the agricultural sector by partnering with the private sector, civil society and farmer organisations - including small, medium and large scale farmers. These partners shall be actively involved in the enhancement of:

(i) monitoring and evaluation;
(ii) advocacy on behalf of their constituency;
(iii) capacity building for farmer organisations and individuals;
(iv) promotion of sustainable agricultural practices;
(v) farmer training and extension services;
(vi) storage capacity;
(vii) access to inputs;
(viii) efficient marketing of outputs;
(ix) increasing exports;
(x) financial services;
(xi) value addition; and
(xii) actual implementation and management of programme components.

In order to strengthen linkages between industry, research and academia or universities, demand-driven research and human capacity development shall be supported. It is recognised that MACO and private sector capacity shall be increased if there is increased utilisation of the human resource capacity available through research institutions and universities in Zambia and networking with appropriate international institutions.

The Government shall focus on creation of an attractive policy environment to stimulate the growth of the agricultural sector as well as enhance private sector participation and resource mobilisation. The major functions shall include:

- coordination of strategic planning;
- oversight;
- policy formulation;
- review and enforcement of legislation;
- regulation and inspection;
- provision of basic agricultural and rural infrastructure;
- financing of the control of pests and diseases of national economic importance;
- farmer training and extension; and
- agriculture research, sector coordination and overall monitoring and evaluation.

3.4 Legal framework

The agricultural sector operates under a number of legislation some of which is outdated. In the recent past, steps have been taken to repeal, amend or to come up with new legislation altogether. It is important to put in place legislation that is in line with current economic policy trends and that will stimulate sector investment and growth. Table xx below shows current legislation under the Ministry.

Tablexx: List of Legislation under the Ministry of Agriculture and Co-operatives

SER. NO	TITLE	CHAPTER	YEAR	REMARKS
1.	Coffee Act	Cap. 228	No.13 of 1994	
2.	Co-operatives Societies Act	Cap.397	No.20 of 1998	Review of Act is underway
3.	Cotton Act	Cap.227	No.21 of 2005	Being reviewed
4.	Food Reserve Act	Cap.225	No. of 2005	
5.	Plant Pests and Diseases Act	Cap.233	No. 13 of 1994	
6.	Plant Variety and Seeds Act	Cap. 236	No. 21 of 1995	
7.	Tobacco Act	Cap. 237	No. 13 of 1994	
8.	Tobacco Levy Act	Cap. 238	No. 13 of 1994	
9.	Plant Breeders' Rights Act		No. 18 of 2007	
10.	Fertilizer and Feeds Act	Cap. 226	No. 51 of 1966 and No. 13 of 1994	The Act is being considered for splitting
11.	Noxious Weeds Act	Cap. 231	No. 13 of 1994	
12.	Agricultural Credits Act	Cap. 224	No. 23 of 1995	Amended in 2010
13.	Agricultural Marketing Bill			Awaiting approval
14.	Agricultural Lands Act			Since separation of

				Ministries of Lands and Agriculture, the Act has been dormant. It needs to be amended to take care of agricultural land use planning and management, including farm blocks.
15.	Agricultural Statistics Act	Chapter 229	No. 13 of 1994	Xxxxxx
16.	Agricultural Products Levy Act	Chapter 232	No. 13 of 1994	
17.	Control of Goods Act			The Act falls under Ministry of Commerce Trade and Industry but affects the Ministry of Agriculture and Co-operatives in as far as the schedule of controlled goods is concerned.
18.	The Financial Services Act			The Act falls under the Ministry of Finance and National Planning but affects the agricultural sector.

3.5 Mobilisation of Funding

In order to realize the objectives and to implement the National Agricultural Policy, there will be need to mobilize funding by government, cooperating partners, non-state actors and the private sector from both domestic and external sources. Government and other partners will make their funding commitments to well articulated, detailed and prioritised investment programmes based on five-year strategic plans including the Zambia CAADP framework.

Private sector contribution may come from equity, commercial bank loans, financing institutions facilitated by government to increase direct investment in the sector, and outgrower schemes. It is hoped that commercial banks shall overcome their administrative deficiencies to increase agriculture credit at affordable terms. However, the Government shall in the interim work with interested private sector and NGOs to facilitate development of a sustainable institution to provide credit on affordable terms to farmers.