



Government of the Republic of Zimbabwe

**NATIONAL AGRICULTURE POLICY FRAMEWORK
(2018-2030)**

**First Draft
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Ministry of Lands, Agriculture & Rural Resettlement



NATIONAL AGRICULTURE POLICY FRAMEWORK (2018-2030)

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FOREWORD

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ABBREVIATIONS AND ACRONYMS

AGRITEX	Agricultural Technical and Extension Services
AKTIS	Agricultural Knowledge, Technology and Information Systems
AKTIPS	Agricultural Knowledge, Technology and Information Platform Systems
ASPEF	Agriculture Sector Productivity Enhancement Facility
CA	Conservation Agriculture
CAADP	Comprehensive Africa Agriculture Development Programme
DFID	Department for International Development
DR&SS	Department of Research and Specialist Services
FAO	Food and Agriculture Organisation of the United Nations
FDGs	Focus Group Discussions
FTLR	Fast Track Land Reform
GDP	Gross Domestic Product
HCCs	Hubs/Clusters/Corridors
IAPRI	Indaba Agricultural Policy Research Institute
ICT	Information Communication Technology
LFSP	Zimbabwe Livelihoods and Food Security Programme
LFSP-APN	Zimbabwe Livelihoods and Food Security Programme – Agriculture Productivity and Nutrition
MAMID	Ministry of Agriculture, Mechanization and Irrigation Development
MDGs	Millennium Development Goals
MFI	Microfinance Institution
MFED	Ministry of Finance and Economic Development
MLARR	Ministry of Lands, Agriculture and Rural Resettlement
MSU-FSG	Michigan State University - Food Security Group
NAPF	National Agriculture Policy Framework
NEPAD	New Partnership for Africa's Development
PSF	Productive Sector Fund
RESAKSS	Regional Strategic Analysis and Knowledge Support System
SADC	Southern African Development Community
SDGs	Sustainable Development Goal
SGR	Strategic Grain Reserve
SSA	Sub-Saharan Africa
UN	United Nations
UNDAF	The United Nations Development Assistance Framework
UZ-AEE	University of Zimbabwe, Department of Agricultural Economics and Extension

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ZAIP	Zimbabwe Agricultural Investment Programme
ZEPARU	Zimbabwe Economic Policy Analysis and Research Unit (ZEPARU)
ZimAsset	Zimbabwe Agenda for Sustainable Socio-Economic Transformation
ZIMSTAT	Zimbabwe Statistics Agency
ZimVAC	Zimbabwe Vulnerability Assessment Committee

1. BACKGROUND

1.1 Sectoral Characteristics

The potential for agricultural growth in Zimbabwe is staggering. The country is uniquely endowed with rich resources for agricultural development, which if harnessed fully, would enable the country to become the breadbasket of the southern African region again. Zimbabwe has abundant land, a large amount of underground and surface water resources (with more than 8,000 dams), and rich flora and fauna. Diverse agro-climatic conditions have enabled the country to grow a large variety of crops, with over 23 types of food and cash crops and a variety of livestock species.

One of the key features of the agricultural sector in the last 15 years has been the fundamental transformation in the structure of land ownership, and access to and use of rural agricultural land as a result of the fast-track national land reform and resettlement programme. The dualistic nature of large-scale commercial white farmers (approximately 6,000) occupying disproportionately large and high-potential agricultural land has been replaced by a structure comprising smallholder farmers that occupy close to 70 percent of the total agricultural land. There is now a large number of medium to large-scale commercial farmers operating on smaller landholdings as shown in Figure 1. The size of large scale commercial farms were reduced resulting in 145,000 new A1 and 18,000 new A2 farmers, added to the existing communal and old resettled farmers, to bring the total number of smallholders to about 1.3 million. The number of large scale farmers was reduced from 6,000 to 4,500.

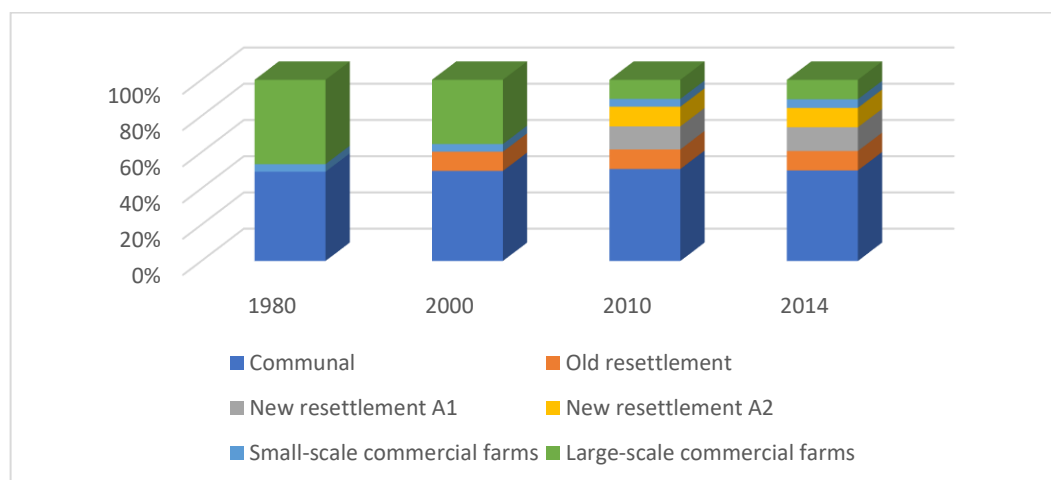


Figure 1: Zimbabwe farm type distribution by year

Source: Ian Scoones et al, 2010, MLARR, 2015

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Zimbabwe's agricultural sector still remains predominantly smallholder-led with over a million communal farmers relying on rain-fed agriculture, and close to 70 percent of them making a livelihood on less than 2 hectares (Ha). The debate, however, should not be on whether to promote smallholder farmers or turn the focus on to the new medium/large-scale, but to find policy options that are suited to different farm categories. A 'one size fits all' strategy will likely leave many trapped in poverty due to stubbornly low productivity and resource constraints facing the different farmers.

1.2 Significance of Agriculture in Zimbabwe

Agriculture occupies a central place in the Zimbabwean economy for employment, incomes and poverty reduction. It contributes 15-18 percent of Gross Domestic Product (GDP), 23 percent to the total formal employment, and provides livelihoods to approximately 70 percent of the rural population (54 percent of which are women). It also supplies about 63 percent of industrial raw materials with the share of agriculture in manufacturing value added at 60 percent, and the share in export earnings at 30 percent. Fifteen out of the 31 industry clusters in Zimbabwe depend on agriculture for feedstock. Agriculture-related employment supports a third of the formal labour force.

Figure 2 shows the contribution of various commodities to agricultural GDP. Maize, tobacco and cotton account for more than 50 percent of the agricultural GDP, with tobacco leading the pack with 25 percent, followed by maize at 14 percent, and cotton at 12 percent. Ten percent is accounted for by the beef and fisheries sectors, whilst about 24 percent is devoted to the rest of the livestock like sheep, goats, pigs, poultry and ostrich. Within the milieu of commodities; tobacco, cotton, sugar, horticulture, tea, and bananas collectively account for about 40 percent by value of national exports. The performance of the agricultural sector therefore has a direct bearing on overall national economic performance, and on human development especially with regard to national and household food and nutrition security.

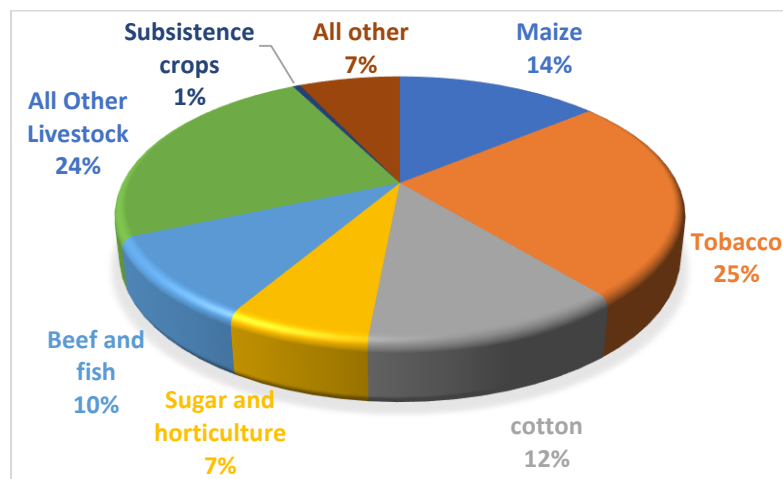


Figure 2: Contribution of various agro sub-sectors to Agriculture GDP

Source: ZIMSTAT, 2017

1.3 Rationale of NAPF

Zimbabwe has for many years operated without an updated standalone Comprehensive Agricultural Policy. Instead, the country has been using the “Zimbabwe Agricultural Policy Framework: 1995 to 2020”, which was formulated in 1994. Given that this framework was outdated, the then Ministry of Agriculture, Mechanization and Irrigation Development (MAMID), now, Ministry of Lands, Agriculture and Rural Resettlement (MLARR), with support from FAO and other stakeholders undertook a process to update the 1994 framework. A draft “Comprehensive Agricultural Policy Framework” was completed in April 2012 to address issues concerning crop and livestock production, marketing and trade. Unfortunately, this Policy Framework remained in draft form and was not embraced as the country’s blueprint for guiding investments in the agricultural sector. The need to put in place a National Agriculture Policy Framework (NAPF) to guide investments and sub-sector strategies to sustainably transform the sector is now more urgent than before.

The restructured agricultural sector has created opportunities and challenges in the agricultural sector in Zimbabwe. The sector has been facing a myriad of challenges relating to low production and productivity, lack of markets, poor access to existing markets, and access to finance among others. As a result, agricultural investment has sharply declined, negatively affecting agricultural productivity and overall production. The NAPF will guide the development of a new and relevant policy and regulatory framework that responds to the needs of the restructured and evolving agricultural sector.

The overall objective of the NAPF is to provide policy guidance and direction on how to promote and support the sustainable flow of investments to transform the agricultural sector through increased and sustained agricultural production, productivity and competitiveness. The NAPF provides a relevant and evidence-based framework to guide and coordinate the development of sector-specific policies that will provide more details, priorities, implementing means, and enforcement mechanisms. Specific of the NAPF objectives are to:

- i. Identify key challenges constraining agricultural performance
- ii. Define objectives, strategic initiatives and development results/outcomes for the agricultural sector
- iii. Articulate a road map to strengthen agricultural performance and achieve the following:
 - a. National and household food and nutrition security;
 - b. Optimum levels of foreign currency, income and employment;
 - c. Increase agriculture’s contribution to the GDP;
 - d. Sustainable industrial development through the provision of adequate agricultural raw materials;
 - e. Improve agricultural market access and competitiveness; and
 - f. A conducive policy and regulatory environment for agricultural development.

1.4 NAPF linkages to other Sector Policies

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The provision of many infrastructural services like water, power, transport, information communication technologies, market intelligence and marketing facilities fall within the mandate of public and semi-public institutions that are outside the control of agriculture; yet they are critical to sustaining the integrity and efficacy of all agricultural value chains. However, their investment plans and actions must therefore cohere to facilitate optimum delivery of the agricultural sector under the support of appropriate institutional structures and systems.

Therefore, the NAPF will be linked to other policies especially those focusing on infrastructural development, particularly in the Energy, Water, Transport and Information Communication Technology (ICT) sectors.

1.5 National, Regional and International Context

The NAPF was conceived in the context of a different set of both domestic and global development circumstances. Zimbabwe is signatory to various national, regional and international agreements and frameworks which focused on the agriculture sector. Therefore, the NAPF incorporates a set of development intentions, targets, principles and values of key global and regional and national initiatives including United Nations (UN) Conventions (Agenda 2063 for Sustainable Development Goals, Feed for Africa Programme, Paris Declaration), the New Partnership for Africa Development (NEPAD), Comprehensive Africa Agriculture Development Programme (CAADP), the Common Market for Eastern and Southern Africa (COMESA) and the Southern African Development Community (SADC).

At national level, the framework was married to national development results and outcomes articulated in the National Development Plan 2030, Zimbabwe Agricultural Investment Plan (ZAIP) 2017-2021, National Climate Policy and Agricultural Gender Policy among others. At the continental level, Vision 2063 for Africa, which invariably finds practical expression through continental initiatives like Feed Africa that are funded through the African Development Bank, the European Union, the World Bank related Foundations; represent veritable sources of investments to make the achievement of Zimbabwe's NAPF a reality.

Whilst CAADP still remains a reference point, the Millennium Development Goals (MDGs) have since been replaced by a more ambitious set of global development intentions and targets under the rubric of Agenda 2030 for Sustainable Development; whose achievements in the agricultural sector is expected to contribute to sustainable development. It is particularly noteworthy that, beyond the 17 Sustainable Development Goals, the global compacts on Financing Mechanisms for the SDGs and the Paris Declaration on Climate Change call on member states to explore additional mechanisms to enhance the flow of investments, including climate funds, to support inclusive, sustainable and green growth and development. This includes the mobilisation of climate compliant funds to support smart agriculture.

2. SITUATION ANALYSIS

2.1 Overview

The agricultural sector remains the only viable vehicle through which development and poverty reduction can occur in the country. Evidence shows that agricultural growth reduces poverty by twice the rate of growth in nonagricultural sectors (World Bank 2007; Diao et al. 2007). However, this growth in Zimbabwe has been curtailed by the slow rate of the country’s economic recovery since 2000 when the Government implemented the Fast Track Land Reform Programme (FTLR). Since then, there have been fluctuations in socioeconomic dynamics and shifting bilateral relations with cooperating and donor countries. Poverty rates have remained stubbornly high (Figure 3). Nearly 84.3 percent of the rural population live below the poverty line with the national poverty rate standing at approximately 63.9 percent, whilst the proportion of food insecure people has ranged between a low of 6 percent in 2014 and a high of 42 percent in 2016 (Fig.4) (ZimVAC, 2017).

The agricultural sector plays a crucial role in the Zimbabwean economy. As such, a vibrant agricultural sector in the country is key to drive pro-poor economic growth and sustainable development, poverty reduction, employment creation and food and nutrition security. Of the 39.6 million Ha of land in the country, about 42.1 percent is utilized for agriculture, with about 365,000 Ha of land suitable for irrigation. However, less than 50 percent of this is currently equipped for irrigation out of which about 123,000 Ha is currently irrigated mostly by commercial farmers and smallholder irrigation projects. Hence, the potential for the sector is staggering. The diverse agro-climatic conditions enables the country to grow a large variety of crops, with over 23 types of food and cash crops and a variety of livestock species.

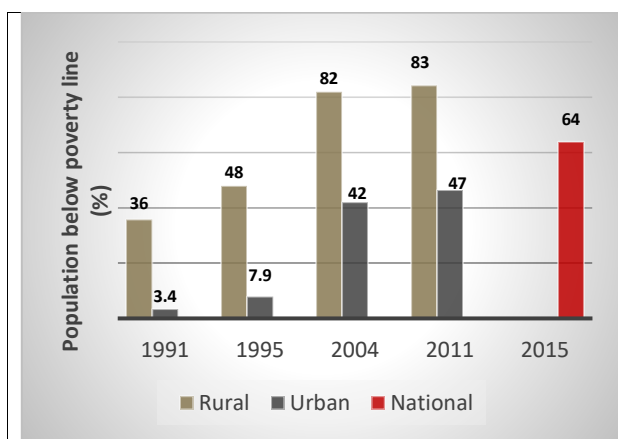


Figure 3: Population below poverty line (%) rural and urban for selected years

Source: SADC (2015) with 2004 levels from <http://www.tradingeconomics.com> and 2015 national average is computed from ZIMSTAT 2015, Poverty Atlas

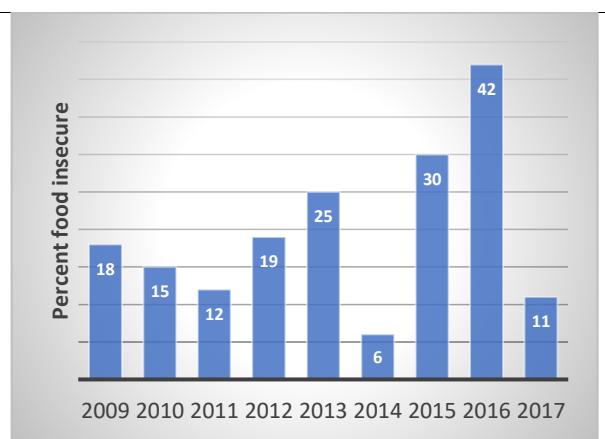


Figure 4 Food Insecurity Trends (Source: ZimVAC)

Source: ZimVAC- Various years

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The country is divided into five agro-ecological regions based on a combination of factors including: rainfall regime; temperature; the quantity and variability of average rainfall; as well as soil quality and vegetation (Figure 5). The suitability of cropping declines from Region I through to Region V. Rainfall ranges from above 1,050 mm to as low as 650 mm per annum in Regions I to III, while in Regions IV and V, rainfall is below 650 mm per annum. Most agriculture is carried out in Regions I, II and III, which have favourable climatic conditions for intensive crop and animal production, while extensive livestock production and irrigated crops (such as sugarcane) are suitable in regions IV and V.

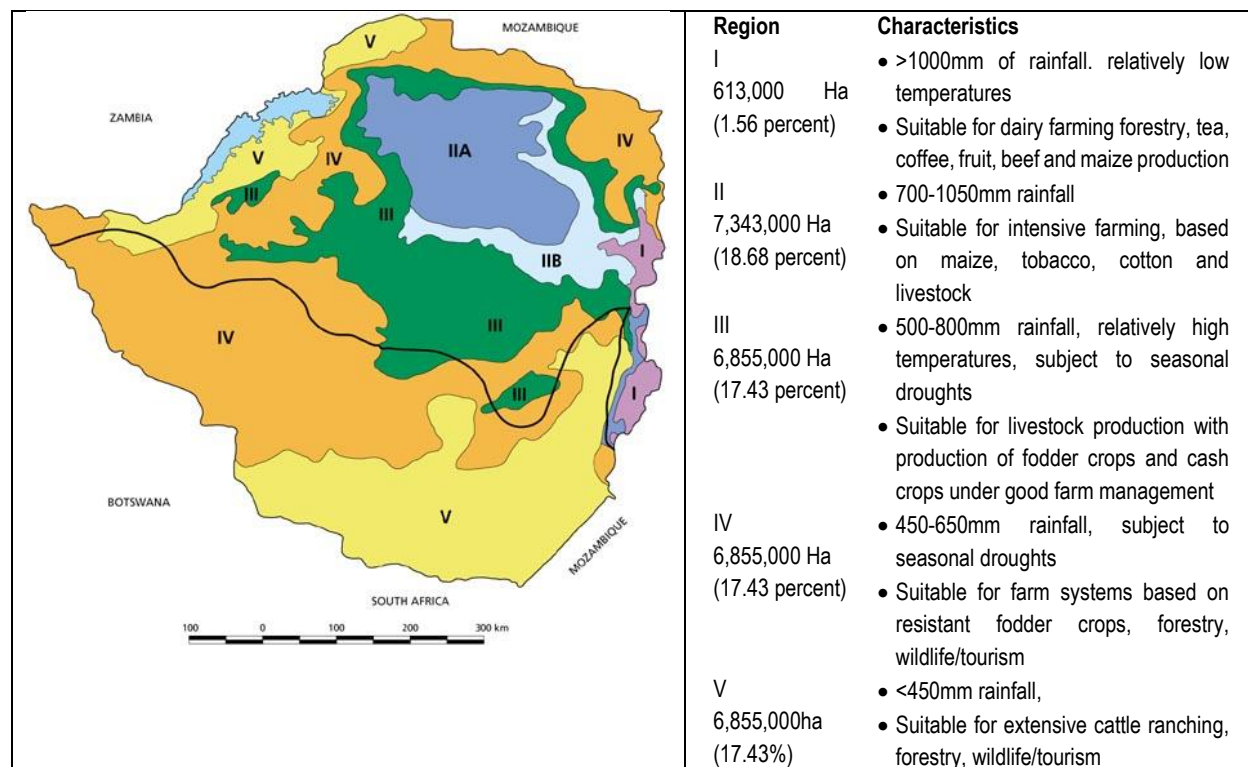


Figure 5: Description of the Natural regions of Zimbabwe

Source: Moyo, 2000; Vincent and Thomas, 1961

2.1.1 Public Expenditure and Policy

The Zimbabwean Government recognizes that agriculture is one of the key priority sectors in achieving sustainable economic growth and poverty reduction. However, frequent droughts, inadequate resource allocation to key drivers of agriculture growth and sometimes inconsistent and ad hoc policy actions associated with agricultural policy have made it impossible to achieve the stated goals.

Maize remains a strategic food staple in Zimbabwe and has continued to occupy a central position in the public expenditure and consumption. For decades, the country has pursued policies aimed at achieving national maize self-sufficiency, primarily driven by public investments in maize input subsidies, and output

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market support. Because of this policy focus, maize now dominates smallholder production systems and absorbs the vast majority of agricultural public spending. Socio-economic and fiscal challenges associated with an undiversified, maize-focused agricultural sector suggest an urgent need for practical strategies that can enable more household-level movement into a wider range of agricultural production options.

The quality of agricultural public spending plays a major role in agricultural growth, development and rural poverty reduction. Provision of public goods, through investments in agricultural research and development, extension services, and rural infrastructure are key to achieving sustainable long-term agricultural growth and poverty reduction. However, the ability of an agricultural sector to sustain broad-based, pro-poor development and food security is intricately linked to the stated priorities and actions of the public sector. Figure 6 shows the proportion of the national budget towards the agricultural sector since 1995 compared to the CAADP target of 10 percent, and Figure 7 shows the budget priorities within MAMID (now combined with Lands and Rural Resettlement under MLARR).

In general, the proportion of the agricultural budget has remained below the 10 percent CAADP target in most years, with the exceptions of 2005 to 2008 due to quasi fiscal expenditure on agriculture in those years. Sustaining 10 percent allocation to the agricultural sector would be a significant initial step in availing more resources to the sector. Targeting public spending to key agricultural areas that directly affect the very poor will help Zimbabwe start to achieve meaningful rural poverty reduction.

In the period 1985 to 1995, budget allocations within the Ministry was dominated by capital transfers where above 50 percent of the budget was spent on input and output subsidies. This trend was reversed during the Zimbabwe Programme for Economic and Social Transformation (ZIMPREST) period when subsidies were stopped and more funds channeled to agricultural development programmes. After the FTLR, the proportion to capital transfers has increased to more than 30 percent of the total budget, mainly because of the increased expenditure towards farmer input support schemes and costs to purchase for the Strategic Grain Reserve (SGR). Employment costs remain the second highest expenditure line, and expenditure to agricultural development programmes and extension has been declining.

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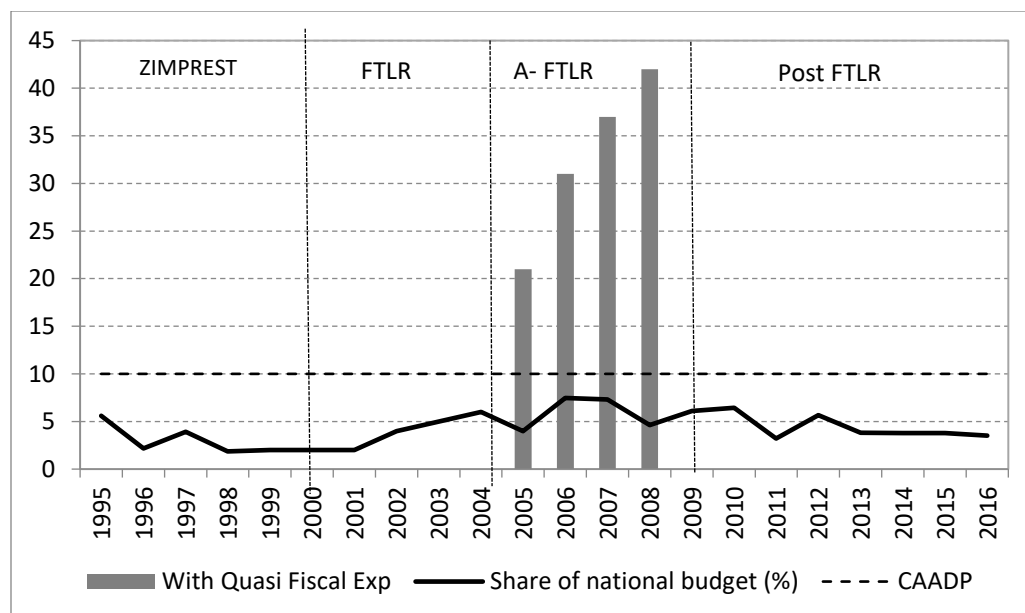


Figure 6: Budgetary allocation to the agriculture sector, 1995-2017

Source: Ministry of Finance and Economic Development (MOFED)

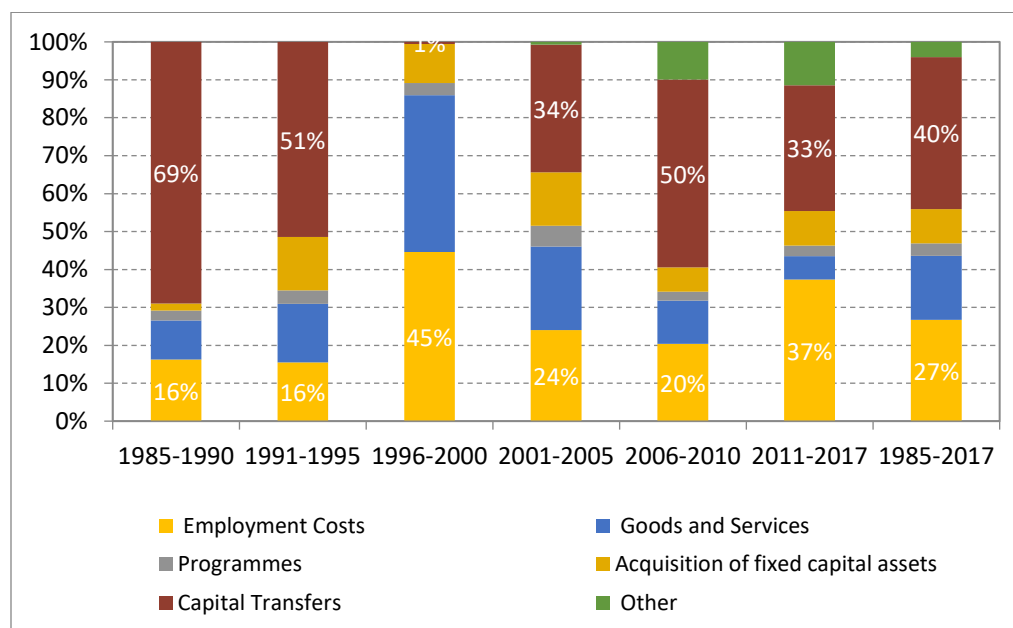


Figure 7: Trend in MAMID expenditure by line item (percent of total agriculture ministry budget)

Source: Ministry of Finance and Economic Development (MOFED)

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Emerging evidence shows that consumption and expenditure patterns in both urban and rural Zimbabwe are changing (LFSP, 2017). Notably, periods of hardship and increased food aid was cited as major drivers of food consumption patterns as people adjusted to the changing economic and climatic conditions. Other drivers of change included knowledge, market access/availability, income, food prices, and disease burden. This may indicate that food substitution is taking place and other commodities are slowly taking up the position initially occupied by maize. To be sustained, this requires a sustainable agricultural diversification policy and public expenditure that does not just focus on maize alone, but on other grains whose demand is notably increasing. Agricultural expenditure and policies that are responsive to these changes will create opportunities for farmers to diversify into new and more lucrative crops, and lead to a reduction in the import bill of food commodities not readily available in the country but preferred by consumers.

2.2 Agricultural Sector Performance in Zimbabwe

2.2.1 Agricultural GDP and value added per worker

Figure 8, shows the trend in the sector's contribution to GDP, and the agriculture value-added per worker (proxy for agricultural productivity). Since 1985, the contribution to GDP has ranged between 6 to 24 percent. The contribution of agriculture to total GDP has generally been declining between 1985 and 1991 (Pre-Economic Structural Adjustment Programme (ESAP)) from 20.7 percent to 6.8 percent. The contribution rose during the ESAP and ZIMPREST period peaking at 23.7 percent in 1999, before declining in 2000 to 7.2 percent in 2004, following the FTLR program. Following the financial support to the agricultural sector by the Reserve Bank of Zimbabwe (RBZ) through the Productive Sector Facility (PSF 2004) and Agriculture Sector Productivity Enhancement Facility (ASPEF 2005), the contribution of agriculture to GDP recovered again and registered a peak of 24.2 percent in 2008, before declining again between 2009 and 2013 with a marginal increase of 1.1 percent in 2016.

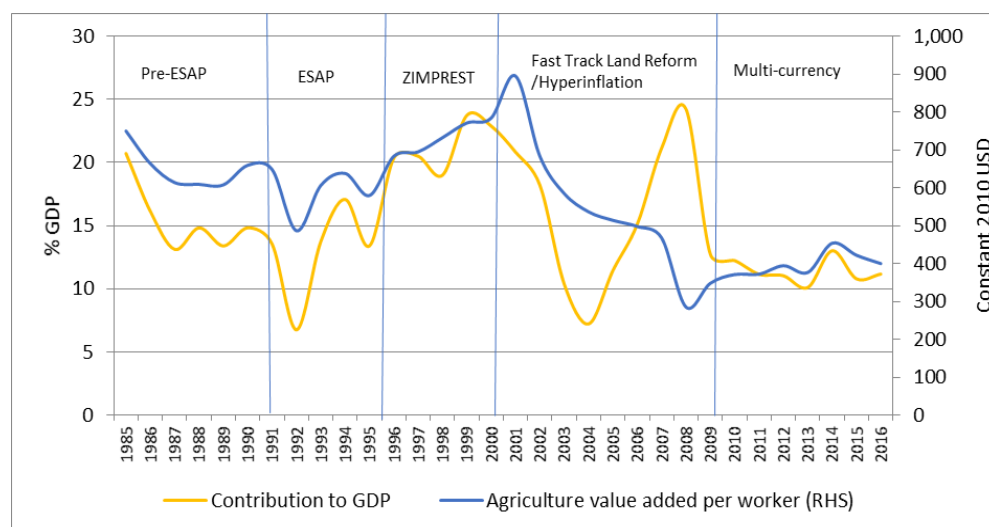


Figure 8: Agricultural contribution to gross domestic product (GDP), 1985-2016

Source: GDP data from ZIMSTAT and Value added per worker from World Bank

Zimbabwe's declining contribution of agriculture to GDP has not been accompanied by increases in agricultural labour productivity or increases in the manufacturing sector respectively. The value added per worker in agriculture, a proxy for labour productivity has continuously been declining, a sign of an ailing sector. The decline in agriculture GDP is mostly associated with the movement of the labour force from the agricultural sector into the informal service sector, but not increases in agricultural productivity. This trend shows that the agricultural sector in Zimbabwe continues to fail to stimulate growth in other sectors and create the necessary linkages required to transform the Zimbabwean economy.

2.2.2 Agricultural Production and Productivity

Crop and livestock production and productivity has significantly declined and remains too low to sustain agricultural growth. Several factors combine to engender low productivity and low production in agriculture. These include: low skills and knowledge base of farmers; a weak research, farmer training and extension system as a source of technology and innovation; shortage of inputs and equipment; low levels of mechanisation; reliance on rain-fed agriculture; limited access to market information and marketing facilities; limited access to finance; limited security of tenure; pest and disease attacks including the Fall Army Worm; Tuta Absoluta and Theileriosis in cattle; low capacity to manage post-harvest losses; mismatch between production and domestic consumption as well as increased incidence and intensity of climate shocks such as El Niño.

Hillbom and Svensson (2013) have asserted that no country has sustained a transition out of poverty and food insecurity without raising agricultural productivity. Through its effects on food and labour prices, agricultural productivity growth is the catalyst for broader processes of economic structural transformation in predominately agrarian societies (Johnston and Mellor 1961). Therefore, raising agricultural productivity for both crops and livestock must be considered a critical dimension of any economic growth and poverty reduction strategy in Zimbabwe.

2.2.2.1 Crops sector

The main food and cash crops in Zimbabwe include maize, wheat, small grains (millets and sorghum), tobacco, cotton, sugar, horticulture (food and non-food), and groundnuts. Figures 9a and 9b show that crop production in the country is highly variable due to the heavy reliance on rain-fed agriculture. The changing climatic conditions and frequent droughts contribute heavily to the volatility in crop production. With the exception of tobacco, production of maize, sorghum, millet and other cash crops has continued to trend downwards compared to 1985 production. At the centre of this reduced production is very low productivity and absence of reliable markets. Average productivity of both food and cash crops across all farm types has been declining between 1985 and 2016. For example, maize yields declined from an average 1.2 metric tonnes per Ha (MT/Ha) between the period 1990 to 1995 to an average of 0.749 MT/Ha between the period 2010 to 2016 (Figure 8). These yields have lagged behind those of neighboring countries such as Malawi, Zambia, Mozambique and South Africa. This story is the same across most food and cash crops, a situation requiring urgent attention.

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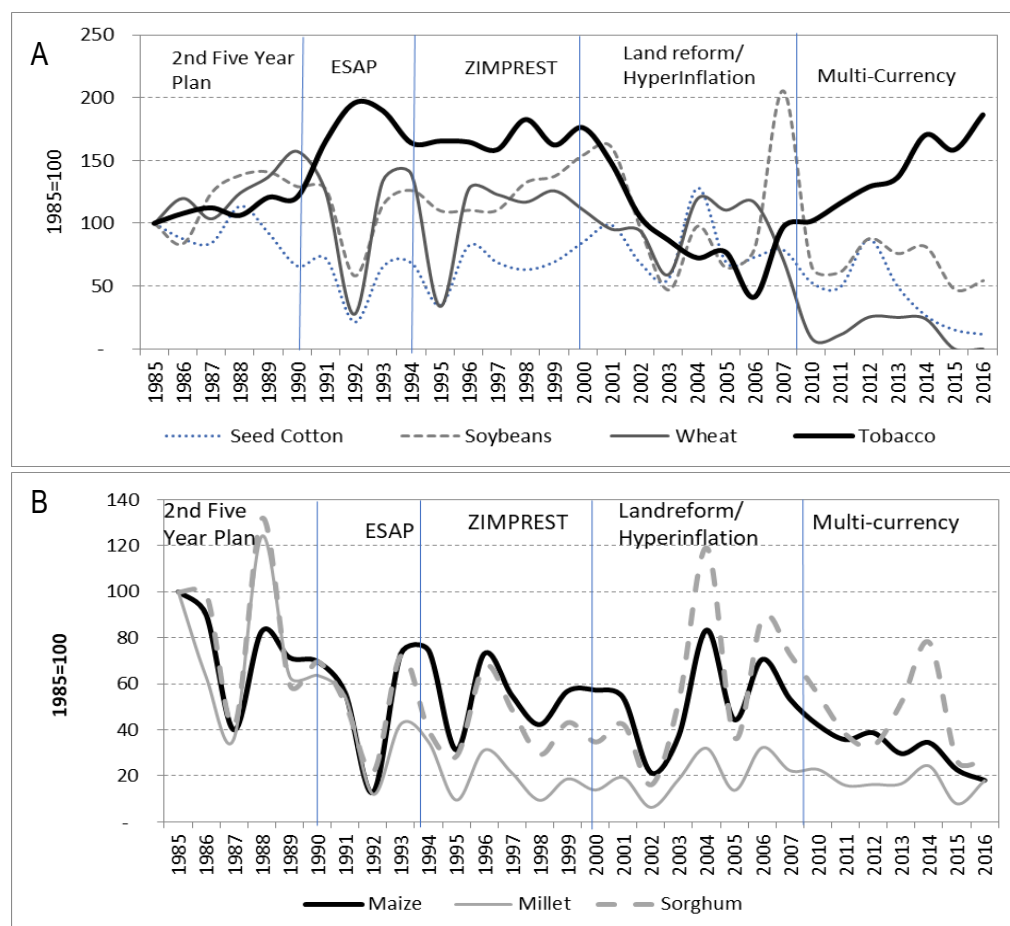


Figure 9a and 9b: Agricultural contribution to gross domestic product (GDP), 1985-2016
 Source: FAOSTAT (1985-1993), ZIMSTAT (1993-2014), 2016 Government of Zimbabwe Crop Assessment report

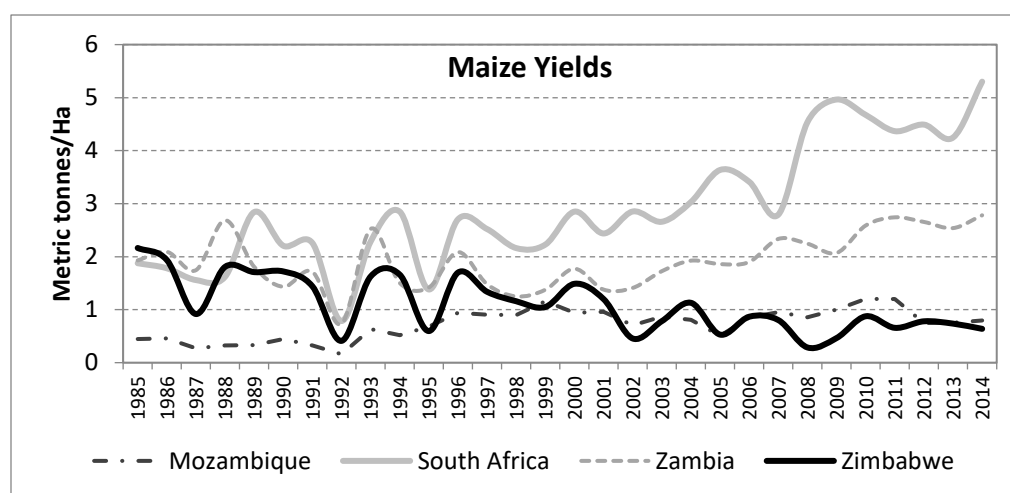


Figure 10: Regional maize productivity (yields), 1985-2014
 Source: FAOSTAT (1985-1993), ZIMSTAT (1993-2014) and 2016 GoZ Crop Assessment report

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2.2.1.2 Livestock Sector

The livestock sub-sector is an important and integral part of the agricultural sector with beef, dairy, small ruminants, pigs, poultry, apiculture, aquaculture and other small and emerging stock making up the livestock industry. The sub-sector contributes about 19 percent to the agricultural GDP (Figure 2, in section 1). The introduction of FTLR, combined with significant fluctuations in the macro-economic conditions, and a transformed agricultural sector post 2000 influenced major changes within the livestock sector. The land redistribution exercise has increased the participation of more than 300,000 newly resettled farmers with varied skills and resources in livestock farming. This transformation of the livestock sector has led to substantial shifts in ownership, use, and livestock management; and associated effects on animal disease management, marketing, production and marketing. Changes in land use patterns following land reform have also influenced livestock production patterns with some former cattle ranches sub-divided into smaller units for mixed cropping and livestock production.

The livestock herd sizes nationally declined by about 20 percent for beef, over 83 percent for dairy, and 26 and 25 percent for pigs and small ruminants respectively (Binswanger-Mkhize and Moyo, 2012). On the other hand, the productivity of smallholder cattle herds remains very low, with average calving rates of about 45 percent against a potential of 60 percent, and off-take rates of about 6 percent against a recommended 20 percent. Therefore, successful transformation of the smallholder livestock sub-sector into a fully commercialized system with increased output and productivity to meet the increased demand for animal protein and surplus for export, requires a more appropriate policy environment.

2.3 Emerging Challenges of the Agricultural Sector

Traditionally, the tendency has been to cast the strategic initiatives of the policy framework in the form of an enumeration of policy categories accompanied by a list of policy issues, and their related objectives and initiatives [statements]. This approach would be an appropriate response in circumstances where the policy related problem to be addressed was identified as “the absence of agriculture related policies to promote and support the growth of the agricultural sector”. However, in Zimbabwe, the major problem to be addressed by the proposed policy framework relates to diminished levels of flows of investment into the agricultural sector that resulted in low levels of agricultural productivity and production. This therefore calls for the formulation of interventions that directly respond to enhance the flow of investments into those areas that are critical to generating and sustaining the growth of the agricultural sector with a decided focus on increasing agricultural productivity and production. To do this, the NAPF discussed emerging challenges under nine pillars as follows:



Figure 11: NAPF Pillars

2.3.1 Food Security and Nutrition

Zimbabwe has some of the highest levels of food insecurity in Sub Saharan Africa regardless of the outcome of the agricultural season. Approximately 70 percent of the population relies on subsistence and rain-fed agriculture for their livelihood and food and nutrition security (ZIMSTAT Poverty Report 2015). Since the 1980s, the sector is dominated by smallholder farmers, tilling an average of 1 Ha per household, producing an average of 0.4-0.6 MT of maize (LFSP, 2017), of which up to 30 percent are lost due to poor post-harvest technologies and practice (GoZ, 2017). The high reliance on subsistence rain-fed agriculture renders a large majority of the rural population vulnerable to climate-related shocks and seasonal stressors. These households have few sources of income other than agriculture (ZimVAC reports) and spend more than 54 percent of their budget on food.

The output subsidies offered to maize producers have been disadvantaging the majority of smallholder farmers who rely on the market for their food needs. As a result, a large segment of the rural population rely on Government-run or donor-based seasonal food and non-food safety net interventions for their food and nutrition security. In addition, the country is facing a triple burden of malnutrition: under-nutrition, over-nutrition, and micro-nutrient deficiency among children. Atypical maize-based diet leads to poor dietary diversity and insufficient consumption of essential nutrients.

2.3.1.1 Implementation of nutrition policies

Food and nutrition insecurity is a function of a combination of low productivity among smallholder farmers, limited capacity in post-harvest management, poverty, and inadequate access to nutritious and safe food throughout the year. This is compounded by limited access to clean water and sanitation services which in the absence of both preventative and curative health services exposes the poor to disease and ill-health.

A recent review of the food security and nutrition policy framework established that in the combination of the Food and Nutrition Security Policy, Social Transfer Policy Framework and the Infant and Young Child Feeding Policy, Zimbabwe has an adequate policy framework and appropriate institutional structures to address food and nutrition security challenges. However there are challenges regarding implementation of various policies and programmes arising from the absence of a single institutional entity that has the authority and capacity to drive the food security and nutrition agenda in Zimbabwe. Many instruments and operational guides to be harmonized include the national visions for development, the Food Deficit Mitigation Strategy, the National Food Fortification Strategy, the National Nutrition Strategy, Scaling up Nutrition Movement and the Zimbabwe Drought Risk Management Strategy.

2.3.1.2 Micro-nutrient malnutrition

Dietary diversification, supplementation, commercial fortification and biofortification have been identified as the key nutritional interventions that can address the burden of micronutrient deficiencies worldwide (LFSP, 2017b). In Zimbabwe, this burden is such that anaemia and Vitamin A deficiency affect 31.5 percent and 21.2

percent of children under five years respectively, and 23.9 percent of women are deficient in vitamin A and 25.8 percent of women are anaemic (MoHCC/ZFNC, 2012). Further, child stunting and deficiencies in vitamin A, iron and Zinc affect one in every three children.

Agriculture plays a critical role in addressing this national public health challenge. The fact that the majority of Zimbabwean households consume food that they produce presents an opportunity to use the strategy of biofortification to meet the micronutrient needs of the country. A focus on production of biofortified crops such as orange fleshed sweet potatoes, orange maize, iron beans etc. can not only further the diversification agenda within the agricultural sector, but also deal with issues of access to nutrient dense foods that are critical in tackling micronutrient deficiencies.

Zimbabwe's biggest requirement given the available policy and institutional frameworks for biofortification is the rationalisation of its implementation in a holistic manner and focusing on how to deal with micronutrient deficiencies across the sectors (LFSP, 2017b). This gives an opportunity for the NAPF to align its priorities in addressing food and nutrition security with the Biofortification Strategy, to especially capture the households that are left out of public health interventions such as commercial food fortification and micronutrient supplementation.

2.3.2 Agricultural Knowledge, Technology and Innovation System

The Agricultural, Knowledge, Technology and Innovation System (AKTIS) in Zimbabwe that has traditionally been anchored on agricultural research, education and extension services, has facilitated a fairly robust agricultural sector in Zimbabwe. However, concerns have been raised regarding the extent to which existing AKTIS has developed in tandem with changes in state of the art knowledge, technology and innovations, the integration of market-centric and business-facing agricultural practices, emerging global opportunities and challenges as well as responsiveness to the needs and demands of actors in the agricultural value chains. For example, the ICT revolution still has to be fully embedded in the agricultural sector.

AKTIS in Zimbabwe is largely driven by investment in agricultural research, education and extension systems from the public sector, academia and non-state actors. These systems are used as the main way in which knowledge is exchanged and disseminated across the agricultural value chain. The use of these systems has been facilitated through support from all actors in the value chain i.e. government (public) systems (research and extension departments), private sector actors, development partners, academic and research institutes, and farmers associations. However, informal knowledge networks are fast replacing formal networks as the main drivers of this communication due to inadequate investments in the development of these systems.

2.3.2.1 Agricultural education training

Agricultural education and training is an integral part of human capital development that is interdependent on agricultural growth and development in the country. The post-FTLR of the 2000s led to an increase in the number of communal farmers from 44 percent to about 74 percent. This change also brought about more

farmers in communal areas that required service provision, something that they were previously excluded from in the agricultural policy that was premised on policies inherited from the colonial times. This increased the need for agricultural research, technology and extension provision, and more human skills and development to respond to this new demand.

Agricultural education in the country is currently provided by 8 public agricultural colleges spread across all the provinces. They produce about 2,000 graduates per year (diploma and certificate levels) and training is in the areas of: crop and livestock production; commercial farming; animal health; meat and livestock classification; and disease control. In addition, private colleges supplement government efforts, especially in areas covering export commodities. There are 10 public universities, on average having one university per province, providing agricultural education at graduate and post-graduate levels.

There are also programmes designed to upgrade National Certificate holders to Diploma Level through modular training aiming to further technical proficiencies in agriculture towards meeting the demands of an evolving sector. Currently, about 330 students are enrolled under this upgrading programme at Chibero, Esigodini, Gwebi, Mlezu and Rio Tinto colleges. Meeting the demand for qualified staff has seen the advent of programmes such as the Young Commercial Farmer Training at Kushinga Phikelela National Farmer Training College that is designed to train students who leave the college with hands-on skills in agriculture. It is the National Farmer Training Centre and plays a coordinating role in the farmer training.

However, main challenges for agricultural training institutes include insufficient funding to efficiently run their programmes. Also, inadequate are trained staff to respond to the many sectoral changes and needs, and have limited support services in terms of modern infrastructure, industrial attachments and collaborations with public and private national, regional and international partners.

2.3.2.2 Agricultural Extension

Like research, agricultural extension and advisory services play a pivotal role in imparting practical knowledge and skills to farmers and are one of the key drivers of agricultural growth. In Zimbabwe, extension services are provided by the government through the Agricultural Technical and Extension Services (AGRITEX) and this is done at no direct charge to farmers. The extension system was once very effective and efficient, but due to the structural reforms of the 1990s, the HIV/AIDS pandemic, and the economic crisis of the 2000s, the performance of the system has changed dramatically. The system was further weakened by the increased demand for extension services from the land reform programme in the 2000s that resulted in a rise in the number of smallholder farmers. Currently, there are about 4,200 extension workers whereas the total number of farmers is estimated at 1,800,000; leaving the farmer to extension ratio at about 800:1. In order to meet the increased demand, the fast track extension agent training programme was introduced but some of the graduates produced lack adequate practical proficiency, and this has led to even greater inefficiencies in service delivery.

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The functioning of research institutions and extension services have been plagued with insufficient resources to sustain them from the government budgetary allocations. The allocations fall short of the New Partnership for Africa's Development - Comprehensive Africa Agriculture Development Programme (NEPAD- CAADP) recommendation of investing 1 percent of agricultural GDP to agricultural research with a huge proportion of the budget allocation going towards salaries. Similarly, the current budgetary allocation for extension services has 95 percent of the funds being used for salaries, leaving an estimated annual budget of US\$ 6 million for all other costs. The allocation of funds for research and extension has dramatically reduced over the years, with 2016 and 2017 having had some of the lowest funds availed to this them. Figure 12 below shows the trend in budgetary allocation for research and extension since 2009.

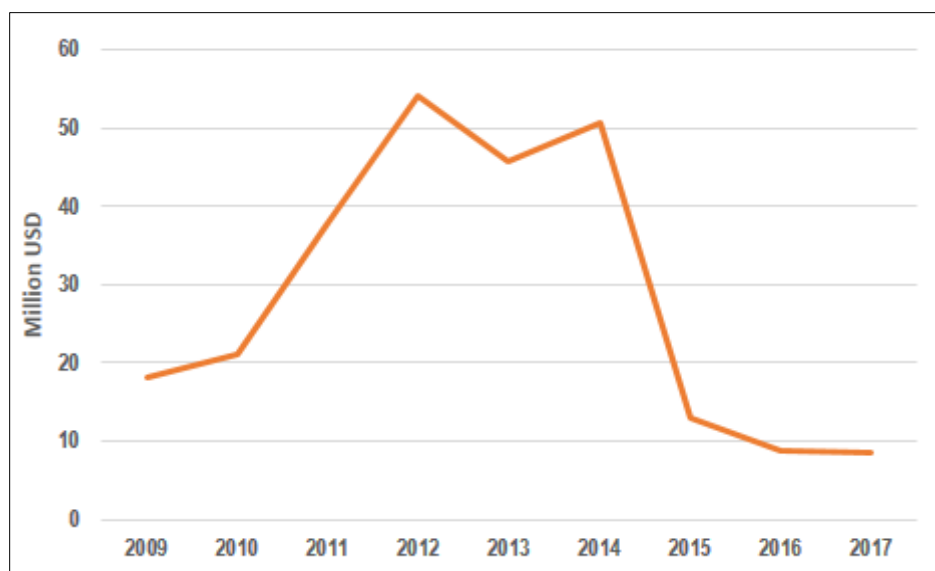


Figure 12: Annual Budgetary Allocation to Research and Extension in Agriculture

Source: (AGRITEX, 2017)

These budgetary constraints have significantly reduced research activities and the mobility of extension workers for extension activities, in-service training to stay up to date with technological advances, and procurement of basic research and extension equipment. On the other hand, linkages with other relevant institutions like extension, universities, private sector and farmers unions/associations are weak and, in some instances, non-existent. This has a negative effect in the dissemination of the research results and adoption of new technologies.

2.3.2.3 Agricultural Research Council

On agricultural research, the Agricultural Research Council (ARC) is mandated with coordination, while other government and non-government agencies are responsible for the implementation of research programmes. Agricultural research is dominated by government institutions with some falling outside the mandate of the Ministry responsible for agriculture e.g. the Scientific Industrial Research and Development Corporation (SIRDC). A number of research activities taking place are driven by the private sector (seed and fertilizer

companies), academia (universities and colleges), and in some cases individuals using their own resources. There are a number of research institutions in the Ministry under the Department of Research and Specialist Services (DR&SS) and Livestock and Veterinary Services that provide research-based technologies, and technical information for advisory services and products for supporting enhanced agricultural productivity and the production of various crops and livestock. These include the Crop Breeding Institute, Chiredzi Station, Grassland Research, Matopo Research, and Central Veterinary Laboratory amongst others. There are other research institutions that fall under the Ministry but outside the DR&SS namely the Tobacco Research Board and the Pig Industry Board.

2.3.2.4 Modernizing Zimbabwe's AKTIS

Actors in agriculture value chains who present their challenges, needs and priorities expect them to be addressed in an integrated manner. Yet the practice by AKTIS institutions in Zimbabwe is to infuse their institutional research, education and extension priorities into work and compartmentalise the timing and delivery of their services to agricultural value chain actors. In addition, the content, methods and tools that are used to deliver the knowledge, technology and innovation services do not reflect the challenges that are faced by the agricultural value chain actors in relation to time, place and target groups. Invariably, smallholder farmers - the majority of which are women and the youths, are underserved by the system.

A framework is therefore required to create a more robust, vibrant, inclusive and sustainable agricultural sector using an institutional model that embraces partnerships at all levels; the principle of subsidiarity in delivering efficient and responsive agricultural services; the need to monitor and evaluate planned and implemented actions for sustainability and impact; and to share lessons and good practices to improve policy and practice anchored in good governance and driven through sustainable funding models. The system must also address social, economic and environmental imperatives and opportunities faced by smallholder farmers especially those in agro-ecologically marginal and environmentally sensitive rural areas

The NAPF emphasises joint planning and implementation strategies for agricultural research, education and extension. It challenges the current set up in which institutions responsible for knowledge, technology and innovation development, dissemination and use partners fall under different departments and have limited interaction. The compartmentalisation of these responsibilities tends to limit interaction and sometimes leads to duplication of activities and wasting of resources. Coordinated planning will enhance use of limited resources; improve relevance, timeliness and effectiveness of knowledge, technology and innovation services.

To be successful, there is need for integration of institutions by creating multi-stakeholder agricultural knowledge, technology and innovation platforms [AKTIPs] at national, provincial and district levels. The AKTIPs will provide an avenue for joint planning, joint research agenda prioritisation, execution and evaluation of interventions. The composition and operation of AKTIPs will be based on the principles of:-

- Demand-driven and responsiveness to the needs of all agricultural value chain actors;
- inclusiveness of stakeholders to enable men, women and youths to be critical participants in decision making;

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- equity of all participants as partners in agricultural research, education and extension based on mutual interaction and interactive learning among stakeholder groups;
- consensus orientation where priorities are agreed upon by all stakeholders, particularly the end-users of the knowledge, technology and innovation services; and
- accountability to enable knowledge, technology and innovation providers and consumers to interrogate and design accountability systems in the way the services are designed, packaged, delivered and evaluated.

The notion of value chain mapping, development and implementation management is to be fully embraced. Research, academic, and extension workers will need to be equipped with adequate knowledge, skills, training material, transport facilities and modern technology in line with global trends. Good practices developed and lessons learned from the experiences of AKTIPs as integration models will be used to inform policy development, and to realign knowledge, technology and innovation institutions for greater efficiency and effectiveness.

2.3.3 Production and supply of agricultural Inputs

Zimbabwe's agricultural productivity remains dismally low. The low productivity is partly driven by low supply of agricultural inputs on the market and limited effective demand. Therefore, increasing agricultural productivity requires access to and utilization of productivity enhancing technologies such as hybrid seeds, fertilizers and other agro-chemicals.

Since the onset of the land reform programme in the early 2000s, the agricultural sector has undergone a remarkable transformation, with a sharp decline in commercial production. The macroeconomic conditions have been unfavourable and this has had ripple effects across different nodes of the agricultural value chain. Generally, inputs are costly and unaffordable to farmers, while on the demand side, farmers and other value chain actors also face liquidity constraints in efforts to procure improved inputs. On the supply-side, local production of inputs has been reduced owing to limited availability of foreign currency to facilitate acquisition of other intermediate inputs not locally available. Worse, low effective demand on the market does not inspire production. Limited access to agricultural finance among the new farmers has also contributed to low demand, and low capacity utilization among the agro-input manufacturers. Because of the unfavourable macroeconomic conditions, input distribution systems are inefficient, with agro-dealer networks not fully developed.

Challenges also exist in strengthening national agro-industrial complexes to ensure the supply of agricultural raw materials to industry in terms of quality and quantities required, and in relation to consistent and timely delivery. Industry must be capacitated to ensure consistent and timely supply of agricultural inputs like fertilizers, seeds, chemicals, agricultural equipment, livestock drugs and vaccines, and packaging materials to farmers as and when these are required. The agricultural policy and strategies should therefore ensure increased local input supply, utilization, and access by all farmers by addressing both the supply and demand-

side constraints, including the availability of foreign currency to input manufacturers, improved access to agricultural finance, and improved efficiency in input markets.

2.3.3.1 Input support programmes

Historically, the Government and some international donors instituted various supply-side programmes to provide agricultural inputs and facilitated access to both input and producer markets at highly subsidised prices or at no charge to smallholder farmers in communal areas. For example, government programmes included the Presidential Well-Wishers Input Scheme targeting smallholder farmers, Winter Input Scheme and the Command Agriculture for crops and livestock. On the other hand, donors' agricultural input assistance programmes were aimed at complementing government programmes especially during the hyperinflation period in 2000 to 2008. The motivation behind this was that formal marketing channels for agricultural inputs had collapsed, making inputs unavailable or inaccessible, hence emergency relief input programmes were set up and characterised by free distribution of inputs to vulnerable and poor households. The main shortcoming of these programmes is that they largely bypass the established agro-dealer networks.

While some aggregate macro and micro economic benefits were realised in keeping a large proportion of smallholder farmers on the land and securing food security at household and national levels, these benefits have been outweighed by the long term costs of undermining a robust and sustainable agricultural sector as programmes largely bypassed the established agro-dealer networks. A combination of inappropriately targeted and managed state-funded input supply facilities and pricing policies have engendered distortionary effects, resulting in the crowding-out of the private sector from participating in the agricultural input supply and marketing chains. The focus on maize as a staple is remains important but should not come at the expense of medium to long-term investments in key drivers of agricultural growth or negate policy intentions targeting food and nutrition; agro-processing, and reduction of the national trade deficits.

In general, public input support programmes fail to deliver expected results due to administrative failures such as: delayed disbursement; inadequate packages; poor targeting, and rent seeking behaviour by some sector players. In the absence of effective targeting of beneficiaries, a significant proportion of the benefits will accrue to farmers with inherent capacities to underwrite their business operations. This undermines efforts to transform stakeholder perceptions of agriculture into one of a market-facing and business-oriented enterprises.

In view of these challenges, the Government of Zimbabwe will therefore support the move towards digital platforms for delivering subsidised inputs. A more flexible electronic voucher system among other new innovations would help put the decision of what inputs to use in the hands of the farmer eliminating the cost of procurement and distribution by crowding in the private sector. The system will create opportunities for other services such as soil testing, and offer incentives to farmers that adopt climate smart practices and technologies. The smart subsidies will be guided at the minimum by the following principles:

1. Promote agricultural diversification by putting the farmers in the driver's seat.
2. Support market development and private sector investment
3. Promote competition
4. Insist on economic efficiency and have an exit strategy
5. Promote pro-poor growth

2.3.4 Development of Agricultural Infrastructure

Agricultural infrastructure is crucial in improving both agricultural productivity and production. Access to affordable physical infrastructure such as irrigation, pre- and post- harvest storage, energy, transportation, telecommunications etc. is a major source of competitiveness within agricultural value chains. Zimbabwe is ranked 124th out of 137 global economies in terms of business competitiveness (source). The global competitiveness index further shows that having inadequate supply of infrastructure is perceived as the 7th most problematic factor in doing business in the country, and infrastructure scored 2.4 out of a potential 7.

For the agricultural sector, inadequate development, rehabilitation and modernisation of agricultural infrastructure across all categories has been a large contributor to low productivity and production, and ultimately competitiveness. The RBZ has estimated that approximately US\$14.2 billion (bn) is required to close the infrastructure gap. However, the rate of recurrent expenditure is reducing access to the capital expenditure required to rehabilitate and develop infrastructure in the country.

2.3.4.1 Farm machinery and agricultural mechanization

Limited access to agricultural machinery and implements is compromising timeliness of farm operations. For instance, the current national requirements for tractors and combine harvesters stands at 40,000 and 400 units respectively, against the currently available 14,000 tractors and 300 combine harvesters. This is maintaining the labour-intensive narrative about the agricultural sector in the country. Farm structures for both crops and livestock such as greenhouses, animal handling, crop produce handling, tobacco curing bans, sales pens, dipping tanks, storage facilities and machinery sheds as well as accessible roads are in a poor state and require rehabilitation. Insufficient skills in the use and maintenance of agricultural infrastructure and technology negatively impacts the lifespan of the agricultural infrastructure.

2.3.4.2 Irrigation and water management

Irrigation plays an important role in agriculture because it reduces farmers' vulnerability to weather and climate shocks and risks. Zimbabwe has potential to irrigate more than 2 million Ha of land and yet, less than 206,000 Ha are currently under irrigation. The utilisation of existing water bodies, underground water and transboundary water bodies such as Zambezi River and Limpopo River can make a significant contribution to food security and agricultural growth in the country, especially in drought periods. However, the available water bodies are currently under-utilised, mainly due to lack of investment in irrigation development, rehabilitation and modernisation. This underutilisation is made worse by having inappropriate technologies that do not take into cognizance different farm sizes and other special considerations such as the sex, physical abilities, and age of the users.

2.3.4.3 Information and Communication Technologies

Information and Communication Technologies within the agricultural sector are being used to overcome the physical barriers that are typically present, such as the high farmer extension ratio that renders extension and market information systems inefficient. ICTs in Zimbabwe are being promoted to support among others,

the ZIMASSET cluster on Social Services and Poverty Reduction; an area agriculture also tries to promote. A solid and extensive telecommunications network allows for a rapid and free flow of information, essential for the fast changing agricultural sector that requires real time information dissemination.

The growing connectivity and the widening ownership of smartphones provides an opportunity for farmers to access useful information in the face of inadequate and/or poorly resourced extension staff. The ICT sector in Zimbabwe contributed 15.2 percent to the GDP in 2013 and active mobile phone subscriptions are estimated at 13,799,648 as of the third quarter of 2017. It is estimated that 94 percent of the population has access to mobile phones. The subscription numbers however do not take into account people with multiple mobile numbers and of these, less than half have access to the internet. Currently, AGRITEX are working on the development of a short message service (SMS) platform that is able to deliver pre-planting, growing, harvesting, post-harvest and marketing information, and providing agricultural information, financial services, crop insurance and market linkages with ECONET Services through Ecofarmer. Other innovations include e-Mkambo, Zimbabwe Farmers' Union bulk SMSs, and emails and newsletters. About 650 telecommunication towers are scheduled to be built in remote areas using resources from the Universal Services Fund. Even with these innovations, the MLARR is still ill-equipped with ICT for digital technology and the situation is worse for their target market, the farmers. The penetration of ICT use within the sector is still very low, and some rural areas still have no network access. Therefore, there is enormous scope for the MLARR to work with the Ministry of ICTs in digitizing the entire agriculture sector in ways to improve service delivery.

2.3.4.4 Energy and agricultural development

Access to affordable and reliable energy for agriculture across the value chain is critical to ensure competitiveness and comparative advantage of agricultural commodities within and outside the country. Zimbabwe is currently experiencing energy challenges with supply being unable to meet this demand. This is due to inadequate investment in the sector and this has led to erratic supply. Energy production in Zimbabwe stands at 9,709 Gigawatt hours (GWh), with the hydropower (4990 GWh) contributing the most followed by coal (4542 GWh), Biofuels (129GWh) and Oil (48 GWh). The advent of climate variability has led to increased incidents of droughts that negatively affect hydro-power generation at Lake Kariba which accounts for about 80 percent of all hydropower generated in the country.

Currently, only 40 percent of the population has access to electricity. Of those accessing electricity, only 21 percent are from the rural areas. In closing this gap in energy supply, there are some investments that have been/are being made. For example, the expansion of the Kariba South Hydropower Station (US\$319m) slated for completion in 2018, the planning of the Batoka Gorge Hydropower Station (US\$2.9bn) in collaboration with Zambia, the Hwange Thermal Power Station (US\$1.5bn) that is expected to be completed by 2021, and the Solar Power Plant in Gwanda (US\$202m) are some of the initiatives expected to close this gap. However, despite the investments underway, fuel wood continues to provide about 53 percent of the total energy in the country. About 63.5 percent of households depend on fuel wood for their cooking requirements, technologies that are energy inefficient and pose some health risks. Unfortunately, communal

areas that have the larger supply gap, are facing wood fuel shortages due to clearing of land for agricultural production and unsustainable harvesting of the fuel wood. The country's abundant renewable resources for sustainable energy production are barely exploited despite these challenges. There is high potential to invest in renewable energy (bio digesters, mini-hydro, solar energy, solar water heaters, bioethanol and biodiesel) as an essential development strategy to stabilise access and reduce costs in energy access, even if the initial set up of these alternatives may be capital intensive alternative energy for agricultural development.

2.3.5 Agriculture Marketing and Trade Development

In recent times, agricultural marketing has become an issue. Market infrastructure requires investments, and the ease of doing business has been worsened by the introduction of many taxes and levies leading to over-regulation of the sector. The cash situation in the country is dire and the use of the United States dollar as the currency of exchange and trade has made Zimbabwean goods uncompetitive including agricultural products. There is also high price volatility for major commodities, partly driven by lack of guiding principles in agricultural marketing and trade.

Accordingly, agricultural policy's focus in marketing and trade should be directed at improving the cost of doing business, facilitating access to and generation of foreign exchange, market infrastructure development, facilitating access to local and foreign markets, and improved predictability of marketing policies. To revitalize Zimbabwe's marketing systems, both public and private sector investments are required to support the development of roads to access both domestic and foreign markets; marketing and post-harvesting storage facilities; ICT platforms to obtain market intelligence and access both domestic and foreign markets; and the establishment of agricultural stock exchanges. Also critical is tracking the demand side and consumption patterns.

2.3.5.1 Predictable and consistent market and trade policies

Inconsistencies in marketing and trade policy space is one major source of risk for the agricultural sector, which usually involved discretionary and Government intervention in the market particularly for maize—the main staple. The main policy responses have been historically trade restrictions (import and export bans) which often have led to the government supporting above market prices. The impact of such trade instruments on price volatility have often resulted in negative impacts on food security, poverty, and foreign exchange earnings. The major concern arises when export bans/restrictions result in extreme price volatility which adversely affects planning among private sector actors. The stop and go marketing policy has been at variance with the commitments made by Zimbabwe in the ZAIP. Therefore, to promote private sector led agricultural marketing systems, the Government will have to ensure a stable and predictable policy environment.

2.3.5.2 Role of the Grain Marketing Board

The Grain Marketing Board (GMB) is mandated to ensure the maintenance of the strategic grain reserves with a capacity of 500,000 MT and with additional funds to allow import of up to 450,000 MT. The current maize pricing policy in Zimbabwe is rooted in a historical context. A prominent goal of the Government has been to ensure food security by supporting maize production and marketing by paying above market producer prices and direct sales to large scale millers at subsidised prices, to ensure lower consumer prices and a reduced import bill. The above market producer prices are supported by direct grain purchases through a network of GMB depots and restricting direct farmer sales to other buyers.

Nevertheless, this approach is not sustainable because it requires huge Treasury support precluding other critical investments. In addition, GMB social and commercial activities fail to foster private sector investments into the sector as government subsidises their activities in terms of procurement, storage and distribution. However, private sector financial resources if harnessed creatively, would ensure food security without putting strain on Treasury.

Going forward, the utilization of the SGR will be transparent. In particular, a comprehensive Cereal Balance Sheet incorporating all the key sources of cereals i.e. production, stocks and imports will be shared with the stakeholders to facilitate informed decision making. Overall, the Government will endeavor to limit the role of GMB to effectively manage SGR, provide oversight and an enabling environment for the private sector to flourish and serve all types of farmers. The social and commercial activities of GMB will be reviewed to ensure that its operations are in line with the food security and market development objectives.

2.3.5.3 Commodity Exchanges and Warehouse Receipts System

Despite the passing of the Warehouse Receipt Systems (WRS) Act in 2003, WRS was never operationalized. The demise of the Zimbabwe Agricultural Commodity Exchange that existed prior to 2000 curtailed the establishment and operation of formal and licensed WRS. Nevertheless, some forms of WRS-like warehousing are currently in use, but these are mainly third-party, trader-operated storage facilities. The operationalization of WRS is thus key to unlocking the potential of more effective agricultural finance to different farmer types in Zimbabwe. The Government will play a critical role in promoting the use of warehouses and investment that will lead to operational Commodity Exchanges in the country.

2.3.6 Expanding Supply of and access to Agricultural Finance and Credit

Agricultural financing is critical for the revival of the agriculture sector through investment. At farm-level, it facilitates adoption of improved varieties of crop and livestock, and the purchase of other inputs. However, statistics suggest low levels of finance flows from commercial sources to the agricultural sector. The agricultural sector's share of commercial lending has been gradually declining, from 19 percent in 2012 to 16.7 percent in 2017, despite the value of loans to the sector rising. A number of factors explain the observed trend. These include the inherent risk of agricultural production that is high cost of finance, inappropriate loan

portfolios and low financial literacy levels for farmers, lack of collateral among smallholder farmers, high transaction costs, and limited affordable lines of credit in the country.

2.3.6.1 Financial inclusion

The national financial inclusion strategy seeks to address some of these challenges through addressing both supply and demand side constraints. The government is also implementing various fiscal and monetary interventions to support the agriculture sector including export incentives. Further, land can be used as collateral but even this has issues. While the 99 year leases are now bankable, the leases are still minimal and yet to inspire confidence among banking institutions. This leaves movable assets as the most readily acceptable collateral. However, few farmers, especially communal farmers, have such movable property usable as collateral. The absence of the Warehouse Receipts System is presenting challenges to farmers who would have wanted to use stocks as collateral and the revival of the system could improve the marketing system of agriculture commodities.

2.3.6.2 Innovations in agricultural finance

Contract farming

Contract farming has proven to be one of the successful funding models for agriculture especially for tobacco and cotton. However, the existing contract farming regulatory framework is inadequate. Specifically, the existing Stop Order Act has failed to attract adequate funding towards other commodities because the financier is not fully empowered. The Ministry would advocate for the review of the Act to facilitate increased finance flows through value chain financing, with financiers enjoying some tax incentives.

Agricultural insurance

Currently, agricultural insurance intake is very minimal, exposing farmers to climate change risks among other hazards, making the industry risky for financiers. As a result, deliberate efforts will be made to sensitise farmers to insure their activities, and to bundle different risk mitigation options. Also, the insurance industry has to re-invent itself in order to be relevant for a dynamic agriculture sector in a changing climate.

2.3.6.3 Funds mobilisation

Access to public and private sector sources of finance and credit is key to sustaining the growth of the agricultural sector. The government remains a significant financier of agriculture activities. However, owing to the limited fiscal space support, funds should be directed towards vulnerable households, and critical agriculture infrastructure activities including extension services and research, among others. Government's role should also be confined to facilitating mobilisation of affordable lines of credit. On the other hand, private sector investors need to be sufficiently incentivised to supply capital by de-risking of agricultural markets through a more predictable and consistently safe and secure policy and institutional environment for agricultural investment.

2.3.7 Access to Land, Tenure Security and Land Administration

The land reform and resettlement programme created a new and more equitable structure of landownership, control and use in Zimbabwe. However, numerous challenges remain within the domain of land management and administration which, if unresolved, can destabilise and consequently render investment agricultural sector insecure and sub-optimal.

Agriculture interfaces with other land uses: urban land use; forests; and wildlife. This therefore calls for a more strategic engagement and judicious management of agricultural activities in relation to urban expansion; natural resources and biodiversity management; and land tenure security. This should be in the context of trade-offs and operational synergies that have significant implications for promoting sustainable investment in the agricultural sector.

2.3.7.1 Agriculture and land tenure security

Different types of farmers in Zimbabwe operate under different tenure systems, composed of: customary tenure for communal farmers; freehold tenure/private for large scale commercial farmers; 99-year leaseholds for the resettled A2 farmers; and permit tenure for the resettled A1 farmers. Despite the variations in tenure arrangements, the State retains the *Powers of Eminent Domain over all land* in Zimbabwe, and holds allodial title to the land. The State can therefore promulgate such legislation to regulate all tenure systems, including freehold, as it deems fit. Accordingly, the State is currently empowered by the Land Acquisition Act (chapter 20:10) to compulsorily acquire land for public purposes, subject to fair and prompt compensation.

A key challenge facing the different land tenure systems (except the private one) is that they are perceived to be insecure. They do not confer all the land rights. As a result, both local and foreign investors are not confident to invest on the farms. The nexus of land administration and management, and tenure security and agricultural development remains problematic. The security of land tenure is the function of the availability of justiciable bundle of land rights to occupy, use, transfer and exclude. These rights confer security to the owner if they are provided for and protected in law. As tradable freehold and/or leasehold interest, they also form the basis for use as collateral for financial institutions that seek to invest in agricultural development. To the extent that the current 99 year leases have these essential characteristics of secure land tenure; the greater proportion of medium and large scale commercial farming land will remain 'dead capital' - incapable of attracting both domestic and foreign capital investment to drive the growth of the agricultural sector.

Concerted effort by Government to convince financial institutions to accept the 99-leases as collateral have so far not achieved positive results. There is therefore need to review the land tenure systems with the view of making them more secure in order to raise investor confidence and spur farm investment, which will ultimately lead to higher productivity and production.

2.3.7.2 Agriculture and biodiversity management

With respect to the interface of agriculture and natural resource and biodiversity conservation, there are 1,117 wetlands spread across the country covering about 793,000 Ha of land. These wetlands are natural ecosystems that serve as water filters, provide for flood and erosion control, and they furnish food as homes

for fish and a variety both land and water-based wildlife. They are also a source of water and provide livelihoods for people and wildlife. But, they have declined significantly. About 21 percent of the wetlands in the country remain in stable and pristine condition, another 20 percent is badly degraded, and the remainder is tittering on the verge of being irrecoverable (Ministry of Environment, Water and Climate, 2017). A policy framework is therefore required to formulate and scale up multi-stakeholder resource management strategies and plans that mobilise public, private, community, and development partner resources and inputs to empower communities through: public awareness campaigns and training, access to skills, innovations, technologies, finance and markets with a focus on enhancing rural livelihoods through equitable benefit-sharing; and the sustainable utilisation of such fragile and biodiverse habitats.¹

2.3.7.3 Land administration systems

Another big challenge hampering access to land are weak land administration systems, which have contributed to the challenges of: illegal settlements; deforestation; land degradation; and farm boundary disputes as well as conflicts between different land uses including mining, forestry, tourism and urban expansion. Land management is difficult because the planning systems are managed by different ministries and authorities, making land use planning a cumbersome exercise. Land use planning challenges include outdated land use plans and standards, unregulated and unclear procedures for land use conversion, and inaccurate farm level land use plans.

In the particular case of rural land and urban land, there are indications that about 45,000 Ha of rural agricultural land has been lost to urban development during the last 15 years of the land reform and resettlement programme (Ministry of Local Government, Public Works and National Housing, 2018) This process continues unabated, and at the expense of the agricultural sector. This challenge calls for a national land master plan to clearly delineate rural land uses like agriculture, forestry, wildlife on one hand, and urban land on the other hand.

Land tenure in communal areas is highly informal and no formal land surveying and registration has been done. Land information is passed from generation to generation and thus remains highly localized. Consequently, administration information technology (IT) remains very basic with limited use of computers, Global Positioning System (GPS) technology, and cadastral mapping among others.

2.3.8 Sustainable Agriculture

The process of enhancing agricultural productivity and production must be anchored in the development and use of inclusive and sustainable knowledge, technology and innovation system. This system must balance

¹ A good example is the Nyambeya Wetland Project in Botswana, a joint project of Government of Botswana, UNDP, the Global Environmental Facility, Oxfam, Chimanmani Rural District Council and Nyambeya Community. This is emblematic of what the possibilities are for attracting joint **investment** in support of a national resource management plan driven through climate and environment smart agriculture.

the exploitation of agricultural land and its environs to grow the economy and sustain livelihoods with the sustainable use and renewal of environmental ecosystem services.

2.3.8.1 Agriculture, climate change, and impacts

The impact of global warming on climate change and productivity is a subject of great concern for agricultural production. Global and local projections suggest changes in rainfall, temperature and the length of growing seasons with an expected impact on agricultural productivity. Climate triggered yield reductions for Southern Africa have been estimated at between 11 and 30 percent by 2030. Climate projections up to 2070 for Zimbabwe show a 2.5 degrees Celsius increase in temperature. On the other hand, rainfall will decrease by 4.1 percent and 5.9 percent by 2030 and 2070 respectively. The effects of temperature changes on agricultural production will be more pronounced in the south-western parts of the country where temperatures will increase by 2.2 degrees Celsius; while those triggered by rainfall reductions will be highest in Mashonaland central, Mashonaland East, Manicaland, and Masvingo provinces.

Climate change effects are already evident. Whist, incidence of crop and livestock pests and diseases has increased, for example, the recent outbreaks of Fall Army Worm and *Tuta absoluta* outbreaks. This is expected to affect agricultural production directly and indirectly through the effect on the production of intermediate inputs. Further, climate change will affect water availability, and thus the need for development of irrigation systems. The year 2015/16 highlighted the need to build resilience to weather-related shocks, as agricultural production declined by 5 percent due to the El-Niño weather phenomenon, leaving 2.8 million people food insecure. Some contributing factors towards limited adaptive capacity include: the low levels of investment in irrigation; weak early warning systems that disadvantage timely generation and dissemination of early warning information; limited funding towards research and development of drought tolerant varieties; and lack of resources for effective extension service provision, disease control, and livestock development, and limited adoption of climate smart agricultural practices (CSAs).

In addition, despite the sector being impacted upon by climate variability and threats, it also contributes to the phenomenon. In Zimbabwe, it is established that agriculture is the third largest contributor to greenhouse gas emissions at 16.3 percent of the 63.8 mega tonnes of greenhouse gases that contribute to global warming annually. Within agriculture, the livestock sector generates the highest amount of greenhouse gases. Weak capacity to enforce forest regulations undermines efforts to ensure the carbon sink function of forests is maintained, in as much as it contributes to prevention of soil erosion. Limited soil testing and likely over-use of inorganic fertilizer from the blanket recommendations across the country contributes to global warming and soil degradation. A well-established fact is that agriculture is a key contributor to forest loss through agricultural land expansion, and within agriculture, with some industries such as tobacco that use many trees for tobacco processing and inefficient curing bans.

2.3.8.2 Climate Smart Agricultural Practices

A range of practices collectively termed climate smart agricultural practices (CSAs) contribute towards sustainable intensification of agriculture production. Essentially, CSA as defined by FAO is a set of farming

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practices that sustainably increase agricultural productivity, build resilience (adaptation), reduce greenhouse gas emissions from agriculture, and enhance local food security. CSA has three pillars, namely, conservation agriculture, soil and water conservation, and improved livestock management.

However, despite the well-known benefits of these practices vis-à-vis climate change mitigation, adaptation, and sustainable intensification, they have not been widely adopted in the country. For example, the adoption of conservation agriculture practices is estimated at only 100,000 smallholder farms on 125,000 Ha of cropland. More could be done if resources were available. Fertilizer placements are not precise and contribute to green-house gas emissions through over-use. The high incidence of wild fires, limited use of improved livestock management practices, and high inorganic fertilizer dependence of farming systems also threaten sustainability of agricultural production. Under these trends, agricultural land expansion will be the main avenue of achieving increased food production but at the cost of environmental damage. Changing the status quo will require mainstreaming efficiency in Zimbabwe's national agricultural policy for enhanced productivity, and the adoption of practices that allow for climate change adaptation and mitigation.

3. GOAL, VISION, OBJECTIVES AND GUIDING PRINCIPLES

3.1 Goal

The overall goal of the NAPF is to create an environment that enhances the sustainable flow of investment into the agricultural sector towards enhancing productivity and production, ensure food and nutrition security, and promote national economic growth and development.

3.2 Vision

A prosperous, diverse and competitive agriculture sector, ensuring food and nutrition security and significantly contributing to national development.

3.3 Policy Objectives

1. Assure national and household food and nutrition security;
2. Ensure that the existing agricultural resource base is maintained and improved;
3. Generate income and employment to feasible optimum levels;
4. Increase agriculture's contribution to the GDP;
5. Contribute to sustainable industrial development through the provision of home-grown agricultural raw materials; and
6. Significantly expand the sector's contribution to the national balance of payments.

3.4 Guiding Principles

The NAPF is built on nine (9) key principles as summarised in Figure 13.

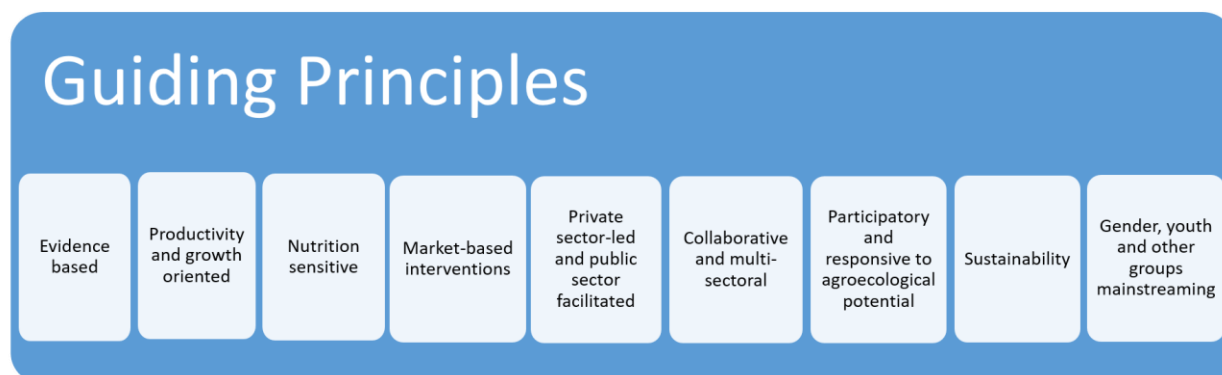


Figure 13: NAPF Guiding Principles

3.4.1 Evidence based decisions

All decisions in the agricultural sector will be evidence based. Stakeholders will be encouraged to use credible evidence to advise and/or guide the Government on agricultural investments and policies.

3.4.2 Productivity and growth oriented

To sustainably transition out of poverty and food and nutrition insecurity, Zimbabwe's agricultural sector will aim to raise its agricultural productivity and production. This will be done by attracting private investments into agriculture and investing more public resources into key productivity growth drivers: research and development, extension, appropriate irrigation and mechanisation, and feeder roads.

3.4.3 Nutrition sensitive

Zimbabwe's agricultural sector will be nutrition-sensitive. Investments and interventions in agriculture will put nutritionally rich foods, dietary diversity, and food fortification (biofortification and industrial fortification) at the heart of overcoming malnutrition and micronutrient deficiencies.

3.4.4 Market-based interventions

Increased agricultural production and productivity growth will be attained through the promotion of competitive, efficient and transparent private sector- driven marketing institutions and market-based risk management. The government will commit to a rule-based system of interventions that will not undermine private sector investments.

3.4.4 Private sector-led and public sector facilitated

The NAPF and associated strategies will promote and support private sector-led agricultural growth and development with government providing the necessary regulations and enabling environment.

3.4.5 Collaborative and multi-sectoral

Implementation, monitoring and evaluation of the NAPF will be collaborative and multi-sectoral at all levels.

3.4.6 Participatory and responsive to agro-ecological potential

The nature, scope and magnitude of investments required to grow the agricultural sector will be planned and implemented in the context of the NAPF, and will be inclusive and partnership-driven through a set of spatially determined interventions that reflect the comparative advantages of different agro-ecological zones in the country.

3.4.7 Sustainability

The process of enhancing agricultural productivity and production will be anchored in the development and use of inclusive and sustainable knowledge, technology and innovation systems. This system will balance

the exploitation of agricultural land and its environs to grow the economy and sustain livelihoods with the sustainable use and renewal of environmental ecosystem services.

3.4.8 Gender, youth and other vulnerable groups mainstreaming

The NAPF and all sub-sector strategies will mainstream gender, youth, and other vulnerable groups. Thus, all sub-sector strategies and policies developed under the NAPF will assess the implications for youth, women and men of any planned investments and interventions.

4. POLICY OBJECTIVES AND STRATEGIC INITIATIVES

4.1 Pillar I: Food and nutrition security

4.1.1 Summary of challenges faced

- Existing price support policies inadequately address the needs of the majority of smallholder farmers
- Current policy instruments insufficiently address the specific requirements of smallholder farmers in terms of collateral and credit repayment.
- Low financial literacy and financial exclusion of small holder famers
- High post- harvest losses.
- Climate-resilient agricultural practices are inadequately used; especially low-cost, climate-smart technologies such as irrigation, livestock, and small grains.
- Fragmented information and coordination systems.

4.1.2 Emerging Strategic Objectives

SO 4.1.1: Facilitate the implementation of policies that promote crop diversity and availability of nutritious food from own production and local markets

SO 4.1.2: Support the development and enforcement of micronutrient intervention related policies

[Insert a relevant picture here]

4.1.3 Strategic Initiatives

Table 4.1: Strategic initiatives to improve food and nutrition security

Type of Initiative	Strategic Initiatives
Policy/Regulatory	<ul style="list-style-type: none">• Review the implementation of input and output support programmes for crops and livestock in order to make them market-friendly• Put in place policies and strategies that promote access to finance and livelihood diversification.• Promote access to bio-fortified seed or vines for the production of nutrient dense varieties.
Strengthening Institutions and Organisation	<ul style="list-style-type: none">• Strengthen government capacity to coordinate actions of stakeholders involved in food security and nutrition interventions.• Strengthen agricultural extension services.• Strengthen grassroots nutrition education programmes
Investments and Operations	<ul style="list-style-type: none">• Investment for improved productivity, food safety, preservation and processing capacity of small holder farmers, A2 farmers and other value chain actors.• Enhance the capacity of farmers to engage financial institutions (make smallholder farmers bankable) through provision of technical assistance• Low cost technology investment in smallholder irrigation (supply and services)• Promote improved post-harvest management practices.• Set up integrated food and nutrition security information system and support information generation, management and sharing across Government departments.

[Insert a relevant picture here]

4.2 Agricultural Knowledge, Technology and Innovation System

Policy statement:

Increase investment in agricultural research and development, technology and extension

4.1.4 Challenges Faced

- Inadequate funding for key drivers of agricultural productivity and growth including: a) research and development; b) extension services, agricultural education and farmer training; c) irrigation and mechanisation development; and d) rural feed roads
- Poor linkages in research-extension-farmer-private sector in terms of extension message delivery, appropriate dissemination approaches and research prioritisation
- Inadequate skilled manpower, practical agricultural training and coherence between curricula and industry needs

4.1.5 Emerging Strategic Objectives

SO 4.2.1: To develop and promote an efficient agricultural knowledge, technology, innovation and communication (exchange and dissemination) system

[Insert a relevant picture here]

4.1.6 Strategic Initiatives

Table 4. 2: Strategic Initiatives to develop and promote an efficient AKTIS

Type of Initiative	Strategic Initiatives
Policy/Regulatory	<ul style="list-style-type: none"> • Realign budgetary allocation to prioritise funding to capital and recurrent expenditure in agricultural research, education and extension activities e.g. contribute 1 percent of agricultural GDP to research and development • Promote cost-recovery measures in research, education and extension provision • Facilitate Public and Private Partnerships to facilitate funding opportunities • Facilitate pluralist extension and research • Strengthen research-extension-farmer- private sector linkages
Strengthening Institutions and Organisation	<ul style="list-style-type: none"> • Fund in service training for research and extension officers • Institutionalise retention policy that facilitates funded in-service training • Facilitate knowledge platform with extension to: <ul style="list-style-type: none"> ✓ Integrate indigenous/local knowledge innovations and systems. ✓ Design appropriate dissemination and feedback materials. • Set up research priorities with the involvement of value chain actors. • Capacitating and enhancing skills of research and extension personnel • Revise agricultural curricula for more practical courses • Review agricultural training on a regular basis in response to industry needs. • Fund in-service training of human resource.
Investments and Operations	<ul style="list-style-type: none"> • Modernisation of research facilities, agricultural equipment and ICT equipment • Resource government research, extension and farmer outreach programmes • Rehabilitate, upgrading and construct new research and training infrastructure • Invest in modern teaching and training technologies that address challenges and gaps in agricultural knowledge.

[Insert a relevant picture here]

4.3 Pillar III: Production and Supply of Agricultural Inputs

Policy statement:

Increase the utilisation of improved productivity-enhancing agricultural inputs

4.3.1 Challenges Faced

- High input costs
- Liquidity challenges among poorly capitalised farmers weakening their demand for purchased inputs
- Limited availability of quality inputs
- Inefficient input distribution system

4.3.2 Emerging Strategic Objectives

SO 4.3.1: To create an environment that permits efficient functioning of agricultural input markets to lower the cost of agricultural inputs

SO-4.3.2: To improve access to finance for farmers to enhance their capacity to purchase adequate inputs

SO-4.3.3: To increase the supply of inputs through the development of an efficient production, distribution and marketing system

[Insert relevant pictures]

4.3.3 Strategic Initiatives

Table 4.3: Strategic initiatives to increase the utilisation of improved productivity-enhancing agricultural inputs

Type of Initiative	Strategic Initiatives
Policy/Regulatory	<ul style="list-style-type: none"> • Promote competitiveness in the input sector • Reform existing non-market based input support programmes and interventions. • Provide incentives to private sector to invest in input production and supply systems of the most valued inputs • Promote research and production of more effective agricultural inputs suited to specific agro-ecologies • Strengthen the distribution channels of critical inputs (fertilizer, seed and agro-chemicals, livestock vaccines and drugs) • Nurture private sector provision of affordable seasonal input credit
Strengthening Institutions and Organisation	<ul style="list-style-type: none"> • Strengthen agricultural input supply system through People-Public-Private Partnerships (4 Ps) • Strengthen quality control monitoring systems • Enhance the capacity of farmer organizations to effectively participate in the input distribution system for the benefit of their members.
Investments and Operations	<ul style="list-style-type: none"> • Provide concessional funding to private sector to re-energize the agricultural input manufacturing industry • Increase finance to input distributors including agro-dealers, chain leaders and local traders to enhance the development of input distribution networks; • Provide support for geographic soil fertility and water quality mapping. • Establish market information systems to monitor input supply and demand, prices and services

4.4 Development of Agricultural Infrastructure

Policy statement:

Invest more resources in the development of infrastructure to support agricultural production and marketing

4.4.1 Challenges Faced

1. Inadequate irrigation, mechanisation, ICT, and crop and livestock related infrastructure
2. Insufficient skills in the use and maintenance of agricultural infrastructure and technology.
3. Underutilized infrastructure
3. Inadequate access to appropriate technologies for:
 - Mechanisation
 - Irrigation
 - Livestock
 - Post-Harvest management
 - ICT
4. Unreliable and high energy costs

4.4.2 Emerging Strategic Objectives

SO 4.4.1: To develop, rehabilitate and modernize agricultural infrastructure

SO4.4.2: To increase access to appropriate agricultural technologies

SO4.4.2: Reduce energy costs across the agricultural value chain

[Insert Pictures (of agriculture infrastructure)]

4.4.3 Strategic Initiatives

Table 4.4: Strategic Initiatives for investing more resources in the development of infrastructure to support agricultural production and marketing

Type of Initiative	Strategic Initiatives
Policy/Regulatory	<ul style="list-style-type: none"> • Facilitate the establishment of an Agriculture Infrastructure Fund • Prioritize and support agriculture value chain development based on regional comparative advantages • Promote public private partnerships to invest in mobile repair and maintenance workshops in farming areas • Promote appropriate technology transfer partnerships • Incentivise private sector to invest in infrastructure development • Provide reduced energy tariffs for agricultural production
Strengthening Institutions and Organisation	<ul style="list-style-type: none"> • Capacitate and enhancing skills for extension workers/irrigation/mechanisation technicians and farmers in repair and maintenance • Institutionalise in-service ICT literacy programmes in all agricultural institutes • Provide capacity building support through knowledge exchange on new agricultural technologies for farmers and extension workers • Capacitate extension workers and farmers to take part in development of appropriate demand driven technologies and ICT technology platforms • Promote the use of infrastructure development models that utilise indigenous knowledge
Investments and Operations	<ul style="list-style-type: none"> • Resuscitation of agricultural related infrastructure and services along corridors and priority value chains. • Reclassification of agro ecological zones in view of climate change to support Agricultural Value Chain Development. • Facilitate PPPs investment in development of agricultural infrastructure • Invest in rehabilitation, construction and maintenance of feeder roads, agricultural training institutions and other related agriculture infrastructure • Promote development of an Operation and Maintenance Fund for farmers • Mobilise funds to access appropriate and updated training materials • Create a revolving fund to finance agricultural technologies • Invest in alternative energy infrastructure such as solar energy, and biogas digesters for livestock and crop residues

4.5 Agricultural Marketing and Trade Development

Policy statement:

Develop effective and efficient domestic, regional and international agricultural markets

4.5.1 Challenges Faced

- Limited access to viable and competitive markets
 - ✓ High cost of doing business
 - ✓ Inconsistent supply (quantity and quality) of agricultural commodities
 - ✓ Limited agro processing and value addition
 - ✓ Information asymmetry in most markets resulting unfair trade
- Inadequate and outdated market infrastructure
- The operations and maintenance of SGR tend to interfere with private sector-led grain market development
- Inconsistent and unpredictable marketing and trade policies such as: import and export bans increasing price volatility
- Limited access to export markets
 - ✓ Non-tariff barriers such as standards
 - ✓ Inconsistent quality
 - ✓ Logistics and unavailability of cold chain and storage

4.5.2 Emerging Strategic Objectives

SO 5.5.1: Improve access to lucrative market segments in agricultural value chain by smallholder farmers

SO 5.5.2: Revitalize agricultural marketing infrastructure

SO 5.5.3: Facilitate reduction of the cost of doing business

SO 5.5.4: Increase agricultural exports

4.5.3 Strategic Initiatives

Table 4.5: Strategic Initiative for developing effective and efficient domestic, regional and international agricultural markets

Type of Initiative	Strategic Initiatives
Policy/Regulatory	<ul style="list-style-type: none"> Promote the development of selected agriculture value chains' growth plans mapped on spatial corridors along major highways or water bodies; Review and streamline the level and collection levies; Streamline and decentralize the permit system and other accompanying documents; Provide incentives to private sector to invest in agro processing and value addition industries. Promote the development of smallholder aggregation models; Facilitate the establishment and harmonization of private and public grades and standards for agricultural commodities. Facilitate access to up-to-date market information to all market players Promote the establishment of commodity exchanges to help with price discovery; Facilitate the operationalization of Warehouse Receipts Systems Rationalize the operations and maintenance of the SGR to be market friendly Facilitate the establishment of export promotion councils
Strengthening Institutions and Organisation	<ul style="list-style-type: none"> Build capacity of government departments, farmer organizations, and other market players in data collection, analysis, storage and dissemination or exchange. Capacitate and enhance skills of the responsible regulatory bodies and local government authorities. Capacitate and enhance skills enhancing of market players in regional and international standards
Investments and Operations	<ul style="list-style-type: none"> Establish a consolidated market information system to provide market players with up-to- date trade and price information Build and refurbish market infrastructure for different commodities i.e. markets stalls, dry and cold chain storage countrywide Invest in ICT based one stop shop for permits and levies Invest in testing facilities at Provincial level Rehabilitate Public grain storage facilities Invest in export related infrastructure Provide concessional funding to private sector to re-energize the agro processing industry for export

4.6 Agricultural Finance and Credit

Policy Statement:

To improve agricultural financing

4.6.1 Challenges Faced

- Limited funding owing to limited lines of credit and limited private sector funding.
- Limited access to finance due to: a) lack of collateral; b) high cost and high risk
- Inappropriate loan facilities
- Limited financing for agricultural development growth plans/strategy based on agro-ecological potential

4.6.2 Emerging Strategic Objectives

SO-4.6.1: To facilitate the mobilisation of affordable and long term lines of credit.

SO-4.6.2: To enhance access to funding for the sector.

SO-4.6.3: To prioritise and support agriculture value chain development based on regional comparative advantages.

4.6.3 Strategic Initiatives

Table 4.6: Strategic Initiative for increasing finances to agriculture

Type of Initiative	Strategic Initiatives
Policy/Regulatory	<ul style="list-style-type: none"> • Facilitate mobilisation of affordable and long term lines of credit from both domestic and international markets. • Promote private sector participation in funding agriculture including joint agribusiness ventures with local and international partners. • Build confidence in 99 year leases, • Facilitate the operationalisation of the Warehouse Receipt System. • Strengthen the contract farming framework
Strengthening Institutions and Organisation	<ul style="list-style-type: none"> • Capacity strengthening to improve the relevance of loan product designs and financial packages to the agricultural sector • Capacitating and enhancing skills for public and private sector players to sustainably enhance Agricultural Value Chain performance;
Investments and Operations	<ul style="list-style-type: none"> • Establish an Agricultural Development Fund • Establish a farmer register to facilitate farmer risk profiling • Capitalization of the farmers through innovations that increase finance flows to the agricultural sector (guarantees, revolving funds or wholesale facilities for lenders) • Establish a crop and livestock contingency fund for disaster risk reduction.

4.7 Access, Tenure Security and Land Administration

Policy statement:

Promote equitable and secure land ownership and rights

4.7.1 Challenges Faced

- The land tenure system is insecure resulting in low investments in productivity enhancing infrastructure by farmers due limited access to finance and credit
- Very weak land administration system resulting in:
 - ✓ Illegal settlements and conflicts with other competing sectors such as mining and tourism
 - ✓ Boundary disputes and infrastructure sharing challenges
 - ✓ Slow pace of land valuation and audits
 - ✓ Underutilization of land
 - ✓ Land degradation and deforestation

4.7.2 Emerging Strategic Objectives

SO-4.7.1: To strengthen the land tenure system to confer security of all land rights

SO-4.7.2: To develop an effective and efficient land administration system

4.7.3 Strategic Initiatives

Table 4.7: Strategic Initiative for promoting equitable and secure land ownership and rights

Type of Initiative	Strategic Initiatives
Policy/Regulatory	<ul style="list-style-type: none"> • Secure land rights • Harmonise land policy and regulations with other sectors • Develop adequate legislative and regulatory framework for dispute resolution, compensation and sharing of infrastructure • Strengthen coordination within the MLARR and across other sectors • Enforce land use planning regulations • Enforce rules and regulations on orderly resettlements • Ensure maximum farm sizes are adhered to
Strengthening Institutions and Organisation	<ul style="list-style-type: none"> • Build confidence in the transferability and bankability of the 99-year lease and other tenure systems • Review other land tenure systems with a view to enhancing the commercial value of the land • Strengthen service delivery capacity and land information systems • Establish and resource land administration systems

Type of Initiative	Strategic Initiatives
Investments and Operations	<ul style="list-style-type: none">• Expedite land survey, registration valuations and audits• Set-up a compensation fund

4.8 Sustainable [Green] Agriculture

Policy statement:

Improve farmer resilience to climate shocks

4.8.1 Challenges Faced

- Vulnerability of farmers to weather shocks and emerging pests and diseases due to dependence on rain-fed agriculture, limited capacity for extension, R&D, low adoption of Climate Smart practices and weak early warning systems, Inadequate financing for climate adaptation and mitigation programmes in agriculture.
- Limited capacity to generate, disseminate, and understand information on climate change, emerging pests and diseases.
- Lack of timeliness in early warning information generation and dissemination.
- Limited adoption of efficient agricultural practices such as integrated crop-livestock production.

4.8.2 Emerging Strategic Objectives

SO 4.7.1: To enhance the resilience of agriculture production systems to climate change, pest and diseases attacks.

SO 4.7.2: To mobilise funds for climate change adaptation and mitigation programmes.

SO 4.7.3: To enhance local capacity to generate, disseminate and understand climate information and best practices.

SO 4.7.4: To mainstream efficiency in agricultural production systems.

[Pictures depicting sustainable agriculture]

4.8.3 Strategic Initiatives

Table 4.8: Strategic Initiative to improve farmer resilience to climate shocks

Type of Initiative	Strategic Initiatives
Policy/Regulatory	<ul style="list-style-type: none"> • Promote the adoption of climate smart agricultural practices. • Promote access to low-cost finance for irrigation development and other investments. • Increase finance flows towards early warning, rapid response systems, extension and Research & Development. • Increase finance flows towards extension and Research & Development. • Promote sustainable agricultural intensification.
Strengthening Institutions and Organisation	<ul style="list-style-type: none"> • Improve cross-sectoral coordination on sustainable natural resource management and conservation • Enhance the capacity of government staff and private sector players to write climate finance proposals
Investments and Operations	<ul style="list-style-type: none"> • Invest in irrigation development and water harvesting technologies • Invest in mechanisation for conservation farming • Invest in research and development • Invest in new early warning infrastructure, and upgrade existing ones.

5.0 OPERATIONALIZING THE POLICY FRAMEWORK

This chapter outlines an approach that will give agency to the proposed policy framework. The chapter proposes the adoption of an approach that is based on the concept of development hubs/clusters/corridors (HCCs). When they are appropriately identified, designed, operationalised and managed, these HCCs can be effective instruments to attract and receive investments into the agricultural value chains that are relevant to their areas.

5.1 Agricultural Hubs, Clusters and Corridors

At a global and continental level, there is growing consensus that national policy frameworks that seek to enhance the flow of investments into agriculture must build on existing information and experiences about growth clusters and/or corridors that anchor agricultural development in general. The notion of a development hub/cluster/corridor is a conceptual, programmatic framework to develop a territory on the basis of its natural and/or created comparative advantage(s) (Healey, P. 2004). The agricultural HCCs will represent different forms of agricultural comparative advantage across the national space and economy that have the potential to attract public, private, community and development partner investments from both domestic and international markets to fund interventions that promote integrated agricultural development.

The model suggests that the coordination of HCC-based investments by governments, the private sector, communities and development partners can trigger the transformational change required to unleash agriculture-driven national development. Such coordination will be based on. AKTIS, water, irrigation, transport, power, communications, agro-processing capacity and in enhancing competitiveness to access both domestic and international markets. This investment-driven and integrated agriculture-based national development model is transformational in the sense that it targets public, domestic and private investment, policies and support programmes for smallholder farmers - particularly rural women and youths. The main objective is to stimulate the closing of stubbornly low agricultural yield gaps; generate sustainable and inclusive increase in crop and livestock outputs; and support sustainable agro-processing and marketing. Achievement of these objectives can collectively enhance the agricultural sector's contribution to national economic development and the realisation of the national vision for Zimbabwe to become a middle income country by 2030.

5.1.1 Adopting Hub/Cluster/Corridor Development

There are strategic advantages for using this NAPF to position the country to attract and align public, private, community and development partner investments in agriculture development through agricultural HCCs.

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First, agricultural development HCCs are increasingly cited as a developmental approach that attracts significant investments at the continental, regional and national levels in Africa.²

Second, Zimbabwe has a rich and yet unexploited history and experience of planning and implementing territorially-based intra-national regional development efforts on the basis of agricultural clusters. These include the development of the South East Lowveld on the back of a sugarcane value chain that bequeathed Mukwasine, Chiredzi, Triangle and Hippo Valley using a combination of rich soils, abundant river damming opportunities, water, irrigation, transport, and market intelligence and marketing infrastructure.

Third, there are many areas in the country that bear significant comparative advantages as agricultural HCCs that can be immediately exploited as part of the drive towards the realisation of Vision 2030 through agriculture-driven development. These include, but are not limited to, the Tokwe-Mukorsi Dam Project; the Odzi-Osborne River System; the Zambezi Gwayi-Shangani Corridor; the Manyuchi Dam Horticultural Hub; and the Kunzvi River-Dam Hub. Indeed, suggestions have been canvassed to conceptualise the Plumtree-Harare-Forbes Border Post and the Beitbridge-Harare-Chirundu road and rail tracks, as agriculture-based spatial development corridors that can give life to high potential regional agricultural value chains spanning grains and staples, livestock, cash crops, horticulture and spices, and edible oils (Technoserve, 2017). In addition, the high density urban centres - Harare, Bulawayo, Mutare, Gweru, Masvingo, Marondera and Kwekwe-Redcliffe - can also be developed into agricultural hubs/clusters that focus on the development of integrated production, collection, processing and marketing infrastructures; similar to the Johannesburg Fresh Produce Market and that can target both domestic and foreign markets for horticultural products and spices.

Lastly, the call to promote and support the flow of investments into agriculture is predicated on a legitimate calculus that is designed to underwrite the national interest in the domains of food and nutrition security, the industrialisation and growth of the economy, and deepening and expanding the domestic market. In addition, it would be strategic to invest in more dam construction and turning the 10,000 water bodies across the country into irrigation propositions that form the basis for more agricultural HCCs to promote investments in fertilizer, chemicals and agricultural equipment manufacturing; and support companies that can produce goods and services for the global markets as is happening in other African countries such as Egypt and Ethiopia.

² The theme for African Economic Outlook [AEO 2015] was on “**Regional Development and Spatial Inclusion**” with a focus on cluster and spatial development initiatives. The same approach is part of the New Partnership for Africa’s Development [NEPAD]; the Grow Africa Initiative founded by the African Union Commission, NEPAD and the World Economic Forum. Grow Africa is a private sector platform or agenda of the Comprehensive Africa Agriculture Development Programme (CAADP) supported by the African Development Bank; and the G8 promoted New Alliance for Food Security and Nutrition. Clusters and corridors also feature in the regional strategies of the Southern African

5.2 Rethinking Institutional Arrangements

The structure to manage and enable the agricultural sector to attract investment and achieve its national development goals would require some reorganisation of the Ministry's key departments as well as parastatals (Box 1). In view of the multi-dimensional nature of the agricultural sector, it is important to have an effective coordination mechanism to ensure enhanced synergies across other sectors. will require to be put in place.

Box 1: Institutional Arrangements

- MLARR, departments and knowledge, technology and innovation institutions
- Parastatals under MLARR - Agribank, ARC, ARDA, CSC, GMB, PIB, TIMB, TRB,
- Enabling ministries and their parastatals and enterprises - MEWC, MEPD, MIC, MFAIT, MT, MCID, MICPS, MPSE, MHTSTD, MHCW, MLGPWH,
- Value chain actor organisations - producers, processors, transporters, marketers, financiers
- Regulatory institutions
- Agricultural policies and legislations - rules and procedures

This policy framework will help to delineate the mandate and structure of the ministry to strengthen its policy development and management systems; capacity development; and promotion and support of investments that optimise agricultural productivity and production. This will require the realignment of current and future investment plans and operations with those of other institutions in the context of deepening agricultural value chains through, inclusive, partnership-based, decentralised and spatially determined investment programmes at provincial and district levels. The reorganisation may entail the merging of some parastatals into a single authority with responsibilities for promoting and facilitating more diverse and sustainable investment in the sector.

5.3 Promotion and Facilitation of Investment in Agriculture

Given the focus on promoting and sustaining the flows of investment into the interventions areas outlined in Chapter 4 to enhance productivity and production; it is imperative that the requisite environment is created to attract these investments.

The NAPF has motivated fundamental principles and elements required to stimulate investments. There is need to operationalise this framework by providing a compendium of investment opportunities and plans across all agro-ecological zones of the country. The key elements to promote and facilitate the flow of investment into agriculture in the compendium must include, at the minimum, the following:-

National Agricultural Policy Framework

- a. Development of an agricultural investment strategy. This calls for the completion of key subsector investments strategies which are aligned to the NAPF;
- b. Investment promotion and facilitation;
- c. Agriculture value chain infrastructure development;
- d. Developing or strengthening trade policy;
- e. Agricultural financial sector development;
- f. Human resources development, research, and innovation;
- g. Rethinking tax policy in relation to agricultural development;
- h. Risk management - crop, livestock and drought insurance, and disaster risk reduction and management;
- i. Responsible business conduct - labour standards, environmental regulations, corruption, equitable benefit sharing, etc.;
- j. Sustainable use of natural resources and environmental management - use of clean energy, smart agriculture, use of green technologies, etc.

6.0 Resource Mobilisation

To turnaround Zimbabwe's agricultural sector, there is need to attract diverse resources to finance the development of the sector. The Government shall need to mobilise resources from public and private sources. There is need to reinvigorate the Zimbabwe Agricultural Investment Plan to align with the AU processes for country support which are funded through CAADP Business Meetings. One option would be to immediately hold an investment conference with all key stakeholders including development partners so that they can commit to funding the NAPF. The agricultural investment conference should be preceded by the development of a comprehensive and updated agricultural Investment plan dealing with the eight pillars discussed in chapter 4.

The Government will allocate a significant proportion of its budget for agriculture sector development in line with the Maputo Declaration under the African Union in 2003. However, the quality of resource allocation will improve, with a substantial proportion of the agriculture budget allocated to key drivers of agricultural and productivity growth. In addition, surtax and surcharges on imports and purchases of agricultural products will be put into an Agricultural Fund to finance agricultural development initiatives and subsidies. In terms of credit, the Government will prescribe a certain proportion of lending by commercial banks to the agricultural sector at concessional rates

7.0 MONITORING, EVALUATION AND LEARNING SYSTEM

A robust monitoring, evaluation and learning [MEL] system is an indispensable requirement for the NAPF and any associated strategic plans that are developed to operationalise this framework. The MEL system is required early on to support the development, and later to manage implementation of the policy framework. The MEL provides opportunities for critical reflections on implementation performance, and to change course if necessary as well as assess the impact and sustainability of the strategic initiatives outlined in planned action. A MEL system also provides opportunities for stakeholders to account to each other, collect evidence, learn and ensure continuous improvement during policy review. To guarantee international resource commitments there is need to there will be need for strengthening linkage with the AU Malabo Biennial Review process.

The NAPF will be reviewed annually starting in 2019, with a comprehensive review being done every four years of implementation.

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