



Ministry of Agriculture, Irrigation and Water Development

Agriculture Sector Performance Report: July 2016 - June 2017

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ACRONYMS

ADD	Agricultural Development Division
ADMARC	Agricultural Development and Marketing Co-operation
AICC	African Institute for Corporate Citizenship
AIDS	Acquired Immuno-Deficiency Syndrome
AISP	Agricultural Infrastructure Support Project
ASWAp	Agriculture Sector-Wide Approach
ASWAp-SP	Agriculture Sector-Wide Approach – Support Project
ATCC	Agricultural Technology Clearing Committee
AUC	African Union Commission
CA	Conservation Agriculture
CAADP	Comprehensive Africa Agriculture Development Programme
CFS	Contract Farming Strategy
CFTC	Competition and Fair Trading Commission
CIMMYT	International Maize and Wheat Improvement Centre
CISANET	Civil Society Agriculture Network
COMESA	Common Market for East and Southern Africa
CSO	Civil Society Organization
DADO	District Agriculture Development Officer
DAECC	District Agricultural Extension Coordination Committee
DAES	Department of Agricultural Extension Services
DARS	Department of Agricultural Research Services
DCD	Department of Crop Development
DLRC	Department of Land Resources Conservation
DPs	Development Partners
GDP	Gross Domestic Product
GoM	Government of Malawi
M&E	Monitoring and Evaluation
MGDS III	Malawi Growth and Development Strategy III
MK	Malawi Kwacha
MoAIWD	Ministry of Agriculture, Irrigation and Water Development
MoFEPD	Ministry of Finance, Economic Planning and Development
MoITT	Ministry of Industry, Trade and Tourism
NAP	National Agriculture Policy
NAIP	National Agricultural Investment Plan
NES	National Export Strategy
NRS	National Resilience Strategy
ORT	Other Recurrent Transactions
PBB	Programme-Based Budgeting
SGDs	Sustainable Development Goals

EXECUTIVE SUMMARY

The 2016/17 Agriculture Sector Performance Report (ASPR) documents the performance of the agricultural sector of Malawi for the fiscal year 2016/17 against the set goal, objectives and outcomes measures of the National Agriculture Policy (NAP) and the Monitoring and Evaluation (M&E) framework of the National Agriculture Investment Plan (NAIP). As such, this report contains the baseline measures for monitoring progress towards achieving the agricultural transformation agenda outlined in the NAP and operationalized through the investment framework of the NAIP.

Given that the NAIP is part and parcel of the CAADP processes towards achieving the country targets, as specified in the Malabo Declaration (2014) and the agriculture-related goals under the Sustainable Development Goals (SDGs) of the United Nations, the ASPR is also a mutual accountability tool that presents the performance of Malawi towards achieving these regional and global commitments. As such, the ASPR reports on agriculture sector performance indicators that are submitted to the African Union as part of the Malabo Biennial Reporting process and those that are submitted at the global level in reporting on progress towards the SDGs. These agriculture-related performance indicators are aligned to the M&E framework of the Malawi Growth and Development Strategy III, which is the medium-term development strategy of Malawi, and the Vision 2020, which is Malawi's long-term development strategy. In addition, the ASPR presents progress on performance indicators that are reported on under the G7 New Alliance for Food Security and Nutrition, as outlined in the New Alliance for Food Security and Nutrition Country Cooperation Framework, which the Government of Malawi signed onto in 2013.

Financing and Investments in Agriculture

Many financial commitments and disbursements have been made by both state and non-state actors in the agriculture sector in the foregoing fiscal year. A key financial commitment by the government is the investment of a minimum of 10 percent of its national public expenditure in the agricultural sector to achieve a 6 percent growth in the sector. This commitment has consistently been achieved over the duration of the ASWAp and after. However, it has been questioned if this commitment could be considered an investment in the agricultural sector or rather a yearly expenditure on social protection for food security in the country. There is still doubt regarding allocative efficiencies of public financial resources considering that approximately 36.9 percent in 2016/17 and 54 percent in 2017/18 (ORT + PE + DEV II) of ministerial resources were allocated to the Farm Input Subsidy Program and maize purchases. This is a sharp contrast to planned investment priorities outlined in the ASWAp and in the new NAIP. Moreover, the investments appear to be misaligned with the priority areas of the NAP.

As for allocation of financial resources by Development Partners, 28.7 percent of all DP resources¹ was allocated to sustainable agricultural production and productivity while 28.0 percent was allocated to agricultural market development, agro processing and value addition whereas the highest allocation of resources from Civil Society (22.5 percent of the total funds for

¹ Figures are derived from the DCAFS database using the preliminary available DP figures broken down according to the ASWAp subcomponents

the sampled non-state projects) was invested in food and nutrition security. Of concern is the budgetary allocation to research and extension services, which are among the lowest among the NAIP components. Since a large share of the budget is allocated to food security, there is potentially very little long-term productivity enhancing impact compared to spending on research and development, extension, or rural infrastructure; all of which are important in attaining agricultural transformation.

Enabling Environment: Policies, Institutions and Coordination

Malawi's agricultural development agenda is driven by several national, regional, and international policies, and cooperation frameworks. These policies, strategies and agreements have an implication on the country's development hence alignment of commitments under these frameworks is quintessential for the country to make meaningful progress on sustainable human development through the agriculture sector. At country level, the agriculture sector is now guided by the NAP, which is an overarching policy for the sector. The NAP outlines the agricultural transformation agenda for the period 2016-2021 against a background of limited agricultural growth and progress in the past. It envisions a paradigm shift in the way of doing business in agriculture in Malawi and aims to remedy the situation by providing clear and comprehensive policy guidance for the sector. In the same vein, the NAIP operationalizes the NAP by guiding investment commitments in the sector so that they are aligned to the priority areas of the NAP and can be coordinated and harmonized to achieve maximal impact and returns to investments. The NAIP is a follow-on investment framework to the ASWAp, which spanned the period of 2011-2016 and previously guided investments in the agriculture sector of Malawi. Lessons learned from the implementation of ASWAp are incorporated in the NAIP based on the ASWAp review that took place in 2016.

During this reporting period (2016/17), several policy developments in the agriculture sector or those with bearing on the sector were either in progress or finalized. Chief among the policies in the sector was the National Agriculture Policy, which was launched by the State President of the Republic of Malawi, His Excellency, Professor Arthur Peter Mutharika, in November 2016. The NAP was launched alongside the National Irrigation Policy and these two policies form a solid foundation for the agricultural transformation agenda for Malawi. At a higher level, the Malawi Growth and Development Strategy II was reviewed and the process of developing its follow-on strategy, the MGS III was initiated. Currently the MGDS III is in its final stages of completion, with a draft having been commented on by various Ministries, Departments and Agencies as well as non-state stakeholders in the country. Of relevance to the agriculture sector in the MGDS III is the pillar on agriculture growth and climate change management. This area is strongly linked to the priority areas of the NAP and also speaks to the National Resilience Strategy, which is another important overarching policy document that the Government of Malawi has developed to break the cycle of food insecurity in the country. Below is a list of additional areas of progress that has been made to improve the enabling environment for agriculture in Malawi:

- Launch of National Fisheries and Aquaculture Policy (2016-2021)
- Drafting of the National Livestock Policy (2017)
- Review of the Milk and Milk Products Bill

- Approval of the Contract Farming Strategy (2016)
- Approval of the National Climate Change Management Policy (2016)
- Land Bills (2016) assented to by the State president
- Drafting of Seed Policy and Seed Bill
- Drafting of the Agricultural Extension and Advisory Services Strategy
- Drafting of the National Fertilizer Policy
- Farm Input Subsidy Programme reforms
- Review of the Plant Breeders Rights Bill
- Submission of the Tobacco Bill

Lessons Learned and Recommendations Going Forward

Based on the analysis and findings from this report, the following recommendations need to be seriously considered if progress towards achieving agricultural transformation is to be made, as outlined in the NAP and NAIP:

- There is urgent need for all actors in the sector (State, Non-State Actors and Development Partners) to seize the momentum surrounding the NAP and align investments to the NAIP to begin making headway towards agricultural transformation and breaking the cycle of food insecurity in Malawi, in line with the aspirations of the Vision 2020, MGDS III and National Resilience Strategy (NRS). While the NAP has clearly outlined the policy priority areas, which have been neatly integrated into the NAIP and the MoAIWD's budget programmes, it will be paramount to follow through on actual disbursements of financial resources. Furthermore, it will be critical to harmonize and sequence these investments through coordinated financing, as outlined in the NAIP, so as to achieve synergies across sectors and in turn achieve maximal agricultural impact. Key in this respect, will be coordination at grassroots levels, where implementation take place, and ensuring adequate funding at local government levels, as well as capacity strengthening and inclusive planning, implementation, monitoring and evaluation. This will be necessary if the sector investments are to avoid the challenges faced during implementation of the ASWAp, where investments obstinately favoured the Food Security and Risk Management component at the expense of the other equally important components.
- Significant strides have been made in terms of improving the enabling environment for the business of agriculture, as shown by improvements in the Ease of Doing Business Indicators for Malawi. Nonetheless, there remains substantial room for improvement. The long list of policies, strategies and pieces of legislation still under development is clear indicating that a lot more work needs to be done in this area. Indeed, the NAIP has identified as one of its programmes, the area on improving the enabling environment in the agriculture sector. Therefore, with a recognition that it takes money to reform institutions and policies as well as to put in place legislation that promotes the business of agriculture, all relevant stakeholders will need to allocate adequate resources towards

institutional and policy reforms as well as processes for improving legislation in agriculture.

- A strong M&E system is needed for the successful implementation of the NAIP and NAP and serious investments need to be made sooner rather than later in this area. Data collection challenges continued to exist throughout the duration of the ASWAp, even after launching the M&E Master Plan and the Agricultural Statistics Master Plan. Large upfront investment in agricultural M&E will be quintessential to improve implementation of the NAP and NAIP. Indeed, this report has not managed to adequately monitor the performance of the sector due to the lack of a National Agriculture Management Information System. In addition, the cost of humanitarian response that took place in the year under review was implemented with incomplete information, resulting in less effective coordination and unintended outcomes as evidenced by several private sector companies requesting permits to export maize grain in a year when the country had experienced the worst drought in decades. These unnecessary and costly challenges can be avoided if serious investments are made in a streamlined National Agriculture Management Information System.
- Contribution to sector financial reporting from Civil Society and Private Sector is a welcome development. However, there continues to be inadequate information on both these subsectors and this further underscores the need to have an integrated National Agriculture Management Information System, which will allow all players to better monitor performance of the sector and inform future decisions.
- Following the launch of the National Irrigation Policy, Government and its partners have intensified promotion and support for sustainable irrigation development. This new direction in investments in the sector should be sustained given the huge irrigation potential in the country and the fact that climate change will continue to affect the sector in the coming decades.
- Output price risk (volatility) has emerged as an area that needs attention from all stakeholders in the sector. Following a boom in maize and pigeon pea prices in the previous year, the markets saw tremendous crashes that have led to significantly reduced farm incomes. Among the severely affected are smallholder farmers who have limited bargaining power and access to market information. Therefore, there is a need to seriously confront commodity market risks through a variety of risk management instruments, including the use of commodity exchange export mandates; risk-hedging and securities instruments; and commodity insurance programmes, which have been shown to be effective elsewhere. It is also recommended that efforts be made to better organise farmers into coordinated organisations or cooperatives that have better bargaining power and are better informed on market trends. In the special case of the pigeon pea market, the market crash was likely caused by an import ban imposed by the Government of India. Therefore, it would be worthwhile for the Government of Malawi to initiate bilateral trade negotiations with India, to seek Malawi access to the Indian pigeon pea market, especially since Malawi comprises a very small share of India's pigeon pea imports. It may also be useful for the GoM to negotiate with private companies in the business of pigeon peas in Malawi, to come up with a generic

promotion and risk management instrument for all players. Similar approaches have been adopted in other countries such as Ghana on cocoa, through the Cocoa Board, and Ethiopia on coffee through the Ethiopia Commodity Exchange.

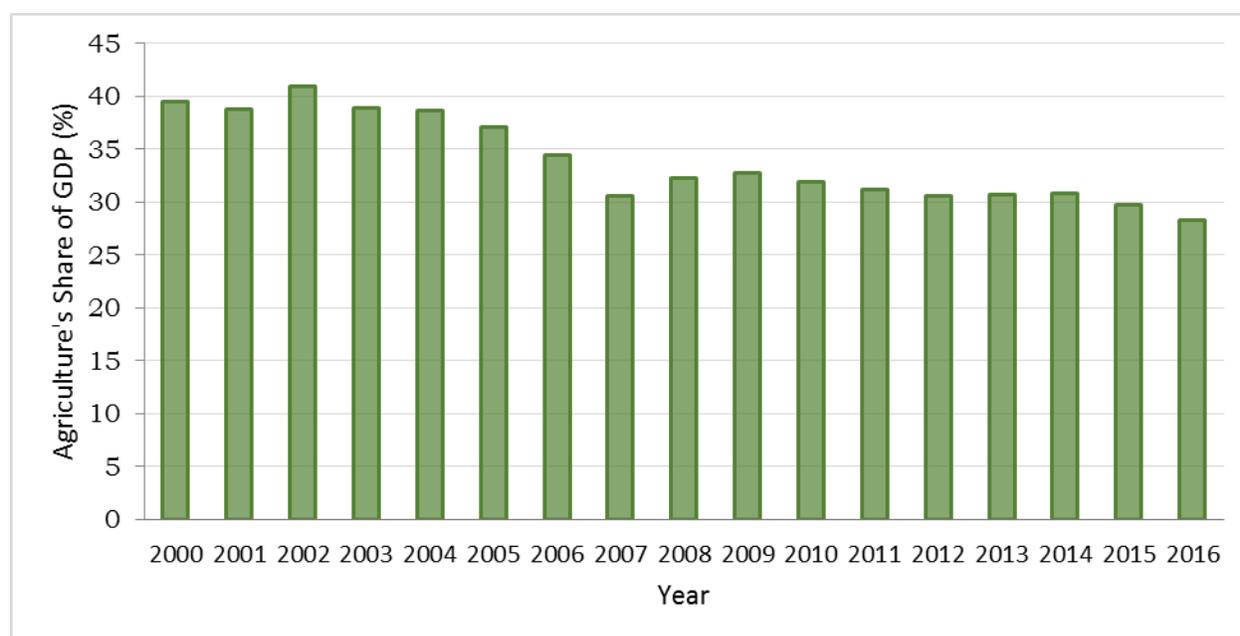
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1. INTRODUCTION

1.1 Overview

Malawi's agriculture sector remains the mainstay of the country's economy and is key to several country development objectives, including economic growth; poverty reduction; contributing to food security and nutrition, by ensuring sufficient availability and reliable access to food for all; and ensuring sustainable use of natural resources. Agriculture accounts for nearly 30 percent of gross domestic product (GDP) (see Figure 1.1), employs over 64 percent of the country's workforce, and provides over 80 percent of the country's export earnings (GoM, 2017; GoM 2013; NSO, 2017).

Figure 1-1: Agriculture sector share contribution to Gross Domestic Product (2000 – 2016)



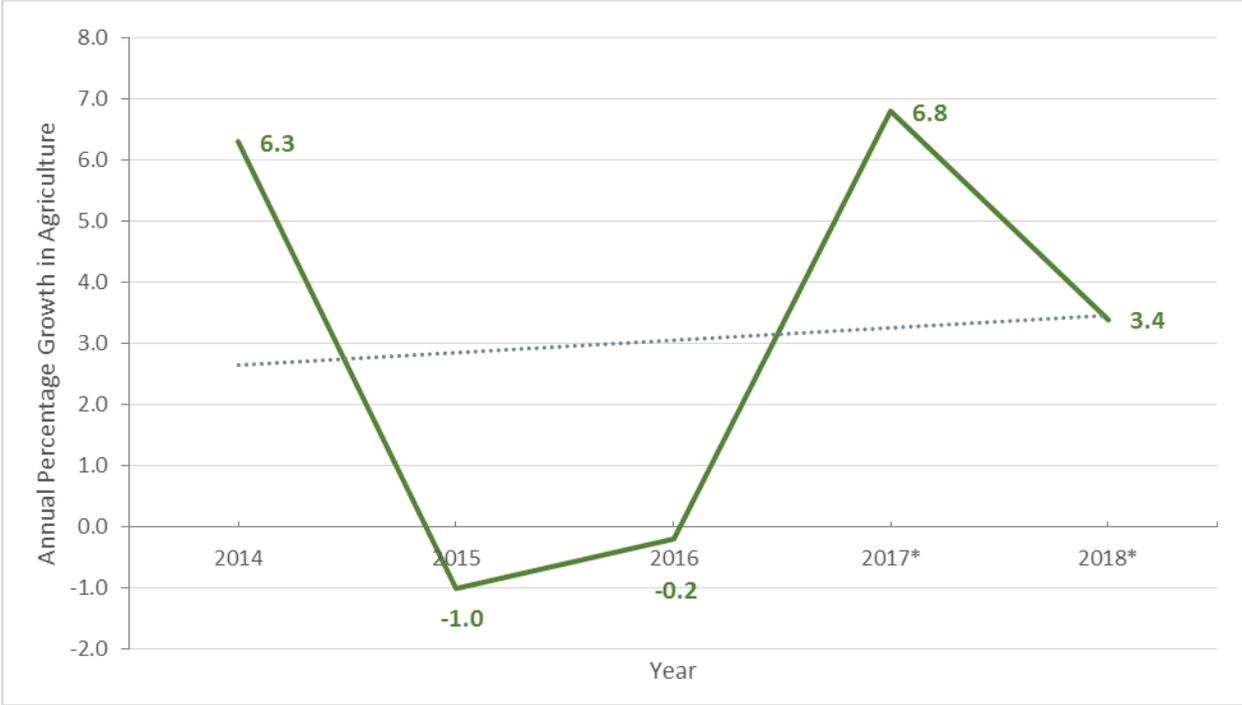
Source: World Bank (2017)

The Government of Malawi (GoM) recognizes the important role that agriculture plays in driving economic growth and human development of the country, as highlighted in the MGDS III². To this end, the GoM for the past decade has continually allocated more than 10 percent of the annual national budget to agriculture. This is also in line with the Comprehensive Africa Agriculture Development Programme (CAADP) compact that Malawi signed in April 2010. CAADP stipulates that countries allocate at least 10 percent of their annual national budgets to the sector in order foster agricultural GDP growth of more than 6 percent per annum. Despite such investments, annual agricultural growth in Malawi has fluctuated around 3 percent per annum for much of the post-independence period. Agricultural gross domestic (AgGDP) has also

² The Malawi Growth and Development Strategy III is in its final stages of development and reference here is made to the draft version that was made accessible to various stakeholders in the nation during the process of developing the document.

been highly volatile, fluctuating from year to year in line with weather variability over the same period, suggesting serious weaknesses and a lack of resilience in the agriculture sector. For instance, in 2015 the sector registered a 1.0 percent decline in growth, the same year that the country experienced devastating floods, and in 2016 the sector registered an additional decline of 0.2 percent as the country experienced drought as a result of the El Nino effect. In contrast, significant agricultural growth of approximately 6.8 percent is estimated to have occurred in 2017, following favourable rainfall in the country (Figure 1-2).

Figure 1-2: Annual percentage (real) growth in agriculture and associated linear trend



*Projections

Source: National Statistics Office (NSO) and Department of Economic Planning and Development (DEPD) (2017)

1.2 Structure of the Agriculture Sector

The agricultural sector in Malawi can be characterised as having three sub-sectors, namely the smallholder subsector, the medium-scale or emerging-farmer subsector and the estate subsector (Jayne et al, 2016). Each subsector contributes to overall agriculture growth with smallholders estimated as contributing the bulk of agricultural production (GoM 2017; Jayne et al, 2016). This implies that most of the sector’s growth relies on resource-poor smallholder farmers who continue to exhibit low agricultural productivity because of low access to farm inputs, irrigation, and agricultural extension and advisory services, among many other factors. Nonetheless, the growing share of the medium-scale farmers presents both opportunity and threats to the sector’s performance and will require appropriate policies and support to harness the potential from this growing middle.

The agriculture sector is also dominated by two crops, *maize* for food security and *tobacco* for export earnings. Such dominance has meant that most policy instruments and public investments

in agriculture have prioritized these two crops, resulting in an undiversified crop, livestock and fisheries production mix. This has further exposed the sector to commodity-specific shocks, such as volatility in maize and tobacco prices, and commodity-specific production risks such as fall armyworm in the case of maize. This lack of diversification in the country's production narrows the country's growth potential and its export base. Moreover, the lack of agricultural diversification has hampered progress on addressing malnutrition due to low dietary diversity in the country.

Most of the country's crops continue to be produced under rain fed production systems by resource-constrained smallholder farmers. Tobacco, groundnuts and pigeon peas are produced as cash crops, while maize is produced as a food security crop on a subsistence basis. Average land holding sizes are around 0.6 hectares and less than one fifth of smallholders produce a marketable surplus (NSO, 2011). Even with good maize yields, the relatively small landholding sizes are inadequate to produce enough food to feed the average family throughout the year (WFP, 2010). In addition, the country's high population density has placed intense pressure on other natural resources that are essential for sustainable and resilient agricultural growth, including soil health and water resources. There is therefore an urgent need to address land resources pressure through proper land use planning and dedicating idle estate land to production of various commodities. Indeed, it is encouraging that in the foregoing year, new land laws have been assented to and there are plans to begin addressing the pressure on land resources, which is affecting agriculture.

While the livestock population in Malawi continues to increase, production and consumption of livestock products remain very low in the country. The value of livestock in Malawi was estimated to be MK317.2 billion in 2016, up from MK174 billion in 2008, while the value of products from livestock increased from MK69 billion to MK760 billion in the same period. Similarly the value of fisheries and aquaculture products in Malawi continued to increase, with estimates showing that capture fisheries for 2016 were valued at MK108.837 billion, while the value of aquaculture products was MK15.814 billion. Unfortunately, there are no records on exports of livestock products, hence it is often assumed that all livestock products are locally consumed, which is erroneous. For 2016, domestic per capita meat consumption was estimated to be 24.06 kg while domestic per capita milk consumption was 5.1 kg. Domestic per capita egg consumption was estimated to be 5.2 eggs in 2016. These figures show that domestic consumption of livestock products is relatively low compared to other countries or recommended daily consumption levels.

1.3 The Agriculture Transformation Agenda

There is recognition of the current structure of the agriculture sector and the imminent dynamics such as increasing population and land pressure combined with the vagaries of climate change. As such, there is need for deliberate policy reforms and investments that will transform the sector for improved outcomes and wellbeing through the agriculture sector. The NAP and NAIP are the sector's policy and investment framework for achieving the aspirations of sustainable agricultural transformation in Malawi. As such, there will be a need to strategically mobilize the resources earmarked for the implementation of the NAIP.

In addition, there is need for the Government to stick to the NAIP and avoid ad hoc programmes that will derail implementation of the NAIP.

In the past year, major efforts have been dedicated to these two policy and investment formulation processes. At the core of these two policy and investment frameworks is an ambitious and business unusual approach, which is seen as necessary if Malawi is to address the impending challenges in the agriculture sector.

1.4 Mutual Accountability Structures

Agriculture joint sector reviews play a key role in supporting mutual accountability and implementing the NAP and NAIP as part and parcel of the CAADP Results Framework. Mutual accountability refers to the process by which two or more parties hold one another accountable for the commitments they have voluntarily made to one another. A framework to guide mutual accountability was developed in 2011 under CAADP in which Joint Sector Reviews were identified as a tool for operationalizing the framework. The JSR creates a platform to: 1) assess the performance of the agriculture sector; 2) assist governments in setting sector policy and priorities; and 3) assess how well state and non-state actors have implemented pledges and commitments laid out in NAIPs and other agreements. Several principles guide the JSRs including national ownership and leadership, relevance to NAIP and other cooperation agreements, inclusive participation, commitment to results by all participants, impartiality and evidence-based decision making, enhancing national planning, mainstreaming of gender, youth and vulnerable groups and making the process a learning experience.

Successful implementation of the NAP and NAIP requires joint effort and commitment from all stakeholders in the agricultural sector. However, leadership in implementation as well as coordination of JSRs and other technical meetings is largely undertaken by the MoAIWD. Support to agricultural policy formulation and implementation is also provided by other government ministries, departments and agencies (MDAs), including the Ministries of Finance, Economic Planning and Development (MoFEPD); Industry, Trade and Tourism (MoITT); Lands, Housing and Urban Development (MoLHUD); Local Government and Rural Development (MoLGRD); Natural Resources, Energy and Mining (MoNREM); and Health (MoH). While support is provided by the other ministries, representation from other ministries and cross-sectoral participation in Agriculture Sector Working Group (ASWG) and JSR's has generally been poor.

Participation in the Technical Working Groups (TWGs) and ASWG processes by development partners, the private sector, civil society organizations, academic institutions and non-governmental organizations is mostly satisfactory (GoM, 2014b). Development partners are in regular attendance at sector-wide platforms and TWGs, in some instances represented by the agricultural donor's leadership Troika, currently consisting of The World Bank, the United States Agency for International Development (USAID) and the European Union Delegation to Malawi (EU) in 2016/2017. For the private sector, the Malawi Confederation of Chambers of Commerce and Industry (MCCCI) plays a pivotal role, not only through direct representation but also

through coordinating participation among private sector firms. Other organizations such as commodity platforms and trusts have also gained prominence in recent years in terms of representing the private sector's interests in agriculture. For civil society, representation in the agriculture sector processes is coordinated by the Civil Society Agriculture Network (CISANET), a policy advocacy group that is also an umbrella body for coordinating all civil society organizations in the agriculture sector. Farmers Union of Malawi (FUM) and National Smallholder Farmers' Association of Malawi (NASFAM) are key organisations representing farmers in Malawi. All these organisations and structures are crucial for mutual accountability and coordination among them is essential for effective implementation.

1.5 Report structure

This ASPR (2016/17) is structured differently, compared to its predecessor reports. This is largely a result of the new dispensation of the NAP and NAIP (2016/17), which have identified a new set of priority areas and programmes for the sector to achieve sustainable agricultural transformation. As such, for alignment sake, the ASPR going forth will adopt the same programmes spelled out in the NAIP, for ease of aligned reporting. The M&E of the policy framework guiding the agriculture sector in Malawi (NAP and NAIP) will thus be easy to trace from the ASPR. While the ASPR 2016/17 evaluates the performance of and progress made in the agricultural sector for the fiscal year 2016/17, it also serves as a baseline for monitoring progress on implementation of the NAP and NAIP for the next five years. The ASPR 2016/17 also recognizes the transition that has taken place from the ASWAp era to the current dispensation of the NAP and NAIP; therefore, the document makes clear reference to the ASWAp framework and its Key Performance Indicators (KPIs) for ease of interpreting the progress made in fiscal year 2016/17 as it relates to the foregoing investment framework of the ASWAp.

The ASPR 2016/17 is structured as follow; Chapter one is the **introduction**, where a background on the transition from ASWAp to the NAIP era and the recent policy developments taking place in the agriculture sector is presented. This chapter provides the context and sets the stage for assessing performance of the agriculture sector in Malawi. Key highlights, in chapter one, are the recent adoption of the review of the ASWAp which was completed in 2016, approval and launch of the NAP and development of the NAIP, which will form the policy and investment framework for the sector going forward.

In chapter 2, the agricultural policy and institutional context within which players in the sector operate is described and evaluated with respect to its ability to enable sector players to perform and deliver on the goal and objectives of the NAP and the NAIP. Ongoing reforms to improve the policy and institutional framework are highlighted together with aspects of capacity of the institutions and organizations in the sector. This chapter 2 corresponds to programme A of the NAIP, on “**Enabling Environment: Policies, Institutions, and Coordination for Results.**”

Chapter 3 presents the situation on **financing and investments in the agriculture sector** from the public sector, the contributions of the development partners, civil society and the investments from private sector (both domestic and foreign).

Chapter 4 presents performance on programme B of the NAIP, **Resilient Livelihoods and Production Systems**. It highlights the agriculture sector's vulnerability to climate shocks that have bearing on food insecurity and under nutrition, and points to the need for resilience-enhancing interventions in the agriculture sector, in line with the National Resilience Plan, in order to break the cycle of food insecurity. The chapter also features the issue of the fall army worm, which attacked the maize crop in early 2017 and how the sector responded to this new pest. Other issues presented include the Africa Risk Capacity insurance policy and how it was implemented in the agriculture sector to help address food insecurity that prevailed in 2016 due to the El Nino drought phenomenon.

In Chapter 5, performance on **Agricultural Production and Productivity for Growth**, which is programme C under the auspices of the NAIP, is presented. The nature of production and commercial agriculture is showcased for the reporting period, and activities on agricultural research and development are highlighted.

Chapter 6 showcases performance of the sector on **Agricultural Markets, Value Addition and Finance for Transformation**, which is programme D in the NAIP. This chapter focuses on the downstream value chain activities in the agriculture sector and emphasizes the need to boost investments that will improve the balance of payments in agriculture (both for import substitution and exports) as well as its role in increasing value-added agriculture in Malawi.

Chapter 7 is the **Conclusion** chapter of the ASPR 2016/17 with a concise set of recommendations for moving progress forward in the next few years, with special attention to the immediate actions that need to be undertaken in the period 2017/18, to make headway towards achieving the targeted results. A key recommendation in this section is on focusing on the so-called "low-hanging fruit", which refers to those areas where meaningful progress can be achieved without substantial effort or cost. In addition, the section points to the importance of not losing the momentum of the NAP and NAIP formulation processes and emphasizes the need for concerted efforts to align investments in the sector to the programmes and priority areas identified in the NAIP and NAP respectively so that the mistakes of the ASWAp of over concentrating investments and efforts one pillar are not repeated. Other recommendation made include the need to sequence investments in line with the medium-term structure of the NAIP and the importance of coordination at grassroots levels, with special need for capacitating the entities operating at local government levels in order to improve implementation efficiency in the sector.

References follow the conclusion chapter, while **Annexes** of the ASPR 2016/17 are presented thereafter, to include the M&E matrix that contains key performance indicators used to quantitatively measure performance of the sector.

2 FINANCING AND INVESTMENTS IN AGRICULTURE

2.1 Key commitments facilitating agricultural investments

The government of Malawi signed onto the G8³ New Alliance for Food Security and Nutrition (G8NA) partnership in 2013 to strengthen investment commitments under the Country Cooperation Framework (CCF) towards enhancing agricultural and food security outcomes. Consisting of commitments from development partners, the private sector, and the government, this tri-partite arrangement aims to promote stronger coordination and mutual accountability of different stakeholders in the agricultural sector (GoM, 2014). The G8NA in Malawi is part of a broader framework of policy commitments and national goals that aims to strengthen the enabling environment for agriculture and food security investment

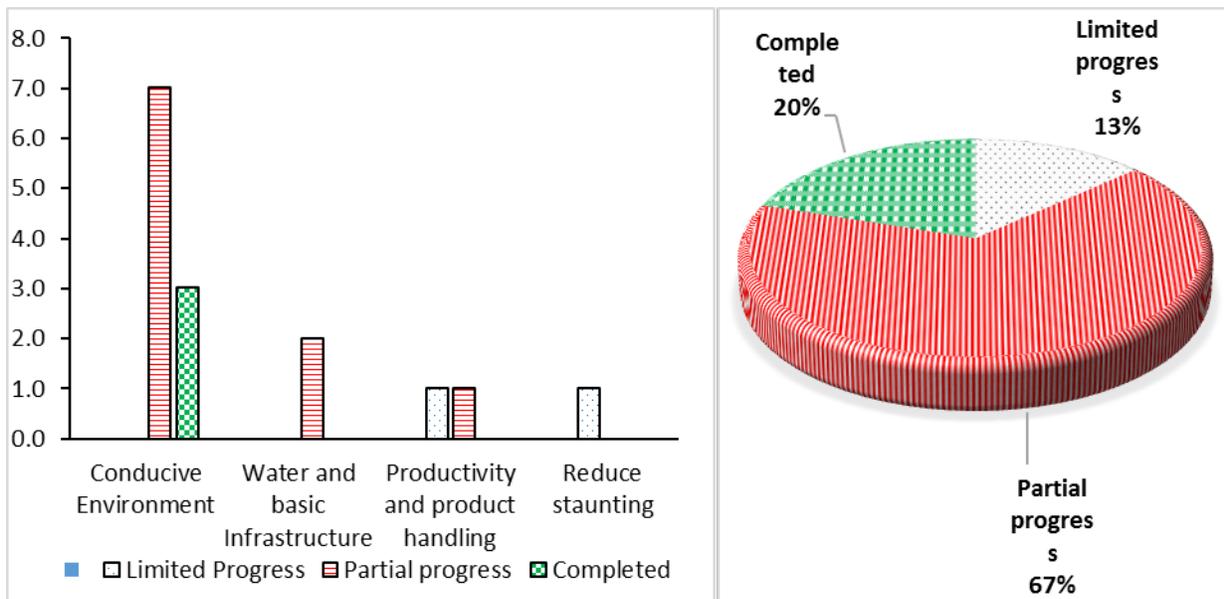
The G8NA framework complements and seeks to facilitate the country's investment plan. It is based on the principles of the CAADP/ASWAp as well as the concept of country ownership and leadership in country agriculture strategy development and implementation (GoM, 2014). In addition to the ASWAp, the G8NA also acknowledges and takes into account recommendations from the NES that are related to agricultural investment. The G8NA is also jointly implemented through the ASWAp and the Trade, Industry and Private Sector Development Sector Wide Approach (TIP SWAp). Following the completion of the implementation of the first ASWAp in 2011-2015, the second national investment plan will be implemented in the framework of the NAP and other policy frameworks such as the NES and the National Resilience Plan.

Under the New Alliance, the government of Malawi had initially committed itself to tracking 35+ policy commitments by providing human and financial resources as well as mechanisms to improve dialogue with the donor community, the private sector, farmers, and other stakeholders. The 35 policy commitments proved to be too ambitious and broad to attain, therefore the commitments have been reprioritized to 15 following a revision of the CCF that was undertaken in April 2015. Among its priorities, the government of Malawi also reaffirmed its commitment to mainstreaming nutrition in all food security and agricultural related programs. Although, the government made remarkable progress in engaging donors and wider stakeholders through program review meetings, TWGs, and dialogue meetings, there was lapses of organising TWGs meetings in 2016/17 fiscal year due to lack financial resources as the ASWAp-SP project previously used to fund activities closed during this period. This is indicative of the need to put in place reliable mechanisms for financing the TWGs and thus avoid reliance on project funding,

³ The G8 countries originally comprised 8 highly industrialised countries: UK US, France, Italy, Russia, Germany, Japan, and Canada. However, Russia was suspended in 2014 over illegal annexation of Crimea leaving the 7 countries.

which is unsustainable for such essential activities. Figures 2.1 summarizes attainment of key government commitments.

Figure 2-1: Progress on Government Commitments under the New Alliance for Food Security and Nutrition



Source: Malawi G8 New Alliance Report (GoM, 2017b)

The governments refined policy commitments into four broad policy objectives that relate to: 1) creation of a conducive environment with reduced risk in doing business and fair market returns for smallholder farmers, 2) improved access to water and basic infrastructure, 3) improved productivity, storage of produce and produce packaging, and 4) reduced prevalence of stunting. As can be seen from Figure 2.1, the government and her partners have not made good progress in implementing the commitments in 2016/17 fiscal year as many of them have missed deadlines and only recorded partial progress in these commitments (see Annex 1:). The category of policy commitments under the objective of creating a conducive environment has one commitment that has made good progress but it has the highest number of policy commitment (3) that have been completed. Policy commitments that have had no progress include introduction of agricultural zoning based on priority crops and growth clusters and review taxation regime and its implementation (see Annex 1:).

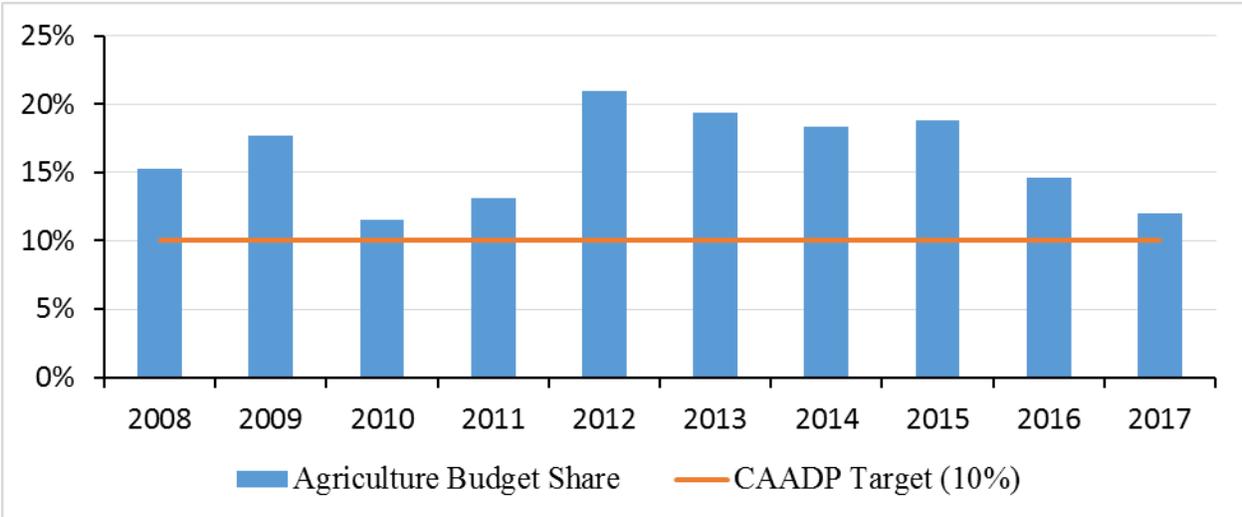
Accordingly, proposals have been put in place to revise the current generation of New Alliance commitments going forward as most of these commitments are expected to be completed and others have proven difficult to achieve because of their design. The new generation commitments have been drawn with focus on implementation of current interventions but also taking into consideration emerging issues relevant for the agriculture sector (see Annex 1:). It is expected

that more time should be committed to allow full deliberation, consensus and agreements upon the proposed commitments by all relevant key stakeholders including Government, development partners, NSAs and most importantly the private sector in the sector. The deliberations should focus on interventions necessary for full implementation of the new policies, strategies and regulations developed from the previous set of commitments and on limiting the list of commitments to a small number that is prioritised based on potential impact and urgency. Hence, the Government should draw a road map to re-design the new generation of New Alliance commitments before full adoption by stakeholders.

2.2 Government financial commitments

In line with the CAADP, Malawi has committed to spend 10 percent of the national budget on agriculture with the aim of achieving 6 percent annual average growth in the agricultural sector to significantly spur economic growth and reduce poverty. The agriculture sector also attracts a lot of donor attention and has benefited from significant development funds for decades. As illustrated in Figure 2.2 below, the volume of funding to agriculture must be deemed to be adequate because allocations to the sector lies above 10 percent CAADP commitment. Since 2010, allocations have been increasing accounting a little over 20 percent of the national budget at their peak in 2012 and then stabilized until 2015. However, allocations have declined from 2016 partly due to the reduction in development budget and marginal reduction in FISP allocations following the reforms in agricultural subsidy programme. Despite this trend, Malawi has successfully achieved CAADP commitment of a minimum 10 percent resource allocation to the agricultural sector.

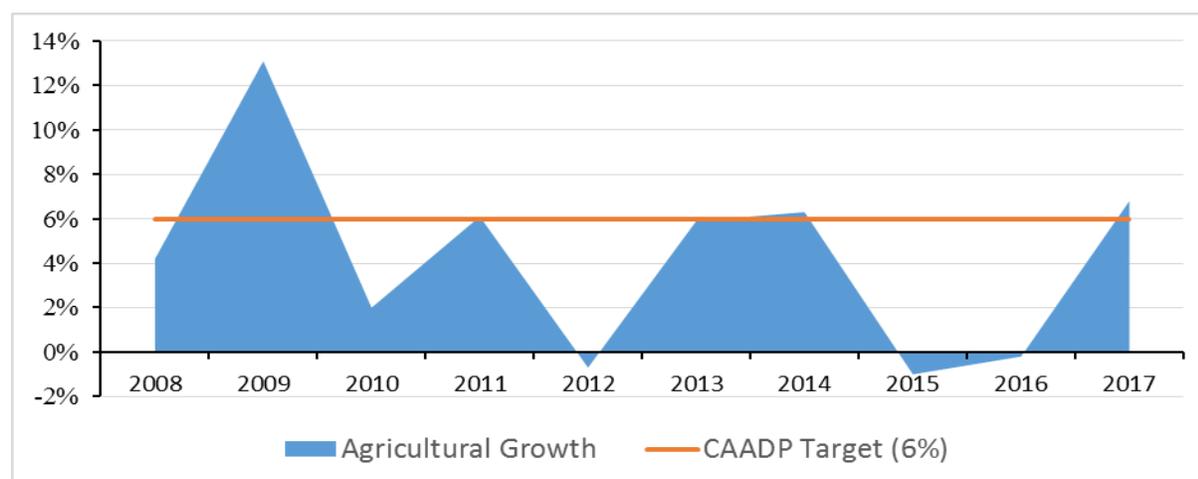
Figure 2-2 Share of Malawi’s public expenditure in the agricultural sector



Source: Government economic reports (GoM, 2017a)

While the country has consistently surpassed the 10 percent CAADP target (even before signing the CAADP Compact), this commitment has not always translated into a 6 percent agriculture sector growth over the duration of the ASWAp.

Figure 2-3 Agricultural GDP Growth Rate (2008-2017)



Source: Annual Economic Reports (2012, 2014 and 2017)

Figure 2-3, illustrates that the country was unable to attain the 6 percent agricultural gross domestic product (AgGDP) growth target in 2010 and 2012 since signing of the CAADP Compact. Worse still, agricultural growth in 2015 and 2016 was negative due to adverse weather-related shocks (including floods, dry spells and drought) and unstable macroeconomic conditions (MoFEPD, 2017). Moreover, the concern over the years has been rebalancing budget allocations to key strategic areas in the sector that can stimulate productivity and growth. In addition, distribution of such budget allocations across various hierarchical levels (headquarters, regional and frontline) has been an issue raised in the last Agriculture Sector Performance Review (World Bank, 2013).

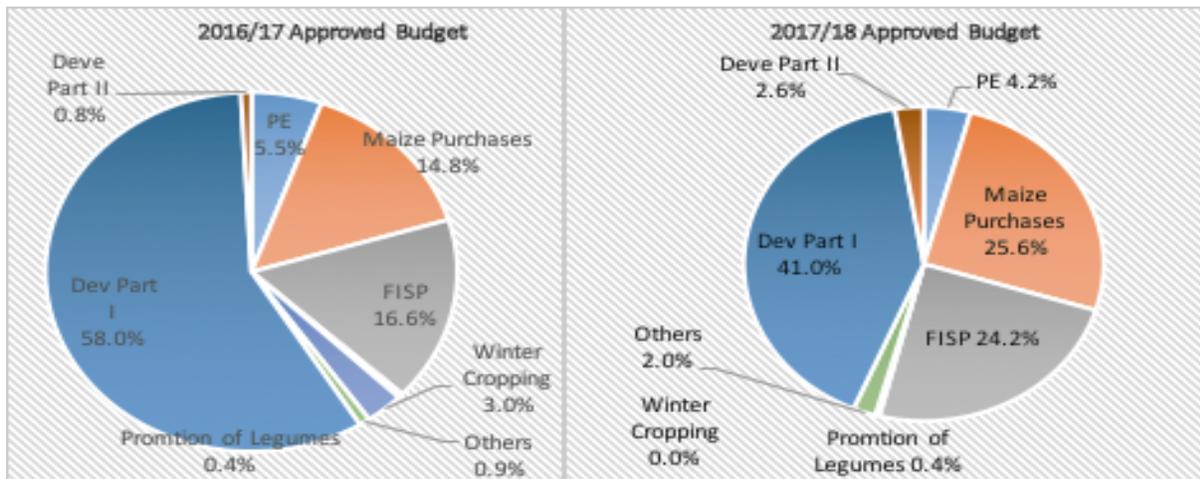
As indicated in Table 2.1, the Ministry received about MK136, 894 million in 2017/18 fiscal year, representing 31 percent nominal reduction from their MK199, 718 million allotment in 2016/17 fiscal year. Government has also allocated more funds directly to the district assemblies and Green Belt Initiatives to boost activities in Agriculture Fisheries and Irrigation based on the decentralisation process. More than half of the budget's recurrent allocations fall into category called Other Recurrent Transaction (ORT) which will likely finance farm inputs subsidies and maize purchases slightly higher than the 2016/17 allocations (See Figure 2.4).

Table 2-1: Summarized agricultural budget allocations Ministry (MK-Million)

Descriptions	2016/17 Approved	2016/17 Revised	2017/18 Approved	Year on Year Increases (%)
Recurrent	82,225	86,968	77,194	-6%
Capital	117,488	93,898	59,700	-49%
Total Ministry	199,713	180,866	136,894	-31%
Green Belt Authority	300	412	2,723	808%
Assemblies	1,959	1,959	12,017	513%
Total Agriculture	201,972	183,237	151,634	-25%

Source: Government Budget Documents (GoM, 2017c)

Figure 2-4: Summary of Key Budget Allocations in the Ministry



According to Figure 2.4, agriculture inputs subsidies and maize purchase continue to dominate allocations among agricultural activities, with input subsidies and maize purchases taking the lion’s share (31.4 percent in 2016/17 and 50 percent in 2017/18). While some evidence suggests that the FISP is a commendable investment, there is need to balance resources to include increased investments in other key priority areas in the agricultural sector such as livestock, extension, irrigation, market development, research and development. The FISP mostly involves subsidizing maize seed and fertilizer for smallholder farmers who are given vouchers or coupons allowing them to buy subsidized farm inputs. Further, allocation to maize purchases has been the highest over the past few years considering the floods in 2015 and drought and dry spells in 2016 that had devastating effects on maize productivity.

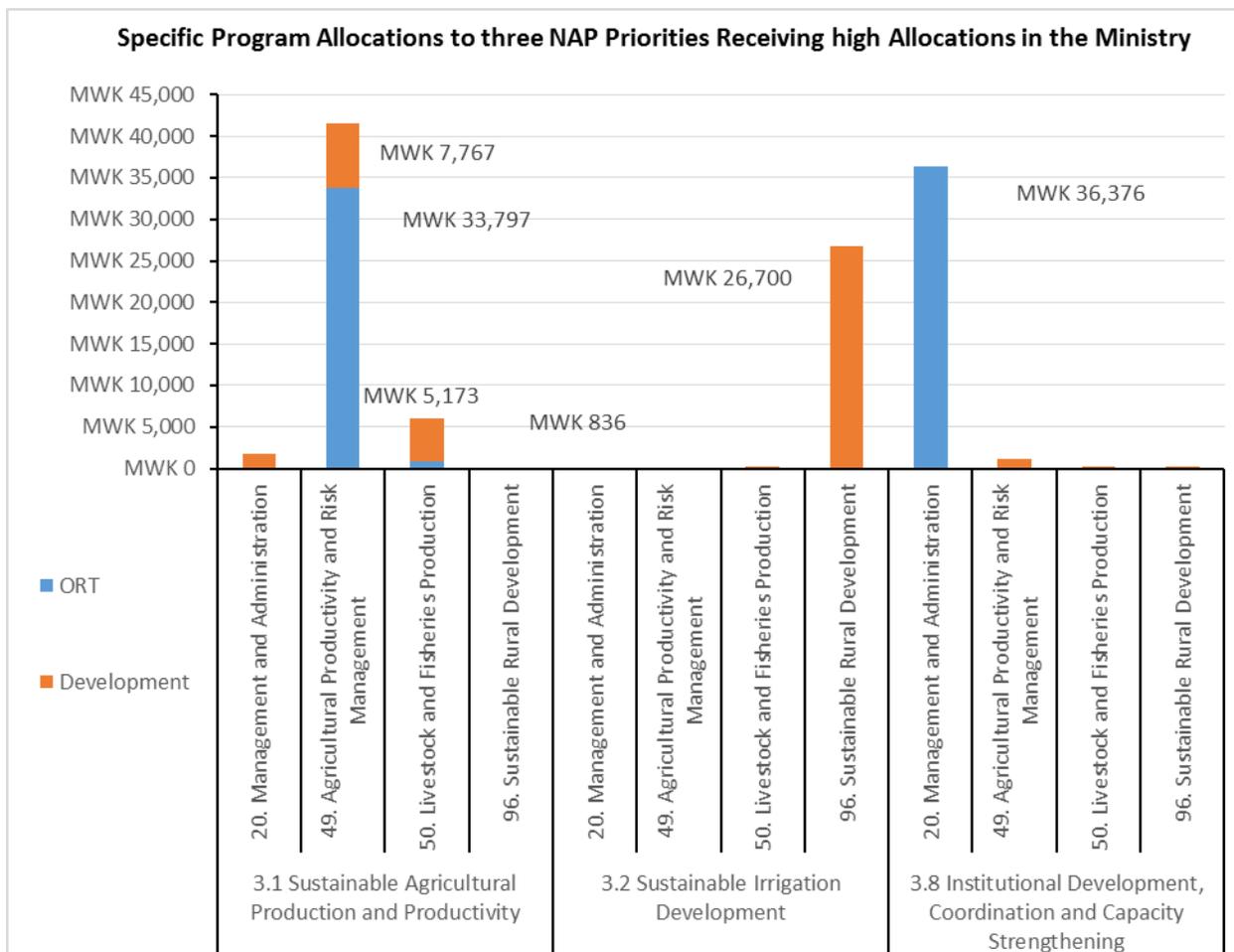
2.3 Alignment of Ministry budget to National Agriculture Policy

Government of Malawi adopted the Programme-Based Budgeting (PBB) in June 2016. The formulation of the PBB is supposed to be linked to the strategic documents of the sectors. Hence, agriculture as a ministry has formulated its 2017/18 budget based on the National Agriculture Policy (NAP) which is in line with the MGDS III. Figure 2.5 highlights how the Ministry budget has been aligned with the NAP priority areas. The pie chart of this figure shows that out of the eight priority areas provided in the NAP, only three priorities have received a lion’s share of the Ministry budget both recurrent and development of about 99 percent. Particularly, more funds have been allocated to Sustainable Agricultural Production and Productivity (43 percent), Institutional Development Coordination and Capacity Strengthening (33 percent) and Sustainable Irrigation Development (23 percent). While very little attention is dedicated to NAP priority areas such as Food Security and Nutrition, Agricultural Mechanisation, Agricultural Risk Management, Agricultural Marketing Development, Agro-processing and Value Addition, Empowerment of Youth, Women and Vulnerable Groups in Agriculture.

The bar graph in Figure 2.5 provides further analysis on what has been allocated to the three priorities areas receiving a large share of the budget in terms of Other Recurrent Transactions (ORT) and development program allocations. The program on Agricultural Productivity and Risk Management in the NAP priority of Sustainable Agricultural Production and Productivity

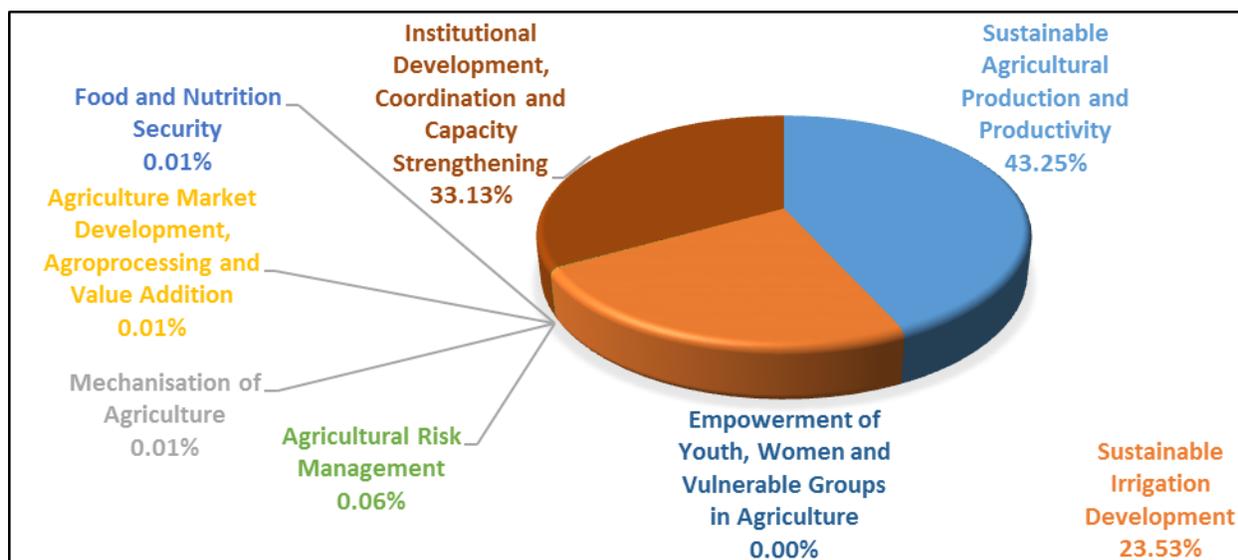
has been allocated more ORT budget to support the FISP program. Worth noting however is that support to Livestock and Fisheries Production program will be supported by development budget and very little from ORT. On Sustainable Irrigation Development NAP priority area, more funds have been allocated to Sustainable Rural Development program in support of irrigation development projects most of which are still in the planning phase. Management and Administration program has received more ORT budget allocations under Institutional Development Coordination and Capacity NAP priority areas. Most of these funds are going to support maize purchases to restock Strategic Grain Reserves (SGR) which were wrongly recorded but were supposed to be allocated under NAP priority area of Sustainable Agricultural Production and Productivity.

Figure 2-5: Alignment of the NAP priority areas with Ministry budget allocations



Source: Ministry's Annual Work Plan and Budget Documents (GoM, 2017d). **Note:** In the bar chart, only few allocations have been highlighted and the rest were very insignificant to be highlighted

Figure 2 6: Alignment of the NAP priority areas with Ministry budget allocations



Source: Ministry's Annual Work Plan and Budget Documents (GoM, 2017d). **Note:** In the bar chart, only few allocations have been highlighted and the rest were very insignificant to be highlighted

Furthermore, budgetary allocations to research and extension services remain the lowest among the programs under the Ministry. Although, there is an increase in budget allocations to finance irrigation activities under development, agricultural inputs and subsidies dominate allocations among agricultural activities with FISP and maize purchases taking the lion's share (50 percent) of total allocations. To fulfil the policy goal of the NAP, creation of future programs in the anticipated new National Agricultural Investment Plan (NAIP) will require a more balance approach between capital and recurrent budget allocations as well as identifying an appropriate allocation across all priority areas of the NAP for the sector to meaningfully contribute to achieve sustainable economic growth and poverty reduction targets.

2.4 Development partners' financial commitments

Total Commitment and Funding Arrangement

The current total funding from Development Partners through different projects, whose average period is 4.2 years, is USD1.463 billion (compared to USD1.151 billion at same period in 2015/16). This funding to the agriculture sector is provided through donor-funded projects under development budget and off-budget support through discreet projects. Currently, there are 99 donor projects in operation (compared to 107 projects in 2015/16). Implementing partners of DP projects range from Government Departments, Civil Society Organizations and Private sector including the financial institutions. The reporting financial year continued to witness the successful implementation of the Multi Donor Trust (MDTF), into which five DPs are pooling resources together to support government priorities reflected in the ASWAp.

Table 2-8: Development partner total commitments and disbursements for ongoing programs (USD' million)

Development Partner	Total Donor Commitment	Total Disbursement to date	Disbursement in 2016/17
WB	433.8	114.92	40.80
IFAD	66.6	26.30	11.03
DFID	93.6	64.00	11.99
USAID	202.3	45.29	44.28
EUD	267.6	93.34	37.56
AfDB	107.8	43.53	15.37
Ireland	38.1	18.21	4.17
Norway	99.9	44.22	15.93
Flanders	30.3	13.62	7.13
JICA	24.9	6.43	1.39
Germany	22.1	11.21	2.03
WFP	14.9	1.74	0.48
FAO	60.5	10.36	5.85
UN Women	0.6	0.36	-
Total	1,463.2	493.5	198.0

Source: DCAFS database

Table 2.2 provides a summary of consolidated donor financial resources committed to the sector, total disbursement to date and disbursement in the 2016/17. The figures shown in Table 2.2 do not include past and ongoing support provided to food security through humanitarian intervention. As of 2017, 34 percent of the committed resources have been disbursed as the disbursement rates depend on program planning and progress. In the 2016/17, total disbursement was USD198.0 million, while cumulative is USD493.5 million.

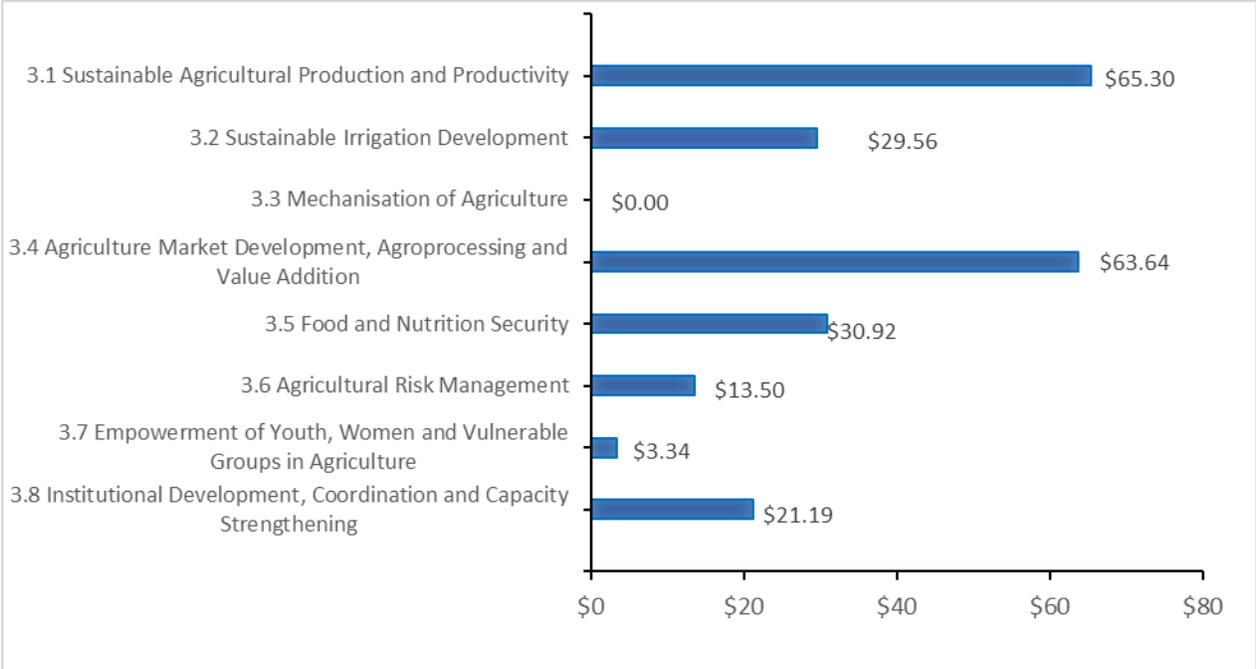
Developments partners committed to implementing several enabling actions in support of both private sector investments and government policy development as a means of fulfilling commitments under CCF. Based on the DCAFS database, investment in the agriculture sector has increased from USD198.0 million in 2016/17 to USD309.93 million in 2017/18. Compared to the Government budget, agriculture budget increased from USD251 million in 2016/17 to USD\$263 million in 2017/18. This shows that in the fiscal year 2016/17, DPs contribution was lower than government budget to agriculture sector as most funds were allocated to humanitarian aid following the weather shocks during this period.

DPs Budget Alignment and Distribution to NAP Priorities

The NAP which was developed through a consultative process defines the vision of the agriculture sector in Malawi in the next 5 years. To achieve this vision, however, there is need to strive to align and re-balance investments to the NAP priorities. An analysis therefore has been made of the DPs projects to NAP priorities using the budget allocation to the ASWAp as provided in the DPs database (see Figure 2.6). The purpose of this exercise is to inform

discussions among various stakeholders in the agricultural sector on re-balancing investments to the sector based on the agreed priorities. According to Figure 2.6, development partners allocate more funds to sustainable agricultural production and productivity and agricultural market development agro-processing and value addition. It should be noted that most of these resources are going towards road rehabilitation to improve access to agricultural markets. In contrast, very little is allocated to empowerment of youth women and vulnerable groups in agriculture and nothing has been invested into mechanisation. The latter is also true with government allocations to the agriculture sector.

Figure 2-9: Alignment of the NAP priority areas with DPs Projects (USD' Million)



Source: DCAFS Database

Lessons Learned and Key Issues from DPs investments in the Agriculture Sector

1. It is evident that the annual Development Partners investment to the sector has been increasing over the past years except in 2016/17 and surpassing government allocation to the sector. This is demonstrating continued growing partnership, effective dialogue and engagement between DPs and Government.

However, it is noted that the number of DPs projects remain very high despite ongoing discussions on harmonized and coordinated investment to the sector. The MDTF is envisaged to be a model to be adopted by most DPs and move towards funding a common program under a specific NAP priority area. For example, a trust fund on M&E, Irrigation development, Extension and Research. This will demonstrate commitment and moving to achieving CAADP principles which include harmonized funding.

2. The above diagram clearly shows unbalanced investment to the ASWAp and NAP priorities by the DPs. This trend is almost similar to the government budget (highest

investment to Food Security and Risk Management). This therefore calls for an open engagement between DPs and Government to re-balance budget allocations to the NAP priorities. Furthermore, government need to take strong leadership role to engage and advise DPs on where to inject more resources in an effort to achieve the sectors goals. The concern for Malawi of such an unbalanced allocation of resources is that the country would not achieve the commercialization agenda as well as ably achieve sustainable agricultural growth and transformation. Experience elsewhere in the world is that sustained growth is driven by corresponding investments in research, extension and development (R&D) and rural infrastructure, among others.

3. The DPs projects are implemented by government and Non-State Actors. Through Challenge Fund, there is an opportunity for the DPs to motivate private investments across the NAP priorities through targeted priority funding.

2.5 Private sector financial commitments

In keeping with the principle of mutual accountability, the African Union Commission, mandated Grow Africa⁴ to engage companies who signed for the Letters of Intent (LoIs) on the implementation progress of the LoIs under the New Alliance Compact. In the context of this mandate, there is an annual stocktaking exercise, which generates input into the annual reporting. In view of the foregoing, Grow Africa conducted an internal review of the LoIs portfolio between the last quarter of 2016 and the first quarter of 2017, and assessed their activeness based on: level of reporting in the past 3 years, commitment to the partnership, and the status of the LoIs. Out of this process, companies were categorized as *action required*, *continuation*, and *lapsed* (Refer to Table 2.3 in the 2017 New Alliance Report).

According to Grow Africa, a survey was launched in the first half of 2017 in the 10 New Alliance countries. The survey suffered serious apathy challenges to the extent that it was suspended between May and June 2017. At the time of the suspension, the overall response rate in all the countries was too low to make meaningful analyses. For Malawi, out of 25 LoIs invited to the survey only three responded. It is reported that the companies mostly, expressed unwillingness to participate in the survey owing to several reasons including the tough and changing business environment, while the survey was tracking static commitments made over a number of years. The slow pace of key reforms was also cited as an issue. This collaborates the one major finding of an independent review on New Alliance carried out over the same period. The review noted the growing loss of interest on the part of the private sector on the New Alliance discourse.

Given these challenges in data collection for reporting, it could possibly be a proxy for the weaknesses and challenges in the LoI model for private sector engagement in the New Alliance. The fact that this is a challenge happening beyond Malawi to other New Alliance countries, strengthens this suspicion. Specifically, there might also be a possibility for weaknesses in the methodologies employed in the management of the model. On the other hand, businesses have been known to be cautious with corporate/business information even

⁴ Grow Africa, is an initiative founded by the African Union Commission, the New Partnership for Africa's Development – (NEPAD Agency) and the World Economic Forum (WEF). It is African, country-led multi-stakeholder platform to accelerate investment into African agriculture in support of the CAADP.

with that information which ordinarily might seem harmless to share. This might also explain the survey apathy. However, even if there was no apathy, the credibility of the self-reporting approach, in the absence of independent verification, is questionable. It is time to rethink of the whole LoI model. For 2017, private sector did not provide that information required in the New Alliance discourse hence reporting is based on available cumulative information.

New Alliance Investment Intentions

Based on available information, on investment commitments, progress is summarized in Table 3.3. So far, proportion of reported investment to date is 35 percent (USD81.5 million in total). Out of 30 LoI commitments, only 22 are continuing, 2 performed well ahead of schedule while there was lapses in performance of 6 LoI companies.

Table 2-10: Performance of LoI companies

Status of LoIs	
Total LoI Commitments	30
Overall Investment Intentions	USD230 million
Reported Investment in 2015	USD41.9 million
Cumulative investment	USD81.5 million
Proportion of reported investment to date	35%
LoIs that responded to survey in 2017	3
Continuation	22
Performing well/ ahead of schedule	2
Action Required	2
Lapsed	6

Source: Grow Africa Updates (2017).

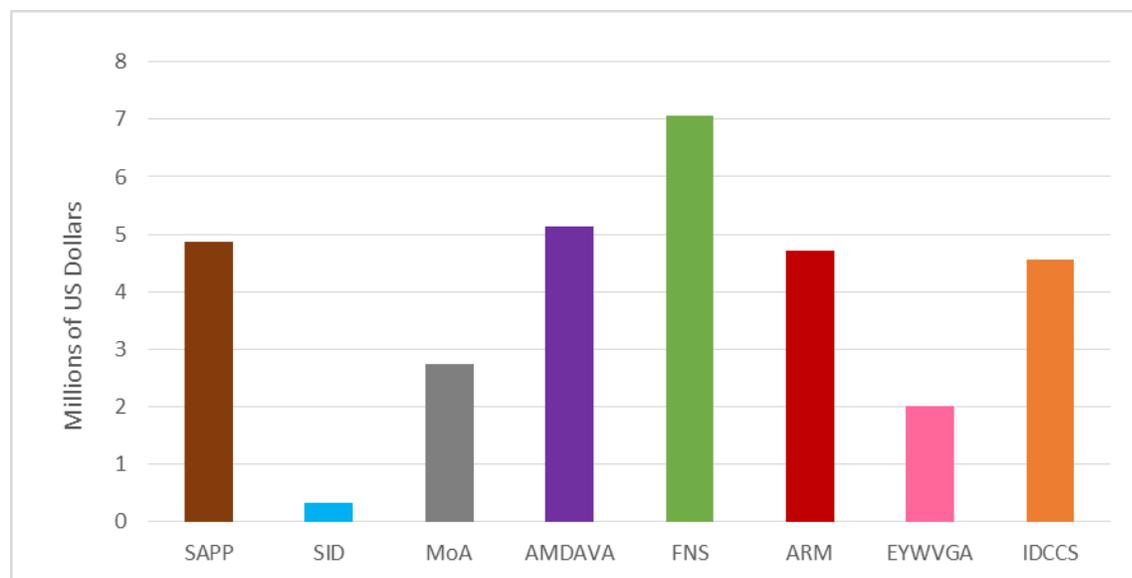
2.6 Civil society financial commitments

Recognizing the effective networking and coordination role of Civil Society Agriculture Network (CISANET) in the agriculture sector, the MoAIWD commissioned CISANET to collect financial data related to investments made in the agricultural sector from non-state actors. This call by the Government is in line with the CAADP mutual accountability principles, which, among others, call for all players in the sector (state and non-state actors) to report progress on their commitments and pledges to the sector. Although CISANET is a member-based organisation, it collected the information from both its members and non-members that operate in agriculture sector. The information was collected from organisations that have agriculture-related projects that are in line with NAP.

Both local and international non-state organisations working in agriculture sector in Malawi were approached and in total, CISANET requested data and information from 61 organisations. Unfortunately, only 26 organisations provided information to CISANET as part of the exercise. While data were not collected from all organizations, the findings based on the data that CISANET was able to collect provide some insight into non-state financial alignment to the 8 priority areas of the NAP. On funding sources, the sampled projects show that 86 percent

(USD26, 968, 279.04) of the projects are funded by external donors while 14 percent (\$4, 390, 184.96) are funded by internal donors.⁵

Figure 2-11: Total budget allocation of CSOs according to NAP priority areas (USD)



Source: CISANET (2017).

Note: SAPP = Sustainable Agricultural Production and Productivity, SID = Sustainable Irrigation Development, MoA = Mechanisation of Agriculture, AMDAVA = Agricultural Market Development, Agro-processing and Value Addition, FNS = Food and Nutrition Security, ARM denotes Agricultural Risk Management, EYWVGA = Empowerment of Youth, Women and Vulnerable Groups in Agriculture, and IDCCS = Institutional Development, Coordination and Capacity Strengthening

Figure 2-11 above shows that CSOs' projects funding mainly focused on Food and Nutrition Security (FNS) among the eight priority areas that NAP targets. A total of US\$7, 074, 446, representing 22.5 percent of the total funds for the sampled non-state projects was invested in FNS.

Very few projects and funding under non-state projects were targeted to Sustainable Irrigation Development; Mechanisation of Agriculture; and Empowerment of Youth, Women and Vulnerable Groups in Agriculture. The data show that US\$326, 207, US\$2,751, 000, and US\$2, 018, 371 were allocated to active agricultural projects that are in line with these three NAP priority areas respectively, representing 1.0 percent, 8.7 percent and 6.4 percent of the total funding under the sampled non-state projects sampled.

The projects' low funding on Sustainable Irrigation Development is somehow worrisome as it may lead to slow expansion of irrigation activities. According to National Irrigation Policy (NIP), it is estimated that the country has 407,862 hectares of irrigation potential but only about 104,634 hectares were developed by the year 2015. Since non-state organisations exist to complement government efforts on all the NAP priority areas, it is worrisome that very few projects by non-state actors focus on Sustainable Irrigation Development.

⁵ See Annex 3 for CSOs summary data base

According to NIP, the development of irrigation has been less than the desired level due to a number of factors that include inadequate financial resource mobilisation, high development costs (i.e. US\$ 9,000 to US\$15,000 per hectare), un-harmonised irrigation development initiatives, environmental degradation, customary land disputes and limited participation of stakeholders. The NIP aims at addressing these issues so as to achieve sustainable development of irrigation infrastructure. Therefore, there is need for non-state actors to invest more financial resources in irrigation development. The NIP calls on Civil Society Organisations (CSOs) to provide services, equipment and materials for development of irrigated agriculture.

During the data collection, CISANET met some challenges which needs attention from MoAIWD to make future similar exercise smooth. The following are major challenges that CISANET encountered during the exercise:

- a) Some organisations deemed it sensitive to provide information via CISANET. They said there was no formal MoAIWD backing for CISANET to collect the information. Some of the organisations that provided information did so on condition that the information will remain confidential and that it can be represented as a combination of all other organisations' projects.
- b) Other organisations questioned the mandate of CISANET to collect such information from non-members of the network.
- c) Failure by CISANET personnel to physically visit all the organisations mainly outside Lilongwe due to lack of funds.

In future exercises, there is need for the MoAIWD to co-sign CISANET letter that is addressed to organisations requesting for this data. This will prove authenticity of the exercise and make it easier for non-state organisations to comply with the call for submitting financial data.

3 ENABLING ENVIRONMENT: POLICIES, INSTITUTIONS AND COORDINATION FOR RESULTS

3.1 Overview

Malawi’s agricultural development agenda is driven by several national, regional, and international policies, commitments, and cooperative agreements (Table 3-1). The country’s overall development agenda is largely driven by the Vision 2020 framework and the MGDS III, where agriculture and food security are identified as key priority areas to foster economic growth and development. The agriculture sector’s transformation agenda is driven more specifically by the NAP and the NAIP, which follow on the ASWAp that was implemented between 2011 and 2016. In the Vision 2020 framework,

Table 3-1: Key policies, strategies, plans and frameworks affecting Agriculture

Policy/Strategy/Agreement	Description	Timeframe
Vision 2020	A long-term strategy that prioritizes agriculture and food security to foster economic growth and development	1998-2020
MGDS	medium term policy framework for social and economic development adopted to mitigate poverty through sustained economic growth and infrastructure development	2011-2016/ 2017-2021
National Agriculture Policy (NAP)	The overarching national policy on agriculture that guides the agricultural transformation agenda in the sector, provides policy coherence, and enhances institutional efficiency and coordination	2017-2021
ASWAp/ NAIP	Prioritized investment plan in the agricultural sector based on priority agricultural elements of the NAP, the MGDS and is aligned to AU/CAADP/Malabo framework.	2011-2015/2017-2021
National Irrigation Policy (NIP)	The national policy that spells out the priorities for investment and institutional reform to facilitate increased sustainable irrigation in Malawi. The NIP is closely aligned to the NAP.	2016-2021
National Irrigation Master Plan and Investment Framework	Provides a detailed technical analysis of irrigation opportunities in Malawi and is a blueprint for long-term irrigation investments in Malawi up until 2030	2015-2030
CAADP Compact/Malabo Declaration	A strategic framework of the New Partnership for Africa’s Development (NEPAD) aimed at guiding African countries development efforts and partnerships in the agriculture sector	2003-2063
New Alliance for Food Security & Nutrition	A country cooperation framework that stipulates national policy reform commitments to provide support within the agricultural sector with the overall goal of facilitating increases in private investment and scaling innovation	2013-2022
Other Agriculture Sub-Sector Policies and Strategies	Agricultural Extension and Advisory Services Strategy; National Fertiliser Policy, Seed Policy, Contract Farming Strategy, Farmer Organisations Development Strategy, Agriculture Sector Food and Nutrition Strategy, Fisheries and Aquaculture Policy, National Livestock Policy, Ministry of Agriculture, Irrigation and Water Development Strategic Plan	Various years
National Export Strategy (NES)	A strategy formulated to provide a prioritized road map for developing Malawi’s productive base to allow for export competitiveness, export diversification, and overall economic growth and empowerment	2013-2018

Policy/Strategy/Agreement	Description	Timeframe
National Trade Policy	Launched in 2016, this is the overarching policy on trade in the country, including agricultural trade.	2017-2021
National Industry Policy	Also launched in 2016 under the MoITT, it provides the policy framework for industrialising Malawi, including the use of agricultural raw materials for manufacturing, processing and value addition.	2017-2021
Sustainable Development Goals (SDGs)	Global targets that several countries committed to for addressing several human development challenges, including poverty, health, hunger and nutrition, gender equality, education, climate change and environmental sustainability, etc.	2016-2030
SADC RISDP	A 15-year regional integration development framework that sets the priorities, policies, and strategies for achieving the long-term goals of the SADC.	2005-2020
Multi-sectoral Nutrition Policy and Strategic Plan	The Multi-sectoral Nutrition Policy and Strategic Plan was recently reviewed and approved to provide guidance and direction on strategies to improve nutrition in Malawi; It seeks to create awareness on the magnitude of the nutrition problems and impact on the individual, household and national economic development, growth, and prosperity; and galvanize the nation towards the Malabo and SDG long-term targets of eradicating under nutrition in Malawi.	2017-2021
Scaling Up Nutrition – 1000 Days Initiative; Compact2025 Initiative	Malawi is party to the Compact2025 is an international initiative of the International Food Policy Research Institute, which is designed to support countries in achieving the Malabo and SDG long-term targets of eradicating hunger and under nutrition. The Scaling Up Nutrition is another global initiative that Malawi is party to, which also aims to support strategic investments and interventions to help eliminate under nutrition.	2016-2025

Source: Authors' representation.

Note: Policies and Strategies shaded in green are those within the agriculture sector.

Enabling the Business of Agriculture

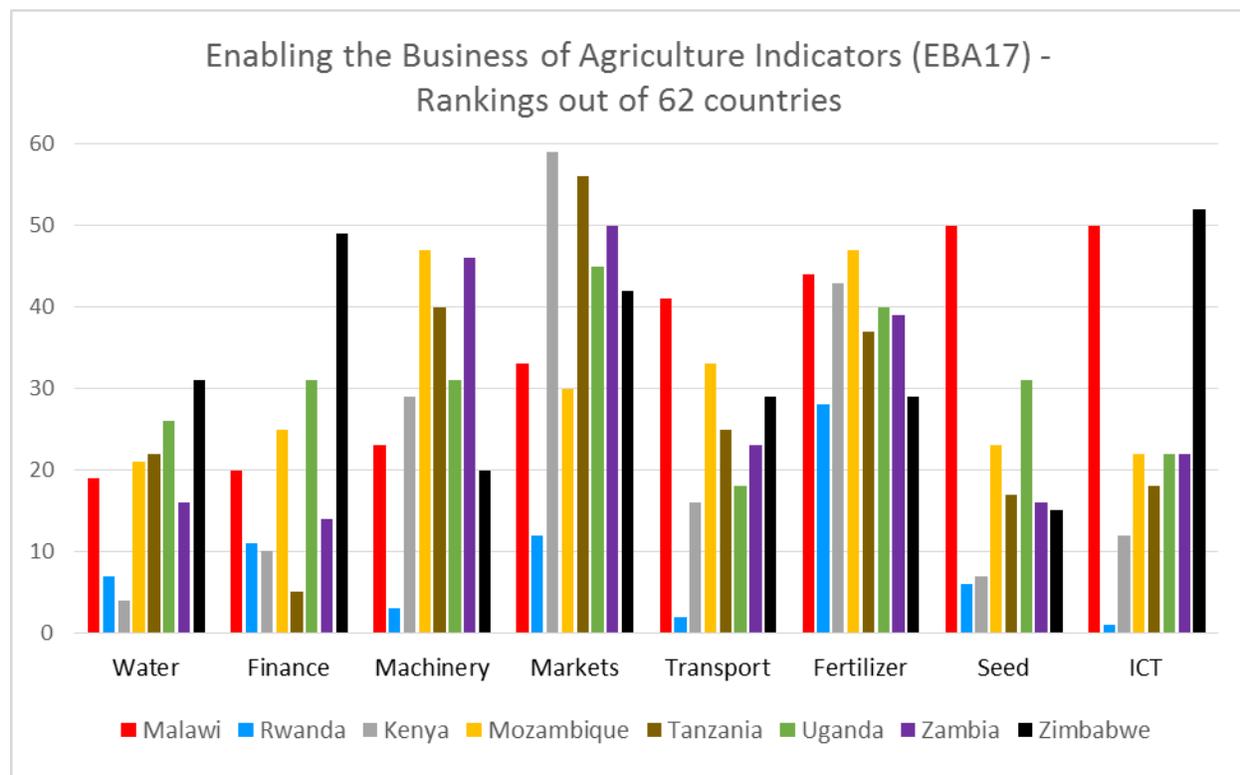
Enabling the Business of Agriculture Indicators (EBA)⁶ score countries on the quality and efficiency of their regulatory systems in as far as enabling the business of agriculture is concerned. EBA use two measures: (i) the distance-to-frontier (DTF) score or absolute distance of a country to the best performance on each topic; and (ii) the topic ranking that results from ordering DTF scores. The DTF score essentially measures how well a country does on a particular topic or domain of the enabling environment compared to the best performance in the set of countries analysed. The DTF score ranges between 0 and 100, with a higher score indicating better performance (i.e. shorter distance to the frontier/best performance measured as 100).

⁶ <http://eba.worldbank.org/>.

The World Bank's Enabling the Business of Agriculture (EBA) examines and monitors regulations that impact on how markets function in the agriculture and agribusiness sectors. The aim is to promote smart regulations that ensure safety, and quality control as well as efficient regulatory processes in support of agribusiness. The 2017 Report was third in series and Malawi was included for the first time.

During 2016/17, Malawi had an overall ranking of 33 out of the 62 countries on the EBA rankings. The country performed relatively well on the areas of water and finance for agriculture, with rankings of 20 or less out of 62 countries. While these rankings are progressive, there is still room for improvement as evidenced by better performance by other comparator countries such as Rwanda and Kenya.

Figure 3-1: Malawi’s EBA rankings relative to comparator countries.



Source: World Bank (2017a).

On most of the domains, Malawi performed below the regional average, ranking above 30 in the areas of Markets; Transport; Seed; Fertilizer; and Internet, Communications and Technology (ICT) for agriculture (see Figure 3-1). In four of these key areas, Malawi ranked above 40 out of 62. Reasons cited by the report include the fact that “while Malawi has laws related to seed and fertilizer registration, it is the country where it is the most expensive to register both new seed and fertilizer products” (World Bank, 2017a; pp8). For fertilizer, Malawi has the most expensive and lengthiest fertilizer registration process out of all 62 countries, taking 913 days (almost 3 years)⁷. For new seed varieties, it takes 579 days to clear, register and release the seeds. The overall rankings on the two indicators (seed and fertilizers) were 50 and 44, respectively, out of the 62 countries in the sample. These rankings are not progressive for an agriculture-based economy and call for major reforms to improve the regulatory and policy frameworks on seed and fertilizer in the country. Reference can be made, in this regard, to some of the critical New

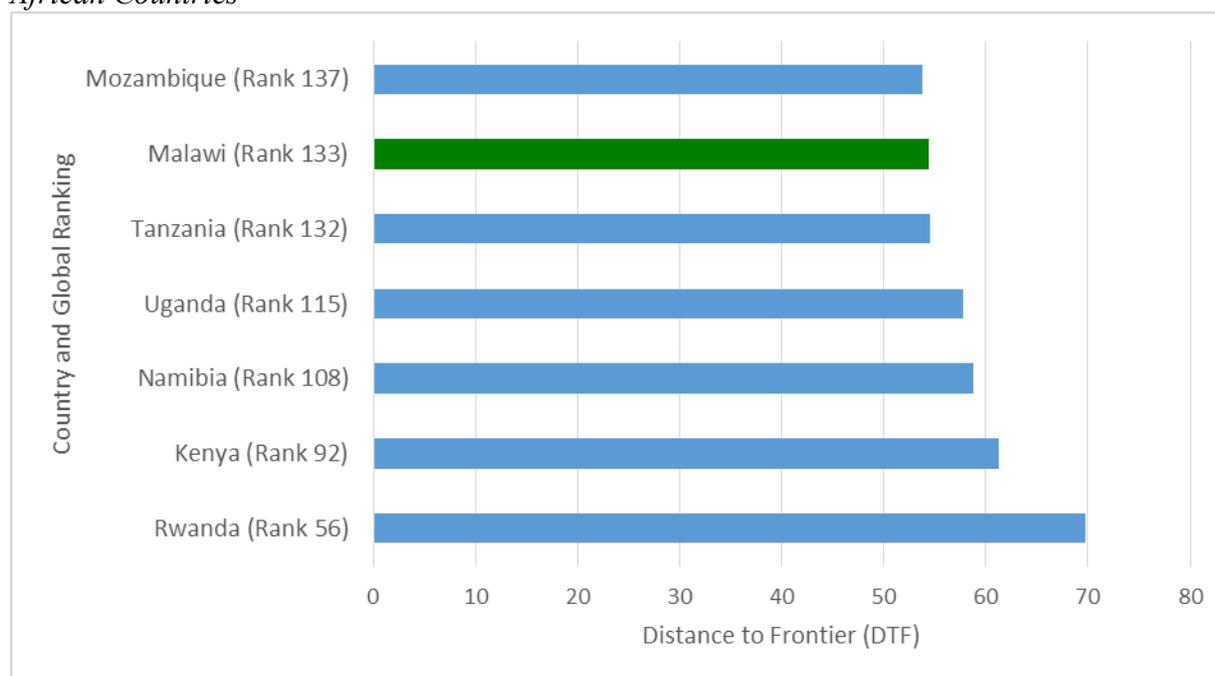
⁷ It is hoped that the new Fertilizer Policy and Bill which is at an advanced stage of development will address the challenges which characterize this important

Alliance commitments such as the Seed Policy, Fertiliser Policy and their respective bills that are under development, as well as the review of the Control of Goods Act.

Ease of Doing Business

The Ease of Doing Business Index for Malawi has improved since 2014, when it was at its worst ranking. The index improved from 141 in 2016 to 133 in 2017 (see *Figure 3-2*). This is mainly attributed to three variables on which positive reforms were made, namely: access to credit, accessing electricity and starting a business.⁸

Figure 3-3: Ease of Doing Business (2017) in Malawi, relative to comparator Sub-Saharan African Countries



Source: World Bank (2017b)

According to the World Bank’s Doing Business 2017 Report, Malawi made starting a business easier by eliminating the legal requirement to use a company seal. It also improved access to credit by adopting a new law on secured transactions that implements a functional secured transactions system and establishes a centralized, notice-based, online collateral registry. The progressive 8-ranks movement is positive news for the private sector, including in agriculture, as it goes a long way towards improving the prevailing investment climate in the economy.

⁸ Starting a Business: Malawi made starting a business easier by eliminating the legal requirement to use a company seal and making it optional for entrepreneurs. This moved 10 places on the Index. Malawi strengthened access to credit by adopting a new law on secured transactions that implements a functional secured transactions system and establishes a centralized, notice-based, online collateral registry. This had the highest progressive movement of 51 places. Getting Electricity: Malawi reduced the time required to get electricity by engaging subcontractors to carry out external connection works. This moved 4 places in the Index.

Outstanding variables, which require improvement, include: dealing with construction permits and trading across the borders. The latter is particularly of concern for the agriculture sector, as it affects incentives for agricultural production, especially for smallholder farmers who could benefit from accessing regional trade markets if the enabling environment for cross-border trade were improved. Although there has been progressive movement on the DBI, there is need to do more with speed. Regional comparison shows that Malawi falls behind some of these countries in the region such as Rwanda, Mauritius, Lesotho, Botswana and neighbouring Zambia. It is therefore a call to policy makers not to be satisfied by mere movement on the Index but to push for transformational policy reforms.

Table 3-2: Ease of Doing Business in Malawi – 2016 and 2017

Topics	DB 2017 Rank	DB 2016 Rank	Change in Rank	DB 2017 DTF (% points)	DB 2016 DTF (% points)	Change in DTF (% points)
Overall	133	141	↑ 8	54.39	51.11	↑ 3.28
✓ Starting a Business	150	160	↑ 10	76.73	69.71	↑ 7.02
Dealing with Construction Permits	65	62	↓	72.45	72.28	↑ 0.17
✓ Getting Electricity	169	173	↑	42.36	36.15	↑ 6.21
Registering Property	95	95	- 0	62.41	62.2	↑ 0.21
✓ Getting Credit	101	152	↑ 51	45	25	↑ 20
Protecting Minority Investors	132	129	↓	43.33	43.33	- 0
Paying Taxes	102	101	↓	69.58	69.7	↓ 0.12
Trading across Borders	118	115	↓	63.32	63.32	- 0
Enforcing Contracts	148	147	↓	46.48	47.09	↓ 0.61
Resolving Insolvency	162	162	- 0	22.25	22.32	↓ 0.07
✓ Doing Business reform making it easier to do business. ✗ Change making it more difficult to do business.						

Source: World Bank (2017b). <http://www.doingbusiness.org/data/exploreeconomies/malawi>

3.2 Policies, Strategies, Plans and Programmes

While it is important to measure Malawi's performance relative to other countries, in terms of the enabling environment for agriculture and business in general, it is equally important to assess

the ongoing policy reforms within the country and the efforts in the last year to improve the enabling environment in the agriculture sector. This section dives in and looks at the specific policy reform processes and efforts undertaken to improve the enabling environment for agriculture in the past year.

3.2.1 Malawi Growth and Development Strategy III

The Malawi Growth and Development Strategy III (MGDS III) was in the process of being developed during the foregoing fiscal year. The MoAIWD and various other stakeholders in the agriculture sector participated in consultations and meetings to inform the design of the MGDS III, which was being coordinated by the Department of Economic Planning and Development (DEPD). Key in the MGDS III draft is a pillar on Agricultural Growth and Climate Change Management, which is aligned to the priority areas of the National Agriculture Policy (NAP). It is envisioned that the agriculture sector will continue to be the main engine for economic growth and that there will be a transformation of the sector towards increased commercialisation and sustained and resilient growth of the sector even as other sectors grow to support the agriculture sector or draw raw materials and labour out of the agriculture sector. The MGDS III is expected to be finalised by end of 2017.

3.2.2 National Agricultural Policy

The National Agriculture Policy (NAP) is one the key policy reforms undertaken in the foregoing fiscal year. It was approved in September 2016 and officially launched by the State President in November 2016, signifying the political will behind the sector's overarching policy. The NAP has the goal of *achieving sustainable agricultural transformation that will result in significant growth of the agricultural sector, expanding incomes for farming households, improved food and nutrition security for all Malawians, and increased agricultural exports*. The NAP identifies eight policy priority areas, which will be critical for implementation if Malawi is to sustainably transform its agriculture. These eight policy priority areas are:

- (1) Sustainable Agricultural Production and Productivity
- (2) Sustainable Irrigation Development
- (3) Mechanisation of Agriculture
- (4) Agricultural Market Development, Agro processing and Value Addition
- (5) Food and Nutrition Security
- (6) Agricultural Risk Management
- (7) Empowerment of Youth, Women and Vulnerable Groups in Agriculture
- (8) Institutional Development, Coordination and Capacity Strengthening

The NAP is aligned to Malawi's Vision 2020 and the Malawi Growth and Development Strategy III, which are the overarching long-term and medium-term development strategies, respectively. The NAP priority areas and strategies have been incorporated in the National Agriculture Investment Plan (NAIP), which is the investment framework that operationalizes the implementation of the NAP.

As the NAP is being rolled out, it will be critical for it to be disseminated widely to various stakeholders in the sector to enable them to align their efforts to the priority areas of the NAP. As such, it will be important to continue disseminating the NAP together with the NAIP for

continued engagement with various stakeholders to assess progress towards attainment of the NAP goal, objectives and outcomes.

3.2.3 National Agriculture Investment Plan

Following the expiry of ASWAp and the approval of the NAP in 2016, MoAIWD led the process of developing the Successor ASWAp, namely the National Agricultural Investment Plan (NAIP). The NAIP development process, which was evidence-based⁹ and inclusive, is now in its final stages and a stakeholder NAIP validation workshop took place on 19th October 2017. The NAIP is the investment framework for Malawi's agricultural sector over the next five years (from 2016/17 to 2020/21). It intends to operationalize implementation of NAP among other things and its policy foundations are the Malawi Growth and Development Strategy III, the National Agriculture Policy (NAP), the CAADP Compact and the Malabo Declaration.

Being the second generation of ASWAP, NAIP builds on the achievements and lessons learned under the Agricultural Sector-Wide Approach (ASWAp), having drawn from the ASWAp review process, which was also concluded during the foregoing fiscal year. Whilst the MoAIWD will be the lead implementing agency for the NAIP, other stakeholders including other ministries, departments and agencies shall play important roles. In this regard, NAIP provides a framework to coordinate and prioritise investments by government agencies, development partners and non-state actors, including the private sector and civil society.

The NAIP details the public investments in agriculture, but also recognises that agricultural growth must be driven by investments of private actors. The willingness of the private sector to invest depends on a favourable enabling environment and as such the NAIP places major emphasis on improving the enabling environment for private sector investments in the agriculture sector. The NAIP adopts the goal of the NAP and has three objectives: (i) broad-based and resilient agricultural growth; (ii) improved well-being and livelihoods of Malawians; and (iii) improved food and nutrition security.

There are four programmes in the NAIP:

- i. Policies, Institutions and Coordination for Results
- ii. Resilient Livelihoods and Production Systems
- iii. Production and Productivity for Growth
- iv. Markets, Value Addition, Trade and Finance for Transformation

All four programs are interconnected to each other through sixteen integrated intervention areas as shown in Table 3-3 below.

⁹ The NAIP development process was informed by CGE modeling and twelve value chain studies, through the support of the USAID-funded NAPAS project implemented by Michigan State University, IFPRI and University of Pretoria. In addition, the FAO team that supported the MoAIWD in developing the NAIP made use of a broad set of studies in the agricultural economic and development literature.

Table 3-3: Link between the NAP and NAIP

NAP Policy Priority Areas *	NAIP Intervention Areas	NAIP Programs			
		A	B	C	D
I. Institutional dev. coordination & Capacity Development (PPA 3.8)	IA1: Coordination and M&E				
	IA2: Farmer-Based Organizations				
	IA3: Public Agricultural Services Delivery				
II. Food & Nutrition Security (PPA 3.5)	IA4: Diverse, Nutritious Food Available and Consumed				
	IA5: Food Safety and Quality Standards				
III. Empowerment of youth, women & vulnerable groups (PPA 3.7)	IA6: Empowerment and Tenure Security				
IV. Agricultural Risk Management (PPA 3.6)	IA7: Disaster Risk Reduction Systems				
	IA8: Pest and Disease Management				
V. Sustainable production & productivity (PPA 3.1)	IA9: Agricultural Innovation Systems				
	IA10: Access to Inputs				
	IA11: Natural Resource Management				
VI. Sustainable irrigation development (PPA 3.2)	IA12: Sustainable Irrigation Development				
VII. Mechanization (PPA 3.3)	IA13: Mechanization				
VIII. Market development, agro-processing & value addition (PPA 3.4)	IA14: Market Systems and Access to Markets				
	IA15: Agri-business Development				
	IA16: Access to Finance				

Source: Draft NAIP (2017).

3.2.4 Ministry of Agriculture Irrigation and Water Development Strategic Plan

Further to the development of the NAIP, the Ministry of Agriculture Irrigation and Water Development is developing its strategic plan. The plan aims at strategically positioning the Ministry in quest to operationalize implementation of NAP. The process of developing the plan involved review of the expired strategic plan with an aim of isolating key lessons. Another critical stage in the development of the Strategy was the Strength Weaknesses Opportunities and Threats Analysis which has entailed identification of relevant strategies to deal with the general weaknesses and threats while strengthening and taking advantage of the existing strengths and opportunities.

3.2.5 National Resilience Strategy

The National Resilience Strategy (NRS) is being developed by the Department of Disaster Management Affairs in the Vice President's Office. Drafting of the NRS is in the final stages. The NRS takes into cognisance that climate change impacts in Malawi have become accentuated and now pose a serious threat to life, livelihoods, economy, and development. Therefore, efforts to improve the enabling environment for agriculture must consider how to deal with vulnerability and shocks caused by climate change. In the last three years Malawi has experienced severe disasters including floods and drought, and consequently food insecurity has worsened over the same period. The National Resilience Strategy is a fifteen-year agenda to be implemented in three phases, aimed at putting vulnerable households on a more sustainable path by strengthening

their resilience to seasonal predictable shocks, and extreme shocks such as drought and floods, which are expected to increase owing to climate change.

Through the NRS, government and supporting stakeholders brings a multi-dimensional approach to addressing food and nutrition insecurity, promoting diversified and climate-smart agricultural growth, disaster risk reduction, flood control, early warning systems, environmental management, social protection, and nutrition, managed under a single common program framework and monitoring and evaluation systems, and through enhanced coordination, pooling of resources and prioritization.

The National Resilience Strategy is composed of four complementary components:

- i. Resilient Agricultural Growth
- ii. Risk Reduction, Flood Control, and Early Warning and Response Systems
- iii. Human Capacity, Livelihoods and Social Protection
- iv. Catchment Protection and Management

The component on Resilient of Agricultural Growth emphasizes support for smallholder farming interventions that will build resilience at the farm household and community levels, address access to farm inputs, training, and asset creation, and dietary diversity. Both estates and smallholder farmers will be incentivized to diversify, engage in forestry, livestock, and fisheries production through policy reforms to create an enabling environment, in line with the New Alliance for Food Security and Nutrition policy commitments of the Government of Malawi. This is in line with the goal of NAP and NAIP, which is to achieve sustainable agricultural transformation, accelerate growth of the agricultural sector, expand productivity and incomes for smallholder farmers, improve food and nutrition security, and increase agricultural exports.

3.2.6 National Irrigation Policy

The National Irrigation Policy (NIP) was also approved by Cabinet in 2016 and simultaneously launched by the State President with the NAP. The NIP identifies the major areas of investment and institutional reform that will be required to mobilize substantial investments for efficient and sustainable increases in irrigation in Malawi. The NIP is founded on the National Irrigation Master Plan and Investment Framework (NIMPIF), which was released in 2015, provides a detailed analysis and blueprint for long-term irrigation investments in Malawi up until 2030.

Since the inception of the new policy, a number of new developments have taken place including strengthening of irrigation water users' associations and cooperatives, promotion of public private partnerships, completion of feasibility studies¹⁰, accelerated roll out of irrigation infrastructure instalment, including the upgrading of the Bwanje Valley irrigation scheme and shifts in natural resource management among others. In addition, in early 2016 the Ministry initiated a call for expressions of interest for irrigated maize production for the SGR in line with the New Alliance commitment to ensure that irrigation designs include priority food and cash crops. This pilot, while fraught with challenges, provided a platform for learning and for rolling out a modified programme, based on evidence and lessons from the pilot, which will link

¹⁰ Among others, the large-scale Shire Valley investment largely funded through the World Bank is under way having completed the feasibility study.

irrigation with the SGR to ensure food security for the country even in years of drought, dry spells or flooding.

Besides these new developments, the NIP will address challenges of spatial and temporal water shortages, water use disputes, and poor operation and maintenance of irrigation infrastructure, which have for many years negatively affected irrigated agricultural production in Malawi.

The new NIP not only aims to contribute to increased agricultural productivity but to also mitigate climate change related effects, which for the past two years have negatively impacted food production and productivity. As evidence of GOM commitment to investing in sustainable irrigation development, the Minister of Agriculture Irrigation and Water Development, announced early in 2016 that the MoAIWD would rebalance its budget to reduce the funding allocated to the Farm Input Subsidy and reallocate these funds towards irrigation investments. Indeed, this welcome reform is evident in the structure of the 2016/17 FISP and the investments slated for irrigation.

In the implementation of the new NIP, the GOM will endeavour to ensure improved coordination amongst stakeholders to avoid redundancies and enable synergistic investments for overall agricultural development. The coordination with the Green Belt Holdings, the Department of Irrigation Services, the establishment of the National Irrigation Fund as well as the National Irrigation Board are critical in ensuring effective coordination and implementation of the NIP, which is aligned to the NAP, Water Sector Wide Approach and the NAIP.

3.2.7 National Agricultural Extension and Advisory Strategy

MoAIWD has in the year under assessment, reviewed the expired National Agriculture Extension Policy (NAEP 2000). The review focused on establishing the extent to which the policy changed the extension approach from supply-driven to demand-driven services and how decentralization of the extension services increased the chances for farmers to participate both in the decision-making process and in accessing the services. The overall conclusion of the review was that the NAEP principles remain relevant and in line with best practice. However, there were some gaps relating to ICT-based extension and poor linkages with nutrition and other innovation stakeholders. The new Strategy therefore builds on past successes while eliminating or mitigating implementation challenges that have previously negatively affected the quality of the provision of AEAS in the country. The review report was released and has formed the basis for development of the successor strategy, which awaits the final validation by relevant stakeholders.

The draft NAEAS profiles and defines the roles and responsibilities of the different AEAS providers in the public-private-partnership arrangement for the benefit of all farmers including government, the private sector and non-governmental organizations. More specifically the strategy:

- i. Provides viable extension ‘tools/platforms’ and ‘communication channels’ to help increase the reach and accessibility of agricultural extension and advisory services (AEAS) to farmers;

- ii. Provides a combination of methodologies and approaches in the provision of AEAS that enhance learning for acquisition of knowledge and skills and change of attitude to farmers;
- iii. Specifies extension and advisory services which are best provided by the different agricultural extension providers in the public-private-partnership arrangement for the benefit of all farmers; and
- iv. Defines the overall role of government to regulate and coordinate the provision of extension and advisory services in a pluralistic approach to make maximum use of all players involved to the benefit of the farmers and the sector as a whole.

The NAESS identifies five pillars which are aligned to the original seven principles of the 2000 Extension policy

- i. **Holistic and inclusive:** This relates to approaches, methods, platforms and tools for delivering AEAS to extend its scale and reach to all categories of farmers including and especially small-scale farmers, women and youth (and other disadvantaged groups) farmers and widen its scope beyond production to other aspects of agricultural value chain such as markets, access to capital, agro-processing and post-harvest handling.
- ii. **Responsiveness:** This specifically addresses the issues of demand-driven services and includes how best users of AEAS generate demand but also how providers deliver quality and effective services in a timely manner. Adoption of participatory approaches involving end users in validation of technologies will be a way of promoting site-specific solutions which are adapted to the prevailing conditions. Responsiveness also takes into consideration issues of accountability by all players to ensure that they are not only playing fairly and by the “rules of the game” but that they are also held to account for their actions or inactions.
- iii. **Accessibility:** This pillar supports the notion that AEAS should be easily accessible to farmers by ensuring improved staff-farmer interface through, among other things, the reduction of extension worker to farmer ratio from the current 2500:1 to 1500:1 as provided in the NAP, ensuring that extension workers are located within the communities and localities which they serve and exploiting and deploying potentials and capabilities of new technologies to enhance AEAS delivery. It also addresses aspects related to working and living conditions of extension staff that are critical for attracting, retaining and motivating extension workers to provide good quality service. It also articulates how the capacity to deliver extension and advisory services by community actors (e.g. lead farmers) should be strengthened through appropriate training on technical and facilitation skills.
- iv. **Regulated and well-coordinated:** This recognizes and addresses the “pluralism” elements of AEAS policy and provides that services should be well regulated and coordinated to reduce inefficiencies in AEAS delivery by articulating institutional arrangements that eliminate duplication of effort and overlap of responsibilities between and among players, that reduce incidents of confusing and conflicting

- messaging to AEAS users and, given the cost implications of AEAS delivery, that help to establish and exploit cost-sharing opportunities and economies of scale.
- v. **Sustainability:** This pillar recognizes that AEAS should be delivered in a sustainable manner that not only maintains its relevance and importance as a key developmental tool but also ensures that adequate and appropriate resources are provided (including well-trained, resourced and motivated of extension workers) to ensure effective delivery of EAS. Sustainability also encompasses elements of fairness and equitable treatment of all players, respect for the physical environment and contribution towards overall economic and social development. Finally, sustainability should also consider the technological dimension by making sure that end users are taken into a process allowing them to continue benefiting of innovations for which they have a continuation capacity even after the funding period.

The new strategy strengthens implementation of the 2000 NAEP and the DAESS guidelines of 2005 and it constitutes one of the several strategic pillars supporting the implementation of the new NAP.

3.2.8 Seed Policy

Increased access to affordable and high-quality inputs is critical for improving agricultural productivity in Malawi. Drafting of the national seed policy therefore is in recognition of the importance of a sustainable and dynamic seed industry that is supported by appropriate and comprehensive policies and regulatory frameworks.

The draft revised Seed Policy carefully defines seed to avoid the ambiguity on the type of commodities to be included under the new revised policy. The new revised policy further seeks to accommodate developments that have taken place in the seed industry since 1993 by providing clear guidelines for the development and promotion of the seed industry, and ensuring supply of adequate and high-quality seed and planting materials for all uses. The revised policy also aims at coordinating and harmonizing all seed-related activities in the country as well as increased agricultural productivity, food security, and job creation. In addition, Civil Society and Development Partners have stressed the importance to include the informal seed sector into the policy and to harmonize the policy better to the COMESA/SADC Seed Harmonization Framework.

3.2.9 National Fertilizer Policy

The Department of Agricultural Research Services (DARS) drafted a zero-draft National Fertilizer Policy (NFP), which was shared with stakeholders prior to holding three regional stakeholder consultations in the month of August 2017. Following the regional stakeholder consultations, a drafting team worked on analysing the input and incorporating it into the document. A revised NFP has been drafted in the month of October 2017 and a validation workshop is planned for in mid-November. The plan is to submit the NFP to the OPC by the end of 2017 for eventual approval by Cabinet in 2018.

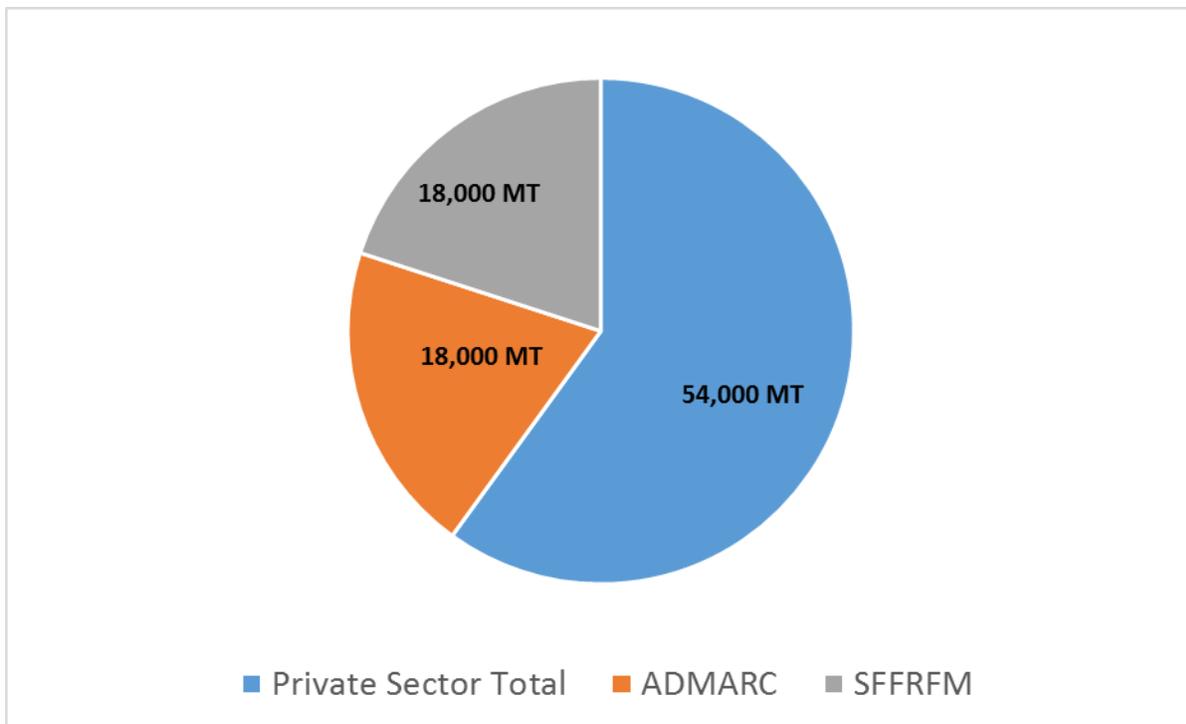
3.2.10 Farm Input Subsidy Programme

Since the 2005/06 agricultural season, the Government of Malawi has made the farm input subsidy programme (FISP) a major pillar of the country's agricultural development strategy. While the impact of the programme has been questioned at times, recent empirical evidence supports its continued implementation, albeit, with a number of reforms to enhance its contribution to agricultural and economic growth. Some of the recommended reforms include (i) making the programme more sustainable financially, e.g. through increasing the contribution made by farmers towards the full price of the farm inputs; (ii) targeting poor but productive farmers; (iii) delivering the vouchers early, well before the rains begin; and (iv) allowing private sector to supply the farm inputs to beneficiaries.

In response to some of these recommendations, the 2016/17 FISP continued the reform from the previous year of having 900,000 beneficiary farmers instead of the 1.5 million, which used to be the case prior to the 2015/16 season. In addition, the 2016/17 edition of FISP required beneficiary farmers to contribute MK5, 000 towards the purchase of the farm inputs.

In addition, the programme allowed private sector to supply both the fertilizer and seed under the programme. A total of twenty-one private sector players supplied fertiliser while sixteen supplied seed. In total, private companies supplied 60 percent of the 90,000MT of fertiliser under FISP, while the rest was equally split between ADMARC and SFFRFM (Figure 3-4).

Figure 3-4: Quantity of fertilizer in metric tonnes, supplied under FISP by private sector companies versus statutory corporations.



In addition, the 2016/17 FISP introduced a pilot project targeting productive farmers in Rumphi and Dowa districts. However, because of delayed introduction of the pilot, final identification of beneficiaries in these two districts was delayed until December 2016. The pilot was also being evaluated by the Centre for Development Management to provide useful insights on the impact of targeting productive farmers under FISP. Findings suggest that maize yields for more productive FISP beneficiaries were about 1 metric tonne higher than the national average for FISP beneficiaries.

Another recommendation to improve the impact of FISP has been to increase the diversity of crop seed supplied under the programme, with emphasis on increasing the amount of legume seed. In 2016/17 the FISP saw an increase in the number of crops whose seed was supplied but also a measurable increase in the share of legume seed (Table 3-4). This change is welcome as it will likely improve the incentives for crop diversification in the country and in turn likely increase farm incomes as well as the diversity of food consumed by farm households. Nevertheless, the lion-share of the seed supplied continued to be maize (73.6 percent). Moreover, as noted by the Logistics Unit, the amount of seed supplied continues to be disproportionate to the amount of fertilizer supplied under the programme and this is likely to have an impact on production.

Table 3-4: Total seed distributed under FISP 2016/17

Seed	Quantity (MT)	(%)
Hybrid Maize	3,129	49.7%
OPV Maize	1,499	23.8%
Groundnuts	776	12.3%
Beans	438	7.0%
Soya beans	327	5.2%
Pigeon peas	98	1.6%
Cowpeas	25	0.4%
Total	6,292	100.0%

Source: Author's calculation using data from Logistics Unit (2017)

Vouchers for the programme arrived in Malawi from the UK end of November to beginning of December and were distributed to beneficiaries around the same period. While data are not available to estimate the time of arrival of coupons to beneficiaries, it can be deduced that more than 50 percent of the vouchers had reached the beneficiaries by December 7th 2016, since this many vouchers had already been submitted for redemption. This implies an improvement in the speed of voucher distribution compared to the previous year. According to the Logistics Unit, the 2016/17 FISP was the first on record when the fertilizer was distributed to the beneficiaries within the 12 weeks stipulated in the contracts. It was also the first ever edition of the program to have been implemented within budget and all fertilizer suppliers were paid their dues within the stipulated period of 45 day. While the overall assessment is that the 2016/17 edition of FISP was

by far one of the most effective, areas of improvement going forward include finalizing and agreeing on programme design early and avoiding ad hoc changes after the programme design has been agreed upon, making timely payments to the seed suppliers in accordance with the stipulations of the contract (as was achieved for the fertilizer suppliers) and further improving the timely identification of beneficiaries across the board.

3.2.11 Contract Farming Strategy

The Contract Farming Strategy (2016) was designed to address challenges of poor farmers' access to profitable agricultural markets and to reduce the problems of side-selling and contract breach in contract farming arrangements. While the CFS was approved at the end of 2016 efforts to sensitise stakeholders on its implementation have been limited due to lack of funding. In early 2017, the Department of Planning in the MoAIWD, in collaboration with the CFTC and with the support of USAID/Malawi through the NAPAS project, conducted regional sensitization workshops on the CFS. The objective was to familiarise relevant stakeholders on the implications of the CFS going forward and to begin making progress on the implementation of the CFS. MoAIWD together with the CFTC prepared a roadmap and budget for amending the Competition and Fair Trading Act to give full powers to the CFTC to regulate contract farming in the country. Unfortunately, funds were not available and efforts are still in progress to secure funding for the next steps to enable implementation of the CFS.

3.2.12 Farmer Organizations Development Strategy

An issues paper has been developed on the Farmer Organisation Development Strategy (FODS), based on input that was solicited during an initial farmer consultation on the FODS, which the NAPAS project in MoAIWD supported in June/July 2016. In addition, a video on farmer cooperatives in Malawi, based on the June/July 2016 event, was produced to communicate issues around farmer organizations in Malawi. Since then, several meetings have been convened with the Acting Director of Cooperatives and SMEs in the MoITT, where a related policy process is in progress, in the form of the review of the Cooperatives Policy. Plans are to link the proposed Cooperatives Strategy with the FODS, with a view of revising the Cooperatives Act and to better coordinate efforts across MoAIWD and MoITT to promote development of cooperatives in the agriculture sector. MoITT, FAO, DAES, Farmers Union of Malawi (FUM), NASFAM, MUSCO, and WeEFFECT, GIZ and the NAPAS project are all working together to chart the way forward on collaborating to conduct further consultations on the FODS. A workshop to present a mapping exercise on cooperatives and farmer organisations in Malawi was convened on October 11-12th 2017 with the support of GIZ. Plans are to hire a consultant, with the support of FAO, to finalize review of the Cooperatives Policy and development of a Cooperatives Strategy as well as the FODS.

3.2.13 Agriculture Sector Food and Nutrition Strategy

Regional and community level stakeholder consultations on the Agriculture Sector Food and Nutrition Strategy (ASFNS) were held earlier in 2017 and input obtained from the consultation was used to draft the Strategy. A validation workshop of the ASFNS took place in Lilongwe in June 2017 and this was followed by several taskforce meetings to improve the document. In September 2017, a drafting workshop was held in Mponela to try and finalize the document and while significant progress has been made, a final workshop to finalize drafting of the ASFNS

was held on October 12th, 2017. It is anticipated that the ASFNS will be finalized by end of November 2017.

3.2.14 National Population Policy

The National Population Policy is under review and this process is being led by the department of Economic Planning and Development in the Ministry of Finance, Economic Planning and Development. The revised National Population Policy is expected to have a section on agriculture as this remains a major livelihood for much of the population. Issues of small farm sizes and sustainable agricultural land management are expected to be featured in the National Population Policy.

3.3 Legislation Affecting the Agriculture Sector

Numerous legislative processes are ongoing that affect the agriculture sector in Malawi. In part, this is due to many outdated laws that need to be reviewed and amended. In other instances, there are new emerging issues arising from technological advances, changes in democratic and market structures in the country as well as predicted changes that are likely to take effect in the coming years, for which laws will need to be in place to enable efficient governance and regulation in the agriculture sector. This section of the ASPR documents some of the key legislations affecting agriculture and highlights those that are currently being amended or are going through the legislative process for a variety of reasons. In some instances, references are made to related policies, which are necessary before the Bills can be considered by the MoJCA.

- *Control of Goods Act*
The Control of Goods Act has been reviewed and is in the process of being amended. Currently, the Ministry of Industry, Trade and Tourism (MoITT) and the Ministry of Justice and Constitutional Affairs (MoJCA) have edited and vetted the draft Control of Goods Bill (2017). A stakeholder validation workshop on the vetted draft bill was held before tabling it with Parliament for debate in the November 2017 sitting.
- *Seed Bill and Seed Policy*
The draft Seed Bill is still awaiting approval of the Seed Policy by Cabinet as this is a prerequisite for submitting the Seed Bill to MoJCA. The Principal Secretaries' committee met to discuss the Seed Policy at the end of June 2017. During the PS's committee meeting, several issues were raised and comments from the meeting were addressed and incorporated in the draft Seed Bill. After the PS's committee meeting, a separate stakeholder consultation meeting was held, on September 7, 2017, where stakeholders raised several issues. Among the issues raised were:
 - (i) Clarity on the process used to develop the draft Seed Policy and whether there was any undue influence by a private seed company as reported in various international media platforms,
 - (ii) Establishment of a semi-autonomous National Seed Commission of Malawi,
 - (iii) Harmonization of the Seed Policy (and draft Seed Bill) to the Southern Africa Development Community (SADC) seed regulatory framework/protocol,

- (iv) Creating an enabling environment for efficient/fast seed varietal release,
- (v) Ensuring that the Seed Policy is inclusive with respect to the informal seed system, that it promotes use of local seed varieties, informal seed market development and farmers' rights.

It was noted that the draft Seed Policy adequately addresses all the issues raised, including support for the informal seed market and production of seed by farmers, e.g. through emphasis on promoting quality-declared seed (QDS). During implementation of the Seed Policy, QDS will be supported through training of farmers to produce QDS and deployment of trained seed paralegals (both in the public and private sectors) for inspection of seed.

Stakeholders were given the opportunity to send additional input via email or mail until September 15, 2017. MoAIWD has since incorporated all the input from the stakeholders and is in the process of drafting a Cabinet Paper, which is to be signed by the Minister of Agriculture, Irrigation and Water development as part of the process of submitting the draft Seed Policy to Cabinet for debate and approval. Once the policy has been approved by Cabinet, MoAIWD (through DARS) will edit the draft Seed Bill to ensure that it is aligned to the policy, before submission of the Bill to MoJCA to resume the process of tabling it with Parliament. It is anticipated that the Seed Bill should be submitted to MoJCA by mid-2018, with a view of tabling the Bill in Parliament during the November 2018 sitting of Parliament.

- *Fertilizer Bill and National Fertilizer Policy*
Much like the Seed Bill, the draft Fertilizer Bill is awaiting the finalization of the National Fertilizer Policy, which is currently in its draft form. It is expected that MoAIWD will submit the draft Fertilizer Bill to MoJCA in late-2018 once the NFP has been approved by Cabinet.
- *Green Belt Authority Bill*
The Green Belt Authority Bill was submitted to Parliament and approved in the foregoing fiscal year. Currently, processes to establish the Green Belt Authority are in full-swing with the intention of accelerating investments in irrigation in the country.
- *Land Laws (2016)*
While the land laws of Malawi were assented to by the State President in late 2016, the process of gazetting them and rolling out implementation is still in progress. Currently, the Ministry of Lands, Housing and Urban Development (MoLHUD) is undertaking a national campaign on the land laws to educate stakeholders on what the laws mean and how they will affect society. With respect to the implications of the land laws on agriculture, MoLHUD, with the support of the EU and USAID and through the New Alliance Policy Acceleration Support project (NAPAS), held a second Land Symposium in May 2017 as part of the national campaign to sensitize stakeholders. Stakeholders are

encouraged to engage MoLHUD, MITC and the Green Belt Initiative to learn more about the implementation of the Land Laws to improve the enabling environment for agricultural development in Malawi.

- *Food and Nutrition Bill*

The Food and Nutrition Bill has been drafted by the Department of Nutrition, HIV and AIDS in the Ministry of Health and following stakeholder consultations, the Bill is in the process of being tabled with Parliament in the November 2017 parliament sitting. Some of the key elements of the Bill, that have bearing on the agriculture sector include clauses on the right to food, state obligations to ensuring food security of the people, and responsibilities of non-state actors in the agriculture sector. Issues around mandatory labelling of food products as it pertains to food safety and nutrition as well as fortification of food products are also articulated in the Bill.

- *Milk and Milk Products Bill; National Livestock Policy*

The Department of Animal Health and Livestock Development (DAHLD) in the MoAIWD is working together with CISANET to review the Milk and Milk Products Act (1972) and draft a revised Milk and Milk Products Bill (2017). DAHLD is leading the review of the Act in line with the draft National Livestock Policy (2017), with technical assistance of a consultant. DAHLD has, through the consultant, developed the draft National Livestock Policy that is all inclusive. It is just a matter of presenting it to parliament through the defined procedures. In addition, a report on the review of the Act as well as the draft Bill will be produced by end of October 2017 and DAHLD together with CISANET plan to convene a dairy sector validation workshop in November 2017, where the draft bill will be presented for comment by stakeholders. Thereafter, the draft bill is expected to be submitted to MoJCA, together with the National Livestock Policy, to begin the process of tabling it with Parliament.

Updates on other legislative processes are documented in Annex Y. There are too many laws under review or development, which affect agriculture in Malawi. As such, there will be a need for allocating the necessary resources as well as having champions to push through the legal reforms. This is given the challenges that exist in terms of the slow processes that legal reforms entail.

3.4 Agricultural Regulation, Licensing, and Public Services

To facilitate agricultural marketing and trade in 2016/17 fiscal year, DARS issued 19,721 phytosanitary certificates to clients out of the target of 15,000 certificates. This shows an overachievement record of about 131%, which is a result of high demand for phytosanitary certificates from the clients in the year under review. The Government also issued 237 import permits to clients out of the target of 2000 permits. This indicator registered the lowest achievement (12%) as compared to all indicators.

In terms of seed regulation improvements, 10,657 hectares of crop out of the target of 16,184 was inspected. The indicator recorded an achievement of 66%. This could be attributed to reduced hectareage registered by SSU. The data also shows that in the year, 19,630mt of seed was certified out of the target of 25,000 MTs recording an achievement of 79%.

The Government also licensed agro dealers in the year. Statistics show that out of 1500 agro dealers who expressed interest, 900 of them were licensed, indicating a percentage achievement of 60. This achievement is mainly due to a low number of agro dealers who expressed interest to undergo training in the year.

3.5 Sector Coordination for Effective Implementation

Successful implementation of the NAP and NAIP requires coordinated joint effort and commitment from all stakeholders in the sector at different hierarchical levels. Leadership is indispensable and this is the role of the MoAIWD but different departments and levels within the Ministry need to coordinate to effectively implement the Ministry's activities, projects and programs to contribute toward attainment of the goal, objectives and outcomes of the NAP. Other government ministries, departments and agencies are also crucial in coordination for effective implementation of the NAP and NAIP as are non-state actors who also operate in the sector.

Inter-Sectoral and Inter-Ministerial Coordination

The primary mechanism for regular coordination across sectors and Ministries, as it relates to the agriculture sector, is at the PS level. PSs are members of a variety of relevant PS committees, and these meet to discuss inter-ministerial issues as needed. For example, the PS for Agriculture is a member of several of the PSs Committee on the Economy and Public-Sector Reforms where several agricultural policies and legislation reform processes were discussed in the past year prior to being forwarded to Cabinet Committees for approval.

At a high level, inter-ministerial coordination takes place through Cabinet meetings, which are chaired by the State President. Another platform for high-level decision making is the Executive Management Committee (EMC), which reviews progress on implementation of projects in the sector and approves work plans and budgets among other high-level decisions. The EMC meets once a year and indeed met in June to execute its mandates. While the EMC is a crucial platform for intra-sectoral and inter-ministerial coordination, its meetings are infrequent and focused on high-level decision making. Hence, there are additional mechanisms for regular and technical coordination across sectors and Ministries.

The Agriculture Sector Working Group (ASWG) is another mechanism for inter-ministerial coordination at the PS level, though it also involves non-state actors. The ASWG normally holds meetings quarterly and these are chaired by the PS of Agriculture, Irrigation and Water Development

Apart from the EMC and the ASWG, there are other platforms for dialogues and coordination which include the Joint Sector Review (JSRs) and the Technical Working Groups (TWGs). For performance of these platforms during the period under review see table 3.5 below.

Participation in the two ASWG meetings that were held was inadequate, with several stakeholders absent. The encouraging news is that for those that were present, participation involved senior leadership such as the PS, CEOs and National Directors of relevant institutions. Table 3-5 shows a summary of the seniority of member participation in the two ASWG meetings that were held in the past year.

Table 3-5: Sector Coordination through the ASWAp

CADDP/ASWAp Process	Meetings Planned	Meetings held	Reasons for variance
Joint Sector Review (JSR) meeting	2	1	Lack of funds to support the other meeting after closure of ASWAp SP
Sector Working Group (SWG)	4	2	Low achievement due to busy schedule of both government and development partners
Technical Working Groups (TWGs)			
Food Security and Risk Management	4	1	The other meetings failed to take place because of low turn up.
Commercial Agriculture, Agro processing and Market Development	4	2	The other 2 meetings failed to take place due to lack of funds
Sustainable Agricultural Land and Water Management	4	0	Failed to organize meetings for the TWG mainly due to lack of commitment
Technology Generation and Dissemination	4	1	Lack of commitment by TWG members
Monitoring and Evaluation (M&E)	4	2	Lack of funds to support the meetings as funds for meetings were drawn from ASWAp SP which had abruptly closed.
Cross Cutting Issues (Gender and HIV and AIDS)	4	0	Lack of commitment by TWG members
Institutional Strengthening and Capacity Building	4	0	Lack of commitment by TWG members
TOTAL	36	10	

Table 3-6: Attendance Composition of Members that attended the last two Agriculture Sector Working Group Meetings (2016/17)

INSTITUTION/ORGANISATION	REPRESENTATION		
	SENIOR-LEVEL LEADERSHIP	JUNIOR-LEVEL LEADERSHIP	ABSENT
MoAIWD	✓		
MoITT			✓
MoLUHD	✓		
MoFEPD		✓	
MoLGRD			✓
MoTPW			✓
Academia			✓
Civil Society	✓		
Farmer Organizations	✓		
Development Partners	✓		
Private Sector	✓		
Statutory Corporations			✓

Source: ASWAp records (2017).

Some of the challenges that led to low number of TWGs meetings conducted include lack of a clear agenda or work plan for some of the TWGs and lack of commitment by all the TWG members. Even for the meetings conducted there was low attendance by some members as they found their TWGs irrelevant. The other challenge to conducting TWG meeting as scheduled is the lack of financial resources. After the abrupt closure of ASWAp Support Project many TWGs did not have financial resources to hold meetings for the fourth quarter of 2016/17 fiscal year. This points to the need for stakeholders to allocate resources in their budgets towards TWG meetings and related activities, going forward

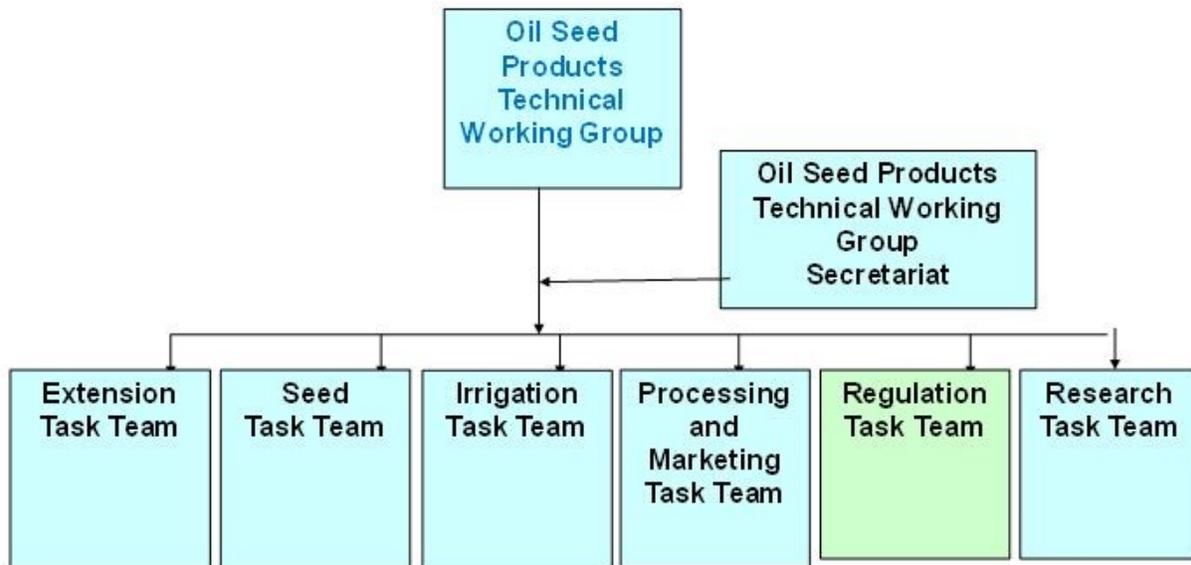
The Trade Industry and Private Sector Development Sector-wide Approach (TIP SWAp) under the MoITT also has TWGs that are related to agriculture and have a bearing on the performance of the sector. The TIP SWAp was instituted to coordinate the implementation of the National Export Strategy, which identified agriculture-related clusters as areas of focus, including oilseeds exports, sugarcane and manufacturing (which included processing of agricultural raw materials). The TWGs of special interest to the agriculture sector include the Oil Seed Products Technical Working Group (OSP-TWG), the Sugar Cane Products TWG and the Access to Finance, Information, Inputs and Business Development Services TWG.

Under the OSP TWG, significant progress has been made through coordination with various departments and ADDs in the MoAIWD. For instance, there has been appreciable progress on decentralizing the process of obtaining crop buying licenses. Through coordinated efforts among the Crops Development Department (CDC), the ADDs, LUANAR and the OSP TWG, a capacity strengthening activity was conducted to train program managers on implementing the decentralized approach to issuing crop buying licences. In addition, the training was also attended by some other representatives/officials directly or indirectly associated with crop

buying licence from Department of Agriculture Research (Crop Phytosanitary Section), Immigration (border posts) and Malawi Revenue Authority (MRA). This effort is expected to reduce transaction costs associated crop marketing and trade in the country as crop buyers will no longer have to travel to Lilongwe from their respective locales of business in order to obtain crop buying licenses.

An important lesson from the operations of the OSP TWG that could be transferred to the TWGs under the NAIP going forward is the formation and use of task teams (MoITT, 2017). According to the OSP TWG reports, this has been an important vehicle for action and accountability on issues raised during TWG meetings. Key to the success of these task teams has been allocation of resources for action rather than a focus on allocating resources for meetings.

Figure 3-5: Structure of the OSP-TWG and its active task teams.



Source: MoITT (2017).

In an attempt to replicate this approach, the Commercial Agriculture, Agro-processing and Market Development TWG under the ASWAp coordination framework, piloted the formation of task teams in the foregoing year. However, the task teams were only able to meet a few times and limited actions resulted. It would be useful to evaluate the reasons why the pilot was not successful, but anecdotal evidence suggests that the lack of financial resources for the task teams to implement actions was one reason. There is therefore a need to dedicate adequate resources (both financial and human) for these processes to ensure optimal participation, not only in attending meetings but more importantly in taking actions raised during the meetings. The example of the OSP-TWG under the TIPS-SWAp offers lessons for TWGs on how they may improve coordination and have impact.

Development Partner meetings and platforms

There are also a number of meetings and platforms being used to coordinate implementation and mutual accountability in the agriculture sector, particularly as it relates to development partners in the sector. Some of these include: (i) the High-Level Forum, (ii) the Donor Committee on Agriculture and Food Security (DCAFS), (iii) The DCAFS Troika, and (iv) the Donor Committee on Nutrition (DONUTS).

To ensure continued dialogue between DPs and the MoAIWD, the DCAFS Troika holds a 1 hour monthly meeting with the PS-MoAIWD, including relevant directors subject to the issue of discussion. Key focus areas of these meetings are policy issues, food security and nutrition, and sector dialogue events including high level meetings. The Troika-PS meeting constantly concludes with clear action points and the follow up meeting starts with a review of such action points. In reporting period, there has been a high demonstration of taking action on the agreed points (over 90%) from these meetings. Troika-PS dialogue has provided an opportunity to the ministry to engage DPs on required and urgent support, and on the other hand, allows the DCAFS to bring a common message to the ministry.

In a broader sense, the DP's support to the sector is coordinated through DCAFS to ensure that all donors' investments and activities in the agricultural sector are aligned to NAP and the NAIP and conform to the priorities of the Government. Conditions key to this effort are the need for government to improve fiscal management, monitoring and evaluation, and policy at the ministerial level to ensure that financial resources are spent prudently and effectively. In addition, alignment issues will be improved considering that the Government of Malawi through MoAIWD has now developed the NAP. The policy builds on existing sector policies and strategies and improves harmonization and coordination across the sector and with other sectors to achieve the country's agricultural transformation agenda.

The DCAFS meets monthly and provides a forum for defining common positions and sharing information on a variety of efforts being undertaken by the donors in the sector. While the majority of development partners operating in the agriculture sector are part of DCAFS, there are still a few who do not participate on this committee. Future efforts to include those who are not part of the DCAFS may be of use to ensure full coordination of donor activities in the sector.

Development Partners have observed that the DCAFS is critical for donor coordination and information sharing. This has consequently promoted good working relationships among Development Partners and the adoption of a common goal towards agricultural investments.

Private Sector Coordination

The primary vehicle for coordinating the private sector in agriculture is the Malawi Confederation of Chambers of Commerce and Industry (MCCCI). A key platform used by MCCCI, though broader than the agriculture sector in its content, is the Public Private Dialogue Forum that is implemented through the auspices of the MoITT. In the past year, a majority of issues discussed and decisions made during the PPDF have pertained to other sectors and while

private sector participation has been relatively high, the platform has often side-lined issues directly concerning the agriculture sector.

A separate vehicle for coordinating the private sector in agriculture is the New Alliance for Food Security and Nutrition (the New Alliance). In the context of the New Alliance, the ‘tripartite commitments’ - involving government, development partners and private sector, there is a framework for mutual accountability. At the continental level, each New Alliance country is required to conduct an annual review of progress against CCF commitments. This is presented to the AU Commission, (31st August 2017) and presented for endorsement during the AU’s Specialized Technical Committee (STC) on Agriculture, Rural Development, Water and Environment prior to the AU Summit. Within Malawi, there is a New Alliance core team that holds meetings and is coordinated by a New alliance coordinator who constantly works with various parties to the alliance, including private sector, government and development partners, to monitor progress towards the mutual commitments under the CCF.

Non-state Actor Conferences and Annual Meetings

The annual general meetings and conferences of non-state actor organizations, such as FUM, CISANET, NASFAM, CASS, AICC, Commodity platforms/trusts etc. are also important platforms for coordination in the sector. While these are specific to the issues or organizations involved they often draw the same constituencies leading to a recent discussion about potentially holding an annual non-stake actors annual meeting were additional coordination among non-state actors may be promoted. In addition, this would reduce the scheduling conflicts and numerous events are constantly held by different organizations in the sector yet they involve the same constituencies or stakeholders.

Stakeholder Consultations and Symposiums

Technical Symposiums, Workshops, Stakeholder consultations and town hall meetings are another set of platforms used to coordinate implementation activities in the agriculture sector in Malawi. number of these workshops/events have been held in the past year mostly to facilitate the processes necessary to formulate policies or vet pieces of legislation that are in the process of reform in the sector. Unfortunately, because there is a lack of a sector-wide calendar of events for such consultations or the fact that the same stakeholders are often participants in many other meetings and events implies that the coordination of such workshops/events is often haphazard and ad hoc in nature. In addition, having a large number of such uncoordinated meetings often implies that stakeholders may spend more time engaged in meetings and workshops as opposed to being engaged in implementation activities that lead to action and impact on the ground.

In the past year several stakeholder consultations on many policies under review or formulation were held. However, there is no database to track the total number of such workshops or to assess the effectiveness of having numerous workshops. It may be worthwhile to consider installing a mechanism or system for improving the planning of such events in the sector to improve stakeholder coordination.

4 RESILIENT LIVELIHOODS AND PRODUCTION SYSTEMS

4.1 Overview

Agriculture is vital to household and national food security and nutrition. The country depends on rain-fed maize production as its main source of staple food. Since agricultural production is rain-fed, maize productivity has decreased overtime due to climate change, natural shocks such as drought. Programme B of the NAIP focuses on strengthening resilience of livelihoods and the natural resource base for agriculture, by promoting sustainable use of natural resources, including measures to mitigate the impact of the climate change and support adaptation of the production system and livelihood strategies (NAIP, 2017). Therefore, it will further ensure that the number of people requiring food assistance per year decreases.

Food insecurity situation in the country has been worsening since 2015/2016 largely due to impacts of 2015/16 El Nino phenomenon that caused flooding and prolonged dry spell in most parts of the country and 2016/17 was the worst in recent years only comparable to 2000/2001 crop failure. As a result, a substantive number of people required humanitarian support year-on-year, regardless of whether the country records a food surplus, or not, with the Malawi Vulnerability Assessment Committee (MVAC) finding that an average of 1.53 million people required humanitarian support for the past five years. Figure below shows the trend of number of people affected by drought that needed humanitarian assistance.

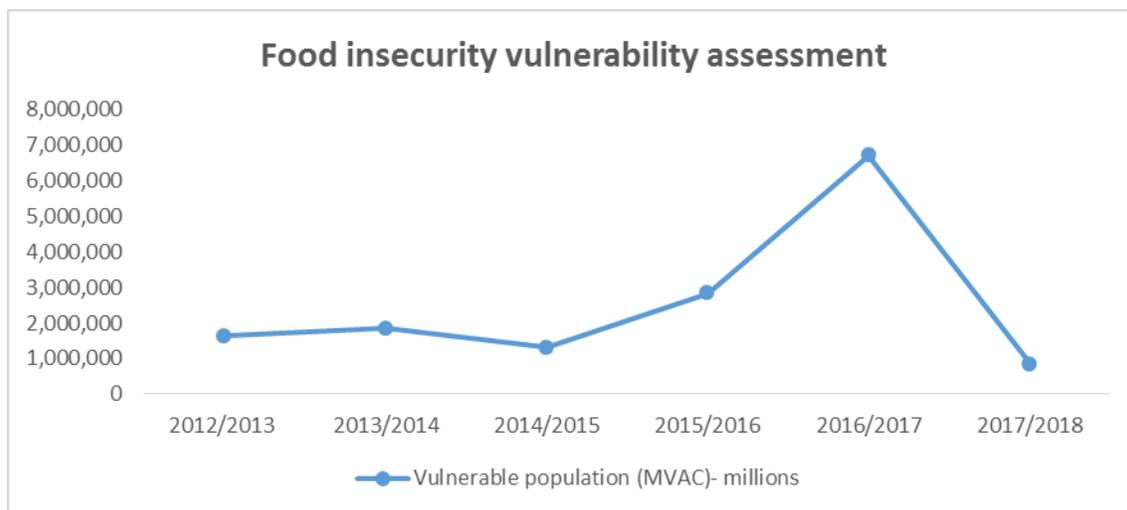


Figure 4.1: Food insecurity vulnerability assessment (MVAC Report)

It can be noted from Figure above, that the number of food insecure people had doubled from previous year (2015/2016). The Malawi Vulnerability Assessment Committee reported that 6,692,144 people were food insecure and in urgent need of food assistance in 24 districts. This represented 39 percent of the population and the needs varied across the affected districts over the whole lean season which spanned from July 2016 to March 2017. Some districts had population that required food assistance for a period of 3 months while others like Nsanje required assistance for up to 9 months. It is important to note that most districts in the south

where the impact of El Nino was high had populations that required food assistance for 5 to 9 months. The worsening situation led the Government to declare a state of disaster on 12th April 2016, aiming to intensify and expand the response actions, disburse additional funds planned for emergency situations and mobilize additional resources through cooperating partners. The affected households were provided with food or cash to buy food depending on the functionality of the nearby food markets.

The Ministry of Agriculture, Irrigation and Water Development played a major role in providing farm inputs such as drought tolerant crops (cassava, sweet potatoes) and livestock to the affected household and promoted small-scale water harvesting and flood mitigation strategies in areas prone to cyclic hydrologic shocks and good soil and water management practices. From the figure above, it can be noted that due to those interventions combined with good rains and tackling of Fall Armyworm, the forecast for the 2017/18 growing season, the population requiring food assistance has gone down to about 836, 766. This is enough evidence of the registered successes in the 2016/17 growing season that has made the attainment of food sufficiency possible.

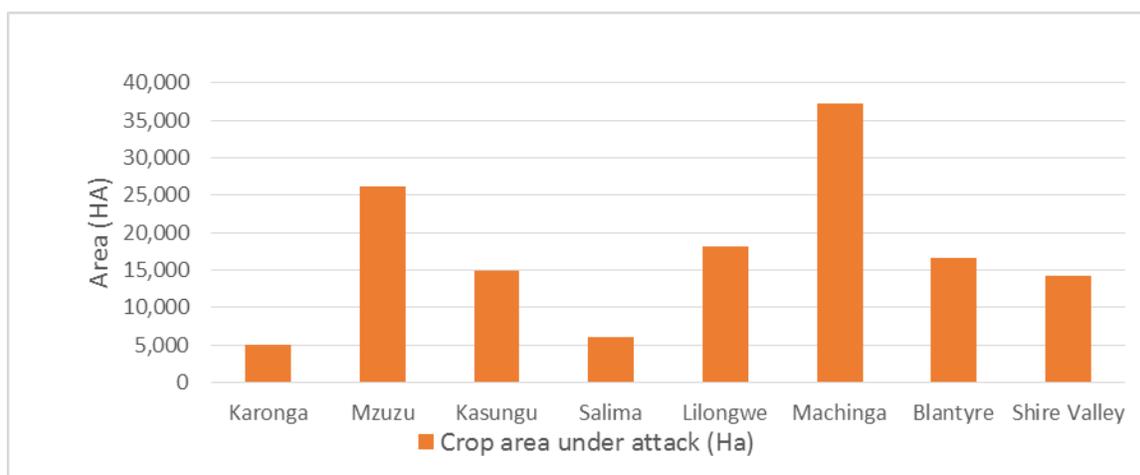
4.2 Pests and Disease Risk Management: Fall Armyworm

During 2016/17 growing season, Malawi experienced an outbreak of Fall armyworm (*Spodoptera frugiperda*), which attacked mainly maize although damage was also noticed in sorghum, millet, onion, tomato, vegetables and other crops in all Eight Agricultural Development Divisions (ADDs). The pest was initially reported in West Africa and has currently become a new invasive armyworm species in West, Southern and Central Africa which includes Malawi. In Malawi, the outbreak was first reported around 16th December 2016 and farmers thought it was an outbreak of maize stalk borer due to the apparent resemblance of feeding damage signs in maize. It was confirmed by experts that it was fall armyworm, early February 2017. About 138,344 hectares of crop were attacked during summer cropping negatively affecting almost 621,875 farm families. The table below depicts the extent of the problem per ADD.

The Fall Armyworm (FAW) (*Spodoptera frugiperda*) is a moth, native to tropical and subtropical regions of the Americas, but it is the caterpillar or larval stage in its life cycle that causes severe crop damage. Developing larvae eat different parts of the host plant, young larvae usually feed on leaves and leaf whorls, giving an outlook of a “tattered plant” in maize. They also feed on developing tassels and cobs under formation. The feeding behaviour of FAW larvae often reduces tassel formation and cause considerable cob damage leading to yield losses and threat to food security. The host range of this alien pest include some 100 different crops types while current trend of infestation shows a preference for cereals maize, rice, sorghum and sugarcane (Abrahams, et al., 2017).

To control the pest, Government through MoAIWD set up a taskforce comprising of state and non-state institutions, to implement strategies for management of fall armyworm in the country. The taskforce is chaired by Controller of Agricultural Extension and Technical Services (CAETS) and it has since formulated an action plan detailing short-, medium- and long-term interventions to address the challenge of the fall armyworm.

Figure 4.2: Fall Army Worm affected area by ADD



Source: MoAIWD (2017).

Similarly, during 2016/17 growing season; with financial and technical support from FAO, DFID, European Union, World Bank, USAID and other NGOs working in the sector; the MoAIWD implemented a number of short and medium term interventions including: identification of the pest, training crop protection officers to train frontline staff in their respective districts on management and control of the pest, training journalists to properly disseminate news and information about the pest, conducting live panel discussions and phone in programmes both on radio and TVs, producing and distributing Information and Education Communication materials, producing documentaries, jingles and comedies for awareness purposes, distribution of about 26,000 litres of Cypermethrin 200E and procurement of an additional 12,500 litres of pesticide.

For 2017/18 growing season, the MoAIWD plans to procure and install 2,880 pheromone traps in all sections to monitor fall armyworm as an early warning system. DARS is planning to conduct a study to determine the biology and behaviour of the pest in local environment and develop locally adapted integrated production and pest management strategies, develop a training manual, exploring the possibility of using seed dressing chemicals seedmate and Monceren GT 390 to protect the crop from early infestation of the pest. The ministry has also evaluated and recommended 11 foliar chemicals, researched how conservation agriculture (CA) is affecting infestation of fall armyworm in maize fields, and is conducting comprehensive research on botanicals and biological control agents, while evaluate maize and sorghum varieties for tolerance to fall armyworm under the Regional World Bank Project.

4.3 Breaking the Cycle of Food Insecurity

The country had experienced dry spells in all the regions in various degrees from the 2015/16 season due to the occurrence of the El Nino. Of an estimated 2,119,218ha of planted area in the country, 654,344ha, representing 31 percent, have been affected by dry spells. The proportion of the area affected by dry spell for the southern, central and northern region are 51%, 22% and 27% respectively.

In terms of households, of the 4,159,924 farming households, 1,845,833 farm households have been affected, representing 44 percent. The percentages of farming households affected by dry spells are 49%, 44% and 32% for the southern, central and northern region respectively.

In many parts on the country, the effective onset of rains came earlier than the previous season. As a result of the weather condition, it resulted in decrease by 30 percent of maize production. The production of the rest of the major crops also decreased except for tubers and pulses. This meant that the 2016/17 season would inherit the worsening food insecurity situation from the 2015/16 growing season. In this case, winter production and irrigation for a second crop production was an inevitable option to be explored by government and other stakeholders to lessen the food insecurity problem across the country in the 2016/17 growing season.

Agriculture Production Estimate Surveys (APES) established that the country had a maize deficit of about 1.1million metric tons. The Ministry came up with interventions to close the gap and break the food insecurity cycle. One of the interventions was to engage large-scale producers and companies to grow maize under irrigation during the 2016 winter season, to be delivered to the SGR. A tendering process was followed which identified 25 companies and individuals of which 11 emerged successful. Since the start of the contract period, it was found that only 5,189mt of the required 9,979mt was to be produced. Out of the successful contractors a total of seven (7) companies/individuals had either failed to produce or had insufficient tonnage to deliver to the SGR. Only four of the 11 companies were able to produce, with only one company able to meet its allocated tonnage. The failure to meet the contracted tonnage was attributed to three key factors, namely scarcity of water, resource constraints and lack of capacity.

Table 4-1: Companies that produced maize under irrigation for the SGR during the 2016 winter cropping season

Company	Contracted Tonnage (MT)	Actual Tonnage Produced (MT)	Tonnage Delivered (MT)
Nexius Investment	500	210	210
White Church General Dealers	40	40	40
Demeter Agriculture	2,800	2,800	2,800
Illovo Sugar (MW) Ltd	2264	923	768
Total	5, 604	3, 973	3,818

Source: MoAIWD (2017)

Despite the challenges encountered by the interventions, there is potential for growers to irrigate grain crops in the winter season, if they are engaged in time and are provided the requisite market incentives and resources. This effort needs to be pursued further in future to increase the resilience of grain supply to the SGR, since the crop would be irrigated and does not depend on the rain-fed production system.

4.4 Africa Risk Capacity Insurance

Malawi is one of the first signatory countries to the African Risk Capacity (ARC) agreement, which implies that it is one of the beneficiaries of the disaster risk financing policy. The initiative has made huge strides towards disaster risk mitigation and financing in the wake of climate variability. Malawi has been hit with droughts in the recent years. The effects of these natural shocks have had detrimental impacts on the agricultural sector and the resulting macroeconomic instability has been a major constraint to growth and poverty reduction in African countries, including Malawi.

In light of the persistent shocks, it necessitated the Malawi government to purchase drought insurance coverage from the ARC to reduce the impacts of the anticipated El-Nino in the 2015/2016 agricultural season. This development enabled the country to benefit from the ARC with a pay-out of US\$ 8.1 million in January 2017. Due to low production levels as a result of the El Nino drought, food security interventions had to be put in place to reduce the impact of the drought. Hence, the government invested the resources in the replenishment of the Strategic Grain Reserves as buffer stock as well as for humanitarian purposes. Therefore, the ARC insurance policy has played a pivotal role in the agricultural sector in terms of beefing up the stock levels especially for the Strategic Grain Reserves subsequently helping lessen the food insecurity burden on the affected households.

4.5 Sustainable Land and Water Resources Management

Sustainable agriculture land and water management is defined in terms of area under soil and water conservation techniques, area under soil fertility management including use of organic and inorganic fertility technologies, area under agro-forestry and area under conservation agriculture practices. These techniques are aimed at reducing soil degradation and soil nutrient loss and using water in a sustainable manner. The DLRC estimated that soil loss in Malawi is estimated at 20 metric tons per hectare per year. It is against this background that the agriculture sector is promoting sustainable land management practices to abate and eventually reverse the negative trend on soil loss. Figure 4.1 shows different land management practices practiced in the country.

Another indicator under SLM is annual increase in total Smallholder Area (Ha) under Conservation Farming. This is the area that is under minimum tillage and mulching with crop residues on the same piece of land. Complementary technologies include permanent pit/basin planting, intercropping and rotation with legume crops and trees (agro-forestry). The total hectareage under conservation farming increased from 52, 207 ha in 2015/16 growing season to 74, 806 ha in the 2016/17 growing season, which translates into a 30% increase. In addition, a total of 5,510 farmer try outs involving 4,776 farmers (2,273 M and 2,503 F) have also been achieved. This is in areas where the farmers were reached with the research led trials during the season.

The increase in the area for 2016/17 can be due to the scaling up of area under soil fertility improvement and soil and water conservation during the growing season. It has to be noted that currently farmers are recognizing the value of using manure with the prevalence of climate variability. This has been achieved due to the concerted efforts in the sector by both public and

non-state actors in providing sustainable land management techniques. The trend consequently shows that the area under sustainable land and water management has increased over the 2015/16 area. The area increased by 22, 599 ha over all the conservation techniques implemented in the growing season under review.

Figure 4-1: Area under Sustainable Land Management Practices

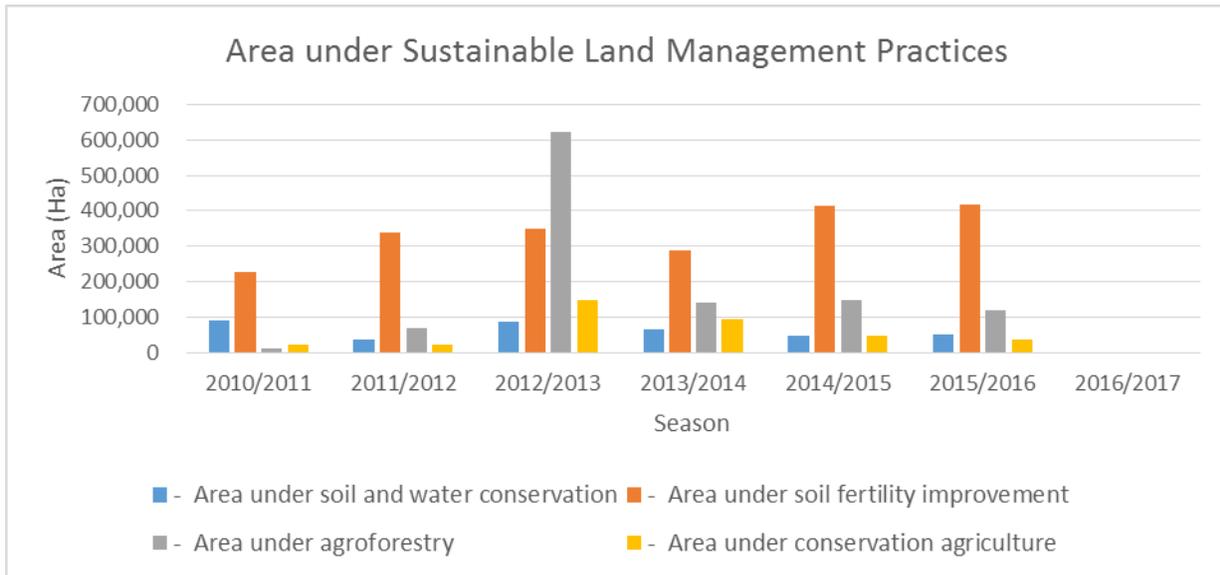
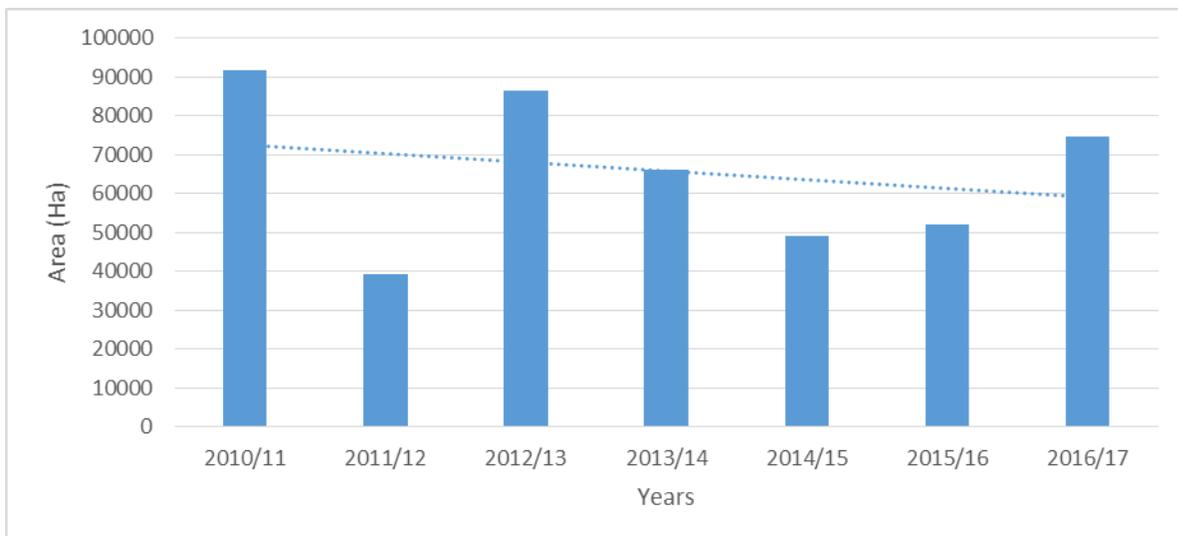


Figure 4-2: Trends in the area under Sustainable land and Water Management



Source: DLRC, MoAIWD (2017).

5 PRODUCTION AND PRODUCTIVITY FOR GROWTH

5.1 Crop production

The 2016/17 season registered an increase in production for most crops. Maize production was estimated at 3,464,139 metric tonnes, representing a 46.2 percent increase as compared to the 2015/16 final round estimate of 2,369,493 metric tons. This major increase was attributed to favourable weather conditions experienced in the 2016/17 farming season. However, when compared to the five-year average production figure, maize production increased by a modest 5.7 percent. Rice production also increased by 44.6 percent, also due to the increased water availability. The season also witnessed substantial increases in the production of millet and sorghum, and this was attributed to the favourable weather as well as increased seed availability for these crops. Table 5-1 shows the production and productivity statistics for several crops.

Table 5-1: Crop Production and Productivity

Crop	Production (MT)			Productivity (MT/ha)			NAP or NAIP Target (MT/ha)
	2015/16	2016/17	Annual % Change	2015/16	2016/17	Annual % Change	
Maize	2,369,493	3,464,139	46.2	1.4	2.0	41.9	4.0
Tobacco	120,479	82,964	-31.1	0.9	1.2	36.1	-
Rice	83,711	121,079	44.6	1.6	1.9	19.6	2.0
Cassava	4,996,843	4,960,558	-0.7	21.9	21.4	-2.2	40.0
Sweet Potato	4,463,710	5,472,013	22.6	17.5	20.2	15.0	35.0
Potato	1,043,338	1,226,603	17.6	16.6	18.4	11.5	35.0
Wheat	797	745	-6.5	1.1	1.2	10.4	-
Millet	19,510	35,121	80.0	0.4	0.6	67.9	1.0
Sorghum	58,192	90,370	55.3	0.6	0.9	47.7	1.5
Groundnuts	274,876	386,319	40.5	0.7	1.0	33.4	2.0
Cotton	31,439	29,545	-6.0	0.4	0.7	79.4	-
Pulses	723,133	958,898	32.6	0.9	1.0	20.5	2.0
Beans	157,769	198,486	25.8	0.5	0.6	24.4	1.0
Pigeon Peas	371,114	470,653	26.8	1.5	1.7	13.7	2.0
Sunflower	15,736	21,423	36.1	1.0	1.1	13.8	2.0
Soya beans	136,910	208,556	52.3	0.9	1.1	24.2	2.0

Source: MoAIWD (2017).

It can be noted that the four crops to register a decrease in production, in a season when the weather was favourable, were tobacco, cotton, cassava and wheat. Tobacco production declined by 31.1 percent owing to a substantial decline in area of land allocated to burley production. Most burley farmers switched to alternative crops because of low tobacco prices that prevailed in the previous tobacco marketing season. Nevertheless, production of flue cured tobacco saw an

increase, but could not offset the substantial decrease in burley production. Overall, this trend of diversification out of tobacco is welcome and should be supported by all stakeholders.

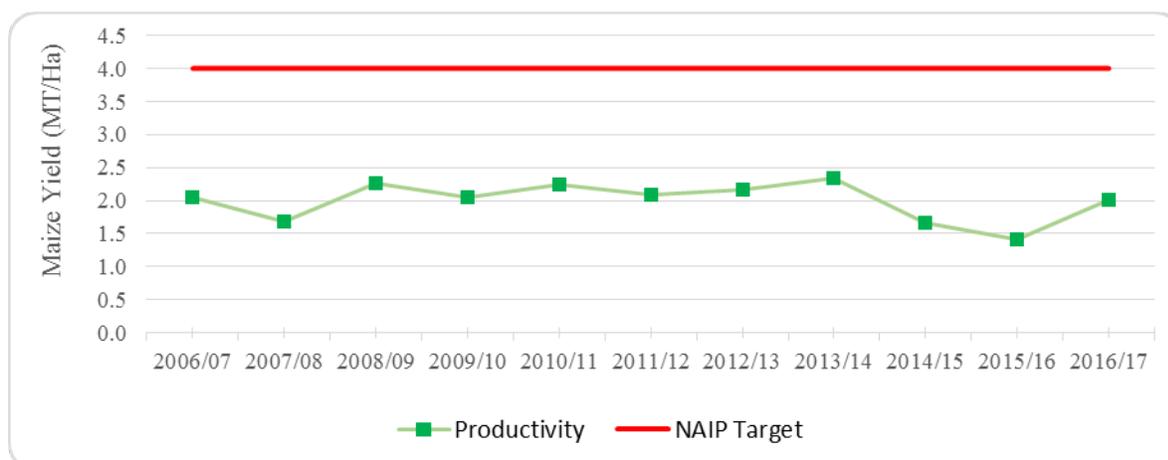
The decrease in cotton production is however a major concern, as cotton has great potential to be a cash crop and avenue for crop diversification for many smallholder farmers. One of the explanations for the decrease in cotton production is the challenge faced by farmers in accessing farm inputs, after almost all cotton ginneries in the country decided not to provide farm inputs on credit, under contract farming arrangements. In addition, the pricing of cotton has been marred by government interventions, which have led to many farmers reallocating their cotton fields to other crops. This calls for supportive policy reforms to enable the business of farming cotton and ultimately address the current dismal situation in the cotton value chain.

In terms of roots and tubers production, cassava marginally declined by 0.7 percent. This was partly due to farmers reallocating their land to other crops and due to relative scarcity of planting material. On the other hand, sweet potato and Irish potatoes production increased by 22.6 and 17.6 percent respectively. These modest increases in production of roots and tubers are encouraging and efforts to continue supporting the roots and tubers subsector should be sustained further diversify the production of starch crops in the coming years.

Regarding legumes, groundnut production increased by 40.5 percent while soya beans, pigeon peas and beans saw an increase in production of 52.3; 26.8; and 25.8 percent respectively. A contributing factor to the increase in legume and pulses production in general was the continued promotion of legumes and increased use of inoculant under a variety of agricultural projects promoting legumes. The FISP also continued to promote increased access to improved farm inputs and adoption of improved technologies legume production and this effort should be scaled up if significant gains are to be realised in legume production and crop diversification.

Pertaining to maize productivity, before expiring, the ASWAp targeted an average maize yield of 3 metric tons per hectare and the NAP and NAIP have gone on to raise that target to 4 metric tonnes per hectare by 2021. Statistics show that since implementation of ASWAp, maize productivity has stagnated around 2 metric tonnes per hectare (APES, 2017).

Figure 5-1: Maize Productivity against NAP and NAIP Target (2006/07 – 2016/17)



Prior to FISP, maize yields were even lower, around one metric tonne per hectare. Analysis of the maize yield trend between 2013/14 and 2015/16 shows a decline in maize productivity, which is mainly attributed to intra-seasonal dry spells, floods and drought. However, in the year under review, maize yield rebounded to about 2 metric tons per hectare. Despite this increase, the maize yield was still far below the targets of the ASWAp, NAP and NAIP. Like maize, other crops experienced yield increases that were below the set targets. Major increases have nonetheless been observed in sweet potatoes and cotton (Table 5-1). Generally, despite failure to reach the NAP and NAIP targets, yields for major crops are much better in the year under review as compared to the past two years.

Considering these statistics, considerable and multiple efforts will need to be implemented to raise crop yields to meet the NAP and NAIP targets. While evidence does show that this is feasible, even when using currently available production technologies and methods, the challenge will be getting the larger share of resource-poor smallholder farmers to adopt the necessary technologies, farm management practices, etc. Therefore, key among various interventions will be upgrading the agricultural extension and advisory services provision to farmers, improving access to the already existing farm technologies and increase use of irrigation.

5.2 Horticultural Production

5.2.1 Fruit Production

Estimates of fruit production are not widely available; however, some statistics are collected by DARS. For 2016 mango production estimates indicate that the country produced about 778,234 metric tonnes of mangoes from about 4.5 million trees resulting in an average yield of 189kg of mango per tree. Nkhotakota and Balaka attained the highest mango yields of 255kg and 224kg per ha, respectively. However, the highest mango output was recorded in Rumphi district (approximately 125,705 metric tonnes).

Table 5-2: Estimated number of mango trees and production in 2016

District	Estimated Number of Trees	Estimated National Output (MT)	Estimated Kg/tree
Chitipa	267,939	46,694	174
Rumphi	619,632	125,705	203
Kasungu	535,876	93,388	174
Lilongwe	852,860	90,072	106
Salima	73,427	14,805	202
Nkhotakota	92,472	23,620	255
Machinga	108,712	21,960	202
Mangochi	582,482	112,419	193
Balaka	349,813	78,360	224
Blantyre	625,192	108,953	174
Chikwawa	357,253	62,259	174
Malawi	4,465,658	778,235	189

Source: APES (2017)

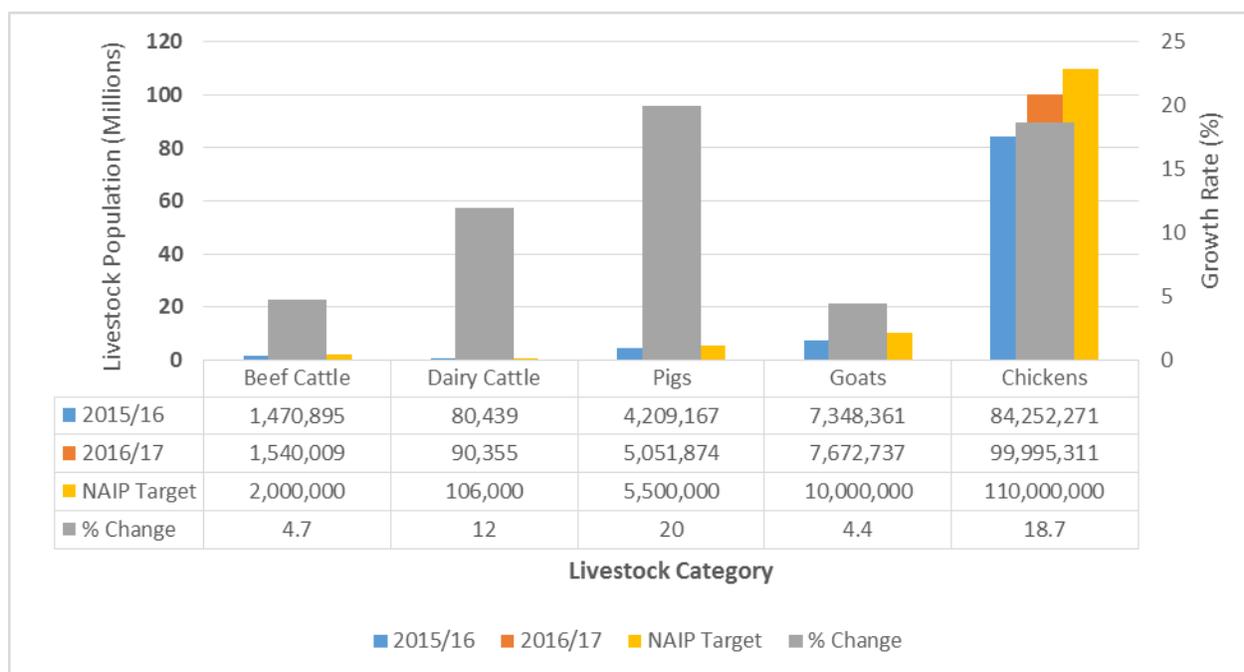
5.3 Livestock and Livestock Products

Examination of livestock production data for 2015/16 and 2016/17 seasons shows that there has been a tremendous growth in major classes of livestock in the country. **Error! Reference source not found.** below, shows the population of livestock in 2015/16 and 2016/17 seasons as well as NAIP targets for each livestock category.

The statistics below show that the population of beef cattle has increased from 1,470,895 to 1,540,009 representing a 4.7 percent increase in population. However, the incremental rate for beef cattle population is not adequate to reach the NAIP target which is 2,000,000 by 2021. On dairy cattle, the population has increased from 80, 439 to 90, 355 representing a 12 percent increase, which would suffice to meet the NAIP target of 106, 000 dairy cattle by 2021. Populations of pigs, goats and chicken have also increased by 20.0 percent, 4.4 percent and 18.7 percent respectively. However, the population growth rate for goats would not suffice to reach the NAIP target. In general, the increase in livestock population is mainly attributed to high breeding prolificacy and improved management practices.

Furthermore, in relation to the rise in livestock population between 2015/16 and 2016/17 seasons, there has been a tremendous increase in the majority of livestock products between the same periods. Figure 5-2 below depicts the production of livestock products in the seasons.

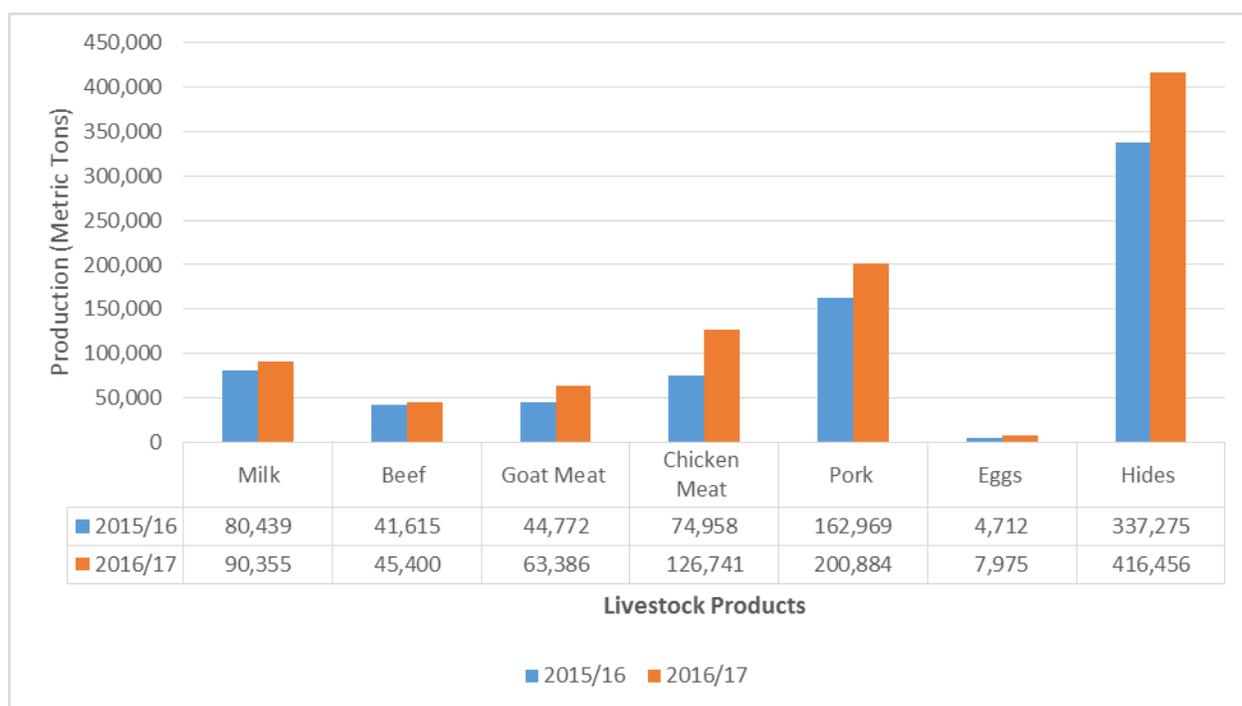
Figure 5-2: Livestock Population 2015/16 to 2016/17



Source: NSO (2017).

Figure 5-3, shows that there have been sizeable increases in production for all the livestock products between 2015/16 and 2016/17 seasons. The largest production increase was recorded for eggs, which saw a 69.2 percent increase. This was closely followed by the increase in chicken meat production, which registered a 69.1 percent increase; while production of goat meat saw a 41.6 percent increase. The increased production of eggs and chicken meat can be partially attributed to the shorter production cycle and lower investment costs associated with these poultry products. At the same time, there are new investments in the poultry subsector, both formal and informal. For example, CP Feeds and Kamponji Investments are two private companies that have expanded their egg production operations. Going forward, AgDevCo, an equity venture capital investor, has recently partnered with Foods and Feeds wholesalers by investing about US\$1.8 million to expand its cold chain infrastructure and build a modern processing unit. Likewise, in the informal subsector, communities and cooperatives are increasing their production of local chicken breeds, which are preferred over exotic breeds by local consumers. These investments are projected to further increase production of eggs and chicken meat products in the next few years.

Figure 5-3: Production of livestock products (2015/16 and 2016/2017)



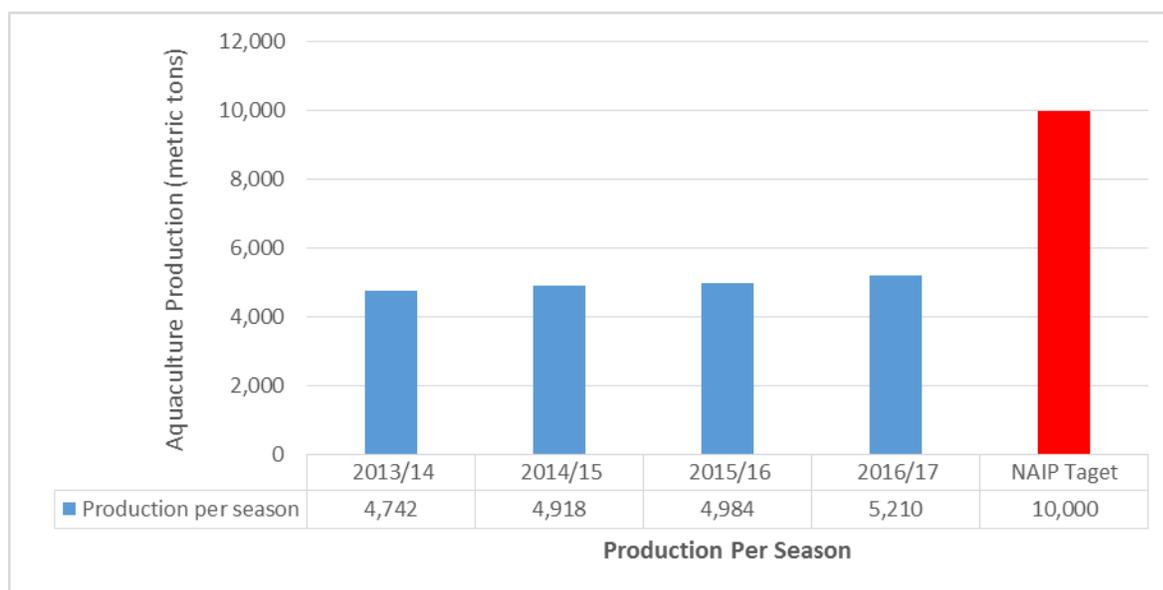
Modest increases in production were also recorded for small stock products, including goat meat and pork. This can be partially attributed to various projects implemented by CSOs as well as the Government livestock pass-on programmes that have promoted community production of small stock in the rural areas.

The increases in beef and milk production were amongst the lowest, at 9.1 percent and 12.3 percent, respectively. This is an indication of the challenges faced by the subsector to promote cattle production for both meat and milk. While statistics on production of other dairy products such as cheeses, yoghurts and butter are unavailable, there is anecdotal evidence showing that the value chains of these products are underdeveloped and domestic market demand is largely catered for by imports. At the same time, domestic processing of these products is minimal and often the quality of the existing processed dairy products is lower than that of imports.

5.4 Capture Fisheries and Aquaculture

Malawi is one of the countries in the southern Africa with natural resources suitable for aquaculture. The Government of Malawi has been promoting aquaculture practices considering its contribution to the economic growth of Malawi. The subsector attracts both small-scale farmers as well as large commercial farmers. Analysis of aquaculture data shows that production has been on the increase, annually since 2013/14 season (NSO, 2017).

Figure 5-4: Aquaculture production 2013/14 to 2016/17



Source: NSO (2017).

Aquaculture production increased by 3.7 percent in 2014/15; 4.5 percent in 2015/16; and 9.7 percent in 2016/17. While the consistent increase in national aquaculture production is encouraging, the growth rate is far below the required rate if the NAIP production target of 10,000 metric tonnes is to be achieved by 2021.

5.5 Drivers of Agricultural Production and Productivity

The levels of production and productivity recorded in the past year, have been a result of the combination of numerous factors of production interacting to produce agricultural output. As such, it is important to assess performance with respect to the availability and quality of the different factors of production in the country. This section delves into the performance of the sector in as far as making the necessary factors of production available in the appropriate form and time.

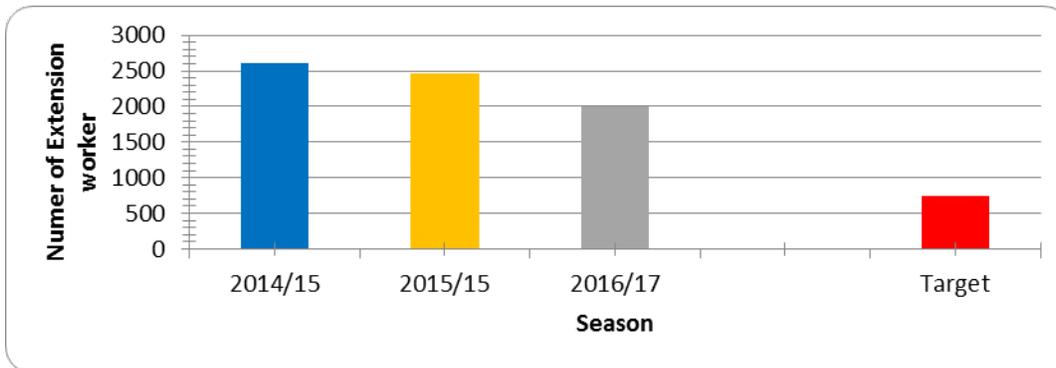
5.5.1 Agricultural Extension and Advisory Services

Ratio of Farmers to Extension Worker

The ASWAp target for the ratio of farmers to extension worker was set at 750:1. Data shows that the ratio slightly improved from 2603:1 in 2014/15 to 2458:1 in the 2015/16 season and further improved to about 2000:1 in the 2016/17. This shows that the sector is in the right direction in terms of achieving the desired target on the ratio of farmers to extension worker. The current improvements are due to the recruitment of additional field assistants under Sustainable Agriculture Productivity Programme (SAPP) and recruitment by NGOs to provide extension services in several districts across the country under ASWAp-SP. These positive changes also created an opportunity for improving the quality of agricultural extension and advisory services

provided to farmers in the country. There is an expectation of further improvement in this indicator in the next three years after 427 field assistants have completed their training at the Natural Resources College.

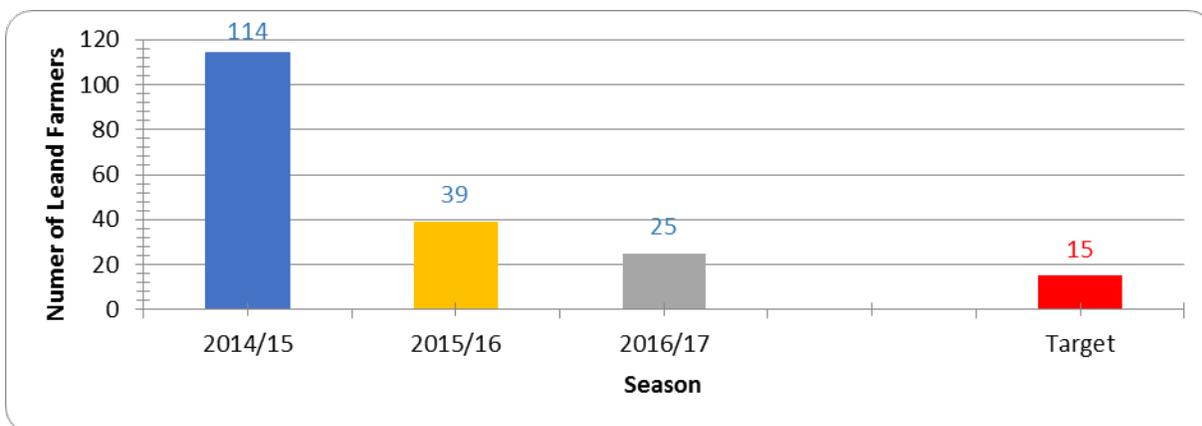
Figure 5-5: Ratio of farmers to Extension Workers in Malawi (2014/15 – 2016/17)



Source: DAES (2017).

Similar to the farmers to extension worker ratio, the ratio of farmers to lead farmer also shows an improvement in the reporting period.

Figure 5-6: Ratio of Farmers to Lead Farmers



The ASWAp target was to reduce the ratio of farmers to lead farmer to 15:1. The current ratio is at 25:1 which is an improvement from 39:1 in the 2015/16. The major improvement was in the past two years when the ratio significantly declined from 114:1 in 2014/15 to 39:1 in 2015/16. These improvements are a result of multiple efforts by the Government and sector stakeholders in promoting the lead farmer approach to providing agricultural extension and advisory services to farmers, especially through programmes and projects that have worked with lead farmers. Some of these projects that have made significant contributions to the improvements recorded in the farmer to lead farmer ratio include the ASWA-SP, SAPP and SIVAP.

5.5.2 Agricultural Research: Technology Generation and Release

In the year under review, the sector made remarkable achievements in agricultural research. The sector implemented 131 agricultural research trials out of the target of 140, representing 94% achievement. The 131 trials are those trials with potential to generate a technology. The sector also approved and released 19 out of the target of 20 technologies to farmers for use. This indicator shows a record of 95% achievement on the number of released technologies in the year under review. However, the figure would have been higher had it not been the failure by the Agricultural Clearing Committee to meet and approve more technologies that were ready to be presented to the committee for approval.

5.5.3 Availability and Use of Improved Seed

Farmers are encouraged to use improved seeds which increase the productivity of crops. A key indicator in the NAIP is the number of farmers using improved seeds. Under the ASWAp, this indicator was captured under technology adoption and dissemination. However, the NAIP disentangles technology adoption and zeros in to talk about the specific technologies one of which is improved seeds. The private sector through the Seed Traders Association of Malawi compiles seed availability on an annual basis. Table 5-3 below shows availability of improved seed in the country.

Table 5-3: Availability of Improved Seed (MT)

Seed Type	006/7	2007/8	2008/9	2009/10	2010/11	2012/13	2013/14	2014/15	2015/16	2016/17
Maize Hybrid	4600	5200	7400	13100	14151	20275	21959	20107	17273	17130
Maize OPV	6300	4600	3600	2210	3178	4400	5140	3055	3461	2850
BEANS	118	108	56	427	352	705	2027	1300	2661	2365
G/NUTS	151	87	-	756	2043	2752	4412	4375	2345	2106
P/PEAS	11	8	15	22	30	83	631	230	749	605
SOYA	150	200	200	703	1259	1441	4152	3910	2541	1820
COWPEAS	-	-	5	6	4	62	112	65	264	325

Source: Seed Traders Association of Malawi (2017).

Table 3 above shows that there has been a significant increase in use of improved seed since the inception of the FISP. In addition, availability of improved legume seed has been rising across time responding to demand though growing very slow as some farmers recycle the seed.

In terms of use of improved seed, STAM and the agro dealer network have been working with farmers to use improved seed. However, much of legumes seed is bought through FISP/NGO-donor programs.

There is an estimated national seed requirement of about 104, 858 metric tons each season. However, only about 27,201 metric tons of seeds were available in the 2016/17 season. This represents 74.1% gap. It also implies that 88% of all seed in the country come from recycled seeds and informal seed markets. Table 4 below gives details on seed availability and requirement in the country.

Table 5-4: Seed Availability against Requirement

Crop Type	Area Planted (Ha)	2016/17 Seed Requirement (MT)	2016/17 seed availability (MT)	Theoretical Gap (MT)	2016/17 Seed Uptake (MT)
Maize Composite	499,134	12,478	2,850	9,628	
Maize Hybrid	818,258	20,456	17,130	3,326	
Total Maize	1,317,392	32,934	19,980	12,954	8,278
Groundnuts	369,987	29,599	2,106	27,493	1,876
Beans	328,339	26,267	2,365	23,902	838
Pigeon Peas	246,362	2,464	605	1,859	1,552
Cow peas	85,787	1,287	325	962	198
Soya bean	153,834	12,307	1,820	10,487	75
Total	2,501,701	104,858	27,201	77,657	12,817

In terms of farmers using improved seeds, the 2016 IFPRI study on the status of Extension Advisory services in Malawi showed that about only 9% of respondents experimented using improved seeds in their gardens. However, it should be noted that statistics on the number of farmers using certified seed is inconsistent from different sources. For example, the FISP targeted 900,000 farm families with improved seeds representing about 22% for the farm families in the country. If we include commercial seed sales, the number should be approximately 40% of farm families. This corroborates statistics from STAM that most farmers in the country are still using unimproved seeds especially for legumes.

5.5.4 Fertilizer Use

To increase crop productivity and address issues of poor soil fertilizer, the government of Malawi introduced the Farm Input Subsidy Program in 2006. In the 2015/16 150,000.00 metric tons of fertilizer were supplied under the FISP. There has been a reduction in the quantity of FISP fertilizer from 150,000 metric tons in the 2015/16 season to 90,000 metric tons in the 2016/17 season. Data for tonnage supplied through commercial channels is not available.

Table 5-5: Fertiliser Consumption in Malawi (2015-2017)

	2015	2016	2017
Total Fertilizer Consumption (NPK, UREA, etc.) Kg	223,114,800	150,000,000	90,000,000
Arable cropped land area (Ha)	3,800,000	4,000,000	3,992,331
Fertilizer Consumption per ha of land (Kg/ha)	58.71	37.5	22.54

Source: MoAIWD (2017)

5.5.5 Water Resources for Agricultural Production

Sustainable water resource management is meant to improve production response to climate change and variability. Malawi has been experiencing erratic rainfall patterns over the recent past which has been the major cause of food insecurity. While average rainfall levels have continued to be adequate for most agricultural production activities, the variability in rainfall has affected

production and productivity. In 2015, the country experienced devastating floods in parts of the country, which destroyed a significant share of the crop that year. In the 2016 season, the El Nino drought that affected the whole of southern Africa led to major declines in production and productivity. As such, efforts to enhance resilience to weather variability cannot be overstated.

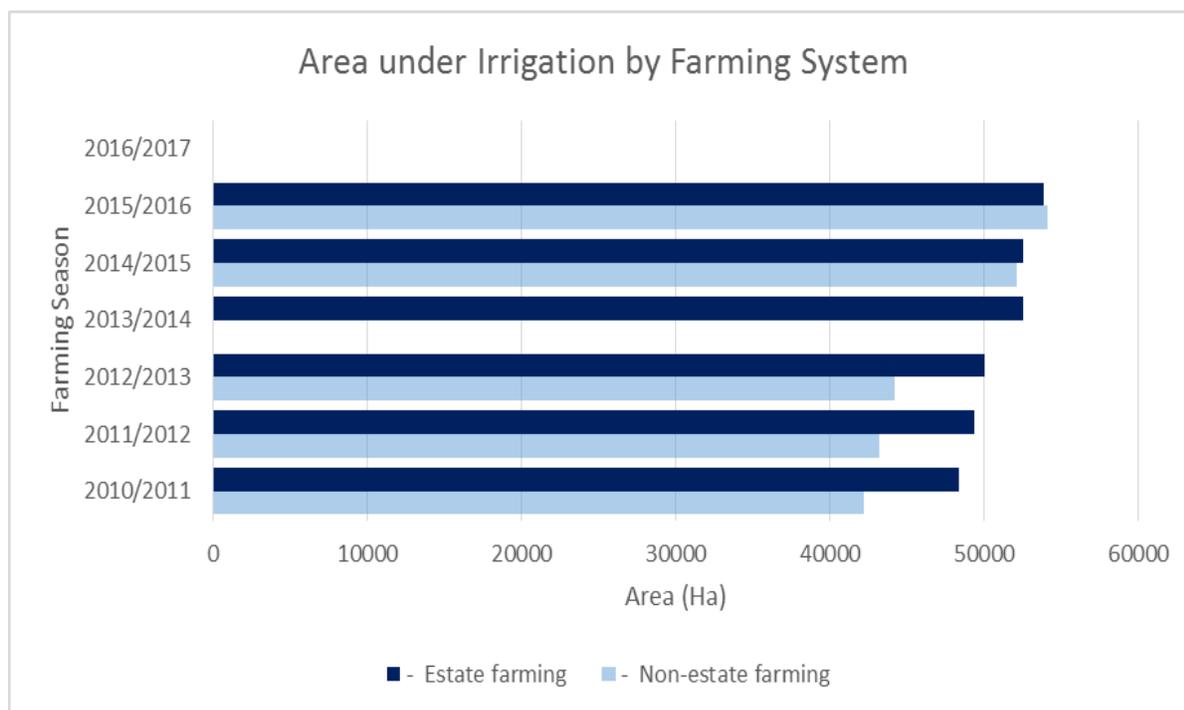
The National Irrigation Policy aims at increasing agricultural productivity and mitigating the impacts of climate change and weather variability through the implementation of sustainable irrigation initiatives. The policy set out to increase area under irrigation by 20, 000ha annually and increase crop intensification to at least 2 crops per season. Figure the growth rate in the size of irrigated area.

Table 5-6: Growth rate of size of irrigated area

Year	2012/13	2013/14	2014/15	2015/16	2016/17
Irrigated Area (ha)	94,209	101,615	104,643	107,991	110,775
Increment (ha)	-	7,406	3,028	3,348	2,784
Growth rate (%)	-	7.9	3.0	3.2	2.6

Table 5-6 above shows that there have been marginal annual increases in the area under irrigation of about 3,000ha each year against the 4,000ha per year required to meet the 20,000ha five-year target of the NAP and NIP. To further invest in irrigation, the government is currently implementing the Shire River Basin Management Project. In addition, the government has embarked on construction of dams (both large-scale and small-scale) to increase the total area under irrigation.

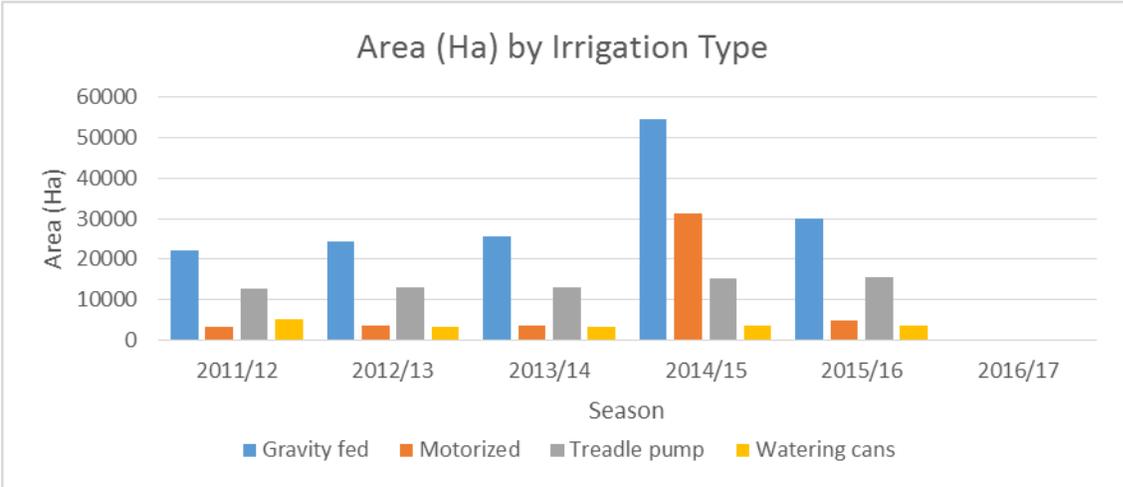
Figure 5-7: Area under Irrigation by Farming System



In the past, the largest share of land under irrigation was in the estate farming subsector (**Error! Reference source not found.**). However, an increase in the area irrigated under non-estate farming is seen to be closing the gap. This can be explained by the increase in area under the gravity irrigation system. The Government of Malawi has been encouraging the farming communities to engage in irrigation farming, wherever water is available. Due to its relative cheap cost, investments in gravity irrigation have increased across the country. Besides gravity irrigation system, several other types of irrigation systems are under use by farmers in the country.

Error! Reference source not found. shows that over the course of time, gravity irrigation has been the most common type of irrigation in Malawi. However, there was a sharp decline in the area under gravity-fed irrigation between 2014/15 and 2015/16. A similar decline was recorded for motorized pump irrigation in the same period. In contrast, a steady but modest increase was recorded for treadle-pump irrigation. One explanation for the decline in gravity-fed irrigation and motorized-pump irrigation between 2014/15 and 2015/16 is the drought, which meant that much of the available surface water for irrigation dried up. In addition, there are some irrigation schemes that are known to have been underutilized because of poor maintenance and management. While this is the case, promoting irrigation farming continues to be of great importance in Malawi, partly because it can increase yields but more importantly because it provides the country an opportunity for a second crop during the dry season.

Figure 5-8: Area (Ha) by Irrigation Type

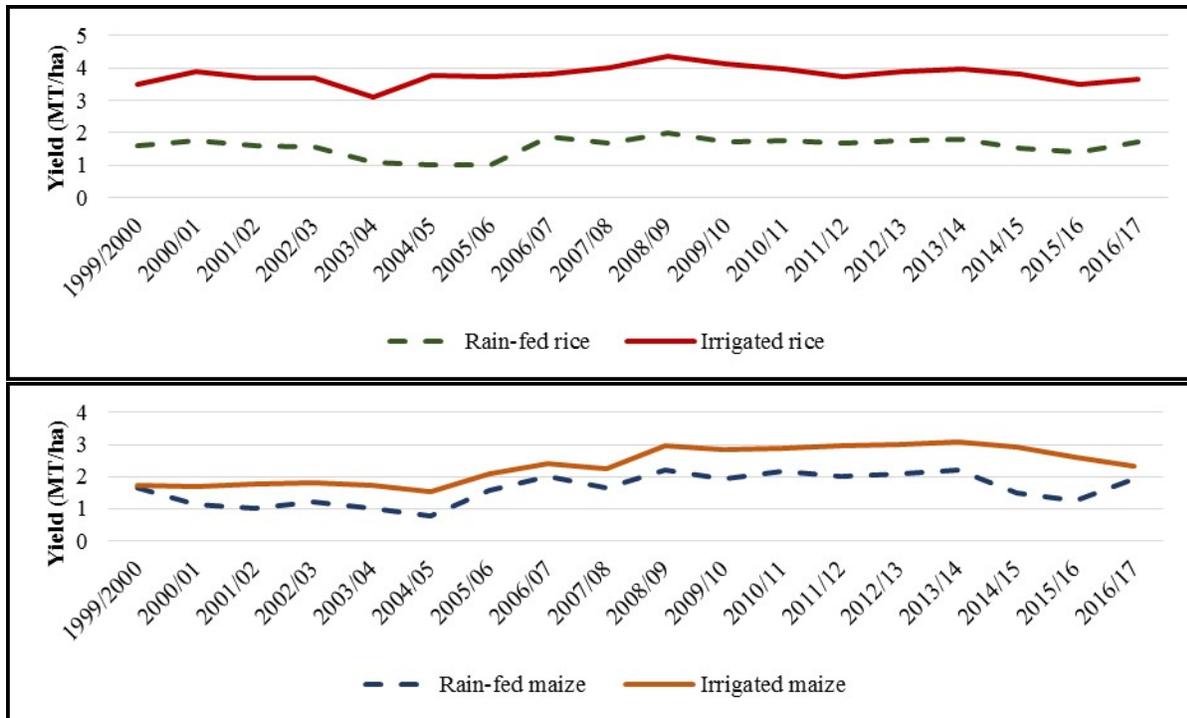


Source: Department of Irrigation Services, MoAIWD (2017).

Figure 5-9 compares yields of maize and rice produced under irrigation and under rain-fed systems and shows the yield gains associated with irrigating these crops in Malawi. As such, it will continue to be important to invest in irrigation infrastructure, particularly rehabilitating existing irrigation equipment that is no longer operation, but also investing in operation and

maintenance of the irrigation equipment together with capacity building of water users' associations and irrigation associations across the country.

Figure 5-9: Comparison of maize and rice yields under rain-fed and irrigated systems in Malawi



Source: Chafuwa (2017) using APES data

5.5.6 Land tenure

Sustainable use of land and water resources in Malawi is compounded by land tenure security challenges. The majority of farmers in Malawi farm under customary land tenure, which complicates their access to credit in formal lending institutions or their incentives to make long-term investment on the land. The newly enacted land laws will see farmers having control over land resources. A key indicator in the NAIP is the number of farmers having land rights. The Ministry of Lands, Housing and Urban Development started the process of documenting land tenure and it started with collecting information from estates. A total of 35, 240 farmers were recorded as having secure land rights in 2016.

6 MARKETS, VALUE ADDITION, AGROPROCESSING, TRADE AND FINANCE FOR TRANSFORMATION

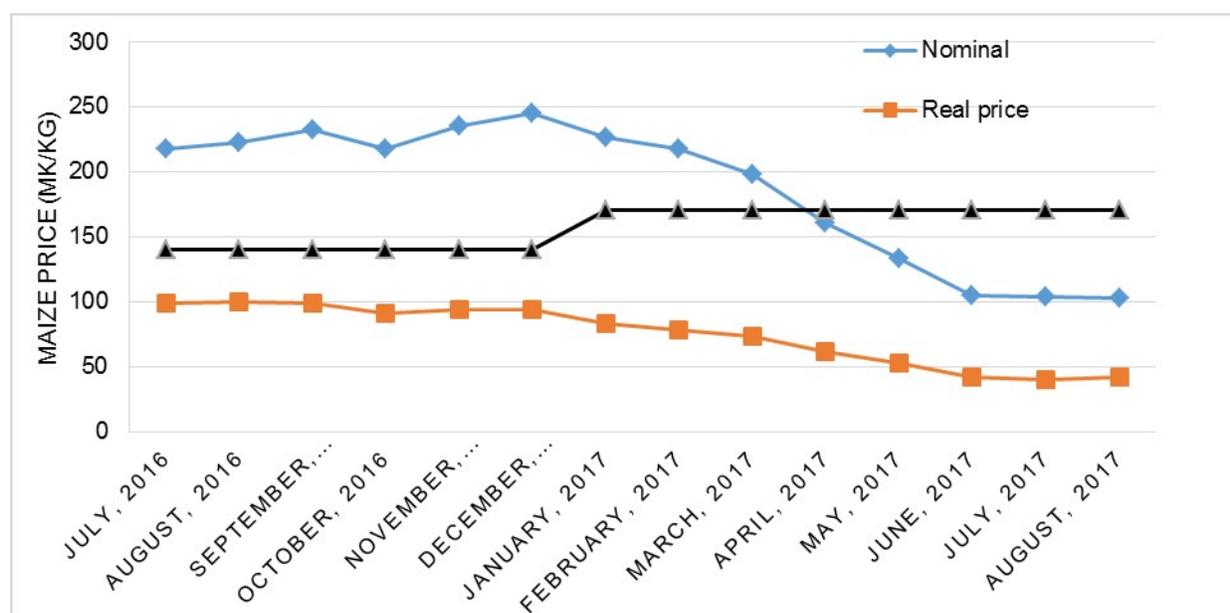
This chapter showcases the performance of the agricultural sector on Markets, Value Addition, Trade and Finance for Transformation, which is programme D in the NAIP. The focus is on downstream value chain activities in the agriculture sector, including value-addition of agricultural output, agricultural trade (both domestic and international trade), and activities geared towards import substitution in agriculture. Performance in these areas is measured using a variety of indicators such as the value of commodities traded, commodity price performance in the markets and efforts made to link farmers to profitable markets.

6.1 Domestic Agricultural Markets

6.1.1 Spot Market Prices and Volatility

Maize remains the most important food commodity traded in the country. Despite the Government setting a minimum farm-gate price of maize at MK170/kg in 2017, the average retail price for maize grain continued to decline between March and June 2017 as harvesting of the 2016/17 crop took place (MoAIWD 2017). For example, FEWSNET reported that in Salima, the average nominal maize price fell by 19 percent between April and June. In addition, the maize price in June 2017 was nearly 50 percent lower than the price in June 2016 and 8 percent below the five-year average. In Karonga, average maize grain price was 39 percent below the five-year average and 27 percent below the price in June 2016.

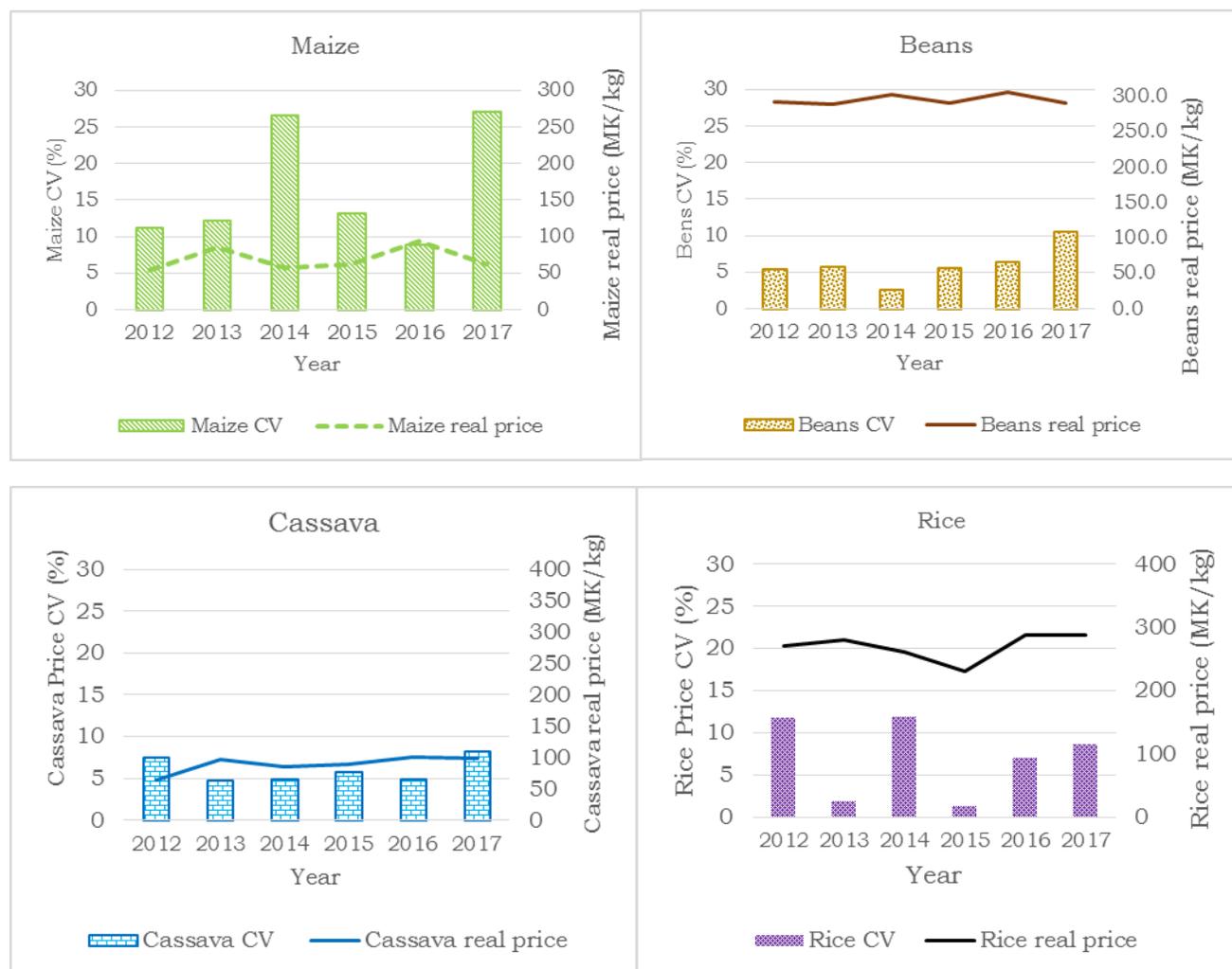
Figure 6-1: Average monthly retail prices and minimum farm-gate prices for maize (MK/Kg)



Source: MoAIWD (2017) – AMIS data.

The low nominal commodity market prices recorded in the 2017 harvest season imply that farmers who sold their produce earned less income than normal. In some instances, farmers were selling maize grain for as low as MK 50/kg. At the same time, the Agriculture Development and Marketing Corporation (ADMARC) started purchasing maize from farmers at MK 170/kg. However, ADMARC depots were unable to purchase large volumes of maize grain due to budgetary constraints.

Figure 6-2: Commodity Real Prices and Respective Coefficients of Variation (Volatility) 2012 – 2017.



Source: MoAIWD (2017) – Agriculture Market Information System.

As measured by the coefficient of variation (CV)¹¹, maize prices exhibited high volatility in 2017 (27 percent) as compared 9 percent in 2016. The calculated CV for maize prices between 2012 and 2017 was also the highest among the starch commodities analysed (see **Error! Reference source not found.**). During the same period, beans recorded considerably lower price volatility

¹¹ CV is a measure of dispersion/volatility from the mean value.

(10 percent in 2017 and 6 percent in 2016) and cassava prices were even less volatile, at 8 percent and 5 percent CV during 2017 and 2016, respectively. Rice prices also exhibited lower CV than maize prices, implying that maize market prices have continued to be exceptionally volatile. Some of the explanation for the observed high volatility of maize prices is the level of Government intervention and market uncertainty surrounding maize markets in Malawi. While maize prices continue to be the lowest not only in the 2017 season but in the long run, they tend to fluctuate significantly more than most crops. These two factors (low price and high volatility) make maize production and marketing a riskier business, which implies that there is less likelihood of private sector investors to invest in maize production and marketing. On the other hand, other commodities like beans and rice exhibit relatively higher prices but significantly less price volatility, suggesting that these commodity markets are likely to experience higher levels of private sector participation. Indeed, unlike the maize markets, these other markets appear to have less government intervention and are more profitable than maize.

The last few years witnessed a pigeon pea price boom. As shown in **Error! Reference source not found.** the average nominal price of pigeon peas increased from about MK105 per Kg in August 2009 to MK666 per Kg in March 2016. Sadly, the pigeon pea market has since witnessed a crash, with nominal prices tumbling to about 332 per Kg in September 2017. Other private company sources indicated that the pigeon pea price tumbled below the 332-mark documented in the Agriculture Market Information System (AMIS) and is projected to continue falling as shown in *Figure 6-3*. Pigeon pea prices also exhibited high volatility, with a coefficient of variation of 38%. This should draw policy makers’ attention to the need for price risk management instruments, particularly if the sector is to promote diversification and commercialization of agriculture in Malawi.

Figure 6-4: Pigeon pea monthly prices (MK/Kg)



Source: MoAIWD (2017) – Agriculture Market Information System.

Calculation of the gross margin for pigeon peas, with an assumed market price of MK240, a price reported in some instances by private companies and traders, suggests that pigeon peas were unprofitable in the year under review (Table 6-1).

Table 6-1: Gross Margin Analysis for Pigeon Peas (2016/17)

Pigeon Peas (shelled)	Kg	2000	@ Unit Price of MK 240 per Kg	MK
Total Revenue				480,000
Less, Variable Costs:				
Seed	Kg	10	1,560	15,600
Chemicals		1	20,000	20,000
Bullet	Litres	1	13,375	13,375
Round Up	Litres	1	19,250	19,250
Tractor		1	71,100	71,100
Planting Labour		1	20,000	20,000
Weeding Labour		1	40,000	40,000
Supervision - Direct		1	50,000	50,000
Permanent Staff		5	20,000	100,000
Unskilled Labour	Days	150	1,000	150,000
Grading		1	40,000	40,000
Shelling		2000	20	40,000
Transportation		2000	40	80,000
Total Variable Costs				659,325
Gross Margin per ha				(179,325)
Percentage Gross margin (Loss)				-37%

Source: Authors calculations

Another important market is that of tobacco, the main cash and export crop in the country. Tobacco is traded under an export mandate using tobacco auction floors in Limbe, Lilongwe, Chinkhoma, Mzuzu and Kabwafu, all owned by Auction Holdings Limited (AHL). There are four types of tobacco sold on the floors and these are Burley, Flue Cured, Northern Division Dark Fired (NDDF) and Southern Division Dark Fired (SDF). Burley tobacco accounts for the largest volume (as shown in Table 6-2) and is generally grown by smallholder farmers.

Table 6-2: Tobacco sales and prices (2015-2016)

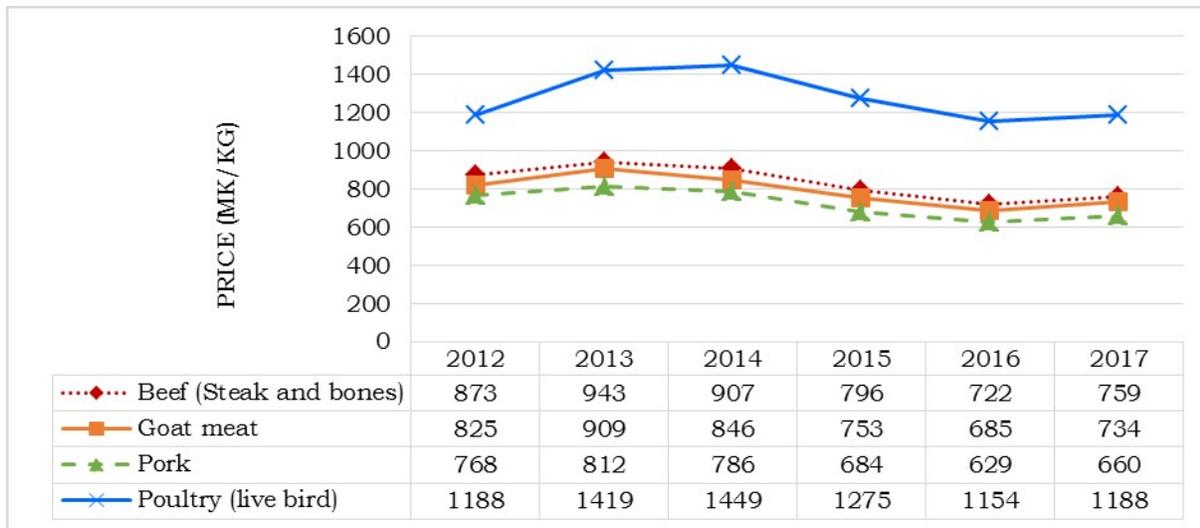
Year	Description	Burley	Flue cured	NDDF*	SDF**	All tobacco
2015	Volumes Traded (kg)	168,248,234	23,060,068	1,303,569	78,432	192,690,303
	Value (US\$)	280,209,951	54,199,989	2,818,688	174,426	337,403,054
	Unit Price/kg (US cents)	167	235	216	222	175
2016	Volumes Traded (kg)	174,902,046	17,558,178	2,496,798	167,972	195,124,994
	Value (US\$)	226,215,286	44,858,974	4,956,950	358,747	276,389,957
	Price/kg (US cents)	129	255	199	214	142
2017	Volumes Traded (kg)	81,446,593	20,812,593	3,899,564	378,065	106,536,815
	Value (US\$)	144,242,300	60,756,985	6,836,563	678,215	212,514,063
	Price/kg (US cents)	177	292	175	179	199

Source: Tobacco Control Commission (2017); Adapted from Gondwe and Baulch (2017).

* NDDF = Northern Division Dark-Fired, **SDF = Southern Division Dark Fired.

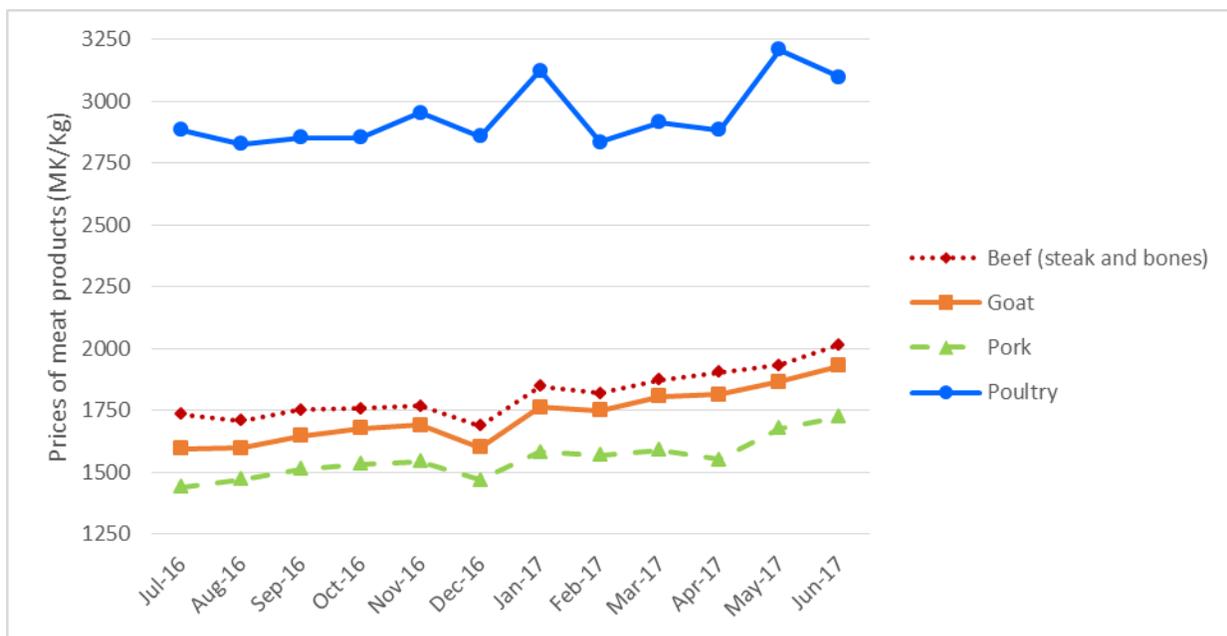
In the case of livestock products, prices have generally been declining over the past five years. As depicted in Figure 6-5, poultry (live bird) prices decreased from about 1,449 per Kg in 2014 to MK 1154 per Kg in 2016 only to marginally increase to MK1, 188 in 2017. Likewise, beef (steak and bones) prices declined from its five-year peak of MK943 per Kg in 2013 to MK722 per Kg in 2016 only to slightly increase to MK759 per Kg in 2017. The recent marginal increase for all livestock product prices is depicted in terms of nominal monthly prices in Figure 6-6, where a price spike is revealed for the months of January and June 2017.

Figure 6-7: Annual trends in real prices for selected meat products



Source: MoAIWD (2017) – AMIS data.

Figure 6-8: Monthly retail nominal prices for selected meat products



Source: MoAIWD (2017) – AMIS data.

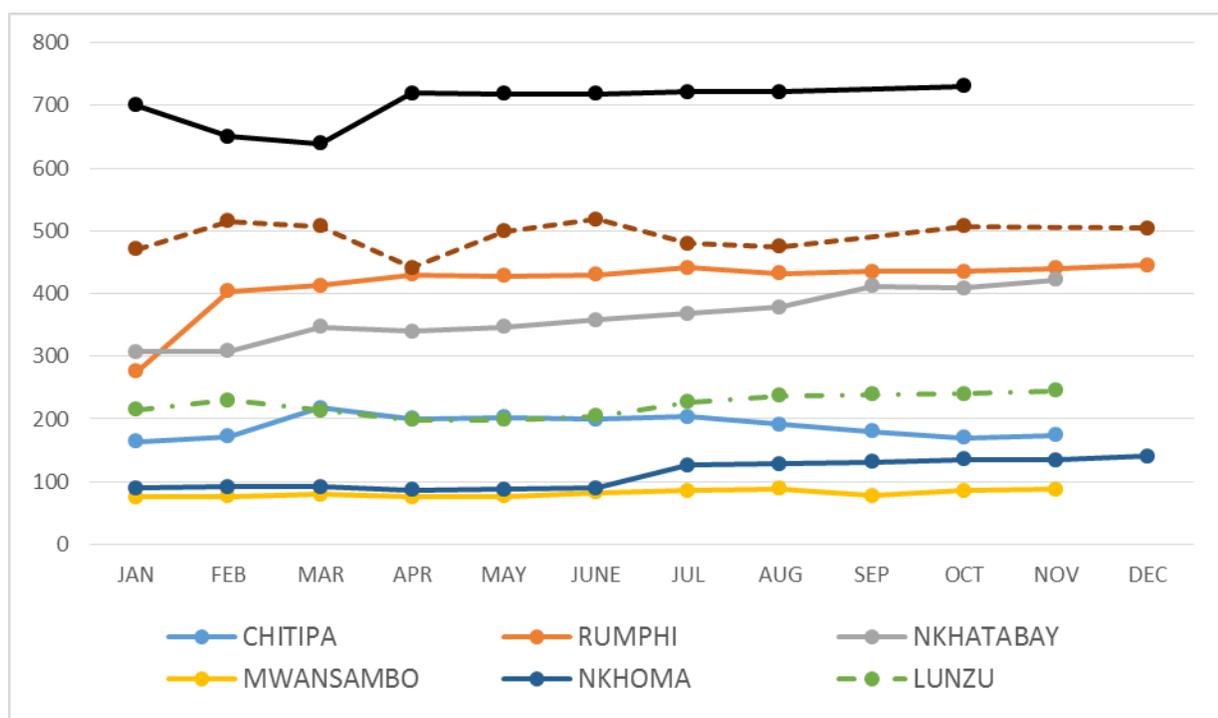
Real prices of eggs have been declining over time, making eggs more accessible to consumers. In part, this decline in egg prices is a result of increased supply on the domestic market. At the same time, volatility in egg prices has declined making the domestic egg market a relatively stable one. *Figure 6-9* shows the price trend for hybrid and local eggs. In general, hybrid eggs are more expensive and their average real price declined from about MK47 per egg in 2013 to MK35 per egg in 2017. Similarly, the real price of local eggs declined from about MK35 per egg in 2013 to MK26 per egg in 2017.

Figure 6-10: Volatility of egg prices (2012 – 2017)



Horticultural products that are commonly traded in the domestic market include bananas, tomatoes, onions and cabbages. Analysis of prices for these horticultural products suggests challenges with the quality of data. Nonetheless, assuming price data quality is relatively acceptable; the prices of most horticultural produce tend to be relatively stable, though significantly different depending on the geographic location. *Figure 6-11* shows the price movements for bananas in select markets in 2016 and illustrates the relative stability of prices throughout the year.

Figure 6-12: Monthly banana (nominal) prices in select markets in 2016 (MK/Kg)

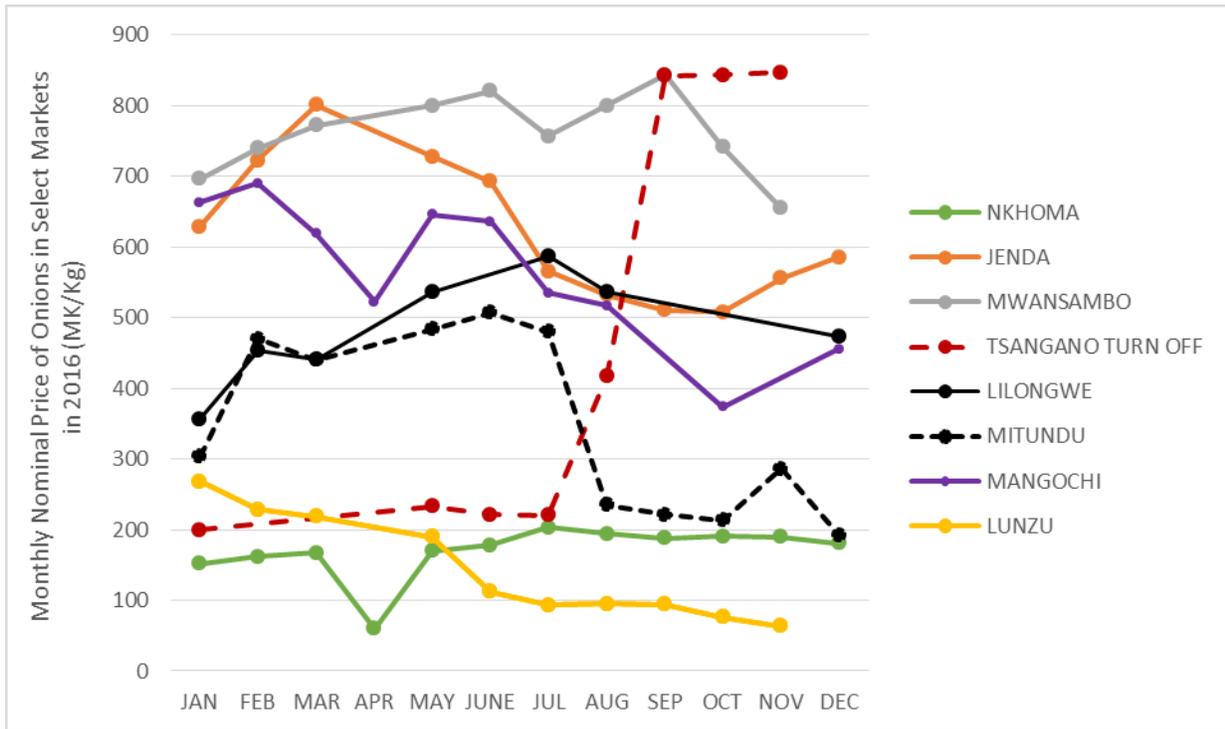


Source: MoAIWD (2017) – AMIS data.

The disparity in prices by location is quite substantial and may be indicative of data quality issues. For instance, the price of bananas in Mzuzu is recorded as approximately MK720/Kg while in Nkhoma and MwanSAMBO markets the banana price was about MK100/Kg. One possible explanation for this huge disparity is that the price in Mzuzu may include the price of plantains, which are a different horticultural crop that tends to be relatively more expensive. In addition, there is anecdotal evidence that bananas in Mzuzu are of better quality and as such the price disparity may also reflect a quality premium for bananas sold in Mzuzu.

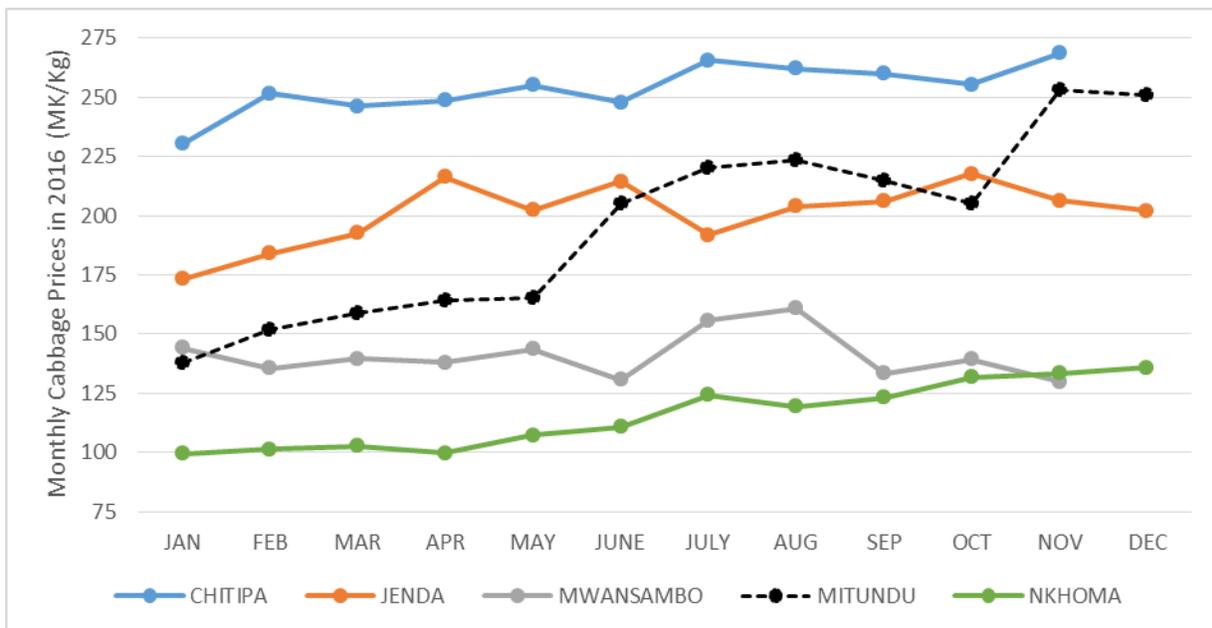
When one analyses the prices of onions, issues of data quality crop up again. Figure 6-8 (on the next page) shows onion prices for select markets. There is a wide price disparity between markets in different geographic areas, for example the average onion price in MwanSAMBO is about MK800/Kg while the price in Lunzu market is about MK100/Kg. In addition, the price trend for onions in the Tsangano Turn-Off market exhibit an extraordinary increase from about MK220/Kg in July 2016 to about MK843/Kg in September and October. This descriptive analysis of horticultural prices suggests that there is need to improve the quality of data for horticultural crops and perhaps a closer analysis of these markets is required, especially if considering the importance of horticulture as pertaining to dietary diversity and nutrition.

Figure 6-13: Monthly prices of onions in select markets in 2016 (MK/Kg)



Source: MoAIWD (2017) – AMIS Data.

Figure 6-14 Monthly cabbage prices in 2016 (MK/Kg)



Source: MoAIWD (2017) – AMIS Data.

In the case of cabbage prices, the data appear to be of better quality as the price spreads by geographic areas are not as large as with other horticultural products. Figure 6-15 shows that the monthly prices of cabbages in select markets for 2016 ranged between MK100 and MK275 per

Kg. Prices of cabbage were generally lower in Nkhoma and Mwansambo, the same markets that appeared to have lower prices for other horticultural products. Chitipa, Mitundu and Jenda markets appear to have higher cabbage prices likely due to distance from places of cabbage production as well as high demand for those locations in cities with high populations. It is also worth noting that the cabbage price in Mitundu exhibited a relatively rapid increase compared to other markets. This may be a sign of increasing demand for cabbage in Mitundu. Prices of cabbage across the board increased in the months of November and December and this is indicative of the seasonal shortage of cabbage in these months.

6.1.2 Contract Farming Arrangements

Contract farming has the potential to improve the livelihoods of farmers in Malawi through increased and profitable access to markets for agricultural commodities, including export markets. At the same time, contract farming offers an opportunity for buyers of agricultural commodities to source high-quality output as and when they need it, thus assuring themselves reliable supply of the agricultural commodities. These advantages, inherent in contract farming, can significantly improve marketing of agricultural commodities, increase production and productivity, and hence contribute to wealth creation and poverty reduction in Malawi.

There are several contract farming arrangements that exist in the country and these include Integrated Production System (IPS) in the tobacco subsector, the out grower schemes in sugarcane, and anchor farming in various crop enterprises. Despite the existence of the various farming arrangements in the Malawi's agricultural sector, the history of contract farming in Malawi shows that farmers have, for a long time, not benefited as much from contract farming. Buyers of agricultural commodities have often taken advantage of the lack of a clear regulatory framework on contract farming in Malawi, and exploited farmers and farm labourers (including women, children and other vulnerable groups), while not taking care of the environment in the process.

In cognizance of above challenges, the Government of Malawi developed the Contract Farming Strategy in 2016 to address these multiple challenges with the view of realizing the potential benefits associated with a functional contract farming system and to create an enabling environment for all entities participating in contract farming.

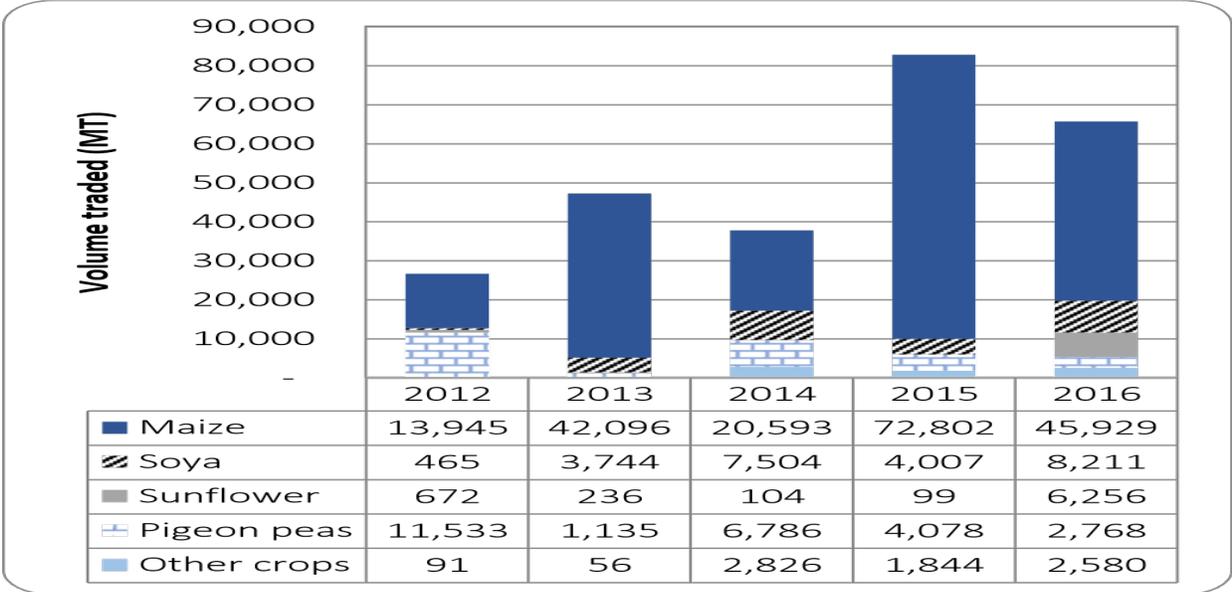
6.1.3 Commodity Exchanges

Malawi has two commodity exchanges, namely the Agricultural Commodity Exchange for Africa (ACE) and the Auction Holdings Commodity Exchange (AHCX) established in 2006 and 2013, respectively. Following the review of the Securities Law in 2010, the Malawi Securities Exchange announced its intention to set up a derivatives market in 2016.

Figure 6.10 shows that the volumes and diversity of commodities trades on the ACE market have expanded over the years. In 2016, just less than 66,000 metric tonnes (MT) of commodities were

traded on ACE. Maize made up the largest share of traded volume (70%) followed by soybeans (12%) and sunflower (10%). Other crops traded on ACE are beans, processed soya, groundnuts, rice and sorghum. While it is encouraging to see the increased diversity of commodities traded on the ACE market, the high concentration of maize in the market warrants efforts to enhance the enabling environment that would allow growth in the volumes of the other commodities traded.

Figure 6-16: Volumes of commodities traded on the ACE commodity exchange



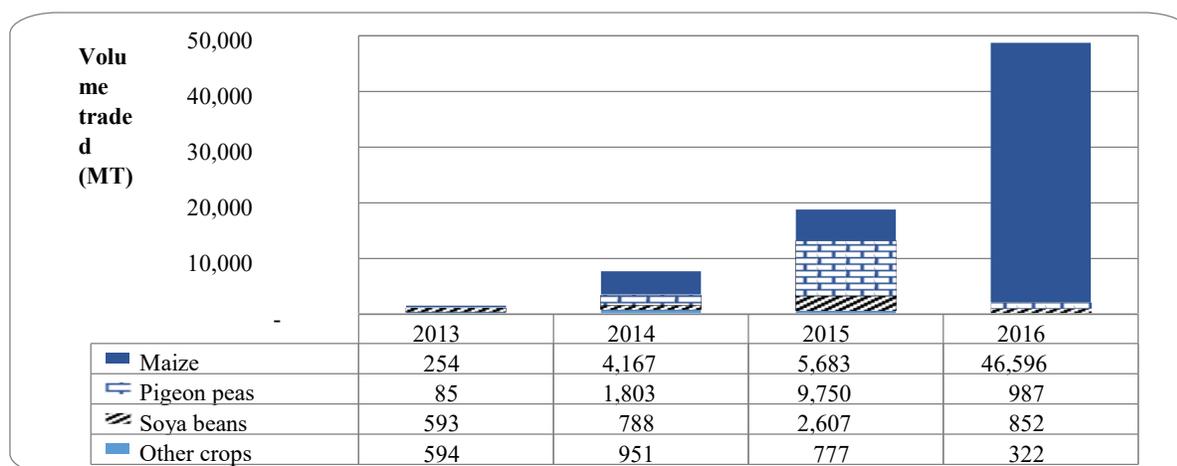
Source: ACE

Source: ACE (2017)

Similarly, volumes traded on the ACHX market have rapidly increased over the years (see Figure 6-17). Again, maize dominates the ACHX market, raising

Warehouse receipts are another trading instrument featured on both the ACE and ACHX markets, which allow farmers to access finance by using their commodity deposits as collateral with commercial banks such as First Merchant Bank. Over the years, finance accessed through ACE’s warehouse receipts system has expanded from US\$ 11,370 in 2011 to US\$ 11,031,098 in 2016. While statistics were not made available, similar trends have been reported regarding the amount of loans accessed through warehouse receipts on the ACHX market.

Figure 6-18: Volumes of commodities traded on the Auction Holdings Commodity Exchange



Source: ACHX (2017)

Generally, warehousing (storage) services somewhat slowed down in 2016 but a strong growth of 6.3 percent is projected for 2017 from 4.7 percent in the previous year.¹² The major contributing factor for the slowdown in 2016 was low agricultural production in the preceding 2015/16 farming season, which had a direct impact on the sector. On the other hand, distribution of relief food offered some demand for storage services during the year.

6.1.4 Agro-processing and Value Addition

The government of Malawi recognizes the important role that agro processing and value addition (as spelt out in the NAP's priority area number 4) can play in spurring economic growth and development in both upstream and downstream value chains. However, one of the major problems facing smallholder farmers in the agricultural sector is limited access to markets. Agro processing adds value to products through improvements in product quality and form thereby enhancing access to lucrative markets, which can in turn lead to increased agricultural incomes.

However, as observed in the NAP, agro processing and value addition in the Malawi's agricultural sector remains low due to several factors that include poor agronomic and management practices that affect product quality, deficient or missing infrastructure, policy and regulatory incoherence and most importantly, low private and public investments in processing technologies and equipment, among others.

On the other hand, the government of Malawi, non-state actors and development partners have taken important strides in improving the competitiveness of Malawian commodity value chains. For instance, the Ministry of Agriculture Irrigation and Water Development through the New Alliance Policy Acceleration Support (NAPAS: Malawi) project commissioned a number of value chains studies in 2016 to aid in prioritization of investment areas in the NAIP. Such value

¹² Annual Economic Report 2017

chain studies included roots and tuber crops (cassava Irish potato, sweet potato and cocoyam), groundnuts, pigeon peas, macadamia nuts, tomatoes, tea, sugar, tea and coffee. GIZ has been supporting several value chains such as cassava through more income and employment in rural areas (MIERA), while private companies such as Sunseed Oil Limited have invested in soy bean value chain, where among others, is processing vegetable cooking oil for the domestic markets and soybean cake for local poultry industry and export market.

In value-added terms, the agriculture sector is the second main contributor to GDP at about 30 percent after the services sector at 56 percent in 2016. Over the years, however, the contribution of value added to GDP from agriculture has been decreasing, reaching its lowest point at 28 percent in 2016. For the past 16 years, its contribution was the highest in 2002, at 41 percent. Figure 3 summaries the contribution of agriculture, value added as a percentage of GDP since 2002.

6.2 International and Regional Agricultural Trade

6.2.1 Formal Agricultural Trade

The performance indicator under the NAIP tracking progress on agricultural export development in Malawi is the value of Malawi Agriculture Exports in Regional Trade. Considering that agriculture accounts for 80% of total exports Malawi and given the lack of quality trade data, value of total exports will be used as proxy indicator. During the period under review, the European Union (EU) was Malawi’s main formal export market followed by SADC, in value of exports.

In terms of increased share of agricultural exports other than tobacco, Malawi has registered 34.2 percent in 2016 against the NAIP target of 60 percent by 2022/23. However, the overall value of exports for key agricultural commodities experienced a sharp decrease compared to 2015 and 2014. The decrease in export values is attributed to decreased production of key cash crops (tea, sugar, cotton and coffee) due to adverse weather conditions and low export prices as shown in Table 6-3 below.

Table 6-3: Export Values of Traditional Commodities (USD Million)

Commodity/Year	2014	2015	2016
Tobacco	600.8	649.7	703.4
Tea	76.6	66.5	62.5
Sugar	125.3	125.7	112.2
Cotton	22.9	9.4	4.4
Coffee	4.4	4.3	3.2
Pulses	52	74.4	74.4

Source: MoFEPD (2017)

It is also worth noting that despite Malawi conceiving three export-oriented agricultural clusters for diversification under the National Export Strategy, tobacco has continued to dominate agricultural exports accounting for 50% of total agricultural exports.¹³ Moreover, tobacco export values were bullish, reaching US\$703.4million in 2016. Pulses have also seen a boom in export value, rising from US\$52million to US\$74.4million between 2014 and 2016. This trend is likely to be compromised, given that a significant driver of this growth was increased pigeon pea exports to India. Unfortunately, India has since slapped an import ban on pigeon peas and this may partially explain the price crash observed in the domestic pigeon pea market. Efforts are already underway to find alternative markets but it is likely a better strategy for the country to initiate bilateral negotiations with the government of India and potentially secure an export window, particularly given

Sugar exports took a hit in 2016, in part because the preferential trade arrangement with Europe expired and world prices were not as favourable. Nonetheless, there are prospects to export increased volumes of sugar to the United States under the African Growth and Opportunity Act (AGOA) trade agreement and other export markets are being explored.

Table 6-4: Malawi export values for 2012 – 2016 (in US dollars)

Product name	2012	2013	2014	2015	2016	% Total (2016)
Tobacco	654,556	553,678	646,655	496,186	555,362	66%
Tea	73,140	83,279	77,380	66,820	75,953	9%
Sugar and sugar confectionery	43,126	110,505	126,821	98,312	64,191	8%
Vegetables, roots and tubers	31,095	30,760	46,409	64,741	49,810	6%
Edible fruits and nuts	12,218	13,784	18,976	20,535	21,030	3%
Oil seeds	45,373	77,883	74,901	18,137	15,778	2%
Coffee	4,052	3,929	4,480	3,576	4,908	1%
Spices	2,065	3,046	1,887	1,189	4,111	0%
Cereals	2,181	3,864	4,047	2,349	3,344	0%
Cotton	49,303	25,806	25,939	24,362	1,461	0%
Other exports (non-agric.)	82,715	101,225	258,922	187,444	43,330	5%
All exports	999,824	1,007,759	1,286,417	983,651	839,278	100%

Source: Gondwe and Baulch, 2017

6.2.2 Informal Cross-border Agricultural Trade

Informal cross-border trade continues to constitute a significant share of total trade among African countries, including Malawi. For example, informal cross-border trade makes up an estimated 30- 40 percent of total intra-SADC trade. This informal trade is mainly practiced by the self-employed, SMEs and a few large firms, and even formal workers desiring to supplement

¹³ World Bank Malawi Economic Monitor

their salaries. These traders often have to deal with duty taxes, burdensome bureaucracy, corruption, harassment and other difficulties at the border.

In the 2016/17 season, maize is one of the important commodities that was traded informally, mainly due to the maize export ban that was in place in 2016. Informal maize exports to countries such as Tanzania in 2017 were 76 percent above the five-year average due to increasing demand for maize in East Africa. The informal cross border exports to Tanzania, and Mozambique through central and southern Malawi districts were recorded at 1,769 MT for the month of June and 1,750 MT for July (FEWSNET, 2017).

In a Regional Supply and Market Outlook report released in August, Famine Early Warning System Network (FEWSNET) indicated that despite imposing a maize export ban, Malawians continue exporting maize to Tanzania, other East African countries including Kenya and Burundi as well as to the neighbouring Mozambique. The report suggests that the cited countries are opting to import their maize from Malawi and Zambia mainly due to low import parity prices of maize from Malawi and high import demand of the grain.

7 CROSS-CUTTING ISSUES

The NAP has a priority area on empowerment of women, youth and vulnerable groups, including the disabled. As such, it is fitting to assess the sector's performance in this area.

The agriculture sector generally mainstreams Gender, and HIV and AIDS issues in projects and programmes implemented in the sector with the aim of minimizing gender disparities, morbidity and mortality attrition. The effects of HIV and AIDS are also mitigated in order to improve agricultural productivity. The overarching goal of gender, and HIV and AIDS mainstreaming is to create an HIV and AIDS free labour force and increase productivity and production at staff and farmer level, respectively.

7.1 Update on Youth in Agriculture

Participation of the youth in the agriculture sector remains key to improving their prospects for employment and a pathway out of poverty. The youth constitute a significant share of Malawi's population, with 45.5 percent under the age of 15 years and approximately 36 percent between the productive ages of 15 and 35 years (Benson et al, Forthcoming). Malawi is likely to experience what is termed a demographic dividend, as most of the population will be between the ages of 15 and 35 in the next decade. From an economic perspective, this implies an increase in the numbers of employable individuals and represents an opportunity to significantly increase Gross Domestic Product (GDP) by enabling this cohort of the population to contribute to the national economy. The ability to capitalize on this opportunity will hinge on strategic planning and investments directed at generation of employment for this segment of the population in the right sectors of the economy.

The new youth entrepreneurship and irrigation project, funded by the African Development Bank and the European Union is an example of a specialized project dedicated to supporting youth in agriculture in Malawi. The project is being implemented in Nkhotakota and Nkhata Bay districts and was launched by MoAIWD earlier this year (2017).

8 CONCLUSION: LESSONS AND RECOMMENDATIONS

8.1 Main findings

This report has documented the performance of the agricultural sector in line with requirements under the NAIP framework and in line with the NAP priority areas. Considering that the NAIP is part of the CAADP process, the report has in some cases compared Malawi's sector performance to other countries in the region as well as used indicators tracked under CAADP and SADC-RISDP. The analysis in this report is further complemented by input from various sector reports including the New Alliance country report for Malawi and other empirical and economic reports.

Malawi's agricultural development agenda is driven by several national, regional, and international policies, cooperative frameworks and agreements that have an implication on the country's development. Alignment of these commitments and agreements is therefore necessary if the country is to make any meaningful development in the agricultural sector. Over the past years the agriculture sector in Malawi has been guided by several sub-sectoral policies and laws, most of which have been out dated or incompatible with each other. This has led to a poor enabling environment for agriculture and thus greatly limited the development impact of programmes and investments in the sector. The NAP, which was launched in 2016, began to address this situation by providing clear and comprehensive policy guidance for the sector. The NAP is aligned to Malawi's Vision 2020 and the MGDS III, which are the overarching long-term and medium-term development strategies, respectively. It is also incorporated into the NAIP, which has been developed during the year under review.

Additional efforts to improve the enabling environment for agriculture through reforms of policies, institutions and coordination are slated in the NAIP under programme A: Policies, Institutions and Coordination for results. It will be imperative for all stakeholders to support and allocate sufficient resources towards improving the enabling environment for agriculture. Of particular importance will be addressing the backlog of legislative reforms that are long overdue as evidenced by out-dated laws of agriculture, such as the special crops act and the general agriculture purposes act, in addition to those laws that are already in the pipeline but have stalled such as the laws on seed, fertiliser and plant protection. It is nonetheless encouraging that several laws have finally been promulgated such as the land laws, which are crucial to enabling investments in agriculture. Implementation of these laws will be of paramount importance as enactment of the laws alone does not suffice.

Implementation of the NAIP shall pull together various stakeholders including Government, development partners, private sector, NGOs, civil society, farmers and farmer organizations. As such, key to successful implementation will be effective coordination. In the reporting period, the sector faced numerous challenges in coordinating implementation through the TWGs and ASWG. Some of the reasons highlighted included, the lack of adequate financial resources dedicated to the functioning of the TWGs and ASWG; the failure to take action or prolonged discussions on the issues identified, without real action on the ground; and ad hoc scheduling of meetings and events in the sector leading to conflicting calendars for stakeholders. The NAIP

proposes a new approach to address coordination failures, including the adoption of a NAIP troika to enhance intra-ministerial coordination, the use of taskforce teams to tackle identified constraints under each TWG and budget allocations for taskforces and TWGs to take action on agreed upon issues.

Several financial and non-financial commitments have been made by both state and non-state actors in the agriculture sector. A key financial commitment by the government is investment of a minimum of 10 percent of its national public expenditures in the agricultural sector, to achieve a 6 percent growth in the sector. This commitment has consistently been achieved over the duration of the ASWAp as well as after. However, its efficiency must be questioned and resolved, as the country has continued to struggle to achieve the 6 percent growth rate in agriculture and experienced severe food insecurity in the reporting period. This call for a serious relook at the way finances are expended in the sector and to consider making investments that will build resilience of the sector, while at the same time enhancing agricultural productivity in a sustainable manner.

As in the past, much of the funding has been allocated to short-term food security interventions that currently do not enhance resilience, such as the FISP and maize purchases by the state. It is however important to note that in the year under review, this was in the context of El Nino-related drought, which left millions in need of food assistance. Moreover, the budget allocation to FISP reduced significantly, indicating that financial budget adjustments are in progress with regards to rebalancing the agriculture budget. Thus, as adjustments continue budgetary allocation to research and extension services, which are among the lowest may need to increase going forward. There has also been increased spending on sustainable land and water management, pest and disease control as well as on rural infrastructure (rural roads and irrigation). While this is commendable, additional investments in these areas that enhance resilience will be necessary if Malawi is to attain the agricultural transformation envisioned in the NAP and espoused in the NAIP.

Agricultural production in the country has struggled to keep pace with the growth rate required to meet the ambitious targets set in the NAP and NAIP, especially in years of unfavourable weather. For the 2016/17 agricultural season, yields rebounded to around their five-year averages. This follows improved weather conditions and commendable response to the fall armyworm challenge that transpired during the year under review. More will need to be done to improve production and some of the new investments in areas such as sustainable land and water management (including irrigation) as well as on extension and advisory services, will make a difference.

On resilient livelihoods and agricultural systems (programme C of the NAIP), the food security and nutrition of the nation remains a challenge. Estimates from the Malawi Vulnerability Assessment Committee show a sizeable decline in the population at risk of food insecurity, following the humanitarian food response in 2016 and the improved crop production in the 2017 harvest season. However, the number of people remaining at risk of food insecurity in a year of bounty remains high.

Nutrition status of the country, as measured by the prevalence of stunting, has also improved, with 37 percent of children under five years presenting with stunting. However, this is still high

under nutrition and more concerted and coordinated efforts are needed to further reduce stunting, especially through agricultural and food-based interventions that have been shown to be more effective and sustainable approaches to ending hunger and malnutrition. Sustainable agricultural land and water management has been identified as a key element to enhancing resilience of the agriculture sector. Assessment of this key element shows that efforts to prevent degradation of soil and water resources, e.g. through adoption of sustainable land management practices were at best modest and in some instances poor. With regards to water management, the estate sector has allocated the most land to irrigation farming with treadle pumps being the most adopted irrigation type.

Commercialisation of agriculture, agro-processing and market development was one of the key focus areas identified in the ASWAp and continues to be a key pillar in the NAIP under programme D: Markets, Value Addition, Trade and Finance for Transformation. Analysis finds that agricultural markets continue to be characterised by high price volatility, which presents enormous risks to farmers and traders. Two cases in point are the maize domestic market and the pigeon pea export market, which both saw commodity prices crashing and making trade in these commodities unprofitable, especially for farmers. This calls for serious action to address price volatility, for instance through improved market information systems, installing export mandates and engaging in bilateral trade negotiations at the government level, in the case of pigeon peas trade, which was largely affected by an import ban by India, the world's largest importer of pigeon peas. In broader perspective, performance in the sector continued to be highly dominated by tobacco, which accounts for about 66% of export earnings of all key export crops considered. Export earnings from other crops including tea and nuts have also increased while sugar exports declined largely due to the phasing out of preferential trade agreement with the EU. This further emphasises the need to find long-term approaches to competitive trade and the role of government in negotiating favourable terms of trade through regional and bilateral trade negotiations.

While the NAP separates out a priority area on empowering women, youth and vulnerable groups (including the disable) in agriculture, the NAIP mainstreams these issues as cross-cutting in all the programmatic areas. It is however disappointing that tracking progress on this important area is difficult in part because gender and youth disaggregated data on many of the indicators is not possible. Moreover, the data for most necessary indicators are currently not being collected. As such, it will be of paramount importance for the stakeholders in the sector to make an effort to share data on this area as well as make new investments in data collection on gender, youth and vulnerable groups in agriculture.

8.2 Challenges and positive developments

In the previous era of the ASWAp, the launching of both the M&E Master Plan and the Agricultural Statistics Strategic Master plan were expected to contribute to improved ASWAp performance tracking and reporting. Sadly, many challenges remain that need to be addressed to continue improving the efficiency of the system. To begin with, the M&EMP set forth clear guidelines for the collection and reporting of key performance indicators (KPIs) selected to inform the performance of the agricultural sector. In the second year since KPIs were

established, collection and flow of data on key indicators remains a challenge. In some cases, TWGs assigned to collect data on behalf of the M&E systems often delayed in submitting their indicators consequently affecting and delaying compilation of reports on the sectors' performance. Furthermore, the recent stakeholder discussion held in preparation of the ASWAp II highlight that the KPI have mostly focused on impact and outcomes rather than on inputs and outputs. In addition, reporting of the KPI through the joint sector review mainly focuses on the performance of the sector and to a lesser degree on the performance of the ASWAp and the MoAIWD. It was also noted that contribution from other stakeholders (private sector, farmer organizations, and NGOs) has not yet been fully integrated although such an exercise has been planned. Nevertheless, M&E remains work in progress and investments need to continue to ensure an improved delivery and holistic reporting on the performance of the agricultural sector.

While challenges might have been many, the NAP launch in 2016 and finalisation of NAIP drafting in 2017 offer increased hope of offering clear and comprehensive policy guidance for the sector. Both the NAP and NAIP seek a transformation of the agriculture sector that will stimulate substantial increases in agricultural production, productivity and real farm incomes. These changes will allow for households to obtain abundant nutritious foods and quality agricultural products at lower real prices. The Policy is aligned to Malawi's Vision 2020 and the Malawi Growth and Development Strategy III, which was also finalised in the year under review. In addition to these changes, other notable developments include a number of reforms in 2016/17 FISP implementation.

8.3 Way forward

Based on the analysis and findings from this report, the following recommendations need to be considered to improve the delivery of future ASWAp and to enhance food security outcomes and agricultural sector development:

- While the NAIP has prioritized four programmes, in line with the eight priority areas of the NAP, allocation of financial resources continues to be skewed towards two programmes, namely Production and Productivity for Growth and Management. This means that fewer resources are being allocated to support other key programmes that are necessary for achieving the goal of the NAP and the desired outcomes of the NAIP.
- There is urgent need for all actors in the sector (public, NSA and Development Partners) to seize the momentum surrounding the NAP and align investments to the NAIP to begin making headway towards agricultural transformation and breaking the cycle of food insecurity in Malawi, in line with the aspirations of the Vision 2020, MGDS III and National Resilience Strategy. While the NAP has clearly outlined the policy priority areas, which have been neatly integrated into the NAIP and the MoAIWD's budget programmes, it will be paramount to follow through on actual disbursements of financial resources. Furthermore, it will be critical to harmonize and sequence these investments through coordinated financing, as outlined in the NAIP, so as to achieve synergies across sectors and in turn achieve maximal agricultural impact. Key in this respect, will be coordination at grassroots levels, where implementation take place, and ensuring adequate funding at local government levels, as well as capacity strengthening and

inclusive planning, implementation, monitoring and evaluation. This will be necessary if the sector investments are to avoid the challenges faced during implementation of the ASWAp, where investments obstinately favoured the Food Security and Risk Management component at the expense of the other equally important components.

- Significant strides have been made in terms of improving the enabling environment for the business of agriculture, as shown by improvements in the Ease of Doing Business Indicators for Malawi. Nonetheless, there remains substantial room for improvement. The long list of policies, strategies and pieces of legislation still under development is clear indicating that a lot more work needs to be done in this area. Indeed, the NAIP has identified as one of its programmes, the area on improving the enabling environment in the agriculture sector. Therefore, with a recognition that it take money to reform institutions and policies as well as to put in place legislation that promotes the business of agriculture, all relevant stakeholders will need to allocate adequate resources towards institutional and policy reforms as well as processes for improving legislation in agriculture.
- A strong M&E system is needed for the successful implementation of the NAIP and NAP and serious investments need to be made sooner rather than later in this area. Data collection challenges continued to exist throughout the duration of the ASWAp, even after launching the M&E Master Plan and the Agricultural Statistics Master Plan. Large upfront investment in agricultural M&E will be quintessential to improve implementation of the NAP and NAIP. Indeed, this report has not managed to adequately monitor the performance of the sector due to the lack of a National Agriculture Management Information System. In addition, the cost of humanitarian response that took place in the year under review was implemented with incomplete information, resulting in less effective coordination and unintended outcomes as evidenced by several private sector companies requesting permits to export maize grain in a year when the country had experienced the worst drought in decades. These unnecessary and costly challenges can be avoided if serious investments are made in a streamlined National Agriculture Management Information System.
- Contribution to sector financial reporting from Civil Society and Private Sector is a welcome development. However, there continues to be inadequate information on both these subsectors and this further underscores the need to have an integrated National Agriculture Management Information System, which will allow all players to better monitor performance of the sector and inform future decisions.
- Following the launch of the National Irrigation Policy, Government and its partners have intensified promotion and support for sustainable irrigation development. This new direction in investments in the sector should be sustained given the huge irrigation potential in the country and the fact that climate change will continue to affect the sector in the coming decades.
- Output price risk (volatility) has emerged as an area that needs attention from all stakeholders in the sector. Following a boom in maize and pigeon pea prices in the previous year, the markets saw tremendous crashes that have led to significantly reduced farm incomes. Among the severely affected are smallholder farmers who have limited

bargaining power and access to market information. Therefore, there is a need to seriously confront commodity market risks through a variety of risk management instruments, including the use of commodity exchange export mandates; risk-hedging and securities instruments; and commodity insurance programmes, which have been shown to be effective elsewhere. It is also recommended that efforts be made to better organise farmers into coordinated organisations or cooperatives that have better bargaining power and are better informed on market trends. In the special case of the pigeon pea market, the market crash was likely caused by an import ban imposed by the Government of India. Therefore, it would be worthwhile for the Government of Malawi to initiate bilateral trade negotiations with India, to seek Malawi access to the Indian pigeon pea market, especially since Malawi comprises a very small share of India's pigeon pea imports. It may also be useful for the GoM to negotiate with private companies in the business of pigeon peas in Malawi, to come up with a generic promotion and risk management instrument for all players. Similar approaches have been adopted in other countries such as Ghana on cocoa, through the Cocoa Board, and Ethiopia on coffee through the Ethiopia Commodity Exchange.

- Since the launch of the National Irrigation Policy, Government and its partners have intensified promotion and support for sustainable irrigation development. This new direction in investments in the sector should be sustained given the huge irrigation potential in the country and the fact that climate change will continue to affect the sector in the coming decades.
- Preparation of the ASWAp II will have to strongly prioritize financial alignment to various program thematic areas considering that the current ASWAp implementation has not been used as a planning and budgeting tool for MoAIWD annual work-plan and budget preparation
- Government's efforts through MoAIWD for the creation of the NAP are commended as there is need for a single comprehensive and coherent policy to guide investments and implementation of priorities of the agricultural sector. To this end, however, there is need to expedite the process to ensure that the Policy document currently in its draft for is validated and submitted to cabinet for review
- Trade earnings in Malawi continue to be dominated by tobacco. Government's efforts under the NES are welcome and continued effort are required to successfully implement the strategy. Government should also continue monitoring developments in tobacco debates particularly those under the World Health Organization's Framework Convention on Tobacco Control and their potential effects for Malawi's agriculture
- Considering the increasing number of the population at risk, the government and its partners should explore a range of interventions under social protection programs with particular emphasis on interventions that build resilience to help vulnerable households cope with adverse situations
- Government and its partners should intensify promotion and support use of irrigation technologies to reduce heavy reliance on rain-fed agriculture as well as to consider risk management strategies in line with climate change.

- Contribution to sector financial reporting from Civil Society is a welcome development. However more needs to be done to improve reporting of financing in the agriculture sector through civil society organisations. Establishing a comprehensive M&E system that all stakeholders contribute to would help address this challenge. In addition, the signing of MoUs with stakeholders, as planned in the NAIP, may improve the situation. A strong M&E system is necessary for the successful implementation of the NAIP but data collection challenges still exist following implementation of the M&E Master Plan and the Agriculture Statistics Master Plan. Continued investment in the M&E systems has potential to improve implementation of the NAIP and overall reporting effectiveness.

9 REFERENCES

- GoM (Government of Malawi). (2017a). Annual Economic Report 2017. Ministry of Economic Planning and Development, Lilongwe.
- GoM (2017b). Joint New Alliance for Food Security and Nutrition and Grow Africa Progress Report (Draft), Ministry of Agriculture, Irrigation and Water Development, Lilongwe, Malawi.
- GoM (2017c). National Government Budget Documents, Ministry of Finance Economic Planning and Development, Malawi.
- GoM (2017d). Annual Work Plan and Budget Documents, Ministry of Agriculture, Irrigation and Water Development, Malawi.
- GoM (2014). G8 New Alliance for Food Security and Nutrition, Malawi. 2014 Annual Progress Report. Ministry of Agriculture, Irrigation and Water Development, Lilongwe. Malawi.
- GoM (2013). Labour Force Survey Report. National Statistics Office, Zomba, Malawi.
- GoM (Government of Malawi). (2011). Malawi Agriculture Sector Wide Approach: A prioritised and harmonised Agricultural Development Agenda: 2011-2015. Ministry of Agriculture and Food Security, Lilongwe.
- GoM (2014a). G8 New Alliance for Food Security and Nutrition, Malawi. 2014 Annual Progress Report. Ministry of Agriculture, Irrigation and Water Development, Lilongwe. Malawi
- GoM (2014b). Malawi Joint Sector Review Assessment: Advancing mutual accountability through comprehensive, inclusive, and technically robust review and dialogue. Lilongwe: Malawi.
- Jayne, T. S., Chamberlin, J., Traub, L., Sitko, N., Muyanga, M., Yeboah, F. K., Anseeuw, W., Chapoto, A., Wineman, A., Nkonde, C. and Kachule, R. (2016). Africa's changing farm size distribution patterns: the rise of medium-scale farms. *Agricultural Economics* 47(S1): 197-214. DOI: 10.1111/agec.12308
- World Bank. (2017a). Doing Business 2017: Equal Opportunity for All – Economy Profile 2017 Malawi. Washington DC: World Bank. Doi.10.1596/978-1-4648-0948-4. License: Creative Commons Attribution CC BY 3.0 IGO
- World Bank. (2017b). Enabling the Business of Agriculture 2017. Washington DC: World Bank. Doi.10.1596/978-1-4648-1021-3. License: Creative Commons Attribution CC BY 3.0 IGO
- World Bank (2013). Malawi Agricultural Public Expenditure Review (2000-2013). Strengthening National Comprehensive Agricultural Public Expenditure in Sub-Saharan Africa Program. World Bank, Washington DC.

10 Annexes

Annex 1: Progress on implementing government policy commitments under the New Alliance for Food Security and Nutrition

	POLICY COMMITMENT AND COMPLETION TARGET	RANK & TRAFFIC LIGHT COLOUR	STATUS AND COMMENTS	DEVELOPMENT PARTNERS INVOLVED IN SUPPORT
1	Review the key enabling policies by April 2016: National Agriculture Policy	3	NAP was approved by Cabinet and Launched by the State President in 2016. There is need to shift progress reporting towards implementation.	USAID
	National Industrial Policy	3	Trade Policy approved and launched in 2016.	UNDP
	National Trade Policy	3	Industry Policy approved and launched in 2016	UNDP
2	Review Control of Goods Act to eliminate export bans and improve licensing e.g. duration, by May 2017.	2	Reviewed Draft vetted by MoITT and MoJCA. Consultative workshop provided input in September 2017 tabling in parliament earmarked for November 2017 sitting.	DFID
3	Promote effective smallholder participation in agricultural value chains by formulating a Special Farmer Organisations Development Strategy by December 2016	1	<ul style="list-style-type: none"> Roadmap for development of Farmer Organizations Development Strategy (FODS) in place. MoITT is working on the Cooperatives Strategy and will collaborate with MoAIWD – DAES with to jointly draft the Cooperatives Strategy and the FODS because of the strong linkages between the two. The FAO to support the process through an on-going project on Strengthening the Regulatory Framework for Farmer Organizations. (MoAIWD- DAES). 	USAID
4	Develop strategy and legislation for contract farming by March 2016	3	<p>Strategy: The Contract Farming Strategy was approved by the Minister of Agriculture, Irrigation and Water Development in 2016.</p> <p>Legislation; the Competition and Fair Trading Commission (CFTC) to review the Competition and Fair Trading Act to incorporate role in regulating contract farming. The CFTC has resource constraints to move forward the process of amending the Act.</p>	USAID

	POLICY COMMITMENT AND COMPLETION TARGET	RANK & TRAFFIC LIGHT COLOUR	STATUS AND COMMENTS	DEVELOPMENT PARTNERS INVOLVED IN SUPPORT
5	Implementation of financial sector development strategy: make the Export Development Fund (EDF) more effective and develop low cost and long term finance opportunities by September 2016	2	<ul style="list-style-type: none"> • Long Term Finance Policy submitted to OPC for cabinet approval. • Second Financial Sector Development Strategy (2017-2022) under final stages of development. • Financial Inclusion Strategy launched in July 2017. • EDF Strategic Plan and Business Process Review leading to automation of the Fund, currently underway. <p>However the bottom line is that, cost of capital and interest rates are relatively still high (MoFEPD). Commitment too broad.</p>	-
6	Review taxation regime and its implementation in order to maximize incentives to investment by November 2015	1	<p>Deadline missed however the following preparatory work has been carried out:</p> <ul style="list-style-type: none"> • A Strategy for Comprehensive Tax Reform to raise revenue and promote growth was proposed by the IMF in 2016. • A comprehensive analysis and review of investment, production and export incentives in Malawi, commissioned by the UNDP on behalf of MoITT was conducted and the results were released in December 2016. • GIZ Public Finance Economic Management Programme (PFEM) conducted the Incentives Review (March 2016) <p>The MoFEPD realizes that the policy commitment is broad and actions have to be broken down. A project concept was developed by the MoFEPD to break down, schedule and implement actions on the commitment including the Policy Statement and reviewing the Tax Administration Act. Presently courting donor support including the EU but no concrete progress can be reported. (MoFEPD)</p>	GIZ Public Finance and Economic Management Program (PFEM)

	POLICY COMMITMENT AND COMPLETION TARGET	RANK & TRAFFIC LIGHT COLOUR	STATUS AND COMMENTS	DEVELOPMENT PARTNERS INVOLVED IN SUPPORT
7	Identify land, in phases, suitable for commercial agriculture (10,000 ha/year from 2013) every year	2	<ul style="list-style-type: none"> • There is need to support information systems on land availability at the MoLHUD. • However, 40,000 ha are earmarked to be provided under the Shire River Irrigation Project by 2018. Work is underway on the Creation of a Nationwide Geographical Estate Database, which will among other things, identify idle land for private sector use. • MITC given legal mandate to assist investors on land related issues. 	EU
8	Enactment of the new Land Bill into Law by July 2015	3	Land Law in place since Sept 2016.	FAO
9	Reviewing of seed policy, strategy and certification system (Seed Act 1996) by September 2015	2	<ul style="list-style-type: none"> • Policy finalized. PSs' committee met at the end of June 2017. Policy due for cabinet consideration. • Seed Act will be reviewed based on the approved Seed Policy (MoAIWD- DARS). 	-
10	Develop fertilizer regulatory framework by December 2015	2	<ul style="list-style-type: none"> • A Draft National Fertilizer Policy (NFP) has been produced with support from the NAPAS. Consultations on the Draft NFP recently done, and validation due for October 2017. • The existing draft Fertilizer Bill will be revised following the finalization of the NFP, likely by end of 2017. (MoAIWD -DARS). 	USAID
11	Ensure that irrigation infrastructure designs (up to farm gate and water storage) accommodate prioritized crops by December 2016	2	<p>National Irrigation Policy launched in November 2016. Area covered is increasing across the country as per the Implementation Monitoring and Evaluation Strategy of the Policy:</p> <ul style="list-style-type: none"> • Rehabilitated Area: 2,893 ha against a target of 2,946 ha • Designed Area: 3, 349 ha against a target of 4, 893 ha (MoAIWD - Irrigation Dept). 	EU

	POLICY COMMITMENT AND COMPLETION TARGET	RANK & TRAFFIC LIGHT COLOUR	STATUS AND COMMENTS	DEVELOPMENT PARTNERS INVOLVED IN SUPPORT
12	Prioritize rural feeder roads to primary production areas of prioritized crops in growth clusters by December 2015	2	The second phase of the foreseen road works completed in the current financial year (Karonga, Kasungu, Machinga, Phalombe and Ntchisi). Most completion deadlines were missed hence there were delays. There is need for re-programming but an evaluation is needed because the 2016 floods damaged some road works. (MoTPW & ASWAP Support Project).	EU
13	Introduction of agricultural zoning based on priority crops and growth clusters by December 2018	2	<ul style="list-style-type: none"> • The NAPAS project developed a Crop Suitability Atlas in 2016 and this was shared with officers working at EPA level in the Department of Crop Development, in the MoAIWD. • Further, with EU support, land profiling was done which among other things, digitized the 1992 Land Resources Evaluation data. However, there is need for a full-scale Suitability Survey to update the land characteristics data and incorporate the changes caused by climate change. Support is sought towards a full Crop Suitability Survey to enable complete zoning (MoAIWD). 	USAID EU
14	Re-organise extension services to improve delivery of modernised market-oriented agricultural extension services by December 2016	2	<ul style="list-style-type: none"> • Agricultural Extension Policy Review process finalized and Strategy is under-development - scheduled to be finalized by close of 2017 (MoAIWD – DAES). • IFPRI recently carried out a nation-wide survey on the extension service provision. This will lead to the development of the Agricultural Extension and Advisory Services Strategy which is at an advanced stage. 	GIZ program Green Innovation Centres for the Agriculture and Food Security is co-funding the IFPRI study. USAID

	POLICY COMMITMENT AND COMPLETION TARGET	RANK & TRAFFIC LIGHT COLOUR	STATUS AND COMMENTS	DEVELOPMENT PARTNERS INVOLVED IN SUPPORT
15	Improve advocacy for the growing and consumption of more nutritious food crops and agro-processed foods by December 2016.	2	<p>Commitment still too broad and needs focus. However, policies and strategies developed (MoH- DNHA):</p> <ul style="list-style-type: none"> • National Nutrition Policy (2017-2022) at OPC submitted for approval. • Finalized consultations on the Food and Nutrition Bill expected to be tabled by November 2017 parliament sitting. • Agriculture Sector Food and Nutrition Strategy (2017-2022) developed. • National Multi-Sectoral Nutrition Strategic Plan (2017-2022) due for launch in September 2017. • Review of the Nutrition Education and Communication Strategy (2017-2022) in the final stages. • Stunting on the decline – 37% from 47% (2015-16 MDHS). 	<p>German Special Initiative “One World no Hunger” (SEWOH): Food and Nutrition Security Program (FNSP): support to 1-4; SEWOH FNSP & KfW Multi-sectoral Nutrition program: contribution to reducing stunting rate (SUN initiative) USAID Nutrition and Access to Primary Education (NAPE): support to Home Grown School Meal program (see reporting format)</p>

Notes: Ranking definition: ‘3’ is for ‘on-course/finished’; ‘2’ normal progress; and ‘1’ no or slow progress.

Abbreviations: MoAIWD is Ministry of Agriculture, Irrigation and Water Development; MoIT Ministry of Industry and Trade; MoLHUB Ministry of Lands, Housing and Urban Development; MoTPW is Ministry of Transport and Public Works; and, MoH is Ministry of Health – DNHA- Department of Nutrition HIV and AIDS; NAPAS is New Alliance, Policy Acceleration Support Project; MDHS is Malawi Demographic Health Survey

Source: New Alliance for Food Security and Nutrition Malawi Core Team (2017)

Annex 2: Legal Reforms Affecting Agriculture

Special Crops Act

MoAIWD has plans to review the Special Crops Act (1972) starting in early 2018. The Special Crops Act is outdated and has been identified by a number of stakeholders as hindering the effective development of agricultural markets for the benefit of farmers, traders and agro-processors in Malawi. As such, pending financial support from development partners, there are plans to start reviewing the act in 2018.

Agriculture (General Purposes) Act

The issue of poor market outcomes for farmers and other stakeholders participating in agricultural markets in Malawi is also attributed to the Agriculture General Purposes Act (). It is proposed that the review of the Special Crops Act should be done in tandem with the review of the Agriculture General Purposes Act to effectively address legal constraints in agricultural markets that make doing business in agricultural markets in Malawi less beneficial. There is however, need to find the necessary financial resources and technical expertise to undertake this work.

Tobacco Bill

The draft Tobacco Bill was submitted to Cabinet Secretariat and has been presented to the Cabinet committee on legal, constitutional and parliamentary affairs. Currently, MoJCA is inputting comments from the committee in readiness for presentation to the full Cabinet.

Sugar Cane Products Regulatory Framework

Through the efforts of the Sugar Cane Products TWG under the TIP SWAp, MoITT has made efforts to come up with a Sugar Cane Products Regulatory Framework and to establish a sugar cane extension programme. Currently, the focus has been to formulate the Sugar Cane Investment Facilitation Programme.

Competition and Fair Trade Act

The Competition and Fair Trading Commission (CFTC), in collaboration with MoAIWD is working on amending the Competition and Fair Trading Act, with a view of mandating the CFTC to regulate contract farming in Malawi. This is in line with the Contract Farming Strategy, which was approved by MoAIWD in 2016. In addition, the Competition and Fair Trade Act would be amended to ensure that the CFTC has adequate powers to regulate other aspects of anti-competitive behaviour in agricultural markets, including anti-competitive and unfair trading practices in farm input markets, output markets and service provision supporting agricultural value

chains in Malawi. Unfortunately, the CFTC is currently facing resource constraints to move forward with the process of amending the act. Discussions with development partners to source funds to hire consultants for the amendment process are still ongoing.

Commodity Exchange Directive

The Commodity Exchange Directive has been approved at all levels, but the Reserve Bank of Malawi is waiting for funding for capacity building to implement the Directive.

Warehouse Receipts Bill (2017)

The Warehouse receipts bill was approved by Cabinet in April 2017 and it is expected to be presented at Parliament during the November sitting of Parliament.

Micro-Small and Medium Enterprises Policy and Bill

The draft Micro-Small and Medium Enterprises (MSME) Policy was reviewed by Cabinet and comments were made, with recommendations to revise the draft MSME policy. The MoITT is in the process of making changes to the MSME policy as requested by Cabinet. It is envisioned that after the MSME policy is approved, MoITT will begin the process of working on the MSME Bill in collaboration with MoJCA.

Investment and Export Promotion Act

The Investment and Export Promotion Bill was reviewed by MITC and vetted by MoITT. It has since been sent back to MoJCA with the expectation that that the Bill will be tabled in Parliament in 2018.

Parliamentary Motion to Legalize Production, Marketing and Use of Industrial Hemp

In December 2016, a parliamentary motion was made in Parliament, to legalize the production and use of industrial hemp in Malawi. The motion was moved and processes are in progress to draft a bill that would be tabled for debate and voting in Parliament. Meanwhile, the DARS has completed field trials of different cultivars of low-THC industrial hemp, and private investors such as Invegrow Limited have shown interest to invest in the production and export of industrial hemp products.

Plant Protection Bill

The Plant Protection Bill which was drafted and submitted to OPC in 2012 has stalled and continues to await feedback, in terms of setting a date for Cabinet to meet and discuss it.

Plant Breeders Rights Bill

The Plant Breeders Rights Bill was passed by Cabinet Committee last year and is awaiting full Cabinet approval, after which it would be submitted to Parliament for debate and enactment.

CROP	2014/15	2014/15	2014/15	2015/16	2015/16	2015/16	2016/17	2016/17	2016/17
	NATIONAL TOTAL			NATIONAL TOTAL			NATIONAL TOTAL		
	HECT	PROD	YIELD	HECT	PROD	YIELD	HECT	PROD	YIELD
MAIZE	1,676,213	2,776,277	1.7	1,674,076	2,369,493	1.4	1,725,367	3,464,139	2.0
local	369,460	210,462	0.6	356,684	168,551	0.5	399,903	308,097	0.8
composite	536,583	828,771	1.5	499,134	612,301	1.2	510,567	899,376	1.8
hybrid	770,170	1,737,044	2.3	818,258	1,588,641	1.9	814,897	2,256,666	2.8
RICE	65,761	111,437	1.7	53,676	83,757	1.6	64,881	121,079	1.9
local	35,090	44,831	1.3	25,303	24,812	1.0	35,095	55,171	1.6
faya	8,095	11,815	1.5	7,105	11,814	1.7	6,287	10,627	1.7
Pussa	4,425	14,031	3.2	3,200	8,613	2.7	1,762	6,732	3.8
TCG 10	2,420	7,314	3.0	2,657	9,293	3.5	2,066	6,527	3.2
IET4094(SENGA)	325	589	1.8	112	263	2.3	108	279	2.6
Wambone	0	0	-	0	0	-	20	70	3.5
Kilombero	13,546	27,322	2.0	13,869	25,387	1.8	15,466	30,686	2.0
ITA/ Nerica				56	58	1.0	2,525	7,227	2.9
Mtupatupa	1,860	5,535	3.0	1,374	3,517	2.6	1,552	4,012	2.6
GROUNDNUTS	373,925	296,498	0.8	369,987	275,070	0.7	389,546	386,319	1.0
chalimbana	163,262	106,389	0.7	152,908	92,337	0.6	156,835	127,041	0.8
manipinter	0	0	-	0	0	-	0	0	-
malimba	9,213	5,689	0.6	8,957	4,732	0.5	8,658	5,775	0.7
CG 7	190,124	174,902	0.9	196,469	168,947	0.9	213,157	239,416	1.1
JL 24/ICGV-SM-90704	11,326	9,518	0.8	11,653	9,054	0.8	13,037	13,952	1.1
TOBACCO (kgs)	123,111	127,195,088	1,033.2	141,625	120,479,110	850.7	71,639	82,964,189	1,158.1
nddf	596	436,967	733.2	1,173	776,277	661.8	1,228	902,007	734.5
Flue Cured	10,938	15,704,022	1,435.7	9,372	13,052,862	1,392.8	8,225	13,846,607	1,683.5
Sun Air	0	0	-	0	0	-	0	0	-
sdf	216	157,747	730.3	186	123,801	665.6	160	164,768	1,029.8
oriental	0	0	-	0	0	-	0	0	-
burley	111,361	110,896,352	995.8	130,894	106,526,170	813.8	62,026	68,050,807	1,097.1
COTTON	123,019	79,289	0.6	78,474	31,439	0.4	41,097	29,545	0.7

	2014/15	2014/15	2014/15	2015/16	2015/16	2015/16	2016/17	2016/17	2016/17
	NATIONAL TOTAL			NATIONAL TOTAL			NATIONAL TOTAL		
CROP	HECT	PROD	YIELD	HECT	PROD	YIELD	HECT	PROD	YIELD
WHEAT	921	1,178	1.3	717	797	1.1	607	745	1.2
SORGHUM	93,858	79,327	0.8	98,853	58,192	0.6	103,921	90,370	0.9
MILLET	50,407	33,512	0.7	51,677	19,510	0.4	55,392	35,121	0.6
Finger	49,420	33,085	0.7	50,705	19,125	0.4	36,031	24,422	0.7
Pearl	987	427	0.4	972	385	0.4	19,361	10,699	0.6
PULSES	815,722	711,359	0.9	848,496	723,132	0.9	933,516	958,898	1.0
beans	329,959	188,745	0.6	328,339	157,769	0.5	331,983	198,486	0.6
pigeon peas	228,817	335,165	1.5	246,362	371,114	1.5	274,908	470,653	1.7
cow peas	81,753	35,903	0.4	85,787	29,266	0.3	100,684	48,168	0.5
field peas	4,727	3,307	0.7	4,249	2,630	0.6	4,372	3,169	0.7
grams	1,806	1,636	0.9	1,275	774	0.6	1,206	1,003	0.8
soya beans	139,005	120,952	0.9	153,834	136,910	0.9	188,714	208,556	1.1
dolichus beans	4,623	2,970	0.6	4,619	2,833	0.6	4,507	3,179	0.7
velvet beans	9,950	13,198	1.3	10,014	13,803	1.4	10,888	14,573	1.3
ground beans	12,545	7,639	0.6	11,539	6,378	0.6	10,967	7,027	0.6
chick peas	2,314	1,844	0.8	2,223	1,655	0.7	2,218	1,847	0.8
SESAME	3,592	1,352	0.4	7,704	1,534	0.2	9,924	2,721	0.3
SUNFLOWER	15,045	13,994	0.9	16,156	15,736	1.0	19,330	21,423	1.1
PAPRIKA	4,060	2,013	0.5	5,163	2,335	0.5	4,391	2,317	0.5
CHILLIES	2,472	1,593	0.6	1,917	1,230	0.6	3,131	1,412	0.5
CASSAVA	222,750	5,012,763	22.5	228,283	4,996,843	21.9	231,657	4,960,556	21.4
S.POTATOES	238,046	4,324,873	18.2	292,339	5,122,473	17.5	271,449	5,472,013	20.2
POTATOES	61,655	1,065,833	17.3	63,040	1,043,338	16.6	66,483	1,226,603	18.4
TOTAL									
CEREALS	1,887,160	3,001,731	1.6	1,878,999	2,531,749	1.3	1,950,168	3,711,454	1.9