

# Ministry of Agriculture, Irrigation and Water Development

## Agriculture Sector Performance Report 2015/2016 Fiscal Year

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#### Acronyms

ADC : Area Development Committee

ADD : Agricultural Development Programme

ADMARC : Agricultural Development and Marketing Co-operation

AgPER : Agriculture Public Expenditure Review

AGRA : Alliance for Green Revolution

AIDS : Acquired Immuno-deficiency Syndrome ASWAp : Agriculture Sector Wide Approach

ASWAp-SP : Agriculture sector Wide Approach- Support Project

ASP : Area Stakeholder Panel

ATCC : Agricultural Technology Clearing Committee

Bsc : Bachelor of science CA : Conservation Agriculture

CAADP : Comprehensive African Agriculture Development Programme

CCF : Country Co-operation Framework

CFA : Core Functional Analysis CFS : Contract Farming Strategy

CFTC : Competition and Fair Trading Commission

CIMMYT : International Maize and Wheat Improvement Center

CISANET : Civil Society Agriculture Network

COMESA : Common Market for Eastern and Southern Africa

CSO : Civil Society Organization

DADO : District Agriculture Development Office

DAECC : District Agricultural Extension Coordination Committee

DAES : Department of Agricultural Extension Services

DHLD : Department of Animal Health and Livestock Development

DAPS : Department of Agricultural Planning Services
DARS : Department of Agricultural Research Services

DCAFS : Donor Committee for Agriculture and Food Security

DfID : Department for International Development

DSP : District Stakeholder Panel EPA : Extension Planning Area

FAO : Food and Agriculture Organization FISP : Farm Inputs Subsidy Programme

FODS : Farmer Organization Development Strategy

FUM : Farmers Union of Malawi GDP : Gross Domestic Product GoM : Government of Malawi

ha : hectare

HIV : Human Immuno-deficiency Virus

IFPRI : International Food Policy Research InstituteINVC : Integrating Nutrition in Value ChainsJICA : Japan International Co-operation Agency

JSR : Joint Sector Review

KPI : Key Performance Indicator

LoI : Letter of Intent

MAFAAS : Malawi Forum for Agricultural Advisory Services

MCCCI : Malawi Confederation of Chambers of Commerce and Industry

MDTF : Multi –Donor Trust Fund

MGDS : Malawi Growth and Development Strategy

MK : Malawi Kwacha

M&E : Monitoring and Evaluation

M&EMP : Monitoring and Evaluation Master Plan

MoAIWD : Ministry of Agriculture, Irrigation and Water Development

MoFEPD : Ministry of Finance, Economic Planning and Development

MoLGRD : Ministry of Local Government and Rural Development

MoLHUD : Ministry of Lands, Housing and Urban Development

MoITT : Ministry of Industry, Trade and Tourism

MoNREM : Ministry of Natural Resources, Energy and Mining

Msc : Master of science MT : metric tonnes

NAGA : New Alliance and Grow Africa NAIP : National Agriculture Investment Plan

NAP : National Agricultural Policy

NASFAM : National Smallholder Farmers' Association of Malawi

NEPAD : New Partnerships for African Development NAPAS : New Alliance Policy Acceleration Support

NES : National Export Strategy

NGO : Non- Governmental Organization

NIMPIF : National Irrigation Master Plan and Investment Framework

NIP : National Irrigation Policy

NSA : Non- State Actors

NSO : National Statistical Office OPC : Office of President and Cabinet

PhD : Doctor of Philosophy
PPD : Public Private Dialogue
PS : Principal Secretary

R&D : Research and Development

SADC : Southern African Development Community
SANE : Strengthening Agriculture and Nutrition Extension
SEBAP : Strengthening Evidenced- based Agricultural Policy

SGR : Strategic Grain Reserves

SDG : Sustainable Development Goals

SFFRFM : Smallholder Farmers Fertilizer Revolving Fund of Malawi

STAM : Seed Traders Association of Malawi

TA : Traditional Authority

TIP SWAp : Trade, Industry and Private Sector Development Sector Wide Approach

ToR : Terms of Reference TWG : Technical Working Group

USAID : United States Aid for International Development

US\$ : United States dollar

VAC : Village Agricultural Committee WASWAp : Water Sector Wide Approach

#### **EXECUTIVE SUMMARY**

The 2016 Joint Sector Review report has been prepared against the background of four key national developments relating to the ASWAp implementation, finalization of the development of the National Agricultural Policy, climate change induced humanitarian crisis involving 6.7 million people, and continued volatile macro-economic conditions that have significant bearing on the sector's investments. The ASWAp which has guided the sector's investments during the past four years came to an end in 2014/15 and steps to develop a successor investment plan are underway to be guided by the just finalized National Agriculture Policy. The development of the new national investment plan will also be informed by the lessons from the worst ever food insecurity crisis owing to two consecutive seasons of poor climatic conditions. The continued volatile macro-economic conditions that impact on the sector's investment efforts also add to the calls for allocative efficiency in the use of the sector's investment resources for it to effectively contribute to the national growth and developmental aspirations. This report content is largely informed by insights obtained from the review of government policy and strategic documents but also supported by insights from empirical analyses.

#### **Policy Context and Institutional Review**

The 2015/16 fiscal year has seen the stakeholders in the agriculture sector, under the leadership of the Ministry of Agriculture, Irrigation and Water Development finalize the development of key sectoral policy and strategic frameworks. These include: i) the National Agriculture Policy, (ii) the National Irrigation Policy and (iii) the Contract Farming Strategy. In addition, significant progress has been made with respect to the development of the National Seed Policy, which has now been submitted to the Office of the President and Cabinet (OPC).

The National Agriculture Policy which not only outlines the specific policy areas of focus, outlines the roles of each stakeholder and defines key indicators, and also provides the ambitious output and outcome targets that are to be attained from the sector investments over a medium to long term period, ie 2016-2021. On its part, the National Irrigation Policy which replaces the National Irrigation Policy and Strategy of 2000, places strong emphasis on the need for public private partnerships, strengthening of water users associations, improved management of natural resources, and transformation of farmer organizations from subsistence to commercial farming.

Further to the finalized policy and strategic frameworks, the other frameworks are in the process of being developed and are at different stages of development. These include: a) the Agriculture Extension Strategy; b) the National Fertilizer Policy; c) the Farmer Organization Development Strategy; d) the Nutrition Strategy; e) the Strategic Plan for the Ministry of Agriculture, Irrigation and Water Development; the Plant Breeders Rights Bill, amongst others.

Equally worth noting is the fact that there are four major reform initiatives taking place within the Ministry of Agriculture, Irrigation and Water Development. These include: a) the Farm Inputs Subsidy Programme reforms that involved scaling down of the beneficiaries while improving on targeting of the beneficiaries; b) a core-function analysis (CFA) process that is expected make the public service in the agriculture sector more effective, efficient and of a higher quality within the ASWAp arrangement by defining and assigning functions that the public sector must perform and

functions that non state actors are encouraged to perform for the long term; c) the review of SGR Management Guidelines that analyzed the current grain management and release procedures and suggest improved ways of managing the SGR. The review also provides guidelines for emergency and non-emergency drawdown of maize from the SGR; and d) ASWAP review and formulation of successor national investment plan.

The year 2015/16 was the starting point for the major FISP reforms undertaken in the sector, which have been strengthened in the 2016/17 season. The 2015/16 reforms were based on the insights from recent evaluation literature, and key policy conferences and seminars. The major reforms involved allowing the private sector to retail 27% of the 150,000 mt of the fertilizers, just as they had done with the seed component. A total of 12 districts were chosen as pilots for private sector involvement. The districts chosen were based on a combination of hard to reach districts and those that had good road infrastructure.

#### **Key Financial and Non-Financial Commitments**

With respect to non-financial commitments, under the New Alliance, the Government of Malawi had initially committed itself to tracking 35+ policy commitments by providing mechanisms to improve dialogue with the donor community, the private sector, farmers, and other stakeholders. In April 2015, the 35 policy commitments were reprioritized to 15 following a revision of the Country Cooperation Framework (CCF). A review of progress on Government policy commitments show 3 out of 15 policy commitments (20%) were reported to have made good progress based on revised schedule, while the other 4 made good progress but missed their schedule. The key policy achievements include finalization of the agriculture policy, the industrial policy, the trade policy and the contract farming strategy.

The New Alliance provides private sector firms a platform through which to actively invest in agriculture and to participate in the country's agricultural policy processes. As such, Malawi has 29 companies (19 African and 10 international) that have signed up Letters of Intent (LOI) to invest in the agriculture sector. Actual participating companies have increased from 10 in 2014/15 to 16 in 2015/16, making a total of 59 % of companies participating under the G8NA and Grow Africa in Malawi. Cumulative investment by the private sector in 2015/16 was estimated to be US\$41.9 million, bringing the total delivered commitment to US81.5 million and representing 35 % of the planned investment commitment to date.

In terms of financial commitments, the Malawi Government has over the past decade successfully achieved CAADP commitment of a minimum 10 % resource allocation to the agricultural sector. While such an allocation has potential to stimulate the desired 6% economic growth and poverty reduction, this has not been the case. Government Annual Economic reports show great variability in the attainment of the desired agricultural 6% growth rates. The country managed to achieve a 6% agriculture growth during the implementation in 2011, 2013 and 2014. However, for the years, 2012, 2015 and 2016, the below CAADP target growth rates of 2.3%, 1.6% and 2.8%, respectively, have been attained.

Climate change, particularly the El Nino, is having significant budgetary allocation implications. While under normal agricultural seasons, marginal allocations have been made to maize purchases,

the past 2 years have seen substantial increases in the allocation to maize purchases, that is from MK8.6 in 2015/16 to about MK 32.5 billion in 2016/17 financial year.

In any case, while climate change induced budgetary changes are appreciated, there are long standing concerns relating to the rebalancing of the agriculture sector budget, from a FISP dominance to other equally strategic areas in the sector that can stimulate productivity and growth, namely research, extension and irrigation development, amongst others.

Regarding development partners' commitment to the agriculture sector, about US\$1.2 billion has been committed to agriculture by various development partners since the start of the implementation of ASWAp. This does not include past and ongoing support provided to food security through humanitarian intervention. As of 2016, only 40 percent of the committed resources have been disbursed as the disbursement rates depend on program planning and progress.

#### **Review of Agriculture Sector Performance**

While production of most crops and livestock species have increased over the past years, the same cannot be said about productivity. Productivity has either marginally increased or remained stagnant over the past 5 years. For instance, in the case of maize, since 2010/11 season, maize productivity has been around 2 mt/ha remaining below the ASWAp target of 3 mt/ha.

Food production is largely determined by climate change conditions besides the policy and investment initiatives. For the past 2 consecutive seasons, the country has had below the national food requirement production levels of 3.2 million mt. However, with the prediction of La Nina conditions for the 2016/17 season, there are prospects of the country's food production levels rebounding to the normal years.

In terms of technology generation, agricultural research done for the period 2012 to 2016 has resulted in the release of 35 commodity varieties, of which 12 are maize linked technologies. The key players in the research activities include both Government, represented by the Department of Agricultural Research and Development, international research organizations such as CIMMYT and AGRA, and private sector seed companies such as Monsanto, Seedco and Syngenta.

With respect to commodity trade, despite the national diversification efforts, tobacco, sugar, and tea still constitute the bulk of the national exports. Recent studies indicate that diversification efforts are constrained by export market uncertainties. These studies advocate for the revision of the Control of Goods Act, the General Purposes Act and the Special Crops Act in order to increase export policy consistencies, as well as the simplification of administrative export procedures. For the period 2010/11- 2015/16, total value of agricultural exports have been declining though some years such as 2014/15 registered a rebound in agricultural export growth. Since tobacco, sugar and tea constitute the major export commodity, the decline in the total agricultural exports are largely due to marked decreases in these three commodities export values. For instance, for the 2014/15 and 2015/16 years, tobacco, sugar, and tea export values, respectively, registered decline levels of 31%, 96% and 48%.

In terms of agricultural commodity imports, wheat is predominantly the major imported commodity followed by maize. Other important agricultural imports include dairy products. For

the 2014/15 and 2015/16 seasons, the total value of imports from major commodities (wheat, maize and dairy products) had declined from 10.3% to 4.6 % of the value of total imports. Much as the share of agricultural imports to total national imports has declined, the country has generally seen an increase in the value and volumes of the major agricultural commodities imported, except for the volumes of dairy products, which are showing a declining trend.

In terms of foreign investments in the agriculture sector, the country has witnessed growth in the both the number of and value of agricultural investments. For the years 2014/15 to 2015/16 years, the country has seen an increase in number of investments from 3 to 15. For the same period, the value of agricultural investments has drastically reduced by 69.2 percent to MK175.4 million in 2015/16. The highest investment value of MK 570 million, was registered in the agricultural sector in 2014/15 year, since 2010/11 when the ASWAp implementation started.

The country realizes the importance of investments in sustainable agricultural land and water management as an instrument for sustainable national development. As such, there have been investments in the area under soil and water conservation which have seen an increase from 49,139 ha in the 2014/15 growing season to 52,207 ha in the 2015/16 growing season, representing a 6% increase. Area under soil fertility improvement increased from 415,626 ha to 419,334 ha.

#### **Challenges and Positive Developments**

Evidently, in spite of the various notable achievements made in the sector over the years, the sector still faces a number of challenges. The sector now has an elaborate overarching policy framework and has revised or is in the process of revising the other sectoral policy and strategic frameworks. However, the challenge would be to stick to the stated timelines for the finalization of the other frameworks so that implementation process starts in earnest. If different departments and stakeholders are guided by policy frameworks with different life spans, the current collaboration challenges may continue to beset the agriculture sector.

With respect to the internalization of the mutual accountability principles, it is evident that most civil society organizations only expect the Government to be transparent and accountable with little reciprocal commitment from their side on the same. It is envisaged that as the stakeholder review their commitment to the agriculture sector and new policy commitments, the same will also translate into commitment to mutual accountability.

Climate change with the attendant food insecurity implications remains a long standing headache for the sector, but it strengthens the call for evidenced based decision making that yields optimal outcomes for the investments made by sectoral players,

With respect to capacity development, the Ministry of Agriculture, Irrigation and Water development continues to face capacity challenges owing to macro-level policy directives such as freezes on new recruitments against the growing sector capacity demands and the continued high attrition rates. For instance, the New Irrigation policy calls for increased irrigation staffing at district levels, and the outcries against high extension worker–farmer-ratios calls for increased recruitment drive against the national freeze for new recruitments.

Despite the Ministry having capacity building plans, high vacancy rates still prevail. For instance, by 2014/15, the vacancy rate was estimated to be at 32% against the target of reducing it to 12%. This is due to factors such as a freeze on new recruitments while attrition rates continue to increase.

In terms of irrigation farming, 107,991 hectares have been developed. As of 2015/16 season, only 70% of such irrigated land was being utilized largely due to climate change effects such as the 2015 floods that damaged the irrigation schemes. In normal years, utilization rates of developed irrigated land are at 98%.

#### **Recommendations on Way Forward**

There is need to expedite the development or finalization of the sectoral policy frameworks that are either outdated or their review process has started but are progressing at some slow pace.

The sector is encouraged to continue with the sector policy reforms, but ensure that the process of doing so continues to be informed by reliable empirical evidence so that the policy reforms and investments yield maximum gains in terms of poverty alleviation and economic growth outcomes.

The civil society players in the sector are encouraged to adopt the principles of mutual accountability by following the good example of the Government and its donors. Provision of up to date data on their activities, outputs, and financial outlays and commitments by the civil society would be a good indicator of their commitment to the mutual accountability approach.

In relation to the above, the mutual accountability framework should continue to be used as a tool for ensuring that all stakeholder investments, achievements and challenges are fully reported hence giving the full picture of what is obtaining in the sector.

The collaboration between departments and stakeholders working on conservation agriculture and livestock development need to be strengthened and sustained if conservation agriculture is to continue yielding the desired positive outcomes.

The civil society organizations to continue supporting the Ministry with the revitalization and strengthening the functionality of the local agriculture institutions such as Area Stakeholder Panels (ASPs) and Village Agricultural Committees established to coordinate agricultural activities at local levels. This should be accompanied by objective evaluations of the production and productivity impacts of the structures.

Current efforts of improving statistical data collection and reporting initiatives aimed at increasing reliability of its data. should continue. In this regard, the Ministry should consider investing in modern electronic data collection technologies such as tablets with GPS and internet to be used by grass roots staff such as AEDOs.

Concerted efforts aimed at improving post harvesting handling techniques that reduce mycotoxin contamination in crop produce should be seriously promoted if the country's agriculture produce are to be guaranteed of export markets. Improved market access will also help improve agricultural diversification, productivity and production outcomes.

The Ministry of Agriculture, Irrigation and Water Development to collaborate with other relevant Government ministries and departments in addressing the long standing traders' and investors' concerns regarding administrative procedures that hinder trade and investments in the sector. As such, some of the corrective measures that the Ministry could champion include: decentralized district and border post one- stop centres to be utilized by prospective investors to pay for business registration; decentralization of issuance of the Certificate of Origin Form; introducing a transparent fee system for obtaining the Customs Clearing Form; and expansion of issuance of Phytosanitary Certificates; and raising the threshold for which a Currency Declaration Form is needed, amongst others.

The Ministry of Ministry of Agriculture, Irrigation and Water Development is encouraged to expedite utilization of the core functional analysis recommendation for its capacity building activities in different areas for improved service delivery.

While the Ministry of Agriculture, Irrigation and Water Development's approach of recruiting and posting front line staff at district level is applauded as a good approach to front line staff retention, there is still need to explore ways of motivating other highly educated staff such as those with bachelor degree training to be posted to EPAs.

With the 22% of the Ministry's total staff at decision making positions being female, the Ministry is encouraged to strive towards the desired 50% in the long term. Details of how the gender gaps are to be addressed should be laid down in the NAIP that is being developed.

In view of the limited access to electricity for irrigation farming, the sector is encouraged to continue with solar energy for irrigation. Hopefully, such energy investments in the irrigation sector can effectively help address well known and long standing challenges of low productivity and low use intensity.

#### 1. INTRODUCTION

#### 1.1 Background

Malawi's agriculture sector remains an important sector of the country's economy and is key to the attainment of national development objectives including economic growth, poverty reduction, food security, and ensuring sustainable use of environment and natural resources. The sector accounts for nearly 30 percent of Gross Domestic Product (GDP), employs over 80 percent of the country's workforce, and provides over 80 percent of the country's export earnings (Government of Malawi (GoM), 2011; GoM, 2013; National Statistical Office (NSO), 2012).

The central role of the agriculture sector to national growth and development outcomes has always been recognized in the national overarching policy and strategic frameworks such as the Malawi Growth and Development Strategy I (MGDSI) 2006-11, and Malawi Growth and Development Strategy II (MGDS II) 2012-16. To this end, the Malawi Government for the past decade has been allocating more than 10 percent of the annual national budget to the sector. Such a commitment to the sector 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.

The Malawi's agricultural sector consists of two main sub-sectors, namely the smallholder and the estate subsectors, which contribute 70 percent and 30 percent to national AgGDP respectively (GoM 2011). It is dominated by two crops, maize for food security and tobacco for export earnings. Such a dominance has meant that most policy instruments for agriculture have prioritized these two crops resulting in an undiversified agriculture production mix. The limited diversification in the sector means continued exposure of the sector and the national economy to external shocks and risks such as weather variability and declining export commodity terms of trade, amongst others. In addition, this means the economy remains vulnerable to commodity specific risks, dependent on a narrow export base, and not able to exploit its full agricultural potential.

Besides the dominant maize and tobacco crops, a number of food and cash crops are also produced. The food crops include: cassava, rice, sweet potato, irish potatoes, groundnut, beans, pigeon pea, cow peas, and a range of vegetable crops. The other cash crops include: cotton, coffee, macademia nuts, chillies, amongst others. Further to that, the country has a growing livestock sector, with the larger share of the production done by the smallholder farmers. The key livestock species include: poultry, cattle, goats, sheep, pigs, just to mention but a few. Over the past 5 years, the production of the livestock species has seen steady increases, while crop production trends have been characterized by fluctuations owing to climate change effects. As such, the targeted 6% agriculture sector growth rate was only achieved in one of the past 5 years.

Agricultural production outputs provide inputs for and the bulk of the agricultural value chain investments, agro-processing investments. With the country's continued limited investments in other sectors of the economy such as tourism and mining, agriculture value chain investments continue to dominate the structure of the country's economy.

Despite the relevance of agriculture to Malawi's economy, the agricultural sector faces other numerous and important challenges that impede its transformation including high population density resulting in small land holdings (of about 0.6 ha per household); a poorly developed seed sector; weak agricultural extension services; limited access to finance; limited market participation; risks and uncertainties due to climate change and related policy constraints; and over-dependence on rain-fed production (USAID, 2011). To address these challenges, the Government of Malawi developed and implemented the Agriculture Sector Wide Approach (ASWAp) (2010- 2016) which is operationalizing the Malawi Growth and Development Strategy (MGDS)-a medium term policy framework for social and economic development adopted to mitigate poverty through sustained economic growth and infrastructure development. Details of the ASWAp scope, development process, and stakeholder participation are provided below.

#### 1.2 The Agriculture Sector Wide Approach

The Agriculture Sector Wide Approach (ASWAp) serves as the country's National Agricultural Investment Plan (NAIP)-a priority investment programed in the agricultural sector for the year 2011-2015 (GoM, 2011). The ASWAp is implemented through the Ministry of Agriculture, Irrigation and Water Development (MoAIWD) and is aligned to the principle elements and priorities of the Comprehensive African Agricultural Development Program (CAADP) of sustaining a minimum 6 percent agricultural growth rate and a 10 percent national budgetary resource allocation to the agricultural sector. The ASWAp identifies key constraints, required investments, and policy direction needed in the agricultural sector to drive agricultural development and improve food security outcomes within the context of its national and regional strategies (GoM, 2011).

The ASWAp was formulated as a means for attaining the agricultural growth and poverty mitigation goals of the MGDS which targets agriculture as a key driver of economic growth and national wealth creation. The ASWAp therefore offers a consolidated strategy for supporting priority activities in the agricultural sector to increase agricultural productivity thereby enhancing food security; enabling the population access to nutritious foods, and increasing the contribution of agro-processing to economic growth. The main objectives of the ASWAp are to increase agricultural productivity; improve food security; diversify food production for improved nutrition and enhance agricultural incomes for the rural poor. To achieve these objectives, the ASWAp incorporates in its design, three priority focus areas, two key support services and two cross-cutting issues, as elaborated in the Table 1.1 below.

Table 1.1: ASWAp Focus Areas, Key Support Services and Cross-Cutting Issues

Item	Focus	
A. Priority Focus Area	1. Food Security and Risk Management	
	2. Commercial Agriculture, Agro-processing	
	and Market Development	
	3. Sustainable Agricultural Land and Water	
	Management	
B. Key Support Services	1. Technology Dissemination	
	2. Institutional Strengthening and Capacity	
	Building	
C. Cross-Cutting Issues	1.HIV Prevention and AIDS Impact	
	Mitigation	

Source: Adapted from GoM (2011)

As can be observed from Table 1.1 above, the ASWAp has been designed to serve as a single comprehensive program and budget framework that ensures that all the key agriculture stakeholders are addressed through a formal coordinated, harmonized investment process that ensures alignment of funding arrangements between the government of Malawi and development partners in the agricultural sector. Key to better coordination and harmonization is the concept of mutual accountability whereby stakeholders hold one another accountable for commitments that have been voluntarily made. Within the agriculture sector, Joint Sector Reviews (JSR) have been identified as a tool for operationalizing mutual accountability and an avenue to discuss the performance of the country's agricultural sector.

#### 1.3 Agriculture Joint Sector Reviews

Agriculture joint sector reviews play a key role in supporting mutual accountability and implementing the ASWAp/CAADP Result Framework. The concept of mutual accountability itself refers to the process by which two or more parties hold one another accountable for the commitments they have voluntarily made to one another. To this effect, a framework to guide mutual accountability under CAADP was developed by a task force team within the New Economic Partnership for African Development (NEPAD) in 2011 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. A number of 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, sensitivity to gender, and making the process a learning experience.

The Ministry of Agriculture, Irrigation and Water Development fully recognizes the fact that successful implementation of the ASWAp requires committed leadership as well as joint efforts and commitment from all stakeholders in the agricultural sector. As such, the Ministry provides leadership in ASWAp implementation as well as coordination of JSRs and other technical meetings. On the other hand, different government ministries and departments do participate in the implementation of various components of the ASWAp focus areas and support services. These include 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. The government ministries and departments do take leadership in the implementation of the specific ASWAp components that fall under their technical jurisdiction.

Further to government ministries and departments, the ASWAp design and implementation fully involved the participation of key stakeholders such as 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 plus one, which during the 2015/16 year comprised European Union, Flanders Government and USAID; and for the 2016/17 year consisting of Flanders Government, USAID and DFID. For the private sector, the Malawi Confederation of Chambers of Commerce and Industry (MCCCI) plays a vital role not only through direct representation but also through coordinating participation among private sector firms. For civil society, representation in the ASWAp process is coordinated by the Civil Society Agriculture Network (CISANET), a policy advocacy group that is also an umbrella body for all civil society organizations in the agricultural sector. Besides CISANET, Farmers Union of Malawi (FUM) and National Smallholder Farmers' Association of Malawi (NASFAM) are key players.

#### 1.4 Report structure

This JSR report evaluates the performance of and progress made in the agricultural sector for 2015/16 fiscal year. In so doing, the report looks at trends in agricultural sector performance based on key priority indicators identified in the ASWAp document. Specifically, the second chapter reviews the country' policy context and institutional arrangements within the agricultural sector towards the successful implementation of the ASWAp. This includes discussing the key existing and emerging policy and strategic frameworks and their implications on ASWAp implementation. The third chapter reviews key financial and non-financial commitments made by various stakeholders in the agricultural sector including government, development partners, private sector, civil society and farmer's organization. The fourth chapter measures progress towards key targeted results and declared commitments under key ASWAp priority focus areas and cross cutting issues. The fifth and final chapter summarizes key findings and provides recommendations with respect to sector performance, policy process, institutional landscape, and financial and non-financial commitments.

#### 2.0 POLICY CONTEXT AND INSTITUTIONAL REVIEWS

#### 2.1 A summary of key existing policies, agreements and cooperation frameworks

The agricultural transformation agenda in Malawi is anchored on a number of national, regional, and international policies, as well as strategies, cooperative commitments and agreements (Table 2.1). Overarching the policy framework of Malawi is the Vision 2020, whose aspirations are to be attained through implementation of the Malawi Growth and Development Strategy (MGDS) and sectoral policies and strategies. The MGDS is currently under review as it expires in 2016, and efforts are under way to develop the next round of the medium term development strategy for the country.

At the same time, the Agriculture Sector-Wide Approach, (ASWAp), current the national agricultural investment plan (NAIP) has expired, and following endorsement of a new National Agriculture Policy (NAP), the next round of the national agricultural investment plan is being developed as an implementation framework of the NAP. It is expected that the development of the NAIP will be completed before July 2017 (the beginning of the 2017/18 fiscal year).

Table 0.1: Key Policies, Frameworks, and Cooperative Agreements

Policy/Strategy/Agreement	Description	Timeframe
Vision 2020	A long-term strategy that prioritizes agriculture and food	1998-2020
	security to foster economic growth and development	
MGDS	medium term policy framework for social and economic	2011-2016/
	development adopted to mitigate poverty through sustained	2017-2022
	economic growth and infrastructure development	
National Agriculture Policy	The overarching national policy on agriculture that guides the	2016-2020
(NAP)	agricultural transformation agenda in the sector, provides policy	
	coherence, and enhances institutional efficiency and	
	coordination	
ASWAp/ NAIP	Prioritized investment plan in the agricultural sector based on	2011-2015/2017-
	priority agricultural elements of the NAP, the MGDS and is aligned to AU/CAADP/Malabo framework.	2021
National Irrigation Policy	The national policy that spells out the priorities for investment	2016-2020
(NIP)	and institutional reform to facilitate increased sustainable	
	irrigation in Malawi. The NIP is closely aligned to the NAP.	
CAADP Compact/Malabo	A strategic framework of the New Partnership for Africa's	2003-2063
Declaration	Development (NEPAD) aimed at guiding African countries development efforts and partnerships in the agriculture sector.	
NI All' C F 1	1 1 2	2012 2022
New Alliance for Food Security & Nutrition	A country cooperation framework that stipulates national policy reform commitments to provide support within the agricultural	2013-2022
Security & Nutrition	sector with the overall goal of facilitating increases in private	
	investment and scaling innovation.	
Other Agriculture Sub-	Agricultural Extension Policy, Fertilizer Policy, Contract	Various years
Sector Policies and	Farming Strategy, Seed Policy, Farmer Organizations	,
Strategies	Development Strategy, Agriculture-Nutrition Strategy,	
	Fisheries Policy, Livestock Development Strategy, Agriculture	
	Strategic Plan	
National Export Strategy	A strategy formulated to provide a prioritized road map for	2013-2018
(NES)	developing Malawi's productive base to allow for export	
	competitiveness, export diversification, and overall economic growth and empowerment	
National Trade Policy	A policy framework that seeks to make Malawi a globally	2017-2021
Transital Hade Folley	competitive export-oriented economy, generating higher and	2017-2021
	sustainable livelihoods through trade that recognizes the role of	

Policy/Strategy/Agreement	Description	Timeframe
National Industry Policy	MSMEs and the vulnerable groups. It aims to achieve this goal by driving structural transformation of the productive sector and supporting and managing domestic market structure and integration in regional and global markets through value chains with the ambition of increasing exports.  A policy framework that seeks to increase the proportion of manufacturing in GDP through structural transformation of the	2017-2021
	Malawian economy. It specifically aims at increasing productivity of the industrial sector, increasing diversification of industrial products, increasing value addition of primary products, and reducing trade deficit.	
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.	
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 undernutrition in Malawi.	2017-2022
Compact2025/ Scaling Up Nutrition – 1000 Days 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 undernutrition. 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 undernutrition.	2016-2025/2011-

Source: Author's representation of Malawi's key agriculture-related policies, agreements and cooperation frameworks.

Note: The highlighted Policies/Strategies are those within the agriculture sector

In the Vision 2020, agriculture and food security are identified as key priority areas to foster economic growth and development. Likewise, the MGDS emphasized the importance of the agriculture sector as an engine of economic growth and broad-based poverty reduction. The newly approved NAP ascribes to the same vision and this is encapsulated in its goal, which is "to achieve 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." As discussed below, the NAP goes on to identify eight policy priority areas, which will be critical areas of implementation if Malawi is sustainably transform its agriculture.

At the international, continental and regional levels, Malawi is a signatory to the Sustainable Development Goals (2016), the CAADP Compact and Malabo Declaration, the G8 New Alliance for Food Security and Nutrition as well as the regional agriculture-related protocols under the SADC and COMESA regional economic communities. The domestic policies and strategies in or related to agriculture sector are aligned to these commitments. Particularly this is reflected in the ASWAp framework, and the forthcoming National Agricultural Investment

Plan (NAIP) which is being developed in alignment to the CAADP guidelines, principles and results framework.

Similarly, the National Export Strategy, and the newly launched Trade Policy which form the subsector policy framework on trade, recognize the importance of agriculture sector. In fact, the NES identifies agriculture related clusters such as the sugarcane and oil seeds clusters as critical to diversification and expansion of Malawi's export base. In the same vein, the National Industry Policy also recognizes the role of agriculture in supplying the much needed volumes of raw materials for the manufacturing sector. For instance, it identifies production of hides and skins from livestock sector, as critical inputs for the agro-processing sector.

Since the adoption of the NAP, which is aligned to the ASWAp/CAADP frameworks, development partners have responded positively and shown a commitment to continued support for the agriculture sector in Malawi in terms of policy alignment, harmonization into the country's policy processes and investment in the sector. Development partners' previous support to the ASWAp/CAADP compact has been strong particularly through the Donor Committee for Agriculture and Food Security (DCAFS), an agriculture sector donor coordination platform. There are indications of enhanced commitment to the sector by development partners in the coming years in view of the fact that the NAP has been approved and launched coupled with the preparation of the National Agriculture Investments Plan.

#### 2.2 Updates on key emerging policies, agreements, and cooperative frameworks

During the 2015/16 fiscal year, the MoAIWD successfully completed three areas of work on policy formulation including: (i) the development of the National Agriculture Policy, (ii) the development and approval of the National Irrigation Policy and (iii) the Contract Farming Strategy. The Ministry has also made significant progress in terms of the development of the National Seed Policy, which has now been submitted to the Office of the President and Cabinet (OPC).

#### 2.2.1 National Agriculture Policy (NAP)

The Ministry of Agriculture, Irrigation and Water Development has successfully facilitated the finalization of the NAP development and approval processes. This included generating stakeholder appreciation and consensus on the NAP eight priority areas, which will be critical areas of implementation if Malawi is to sustainably transform its agriculture. These eight policy priority areas include: sustainable agricultural production and productivity; sustainable irrigation development; mechanization of agriculture; agricultural market development, agroprocessing and value addition; food and nutrition security; agricultural risk management; empowerment of youth, women and vulnerable groups in agriculture; institutional development, coordination and capacity strengthening.

The process of finalizing the NAP development during the 2015/16 year involved a number of activities. These include the comments and inputs from the PS's Committee on Policy and Economic Affairs in early April 2016, and later by the Cabinet Committee meeting in June 2016. The Cabinet Committee made some comments which were incorporated by the Ministry of Agriculture, Irrigation and Water Development before re-submitting the policy document to the full Cabinet convened by the Head of State for endorsement and approval as a national

policy. The document was launched by the President of the Republic of Malawi on 30<sup>th</sup> November 2016.

#### 2.2.2 National Irrigation Policy (NIP)

The NIP has been developed based on the recognition of the fact that Malawi has over the years allocated considerable resources to increase the production and productivity of various crops, with minimal production outcomes to meet national demand and meet export market needs. The limited national production potential has been more critical in the past two years characterized by production decline due to weather related calamities. These recent events prompted the MoAIWD through the Department of Irrigation Services to finalize the development of the new National Irrigation Policy, which has also been approved by Cabinet and launched. The new National Irrigation Policy identifies the major areas of investment and institutional reform that will be required to mobilize substantial investments and efficiently and sustainably implement irrigation in Malawi. The NIP is founded on the basis of the National Irrigation Master Plan and Investment Framework (NIMPIF) which was released in 2015. The NIMPIF provides a detailed analysis and blueprint for irrigation investments in Malawi up until 2030.

Irrigation developments in the country have so far been guided by the National Irrigation Policy and Development Strategy (2000). However, a number of new developments have taken place that necessitated the revision of the said policy. These include the need for the strengthening of irrigation water users associations and cooperatives, promotion of public private partnerships, shifts in natural resource management, among others. The new NIP, is therefore, expected to 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 evidently had negative impacts on the country's 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 FISP and reallocate these funds towards irrigation investments. This policy shift is evident in the structure of the 2016/17 FISP and the investments for irrigation.

Implementation of the new NIP involves a commitment of the MoAIWD to ensuring improved coordination amongst stakeholders to avoid duplication of interventions 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 seen as critical steps in ensuring effective coordination and implementation of the NIP, which is aligned to the NAP, Water Sector Wide Approach (WASWAp) and the NAIP.

As a demonstration of Government's commitment to use of irrigation to attain national food security outcomes, in early 2016, the Ministry initiated a call for expressions of interest for *irrigated maize production for replenishment of the Strategic Grain Reserve (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 has provided a platform for learning and for

the roll out of a modified programme that will link irrigation with the SGR to ensure food security for the country even in years of drought, dry spells or flooding.

#### 2.2.3 Contract Farming Strategy (CFS)

During the 2015/16 fiscal year, the Department of Agricultural Planning Services in the Ministry of Agriculture Irrigation and Water Development developed the Contract Farming Strategy with the support of the Multi-Donor Trust Fund (MDTF) as well as technical support from the Food and Agriculture Organization of the United Nations (FAO) and the NAPAS project. The CFS seeks to create wealth, reduce poverty and inequality by increasing profitable market access for farmers and buyers of agricultural output, through contract farming arrangements where appropriate. The desired outcomes are to be realized through the creation of an enabling environment for contract farming activities to take place in Malawi in an efficient, competitive and fair manner.

The process of CFS development involved a number of technical deliberations and inputs from different stakeholders. A consultant was engaged to develop the initial draft of the document, and a stakeholder workshop was convened to validate the draft in November 2015. The validation workshop made a number of recommendations including the request by stakeholders to look into working with the Competition and Fair Trading Commission (CFTC) as opposed to the initial recommendation of establishing a new regulatory body that would regulate contract farming in Malawi.

In May 2016, a technical meeting was held with stakeholders to revise the document based on the given recommendations. These include the need for framework to provide adequate data on actual contracts prevailing in the farming subsector in Malawi, and that additional information needed to be included in the document before it could be forwarded to the PS for Agriculture and the Minister. Therefore, NAPAS supported the continued revision of document by supporting the staff of the MoAIWD in searching for additional data and information to be included in the CFS document. This was followed by another review done in August 2016 in Salima of the CFS document by a team of experts including officers from the DAPS, the NAPAS team, IFPRI collaborator under SEBAP. Once revision of the document was finalized, it was submitted to the PS and Minister for final adoption as the Ministry's Strategy document on Contract Farming in Malawi. As a result, the CFS was finally adopted by the Ministry in the same month of August, 2016.

#### 2.2.4 Agricultural Extension Policy

The MoAIWD, through the Department of Agricultural Extension Services (DAES) is in the process of reviewing the Agricultural Extension Policy and has engaged a consultant through the Multi-Donor Trust Fund managed by the World Bank. The consultant produced an inception report which was presented in mid-November 2016. The consultant is expected to produce a draft report by mid-December 2016.

As part of the process of reviewing the agricultural extension policy, a number of national stakeholders participated in the Malawi Forum for Agricultural Advisory Services (MAFAAS) week in July 2016 to solicit information that could be used for the review of the policy. During this forum, several issues on agricultural extension were raised and will be used as input into the review of the Agricultural Extension Policy.

#### 2.2.5 Fertilizer Policy

The Fertilizer Policy is being developed in a highly consultative and collaborative manner, with DARS, CISANET and Fertilizer Association of Malawi, among other stakeholders at the forefront, while technical support is being provided by the NAPAS project. Initial consultations on the Fertilizer Policy were conducted in November 2015 where input was gathered from mainly private sector players and farmer organizations. During the period January to September 2016, NAPAS team working closely with the Department of Agricultural Research Services (DARS) conducted one-on-one interviews with stakeholders in the fertilizer industry in Malawi. Thereafter, the NAPAS team analyzed the inputs from the stakeholder interviews and presented them to the Director of Agricultural Research Services (DARS). Subsequently, DARS instructed the NAPAS team to come up with a draft Fertilizer Policy. A zero-draft Fertilizer Policy document was expected to be completed by the end of November 2016 and will be shared internally within the Ministry's departments for their comments.

Once the draft Fertilizer Policy has been commented upon by the Ministry's departments, further consultations involving all key stakeholders will be organized. These additional consultations are expected to take place at the regional level, with one in the Northern Region (Mzuzu), one in Central Region (Lilongwe) and also in the Southern Region (Blantyre). Dates have yet to be agreed upon within the Ministry but its likely to be in December 2016 or January 2017.

#### 2.2.6 Farmer Organization Development Strategy

The Ministry through DAES is also developing a Farmer Organization Development Strategy (FODS). The FODS development is part of Government's New Alliance commitment to "promote effective smallholder farmer participation in agricultural value chains by formulating a special Farmer Organizations Development Strategy". The FODS development process is also being supported by the NAPAS team as well as a number of stakeholders.

Just like any other policy and strategic frameworks being developed in the agriculture sector, the development of the FODS is done in a highly consultative manner. As part of this effort, NAPAS supported DAES in holding the initial consultations for the FODS on 1<sup>st</sup> July 2016 in Lilongwe, where over 160 farmers were drawn from all districts in the country attended. This consultative event was jointly organized by the NAPAS team, DAES, Ministry of Industry Trade and Tourism (MoITT) as well as the Feed the Future USAID Integrating Nutrition in Value Chains (INVC) project. The INVC project also brought some of its beneficiaries involved in cooperatives to share experiences that would inform the development of the FODS. In addition, the Food and Agriculture Organization of the United Nations (FAO) with support from GIZ are involved in supporting the development of the Strategy.

#### 2.2.7 Agriculture-Nutrition Strategy

The DAES is in the process of also developing the Agriculture-Nutrition Strategy for the MoAIWD, with technical support from the Strengthening Agricultural and Nutrition Extension (SANE) and the NAPAS projects. Currently, a zero-draft of the Agriculture-Nutrition Strategy

has been developed. It is expected that DAES will begin consultations on the zero draft in early 2017 and both the SANE and NAPAS activities will support this effort.

#### 2.2.8 Strategic Plan for the MoAIWD

The MoAIWD is in developing its Strategic Plan as a requirement from the Office of the President and Cabinet (OPC) for sector ministries and departments to outline strategic actions for achieving their policy frameworks, and in the case of the agriculture sector, the NAP. The development of the Ministry's Strategic Plan will be done in parallel with the National Agricultural Investment Plan (NAIP). A taskforce to lead the development of the Strategic Plan has been set up, and its expected to undertake consultations starting November 2016. Preparatory activities that have taken place towards the Strategic Plan development include studying the OPC guidelines and other related documents, including a draft Core Function Analysis report (July 2016).

#### 2.3 Institutional setup for ASWAp Implementation

The development and implementation of ASWAp involved a multi-sectoral approach with MoAIWD providing overall leadership. Different agricultural stakeholders such as government ministries and departments, civil society organizations, farmer organizations, private sector and development partners not only participated in the design of the ASWAp but also have been involved in its implementation and review. The ASWAp review has largely centered around organization of annual Joint Sector Review (JSR) meetings involving all the above key players during which annual progress on different aspects of the ASWAp are presented, discussed and recommendations made. Therefore, it can be safely noted that ASWAp has been successful in improving coordination within the sector, as well as stimulating the participation of civil society and private sector in sector dialogue (GoM, 2016).

#### 2.3.1 ASWAp Support to the Decentralized Agriculture Extension Service Systems

With the advent of the national decentralization policy, the agricultural extension system is run through the decentralized structures of the Government, from the national level through the Agricultural Development Divisions (ADDs) (being decentralized establishments of the Ministry headquarters), the District Agriculture Development Offices (DADOs) down to Extension Planning Areas (EPAs). The ASWAp development sought to improve capacity and coordination amongst the district decentralized structures as well as to enhance communication with and participation of the lower grassroot level structures. The ASWAp support to the decentralization structures at district and village levels was to be in terms of establishment of functional structures, training of members, and facilitation of meetings.

At the district level, the key decentralized structures include the District Agriculture Extension Coordination Committee (DAECC) and the District Stakeholder Panel (DSP). These structures are generally well established in all districts and are able to facilitate harmonization of the work of the various partners. The DAECC comprises technical officers from the District as well as NGOs and other agricultural stakeholders in the district, hence it provides a forum for technical deliberations and coordination of agricultural development issues at the district level. On the other hand, the DSPs have a wider membership including private sector actors, service providers, farmer representatives from lower structures, amongst others. Anecdotal evidence

from reviews of the operations of these decentralized structures shows that few of such structures are active, though in some districts some agriculture sector donors<sup>1</sup> and NGOs do provide support for the rejuvenation of some of them.

Area Stakeholder Panels (ASP)s established to coordinate agricultural activities at Traditional Authority (TA) level to operate under the Area Development Committees (ADCs) have been supported throughout the ASWAp period, and majority are functioning, some with support from donors and NGOs in the area, others with government support and some with own fundraising mechanisms. The Village Agricultural Committees (VACs) have similarly been established in many districts although many are not functioning due to capacity constraints. The DAES has been supporting the structures through meetings and trainings.

In any case, in places where the grass roots decentralized structures are functional, this helps promote positive and increased interaction among stakeholders working on agricultural issues<sup>2</sup>. For instance, ASPs are helping in providing linkage between grass root farmers and district level structures such as DAECC and DSP on key issues that require attention at the district level.

#### 2.4 Monitoring and Evaluation

Monitoring and evaluation is an integral component of the ASWAp institutional architecture for reviewing the performance of the agricultural sector. Considering the numerous policies and strategies within the agricultural sector, a set of well-conceptualized and relevant indicators is necessary to track and monitor sector performance. Such a set of indicators is vital to informing agricultural stakeholders about the performance of the agricultural sector, assessing trends that may need to be reversed and stimulating discussion on the essential policy and investment options that may enhance the performance of agriculture within the economy. For a number of years, the sector was operating without a robust M&E system and concrete indicators which made review of the agriculture sector particularly challenging. In 2014, the MoAIWD launched an M&E master plan (M&EMP) and the Agricultural Statistics Strategic Master plan (ASSMP) as a means of improving integration, coordination, and harmonization of agricultural and ASWAp data systems. Following this launch in the 2015/16 year a number of efforts aimed at improving agricultural statistics have been undertaken as enunciated below.

During the 2015/16 fiscal year, the Ministry of Agriculture, Irrigation and Water Development in collaboration with some stakeholders carried out an evaluation exercise aimed at assessing the Area frame and point frame methodologies that use remote sensing and satellite imagery to estimate crop production. The ultimate objective of the process was to draw lessons which can be adopted and incorporated into the Agricultural Production Estimates Survey (APES) to enhance quality and credibility of the data produced. Among others, the team examined the following elements: implementability, integration with APES, sustainability, cost-benefit analysis, reliability and accuracy, timeliness and field data transmission. Based on lessons learnt from these studies, the evaluation team came up with the following short, medium and long term recommendations:

<sup>2</sup> However, there is need for critical assessments of production and productivity impacts of the functionality of these structures.

<sup>&</sup>lt;sup>1</sup> Flanders has been actively supporting for a through institutions such as Farmers Union of Malawi, FAO, LUANAR, amongst others.

#### **Short and Medium Term Recommendations**

i) Use of Information, Communication and Technology (ICT) in Data Collection and Transmission

The team recommended the introduction of electronic data transmission system for APES. Electronic data acquisition and transmission has proven to promote quick and error free data submission. In order to implement the recommendation, the team suggested that the Ministry should use the existing central server located in the Ministry headquarters for data submission. Daily data transmission by AEDO's should be made possible by distributing tablets (i.e., with GPS and internet access) to every AEDO.

#### ii) Development of electronic database

There is need to develop an electronic database for APES data to be centrally stored and managed. In this way, the Ministry will be able to derive estimates with coefficient of variations to determine precision of estimates for each crop at all levels. The database should be programmed so that estimates are calculated automatically as data is being transmitted to the database.

#### iii) Revise the sampling frame for APES

Currently APES samples 15 households in each block which means that all blocks are treated as homogeneous entities. This may result in oversampling in areas where there are less agricultural households and under sampling in areas with more households. Therefore, APES sampling plan should be revised based on agricultural land use and a sample of households should be allocated according to the agricultural land in that particular area. This kind of stratification taking advantage of differences in agricultural land use intensity will provide a significant increase in precision.

#### iv) Maintain current APES yield estimation

Crop cutting method for APES has proven to produce credible results. The method is applicable to all crops. Yield estimation methods from the pilot methodologies either require some adjustments (point frame methodology) or separate methods for non-cereal crops (area frame methodology).

#### v) Introduction of moisture content measurement for crops

Current APES methodology does not measure moisture content for crops. It is recommended that moisture content measurement should be introduced in APES.

#### **Long-Term Recommendations**

#### i) Use of point frame approach for hectarage estimation

The point sampling methodology was recommended to be adopted for hectarage estimation. However, to achieve good estimates at all levels, there is need to increase the sample size for points. The point frame hectarage estimation has proven to be more accurate, quick, easy, less time consuming and requires less human resource.

#### ii) Development of strong capacity building programme

There is need for strong capacity building in the Ministry mainly through short and medium-term training. Arrangements should be made with the Development Partners such as FAO to obtain a local technical support in terms of area sampling and Geographic Information System (GIS) and image analysis. A free software should be installed in the Ministry offices and adapted as a function of local needs.

Following the evaluation, the team developed a feasible action plan for implementing the recommendations as outlined in Annex 2. The implementation plan covers activities, time frame and costs. While implementation of both the M&EMP and the ASSMP have contributed to improved ASWAp performance tracking and report requirements, a number of challenges still remain that need to be addressed to continue improving the efficiency of the system. Some of the challenges include late submission of reports and data by some TWGs and failure of non-state actors to report on their performance.

#### 2.5 FISP reforms

Since the 2005/06 agricultural season, the Government of Malawi has made the farm input subsidy programme (FISP) the major pillar of both the country's agricultural development strategy and its social protection strategy. While the impact of the programme has been mixed, recent empirical evidence supports its continued implementation, albeit, with a number of reforms to enhance its contribution to agricultural and economic growth. In the 2015/16 fiscal year several reforms were made to the FISP. Chief among them, the FISP reintroduced participation by the private sector in select districts while Government continued to deliver FISP in the majority of the districts.

Drawing from recent evaluation literature, results of the National Agriculture Policy and key policy conferences and seminars, a number of areas of the FISP were reformed in the 2015/16 farming season. Implementation of the 2015/16 farm input subsidy program took into account some of the proposed reforms from research evidence. The programme targeted 1.5 million recipients and made an effort to maintain the 150,000 metric tons of fertilizer as in previous implementation years. However, the private sector was involved in the retailing of fertilizer just as they had previously done with the seed component. A total of 40,000 metric tons of fertilizer was allocated to the private sector for retailing. To this end, a total of 12 districts were chosen as pilots for private sector involvement. Some companies, however, withdrew from 10 districts due to a number of reasons. The districts chosen were based on a combination of hard to reach districts and those that had good road infrastructure. The districts selected were representative at the ADD level. Also, the programme implementation adopted a fixed coupon value. Government contribution for each 50 kilogram bag of fertilizer was at MK13,000 whereas farmer contribution for each bag of fertilizer was MK 3,500.

During the implementation of the 2015/16 FISP, a number of challenges were encountered which include the following:

- The method adopted to centrally select beneficiaries caused major delays to the process. Beneficiary selection was not completed until 20<sup>th</sup> November, 2015.
- Delayed awarding of contracts for the supply of fertiliser. As a consequence fertiliser was distributed late to the farmers.
- Pulling out of some companies from full private supply and retailing of fertilisers and seed programme, in pilot districts of Nkhata Bay and Chitipa because of belated signing of contracts affected implementation of the programme.

In order to further improve implementation of the programme, additional reforms have been proposed to be implemented in the 2016/17 fiscal year as follows:

- 1. A total of 54,000 MT (60% of total tonnage of fertilizer) will be retailed by the private sector, as part of Farm Input Subsidy Programme Reforms. The private companies will retail fertilizer in all the districts except hard to reach districts of Likoma, Chitipa and Nsanje
- 2. ADMARC and SFFRFM will retail the remaining 36,000 MT (40% of total tonnage of fertilizer)
- 3. Government will only pay the fertilizer suppliers upon submission of genuine coupons.
- 4. The coupon values have been fixed as follows:

**Table 2.2: FISP Inputs and Coupon Values** 

Input Type	Coupon Value (MK)
NPK Fertilizer	15,000
Urea Fertilizer	15,000
Maize Seed	5,000
Legume Seed	2,500

With this arrangement Government has given a total monetary value of MK37,500 to each programme beneficiary as a free contribution towards the four inputs (NPK, Urea, Maize Seed and Legume Seed). Therefore, the farmer will pay the difference between commercial price and the coupon value. For instance, if the commercial price of Urea will be MK20,000, the farmer will pay a top up price of MK5,000 since Government has already paid MK15,000 for that farmer. Ideally, it shows that the farmer contributions towards inputs will vary depending on the commercial selling prices unlike in the previous year where Government fixed both the coupon value as well as farmer contributions. In the 2016/17 edition of FISP, Government has contracted 27 private companies including ADMARC and SFFRFM to retail fertilizer to the farmers countrywide. For this year's programme, the Development Partners have contributed about MK3.6 billion (5 Million US Dollars) towards the purchase of seed and Government is very grateful for this.

#### 2.6 Core Function Analysis and Review

Core-Functional Analysis (CFA) is an organizational development tool which thrives in democratic dispensations to define and assign functions that the public sector must perform and functions that non state actors are encouraged to perform for the long term.

The ministry engaged a consulting firm to carry out CFA exercise with the goal to make the public service in the agriculture sector more effective, efficient and of a higher quality within the ASWAp arrangement. The contractual Terms of Reference (ToRs) for CFA had four objectives and are as follows:

- a) Analyze functions/roles which currently the Ministry's technical departments are undertaking and identify those that could more effectively and efficiently be carried out if outsourced to the private sector or CSOs; decentralized to districts or other sectors; and delegated to other sector actors.
- b) Assess the impact and risks of those functional changes (outsourced, decentralized and dele-gated) on the Ministry's effectiveness (capacity to fulfill its strategies, service

- delivery, working relations, teamwork and staff morale) and come up with mitigation strategies for such risks.
- c) Extrapolate from the analysis to make recommendations for improvement and institutional reforms to be considered in the MoAIWD and other related sectors, for example, Industry and Trade, Local Government and Rural Development and Economic Planning and Development.
- d) Come up with a concrete, realistic and distinct capacity development plan for the Ministry to ably manage the public, private sectors and community groups and deliver its core functions/services effectively.

The assignment was completed in July 2016 and final reports were discussed at validation workshop where all the deliverables were approved. The final documents submitted are Core Function report, Capacity Assessment and Capacity Development report, Risk Assessment report, and a summary of recommendations. Currently the ministry is summarizing the CFA reports for presentation to the OPC for further policy direction on the recommendations. The recommendations will be shared once the report is approved by the OPC.

#### 2.7 Review of SGR Management Guidelines

#### 2.7.1 Rationale for development of SGR management Guidelines

The Government of Malawi established the Strategic Grain Reserve (SGR) to respond effectively to food insecurity and unpredictable shocks. In 1999, the National Food Reserve Agency was established under a Trust Deed to assume responsibility for the nation's Strategic Grain Reserves (SGR). Major decisions on grain procurement and release from the SGR are made by the multi-stakeholder Strategic Grain Reserve and Commercial Maize Committee chaired by the Principal Secretary for Agriculture, Irrigation and Water Development. Although the SGR system has been using some guidelines, there has been a lack of clarity in terms of thresholds, recycling, replenishment rules, and ways to overcome delays when releasing maize, among others. Besides, there were no guidelines for emergency drawdown of maize from the SGR.

The Ministry of Agriculture, Irrigation and Water Development is carrying out a review of the SGR guidelines. The purpose of the study was to, among other things, critically analyze the current grain management and release procedures and to propose improved ways of managing the SGR. The study also provides guidelines for emergency and non-emergency drawdown of maize from the SGR. The study review was completed having been validated through the Food Security and Risk Management Technical Working Group. The results of the study are two documents, the study report and new guidelines documents, both of which have been approved by the Ministry which will come up with an implementation plan.

#### 2.7.2 The New SGR Guidelines Document

Of most importance to the process of reviewing the SGR management guidelines is the Guidelines Document whose effective lifespan will be five years. The document identifies critical gaps in the current SGR management guidelines that have crippled efforts for making the SGR more efficient and responsive. Among other identified gaps include: delay in provision of funds for timely procurement, lack of systematic criteria for engaging different

suppliers categories, loose enforcement of the farm-gate price, lengthy drawdown process, low utilization of storage facilities, lack of quality control documentary, and lack of systematic triggers for recycling. Specific recommendations have been made on addressing these gaps.

The SGR guidelines document also presents new guidelines for managing the SGR which clearly distinguishes between non-emergency and emergency drawdown, and commercial and non-commercial stock. As per the new guidelines, the SGR size will be 217,000 metric tons (mt), the non-emergency drawdown process will only take 14 days while emergency drawdown will be pre-approved by 30<sup>th</sup> June of every year. In addition, to enforce the farm-gate price, ADMARC is recommended to buy grain at the farm-gate price.

#### 2.8 ASWAP review and formulation of successor phase

The ASWAp was been implemented from 2010 to 2015 with an extension of one year. During 2015, the Government of Malawi requested the FAO to provide assistance with the review of the ASWAp and with the preparation of its successor. FAO accepted and mobilized a team from its Technical Investment Centre which led the review process. The exercise was finalized in July 2016 with a final validation meeting. The following are highlights of the findings:

- 1) With respect to food security, the ASWAp review shows that the total maize production has fluctuated between 2.8 million MT and 4.0 million MT per year in the period, registering the surpluses between 0.5 and 2 million MT per annum. The FISP has been an important instrument for productivity gains realized by farmers. However, such gains are still considered to be below potential (not reaching the ASWAp target). Fertilizer usage per ha of arable land has increased, which coupled with rains gives a good production potential.
- 2) Regarding post-harvest losses, the review found that the adoption of post-harvest technologies such as metallic silos has been limited. However, an increase in uptake of storage pesticides to deal with the challenge of post-harvest losses has been reported. In addition, aflatoxin continues to be a serious issue, especially for commercialization, but is being addressed sporadically. With the objective of agricultural export promotion, stakeholders such as ICRISAT and NASFAM are promoting aflatoxin-free groundnuts and assisting with testing.
- 3) In terms of trade and market development, the review finds that Malawi continues to face the challenge of trade deficit despite having elaborate agricultural diversification and export growth objectives in the ASWAp. Agriculture sector commercialization efforts have had some positive outcomes though not translating into noticeable national level economic structural transformation. For instance, it is reported that about 70 new farmer organisations, including associations and cooperatives, were registered by DAES per year during the ASWAp period. However, it is estimated that 80% of cooperatives cannot reach the quality standards required to get certification from Malawi Bureau of Standards. In addition, much as the ASWAp targeted that 70% (up from an estimated 20%) small and medium scale agro-processors or traders to have access to credit, commercial banks do not officer suitable and accessible credit products for the target groups.

- 4) In the case of sustainable land and water management, the ASWAp review find that for water management, sporadic activities in water harvesting and protection of river banks, amongst others, have been undertaken, but irrigation achievements are far behind schedule. The use of lead farmers in achieving the sustainable land water management objectives has been successful.
- 5) Currently development of the next National Agricultural Investment Plan is under way. Currently, a team of consultants has been engaged with the support of FAO to develop a draft NAIP document. The consultants are undertaking stakeholder consultations and collecting information for the NAIP development. The development of the NAIP is expected to be guided by the aspirations and strategic focus areas outlined in the NAP framework. It is further expected that the NAIP will form the agriculture chapter in the MGD under development as will be aligned to various regional and international policy instruments such as the SDGs or CAADP.

#### 3.0 KEY FINANCIAL AND NON-FINANCIAL COMMITMENTS

#### 3.1 Key non-financial commitments

It is has long been recognized that the growth of the country's agriculture sector requires both public and private investments. Hence, over the past four years, Government has instituted a number of reforms to improve doing business in Malawi. One of the key reforms is simplifying the process of starting a business by streamlining company name search and registration through elimination of company premise inspections prior to issuing a business license. In addition, there is improvement in time taken to connect to electricity. The thrust of the reforms is need for an enabling environment for the private sector to play its crucial role as the engine of growth in Malawi as envisaged in the MGDS. To this end, the high-level Public Private Dialogue (PPD) Forum has continued to provide an opportunity for key stakeholders from government and the private sector to discuss and formulate agreed plans to overcome the current constraints affecting the private sector.

Yet despite such attempts, private sector companies still face a number of constraints for their operations and investments. There is a general public outcry against intermittent electricity black outs in the country which requires immediate redress as it is negatively affecting the small and medium enterprises performance. Of course it has been reported that Government is putting up other generating schemes to boost up provision of electricity in Malawi. Furthermore, as noted in CAADP and Country Systems report (August 2016), private sector companies are engraved in a dwindling macroeconomic environment. Particularly, domestic entrepreneurs struggle with high interest rates (40% and above) and stringent lending conditions, which is especially harmful to agri-business as this needs a large working capital to buy in season and in bulk. High inflation and unsteady exchange rates create risks and uncertainties in the economy.

In addition, the private sector strongly feels that the policy environment is another important stumbling block to increased investment. For instance, unaddressed issues of export bans continue to create uncertainty in agricultural production for export market. Besides, administrative procedures continue to hinder investments. For example, to export one truck of soya, it takes a minimum of 21 days, USD 95, 15 unique documents and 11 separate office

visits. Consequently, there is no correlation between international and domestic soya prices in Malawi. Not surprisingly, from the 2016 Doing Business Survey, the country's ranking in the doing business indicator has improved 8 places from 141 to 133 out 190 economies (World Bank, 2016).

In order to address some of the above investment challenges, a number of recommendations have been made by different stakeholders, which need to be seriously considered. For instance, the Oil Seed Products TWG under the TIP SWAp recommends introduction of convenient system for paying for business registration, decentralization of issuance of the crop buying license (as already done MoAIWD in May 2016), raising the threshold to USD 20.000 above which a Currency Declaration Form is needed, decentralize issuance of the Certificate of Origin Form, introducing a transparent fee system for obtaining the Customs Clearing Form and expansion of issuance of Phytosanitary Certificates at all border post, amongst others. These documents should be harmonized to a one stop office at each district and at the border posts.

#### 3.2 Government non-financial commitments in the agricultural sector

#### 3.2.1 New Alliance- Grow Africa commitments

Further to the above reforms, the government of Malawi signed onto the G8 New Alliance (G8NA) partnership in 2013 to strengthen investment commitments under the Country Cooperation Framework (CCF) towards enhancing agricultural and food security outcomes. Malawi also joined the Grow Africa Initiative which helps to mobilize private sector investment. The New Alliance and Grow Africa (NAGA) is part of a broader framework of policy commitments and national goals that aims at strengthening the enabling environment for agriculture and food security investment in Malawi (GoM, 2016). A tri-party arrangement has been established whereby commitments from development partners, the private sector, and the government have been put together to promote stronger coordination, mutual accountability of different stakeholders in the agricultural sector as well as facilitating increases in the private sector investment and scaling innovations.

The New Alliance and Grow Africa framework complements and seeks to facilitate the country's agricultural investment plan. It is based on the principles of the Comprehensive Africa Agriculture Development Program/ Agriculture Sector Wide Approach (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 NAGA also acknowledges and takes into account recommendations from the National Export Strategy (NES) that are related to agricultural investment. The NAGA is also jointly implemented through the ASWAp and the Trade, Industry and Private Sector Development Sector Wide Approach (TIP SWAp).

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. To date the 35 policy 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 has also reaffirmed its commitment to mainstreaming nutrition in all food security and agricultural related programs. Further to this, the government has made remarkable progress in engaging donors and wider stakeholders through program review meetings, TWGs, and dialogue meetings.

Figure 3.1 below summarizes attainment of key government commitments based on the Joint New Alliance and Grow Africa (NAGA) progress report (GoM, 2016). Indications are that progress has been mixed in the majority of the 15 commitments under the revised CCF. As indicated in JSR report (GoM, 2015), the refined policy commitments are categorized into four 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. Particularly, the results show that 3 out of 15 policy commitments were reported to have made good progress based on revised schedule while the other 4 made good progress but missed their schedule.

#### 3.2.2 Achievements on the Policy Commitments

Notable achievements are the finalization of the agriculture policy, the industrial policy, the trade policy, enactment of the new land bill into law and the contract farming strategy under the policy objective of creating enabling environment (see Annex 1). Categorizing further policy commitments in Annex 1 into four policy objectives as highlighted in Figure 1, although the policy objective of creating enabling environment has experienced the most progress, it is also one of the policy objective that has policy commitments with partial and limited progress. However, work on most of these policy commitments such as the special farmer organization development strategy and the fertilizer regulatory framework is progressing well with a delay. Figure 3.1 also demonstrates that there has been sluggish progress on commitments under the policy objective of productivity and product handling such as introduction of agricultural zoning based on priority food and cash crops in growth clusters. Updates on these 15 policy

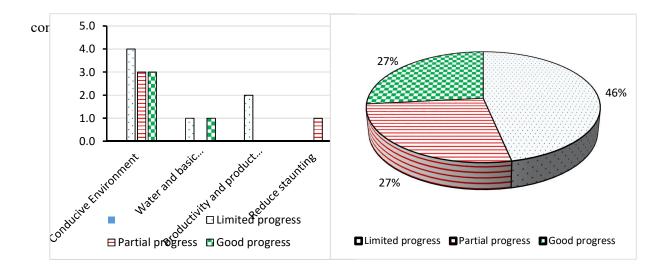


Figure 3.1: Progress on government commitments under New Alliance

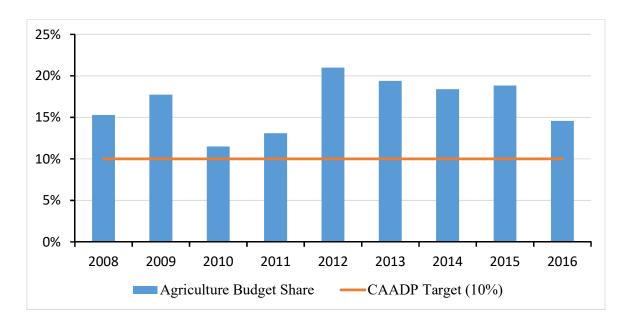
**Source:** Malawi Joint New Alliance and Grow Africa Progress Report (2016). **Note**: Significance progress means that there was good progress based on revised schedule while good progress means that there was progress but missed their schedule.

Figure 3.1: Progress on government commitments under New Alliance

#### 3.3 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 3.2 below, the volume of funding to agriculture must be deemed to be adequate. Particularly, agricultural expenditures in Malawi have increased consistently since implementation of the ASWAp and accounting a little over 20 percent at their peak in 2012. Accordingly, Malawi has successfully achieved CAADP commitment of a minimum 10 percent resource allocation to the agricultural sector.

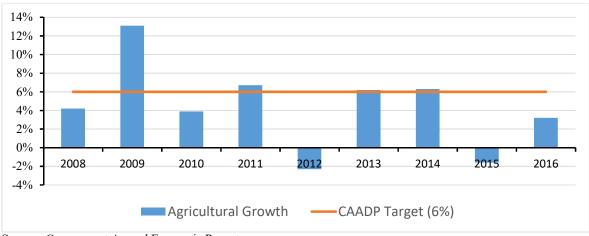
In principle, such an allocation to the agricultural sector is expected to stimulate broader economic growth and consequently improving the country's economic outlook. However, the concern over years has been rebalancing such budget allocations to key strategic areas in the sector that can stimulate productivity and growth. In addition, distribution of such budget allocations across various levels (headquarters, regional and frontline) has been an issue raised in the Agriculture Sector Performance Review (AgPER).



Source: Government Economic Reports and Budget Financial Statements

Figure 3.2: Share of Malawi's public expenditure in agricultural sector

As indicated in Figure 3.3 below, despite the country consistently surpassing the 10 percent CAADP target, this commitment has not always translated into a 6 percent agricultural sector growth over the duration of the ASWAp. As illustrated in this figure, the country managed to achieve a 6 percent growth during the implementation of ASWAp in 2011, 2013 and 2014. However, the situation worsened in some years registering negative growth of about 2.3 percent in 2012 and about 1.6 percent in 2015. Although marginal increase of agricultural growth was achieved in 2016, it still remained far below the CAADP target. Assuming other things constant, failure to meet the CAADP target might imply that investments made in the agricultural sector have not always been effective at spurring growth in the sector.



Source: Government Annual Economic Reports

Figure 3.3: Agricultural GDP growth rate (2008-2016)

Agriculture is vital to economic growth in Malawi and has in recent years occupied a large share of public resources. Although the country has managed to attain the CAADP commitment of a 10 percent allocation to the agricultural sector since implementation of the ASWAp, actual resource allocation and distribution to other key agricultural programs still remain limited. As indicated in Table 3.1, agriculture budget in the Ministry confirms the uneven distribution of resources considering the dominance of resources allocated to the food production and management component where a large share of funds are dedicated to FISP implementation.

Table 3.1: Ministry of Agriculture Expenditure Allocations in 2015/16 Budget (MK' Million)

Allocations	2015/16
	Revised
Total Expenditure	138,262
of which PE	10,378
ORT	78,170
Development Part 1	47,658
Development Part 2	2,056
<b>Key Activity Allocations</b>	
Maize Purchases	8,565
Winter Cropping	
Fertilizer Subsidy	63,929

Source: Government budget documents

Of the MK138.3 billion (Recurrent + Capital Part I and II) allocated to MoAIWD, MK63.9 billion (46% of Ministry Budget) has been allocated to the FISP in 2015/16 fiscal year. Through FISP allocations seems to have declined in 2016/17 when compared with the allocations in 2015/16. However, there is still need to balance resources to include increased investments in other key priority areas in the agricultural sector such as livestock, extension, irrigation, market development and research. Specifically, allocation to maize purchases has have more than doubled over the past few years considering this year's drought due to El Nino that has had negative effect on maize productivity.

#### 3.4 Overview of development partners' financial commitments

Development partners' financial commitments to the agricultural sector are provided through donor-funded projects under the Development Part 1 budget and off-budget support. Additionally, development partners provide resources to the agricultural sector through various non-state actors, as off-budget support mechanisms. The summary of consolidated donor financial resources is provided in Table 3.2 and compares the initial plans under ASWAp against cumulative fund disbursement.

Since the start of the implementation of ASWAp, about US\$1.2 billion has been committed to agriculture by various development partners to ongoing programs and projects in the sector. The above figures do not include past and ongoing support provided to food security through humanitarian intervention. As of 2016, 62 percent of the committed resources have been disbursed as the disbursement rates depend on program planning and progress. Development partners committed to implementing a number of enabling actions through providing financial resources in support of both private sector investments and government policy development as a means of fulfilling commitments under CCF.

Table 3.2: Development partner total commitments and disbursement for on-going programs

Development Partner	Commitment 2015/16 USD'M	Disbursement 2015/16 USD'M	Commitments 2016/17 USD'M
1 arther	OSD W		USD W
WB	71.88	44.19	73.76
IFAD	12.48	11.03	8.32
DFID	34.75	41.71	27.34
USAID	51.38	29.04	41.71
EUD	59.50	27.34	29.04
AfDB	11.06	22.24	21.56
Ireland	12.92	11.06	7.63
Norway	27.80	7.63	22.02
Flanders	8.60	7.58	7.58
JICA	4.68	15.67	15.67
Germany	6.37	0.00	6.89
WFP	18.30	0.48	4.98
FAO	32.97	1.61	12.86
UN Women	0.56	0.00	0.60
Total	353.25	219.58	269.69

Source: DCAFS Database November 2016, Note: Commitments are based on average investment per year per DP

Table 3.3 highlights how the current database of development partner's projects has been classified based on program budgets according to ASWAp priority areas. The purpose of this exercise is to inform discussions among various stakeholders in the agricultural sector on rebalancing investments to the sector priority pillars. All development partners have realigned their budgeting systems to ASWAp priority areas, and the information from the few provides insight into allocations and how these affect outcomes in the agricultural sector. Based on the

few projects, results from Table 3.3 depicts the same trend presented in 2015 JSR report. The land and water and food security components of the ASWAp continue to be allocated the most funds whereas cross-cutting issues as standalone and technology generation continue to be allocated the least. Worth noting however is that crosscutting issues including gender and HIV/AIDS are integrated across all ASWAp pillars yielding substantial budget allocations.

Of concern is the large donor dependency for the majority of the ASWAp pillars and the low resource allocation to technology generation which underscores the need for discussion on rebalancing investment to the sector. The concern for Malawi of such an allocation is the potential inability for the country to reach some of its key CAADP/ASWAp targets. Sustainable agricultural growth and transformation as experienced elsewhere in the world is based on sustained growth in productivity through corresponding investments in research and development (R&D) and other critical activities.

Table 3.3: Development Partner commitment by ASWAp priority areas (2015/16)

Table 3.3. D			<u>, , , , , , , , , , , , , , , , , , , </u>		1 1				- /					
	Foo	od Secui	rity	Cor	mm. A	gric.	Lano Wa		Tec Gene		Insti Dv		Cr Cut	
Developmen t Partner	Maize Sufficient	Diversification	Risk mgt	Agric. Exports	Agro-processing	Market dvpnt	Sutanable Land mgt	Irrigation and Water mgt	Results & mkt resaerch	Framer-led extension	Public mgt system	Capacity building	Gender	HIV & AIDS
WB	60.0 6	3.00	2.79	0.0	0.0	12.3 6	2.90	7.42	1.4	0.5 8	6.92	3.84	0.0	0.0
IFAD														
DFID	5.76	3.60	2.88	0.0	0.0	3.19	2.88	7.97	0.0	0.0	0.00	0.00	0.0	0.0
USAID	0.00	19.9 6	0.94	2.3	3.7 5	12.3	9.89	5.70	1.0	0.0	0.00	9.60	3.7 5	0.0
EUD	2.66	1.08	0.24	0.9 4	0.9 4	10.8	0.65	8.30	0.0	0.2 9	1.95	3.91	0.0 4	0.0 4
AfDB	3.56	0.00	0.60	0.0	2.3	0.00	0.00	12.3 9	0.0	0.0	0.00	2.85	0.0	0.0
IRISH AID	1.32	1.26	0.12	0.0	0.0	1.56	0.41	0.00	1.0	0.1	0.26	0.24	0.0	0.0
RNE	3.40	2.22	0.34	0.0	0.8	3.91	2.85	0.44	0.8	1.3	0.54	1.82	0.6	0.4
Flanders	1.08	0.17	0.22	0.0	0.0	2.56	0.22	0.00	0.0	1.3	0.18	0.17	0.0	0.0
JICA	0.00	0.46	9.15	0.0	0.3	0.00	1.16	1.01	0.0	0.0	0.42	0.00	0.0	0.0
FAO	1.46	1.72	2.51	0.0	0.0	1.24	0.61	0.30	0.2	0.0	0.34	0.88	0.1	0.0
WFP	-		-				-							
Brazil														
UNDP														

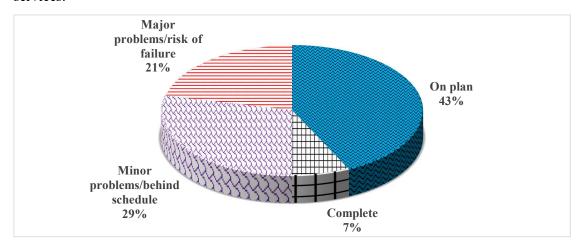
				0.0	0.0				0.0	0.1			0.1	0.1
UN Women	0.00	0.00	0.00	0	0	0.00	0.00	0.00	0	5	0.00	0.15	5	5
				0.0	0.6				0.0	0.0			0.0	0.0
Germany	0.35	1.10	0.00	0	5	1.30	0.00	0.50	0	0	0.05	2.60	5	0
	79.6	34.5	19.7	3.2	8.9	49.2	21.5	44.0	4.6	3.8	10.6	26.0	4.8	0.6
	17.0	34.3	17.7	3.2	0.5	49.4	21.3	44.0	4.0	3.6	10.0	20.0	4.0	0.0
Totals	5	5	9	9	9	4	6	3	1	1	6	6	2	2
Totals						l '.'			1	1			2	

Source: Updated based on DCAFS database November 2016

# 3.5 Overview of private sector financial commitments

The adoption of the New Alliance has provided private sector firms a platform through which to actively invest in agriculture and to participate in the country's agricultural policy processes. Regarding private sector commitments, Malawi has 29 companies (19 African and 10 international) that have signed up Letter of Intent (LOI) to invest in the agriculture sector (see GoM, 2016). Currently, participating companies have increased from 10 in 2014/15 to 16 in 2015/16 making a total of 59 percent of companies participating under the G8NA and Grow Africa in Malawi. Cumulative investment by the private sector in 2015/16 was US\$41.9 million, bringing the total delivered commitment to US81.5 million and representing 35 percent of the planned investment commitment to date.

As indicated in Figure 3.4, of these 16 participating companies, 43 percent of commitments are on plan, 29 percent are behind schedule or have minor problems, 21 percent have major problems and are in risk of failure, 7 percent have been completed. In addition, the use of resources by the private sector has enabled the realization of a total of 1.4 million smallholder farmers reached in 2015/16, of which 39 percent are women. The highest number of smallholders reached was through open market sourcing, training, financial and market data services.

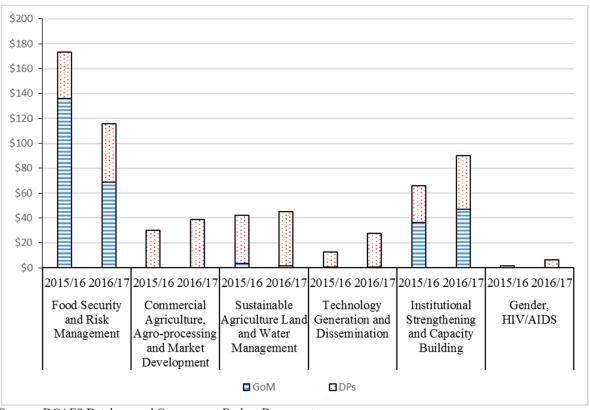


Source: Joint New Alliance and Grow Africa progress report (2016)

Figure 3.4: Status of private sector implementation of letters of intention

# 3.6 Alignment of sector's budget to ASWAp pillars

As the principal priority investment programme in the agricultural sector, the ASWAp recognizes the fundamental role of agriculture in alleviating poverty and hunger, as well as contributing to overall economic growth. Empirical literature acknowledges the powerful leverage effect of agriculture on the rest of the economy, particularly in the early stages of economic transformation, and can generate favorable conditions for economic development of the rural poor. Such an economic development in Malawi can materialize through agricultural activities that are increasingly oriented towards profitable commercial farming through specialization of smallholder farm production, output diversification at the national level, and value addition in downstream value chains. While the ASWAp processes have conformed to the principles and values of the CAADP, implementation of the ASWAp continued to favour the food security and risk management priority focus area in 2015/16 (Figure 3.5).



Source: DCAFS Database and Government Budget Documents

Figure 3.5: Allocation to ASWAp focus priority areas - 2015/16 & 2016/17 (USD' Million)

As illustrated Figure 3.5, Government of Malawi (GoM) funding focuses mainly on food security and risk management (includes FISP) and institutional strengthening and capacity building. On the other hand funding by development partners (DPs) seems to have been spread across the ASWAp pillars but with different magnitude. Government also managed to allocate funds to sustainable agriculture land and water management in 2015/16 mainly to finance conservation agriculture and irrigation. However, some funds to support irrigation development are also included under the GBI in the Office of the President and Cabinet (OPC). In tandem with Table 3.5, the food security and risk management and particularly maize productivity and risk management continue to receive almost 64 percent of ASWAp funds from Government resources in 2016. Although donors are also allocating some of the resources to maize production and risk management (average of 28 percent), much focus has also gone to market development and diversification. Irrigation has also received higher funding from

development partners in 2015/16. Much of these resources have gone to infrastructure investment. As this trend of allocation across the ASWAp pillars and components remains the same as what has been revealed in the Review of ASWAp Report (FAO/GoM, 2016).

Table 3.4: Overall GoM & DP annual sector investment per ASWAp priority (\$' M)

	GoM	DPs	GoM	DPs
	2015/1	.6	201	6/17
Maize Sufficient	127.164	11.6	55.77	10.98
Diversification	2.819	9.4	8.28	30.40
Risk management	6.654	16.4	4.91	5.46
Agriculture Exports	0.032	0.8	-	2.96
Agro-processing	0.019	4.5	0.04	4.58
Market development	0.001	24.5	0.02	31.27
Sustainable Land management	0.125	9.1	0.08	19.22
Irrigation and Water management	3.396	29.7	1.48	24.45
Results & market research	0.249	4.8	0.14	7.48
Farmer-led extension	0.142	7.6	0.77	19.90
Public management system	35.629	12.3	46.86	12.40
Capacity building	0.647	17.4	0.03	30.60
Gender and HIV & AIDS	0.038	1.6	0.03	6.21
Total	198.22	149.8	118.40	205.90

**Source:** DCAFS Database and Government budget documents

Nevertheless, much of concern is the budgetary allocation to research and extension services which are among the lowest among the ASWAp 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, organization of farmers into business entities, market development or rural infrastructure. This is one area of focus Government can consider in the current formulation of the second ASWAp which is expected to accommodate a balanced approach between capital and recurrent budget allocations as well as identifying an appropriate allocation across priority areas to achieve growth and poverty reduction targets.

# 4.0 REVIEW OF AGRICULTURE SECTOR PERFORMANCE

# 4.1 Introduction

This section analyzes the performance of the agricultural sector since the implementation of the ASWAp (2010-2015) with special emphasis on the 2015/16 financial year. The analyses as provided in the sections below are based on a set of key performance indicators (KPIs) that were shortlisted to streamline the ASWAp M&E process from data collection to reporting requirements. Following an indicator prioritization exercise, 27 indicators were identified that

are capable of informing the performance of the agricultural sector. The KPIs were identified based on data availability and the ease with which they can be updated either annually or on a periodic basis. According to the agriculture Monitoring and Evaluation Master Plan (M&EMP), the KPIs were identified following extensive consultations with the seven technical working groups (TWGs) established under ASWAp. The KPIs, as reported in the sections below, are also consistent with key indicators in CAADP, ASWAp and MGDS II and together provide data with which to track the performance of the agricultural sector<sup>3</sup>.

The analysis in this section closely follows ASWAp key priority Focus Areas, Key support Services and Cross-Cutting issues. The analysis is complemented by information from other relevant reports that track the performance of the agricultural sector. According to the M&EMP, KPIs will be modified in response to changing ASWAp policy priorities and availability of data.

# 4.2 Progress on Food Security and Risk Management

Under the Food Security and Risk Management component, the ASWAp emphasizes on increasing maize productivity, reducing post-harvest losses, diversifying food production and management of risks associated with the national level food reserves. Besides, the ASWAp identifies diversification of agriculture production to legumes, vegetables, fruits, small stocks, pigs, rabbits and chicken among others as a means to reducing malnutrition.

ii. Food Consumption Score of a household;

iii. Share of food expenditure for rural households;

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<sup>&</sup>lt;sup>3</sup> Some KPIs have not been reported on due to unavailability of data during the period under review and these include:

i. Proportion of post-harvest losses in production at farm;

iv. Proportion of farm households which adopt recommended agricultural technologies;

v. Ratio of farmers to lead-farmers in extension services,

vi. Proportion of employed staff and farmers in the agricultural sector accessing HIV/AIDS related support

vii. Percentage of farmers accessing productive resources

## **4.2.1 Maize Productivity**

To increase maize productivity, various interventions have been implemented in the agriculture sector. The Farm Inputs Subsidy Program (FISP) is one of the interventions identified by the ASWAp on increasing maize productivity due to its potential in increasing maize yields. Prior to introduction of FISP, maize yields were around one (1) metric tons per hectare (mt/ha) but later increased to around two (2) metric tons per hectare.

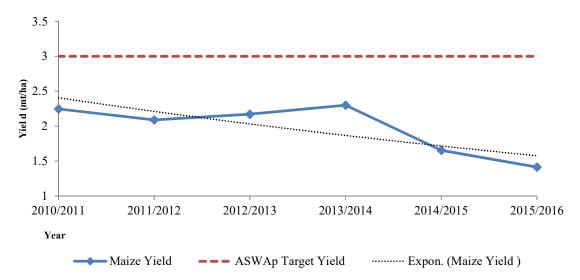


Figure 4.1: Average Maize Yield in Smallholder Farms

From Figure 4.1, the average maize yield since the implementation of the ASWAp in 2010/2011 has been around 2mt/ha below the ASWAp target yield of 3 mt/ha. Maize yields decreased in 2014/15 and decreased further in 2015/16 (year under review) due to erratic rainfall, prolonged dry spells, floods and unreliable market conditions. Furthermore, from Figure 4.1, it can be noted that there has been a steady decline in maize productivity from 2014 further from the ASWAp target. This is largely attributable to the negative climate change effects for the past 2 consecutive seasons.

Even though maize yields were better prior to the 2014/15 and 2015/16 growing seasons, they were still below the ASWAp target of 3mt/ha and stagnated around 2mt/ ha. This is attributed to among other things low adoption of improved technologies among farmers and in adequate access to agricultural extension services by farmers. Furthermore, more technologically efficient farmers have not been adequately incentivized to engage in maize production. As such there is need to come up with programs that are targeting more technologically efficient farmers to engage in maize production on a commercial scale.

# **4.2.2 Productivity of Pulses**

In addition to increasing maize productivity, interventions in the agriculture sector focused on increasing productivity of other keys crops such as pulses, cassava and potato. Productivity of pulses is also of great interest since pulses are amongst the key crops in the country. Pulses productivity trends are presented in Figure 4.2 below.

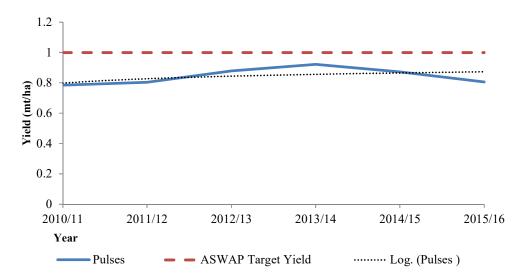
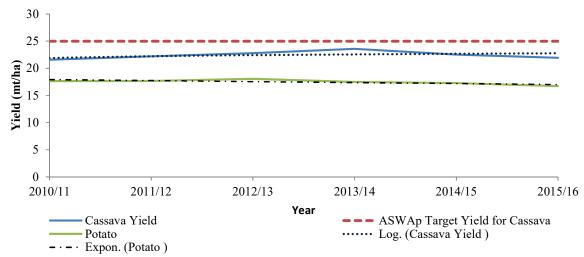


Figure 4.2: Average Pulses Yield in Smallholder Farms

From Figure 4.2, productivity of pulses has been lower than the ASWAp target yield (1mt/ha) since the 2010/11 fiscal year. Just like in the case of maize, the past 2 years have seen a steady yield declining trend. Mostly the decline in the pulses yields is due to unpredictable prices on the local market for pulses hence constraining farmers from adopting yield enhancing technologies, as their profitability is largely uncertain. Furthermore, availability of certified legume seed still remains a challenge in the country, as such farmers still use recycled seed. In any case, despite the reported yield declines in some years, a trend analysis of the yields for pulses from 2010/11 to 2015/16 reveals that on average there has been an increase in the yields for purses due to increased support to legume crop diversification under ASWAp. Generally productivity of pulses tends to approach the target yield of 1mt/ha in the ASWAp.

# 4.2.3 Cassava and Potato Productivity

Cassava and potatoes are the major roots and tuber crops grown in the country. As such, the ASWAp had set productivity targets to be attained at the end of the programme period. Details are in Figure 4.3 below.



#### Figure 4.2: Average Cassava and Potato Yield

Figure 4.3 shows that cassava and potato yields in the 2015/16 growing season were lower than in the 2014/15 growing season. Also notable is the fact that the realized cassava yields have been lower than the ASWAp target yields of 25 mt/ha. However, a trend analysis for cassava yield shows that there has been an increasing trend in cassava yields overtime though not reaching the set targets. On the other hand, a trend analysis for potato yields shows that yields have been decreasing over time.

Realizing the role of roots and tubers in ensuring food security, a number of partners and government advocated for their production by providing farmers with planting materials and technical training for three consecutive growing seasons.

#### 4.2.4 Diversification of Food Production and Diets

## 4.2.4.1 Livestock Ownership

Besides crops, livestock production is also recognized as critical for the country's economy. In this regard, trends in livestock production are of interest for gauging the extent of realization of livestock investment initiatives. For purposes of this analysis, trends in livestock production are presented in livestock units (converting all livestock into cattle equivalent). See Figure 4.4 below.

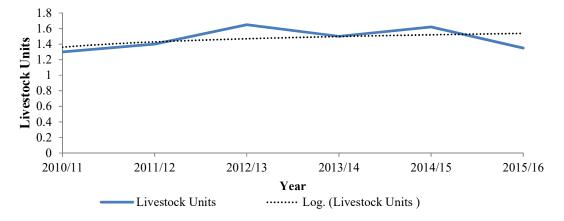


Figure 3.4: Average Number of Livestock Units owned per smallholder farmer

Figure 4.4 shows that the average of livestock units owned by smallholder farmers in 2015/16 was lower than in 2014/15. The observed drop could be due to lack of data in other Agricultural Development Divisions (ADDs). Despite the isolated drop in livestock production in 2015/16 season, a trend analysis in Figure 4.4 indicates that there has been a rise in the number of livestock units owned by smallholder farmer overtime. This is attributed to intensive livestock investment initiatives such as disease control through vaccination of animals, increasing animal breeding rates and expanding loan programs for livestock farmers. In addition, other contributing factors are intensified trainings on goat, pig and sheep and livestock pass on programs. Furthermore, the lead farmers have contributed to the observed trend in livestock units owned by smallholder farmers through promoting recommended animal husbandry techniques, animal health treatment and improvement of animal housing structures.

With increased livestock ownership as depicted in Figure 4.4, there is need to increase investments in animal value chains to consolidate the gains. Investments in veterinarians and vet technicians, animal and animal products value chains, and food quality controls would be desirable.

#### 4.2.4.2 Fish Production

Fish contributes significantly to the national protein requirements. Most of the country's fish is obtained from natural water resources, namely Lake Malawi, Lake Malombe, Lake Chirwa and some big rivers such as Shire. Details of fish capture trends are in Figure 4.5 below.

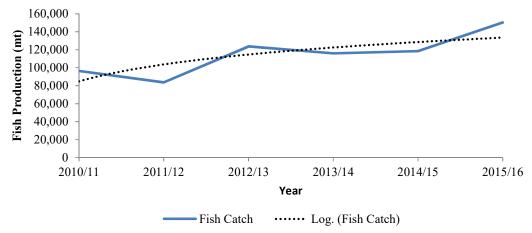


Figure 4.5: Malawi Average Fish Catch: 2010-16

From Figure 4.5, over the past 5 years, fish capture has been generally been increasing save for 2012. As such, one observes that for 2015/16 season, the fish capture was higher than that in 2014/15 season. The increasing fish capture trends imply increased protein availability to the growing national population. However, since the increase in fish captures may not match the match the population growth trends, there are still concerns of decline in access to fish by the populace.

Cognizant of the supply shortfalls from the fish capture from the natural water bodies, the Government of Malawi has been promoting aquaculture investments under the ASWAp. Therefore, it is important to review trends in aquaculture in relation to the fish capture. Details in Figure 4.6 below.

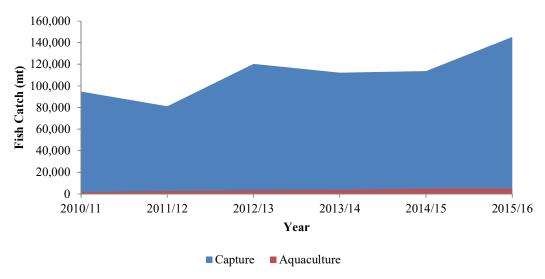


Figure 4.6: Fish Catch in Capture Fisheries and Aquaculture Sub-Sector

From Figure 4.6, it is evident that capture fisheries constitute a bigger portion of the landed fish catch compared to aquaculture. This means that the country has a long way to go to realize the full potential in the aquaculture. Since 2010/11 growing season the aquaculture fish production has been increasing similarly fish production from capture fisheries.

Considering that capture fisheries remains the major source of fish, there is need to invest more in programs that would enhance the sustainability of fishing activities.

## 4.2.5 Nutritional Status

Attainment of improved nutritional status is one of the developmental objectives outlined in the ASWAp. The nutritional status for children are usually measured in terms of stunting, wasting and underweight conditions. The progress achieved over the past 5 years is reported in Figure 4.7 below.

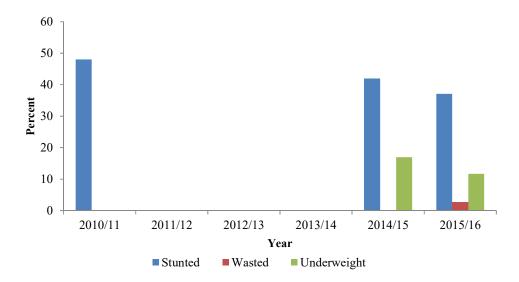


Figure 4.4: Proportion of malnourished children

As reported in Figure 4.7, there has been a decrease, though not marked, in the percentage of stunted and underweight children over the past years. The improvement is due to the many interventions that have been implemented on reducing malnutrition in children. These interventions include breast feeding programs, nutritional information and provision of super cereals to lactating women. There will be continued reduction in child malnutrition in the next five (5) years.

# 4.2.6 Management of food insecurity risks

Food gaps conditions are of interest since they reflect the extent to which the country is meeting its food requirements for the populace. Figure 4.8 below has the details for the 5 year period, i.e. 2011-16

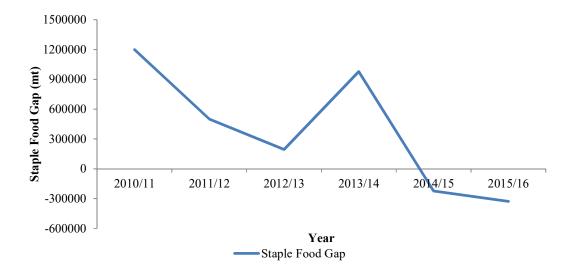


Figure 4.5: Staple Food Gap

Figure 4.8 shows that the staple food gap was positive from 2010/2011 to 2013/14 seasons. It worsened in the 2014/15 and 2015/16 growing seasons due to the negative impacts of El Nino on agricultural production in the two seasons. In the 2016/17 the country is expected to realize a normal harvest due to the forecasted La Nina Season. This will have a positive impact on the staple food gap in the 2017/18 season.

Besides the food gap conditions, another key food security indicator is proportion of people at food security risk. Details are in Figure 4.9 below.

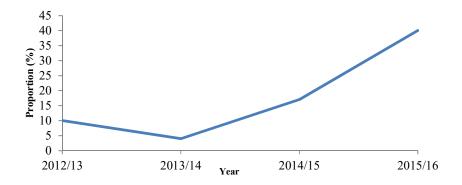


Figure 4.6: Proportion of the Population at Food Security Risk

Figure 4.9 shows that the proportion of the population at food security risk increased from 17% in 2014/15 season to 40% in 2015/16 season. The major contributing factor to the rise in the proportion of population under food insecurity risk is the under production of staple cereals due to pro-longed dry spells compounded by the low adoption of technologies that would mitigate the negative impacts of dry spells on agricultural production (i.e. conservation agriculture).

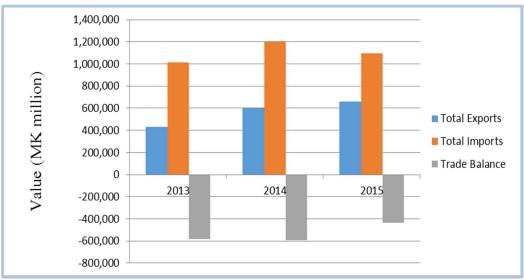
# 4.3 Commercial Agriculture, Agro processing and Market Development

One of the key thematic areas of the Agriculture Sector Wide Approach is Commercial Agriculture, Agro-Processing and Market Development aimed at enhancing agricultural growth and economic development of the country. The component focuses on promoting commercial agriculture production that involves smallholder farmers, agricultural diversification, agro-processing for import substitution and value addition, developing the domestic and export markets for inputs and outputs. It also seeks to promote more public private partnerships involving producers, buyers, input dealers, service providers, and policy makers in the value chain.

# 4.3.1 An overall trade performance of Malawi

In terms of overall external trade performance, Malawi has registered a rapid growth of imports as compared to exports. In 2015, a total value of MK659, 739 million was recorded on merchandize exports as compared to MK601, 869 million in 2014 translating into a growth of 9.61 percent. On the other hand, total merchandise imports declined to MK1, 092,933 million in 2015 from MK1, 198,103 million in 2014 thus registering a decrease of 8.78 percent.

However, this increase in exports could not offset the decrease in imports but managed to reduce the trade deficit to MK433, 193 million from MK596, 234 million registered in 2014.



Source: Annual Economic report 2016, MFEPD

Figure 4.10: Exports and Imports Values: 2013-2015

# 4.3.1.2 Agricultural exports for improved trade balance and income

During the 2015/16 year, the total value of agricultural exports decreased by 46.33 percent from 2014/15 financial years thus registering the lowest value of exports since 2010/11. This is despite the fact that the country registered the highest total volume of major agriculture commodities for exports since 2011/12. The highest earnings from the exports were registered during the 2010/11 Financial Year. However, the volumes of exports have tremendously increased in the period under review, registering the highest volumes since 2010/11 financial year with an increase of 307 percent compared to the previous year, which had the lowest volumes recorded since 2010/11.

Table 4.2: Value and Volume of Exports for Major Crops (2010/11-2015/16)

Fiscal	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	ASWAp
Year							Target
Value by	Commodity(	USD'000)					
Tobacco	612,145	510,477	385,488	623,047	566,861	391,392	361,557
Sugar	149,479	113,502	82,937	126,547	101,968	3,709	N/A
Tea	76,037	68,026	83,133	80,201	69,220	35,906	N/A
Total	1,352,578	972,231	999,944	1,278,408	1,317,290	706,983	N/A
Volume b	y Commodity	v(MT'000)					
Tobacco	151,106	215,903	103,275	151,410	245,349	125,598	122,000
Sugar	214,241	196,551	128,071	212,078	172,109	83,013	122,000
Tea	47,970	48,981	41,406	46,658	41,785	26,015	N/A
Total	3,780,895	4,153,700	8,669,118	17,393,817	8,663,400	35,299,573	N/A

Source: Annual Economic report 2016, MFEPD

The values of exports from tobacco, sugar and tea have drastically decreased by 31 percent, 96 percent, and 48 percent respectively between 2014/15 and 2015/16. During the same period, the volumes of the major commodities exported also followed a corresponding decrease. The biggest volume of tobacco was exported in 2014/15 at 245,349 MT while the lowest export volume was recorded in 2012/13 season at 103,275MT. On the other hand, the highest value of exports from tobacco were recorded in 2010/11 worth USD612 million while the lowest value was USD386 million in 2012/13. Sugar exports hit the lowest volumes and value of USD3million in 2015/16 and highest export value of USD149 million in 2010/11, where it also registered its biggest export volumes. Tea exports have generally remained stable during the period under review with lowest figures recorded in the 2015/16 season. Figure 2 below show the trend analysis in terms of volume of exports by commodity.

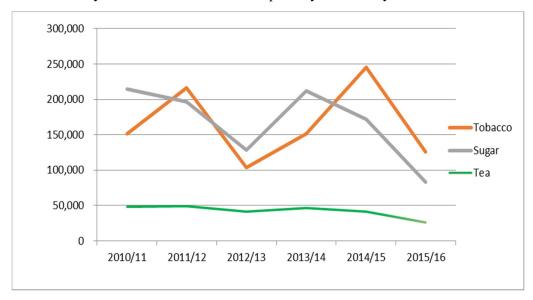


Figure 4.11: Volume of Main Export Crops in Malawi (MT'000)

Overall, since 2010/11 financial year, the country has experienced very unpredictable and fluctuating trends in both the values and volumes of exports from the three major export commodities of tobacco, sugar and tea, mostly suggesting a general decrease in the dollar value of exports and an increase in the total volumes exported. The values of export for tobacco, sugar and tea were generally low in the 2015/16 as compared to other years since 2010/11.

# 4.3.1.3 Value and Volume of Agricultural Imports for Major Commodities

Between 2014/15 and 2015/16, the total dollar value of imports declined by 48.4 percent while the total national volumes imported reduced by 17.3 percent. The total value of imports from major commodities (wheat, maize and dairy products) constituted 10.3 percent and 4.6 percent of the value of total imports in 2014/15 and 2015/16, respectively. Of these, wheat is predominantly the major imported commodity followed by maize. Maize imports hit record high at 31,288MT in 2015/16 while was lowest in the year 2011/12 at 1,373MT.

Table 4.3: Imports for Major Agricultural Commodities (2010/11-2015/16)

Tubic no. Impor	to for manyor	1151 Icultul ul	Commounted	(2010/11 201	0/10/	
Financial Year	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Value by commo	dity(USD'00	<i>0</i> )				
Wheat	78,858	42,687	62,001	92,122	85,808	87,687
Maize	4,365	1,373	8,563	20,163	17,124	31,288
Dairy products	14,030	7,291	9,432	12,851	10,802	10,871

Total	2,420,230	1,405,504	273,135	3,022,822	2,454,121	1,265,749
Volume by comm	nodity(MT)					
Wheat	136,629	114,038	114,990	189,932	180,566	166,412
Maize	8,706	2,519	21,484	58,583	47,365	84,360
Dairy products	5,911	4,234	3,520	4,601	4,401	3,568
Total	1,945,865	3,213,538	3,523,318	11,115,635	1,893,969	1,567,023

Source: Annual Economic report 2016, MFEPD

Generally, there is an increase in the value and volumes of the major agricultural commodities imported, except for the volumes of dairy products, which are showing a declining trend. The year 2012/13 witnessed an overall decline in both volumes and values of commodities imported into the country, while 2013/14 registered the highest volumes and value of commodities imported at a value of USD3.02 billion. Wheat remains the country's major imported agricultural commodity followed by maize. Wheat has a wide range of uses mostly in confectionery industry, and yet its production remains decimal in Malawi. As a result, most of the wheat is imported from outside.

Although, maize is widely produced in the country, its production has failed to match its consumption requirements. Since the 2011/12 season, the country has experienced a maize deficit which necessitated the importation of the staple food crop from neighboring countries of Zambia, Tanzania and Mozambique as well as Kenya and beyond Africa. The poor and unreliable rainfall experienced from the 2012/13 growing season resulted in a huge increase in the amount of maize deficit hence an increased value and volume of maize imported into the country. For instance, in 2012/13 about 8,563MT were imported and in the following growing season, the imports figure increased to 20,163 MT. The persistent droughts back-to-back with floods experienced in the recent years have resulted in record high volumes of maize being imported in the financial year 2015/16.

Importation of dairy products on the other hand, has not shown any significant increase. This may be due to increased production of soya, which has substituted some milk ingredients in some processed commodities (through soya milk and also soya is being promoted as a milk substitute).

# 4.3.2. Value of Foreign Investment in Agriculture

Although there has been an increase in the number of foreign investments in the agriculture sector from three (3) in the 2014/15 to 15 in the 2015/16 which is above the ASWAp target of 3, the total value of investments have drastically reduced by 69.2 percent to MK175.4 million in 2015/16. In 2014/15 financial year the sector registered the highest value of investment in the agriculture sector since 2010/11 financial year.

Table 4.4: Number and Value of Foreign Investment in Malawi Agriculture

Item	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Number investments	6	6	2	7	3	15
Value of investments (MK)	11,759,920	30,702,500	510,000	237,474,000	570,000,000	175,430,000

Source: Malawi Investment and Trade Centre

The increase in the number of foreign investments with a corresponding decrease in the total value of investment in the sector could be due to the nature and sizes of the recent investments in the economy. A slow growing agriculture sector and economy could be more attractive for investments by small companies as compared to big ones. As such, in the year 2015/16 as the economy continues to grow at a decimal rate, there has been a proliferation of small companies in agro-processing and poultry with small sums of investments.

# 4.4 Progress in Sustainable Agricultural Land and Water Management

Sustainable Agriculture Land and Water Management promise to be the best approach for sustaining returns from agriculture production whilst concurrently conserving the environment. It is also one of scientifically proven measures for mitigating the effects of climate change related shocks on agriculture production. According to the study by Sadoff et al (2015), Malawi could reduce the effects of drought through adaptation and mitigation by 50% then GDP would increase by 20%.

#### 4.4.1 Land Resources

Agricultural area under sustainable land management in 2015/16 growing season was estimated at 628,738ha surpassing the ASWAp target of 250,000ha by 151%. This is attributed to general increase in area under soil fertility improvement and soil and water conservation in the 2015/16 growing season. This is due to interventions by both public and non-state actors in providing sustainable land management techniques. Farmers are now appreciating the use of manure, especially now, at a time when climate is not so favourable. However there have been variations in performance of various sustainable agriculture land management techniques since 2010/11 growing season as well as during the 2015/16 growing season.

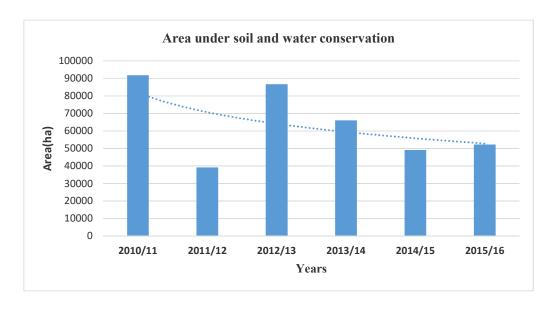


Figure 4.12: Trends in the use soil and water conservation

Area under soil and water conservation increased from 49,139 ha in the 2014/15 growing season to 52,207 ha in the 2015/16 growing season, representing a 6% increase. However the trend show that area under soil and water conservation has been decreasing over the years since 2010/11 growing season.

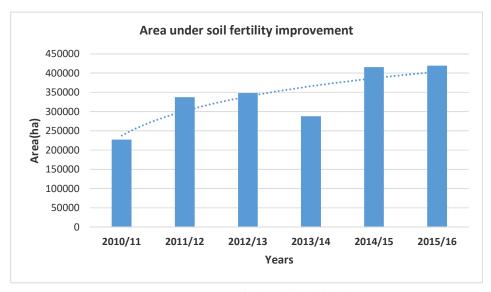


Figure 4.13: trends in soil fertility improvement

Area under soil fertility improvement increased from 415,626 ha to 419,334 ha. A general outlook for this technique also depict an increasing trend in use by farmers since 2010/11 growing seen as shown in figure 4.13 above. This is attributed to intensification of manure campaigns in the sector

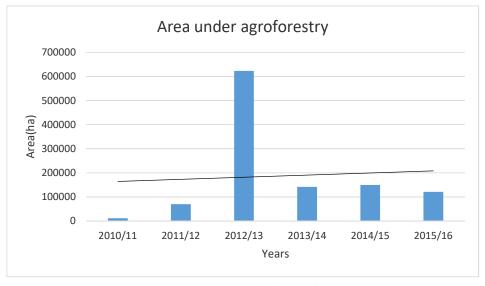


Figure 4.13: trends in agroforestry

As shown in the figure above, area under agroforestry decreased from 150,000ha in the 2014/15 financial year to 120,742 ha. The trends however show that use of agroforestry in sustainable land management has almost been constant from 2010/11 growing season.

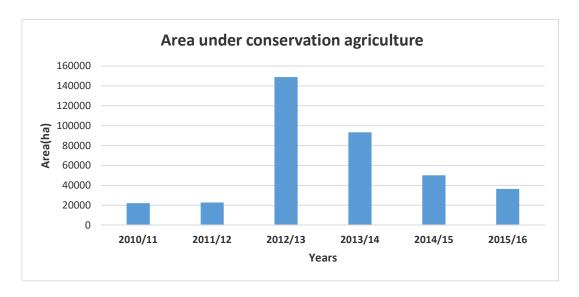


Figure 4.14: trends in soil fertility improvement

As can been seen in figure above, area under conservation decreased from 50,000ha in the 2014/15 growing season to 36,455 ha in the 2015/16 growing season. There has also been a general decrease in use of the technique since 2013/14 growing. This is partly because farmers have not been availed with empirical cost-benefit evidence on the practice. In addition ,there are also competing demands for crop residues since in some areas, dry maize stalks are used as firewood, while others as animal feeds. In certain cases, burning of fields by mice hunters after harvesting is common. A general overview however show an increasing trend is adoption of the technique.

Notwithstanding this, with the coming of the Climate Smart Agriculture at the regional level, there is hope that new techniques of doing business shall improve. The regional alliances shall present massive opportunities for learning and improvement. There is still hope that despite the challenges facing Conservation Agriculture, it is a practice that farmers are holding in high regard, and hence an increase trend would not be surprising in the years to come. Presently, there is a strong collaboration with the Livestock Department to make sure the practice is a success.

The methods of data capturing within the lead department need to be revised so that it can easily capture the overall performance on area under Sustainable Land Management. It is also important to effectively collaborate with the NGOs and other stakeholders on data sharing and reporting. There are a lot of initiatives that go unreported. The ministry should also seriously consider the resumption of national socio-economic (impact) surveys since the usual monthly templates can hardly show the accrued impacts

#### 4.4.2 Water Management

Irrigation has been identified as a climate change adaptation strategy. As such development of land under irrigation has been steady since the launch of the ASWAp in 2010/11 fiscal year. This is due to increased investments in the subsector through various irrigation projects. During the reporting period, the total land developed for irrigation increased from 104,643 ha in the 2014/15 growing season to 107,991ha in the 2015/16 growing season representing a 3.2% increase. However the achievement in the 2015/16 growing season is below the estimated 407,862 hectares of irrigation potential and below the ASWAp target of 200,000ha and .Besides, out of the developed land for irrigation of 107,991 hectares, 70.2% was being utilized during the period compared to 98.4% the previous financial year. This could be attributed to the fact that most of the major irrigation schemes had experienced floods and some considerable damages during January of 2015 as such more emphasis was on the rehabilitation works in order to save the already developed area. This calls into question the entire natural resource management initiatives to ensure that infrastructure built is protected.

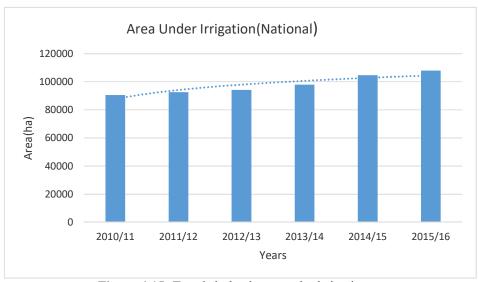


Figure 4.15: Trends in land area under irrigation

In terms of ownership, it can been seen that estate ownership has dominated for long time. In response to this trend there has been attempts to reverse this trend and modernize non estate irrigation holding by borrowing the estate model. The only challenges was lack of thorough consultations and use of local structures which resulted in low utilization of the schemes (Chiroro, 2015). However, as shown in the Figure 4.13 below, non-estate irrigation farming almost equaled estate irrigation in the 2014/15 growing season and has recently surpassed estate irrigation in the 2015/16 season. This is attributed to increased investment to non-estate irrigation through various projects such as the Agriculture Infrastructure Support Project (AISP), Small holder Irrigation and Value Addition (SIVAP).

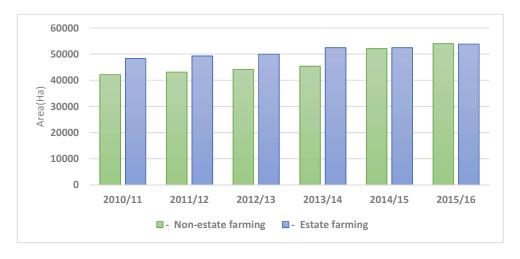


Figure 4.16: Trends in estate and non- estate irrigation land areas

Although irrigation development has an increasing trend over the years; however, there are variations on the rate of increase by different technologies.

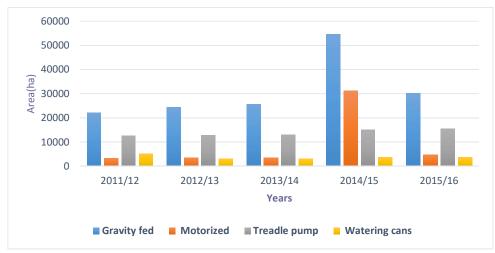


Figure 4.17: Trends in Irrigation Development in Malawi

From the technologies presented in the figure above, between 2011/12 and 2014/15 there has been steady increase in use of motorized, gravity fed and treadle pumps. Over this period gravity fed and motorized increased sharply in 2014/15 compared to the other two types of technologies. This was attributed to inclusion of estate farming in motorized category than was done previously and the increased investment in gravity fed irrigation through various projects. On the other hand, there has been a decrease in gravity fed and motorized irrigation in 2015/16 due to high electricity tariffs and decreased water levels in rivers across irrigable areas country wide. Much as there has been a general downward trend in the use of watering cans, use of treadle pumps, gravity fed irrigation and motorized has been increasing steadily over the years from 2011. This is in line with the National Irrigation Policy and Irrigation Master Plan that

lays emphasis on developing and adapting irrigation technologies and best practices taking into account the financial and technical limitations of beneficiaries.

A number of challenges affected performance of the irrigation subsector. The major challenge during the 2015/16 were floods which destroyed irrigation infrastructure covering about 5,000 hectares. The floods and heavy rains damaged infrastructure valued at MWK2.6 billion where intake, conveyance and infield infrastructure were damaged by the floods. The foods also brought with it a large sand body that delayed land preparations for irrigation in most fields. This was felt mostly in the Shire Valley region that registered 33% utilization. Most damage was encountered in Mulanje, Nsanje, Mangochi and Chikwawa. Most rehabilitation works are still under way. There was also low utilization of completed irrigation schemes due to high dependency of farmers on donor and government support. This has been compounded by low water levels following the erratic rains in the 2015/16 rainfall period. Furthermore, low earnings from farming due to poor performance of the agriculture sector in 2014/15 and 2015/16 has also heavily affected utilization of most diesel or electric powered irrigation schemes as farmers were observed prioritizing expenditure in food items.

Looking forward, the sector has ventured in the solar powered irrigation technology in a bid to improve utilization of irrigation schemes. The only challenge is the initial heavy investment cost and safety of the irrigation equipment. Considering that incidences of floods are likely to continue in the wake of climate, catchment management should be one of the areas of strategic focus. There is also a need for the sector to make use of past experiences in implementation of irrigation projects as challenges such as low productivity and low use intensity are not new and therefore their recurrence reflect gloss negligence of lessons from the past (Cassman and Grassin, 2012; Mutiro et al 2015). There is need for more serious approach to efficient utilization of irrigation schemes.

# 4.4 Updates on ASWAP Key Support Services

Besides the three ASWAp focus areas, the current investment plan has two key support services of the ASWAp, namely technology generation and dissemination and institutional strengthening and capacity building. There have been investments in the support services, hence the synthesis of the progress that has been registered, as stated in sections below.

# 4.4.1Technology Generation and Dissemination

The National Agricultural Research System (NARS) led by the Department of Agricultural Research Services (DARS) is the key to agricultural technology generation. Other key players are the Department of Animal Health and Livestock Development (DAHLD), public universities, ARET, CGIAR, seed companies and the private sector. Technologies generated from various researches are required to be passed by the Agricultural Technology Clearing House (ATCC) of the MoAIWD. Such technologies are well catalogued by DARS (ASWAP review, 2016). Thus key updates in technology advances will emphasise on performance of DARS. However, as regards to technology dissemination, the DARS and other agricultural research institutes disseminates their technologies through extension service providers and other stakeholders to ensure increased technological uptake by farmers (GoM, 2014). Performance of DAES in extension services delivery and farmer adoption rate of key technologies has thus been analysed in the section below.

Technology generation and dissemination was prioritized under the ASWAp after noting that public expenditure on agricultural research and extension in the country was low and major investments were needed to revitalize research and extension services if increased agricultural production and productivity was to be successful (ASWAP, 2011). Furthermore, it was noted that international and regional as well as private technology flows needed to be further integrated and diffused to farmers. The ASWAp, through this key support service, aims at strengthening technology generation (research) and technology dissemination (extension) services by ensuring that there are results and market oriented research on priority technology needs of farmers and also to ensure adequate provision of technical and regulatory services in Malawi. This Key Support Service component also aims at promoting efficient farmer-led extension and training services.

As regards to technology generation, agricultural research done for the period 2012 to 2016 indicates that emphasis was mainly on releasing relevant technology which were need based. As regards to crops, maize received the most attention with 35 varieties released, and 12 maize linked technologies as indicated in the table below. The research was done by both DARS (with CIMMYT and AGRA) and private companies (such as Monsanto, Seedco and Syngenta). Rice varieties and technologies were researched only by DARS, leading to the release of 2 new varieties and 1 technology. DARS was also the only one focusing on groundnuts (releasing 7 varieties and 5 technologies). Of other legumes, soya bean, sunflower and cotton varieties were researched by private companies, while no release was done in the area of pigeon peas. Research in horticultural crops was done in the areas of tomato, cassava, macadamia and sweet pepper, primarily by DARS. Of cash crops, varieties were released in tea and tobacco, by private companies.

Table 4.5: Crop Technologies developed by Government and Private Sector

Commodity	Crop	Developed	Technologies		ASWAP
group		by	Developed	Total #	TARGET
		companies	by DARS		IAKGEI
Cereals	Maize varieties	20	15	35	
	Maize technologies				
	(fertilizer, herbicide,	11	1	12	
	fungicide, pesticide,	11	1	12	
	storage bags)				
	Rice varieties	0	2	2	
	Rice technologies	0	1	1	
	(planting patterns)	0	1	1	
Legumes	Soybean varieties	4	0	4	
	Soybean technologies	1	0	1	
	Groundnut varieties	0	7	7	
	Groundnut technologies	0	5	5	
	Sunflower varieties	3	0	3	
	Cotton technologies	1	0	1	
Horticulture	Tomato varieties	2	0	2	
	Macadamia varieties	0	4	4	
	Sweet pepper varieties	0	3	3	
Other crops	Tea technology (fertilizer)	1	0	1	
	Tobacco varieties	3	0	3	
	Tobacco technologies	7	0	7	
	Total	49	40	89	

Source: ASWAP review report, 2016

# 4.4.2 Technology Dissemination

In terms of technology dissemination, the DAES and other stakeholders including the NSAs are the main players to ensure increased technological uptake by farmers (GoM, 2014). Performance of DAES in extension services delivery and farmer adoption rate of key technologies has thus been analyzed in the section below.

## 4.4.2.1 Ratio of Farmers to Extension Worker

During the 2015/16 fiscal year, the performance on the indicator has been unsatisfactory despite several interventions by the ministry. Though the performance has been above the ASWAp target ratio of 750:1, the ratio has slightly improved from 2603:1 in 2014/15 to 2458:1 in the 2015/16 season. This slight improvement in farmers to extension worker ratio has been due to the recruitment of field assistants under Sustainable Agriculture Productivity Programme (SAPP) and recruitment of NGOs to provide extension services in some districts of the country under ASWAp-SP. The indicator is expected to improve further in the next three years when the recruited 427 field assistants complete the on the job training at Natural Resources College.

#### 4.4.2.2 Ratio of Farmers to Lead Farmer

There has been an improvement in the ratio of farmers to lead farmer in the sector from 114:1 in 2014/15 to 39:1 in 2015/16. The improvements in the indicator is due to efforts by the Government and other players in the sector in promoting the lead farmer concept through programmes and projects. From the Ministry point of view, programmes that have contributed to the significant improvement in this indicator include ASWA-SP, SAPP, and SIVAP among others. The ASWAp target is to reduce the ratio of farmers to lead farmer to 15:1 and based on the achievement of 2015/16 fiscal year, the ratio is still above the target. It should also be noted that the increase in the number of lead farmers is not an end in itself but building their capacity so that they deliver quality extension services to fellow farmers effectively.

# 4.4.3 Institutional Development and Capacity Building

As shown in table 4.18 below, there has been a sharp increase in the national vacancy rate between 2014/15 and 2015/16 from 32% to 41% which is above the ASWAp target of 12%. This is however more pronounced amongst management and support staff whereby vacancy rate has increased by 29% points and 23% points respectively. The increase is partly attributed to the integration of Ministry of Agriculture with the Department of Irrigation and Water Development which has many vacancies that are yet to be filled and lack of financing leading to government restrictions on recruitment in civil service. Other factors include: deaths, mandatory retirements and voluntary retirements, resignations, interdictions and dismissals. However, the vacancy rate is set to gradually improve especially in the technical and support staff categories, as the Ministry has recruited over 300 field assistants and enumerators in the current financial year. Table 4.6 below provides some details of vacancy rate condition in the Ministry of Agriculture, Irrigation and Water Development.

Table 4.6: MoAIWD Vacancy Rates by Staff Category

Objectives/	Baseline							
Indicators		2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	Target
Vacancy								
rate in								
MoAIWD								
(average)	31%	29%	29%	29%	31%	32%	41%	12%
Managemen								
t Staff	N/A	18%	15%	17%	15%	12%	41%	N/A
Technical								
Staff	N/A	55%	54%	55%	55%	59%	48%	N/A
Support								
Staff	N/A	11%	11%	11%	11%	11%	34%	N/A

Source: Department of Human Resource, MoAIWD

# 4.5 Updates on Crosscutting Issues

# 4.5.1 Proportion of women holding decision making position in agriculture organizations and institutions

The ASWAp seeks to promote empowerment of all gender groups, especially by ensuring that vulnerable people are involved in decision making, policy formulation and implementation processes. The ultimate goal is to achieve an overall adequate representation of women at various levels and grades. In terms of gender equality, about 20% of staff are women, both at HQ and ADD level. This is below the ASWAp baseline of 30%, and below the target of 45%.

The poor performance on this indicator is attributed to low number of females with desired qualifications for various decision making positions within the sector. However, the future looks promising since more and more female graduates are joining the sector and there is need to increase efforts in retaining female staff through provision of incentives (Gender Audit report, 2014).

# 4.5.2 HIV prevention and AIDS impact mitigation

The Agriculture sector mainstreams gender and HIV and AIDS issues in projects and programs implemented in the sector. Programmes include sero-status awareness campaigns, supplementary feeding as well as other HIV and AIDS related support services. The effects of HIV and AIDS are also mitigated in order to improve agricultural productivity. The overarching goal is to create and HIV and AIDS free labor force and increase productivity and production at staff and farmer level respectively.

# 5. CONCLUSIONS, LESSONS AND RECOMMENDATIONS

The 2015/16 JSR report has been prepared against the background of four key national developments relating to the ASWAp implementation, finalization of the development of the National Agricultural Policy, climate change induced humanitarian crisis involving 6.7 million people, and continued volatile macro-economic conditions that have significant bearing on the sector's investments. The ASWAp which has guided the sector's investments during the past four years is coming to an end and steps to develop a successor investment plan to implement the just finalized National Agriculture Policy are underway.

# 5.1 Main Findings

- i. The 2015/16 fiscal year has seen the stakeholders in the agriculture sector, under the leadership of the Ministry of Agriculture, Irrigation and Water Development finalize the development of key sectoral policy and strategic frameworks. These include: i) the National Agriculture Policy, (ii) the National Irrigation Policy and (iii) the Contract Farming Strategy. In addition, significant progress has been made with respect to the development of the National Seed Policy, which has now been submitted to the Office of the President and Cabinet (OPC).
- ii. The other frameworks are in the process of being developed and are at different stages of development. These include: a) the Agriculture Extension Policy; b) the National Fertilizer Policy; c) the Farmer Organization Development Strategy; d) the Nutrition Strategy; e) the Strategic Plan for the Ministry of Agriculture, Irrigation and Water Development; the Plant Breeders Rights Bill, amongst others.
- iii. Four major reform initiatives are taking place within the Ministry of Agriculture, Irrigation and Water Development. These include: a) the Farm Inputs Subsidy reforms that involved scaling down of the beneficiaries while improving on targeting of the beneficiaries; b) a core-function analysis (CFA) process that is expected to make the public service in the agriculture sector more effective, efficient and of a higher quality within the ASWAp arrangement by defining and assigning functions that the public sector must perform and functions that non state actors are encouraged to perform for the long term; c) the review of SGR Management Guidelines that analyzed the current grain management and release procedures and suggest improved ways of managing the SGR. The review also provides guidelines for emergency and non-emergency drawdown of maize from the SGR; and d) ASWAP review and formulation of successor national agriculture investment plan.
- iv. The year 2015/16 was the starting point for the major FISP reforms undertaken in the sector, which have been strengthened in the 2016/17 season. The 2015/16 reforms were based on the insights from recent evaluation literature, and key policy conferences and seminars. The major reforms involved allowing the private sector to retail 27% of the 150,000 mt of the fertilizers, just as they had done with the seed component.
- v. A review of progress on Government policy commitments made under the New Alliance and Grow Africa initiative show 3 out of 15 policy commitments (20%) were reported to have made good progress based on revised schedule, while the other 4 made good progress but missed their schedule. The key policy achievements include finalization of the agriculture policy, the industrial policy, the trade policy and the contract farming strategy.

- vi. Under the New Alliance, Malawi has 29 companies (19 African and 10 international) that have signed up Letter of Intent (LOI) to invest in the agriculture sector. Actual participating companies have increased from 10 in 2014/15 to 16 in 2015/16. Cumulative investment by the private sector in 2015/16 was estimated to be US\$41.9 million, bringing the total delivered commitment to US\$ 81.5 million and representing 35 % of the planned investment commitment to date.
- vii. In terms of financial commitments to the ASWAp, the Malawi Government has over the past decade successfully achieved CAADP commitment of a minimum 10 % resource allocation to the agricultural sector. While such an allocation has potential to stimulate the desired 6% economic growth and poverty reduction, this has not been the case. The country managed to achieve a 6 % agriculture growth during the implementation in 2011, 2013 and 2014.
- viii. Climate change, particularly the El Nino, is having significant budgetary allocation implications. While under normal agricultural seasons, marginal allocations have been made to maize purchases, the past 2 years have seen substantial increases in the allocation to maize purchases, that is from MK8.6 in 2015/16 to about MK 32.5 billion in 2016/17 financial year.
- ix. About US\$1.2 billion in commitments has been made by the development partners to the country's agriculture sector since the start of the implementation of ASWAp. This does not include past and ongoing support provided to food security through humanitarian intervention. As of 2016, only 40 percent of the committed resources have been disbursed as the disbursement rates depend on program planning and progress.
- x. While production of most crops and livestock species have increased over the past years, the same cannot be said about productivity. Productivity has either marginal increased or remained stagnant over the past 5 years. For instance, in the case of maize, since 2010/11 season, maize productivity has been around 2 mt/ha remaining below the ASWAp target of 3 mt/ha.
- xi. Food production is largely determined by climate change conditions besides the policy and investment initiatives. For the past 2 consecutive seasons, the country has had below the national food requirement production levels of 3.2 million mt. However, with the prediction of La Nina conditions for the 2016/17 season, there are prospects of the country's food production levels rebounding to the normal years.
- xii. In terms of technology generation, agricultural research done for the period 2012 to 2016 has resulted in the release of 35 commodity varieties, of which 12 are maize linked technologies. The key players in the research activities include both Government, represented by the Department of Agricultural Research and Development, international research organizations such as CIMMYT and AGRA, and private sector seed companies such as Monsanto, Seedco and Syngenta.
- xiii. With respect to commodity trade, despite the national diversification efforts, tobacco, sugar, and tea still constitute the bulk of the national exports. For the period 2010/11-2015/16, total value of agricultural exports have been declining though some years such as 2014/15 registered a rebound in agricultural export growth.

- xiv. With respect to foreign investments in the agriculture, the country has witnessed growth in the both the number of and value of agricultural investments. For the years 2014/15 to 2015/16 years, the country has seen an increase in number of investments from 3 to 15. For the same period, the value of agricultural investments have drastically reduced by 69.2 percent to MK175.4 million in 2015/16.
- xv. The country realizes that importance of investments in sustainable agricultural land and water management as an instrument for sustainable national development. As such, there have been investments in the area under soil and water conservation which have seen an increase from 49,139 ha in the 2014/15 growing season to 52,207 ha in the 2015/16 growing season, representing a 6% increase.

# **5.2** Challenges and Positive Developments

In spite of the various notable achievements made in the sector over the years, the sector still faces a number of challenges. These are as follows:

- i. Much as the sector has the National Agricultural Policy as its overarching sectoral policy framework, the challenge would be to stick to the stated timelines for the finalization of the other frameworks so that implementation process starts in earnest.
- ii. Mutual accountability principles are being mainstreamed in the sector, but evidently, most civil society organizations only expect the Government to be transparent and accountable with little reciprocal commitment from their side on the same.
- iii. Climate change with the attendant food insecurity implications remains a long standing headache for the sector, but is strengthens the call for evidenced based decision making that yields optimal outcomes for the investments made by sectoral players,
- iv. With respect to capacity development, the Ministry of Agriculture, Irrigation and Water development continues to face capacity challenges owing to macro-level policy directives such as freezes on new recruitments against the growing sector capacity demands and the continued high attrition rates.
- v. Despite the Ministry having capacity building plans, high vacancy rates still prevail. For instance, by 2014/15, the vacancy rate was estimated to be at 32% against the target of reducing it to 12%. This is due to factors such as a freeze on new recruitments while attrition rates continue to increase.
- vi. In terms of irrigation farming, 107,991 hectares have been developed. As of 2015/16 season, only 70% of such irrigated land was being utilized largely due to climate change effects such as the 2015 floods that damaged the irrigation schemes. In normal years, utilization rates of developed irrigated land are at 98%.

# 5.3 Recommendations on Way Forward

In view of the above, a number of recommendations on the way forward are in order:

- 1) The development or finalization of the sectoral policy frameworks that are either outdated or their review process has started but are progress at some slow pace. This would help the different departments to effectively implement the sector aspirations as outlined National Agricultural Policy.
- 2) The sector is encouraged to continue with the sector policy reforms, but ensure that the process of doing so continues to be informed by reliable empirical evidence so that the policy reforms and investments yield maximum gains in terms of poverty alleviation and economic growth outcomes.
- 3) The current electronic statistical data collection and reporting initiatives should be encouraged as part of the efforts of improving the precision of the Agricultural Production Estimates using area frame and point frame methodologies that use remote sensing and satellite imagery to estimate agricultural production. It is envisaged that such efforts if well adopted, will enhance quality and credibility of the APES data produced. As such, AEDOs should be provided with tablets with GPS and internet access so that they transmit data to the Ministry's server.
- 4) Agricultural market development efforts should continue be prioritized in the next Investment Plan owing to the realization that poor marketing access conditions continue defeat agricultural diversification, productivity and production objectives. In this respect, concerted efforts should be put in improvement in post harvesting handling techniques that have proven positive impacts in reduction in mycotoxin contamination at post harvesting stage, hence guaranteeing limited market access hurdles for the country's agricultural produce.
- 5) The current Government positive efforts of addressing complaints relating administrative procedures that hinder trade and investments should sustained and enhanced. Decentralized district and border post one stop centres to be centres for paying for business registration, decentralization of issuance of the Certificate of Origin Form, introducing a transparent fee system for obtaining the Customs Clearing Form, and expansion of issuance of Phytosanitary Certificates. In addition, there is need for raising the threshold for which a Currency Declaration Form is needed.
- 6) The civil society players in the sector to be encouraged to embrace the principles of mutual accountability by following the good example of the Government. Provision of up to date data on their activities, outputs, and financial outlays and commitments by the civil society would be a good indicator of their commitment to the mutual accountability approach.
- 7) The civil society organizations to continue supporting the Ministry with the revitalization and strengthening the functionality of the local agriculture institutions such as Area Stakeholder Panels (ASPs) and Village Agricultural Committees established to coordinate agricultural activities local levels. Further to the need to strengthening the decentralizations, the Ministry and stakeholders should work on evaluating the production and productivity impacts of the structures, and suggest ways of ensuring that they do effectively contribute to the attainment of such outcomes.
- 8) The recommendations from the core function analysis of the Ministry of Agriculture, Irrigation and Water Development to be utilized to enable the ministry effectively

- develop its capacity building activities in different disciplines to effectively respond the diverse and dynamic needs of the sector.
- 9) The Ministry's current approach of recruiting and posting front line staff at district level is applauded as a good strategy for front line staff retention. However, there is still need to explore ways of motivating other highly educated staff such as those with bachelor degree training to be posted to EPAs.
- 10) There is need to explore ways of increasing female skilled labour in the sector from the current 22% to desired 30% in the medium term, while striving the reach the desired 50% in the long term.
- 11) The sector is encouraged to continue with solar energy for irrigation considering the limited access to electricity from the national grid. It is hoped that the solar energy investments in the irrigation sector can effectively help address well known and long standing challenges of low productivity and low use intensity.

# References

- Chiroro C.(2015). Innovations to Promote Growth in Small Scle Irrigation inAfrica. Retrieved online at <a href="www.sussex.ac.uk/global/documents/malaawi-report-nov-2015">www.sussex.ac.uk/global/documents/malaawi-report-nov-2015</a> on 9/12/2016.
- Mutiro, J. and Lautze, J. (2015). *Irrigation in Southern Africa: Success or failure?* .Published online in Wiley Online Library (wileyonlinelibrary.com) DOI: 10.1002/ird.1892
- Sadoff et al(2015). Securing Water, Sustaining Growth: Report of the Global Water Partnership /OECD Task Force on Water Security and Sustainable Growth. University of Oxford, UK
- FAO/GoM (2016). The Agriculture Sector Wide Approach (ASWAp): 2010-2014–Review, Achievement and Implementation. Lilongwe, 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 (2015). Agricultural Sector Performance Report for 2014/15, Ministry of Agriculture Irrigation and Water Development, Lilongwe, Malawi. Page 13
- GoM (2016). Joint New Alliance for Food Security and Nutrition and Grow Africa Progress Report (Draft), Ministry of Agriculture, Irrigation and Water Development, Lilongwe, Malawi.
- GoM(2016) Malawi Agricultural Sector Wide Approach: A prioritised and harmonised Agricultural Development Agenda: 2011-2015, Pages 30, 31, 73
- GoM(2015). National Irrigation Master Plan and Investment Framework. SMEC Group
- GOM(2016)National Irrigation Policy
- RBM (2016). *Monthly Economic and Financial Reports*. Reserve Bank of Malawi, Lilongwe, Malawi.
- World Bank (2016). Doing Business Report, Washington DC, USA

# **Annex 1: Policy Commitments and Progress**

	POLICY COMMITMENT AND COMPLETION TA	ARGET	Rank	Current status and revised deadline	Traffic rating
1	Review the key enabling policies by April 2016:	Agricult ure policy	3	The policy has been approved by Government	Green
		Industria 1 policy	3	The policy has been approved by Government	
		Trade Policy	3	The policy has been approved by Government	
2.	Review Control of Goods Act to eliminate export bans a licensing e.g. duration, by September 2016 [MoITT]	nd improve	3	Consultant hired and review study underway. The deadline remains the same (does not include adoption by Parliament.	Amber
3.	Support farmer aggregation by formulating a Special Farmer Organisation Development strategy by Dec 2016 [MoAIWD]		1	Consultations with 167 farmers from all districts across the country done in July 2016. Stakeholder consultations with farmer organisations, civil society, private sector, academia, government and development partners planned for December 2016.	Amber
4.	Develop strategy and legislation for contract farming by [MoAIWD]	Sept 2015	2	Strategy has been finalised and approved by the Minister	Amber
5.	Implementation of financial sector development strategy Export Development Fund (EDF) more effective and de cost and long term finance opportunities by Sept 2016 [MoIT]		2	EDF independent of RBM and running; base lending rate reducing; more low cost funds being set up.	Amber
6.	Review taxation regime and its implementation in order maximise incentives to investment by November 2015 [MoIT]	to	1	Commitment too broad, and captures a number of independent initiatives. Some components were completed by March, 2016, but others are ongoing for the coming years.	Red
7.	Identify land, in phases, suitable for commercial agricult ha/year from 2013) every year [MoLHUB]	cure (10,000	1	On-going activity and requires the collating of administrative data on land being awarded for commercial agriculture to applicants. In addition, surveys to identify idle land were completed in one district – Kasungu. At the moment, the Ministry is working on collecting data for 2015.	Red
8.	Enactment of the new Land bill into law by July 2015		2	Bill finalised and approved by Parliament. Endorsement by the President done.	Amber

	[MoLHUB]			
9.	Reviewing of seed policy, strategy and certification system (Seed Act 1996) by September 2015 [MoAIWD]	1	Policy papers finalised and submitted for cabinet approval. Will input in the revised Seed Act and new deadline to be revised.	Amber
10.	Develop fertiliser regulatory framework by December 2015 [MoAIWD]	1	The draft bill been developed, but waiting for policy review. Policy consultation started. Three broader regional stakeholder consultations are expected by December 2016. Draft policy expected by March 2017.	Amber
11.	Ensure that irrigation infrastructure designs accommodate prioritised crops by Dec 2016 [MoAIWD]	3	Area covering this is increasing as 10,000 ha have been developed in 2014/15 across the country. Concept note on irrigation investments developed by MoAIWD in April 2016. Private sector currently producing about 20,000MT of maize under irrigation for the National Food Reserve Agency. Implementation of the Concept note to expand, focusing on the establishment of an innovative financing mechanism for irrigation through private sector, being administered through commercial banks under consideration. No need for revision to deadline.	Green
12.	Prioritise rural feeder roads to primary production areas of prioritised crops in growth clusters by Dec 2015 [MoTPW]	1	Identification of roads completed; phased approach due to limited funds. In 2015, 10 roads (evenly distributed among 5 districts) were completed. Program depends on funding through ASWAP, done on an annual basis.	Red
13.	Introduction of agricultural zoning based on priority crops and growth clusters by Dec 2018 [MoAIWD]	1	On-going work not tailored to meet the commitment. There is need for a new approach linked to potential areas with land for private investment. Facilitation support is required to move forward.	Red
14.	Re-organise extension services to improve delivery of modern market-oriented agricultural extension services by December 2016. [MoAIWD]	1	A consultant has been engaged to review the current extension policy. International Food Policy Research Institute (IFPRI) is conducting a nationally representative survey on demand and supply side of extension and advisory services that will also inform the policy review and development of an agricultural extension strategy. Survey commenced in August 2016.	Amber
15.	Improve advocacy for the growing and consumption of more nutritious food crops and agro-processed foods by December 2016 [MoH-ND]	2	Policies and strategies in place, outreach covered more than 50% of the 28 districts. Monitoring still weak and erratic to enable accurate assessments, efforts underway to improve it	Amber

Annex 2: Summary of action points on The 2015/16 Mid-Year Agriculture Joint Sector Review – June 2016

ID NO.	ISSUE	RECOMMENDED ACTION	ACTION TO BE TAKEN BY	TIME FRAME	PROGRESS
1.0	Mitigation measures to looming hunger due to 2015/16 food shortage	1. The ministry to ensure that NFRA and ADMARC buy and stock adequate maize for humanitarian response and commercial use	PS	Immediately	1. ADMARC procured and stocked 107,000 MT locally, 100,000 MT imported from Zambia and uplifting is in progress; and 100,000 MT imported from Romania, shipping expected end of December 2016.  NFRA had in stock 22,217 mt and procured 91,183 mt gives a total of 113,400mt. So far has drawdowns of 42,345mt. NFRA is currently uplifting contracted maize from commercial growers.
		<ul><li>2. Adopt and implement new SGR Management Guidelines</li><li>3. Establishment of effective mechanisms for food price stabilization</li></ul>	PS/DAPS  DAPS	Immediately	2. The Consultant developed the SGR guidelines which were reworked on by a team from government. The Ministry is yet to approve the guidelines.  3. Government released minimum farm gate prices for various commodities Government has just released maize price of MK250/kg for
		4. Engage large scale commercial growers to produce maize during the winter season.	DAPS	Immediately	ADMARC markets

ID NO.	ISSUE	RECOMMENDED ACTION	ACTION TO BE	TIME FRAME	PROGRESS
			TAKEN BY		
		5. Intensify irrigation farming around dambos amongst the farming community	DoIS	Immediately	4. The maize was produced under irrigation by contracted companies like Illovo. NFRA is currently uplifting the maize.
					5. Government provided fertilizer to small scale irrigation schemes amounting to 320 MT of both NPK and UREA. The projects within ASWAp framework such as SIVAP, AISP intensified the production of maize and rice in newly constructed and rehabilitated schemes.
2.0	Investment in Irrigation farming as a strategy to reduce overdependence on rain fed agriculture	Investment to follow value chain approach targeting high value crops to ensure financial viability of irrigation schemes     Need for more holistic approach to irrigation farming by	DAPS/DoIS	Ongoing	1. Newly launched Irrigation Policy has incorporated the use of value chain approach in promoting production of high value crops.
		providing adequate investments and attention to water harvesting structures, proper water catchment management, optimal water use efficiency, cheap energy uses and private sector involvement to ensure sustainability	DAPS/DoIS	Ongoing	2. The ministry has mounted intensive campaign to promote water harvesting, catchment watershed management, use of renewable energy and engagement of private sector in irrigation
3.0	Approach to FISP Reforms	1. To revolve around quality of targeting to ensure that the productive group of farmers is targeted, timely delivery of farm inputs and adaptation to climate change	DAPS/DCD	2016/17 Fiscal Year	1.— The number of companies retailing farm inputs has been increased to ensure timely delivery of farm inputs.
					1.— Government has contracted Centre for Agricultural Research and Development to pilot FISP on identification of productive farmers. The lessons learnt will scaled out to cover the whole country
		2. The ministry to ensure that FISP implemented as an integral component of the National Agricultural Policy in order to drive the agricultural productivity, climate adaptation and diversification agenda.	ALL DIRECTORS	2016/17 Fiscal Year	2. The newly launched NAP encompasses all issues of increased productivity.

ID NO.	ISSUE	RECOMMENDED ACTION	ACTION TO BE	TIME FRAME	PROGRESS
4.0	Low allocation (<1%) of Development budget in the sector compromising Government leadership role	Lobby for more Government allocation to Development budget in the sector	DAPS	2017/18 Fiscal Year	This was taken care of during the 2016/17 budget formulation
5.0	in the development process  Imbalance of resource allocation along the ASWAp Priority Focus areas and components in the sector with more focus on food security	1 The Ministry to ensure that there is s balanced and strategic approach to investments in the agriculture sector.	DAPS	2016/17 Fiscal Year	1 – The ministry took this into consideration when developing 2016/17 budgets      1 - The NAIP under development will focus more on investment areas and components that will enhance economic growth.
		2. Development projects to realign and balance investments to zero in on lean areas of investments in the Government Budget in order to achieve a paradigm shift and rebalance investments in the sector	DAPS/ PROJECT COORDINATOR	2016/17 Fiscal Year	2. The ASWAp Projects budgets were crafted to provide adequate resources in areas where Government budget did not provide adequate resources in order to ensure balance in all ASWAp priority focus areas.
6.0	Cumbersome licensing requirements for market operators	Review and amendment of the current legislation on control of goods to provide for measures to streamline licensing requirements for market operators	DAPS/DCD	September, 2016	Consultant hired to review Control of Goods Act and review study underway. This is led by MoIT
7.0	Promotion of water harvesting as a key strategy to ensuring sustainable development of the agriculture sector	Organize a study tour to Tanzania for Ministry staff to learn how this technology has been developed in that country for possible adoption in Malawi.	DAPS/DoIS/ DLRC	Immediately	The planning for the tours commenced and Tanzania will not be visited instead Ethiopia will be visited
8.0	Delayed Approval of National Agriculture Policy and implementation modalities	Expedite the approval process of the National Agriculture Policy and implement it as one broad investment and implementation plan that clearly clarifies the role and responsibility of the different stakeholders with Government through the Ministry strengthening its role as sector coordinator and regulator	PS/DAPS	July, 2016	The NAP was approved by Cabinet Committee on Economy and was launched by the President on 30 <sup>th</sup> November 2016.
9.0	Investment on commercial agriculture, agro processing and market development skewed towards rural roads and rehabilitation of infrastructure at the expense	1. Speed up adoption and implementation of the 15 policy commitments under the new alliance initiative and put in place smart laws and regulations supported by well-designed procedures and effective implementation structures and promote a value chain approach to agro processing with capacity	PS/DAPS	Immediately	1. The following policies, strategies and bills have been finalized, approved and some of them launched: National Agriculture Policy, Industry Policy, Trade Policy, Contract Farming Strategy, Land Bill, and Irrigation Policy. The focus now is on implementation of these

ID NO.	ISSUE	RECOMMENDED ACTION	ACTION TO BE	TIME FRAME	PROGRESS
			TAKEN BY		
	of other components of business environment	development for Malawi Bureau of Standards and phytosanitary protection.			instruments with relevant stakeholders. However, work is on progress to ensure that the remaining policies are finalized.  2. Projects such as ASWAp SP, SAPP, AISP,
		2. Provide support for development of farmer organizations and cooperatives as commercial entities as well as financial institutions	DAPS/DAES/ DCAFS	Immediately	and SIVAP support farmer organisations to become commercial entities. Agricultural commercialization project (in pipeline) will also enhance FOs to concentrate on commercial business.
		3. Provide support to Ministry of Industry and Trade for improving WB Doing Business Indicators backed by deliberate action to facilitate and simplify registration and administrative procedures such as decentralization of crop buying license to ADDs	DCAFS	2016/17 Fiscal Year	Supported. Currently, accessing crop buying license has been decentralized to ADDS since May 2016. The Oil Seed Products Technical Working Group organised training for the Programme Managers of all eight ADDs so that they could know how to issue licenses.
10.0	Low investment (6%) for sustainable land management coupled with low farmer adoption rates	Speed up approval of the Irrigation Policy and land bill(to resolve land disputes) backed by a holistic approach to implementation of irrigation projects to integrate issues of water harvesting, management of catchment areas, river bank protection and private sector involvement	PS/DoIS	September, 2016	1. Irrigation Policy was approved and launched on 30 <sup>th</sup> November, 2016. Land Bill was passed in Parliament and was assented to by the President.
11.0	Lack of value for money from the African Risk Insurance Policy	Involve Ministry of Justice to review and reconsider Government position on the matter	DAPS/DA	Immediately	1. The Ministry of Justice is the regulatory institution for the insurance policy. The payout of US\$ 8.1 million has been approved by African Risk Capacity (ARC). Government has
		2. As Government negotiates for the new insurance deal, there is need to review some parameters of the model as well as ensuring the crop at regional level to reflect interregional differences on the effect of weather	DAPS	September, 2016	prepared and submitted an implementation plan to ARC for approval. Payment is expected mid December 2016.  2. The model was reviewed and is localized,
12.0	Low production of traditional crops such as cotton, cow peas sorghum and millet	Promote traditional crops such as sorghum, cowpeas and millet suited to specific areas like Chikwawa, Salima and Phalombe.	DCD/DARS/ DAES	Ongoing	Government has intensified efforts to promote production of cowpeas, sorghum and millet in most suitable ecological zones to diversify

ID NO.	ISSUE	RECOMMENDED ACTION	ACTION TO BE TAKEN BY	TIME FRAME	PROGRESS
					production of various traditional crops. However, the challenge is availability of improved seed.
13.0	Large investments to institutional strengthening and capacity development (26%) do not match results in terms of service delivery	2. Finalize core function analysis for the sector and implement its recommendations	DHRM	End of July, 2016	The core function analysis was finalized. Currently, the ministry is consulting OPC on the proposed organization structure
14.0	Low investment in cross cutting issues of gender and HIV/AIDS despite their importance to integrated development approach	Need to refocus on the allocation of resources and streamline gender approaches and HIV/AIDS issues in all programmes and projects	DAPS/DAES	2016/17 Fiscal Year	The NAIP will emphasize on the mainstreaming of gender and HIV and AIDS. Therefore projects and programmes will give gender and HIV and AIDS issues due consideration.
15.0	Low representation and participation of the Ministry at regional and international fora on the New Alliance Policy Initiative	Ministry to engage EU for support to ensure its representation and participation at regional and international fora on the New Alliance Policy Initiative	PS/DAPS	Immediately	The EU was engaged and participation has improved. TA and government officials have been attending the international meetings. At the recent meeting the Ministry was represented by the Chief Economist Mr. Daisi Kachingwe Nkhoma and the TA who a made presentation for Malawi.
16.0	High proportion(42%) of stunted children due to low food diversification	Need to institute massive sensitization campaign by all sector players including development partners through local assemblies as a holistic approach to addressing the problem of malnutrition	DAES/DCAFS	Immediately	Frontline staff together with relevant partners have intensified campaigns on food diversification; balanced diet for pregnant women and children within 1000 days after birth. They are also intensifying integrated household gardening to ensure availability of various food items.
17.0	Funding constraints for collection of data from non-state actors operating the agriculture sector	Prepare a request for funding proposal and submit it to potential donors for support	CISANET	Immediately	No resources have been identified