

Unlocking Implementation Challenges: Lessons from the Agricultural Sector

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Executive Summary

The economy of Malawi is predominantly agriculturally based. Agriculture sector contributes significantly to the country's total GDP and national food security. Over the past years, the sector performance has been constrained by several challenges affecting processes from production to marketing. In response, the Government of Malawi in conjunction with various developmental partners has come up with various national development programs, policies and strategies. However, implementation of these programs, policies and strategies has been a major challenge. This being the case, this study investigates the causes of challenges in programs, policies and strategies implementation in agricultural sector and draw lessons that can inform the ministries responsible for agriculture and rural development address these challenges.

The study relied on review of some selected policies, legislation, projects, programs and strategies, and key informant interviews with stakeholders in the agricultural sector. The main policies reviewed included: National Agricultural Policy (NAP), National Seed Policy, National Irrigation Policy, National Fisheries and Aquaculture Policy, National Crop Production Policy, National Livestock Policy, National Agricultural Extension Policy, and Food Security Policy. The paper further reviewed some of the Acts and Bills that were enacted to support the implementation of these policies. These included: Special Crops Act (SCA), Agricultural General Purposes Act (AGPA), Irrigation Act, Customary Land Act, Fisheries Conservation and Management Act, Land Resources Conservation and Management Act, Tobacco Act, and the Seed Bill. The study also reviewed selected projects and programs that are implemented by the Ministry of Agriculture such as Farm Input Subsidy Program (FISP), Agricultural Sector Wide Approach - Support Project (ASWAP-SP), Smallholder Irrigation and Value Addition Project(SIVAP), Programme for Rural Irrigation Development (PRIDE), and the Agricultural Commercialization (AGCOM) project.

The paper unearthed several challenges that affect the implementation of programs, policies and strategies in the agricultural sector. These include but not limited to: (i) Non-inclusive policy formulation processes. Most policies lack stakeholders' input and perspective as they were unilaterally formulated by respective government departments; (ii) Lack of inbuilt implementation framework, resource mobilization, and strong monitoring and evaluation framework. (iii) Delays and inadequate funding. This could be attributed to overambitious policies and programs that are incompatible with the available resources, and overreliance on external funding. (iv) Inadequate infrastructure to facilitate programs, policies and strategies formulation and implementation. (v) Political patronage resulting in policies that are inconsistent with agricultural sector's demands. (vi) Lack of coordination among stakeholders especially in the formulation and implementation of policies and programs that transcend the mandate of one department. This leads duplications, waste of resources and contradictory policies in some cases. (vii) Lack of personnel and human resources, and regulatory institutions to monitor, regulate and ensure effective and successful policy implementation. (viii) Lack of new policies stakeholders' sensitization resulting in obstruction and delays in policy implementation. (ix) Unexpected events, such as natural disaster, coupled with disaster unpreparedness.

Lack of regulatory framework (laws) to support the implementation of the policies was also identified as another factor constraining the implementation of some policies and programs. Some other Acts (e.g. SCA and AGPA) in the sector were found to be outdated and unable to cope with the realities of a relatively liberalized economy. The unpredictability and inconsistencies associated with the application of some elements of these laws, for example export bans, has led to a very uncertain environment that stifles the operations of private sector players.

The paper also outlines a number of challenges facing projects and programs design and implementation: These include: (i) Inadequate extension staff at community level; (ii) Limited access to credit facilities; (iii) Unconducive regulatory environment for the business of agriculture; (iv) absence of inbuilt mechanisms to constantly monitor and adjust projects/programs implementation in real time; (v) Thin and informal commodity markets;

(vi) Predatory cartels in the farm produce markets; and, (vii) Lack of coordination among stakeholders.

To overcome programs, policies and strategies implementation challenges, the paper suggests some proposals for consideration by the ministries responsible for agricultural and rural development. These include: (i) Need to align government's funding and allocations to priority programs as set out and approved in the national and sectoral plans. (ii) Make policy making processes more inclusive and transparent by bringing in the voices of key stakeholders such as farmers, private sector and civil society. (iii) Embracing use data and evidence to inform policy formulation and projects/programs design. (iv) Continuously strengthen the capacity of policymakers to interpret and use evidence for better decisions making. (v) Incorporate monitoring and evaluation frameworks and implementation plans in policy and programs/projects design. (vi) Facilitate government and private sector investment in infrastructure.

As seen already seen, most of the challenges that hinder implementation of policies and programs in the agricultural sector are political in nature. This implies the solutions to the challenges will to a larger extend depend on the political leadership and will to drive change. Example from fast growing economies in Africa such as Rwanda and Ethiopia show that development is a leadership-driven process. This underscores the need for leadership that is commitment to designing and implementation of sound policies and programs to transform the agricultural sector for wealth creation for all Malawians.

1. Introduction

Agriculture sector remains the backbone of the Country's economy. The performance of the sector is fundamental to Malawi's economy because agriculture contributes significantly to the Country's economic growth, employment, foreign exchange earnings, and household food and nutrition security. In 2019, the agricultural sector contributed 25.54 percent of Malawi's Gross Domestic Product (GDP) (World Bank, 2020 and Plecher, 2020). The sector also plays a fundamental role in forward and backward linkages with other sectors of the economy. According to Thurlow and Benfica (2017), the Country's agri-food system (comprising agricultural production, processing, input supply, trade and transport services) contributes about 44% to GDP and generates about 74% of employment.

Despite the crucial role that the agricultural sector plays in the Country's economy, the sector's performance is constrained by a host of factors including low and stagnant yields, limited irrigation, low uptake of improved farm inputs especially seeds, weak links to reliable and stable markets, ineffective farmer organizations, poor quality control, and asymmetric market information. The performance of the sector has remained dismal despite taking over 10 percent of the government national budget.

The Government of Malawi (GoM) over the years has come up with national various development programs, policies and strategies to reverse this situation. However, the implementation of these programs and strategies has remained a major challenge (Makhura et. al., 2019; Benson et. al, 2018; Particip Consultant, 2016; Dorward et. al, 2008). The poor implementation of strategies and programs has been attributed to problems in the conceptualization, development and design the policies and strategies (Mapemba, 2019). This has been the case despite the substantial amounts of resources directed to this sector by development partners (GoM, 2017a and GoM, 2017b).

This paper is therefore set to investigate the causes of programs, policies and strategies implementation challenges in the agricultural sector in order to draw lessons to inform the Country's implementation policies and strategies to facilitate the realization of the Malawi Vision 2063 objectives. The specific objectives of the study are: (1) identifying the key underlying implementation challenges facing the agricultural sector; and (2) putting forward concrete proposals for surmounting those challenges. This paper comes at an opportune

time when the Government of Malawi is seeking ways to revitalize the agricultural sector growth for economic prosperity and wealth creation in line with the Malawi Vision 2063 goal.

The paper draws information from several sources. First, literature review of some selected key policies, legislation, projects, programs and strategies in the agricultural sector to understand contexts surrounding their formulation, their objectives, drivers, and outcomes. Second, key informant interviews with some selected stakeholders in the sectors to elicit their opinions on underlying causes of programs, policies, and strategies implementation pitfalls and possible solutions. These included directors of departments in the ministries responsible for agriculture and trade, selected district councils, civil society organizations (CSOs), private sector institutions, and development partners in the agricultural sector.¹

2. Review of Policies in the Agriculture Sector

In this section, we review some selected policies in the agricultural sector. The objective of the review is to examine the objectives, formulation processes, and challenges faced in the implementation.

2.1. Policies

The policies reviewed include the National Agriculture Policy (NAP), the overarching policy for the agriculture sector, and some selected sub-sectoral policies, namely, the National Seed Policy, National Irrigation Policy, National Fisheries and Aquaculture Policy, National Crop Production Policy, National Livestock Policy, National Agricultural Extension Policy, and the Food Security Policy.

The National Agriculture Policy (2016)

The policy is an overarching and consolidated framework that guides the agriculture sector in Malawi. Its main goal is “to achieve sustainable agricultural transformation that will result in significant growth of the agricultural sector, expanding incomes for farm households, improved food and nutrition security for all Malawians, and increased agricultural exports”

¹ The list of the stakeholders interviewed is obtainable from MwAPATA Institute

(GoM, 2016a:10). The NAP was developed through a nationwide consultative process at district and national levels with donor support from USAID.

The NAP draws from other strategic documents such as the Malawi Vision 2020 (GoM, 1998), and the Malawi Growth and Development Strategy (MGDS) II which are broader and multi-sectoral strategy documents. These documents define the Country's long-term and medium-term development plans that would spur sustainable economic growth and development. Some key sub-sectoral and cross-sectoral policies which are consistent with NAP include the National Land Use Planning and Management Policy (2005), National Gender Policy (2015), National Youth Policy (2013), National Irrigation Policy (2016), National Climate Change Management Policy (2016), National Export Strategy (2012), the National Nutrition Policy and Strategic Plan (2007), as well as the Agricultural Extension Policy (2000). The NAP is coherent with the Agriculture Sector Wide Approach (ASWAp), which promotes the implementation of the NAP through the ASWAp Support Project II (ASWAp-SP II).

The formulation of the NAP was in accord with the Country's international agreements and protocols on agriculture, such as those under Southern African Development Community (SADC), the Comprehensive Africa Agriculture Development Programme (CAADP), the Common Market for Eastern and Southern Africa (COMESA), the African Union Maputo Declaration (2003), the Malabo Declaration on Agriculture and Food Security in Africa (2014), the New Alliance for Food Security and Nutrition, the Sustainable Development Goals of the United Nations, and the World Food Summit declaration of 1996.

The NAP is implemented through the NAIP. A key challenge faced in the implementation of this Policy has been inadequate and untimely funding due to various factors most of which are related to bureaucracy and lack of political commitment.

The National Seed Policy (2018)

The overall goal of the National Seed Policy (GoM, 2018a) is to provide clear guidelines for the development and promotion of seed industry in order to raise agricultural productivity through the provision of sustainable, adequate and high-quality seeds. Specifically, the policy seeks to enhance appropriate and effective seed regulatory framework, enhance seed

quality assurance for better performance of agriculture, establish reliable and internationally acceptable seed certification system, and to enhance growth of the domestic seed industry" (GoM, 2018a).

The policy was developed by the government through a consultative process that involved active participation of stakeholders including government ministries, departments and agencies (MDAs), civil society organizations (CSOs), non-governmental organizations (NGOs), the private sector, development partners, and farmers. The end-product was validated in a stakeholder's workshop. The development process of the National Seed Policy was supported by the World Bank through the Agricultural Productivity Programme for Southern Africa (APPSA).

The implementation of this Policy is ongoing and is overseen by the Department of Agricultural Research Services (DARS) in the Ministry of Agriculture (MoA). The implementation of this Policy has been affected by slow progress in enacting the Seed Bill to regulate activities in the seed industry. The draft Bill, still undergoing approval processes, seeks to establish a National Seed Commission to regulate activities in the seed industry in Malawi. The delay in enacting the Seed Bill is the main challenge facing the implantation of the National Seed Policy.

The National Irrigation Policy (2016)

The overall goal of the National Irrigation Policy (NIP) (GoM, 2016b) is to contribute to sustainable national economic growth and development through enhanced irrigated agriculture. Specifically, the policy seeks to increase land under sustainable irrigation, facilitate crop diversification and intensification, create an enabling environment for irrigated agriculture, optimize investment in irrigation development taking into account climate change, enhance capacity for irrigated agriculture, and promote a business culture in the small-scale irrigated agriculture sector (GoM, 2016b). Malawi's irrigation potential has been estimated to be 407,862 hectares.² Of which only about 116,249 hectares have been developed as of 2017/18.

² <https://www.jica.go.jp/malawi/english/activities/c8h0vm00004bpzlh-att/agriculture.pdf>

Increased investment in irrigation is consistent with Malawi's higher-level development plans and aspirations articulated in Malawi Vision 2020 (GoM, 1998). The NIP is aligned to the Sustainable Development Goals, the MGDS, the Irrigation Master Plan and Investment Framework (IMPIF), the Green-Belt Initiative (GBI), the NES, and the CAADP Compact. Irrigation also occupies a prominent position in a number of sectorial and sub-sectorial strategies including the National Water Policy (2005), Water Resources Investment Strategy (2011), Malawi Water Sanitation and Irrigation Sector Strategic Plan (2013), Department of Irrigation Strategic Plan (2011-16), and the Draft National Water Resources Master Plan.

The IMPIF was launched in February 2015, covers a period of 20 years (from 2015 to 2035), and is implemented under the irrigation sub-sector. The Framework has prioritized projects into short, medium, and long-term categories. The total cost is estimated to be around US\$ 2.4 billion, of which 46 percent will be invested in new irrigation development; 32 percent in sustainable irrigation management; 21 percent in capacity building; and 1 percent in coordination and management. Around 89 percent of IMPIF costs represent investments and 11 percent recurrent costs, mainly irrigation scheme operation and maintenance.

Since commencement of the IMPIF, a total of 14,200 hectares have been irrigated within the first 4 years of its implementation, representing about 89 percent achievement against the 4-year target. This represents a 71 percent achievement against the entire Phase I target of 20,000 hectares in the first 5 years of the IMPIF implementation. While smallholder irrigation has increased significantly over the years, irrigation in estate farms has remained static, possibly due to lack of capital and difficulties in identifying new pieces of land for expansion.

The main challenge associated with the implementation of the NIP has been implementation coordination difficulties. This is because irrigation spans a range of sectors and characterized by a diverse institutional framework. A holistic approach to irrigation development calls for the participation of many government institutions covering agriculture, land, water, infrastructure, transport, commerce and trade, finance, environment, training and community development, as well as farmer organizations, NGOs and the private sector. Due to financial and human resource limitations, most of these institutions struggle to fulfil

their roles. This is exacerbated by frequent organizational and management changes characteristic of the public sector.

The National Fisheries and Aquaculture Policy (2016)

The Policy was developed in 2016 to contribute to improving food security and economic growth, among others, in response to the MGDS II. As much as the Policy document does not specify its contribution towards Malawi Vision 2020 (GoM, 1998), it significantly contributes to the Natural Resource and Environmental Management section of the Vision. The Policy goal is “to promote sustainable fisheries resource utilization and aquaculture development” with the aim of contributing to “food and nutrition security and economic growth of the Country” (GoM, 2016c). Further, the Policy aims at “sustainably increasing fisheries and aquaculture productivity for accessible nutritious food and increased contribution to economic growth. It has seven priority areas namely: Capture Fisheries; Aquaculture Development; Fish Quality Control and Value Addition; Governance; Social Development and Decent Employment; Research and Information; and Capacity Development”. Formulation of this policy involved a series of extensive consultative meetings with different stakeholders including fish farmers, fisher folks, public institutions, academia, private sector and cooperating members.

Several complementary documents were developed to ensure that Policy objectives are achieved. The legislative framework of the Policy insisted on developing an Act that would guide conservation and management of fisheries resource. An implementation plan was also developed with targets and outcomes related to the Policy’s seven priority areas. Together with the implementation plan, a monitoring and evaluation framework is to be adopted at all stages in order to facilitate self-monitoring and evaluation on top of the external policy evaluations. Despite the policy having these complementary documents and stating potential source of funds, it does not explicitly state budgetary requirements over the Policy implementation period. Furthermore, there are still problems with functional institutions for effectively implementing the Policy. For example, fish harvests routinely exceed official quotas due to limited enforcement of fishing rules and regulations.

National Crop Production Policy (2002)

The National Crop Production Policy (GoM, 2002) is aligned to Malawi Vision 2020 (GoM, 1998) as it addresses food security and nutrition as well as sustainable economic growth and development sections of the Vision. The policy is aimed at enhancing production of balanced and diversified crops to attain the Country's needs for food, foreign exchange and increased rural incomes, while sustaining the productive potential of cropland. The policy expires in the 2019/20 financial year and is currently under review. The Policy's objectives include: maintaining self-sufficiency in food; cultivation of crops in areas with suitable agro-ecological factors and following appropriate husbandry practices to ensure conservation of natural resources; transferring appropriate technologies to farmers for a steady improvement in yield; diversifying cash and food crops and their respective value chains to achieve food security and promote export-led agricultural growth; promotion of processing and preserving of food crops; and providing credit opportunities to farmers. Implementation of the policy is led by the Department of Crop Development in the MoA.

The formulation process of this Policy was not inclusive, and the document is not explicit on implementing stakeholders. However, according to the priority area of the Policy, the implementation was expected to include other departments within the MoA, other relevant ministries, academia and research institutions, farmers, the private sector, and NGOs. Regrettably, the policy lacked a complementary implementation plan, budget and resource mobilization plan, and monitoring and evaluation framework. The absence of such vital complementary instruments was a major stumbling block in the implementation of the Policy.

National Livestock Policy (2004)

This Policy was developed with the goal to contribute towards poverty reduction, rural livelihoods enhancement, environmental management through appropriate animal husbandry practices, health and public services. The policy sought to encourage and involve various stakeholders in the livestock sector including farmer organizations, NGOs and the private sector in promoting animal health and livestock development (GoM, 2004). Despite lack of clear alignment with Malawi Vision 2020 (GoM, 1998), the Policy's focus on expansion and improvement of the livestock sector is consistent with the elements of the Malawi Vision

2020 (GoM, 1998). The Policy had a comprehensive National Livestock Development Master Plan.

Since the lifespan of the Policy expired, it is currently under review. It should be noted that the National Livestock Policy was anchored on dated veterinary legislation and characterized by weak enforcement thereby adversely affecting the delivery of veterinary services. The Policy did not have strategies for supporting investments in reputable animal health and livestock programs.

National Agricultural Extension Policy (2000)

The National Agricultural Extension Policy of 2000 emphasized farmer demand and access to quality extension service, pluralism in extension services, stakeholder involvement and accountability, as well as coordination in agricultural extension services (GoM, 2000). The policy was formulated in line with the Country's Vision 2020 (GoM, 1998). It sought to contribute towards realizing this Vision by setting clear policy guidelines to orient all actors and agencies involved in providing agricultural extension services. A substantial part of the policy has been implemented, as the agricultural sector in the Country is now characterized by demand-driven provision of agricultural extension services. Also, gender equality has been promoted by setting up a Division within the Department of Agricultural Extension Services (DAES) that is dedicated to mainstreaming gender issues. Furthermore, there is improved coordination, pluralism, as well as regular assessments of the impact of extension in the Country.

The implementation of the National Agricultural Extension Policy has faced several challenges. First, the formulation process of this Policy did not involve wide consultations with various stakeholders such as NGOs, development partners, other MDAs and private sector. Perhaps as a result, a lack of ownership on the part of stakeholders weighed down the its implementation and institutional coordination. Second, it emerged during this review that some NGOs and the private sector still believe that extension service is a public good that must be provided by the government. Most NGOs in agricultural sector arena do not have their own extension staff but use government extension officers. They pay higher daily subsistence rates than those offered by government. This compromises the delivery of government extension services. Third, the Policy did not have an inbuilt implementation plan

with budget commitments for effective implementation. Fourth, the Policy failed to strengthen and promote farmer-based organizations to become effective extension service providers. Fifth, the Policy failed to effectively coordinate the extension systems players and messaging. The system is now more complex, leading to an increase in inefficiencies, redundancies, and confusion due to conflicting messaging on some issues (Ragasa et al., 2015). That said, it is important to note that the Policy is now outdated, a successor policy has been drafted.

The Food Security Policy (2006)

The Food Security Policy (GoM, 2006) was developed in 2006 based on desired outcomes from Malawi Vision 2020 (GoM, 1998) and the MGDS I. The objective of the Policy was to increase agricultural productivity and enhancement of diversity in food production to guarantee that the population has access to nutritious food for a healthy lifestyle. To ensure food security, the Policy had three priority areas of sustainable food availability, sustainable access to food, and stability in food supply. The Policy introduced a National Food and Nutrition Security Joint Task Force, that coordinates implementation of Food Security Policies by different institutions and stakeholders. In addition, the Task Force coordinates with other relevant sectors and institutions such as the health and trade sectors. The Policy design emphasized development of an implementation plan, which formed a basis for a monitoring and evaluation system to ensure keeping track of Policy's programs outcomes. Most importantly, the monitoring and evaluation system guides and coordinates food security and nutrition related information systems used by sectoral ministries and other stakeholders.

The formulation and design of this Policy, just like other policies that were developed in this period, was characterized by limited consultation with stakeholders. The Policy lacked a resource mobilization strategy to raise funds to supports its implementation. The performance of the Policy has however been associated some failures. Key among them is that a huge proportion of the Country's population is still food insecure. The Country has witnessed an increase in the number of food insecure people increasing from an annual average of 350, 000 in 2007-2011 to 1.7 million over the 2012-2014 period, and more than 6.7 million in 2016/2017 (GoM, 2018b).

2.2. Overview of Policy Implementation Challenges

To conclude this Section, we provide some main highlights on the main challenges facing policy design and implementation in the Country. As noted in the review, most of the policies that were developed in 2000s were designed unilaterally by the respective government departments with some consultations with other relevant government departments. The lead department would take the policy through all the stages of policy processes up to approval. Then, stakeholders would be invited to be informed of the new policy at the very end. At that point, new ideas and perspectives from stakeholders could not be incorporated as the policy was already approved. Most of these policies lacked inbuilt implementation framework and resource mobilization strategies. As noted, such policies, such as the irrigation, crop production, and fisheries and aquaculture were not supported by enforceable Acts.

That said, most of recent policies are now open to stakeholders' participation and have inbuilt resource mobilization strategies. Since the implementation of New Alliance Policy Acceleration Support (NAPAS) project, most of the policies in the agricultural sector are developed via consultative processes and validated by all stakeholders, at all levels, including farmers in some cases. MDAs, CSOs, Non-Governmental Organizations (NGOs), the private sector, as well as development partners are actively involved in the entire policy development process.

Other challenges facing policy implementation in the agricultural sector include:

Inadequate Financing

The biggest challenge impeding implementation of policies and programs is inadequate financing of planned activities. Policies in the sector lack sustainable, consistent and adequate funds for successful implementation of planned activities. Inadequacy in funding sometimes crops from over-ambition in activity planning. This is the case whereby the planned activities' financial needs do not match funding and allocation of financial resources from the national Treasury.

Overreliance on External Funding

The government does not fully finance policy formulation and implementation, resulting in dependency on funding from development partners. Most of the times, the development partners' funding objectives may not align with the government's development priorities. This leads formulation and funding of policies that are not consistent with the government's set priorities.

Delays in Financing

Another problem that affects implementation of policies and programs is delays in financing. This problem could result in irreversible negative affects since most activities in the agriculture sector are time and/or season bound.

Weak Monitoring and Evaluation Systems

Policy implementation in agricultural sector is hampered by weak monitoring and evaluation systems. This is mostly caused by long time lags between data collection, analysis, reporting and taking appropriate action. Most policies that were developed before 2010 did not have monitoring and evaluation frameworks embedded in them. Information on various indicators needs to be updated in timely manner and frequently to enable efficient and effective monitoring and decision making by various users and decision makers. This problem could be solved by the development and operationalization of the National Agriculture Management Information System (NAMIS). When this System is fully operational, it will significantly increase efficiency and effectiveness of policy analysis as well as program/project monitoring, evaluation and management as time-sensitive information will be accessible in real time for use by management at all levels.

Lacking or Poor Infrastructure

Lack of adequate infrastructure to facilitate the implementation of proposed activities under some policies is a major stumbling block in policy implementation. The Country has poor or inadequate physical and telecommunications infrastructure making some parts of the Country inaccessible or significantly increasing the cost of service delivery. For example, unreliable and expensive mobile telecommunications services make it difficult for farmers

to access extension information limiting the farmers access to modern farming technologies and markets information. For example, a transformative initiative undertaken by the Department of Animal Health and Livestock Development (DAHLD) aimed at improving livestock production through disease control as stipulated in the Livestock Policy has been hampered by lack of cattle dips. Most of the dips are dilapidated and non-operational.

Political Patronage and Control

Sometimes policies are not grounded on good economics and/or sector demands, but rather on political vote-maximization considerations. Politically conceived policies, without sound economic considerations may result in misallocation of scarce. Political considerations may also result in appointment of officers based on political patronage. Persons with skills and will to deliver sound technical advice are shunned. Technical officers who fail to ‘toe the line’ are punished through transfers to remote duty stations or/and demoted. Political patronage is also associated with policy discontinuities and reversals when a new political regime comes into power. Change in political regimes usually disregard long-term policy plans thereby increasing the likelihood of policy failures.

Inadequate Personnel and Human Resource

Policy and program implementation in the sector are highly weakened by capacity gaps at institutional and individual levels. Most of the times departments are not adequately staffed to full establishment. Institutions and technical officers fail to translate policies into relevant activities or projects due to a lack of relevant training, and frequent transfers of experienced officers among government departments. Technical officers also lack the capacity to translate policies to successful implementation. In such cases non-technical stakeholders, like local leaders and farmers, are not assisted in the implementation process.

Lack of Coordination Among Stakeholders

Limited coordination between government ministries and departments, CSOs, academia, the private sector, and development partners has hampered policy design, formulation and implementation. To some extent, agricultural sector lacks internal coordination-- subsectors do not adequately coordinate their activities and cooperate towards achieving broad sectoral

goals. There is also a lack of coordination across sectors. For instance, there is lack of coordination in formulation of trade policies between ministries responsible for trade and agriculture despite the fact most of the Country's export commodities are agricultural products. Academia and institutions researching on agriculture are not fully coordinated with other sector stakeholders to provide the research support and education that is needed for agricultural transformation. For instance, there is close coordination between the Ministry of Agriculture and Lilongwe University of Agricultural and Natural Resources (LUANAR) despite LUANAR being the Country's premier institution in agricultural research. There are useful lessons to learn from the collaboration and coordination between the ministry of health and health institution of higher learning and research in the Country.

Policy Incoherence

Perhaps as an extension of limited coordination among stakeholders. Policies lack coordination and complementarity with each other, which slows the pace towards achieving the Country's long-term national vision. In the worst case, policies can even contradict each other. For example, the National Export Policy is usually contradicted by the ad hoc export bans that are implemented from time to time.

Inadequate Regulatory Institutions

Agricultural policy requires institutions to monitor and regulate activities to ensure effective and successful policy implementation. However, not all stakeholders in the agricultural sector are monitored and regulated during policy implementation. For instance, promoting of private traders in agricultural markets without a vibrant regulatory institution has exposed smallholder farmers to exploitation. Information asymmetry on price information among smallholder farmers has given private traders an upper hand to purchase farm produce at below break-even prices.

Lack of Policy Sensitization During Initial Phases

Rolling out policies is a huge challenge when individuals or groups that are likely to be negatively affected by a policy obstruct implementation during early stages. Resources to implement policies are often limited. As such, awareness about policies is often considered

a low priority. However, without an effective strategy to sensitize the population regarding policies and policy changes, effective implementation can be severely limited.

Low Literacy and Knowledge Levels

Successful policy implementation requires knowledgeable and literate actors who are capable of understanding, translating and implementing policies. The agricultural sector is dominated by smallholder farmers with low literacy levels. Low literacy levels affect rates of adoption of various technologies that would lead to increased agricultural productivity.

Climate Change Effects, Natural Disasters and Unpreparedness

The agricultural sector has been hit hard by negative effects of climate change, ranging from flashfloods to dry spells and Fall Army Worm (FAW) attacks. For example, the FAW attacked an estimated 258,467 hectares of crop fields, affecting 648,691 farm households across the Country in the 2018/2019 farming season. Disasters have caused severe damage to irrigation infrastructure especially at water intake (i.e. washing away of weirs) reversing achievements in irrigation expansion. These calamities are often met with unpreparedness by the government due to lack of adequate financial resources.

In Appendix Table 1, we present some proposals to address most of these challenges that impede policy implementation challenges. To implement the suggested interventions, it will require a concerted and joint effort involving all stakeholders in the agricultural sector.

3. Review of Selected Acts and Legislation

Policies are effective and successful if the designed policies have the required legal framework to support and facilitate their implementation. In this section, we briefly review selected Acts and Bills that were developed to support the implementation of some of the policies that were reviewed in the foregoing section.

3.1. Acts and Legislation

The Acts and Bills discussed in this section include: The Special Crops Act (SCA), Agricultural General Purposes Act (AGPA), Irrigation Act, Customary Land Act, Fisheries

Conservation and Management Act, Land Resources Conservation and Management Act, Tobacco Act, and the Seed Bill.

Special Crops Act (1963)

The Special Crops Act (SCA) (GoM, 1963) was enacted with the aim of supporting marketing of special crops and to establish Special Crop Authorities. The objective of the Authority was to promote and foster the development of the special crop in whatever ways the minister responsible for agriculture deemed necessary. The Act further empowers the minister to intervene in the agriculture produce market whenever satisfied that a particular crop's economic value has increased enough to benefit the economy by declaring it a *Special Crop* by an order published in the GoM Gazette. According to a review conducted by International Food Policy Research Institute (IFPRI) in collaboration New Alliance Policy Acceleration Support (NAPAS) project of Michigan University, the purposes of the authority included aiding development of smallholder farming through on-farm training and offering management services to estates, exerting market controls on internal and export/import markets, and price controls (Comstock et al., 2019).

The Act is now outdated and unable to cope with the realities of a relatively liberalized economy. The SCA introduces inefficiencies in production by requiring application of licenses for one to grow some particular crops. Issuance of licenses has been associated rampant rent-seeking behavior. The issuance of 'buyers' and sellers' licenses also creates room for collusion amongst buyers to offer sellers below-market-level prices for their produce. Also, the performance of some of the crops that had been declared 'special' has been disappointing. For example, tobacco prices have declined significantly in the world due to various factors such as anti-smoking lobbies or campaigns. Consequently, a decline in allocative efficiency in the use of lands that had been set aside for production of tobacco. On the legal front, the Act is inconsistent with the Country's Constitution, the supreme law of the land. The Constitution contains provisions for respect for individual rights and freedoms and demands that laws provide legal avenues for private citizens to petition the government regarding perceived grievances (Comstock et al., 2019). Yet the Act gives the minister responsible for agriculture overriding powers to make decisions that cannot be challenged in a court of law. The Act is likely to violates customary land use right if the land

being designated for the development of the special crop falls under the customary land category. Finally, some crops such as tobacco and cotton, which were declared special crops, have independent Acts establishing the development of their value chains rendering the SCA redundant.

Agriculture (General Purposes) Act (1987)

The Agriculture (General Purposes) Act (AGPA) (GoM, 1987) was enacted the broad aim of general regulation of the agriculture industry in Malawi. The objective of the AGPA was to provide the government a legal framework to control and regulate various activities in the agriculture industry. The Act designates the Agricultural Development and Marketing Corporation (ADMARC) as the sole agricultural produce buyer in the Country.

This Act presents several problems to the agriculture sector. First, designation of ADMARC as the sole buyer of agricultural produce in the Country is against provisions for market liberalization. Second, the Act surprisingly focuses narrowly on the marketing of maize crop. While the Act is supposed to provide a legal framework for all sub-sectors in agriculture, it also excludes many other equally important sub-sectors in agriculture such as livestock. The Act also grants the minister responsible for agriculture unchecked powers that cannot be contested in a Court of Law. For example, applicants who are unjustifiably denied licenses may not seek recourse in a court of law. The minister's powers are inconsistent with the Country's Constitution and therefore null and void to the extent of the inconsistency.

The Irrigation Act (2001)

The Irrigation Act (GoM 2001) was developed to support the implementation of policies and programs on irrigation and to establish the formation of the National Irrigation Board. The Act provides the legal framework for the implementation of the National Irrigation Policy (2016), which also promotes sustainable irrigation development and management. The establishment of Water User Associations (WUAs) and Cooperatives is provided for in the Act. These organizations assist in managing irrigation schemes with respect to maintenance and marketing as well as value addition for produce from the schemes.

The Act, however, is not clear on how to ensure that those infringing on the rights of downstream water users, a violation of land use rights, shall be dealt with in a court of law. While poor land conservation and management practises upstream has caused water flow disruptions and flush floods downstream, no sanctions are prescribed in the Act against perpetrators of the activities (GoM, 2006).

Customary Land Act (2016)

The Customary Land Act (GoM, 2016c) establishes the existence of land within the boundaries of a Traditional Land Management Area other than Government or reserved land. The Act also establishes Customary Land Committees and Tribunals to assist Traditional Authority (TA) in administering land issues in the area under their jurisdiction. The Act provides for joint customary land use between different Land Committees which is beneficial for development interventions. For example, irrigation schemes require land to be consolidated for economical provision of infrastructure such as water conveyance structures. The Act also provides for the use of land for various purposes including agricultural production, thus promoting the implementation of the NAP (2016).

Implementation pilots of the Customary Land Act commenced recently with support from development partners supported programs in some selected districts under the Land Reform Implementation Program. Some of the emerging challenges associated with the implementation of this Act include limited awareness on the new land laws, resistance from traditional leaders, limited capacity of customary land committees and tribunals, and absence of land clerks at local level that are required for the new customary land governance regimes.

Fisheries Conservation and Management Act (1997)

The Fisheries Conservation and Management Act (GoM, 1997) makes provision for the regulation, conservation and management of fisheries and fishery resources in Malawi. The Act further provides governance reforms to ensure sustainability of the fisheries resources for future generations in Malawi. The Act is useful in guiding the sustainable development of the fisheries sub-sector given the growing interest in investments for fish production for both local and export markets.

The Act faces some challenges. The Act is unable to successfully control fishing activities during the breeding and off-season periods. The Act has faced some ethical issues related to stopping fishing activities by communities that rely on fishing for livelihoods during breeding periods. It Act has faced challenges in patenting rare species of fish such as *Chambo*. Patenting of these rare species could promote the Country's trade and tourism sectors. The Department of Fisheries has now drafted a new Fisheries and Aquaculture Bill which will be consistent with the National Fisheries and Aquaculture Policy (2016).

Tobacco Industry Act (2019)

The Tobacco Industry Act (GoM, 2019a) establishes the Tobacco Commission. The Commission was previously known as the Tobacco Control Commission. The Commission is charged with the following responsibilities: regulating the production, grading, processing, importation, exportation and marketing of tobacco; promoting crop diversification and good agricultural practices in tobacco production; and, collating statistics and distributing information relating to the production, marketing, manufacturing and consumption of tobacco. It is also charged with the responsibility of promoting a conducive environment in the tobacco industry so as to allow effective and fair competition for all stakeholders, regulating and enforcing quality standards of tobacco, and advising government on policies and strategies to promote and develop the tobacco industry (GoM, 2020). Furthermore, the Act provides the legal framework for implementing the NAP (2016) goal of diversifying and transforming the agricultural sector in Malawi for sustainable economic growth and development.

The Act has some limitations. The Act does not address environmental degradation issues, particularly deforestation (Minde et al., 2001), often associated with tobacco farming. The Act is silent on the possibility the requiring that tobacco growers undertake compulsory tree replanting since trees are used in curing of tobacco.

Seed Bill (2019)

The Seed Bill (GoM, 2019b) was developed to address issues such as the release of new seed varieties; seed inspection, testing and certification; registration of seed producers and sellers; and the need for institutional frameworks to regulate the sector and penalize

offenders. The Bill institutionalizes a Seed Commission to support the provision of services that are currently provided by the Seed Services Unit (SSU) in the DARS. Furthermore, the Bill makes provision for minimum standards to regulate and control the production, processing, sale, importation, exportation and testing of seed. It also makes provision for the certification of seed and related matters. These provisions seek to protect the interests of buyers and sellers alike by fostering the production, processing importation, testing and certification of seed. The Bill concentrates on seed quality matters and the formal seed sector (Malawi Government, 2019ba). The draft Bill is due for review by the Cabinet Committee on the Economy. Thereafter, it will be forwarded to the Parliament of Malawi for orientation of Members and enactment.

3.2. Overview of Challenges Facing Acts and Legislations

Despite Malawi transitioning to multi-party democracy in 1994 and changing its economic paradigm of “a centrally planned and controlled economy” to “a private sector led economy”, the Country’s macroeconomic policies and the main legislation for the agriculture sector and trade (e.g. SCA, AGPA, and Control of Goods Act- COGA) have remained unchanged. Government has recently started addressing this, first by revising the COGA in 2018 to reflect the current political and economic environment. However, the Government is yet to finalize the revision of the SCA and AGPA despite the critical importance of these pieces of legislation to the success of investments in the agricultural sector.

4. Review of Selected Programs and Projects

The MoA is implementing several programs and projects that are meant to contribute towards the transformation of the agricultural sector. In this Section, we briefly review some of these programs and projects.

4.1. Programs and Projects

The selected programs and projects are: Farm Input Subsidy Program (FISP), Agricultural Sector Wide Approach - Support Project (ASWAP-SP), Smallholder Irrigation and Value Addition Project (SIVAP), Programme for Rural Irrigation Development (PRIDE), and Agricultural Commercialization (AGCOM).

Farm Input Subsidy Program (FISP)

This Farm Input Subsidy Program (FISP) was introduced in 2005/06 financial year. The implementation of the Program was motivated by weather shocks that affected production resulting in prolonged food shortages and high input prices. The primary purpose of the program is to achieve food self-sufficiency and increase income generation among poor smallholder farmers by ensuring access to agricultural inputs (Chiwaula et al., 2019; Dorward et.al., 2014). While at the beginning the Program enjoyed tremendous support from donors, that support has been withdrawn leaving the GoM as the sole financier of the Program. The Program receives a large proportion of the agricultural budget each year. For instance, in 2019/2020 the FISP was allocated US\$48.5 million (K35.5 billion) to target 900,000 farmers. This allocation represents about 20 percent of the total agriculture budget.

The main implementing agency of the program is MoA. The Program design requires the MoA to work closely with farmers, Ministry of Finance, Agricultural Development Division (ADDs), TAs, Village Development Committees (VDCs), police, CSOs, fertilizer importers, seeds suppliers, retailers, ADMARC, and Smallholder Farmers Fertilizer Revolving Fund of Malawi (SFFRFM). The program was designed to target 50–60 percent of the farmers who are resource poor but able to produce a surplus that can be sold in the market.

While the implementation of the Program has been successful, the Program has raised concerns about budgetary burden posed on the government against the significance of impacts from the program.

Agricultural Sector Wide Approach - Support Project (ASWAP-SP)

The GoM together with development partners formulated Agricultural Sector Wide Approach - Support Project (ASWAP-SP) in line with MGDS I. The objective of the Project is to contribute towards eradication poverty and to promote agricultural growth. The ongoing project, ASWAP-SP II, is a successor program to ASWAP-SP I that was implemented between 2014 and 2016. ASWAP is a priority ongoing investment program that targets “…three focus areas of: food security and risk management; commercial agriculture, agro-processing and market development; and sustainable agricultural land and water management…” (Government of Malawi, 2011: 1-2). In terms of funding, a Multi Donor Trust

Fund (MDTF) managed by the World Bank Finances the project. The MDTF comprises of the EU, the Irish Embassy, Flanders, USAID, and the Embassy of Norway.

The project is implemented by Ministries responsible for agriculture, water and irrigation development, trade, local government, gender, finance, economic planning and development, and nutrition. Planning, implementation, monitoring, and evaluation is done in district councils in collaboration with ADDs, MoA and relevant ministries. Implementation of the program also includes farmers, the private sector, development partners, CSOs and other non-state actors.

With its sector wide approach, the project has successfully implemented its activities as well as helped other project in other sectors. For instance, it promotes legume seed production that supports FISP and advance the diversification agenda, improves unpaved rural roads through labor-intensive rehabilitation and upgrading works, resuscitated the banana industry which was hit with the banana bunchy top virus disease through provision of clean planting materials, and supports the improvement and alignment of the Ministry's budgeting to NAIP. Gender mainstreaming is incorporated in its programming and implementation plan.

Smallholder Irrigation and Value Addition Project (SIVAP)

This Project was conceptualized by the GoM and the African Development Bank (AfDB) in line with the first key priority area under MGDS II. The Project started in the 2014/15 financial year and its implementation was completed in December 2019. It was financed under the Global Agriculture and Food Security Program (GAFSP) through Multi-Donor Trust Fund and implemented through GoM's ASWAP. The Project objective was poverty reduction among its beneficiaries as well as ensuring sustainable food security. It was divided into three components: (1) sustainable land and water management with two sub-components (development of new irrigation schemes and rehabilitation of existing irrigation schemes); and (2) crop diversification and value chain development with four sub-components (seed selection and multiplication, rain fed cropping, agro-processing and value addition, and support to market linkages); and (3) institutional strengthening and capacity building with four sub-components (support to public sector, support to farmer organisations, monitoring and evaluation, and project coordination) (GoM, 2013). The Project was implemented by all

departments of the MoA through ADDs and District Councils. It was executed with close collaboration with the Ministry of Industry, Trade and Tourism (MoITT); Ministry of Health; and Ministry Natural Resources, Energy and Environment.

The Project design exhibited some strong points. The Project formulation embraced extensive consultations with key stakeholders to ensure ownership. In addition, the Project ensured stakeholder inclusiveness in monitoring, evaluation, afforestation activities, matching grant arrangement for equipment, meetings and trainings. Furthermore, the project design was gender inclusive and this was highly reflected in the implementation results of the project. About 436,600 people of which 218, 300 were women, indirectly benefited from this project through enhanced crop production, diversification and developing high value chains (GoM, 2013:7).

Programme for Rural Irrigation Development (PRIDE)

The PRIDE Project was jointly developed by GoM and the International Fund for Agricultural Development (IFAD) of the United Nations. This was following a wide consultation process that culminated into the development of the Country Strategy Paper on Malawi for IFAD. The Project is currently implementing activities to contribute to the National Irrigation Policy and the National Resilience Plan. The implementation of the program started in the 2017/18 financial year and is led by the Department of Irrigation. It is a 7-year Project with the aim to ensure that rural communities are resilient to food insecurity, climate change, and economic risks. Its main objective is to ensure enhanced smallholders incomes and nutrition through sustainable agricultural production.

The Project implementation involves several institutions including government departments, NGOs, and the private sector. The Project just developed its monitoring and evaluation framework and funding flow is reported to be good with project activities such as irrigation design, feasibility studies, and environmental impact assessments underway.

Agriculture Commercialization (AGCOM)

This is an ongoing Project. It was co-conceptualized by GoM and the World Bank and started in the 2018/19 financial year. The Project seeks to commercialize agricultural value chains

in the Country, with strong market linkages in both value chain and buyer aspects. The Project objectives will be achieved through building productive alliances for farmer groups, supporting investment enabling services, and providing contingent emergency responses. The Project activities are meant to contribute to the implementation of the NAP. The main implementation agencies of the Project include ministries responsible for agriculture, trade, lands, irrigation, transport; District Councils, MITC, NFRA and MBS.

4.2. Overview of major challenges facing program and project implementation

To conclude this Section, we provide an overview of the main challenges facing programs and projects design and implementation in the Country.

Inadequate extension staff at community level

Inadequacy of extension workers on the ground, coupled with inadequate housing and lack of means of transport to visit farmers is negatively affecting the delivery of extension services. Most extension workers rely on bicycles, which limit the geographic scope of their reach. This has slowed down the delivery of modern transformative technologies to the farmers.

Limited access to credit facilities

This could be attributed to lack of credit facilities and collateral (productive assets) to secure loans to procure output enhancing inputs such as fertilizer and quality seed. This, in turn, hampers efforts aimed at increasing productivity in program implementation. This in turn leads to low agricultural productivity, low food production, and food insecurity.

Unfavorable environment for enabling the business of agriculture

In 2017, the World Bank ranked Malawi 14th in terms of the quality of the regulatory environment for doing business of agriculture. This was out of 28 countries in sub-Saharan Africa that were considered in the survey. In contrast, Malawi's neighbors scored higher: Zambia- 3rd; Tanzania- 4th; Mozambique- 6th and Zimbabwe- 9th. According to the World Bank, Malawi ranked low in quality of seed, time, and cost to register a new seed variety; quality

of fertilizer, time and cost to register a new fertilizer product; and quality of manufactured livestock feed and veterinary medicinal products for sustaining livestock.

Absence of inbuilt mechanisms to constantly check and adjust projects/programs during implementation

The dependence of the Country on external financing for its projects/programs limits the frequency and extent to which adjustments can be made during program implementation. Most donors do not allow adjustments prior to mid-term reviews. Conversely, this rigidity in program implementation leads to most implementers not regularly checking with their beneficiaries whether their interventions are yielding expected outcomes and, if not, whether and how to tweak the designs accordingly. This may lead to failure in achieving the outcomes of some projects with very good objectives.

Thin and informal commodity markets

Commodity markets that are thin (with few transactions) or predominantly informal present major challenges to Malawian agribusinesses. Commodity markets are thin because the urban markets are relatively small due to low urbanization. Very small proportion of the Malawi population is urbanized. Food security has been the focus of government policy and not income generation (treating agriculture as a business).

Commodity markets have remained predominantly informal. Commodity exchange markets have not taken off in the Country for two primary reasons. First, there is a mismatch between commodity exchanges and the smallholder farmer model emphasized by government policy. Smallholders prefer direct linkages with buyers that pay instantaneously for commodity purchases. Second, large-scale farmers have only preferred the services of commodity exchange outlets when they fail to identify better alternative markets. Evidence suggest that only a small portion (e.g. <1% for groundnuts, and <3% for pigeon peas) of the Country's total marketable surplus is being sold through the commodity exchange markets (Source: Verbal discussion with key informant at AICC). Most produce is sold at informal markets or to informal buyers.

Predatory cartels in the farm produce markets

Claim emerged during the stakeholder interviews that the poor performance of ADMARC has given rise to predatory cartels that create barriers to entry into the smallholder farmers produce markets. The cartels manipulate prices and block policy interventions that would disrupt the status quo. While these are serious allegations, it should be noted that we lack evidence to either corroborate or refute them.

Lack of effective coordination among stakeholders

The agricultural sector is characterized by the absence of well-articulated and coordinated action plans, contradictory approaches to program implementation and/or promotion of agricultural technologies, and ‘dependency syndrome’. Besides, the tendency of public officials of only attending meetings where they will be paid sitting allowance has weakened collaboration between stakeholders as some government officers boycott important activities if they are not going to be paid per diems, thereby creating knowledge gaps and confusion in communities on technologies and other important issues. This tendency can affect implementation process if such officials are key in programs implementation processes being discussed at such meetings. Further, there is no system/mechanism for mapping resources or activities at district and other levels. This encourages wastage of resources, hinders accountability and undermines development efforts by encouraging implementation of non-priority activities.

5. Conclusion

The objective of this paper was to identify implementation challenges faced by policies and programs in the agricultural sector in Malawi. To achieve this objective, the paper reviewed some policies, acts, programs and projects in the agriculture sector.

A number of issues were discussed as contributing to failure in implementation of policies. It is noted that lack of extensive consultations during early stages of policy formulation has challenged policy implementation as well as resulted into failure of some policies as stakeholders have only been involved at a later stage. Other issues that have affected policy implementation of policies include policies that are incompletely developed

as they lack auxiliary components such as work plans, monitoring and evaluation frameworks, enforceable acts and resource mobilization plans. Furthermore, as much as funding problems have led to overreliance on external funding and failure in implementing policy activities, it has also contributed to diverting from long-term goals and lack of ownership of implemented activities. Since policies are implemented in a complex environment political environment, climate change and inadequate regulatory institutions also challenge policy implementation.

Further review of current Acts and Regulations noted that they were outdated. This has ultimately resulted into inconsistency with currently liberalized market economy and other newly developed or revised Acts and regulations (e.g. Special Crops Act and Agriculture General Purposes Act versus Customary Land Act). Other challenges associated with implementation of these Acts include lack of consultations and awareness among some stakeholders resulting in resistance to implementation, for instance Customary Land Act. It was also learnt during the review of Acts that some of them face implementation challenges due to the way they were formulated. Some did not take care of all possible challenges such as the Irrigation Act, Fisheries Conservation and Management Act, and Tobacco Industry Act.

The paper finally reviews the implementation challenges of programs and projects. From the review it is observed that implementation of programs and projects have encountered a couple of challenges such as inadequate extension staff at community level, limited access to credit facilities, thin and informal markets that are dominated by predatory cartels and lack of effective coordination among stakeholders. Lastly, a number of interventions have been suggested for improvements in implementation of programs, projects, policies and strategies.

As seen, most of the challenges that have negatively affected implementation are political in nature. If Malawian political leaders have a will to transform the agricultural sector, support and advance relevant policies and take advice from technical people these challenges may be fewer, thereby reducing poverty and enhancing agricultural sector growth. The paper further suggest intervention with an implementation plan for improved policy and program implementation.

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References

- Benson, T., Nyirenda, Z., Nankhuni, F. & Maredia M (2018). The Quality of Agriculture and Food Security Policy Processes at National Level in Malawi. *Results from the 2017–18 Malawi Agriculture and Food Security Policy Processes End Line Survey*. Feed the Future Innovation Lab for Food Security Policy Research Paper 107. East Lansing: Michigan State University.
- Chiwaula, L., Cassim, L. & Manja, L. (2019). *A Comparative Assessment of the Impacts of Malawi Farm Input Subsidy and*, Zomba : Malawi
- Comstock, A., Benson, T., Nankuni, F., Kanyamuka, J., Nyirenda, Z. & Nyondo, C. (2019). A Critical Review of Malawi's Special Crops Act and Agriculture (General Purposes) Act. IFPRI Discussion Paper 01792, Washington, D.C.: International Food Policy Research Institute (IFPRI).
- <http://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/133043/filename/133256.pdf>
- Dorward, A. & Chirwa, E. (2014) *Evaluation of the 2013/14 Farm Input Subsidy Programme, Malawi: Programme Implementation and Benefit Cost Analysis*. SOAS, University of London, London
- Dorward, A.R., Chirwa, E., Boughton D., Crawford E., Jayne T., Slater R., Kelly V., & Tsoka M. (2008) *Towards 'smart' subsidies in agriculture? Lessons in recent experience in Malawi*. *Natural Resources Perspectives*, 116 (Overseas Development Institute, October 2008).

Makhura, M.N., Adegbite, O.O., Mkandawire, E., Olivier, N., Nankhuni, F., Nyondo, C., & Hendriks, S. (2019). Are Financing Policies Sensitive to Food Systems Transformation in Malawi. *Feed the Future Innovation Lab for Food Security Policy*, Policy Research Brief 78

Government of Malawi (1963). *Special Crops Act*. Lilongwe: Malawi

Government of Malawi (1987). *Agriculture (General Purposes) Act*. Lilongwe, Malawi

Government of Malawi (1997). *Fisheries Conservation and Management Act*. Lilongwe, Malawi.

Government of Malawi (1998). *Malawi Vision 2020*. National Economic Council, Lilongwe, Malawi.

Government of Malawi (2006). *The Food Security Policy*. Lilongwe, Malawi
Government of Malawi. (2000). *National Agricultural Extension Policy*. Lilongwe: Malawi.

Government of Malawi (2001). *The Irrigation Act*. Lilongwe: Malawi.

Government of Malawi. (2002). *National Crop Production Policy*. Lilongwe: Malawi .

Government of Malawi. (2004). *National Livestock Policy*. Lilongwe: Malawi

Government of Malawi. (2006). *National Food Security Policy*. Lilongwe: Malawi

Government of Malawi.. (2011). *Malawi Agricultural Sector Wide Approach*. Lilongwe: Malawi

Government of Malawi. (2013). *Appraisal Report Smallholder Irrigation and Value Addition Project (SIVAP)*. Lilongwe: Malawi.

Government of Malawi.. (2016a) *National Agricultural Policy*. Lilongwe: Malawi

Government of Malawi.(2016b). *National Irrigation Policy*. Lilongwe: Malawi.

Government of Malawi. (2016c). *Customary Land Act*. Lilongwe: Malawi

Government of Malawi.(2016c). *The National Fisheries and Aquaculture Policy*. Lilongwe: Malawi

Government of Malawi. (2017a). *Integrated Household Survey 2016-2017. Household Socio-Economic Characteristics Report*. National Statistical Office, Zomba: Malawi. November, 2017.

Government of Malawi.. (2017b). *Annual Economic Report 2017*. Lilongwe: Malawi

- Government of Malawi .(2018a). *National Seed Policy*. Lilongwe: Malawi.
- Government of Malawi. (2018b). *National Agriculture Investment Plan*. Ministry of Agriculture, Irrigation and Water Development, Lilongwe: Malawi
- Government of Malawi. (2019b). *Draft: Seed Bill, 2019*. Ministry of Justice and Constitutional Affairs, Lilongwe: Malawi
- Government of Malawi. 2020). Ministerial Gazette. *Tobacco Act, 2020*. Lilongwe:
- Mapemba, L. (2019). *End of Project Review of the New Alliance Policy Acceleration Support: Malawi Activity*. Final Evaluation Report Submitted to the Ministry of Agriculture, Irrigation and Water Development.
- Minde, J., Kowero, G., Ngugi, D., & Luhanga, J., (2001) Agricultural Land Expansion And Deforestation in Malawi, *Forests, Trees And Livelihoods*, 11:2, 167-182, Doi: 10.1080/14728028.2001.9752384
- Particip (2016). *Functional Assessment Report*. Core Functional Analysis of the Ministry of Agriculture, Irrigation and Water Development. Republic of Malawi.
- Plecher, H. (2020). *Share of economic sectors ion the GDP in Malawi 2017*. Lilongwe: H Plecher.
- Ragasa, C., Mazunda, J, Kadzamira, M. 2015. *The national extension policy of Malawi – lessons from implementation*. MaSSP Policy Note 23. Washington, D.C.: International Food Policy Research Institute
(IFPRI).<http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/129612>
- Thurlow, J & Benfica, Rui. (2017). *Identifying Priority Value-Chains in Malawi*. Paper presented during NAIP preparation workshop, based on results of the RIPA model.
- World Bank. (2017). *Doing Business 2017: Equal Opportunities for All - Economy Profile 2017 Malawi*.

Appendix A. Suggested Interventions and Implementation Plan

Challenges	Suggested Interventions	Relevant Stakeholders	Implementation Period
Inadequate and/or delayed financing of programs	<ul style="list-style-type: none"> • Align government's funding and allocations to priority programs as set out and approved in the national and sectoral plans. • Ensure the programs are few and prioritized to be accommodated within the government revenue. • Engage parliamentary committee on agriculture and irrigation on sector funding challenges 	Parliament, MoF, MoA	Medium term
Weak monitoring and evaluation systems of agricultural policies	<ul style="list-style-type: none"> • Finalize the development and operationalization of NAMIS within the MoA for efficient and effective monitoring and evaluation policy implementation. • Include monitoring and evaluation frameworks and implementation plans as subsector policies get revised • Orient the parliamentary committee on agriculture and irrigation on their oversight role in policy implementation • Develop an online Policy and Bill Tracking System 	MoA, MoF	Short term
Unreasonable political influence in policy formulation and implementation	<ul style="list-style-type: none"> • Promote and advance long-term national development plans and visions that are implemented through sectoral policies. • Allow technical advisors to substantively contribute to agriculture policy development, as is typical in the health and education sectors of government. • Engage politicians in sectoral policy formulation • Link national budgetary allocations to sectoral policies 	Politicians, OPC, Parliament, MoA, MoF, NPC, Relevant CSOs	Medium-long term
Inadequate and incapacitated regulatory systems	<ul style="list-style-type: none"> • Develop, strengthen and reform regulatory systems and enforcement agents. 	Parliament, MoJCA, All Ministries,	Medium-long term

Challenges	Suggested Interventions	Relevant Stakeholders	Implementation Period
in the agricultural sector	<ul style="list-style-type: none"> Facilitate formulation of supportive legal frameworks for all sector policies 	Academia, Relevant CSOs, Private sector	
Lack of coordination among stakeholder in the agricultural sector	<ul style="list-style-type: none"> Consider working with all relevant stakeholders in agriculture sector at national and district levels during policy and program formulation. This includes coordination across Ministries and Departments, other relevant parastatal organizations, academia, all relevant CSOs, private sector, and representative farmers at all scale of operation. Strengthen sectoral technical working groups at national and district levels 	OPC, MoF, MoA, All Ministries, Academia, Parastatals, Relevant CSOs, Private Sector, Farmers	Medium-long term
Negative climate change effects and natural disasters	<ul style="list-style-type: none"> Enhance policies that promote the agricultural sector's resilience to adverse climate change effects and inclusion of risk management. Jointly design and implement programs with EAD and DoDMA 	MoA, EAD, CISANET, FUM, NASFAM, CEPA	Medium term
Lack of or poor infrastructure	<ul style="list-style-type: none"> Facilitate government and private sector investment in roads, bridges, markets, internet and telecommunication infrastructure. 	OPC, MoF, Private Sector	Medium-long term
Fragile organizational and individual capacity	<ul style="list-style-type: none"> Retain trained staff and maintain them in relevant Government Ministries, departments Support on job and external training 	MoA	Short-medium term
Dependency on external funding for policy formulation and implementation	<ul style="list-style-type: none"> Take lead in financing formulation and reform of national and sectoral policies, to enhance policy ownership among national stakeholders. Allocate funding for sectoral policy processes Develop sectoral visions and strategic plans and only invite DPs to support already defined visions 	MoF, OPC, MoA, DPs	Short-medium term

Challenges	Suggested Interventions	Relevant Stakeholders	Implementation Period
Low literacy and knowledge levels to successfully translate and implement policies	<ul style="list-style-type: none"> • Develop and/or improve adult literacy programs among smallholder farmers in rural areas. • Integrate adult literacy in agricultural extension programs 	Parliament, MoF, MoEST, Academia, Relevant CSOs, Private sector	Medium-long term
Poor/incomplete policy formulation	<ul style="list-style-type: none"> • Support stakeholder consultations in policy processes • Develop policy implementation plans and monitoring and evaluation frameworks as policies get revised or new policies get developed 	OPC, MoA, Academia, CSOs, Private sector, Farmers	Medium-long term

Appendix B. Suggested Interventions and implementation plan to surmount program implementation challenges

Challenges	Suggested Interventions	Relevant Stakeholders	Implementation Period
Inadequate extension staff	<ul style="list-style-type: none"> • Formulate and implement an agricultural human resource plan together with a vibrant resource mobilization plan to fill in vacancies. Most importantly, offering attractive remuneration, transportation, timely promotions and employment perks to extension workers. • Consider ICT-based extension methods. • Strengthen and expand lead farmer extension approaches with regulated incentives. 	MoA, MoF, DHRMD, DPs, MoLSI, CSOs	Medium term
Predominantly thin and informal commodity markets	<ul style="list-style-type: none"> • Develop structured commodity markets for smallholder produce. Strengthen and improve market structures and arrangements that encourage market-oriented farming practices among smallholder farmers so that farm production targets regional and international markets. 	MoA, MoF, MoCECT, MoITT, Private Sector, ADMARC, MoJCA, Relevant NGOs	Short-medium term
Limited access to finance	<ul style="list-style-type: none"> • Encourage formation of market-oriented farmer organizations to increase the chance of accessing finance due to group collateral. 	MoA, DPs, NGOs, Private sector, Academia	Short-medium term
Transition without transformation is killing Malawian agribusinesses	<ul style="list-style-type: none"> • Review and revise SCA, AGPA and COGA to reflect the current economic paradigm. 	OPC, MoA, MoJCA	Medium term
Unfavorable enabling environment for doing business in agriculture	<ul style="list-style-type: none"> • Continue efforts to streamline the procedures of starting a business in Malawi and implement policy reforms more efficient processes. 	OPC, MoF, MoITT, MRA, MCCCI	Short-medium term

Challenges	Suggested Interventions	Relevant Stakeholders	Implementation Period
Absence of mechanisms to adjust projects/programs during implementation	<ul style="list-style-type: none"> • Engage with DPs to allow flexibility of adjustments during program implementation prior to MTR once a problem that may hinder effective implementation has been identified. 	MoF, OPC, MoA, DPs, All Ministries	Short-medium term