



Malawi Government

# National Agricultural Investment Plan (NAIP)



*Prioritised and Coordinated Agricultural Transformation Plan for Malawi:  
FY 2017/18-2022/23*

January 2018



# **National Agricultural Investment Plan (NAIP)**

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Ministry of Agriculture, Irrigation and Water Development  
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Malawi

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#### Exchange Rate

USD 1.00 = Malawi Kwacha (MWK) 720





# List of Acronyms

ADD	Agriculture Development Division
ADMARC	Agricultural Development and Marketing Corporation
AEDO	Agriculture Extension Development Officer
AgPER	Agricultural Sector Public Expenditure Review
APES	Agricultural Production Estimate Survey
ASP	Area Stakeholder Panel
ASWAp	Agricultural Sector-Wide Approach
ASWG	Agricultural Sector Working Group
AU	African Union
CAADP	Comprehensive Africa Agriculture Development Program
CAETS	Controller of Agricultural Extension and Technical Services
CAP-F	Country Agribusiness Partnership Framework
CAS	Controller of Agricultural Services and Institutions
CCA	Country Cooperative Agreement
CFA	Core Functional Analysis
CGE	Computable General Equilibrium
CGIAR	Consultative Group on International Agricultural Research
CISANET	Civil Society Agriculture Network
COMESA	Common Market for Eastern and Southern Africa
CONGOMA	Council for Non-Governmental Organizations in Malawi
CSO	Civil Society Organisation
DADO	District Agricultural Development Officer
DAECC	District Agriculture Extension Coordinating Committee
DAES	Department of Agriculture Extension Services
DAHLD	Department of Animal Health and Livestock Development
DAPS	Department of Agricultural Planning Services
DARS	Department of Agricultural Research Services
DCAFS	Donor Committee in Agriculture and Food Security
DCG	Development Cooperation Group
DEC	District Executive Committee
DP	Development Partner
DSP	District Stakeholder Panel
EIF	Enhanced Integrated Framework
EMC	Executive Management Committee
EPA	Extension Planning Area
FAO	Food and Agriculture Organisation
FISP	Farm Input Subsidy Program
FNS	Food and Nutrition Security
FO	Farmer Organisation
FUM	Farmers Union of Malawi
GA	Grow Africa

GAPs	Good Agricultural Practices
GBA	Green Belt Authority
GBI	Green Belt Initiative
GEF	Global Environment Facility
GoM	Government of Malawi
HACCP	Hazard Analysis Critical Control Point
HLF	High Level Forum
IA	Intervention Area
ICT	Information and Communications Technology
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
INDC	Intended Nationally Determined Contributions
IO	Intermediate Outcome
IPDM	Integrated Pest and Disease Management
IPM	Integrated Pest Management
JICA	Japan International Cooperation Agency
JSR	Joint Sector Review
LA	Lead Agency
M&E	Monitoring and Evaluation
MBS	Malawi Bureau of Standards
MCCCI	Malawi Confederation of Chambers of Commerce and Industry
MCCIP	Malawi Climate Change Investment Plan
MDTF	Multi-Donor Trust Fund
MGDS	Malawi Growth and Development Strategy
MITC	Malawi Investment and Trade Centre
MNSSP	Malawi National Social Support Program
MoAIWD	Ministry of Agriculture, Irrigation and Water Development
MoEST	Ministry of Education, Science and Technology
MoFAIC	Ministry of Foreign Affairs and International Cooperation
MoFEP&D	Ministry of Finance, Economic Planning and Development
MoGCDSW	Ministry of Gender, Children, Disability and Social Welfare
MoHP	Ministry of Health and Population
MoITT	Ministry of Industry, Trade and Tourism.
MoLGRD	Ministry of Local Government and Rural Development
MoLHUD	Ministry of Lands, Housing and Urban Development
MoLYSMD	Ministry of Labour, Youth, Sports and Manpower Development
MoNREM	Ministry of Natural Resources, Energy and Mining
MoTPW	Ministry of Transport and Public Works
MTEF	Medium-Term Expenditure Framework
MVAC	Malawi Vulnerability Assessment Committee
NAFSN	New Alliance for Food Security and Nutrition
NAIP	National Agricultural Investment Plan
NAMIS	National Agricultural Management Information System
NAP	National Agricultural Policy

NAPA	National Adaptation Program of Action
NAPAS	New Alliance Policy Acceleration Support
NASFAM	National Smallholder Farmers Association of Malawi
NCCIP	National Climate Change Investment Plan
NEPAD	New Partnership for Africa's Development
NES	National Export Strategy
NFRA	National Food Reserve Agency
NGO	Non-Government Organisation
NRP	National Resilience Plan
NSA	Non-State Actor
NSO	National Statistics Office
NSSP	National Social Support Policy
ODA	Official Development Assistance
OPC	Office of the President and Cabinet
ORT	Other Recurrent Transaction
PAF	Performance Assessment Framework
PBB	Program-Based Budgeting
PIU	Project/Program Implementation Unit
PPA	Policy Priority Area
PPP	Public-Private Partnership
PRAI	Principles of Responsible Agricultural Investment
PS	Principal Secretary
RBM	Reserve Bank of Malawi
SACCO	Savings and Credit Cooperative
SADC	Southern African Development Community
SDGs	Sustainable Development Goals
SGR	Strategic Grain Reserve
SME	Small and Medium Enterprise
SMT	Senior Management Team
TA	Technical Assistance
TIP-SWAp	Trade, Industry and Private Sector Development, Sector Wide Approach
TWG	Technical Working Group
UNDP	United Nations Development Program
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
VAC	Village Agricultural Committee
WB	World Bank
WFP	World Food Program
WTO	World Trade Organisation
WUA	Water User Association



HIS EXCELLENCY

**PROF. ARTHUR PETER MUTHARIKA**  
PRESIDENT OF THE REPUBLIC OF MALAWI

# FOREWORD



The Malawi Government places highest priority on the agriculture sector due to its critical contributions towards socio-economic development and livelihoods of the population. Government recently (2016) developed the National Agriculture Policy (NAP) to provide clear and comprehensive policy guidance in agriculture development. The policy provides clear direction and guides all players towards addressing challenges in the agriculture sector and increasing production, productivity and farm incomes. The NAP has been aligned to Malawi's Vision 2020 and the Malawi Growth and Development Strategy III, which are the overarching long-term and medium-term development strategies, respectively. This policy sets out the agricultural transformation agenda by providing guidance through a process by which individual farm households shift their agricultural related activities from subsistence-oriented towards more specialized and market-oriented production.

The Government has consequently prepared the National Agriculture Investment Plan (NAIP) to operationalize the NAP by guiding investment focus in the sector to accelerate agriculture transformation, economic growth and poverty reduction. The NAIP is second generation framework under CAADP and is aligned to the African Union Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods. It is also aligned to the global Sustainable Development Goals (SDGs), a global agenda for inclusive and equitable growth and several other International and Regional Policy Frameworks. Due to the nature of the commitments in the Malabo Declaration and the SDGs, the NAIP will require close collaboration at the level of implementation with key policies and strategies in other key sectors.

Successful implementation of the NAIP will entail close coordination and collaboration between stakeholders and proper harmonization of investments and alignment of programming. Government is committed to provide leadership and coordination in the implementation of this investment plan and will facilitate other stakeholder participation. I therefore urge all stakeholders including farmers and development partners, civil society and private sector to cooperate with the government in driving the NAIP agenda forward. Fellow development players, I earnestly appeal to each one of you to shift from treating this NAIP as "Business as Usual" to embracing it as a means of accelerating an agricultural transformation agenda in Malawi.

Together, we can transform agriculture, transform the economy and transform lives.

A handwritten signature in green ink, reading "Arthur Peter Mutharika". The signature is fluid and cursive.

HIS EXCELLENCY PROF. ARTHUR PETER MUTHARIKA  
PRESIDENT OF THE REPUBLIC OF MALAWI



## PREFACE



The National Agriculture Investment Plan (NAIP) is a medium-term investment framework for the agricultural sector to be implemented over a five year period (2017/18- 2022/23). It is the second Malawi NAIP, building on achievements and lessons from its predecessor, the Agriculture Sector Wide Approach (ASWAp) which was implemented between 2010/11 and 2014/15. The NAIP like its predecessor, is aligned to the Comprehensive Africa Agriculture Development Program (CAADP) and the African Union Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods. It is also aligned to the national development policy blue print, the Malawi Growth and Development Strategy (MGDS III) and serves as the main implementation vehicle for the 2016 National Agriculture Policy (NAP).

NAP is linked to policy and strategic frameworks in adjacent sectors like trade, nutrition, resilience, climate change, lands etc. Following its linkage to the Malabo Declaration, MGDS III, the NAP and other sector policies, its implementation goes beyond the mandate of the Ministry of Agriculture, Irrigation and Water Development (MoAIWD) and requires the commitments, inputs and strategic partnerships of several other ministries, along with Non State Actors (NSAs) including the private sector. The NAIP implementation, therefore, will involve coordination of a broad range of players including: Government; Non State Actors (NSAs) such as Non-Governmental Organisations (NGOs) and Civil Society Organisations (CSOs), the private sector (including farmers, farmer organisations and private sector companies), research and academia, and Development Partners (DPs).

The NAIP development process involved extensive consultative process of all key sector stakeholders at various levels including: Government and its agencies, civil society, farmers' organizations, private sector and development partners. The NAIP has also gone through a number of validation meetings within government and wider stakeholders and, therefore, it contains common agreed sector priorities, targets and investments aspirations. It is my strong belief, therefore, that the same commitment spirit and collective effort demonstrated during the preparation of the NAIP will be extended to its implementation.

While Government is committed on its part to financing and implementing this NAIP, I wish to appeal to all stakeholders: the Development Partners, Farmers, Farmer Organizations, Civil Society and Non-Governmental Organizations and Private Sector to harmonize and align their programming to the objectives of the NAIP and wider government development objectives. Furthermore, I would like to appeal for enhanced and coordinated tracking of results to NAIP targets and indicators.

Government is committed to providing leadership and coordination to the NAIP implementation and would like to ask all players to work with and support the established institutional structures of the NAIP. This among others require mutual accountability by all players with regard to resource inputs, alignment to priorities, and more importantly results of our efforts.

May God bless Malawi.

Hon. Joseph M. Mwanamvekha, MP

**MINISTER OF AGRICULTURE, IRRIGATION AND WATER DEVELOPMENT**





# ACKNOWLEDGEMENTS



The Ministry of Agriculture Irrigation and Water Development (MoAIWD) provided central leadership in the formulation of the NAIP. A number of individuals and organizations were engaged and involved in the process in one way or another. The Ministry therefore wishes to express its appreciation to all of them for their dedication and commitment to this exercise

The Ministry wishes to single out the following:

- Food and Agriculture Organization of the United Nations for technical support: The FAO Country Representative Ms. Florence Rolle is commended for facilitating mobilization of the expert team from the FAO Investment Centre, led by Ms. Linny Kaspersen, Mr. Frank Hollinger and a team of national consultants.
- The Government of Germany for the financial support through the Enhanced Capacities for Effective Mobilization and use of Resources for Food Security & Nutrition Projects implemented by FAO. This included various stakeholder workshops, Government planning and coordination meetings, and the mobilization of FAO Technical Expert and consultants.
- The Department of planning, (MoAIWD), under the leadership of Mr. Alex Namaona for the facilitation and secretariat roles;
- The ASWAp Secretariat, MoAIWD, under the leadership of Nelson Mataka for guiding the Technical Team.
- Mr. Readwell Musopole, Deputy Director, Department of Planning, MoAIWD for the overall coordination of the exercise.
- The Technical Team which comprised all Technical Departments in the MoAIWD, other Government ministries and Departments, Development Partners, Farmers Organizations, Civil Society and Private Sector.
- All Directors, Programme Managers and DADOs for their expert input during the focused consultations.
- IFPRI and NAPAS team for their technical input on value chain studies and logistical support during the final editing of the NAIP.
- The AUC Independent Technical Team of reviewers led by Dr. Greenwell Matchaya.
- The Director of Agriculture Extension Dr. Jerome Nkhoma and his team for final editing, design and printing the document.

The spirit demonstrated at the time of the NAIP preparation can only be wished to be extended during implementation and the result will be successful delivery of the investment plan.

A handwritten signature in black ink, appearing to read 'Gray S.V.K. Nyandule - Phiri'. The signature is stylized and fluid, with a large loop at the beginning.

Gray S.V.K. Nyandule - Phiri

**SECRETARY FOR AGRICULTURE, IRRIGATION AND WATER DEVELOPMENT**



# Executive Summary

The National Agriculture Investment Plan (NAIP) is the framework guiding investment in Malawi's agricultural sector over the next five years. Its policy foundations are mainly the Malawi Growth and Development Strategy (MGDS), the National Agricultural Policy (NAP), the CAADP Compact and the Malabo Declaration.

The NAIP succeeds and builds on the achievements and lessons learned under the Agricultural Sector-Wide Approach (ASWAp). Whilst the Ministry of Agriculture, Irrigation and Water Development (MoAIWD) will be the lead implementing agency for the NAIP, other ministries, departments and agencies play important roles. The NAIP provides a framework to coordinate and prioritise investments by government agencies, development partners, civil society, farmer organizations and the private sector.

The NAIP focuses on public investments, while recognising that agricultural growth must be driven by investments of private actors. It therefore, supports critical policy, legal and regulatory reforms and will strengthen public institutions to fulfil their mandates. It further provides a framework for effective coordination within the public sector and between the public and private sectors.

The NAIP departs from its predecessor (the ASWAp), by adopting a matrix structure comprising four Programs and 16 Intervention Areas (IAs). The four Programs, their objectives and estimated costs (USD millions) are:

Program	Objective	USD m
A. Policies, institutions and coordination	To improve policy and regulatory environment , stakeholder coordination and accountability	372
B. Resilient livelihoods and agricultural systems	To strengthen resilience of livelihoods and natural resource base for agriculture.	925
C. Production and productivity	To increase production and productivity of a more diversified agricultural sector	994
D. Markets, value addition, trade and finance	To enhance market access, value addition, trade, and access to finance	927
<b>Total Cost USD millions</b>		<b>3,218</b>

The 16 IAs cluster activities in technical areas that are needed to achieve the objectives of the NAIP. The IAs cut across the four Programs, with each IA contributing to more than one Program. The table below presents the intervention area, the corresponding outcome and budget.

Intervention Area	Outcome	USD m
1. Policy, Program and Stakeholder Coordination	Effective mechanisms for multi-sectoral and multi-stakeholder coordination to support Program implementation and M&E introduced	182
2. Farmer Organisations	Strengthened performance and outreach of farmer organisations	16
3. Public agricultural services delivery	Strengthened MoAIWD's capacity to provide Relevant, market-oriented agricultural extension services	93
4. Food and Nutrition Security	Available diversified and nutritious foods consumed	209
5. Food safety and quality	Food safety and quality standards established and mainstreamed	11
6. Empowerment and tenure security	Empowered Women and youth and enhanced land tenure security	33

<b>Intervention Area</b>	<b>Outcome</b>	<b>USD m</b>
7. Disaster risk management	Strengthened Capacity to manage disasters and reduce their impact	413
8. Pest and disease management	Major pests and diseases controlled and major outbreaks managed effectively	232
9. Agricultural innovation systems	Demand-driven, pluralistic innovation systems for relevant technologies generated and disseminated	432
10. Access to inputs	broader range of quality inputs at reasonable costs timely accessed by farmers	361
11. Natural resource management and Climate Change	Sustainably managed natural resources and enhanced climate resilience of production systems	65
12. Irrigation development	Sustainably increased use of irrigation (increased use of sustainable irrigation?)	396
13. Mechanisation	Improved access to and use of mechanisation services	55
14. Agricultural markets and trade	Enhanced efficiency and inclusiveness of agricultural markets and trade	522
15. Investments in agribusiness	Increased agro-processing, value addition and investments into the domestic markets	168
16. Access to financial services	Improved access to agricultural finance by all target groups	31
<b>Total Cost USD millions</b>		<b>3,219</b>

The NAIP will build on funding mechanisms as was in the ASWAp and continue to move towards Program based approach and away from the project-based approach. The Development Partners have committed to provide harmonised support as part of a transition from short-term project financing to coordinated financing of the investment Program, making greater use of government systems. Several different financing scenarios are considered. The USD 3.219 billion cost of the NAIP is expected to be financed mainly from Government, the development partners and the private sector (under PPP arrangements). However, despite the available funding commitments, indications are that there is a funding gap of around USD 330-780 million, which is 10-24% of the total cost.

MoAIWD as the lead agency will be responsible for overall implementation of the plan, policy guidance, sectoral planning, coordination and M&E. However, other ministries, parastatals, and non-state actors will also have important roles to play. These roles will be performed within a well-defined framework for governance, management and coordination. The NAIP will be implemented within the government wide and sector specific decentralization framework taking into account the recommendations of the recent Core Function Analysis in MoAIWD. The Executive Management Committee (EMC) will act as the overall governing body of the NAIP while the NAIP Secretariat in the Planning Department shall provide overall coordination of the NAIP. The Plan defines the detailed coordination arrangements to be used within MoAIWD and between MoAIWD and the other participating ministries and agencies, non-state actors and the private sector.

To effectively monitor the NAIP, a robust Monitoring and Evaluation framework will be implemented. Specifically, the National Agriculture Management Information System shall be implemented to provide real time data for efficient decision making.

## Chapter 1: Introduction

### 1.1 Background

1. Malawi is endowed with land suitable for both rain-fed and irrigated agriculture. However, the agricultural sector operates far below its potential and the country faces periodic food shortages. Agriculture is critical for achieving national objectives such as broad-based growth, poverty reduction, food and nutrition security, resilience, climate change adaptation and trade development. A targeted and well-balanced portfolio of investments in the sector is key for achieving these objectives

### 1.2 Purpose of the NAIP

2. The National Agricultural Investment Plan (NAIP) is the medium-term investment framework for the agricultural sector covering a five-year period (FY2017/ 2018- FY2022/2023). The NAIP provides a framework to coordinate and prioritise investments by various government agencies, Development Partners (DPs) and Non State Actors (NSA) in the sector. It is the successor framework , built on achievements and lessons learned under, the Agricultural Sector Wide Approach (ASWAp), which was implemented from 2011/2012 to 2015/2016 financial years. In particular, the NAIP is guided by the Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods signed by the Heads of State in June 2014. NAIP is the main implementation vehicle for the National Agriculture Policy (NAP) and as such, it places emphasis on strengthening implementation capacities and coordination of various actors involved in its implementation. This includes alignment with related policies and investment frameworks in areas such as trade, resilience, climate change, nutrition and social protection; and also improved coordination within the agricultural sector as well as strengthening the prominent role of NSAs and the private sector. Whilst the Ministry of Agriculture, Irrigation and Water Development (MoAIWD) will be the lead implementing agency, other ministries will also play important roles in its implementation.
3. The NAIP focuses on public investments, while recognising that broad-based agricultural growth must be driven by investments of private actors, ranging from smallholder farmers to companies engaged in input supply, production and value addition. The NAIP recognises that willingness of these actors to invest depends on an enabling policy and investment environment. As such, the framework supports critical policy, legal and regulatory reforms. It will, therefore, strengthen public institutions to fulfil their mandates for services and public investments. The NAIP also creates appropriate coordination mechanisms within the public sector and between the public and private sectors, including farmers and NSAs. While private investments are critical to the success of the NAIP, they are very difficult to plan and budget over a five-year period in a volatile and diverse sector such as agriculture, and any such attempts would be highly speculative. Hence, private investments are only included in the NAIP budget and results framework to the extent in which they co-finance public investments and service provision under the plan, except for a few cases where clear private sector investment commitments do exist.
4. The NAIP ensures that sectoral growth is inclusive, environmentally sustainable and climate-smart. This requires close coordination across related policy areas, such as social protection, gender, youth, environment, climate change, nutrition and health in order to maximise synergies. The NAIP will therefore, supports well-coordinated investments at the boundaries between agriculture and other sectors, where this is necessary to achieve its objectives.

### 1.3 Development of the NAIP

5. The NAIP has been developed through an extensive consultative and participatory process involving all key stakeholder groups. The process sufficiently built on lessons from terminal review of the predecessor investment framework (ASWAp), taking into account achievements made and recommendations going forward. The consultations were organized with different constituent groups such as technical departments of the Ministry of Agriculture, Irrigation and Water Development, other line Ministries, Private Sector as well as Civil Society Organisation. Consultations were aimed at prioritizing and quantifying proposed interventions, costing, financial flows mapping and identifying value chains. Consequently, the budget was contributed by a range of stakeholders (i.e. MoAIWD technical departments, MoITT and MoLHUD).
6. The NAIP development process was facilitated with financial and technical support from the Food and Agriculture Organization of the United Nations working closely with the Technical Team comprising of MoAIWD, representatives of other ministries, civil society, farmers' organizations and the private sector. The start of the formulation process coincided with the launch of the domestication exercise of the Malabo Declaration. This was crucial as the NAIP is the delivery mechanism of the continental aspirations as well as the newly approved National Agriculture Policy. To ensure that the NAIP is well informed by all subsector processes and also that it optimizes various technical inputs, different stakeholders were consulted and contributed their inputs towards various sections of the document. Just to mention a few, NAPAS Malawi<sup>1</sup> conducted value chain studies and computable general equilibrium (CGE) modelling and Donor group contributed to the portfolio analysis of donor supported projects as captured in the database. Following production of the draft NAIP, a validation workshop was held, which provided an opportunity for various stakeholders to authenticate the plan. It was critical in order to strengthening ownership, accountability and cultivating strong commitment to the NAIP implementation.

### 1.4 Structure of the Document

7. The rest of the document is structured as follows: Chapter 2 provides an overview of the country context including the agricultural sector, its recent performance and the key policies, implementation frameworks and actors. Chapter 3 is a detailed description of the NAIP. It first introduces the NAIP scope, objectives and expected results; supported by a narrative on the rationale (theory of change); as well as NAIP Programs and Interventions Areas. It then describes the Programs and IAs in detail including their focus, expected outcomes and outputs. Chapter 4 presents the aggregate NAIP budget organised by Program, IA, year, and budget classifiers. It is supported by a detailed budget file which visualises the budget from different angles. Chapter 5 describes the implementation arrangements including the governance structures, management and coordination. Finally chapter 6 discusses alignment and mutual accountability mechanisms. The document also includes a number of Annexes as follows:
  - Annex 1 provides a detailed overview of the NAIP in tabular form including the high-level results framework, and the outputs organised by Program and Intervention Area.
  - Annex 2 contains the impact and outcome indicators and related targets.
  - Annexes 3 and 4 provide the detailed budget by Intervention Area and Program.
  - Annex 5 provides an overview of donor financing for agricultural sector development.
  - Annex 6 provides a review of the policy and institutional framework.
  - Annex 7 describes the process of prioritising value chains.
  - Annex 8 provides a list of the organisations that participated in the consultations for formulation of the NAIP.
  - Annex 9 provides a list of references.

<sup>1</sup>New Alliance Policy Acceleration Support implemented by Michigan State University (MSU) in collaboration with International Food Policy Research Institute (IFPRI).

## Chapter 2: Country and Sector Context

### 2.1 Overview

8. Malawi is one of the most densely populated countries in the world, with 178 persons per square kilometre of land, and 85% of the population living in rural areas. The majority of the country's 16.8 million people live in the Central and Southern Regions (42%, and 45%) respectively (NSO, 2008). Malawi's population is young, with 46% below 15 years of age, resulting in a youth bulge entering the labour market within the next decade. The UNDP Human Development Index<sup>2</sup> of 2015 ranks Malawi 170th out of 188 countries, with an improvement of only one position in the rankings since 2010. According to the Integrated Household Survey (IHS3) of 2010/11, only 49% of the population was above the national poverty line and only 58% of the population was food secure. Poverty prevalence and severity is higher in the densely populated regions, especially in the South, in the extreme North, and areas along the lake shore (Mkandawire, 2015). Poverty is mainly rural, with 57% of persons in rural areas below the poverty line, against 17% in urban areas. The depth of poverty measured by the poverty gap index was also higher in rural than in urban areas (19.2% versus 7.1%, respectively)<sup>3</sup>, with 28% of the rural population categorised as ultra-poor.
9. Malawi's recent performance on key development indicators shows a mixed picture. While economic growth averaged 4.3% between 2000 and 2014, annual population growth rates of 3.1% reduced GDP growth per capita to 1.3% on average. Progress has been made on other indicators such as prevalence of vitamin A deficiency disorders that has reduced from 22% to 4%, increased access to primary education and infrastructure development. Despite this notable progress, levels of poverty and food insecurity have remained high and deteriorated with recent droughts. Approximately 70% of the population is still below the international poverty line (USD 1.90/day in 2011 PPP prices), down from 74% in 2004/05<sup>4</sup>. Food insecurity has worsened in recent years. In 2013, 84% of poor rural households were classified as food insecure, against 67% in 2010. Progress on nutrition varies among indicators: while stunting rates have fallen strongly from 47% in 2010/11 to 37% in 2015/16, the number of underweight children has only slightly decreased from 13% to 12% during the same period (NSO, 2017). Wasting of children under five is below the Malabo target for 2025 of 5%. The National Multisectoral Nutrition Policy also highlights micronutrient deficiency and underweight in women as major concerns.
10. Malawi is ranked 110th out of 190 on the World Bank's Ease of Doing Business Index, a major improvement from 2016, when she was ranked 133. This improvement is mainly attributable to progress made on three indicators: access to credit, access to electricity, and ease of starting a business. The country scores relatively high on indicators related to construction permits (55), registering property (95) and paying taxes (102). Ratings are lowest on starting a business (150) and generating electricity (169) despite improvement in the indicators as well as on resolving insolvency (162). Malawi's ranking in the Enabling the Business of Agriculture index compiled by the World Bank is 35 out of 62 countries. The index includes eight parameters: seed, fertiliser, machinery, finance, markets, transport, water and ICT. Malawi's ranking is weighed down by poor scores on access to seed, fertiliser and ICT services. Issues related to seed and fertiliser

<sup>2</sup> The **Human Development Index** (HDI) is a composite statistic of life expectancy, education, and income per capita indicators, which are used to rank countries into four tiers of human development. A country scores higher HDI when the life expectancy at birth is longer, the education period is longer, and the income per capita is higher

<sup>3</sup> Poverty gap is the average consumption shortfall of the population relative to the poverty line.

<sup>4</sup> Projections based on IHS 3 data.

registration process stand out, as Malawi has the most expensive (Across the 62 countries sampled, the average cost to register a new fertilizer product is 171.7% of income per capita, and it is most expensive in Malawi (totalling 3030.5% of income per capita) and lengthiest fertiliser registration process of all 62 countries (913 days). Registering and releasing new seed varieties takes 579 days on average .

11. Despite recent improvements, access to finance remains a key constraint facing small firms and farmers. High interest rates, demanding collateral requirements and complex loan application procedures are the main access barriers. The second most important constraint relates to the high cost and unreliable electricity supply, especially in rural areas which undermines the development of agro-processing, cold storage and communications. For private sector development, access to land, fair and transparent market interventions, including import and export regulations, remain challenges, along with high transportation costs.

## 2.2 The Agricultural Sector

12. Agriculture remains the backbone of the economy and vital for the livelihoods of most Malawians including national food self-sufficiency and household food and nutrition security. Agriculture generated approximately 28% of GDP, 65% of employment, and 63% of export earnings in 2015, and is even more important if forward and backward linkages are factored in. Considering the linkages of agricultural production and processing with input supply, trade and transport service, the broader Agri-food system contributes 44% to GDP and generates 74% of employment<sup>5</sup>. Agriculture is also critical for Malawi's trade. While balance of trade for agricultural products is positive, the country faces a large overall trade deficit importing more than twice of its exports. The main agricultural exports include tobacco followed by sugar, tea, coffee and cotton. In turn, agricultural products only accounted for 10% of total merchandise imports in 2015.
13. Crops dominate the agricultural sector, accounting for 17% of GDP in 2014 followed by forestry (9%). The country's most significant agricultural commodities are maize, cassava, potato, peas, beans, rice, groundnuts, bananas, tobacco, and sugar, which together account for approximately 80% of Malawi's agricultural production value. Livestock and fisheries sub-sectors are comparatively small, contributing 3% and 1% to national GDP and 10%, and 4% to agricultural GDP, respectively. However, their share in employment generation is much higher than their contribution to national GDP, and they are important sources of food and nutrition security.
14. Crop production is concentrated on one main food crop (maize) and one main cash crop (tobacco). Maize is by far the most dominant crop grown by almost every farmer in Malawi and accounting for about 50% of the entire planted area. As the main source of food, maize has been at the centre of agricultural policies and public expenditures for decades. At the same time, the maize-centred approach to food security has contributed to a limited dietary diversity at household and national levels such that only 25% of the population are able to meet the dietary diversity. Regarding livestock, around 4.5 million farmers are rearing different types of livestock with an average of 1.4 Tropical Livestock Units per household.
15. Tobacco has been the major cash and export crop since the 1980s, accounting for between a quarter and a half of Malawi's exports. Initially restricted to estates, smallholder production now accounts for 95% of the total production. Under the Integrated Production System production, buyers provide finance, inputs and extension services to farmers. However, given the long term negative market trend of tobacco, efforts are underway to promote diversification into food and other cash crops, as well as steps into value addition.

<sup>5</sup>Computations based on the RIPA model developed by IFPRI and IFAD based on a Social Accounting Matrix and household survey data, 2017.



16. The dominance of maize and tobacco renders the country vulnerable to production and market risks related to these two commodities, hence, diversification of production and exports has become a priority. The other food crops apart from maize are cassava, sweet potato, Irish potatoes, groundnuts, beans, pigeon peas, cow peas, rice, and a range of vegetables. Other cash crops include sugarcane, cotton, coffee, tea, macadamia nuts, soybeans, other oilseeds and chillies. Together, maize, potatoes and cassava account for two thirds of the caloric intake.
17. Despite the high dependence of the economy on agriculture, commercialisation of the sector is limited. Overall, it is characterised by low productivity, low levels of improved farm input use, limited private investment, and low mechanisation levels. The average added value per agricultural worker during 2005-12 amounted to USD 209, far below the Sub-Saharan average of USD 680.
18. Historically, Malawi had a dual agricultural structure: the smallholder sub-sector farming on communal land, and the estate sub-sector farming on leasehold and freehold land. The major proportion of estate subsector was created after independence when a million hectares were converted into leasehold and transferred to commercial farmers. On the other hand, there are about 2.6 million farmers on 3.3 million hectares under customary tenure. Reliable current data on land size distribution does not exist, as the latest agricultural census was conducted in 2006. However, recent studies suggest that larger farm sizes are often not associated with higher production and productivity. While larger farms and estates use modern inputs more frequently, the ratio of cultivated land area to total land holding size declines as farm size increases. Only 15% of land owned by estates was cultivated in 2006.

### 2.3 Natural Resource Degradation and Climate Change

19. Agriculture is increasingly vulnerable to natural shocks and this is worsened with climate change. High population growth compared to available cultivable land has led to increased pressure on land and other natural resources resulting in increased land fragmentation, degradation and deforestation. Agricultural practices are inadequately adapted to intensive land use and weather extremes. Loss of topsoil from agricultural land is substantial, largely because of inappropriate soil management practices. Climate change induced extreme weather events such as droughts and floods are increasingly affecting agricultural production and rural livelihoods. The country experienced consecutive severe droughts in 2014/15 and 2015/16, and floods in 2015/16. High rates of rural poverty mean that climatic shocks often have devastating and long-lasting impacts on the livelihoods of smallholder farmers. While on average, 1.5 million people required humanitarian support during the past five years, the number sharply increased to 6.8 million during 2016/17<sup>6</sup>.
20. Climate change is expected to increase temperatures by 1.1-3.0°C by the 2060s, and the intensity of dry and wet seasons will increase resulting in longer dry spells and more floods. Medium-term climate projections raise concerns for all key agricultural sub-sectors in Malawi. Maize is sensitive to temperature and precipitation change, meaning that most climate scenarios predict decreasing yields. Livestock productivity is likely to be impaired by heat stress, and reduced grazing availability will pose a feed issue if Malawi's wetlands degrade or even dry out under new conditions, as some studies predict. Less frequent yet heavier rainfall is expected to give rise to higher incidences of livestock diseases. Climate change is also anticipated to impact fisheries, increased incidences of drought, changes in surface water temperature as well as pH levels and dissolved oxygen in Malawi's five lakes and river systems.
21. The vulnerability of agricultural production to climate risks is exacerbated by the reliance on rain fed farming. While the country registers good rainfall levels in average years, and has substantial surface water resources, only about 107,000 hectares are currently developed for irrigation farming. This is about a quarter of the potential irrigable area identified in the Irrigation Master Plan. Slightly more than half of the irrigated land is cultivated by smallholders.

<sup>6</sup> Based on data from the Malawi Vulnerability Assessment Committee (MVAC).

## 2.4 Rural Livelihoods, Gender and Youth

22. Around 11 million Malawians live in rural areas, majority of them are poor and depend on agriculture for their livelihoods. Most of these rural households are engaged in subsistence farming, with less than a fifth producing marketable surpluses. This is mainly due to land and labour constraints. Land holdings average 0.8 hectares but 30% of farmers cultivate less than half a hectare. HIV remains one cause of labour constraints, with 7.4% of rural population aged 15-49 being positive. Around 70% of women managing farming plots are widowed, divorced, or separated, and have limited access labour or mechanisation. Most smallholder farmers cultivate customary land using hand tools and minimal inputs and technologies
23. Women represent 52% of the population and play an essential role in the household as food producers and carers, as well as engaging in small-scale trading activities. Over half of the farmers in Malawi (59%) are women. Around 30% of households are female headed and are particularly vulnerable to shocks as most of them do not have assets or savings. Women in Malawi produce up to 80% of the food which fetches low prices due to limited access to markets. Most women have only small plots and often sell labour to those who can afford to hire labour within their communities. . Women also have a wide range of chores in the household. Men play a key role in specific stages of the agricultural cycle such as preparing fields, marketing and deciding how to use income. Rural men tend to have increased involvement in cash crops and casual employment as agricultural labourers.
24. In general, Malawi's female farmers are less productive (by 28 percent on average) compared to their male counterparts. This is so because women frequently have unequal access to key agricultural inputs such as land, labour, knowledge, fertiliser, improved seeds, and mechanization. However, according to "The Cost of the Gender Gap in Agriculture" Malawi stands to gain if women are more involved in the entire agricultural value chain. The report estimates that closing the gender gap would result in a 7.3% increase in crop production, USD 100 million increase in GDP and lift 238,000 people out of poverty.
25. Malawi ranks near the bottom of the UNDP Gender Inequality Index: 173rd of 188 countries ranked. The main dimensions of inequality include: (i) unequal workloads between men and women; (ii) control of productive assets is in the hands of men; (iii) limited participation in household and community decision-making; (iv) lower literacy rates (57% women versus 74% for men); (v) lower access to opportunities and services; and (vi) as the prime victims of gender-based violence. Plots of cultivated land among women-headed households are smaller than those of men. This is consistent with the fact that 57% of women-headed households live under the poverty line.
26. Youth (aged 10-35) constitute over 40% of the population. Custom and tradition entail the submission of youth to parents and other adults. Youth do not generally participate in household or community level decision-making processes and their views are unrepresented in wider societal circles. In rural areas, youth and younger households tend to be poorer than those headed by older adults due to limited access to assets particularly land. This typically leaves youth locked in unpaid or subsistence farming.
27. Youth development and empowerment are priority features of MGDS III, and the National Youth Policy of 2013 aims to stimulate the participation of youth in Malawi's development. The policy recognises the role that youth play in rural development and the pressing need to render agriculture attractive to youth. Policies and programs contributing to rural development are expected to emphasise the need to involve youth for effective gender mainstreaming.

## 2.5 Recent Agricultural Sector Performance

28. Agricultural growth has been highly volatile over the past five years. While growth rates at and above 6% were achieved in 2011, 2013 and 2014, lower or negative growth rates, driven largely by climatic conditions, were registered in other years. The sector was also affected by macroeconomic imbalances. After floating the exchange rate in 2012, the Kwacha depreciated by 50% making exports more competitive but increasing the costs of imports, such as fertilisers. Inflation has been above 20% between 2012 and 2016 but has recently receded significantly to single digit (9.8 percent as at March 2018). Reduced donor budget support triggered increased domestic borrowing and high Treasury bill rates have been crowding out bank lending. Macroeconomic instability has led to interest rates of 35% or more, further constricting growth. Furthermore, some unfavourable economic policies, have restricted private investment in export-oriented agriculture.
29. Overall, commercialisation of the agricultural sector is limited by poor market access, limited infrastructure and weak coordination of most agricultural value chains. However, there are some encouraging developments such as commodity exchanges and warehouse receipt systems (including related legal frameworks about to be enacted). There are also several value chain coordination platforms (cotton, rice, legumes, roots and tubers).
30. **Crops:** Agriculture crop production in Malawi can be categorised into food crops and cash crops. Maize, rice, millet, bananas and roots and tubers are Malawi's food crops while tobacco, tea, sugar, coffee, cotton and grain legumes and oil seeds are the country's cash crops. Maize is the main staple food grown by almost all farmers in Malawi. Its production has substantially increased. For example, maize production has increased from 1.7 million tonnes before 2005 to an average 3.3 million tonnes in 2015/16. This increase is attributed, among others, to the increased use of fertiliser, and use of improved maize seed varieties. Fertiliser use per hectare has increased from 30 to nearly 40 kg. This is largely attributed to the Farm Input Subsidy Program (FISP) providing subsidised seeds and fertiliser to farmers since 2005 – see Box 1. However, maize production has plateaued and remains highly correlated to rainfall patterns. The production has been fluctuating between 2.8 and 4.0 million tonnes since 2008. On the other hand, the country's maize productivity between 2011 and 2016 increased slightly and remained far below the target of 3.3 tonnes/ha. Furthermore, hybrid maize seed use has increased slightly from 41% (2010) to 46% (2014). Whereas, production of cassava has expanded from 4.0 to 4.9 million tonnes from 2010 to 2014, with yields increasing from 17 tonnes/ha in 2000 to 23 tonnes/ha in 2014, following the introduction of new varieties. In addition to household food security, there has been growing commercialisation with fresh cassava being sold into urban market and processing into cassava flour.
31. On cash crops, with exception of few legumes, the production trend has not been impressive over time. Average production over the five years (2013-2017) for groundnuts and beans, for instance, stands at 307,790mt and 185,893mt per year, respectively. On the other hand cotton production has drastically reduced over time. Between 2013 and 2017 it has declined from 158,826mt to 29,545mt. However, in general there has been some progress in crop diversification, alongside tobacco, as the country's main cash crop especially with increasing production of legumes over the period. For example, production of grain legumes has almost doubled, from 0.53 million tonnes in 2010/11 to 1.02 million tonnes in 2014/15. The commercialisation of grain legume production was supported through strengthening of farmer organisations, increased market linkages with processors and exporters, private investments in downstream segments, and increased trading levels on commodity exchanges and use of warehouse receipts. Nevertheless, the seed industry to support this diversification drive is not yet developed.

### Box 1: Farm Input Subsidy Program

Government introduced the Farm Inputs Subsidy Programme (FISP) in 2005 to increase smallholder farmers' access to improved agricultural farm inputs – fertilizers and improved seeds and, therefore, attain food security at household and national levels. FISP has contributed to increased maize production with surpluses in especially years which experienced favourable weather. It has also contributed to yields increases from 0.8mt/ha to 2.1mt/ha; increased utilization of fertilizers from slightly above 100,000mt to over 300,000mt per year; and has contributed to private sector development in the agriculture sector. For instance, there were only 3 seed companies, but to-date have increased to 22. Despite the positive contribution of the program, there is a growing consensus on the need for Government to improve its efficiency and sustainability. On-going FISP reforms include: (i) improvement in targeting of productive poor smallholder farmers; (ii) the increasing involvement of the private sector in input distribution; (iii) Increased farmer contribution to the input; and (iv) the use of FISP as a tool to promote diversification through expansion towards other cereal seeds. These FISP reforms aim at reducing its financial burden in order to free resources for sustainable agriculture investment by the GOM.

The re-orientation of the FISP requires harmonisation with other policies such as social cash transfers in terms of the Unified Beneficiary Registry and other tools. This requires a new targeting approach currently being piloted. The use of the Unified Beneficiary Registry developed under the MNSSP would help to improve targeting efficiency and ensure that various interventions are harmonised. The latter include other interventions under the NAIP, under Program B and IA 6, which target strata of the rural population that will no longer be eligible under the FISP.

Further reforms should consider opportunities to address environmental and soil fertility issues requiring a more holistic approach to soil fertility management. The reform areas should include management practices such as use of organic fertiliser and provision of varied fertilisers depending on soil types and cropping systems; crop rotation and expanding the choice of seeds to include more legumes, cereals and oilseeds crops; and linking FISP eligibility to the adoption of good agricultural practices.

32. **Strategic Grain Reserve (SGR):** The Malawi Government established the SGR under the management of the National Food Reserve Agency (NFRA) to respond effectively to food insecurity and unpredictable shocks. NFRA's objectives at its establishment were; 1) to maintain the SGR; 2) stabilize the grain price; 3) and oversee grain importation and exportation on behalf of the Government of Malawi. It releases maize grain during emergencies for humanitarian support and for price stabilization purposes. It has an institutional set up that includes the SGR and Commercial Maize Committee, whose mandates include recommending and approving release of maize grain for humanitarian support or for commercial purposes. Several years of the SGR's operations have revealed a lack of clear guidelines in terms of procurement, recycling, replenishment rules, and drawdown of grain, among others. This brought about uncertainties which undermined private investments in storage and the use of risk management and financing instruments such as warehouse receipts and, commodity exchanges. Hence, while strategic reserves are an important instrument to cope with disaster-induced food crises, management of such reserves need to be handled more carefully to manage trade-offs with other policy objectives, such as private investments in marketing and storage and the development of market-based risk management instruments. The new SGR guidelines that Government has adopted since December 2016 provide an effective tool for addressing gaps and outline practical rules for procurement, storage and drawdown of grain from the SGR without interruptions.
33. **Livestock:** Though the livestock sub-sector has shown a more positive performance, its growth is relatively slower than the country's demand for livestock products. As such Malawi continues to import meat and meat products. Statistics indicate that the country has about 97 million chickens, 7 million goats and 4 million pigs. This increase is attributed to the pass-on schemes the country is implementing and improved management. The cattle population has doubled to

1.5 million during the ASWAp implementation and includes 80,000 dairy cattle. The latter has led to an increase in milk production supported by improved breeds and advances in animal health. However, per capita milk consumption in Malawi is still one of the lowest in the world at about 4.9 litres per person per year (FAO Stat). The sub-sector has potential to grow and contribute to the economic wellbeing of Malawians and improve nutrition. However, it faces a number of challenges that include high disease prevalence, limited infrastructure development and investment and lack of breeding facilities.

34. **Fisheries:** The fish catch from Lake Malawi has surpassed previous targets of 60,000 tonnes per annum, oscillating between 81,000 and 116,000 tonnes. While this has improved the availability of fish, it exceeds the sustainable yield of the lake fishery. Aquaculture production has almost doubled, from 2,632 tonnes to 4,742 tonnes per year but still remains at a low-level compared to the capture fishery. However, according to FAO the fish supply per capita has steadily dwindled due to high population posing a real threat to food and nutrition security. Some estimates indicate that there is substantial decline in per capita fish consumption in the country, from 14 kg in the late 1990s to about 5.4 kg in 2017. This is the case despite the fact that country is endowed with vast fresh water and suitable land for upland fish production.
35. **Exports:** The value of agricultural exports increased from USD 839 million in 2010 to USD 925 million in 2015, with substantial fluctuations in between. The traditional export crops – tobacco, sugar, tea, coffee and cotton - have shown little dynamism in recent years, with fluctuating production and productivity levels. There has been a strong increase of some non-traditional export crops such as cow peas, macadamia nuts and spices (paprika and chillies). Other crops targeted under the National Export Strategy (NES) such as cotton, soybeans and sugar have not experienced major growth.

## 2.6 The Agricultural Sector Expenditure

36. Public spending in agriculture has traditionally been high in Malawi, averaging 16.3% of the total budget between 2007/8 and 2011/12, far above the CAADP Maputo target of 10%. Public expenditures in agriculture oscillated between USD 250 million and USD 365 million per annum during this period. At ASWAp design, the development budget was calculated at USD 2.2 billion over a four-year period, of which 29% and 17% were to be contributed by GoM and development partners respectively, leaving a funding gap of 54%. At the end of the ASWAp implementation period, USD 1.9 billion had been spent by MoAIWD and DPs that participate in the Donor Committee in Agriculture and Food Security (DCAFS), representing 85% of the identified financing need. GoM spent 52% of this amount and donors 29%, leaving a funding gap of 18% (USD 329 million). Hence, in terms of resource mobilisation and disbursement, the ASWAp was quite successful with average annual spending of almost USD 500 million.
37. Since ASWAp mostly focused on food security, expenditures were highly skewed towards pillar 1, Food Security and Risk Management. The pillar had 72% of the total expenditure under ASWAp and 93% of the GoM contribution. Within this pillar, 61% was spent on sub-Program 1.1 targeting maize production, mainly through the FISP. This left few resources for the other sub-Programs and pillars, with diversification of production receiving 10%, commercialisation 7%, technology generation and dissemination only 4%. Sustainable land management received 9% of resources. Irrigation development as a sub-programme lagged far behind with only USD 96 million spent out of USD 921 million budgeted.

38. ASWAp spending was highly centralised. Only 1% of the funds spent by MoAIWD were transferred to the districts, where most capacity development and extension takes place. This is mainly attributable to the high share of the centrally-managed FISP in the budget including procurement of fertilizers and seeds which were actually used at district level. Moreover, only 4% of MoAIWD's budget was allocated to development activities, with the remaining 96% being recurrent costs, known as Other Recurring Transactions (ORT). This included the FISP and other recurrent expenditures.
39. Some 60% of donor funding for the ASWAp was channelled through MoAIWD and 10% through other public entities, mainly through Project Implementation Units (PIUs). The remainder of donor funding was channelled through NSAs including NGOs/CSOs (18%), research entities (6%), private sector (5%) and UN Agencies (1%). Limited progress was made towards pooled funding, though this was one of the main envisaged implementation modalities. Only 6% of resources were disbursed through the Multi-Donor Trust Fund (MDTF), established in 2014, managed by the World Bank and contributed by several donors. The MDTF was nevertheless catalytic in improving inter-sectoral coordination and providing a predictable flow of funds. Some of the resources were transferred to other Ministries, including the Ministry of Industry, Trade and Tourism (MoITT), the Ministry of Transport and Public Works (MoTPW) through the Roads Funds Administration, and the Ministry of Lands, Housing and Urban Development (MoLHUD).

## 2.7 Policy Context

### International Policy Frameworks

The NAIP has been informed by global, continental and regional policy frameworks. Its targets, therefore, are also aligned to the M&E and results frameworks.

40. Malawi is a signatory to international instruments related to agriculture, including the **Sustainable Development Goals** (2015) and the continental **CAADP Compact**. The CAADP which is Africa's policy framework for agricultural transformation, wealth creation, food and nutrition security as well as inclusive economic growth. It helps to identify sources of pro-poor growth for the agriculture sector, build knowledge management systems and embrace peer review mechanisms to enhance collective responsibility and local ownership. Malawi signed the CAADP compact in 2010, setting the stage for joint sector reviews, budgetary and investment dialogue, and commitments to align, scale up and improve the quality of sector investment.
41. In 2014 African leaders renewed their commitment to the CAADP Compact through the **Malabo Declaration** on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods. The Declaration constitutes a recommitment of African governments to the CAADP process and sets objectives and targets for the second CAADP decade. The Malabo declaration is based on a critical review of the achievements and challenges of the first phase of CAADP commitments, including the first generation NAIPs. The declaration strongly recommends strengthened coordination and alignment of agricultural investment Programs with other adjacent policy areas; with a stronger emphasis on implementation capacity; and a stronger role of the private sector. The Declaration has seven commitments as follows;
- I. Recommitment to the principles and values of the CAADP process;
  - II. Enhancing investment finance in agriculture;
  - III. Ending hunger in Africa by 2025;
  - IV. Halving poverty by the year 2025, through inclusive agricultural growth and transformation;
  - V. Boosting intra-African trade in agricultural commodities and services;
  - VI. Enhancing resilience of livelihoods and production systems to climate variability and other related risks;
  - VII. Mutual accountability to actions and results.

Each commitment has sub-themes with related targets and performance indicators. Countries agreed to a biannual review process to monitor progress towards the 2025 targets. Achieving these targets requires a multi-sectoral approach that involves several ministries. While the agricultural sector and agricultural ministries continue to play a central role, contributions from other sectors such as nutrition, trade, private sector development, natural resource management and social protection are critical in achieving such targets.

42. Malawi is a Party to the **United Nations Framework Convention on Climate Change** (UNFCCC) and the **Paris Climate Agreement** of December 2015. Under these agreements Malawi has made firm commitments to move the country's development pathways towards a green economy based on national circumstances and capabilities. These commitments are defined under Malawi's Intended Nationally Determined Contribution (INDC).
43. The **Enhanced Integrated Framework** (EIF) is a global initiative of WTO which brings together partners and resources to support least developed countries in harnessing trade for poverty reduction, inclusive growth and sustainable development. It provides financial and technical support to build trade capacity in 50 countries including Malawi. The EIF has supported Malawi in identifying and quantifying the trade costs constraining its competitiveness within regional and international markets.
44. Malawi has also joined two Continental Initiatives to foster private investments in Africa: **Grow Africa** (GA) and the **New Alliance for Food Security and Nutrition** (NAFSN). GA is a partnership that was jointly founded in 2011 by the AU, NEPAD and the World Economic Forum. It works to increase private sector investment in agriculture and accelerate the execution and impact of investment commitments. The aim is to enable countries to realise the potential of the agriculture sector for economic growth and job creation, particularly among farmers, women and youth. The NAFSN which was launched in 2012 is a shared commitment to achieve sustained inclusive, agriculture-led growth in Africa. It sets out to: (i) reaffirm continued development partner commitment to reducing poverty and hunger; (ii) accelerate implementation of key components of the CAADP; (iii) leverage the potential of responsible private investment to support development goals; and (iv) help lift 40 million people out of poverty in Africa by 2022. The NAIP is also aligned with the SADC Regional Agricultural Policy (2013) and Regional Agricultural Investment Plan (2016); as well as the COMESA Regional Agricultural Policy and Investment Framework and the COMESA Regional CAADP Compact– see Annex 6.
45. The key role of the private sector in the NAIP is consistent with the Malabo Declaration's invitation for countries to establish a Country Agribusiness Partnership Framework (CAP-F). The CAP-F will identify policy issues and actions to stimulate private agribusiness investment building on GA and the NA.

### National Policies and Strategies

46. Malawi has a very wide range of sectoral and sub-sectoral policies that are relevant to the NAIP, most of which are accompanied by various policy statements, investment frameworks and strategic plans. The most important ones are summarised in Annex 6. The overarching National Development Plan is the **Malawi Growth and Development Strategy**. The third phase (MGDS III) was prepared in parallel with the NAIP and is currently in draft form pending publication. The five priority areas of MGDS III are: (1) Agriculture, Water Development and Climate Change; (2) Education and Skills Development; (3) Transport and ICT infrastructure; (4) Energy, Industry and Tourism Development and (5) Health and Population. Several cross-cutting areas are mainstreamed into the strategy including: gender; youth development; empowerment of persons with disabilities; management of HIV and AIDS and nutrition; environmental management; disaster risk reduction and resilience building; peace, security and good governance. The agricultural content of MGDS III is derived from the National Agricultural Policy which was developed and approved in 2016.

47. The main policy document for the agricultural sector is the **National Agriculture Policy (NAP)** which defines the vision and provides a high-level framework for development of the agricultural sector in Malawi for (2016 - 2020), with MoAIWD as the policy holder. It includes eight Policy Priority Areas (PPAs), subdivided into 54 Policy Statements which are to be implemented through a number of strategies. The Policy intends to achieve sustainable agricultural transformation, expanding incomes for farm households, improved food and nutrition security and increased agricultural exports by creating a conducive environment for development of the sector. The emphasis is on farmer-led agricultural transformation and commercialisation by treating farming as a business, facilitating and harnessing dynamic transitions within farming communities, in particular a transition into non-traditional high-value agricultural value chains, and increased engagement in profitable off-farm and non-agricultural livelihoods. There are also a number of sub-sectoral and thematic strategies and policies (see Annex 6) which are subsidiary to the NAP.
48. Whilst the NAIP is firmly rooted in the national policies for agriculture, it also responds to a number of related policies and strategies in line with its objectives. The alignment of the NAIP with sectoral and related policy frameworks is guided by the need to ensure consistency and coherence and address critical resource gaps in overlapping policy and investment areas. These fall under the mandates of other Ministries and are described in Annex 6. The most important of these are:
- National Trade Policy and the National Export Strategy (NES)
  - Trade, Industry and Private Sector Development, Sector Wide Approach (TIP-SWAp) and the Joint Sector Plan (JSP)
  - National Resilience Plan (NRP)
  - Malawi National Nutrition Policy, 2016-2020, the draft National Nutrition Strategic Plan, 2017-2021 and the draft Agriculture Sector Food and Nutrition Strategy 2017-2021.
  - National Gender Policy
  - Malawi National Social Support Program, Phase II (MNSSP II)
  - Financial Sector Development Strategy and the Financial Inclusion Strategy
  - Decentralisation Policy and the Integrated Rural Development Strategy
  - National Environmental Policy, National Climate Change Policy, and Malawi Climate Change Investment Plan (MCCIP)
  - Malawi National Land Policy

## 2.8 Key Stakeholders

49. Effective implementation of the NAIP requires stronger coordination of all key players in the agriculture sector. These includes: Government and its subsidiaries (parastatals, boards and trusts); non-state actors (NSAs) such as Non-Governmental Organisations (NGOs) and Civil Society Organisations (CSOs); the private sector (including farmers, farmers organisations and private sector companies); Research and Academia; and Development Partners (DPs). The key stakeholders and their main roles are described in Annex 6.
50. As identified in the NAP, the ministries responsible for implementation of the NAIP are:
- Ministry of Agriculture, Irrigation and Water Development (MoAIWD), as the lead ministry
  - Ministry of Industry, Trade and Tourism (MoITT);
  - Ministry of Local Government and Rural Development (MoLGRD);
  - Ministry of Lands, Housing and Urban Development (MoLHUD);



- Ministry of Natural Resources, Energy and Mining (MoNREM),
  - Ministry of Health and Population (MoHP);
  - Ministry of Transport and Public Works (MoTPW)
  - Ministry of Gender, Children, Disability and Social Welfare (MoGCDSW), and
  - Ministry of Finance, Economic Planning and Development (MoFEP&D).
51. Other important ministries though not directly part of NAIP implementation include; Ministry of Foreign Affairs and Internal Corporation, Ministry of Justice and Constitutional Affairs and Ministry of Labour, Youth ,Sports and Manpower Development. Other key stakeholders include the Reserve Bank of Malawi (RBM) and a number of **parastatals, boards and trusts** which are important for development of the agricultural sector and have in some cases substituted for private sector.
52. **Civil Society** is relatively well organised in Malawi. The Council for Non-Governmental Organisations in Malawi (CONGOMA) and the NGO Board are the official registrars, and for the agricultural sector the Civil Society Agriculture Network (CISANET) is active in policy dialogue and Program implementation. They have also lobbied for progressive policies, quality service provision and facilitating access to markets. These organisations have supported multi-stakeholder dialogue structures especially at district level, such as the District Agriculture Extension Coordinating Committees (DAECCs), District Stakeholder Panels (DSPs) and Area Stakeholder Panels (ASPs).
53. The **private sector** is composed of approximately 2.6 million farmers (small and medium-sized), and 30,000 estates, as well as a number of companies engaged along agricultural value chains and related inputs and services. There are a number of large corporates in the sector (both domestic and foreign) of which over 30 have participated in the NAFSN and GA. Private financial institutions such as banks, microfinance institutions and Saving and Credit Corporative (SACCOs) also have a key role to play. Rural (SMEs) such as traders, transporters and agro dealers are often direct market partners of commercialising smallholder farmers and should play an important role in agricultural transformation. However micro, small and medium enterprises in the sector are not very visible and receive little support (the so-called “missing middle”) and this has been addressed in the NAIP.
54. **Farmer Organisations:** The Farmers Union of Malawi (FUM) represents smallholder, medium and larger farmers<sup>7</sup> and The National Smallholder Farmers Association of Malawi (NASFAM) represents commercially-oriented smallholders. In addition to policy and advocacy work, NASFAM provides services to farmers and buys produce through subsidiary processing enterprises. Input suppliers and certain value chain segments are organised in associations (e.g., in dairy, cotton, tea, and tobacco). However, overall organisation of the private agribusiness sector is weak, partially due to the diversity of actors in terms of size and specific interests. While the Malawian Confederation of Chambers of Commerce and Industry (MCCCI) represent the overall private sector interests, the interests of smaller companies remain diluted. Attempts to create a sub-chamber for agriculture have not succeeded yet.
55. Agricultural research is coordinated and undertaken by MoAIWD through the **Department of Agricultural Research Services (DARS)** at its three main research stations as well as sub-stations strategically positioned throughout the country. Much of this work is undertaken in collaboration with CGIAR institutions of which there are normally 4-5 active in the country at any time. Universities also play an important role in agricultural research and human resource development. In the tobacco sector, the **Agricultural Research and Extension Trust** is responsible for conducting research and providing technical and extension services.

<sup>7</sup> Farmers Union of Malawi (FUM) has a total membership of 1,024,843 farmers which consist of 1,024,193 individual smallholder farmers organized into 256 farmer organizations across the country and 650 medium and large-scale farmers. NASFAM represents over 100,000 smallholder farmers.

56. Malawi's **development partners** have supported the ASWAp and are expected to continue their support for agriculture and rural development via the NAIP. The DPs also play an important role in guiding and coordinating the sector. The agricultural sector stands out in terms of donor coordination. The **Donor Committee in Agriculture and Food Security (DCAFS)** aims to deepen dialogue, coordination and cooperation among development partners, and between these and the Government in relation to agriculture and food security, with a view to strengthening the quality of partnership and effectively supporting the NAP, Malabo, CAADP and related strategies. The DCAFS consists of resident bilateral and multilateral donors as well as UN agencies. The group provides harmonised and coordinated input to MoAIWD and maintains a database of all donor projects in the agricultural sector. The group is professionally managed through contributions from each of the resident donors and meets on a regular basis. The leadership is organised as a troika comprising the current, incoming and outgoing chairs, and meets regularly with the Principal Secretary of MoAIWD. Similar donor structures with professional coordination have been set up, modelled after DCAFS and these include Donor group in Nutrition Security (DoNUTS), Private Sector Donor (PSD) group and Climate Change and Environment Donor Group.

## Chapter 3: Detailed NAIP Description

### 3.1 Objectives and Scope

57. **Policy Foundations:** The NAIP is based on two main foundations; the NAP and the Malabo Declaration. The NAP's transformation agenda involves a holistic approach to a heterogeneous sector, retaining a focus on smallholders but also supporting commercial farming. In addition to the focus on production and productivity, the NAP addresses other issues such as sustainable management of agricultural resources; resilience to climate change; increased agricultural exports; as well as food security and improved nutrition. Its implementation therefore requires inputs from other sectors and line ministries. This applies even more to the Malabo Declaration with its ambitious targets related to ending hunger, halving poverty, boosting intra-African trade in agricultural commodities and services (including a continental free-trade area and transition to a continental Common External Tariff) and making at least 30% of farm/pastoral households resilient to shocks. While agriculture plays a central role in achieving these targets, other sectors and related policies investment frameworks in areas such as nutrition and health, water and sanitation, education, social development and protection, trade, transport, natural resources and climate change also have to make important contributions.
58. Several activities mentioned under the above policy and investment frameworks that are important for achieving the NAIP's development objectives, are included and budgeted for in the NAIP. This not only lays the foundation for improved coordination between the NAIP and adjacent programmatic frameworks but also helps to ensure that critical activities are funded and implemented<sup>8</sup>. The NAIP implementation and monitoring arrangements described in Chapter 6 will ensure proper coordination and reporting across sectors, identify financing gaps and avoid parallel funding and implementation of similar activities by various actors<sup>9</sup>.
59. **Key changes compared to the ASWAp.** The NAIP shares some common elements with the ASWAp and draws on many lessons learned from the latter. However, there are a number of material differences between the NAIP and the ASWAp which are expected to make the NAIP a more effective framework for targeted and harmonised agricultural sector investment as can be noted below:

ASWAp	NAIP
<ul style="list-style-type: none"> <li>Formulated in the absence of a national agricultural policy - functioned as both a policy and an investment framework.</li> </ul>	<ul style="list-style-type: none"> <li>The NAIP is informed by the NAP.</li> </ul>
<ul style="list-style-type: none"> <li>Pillar structure with limited horizontal linkages between different focus areas.</li> </ul>	<ul style="list-style-type: none"> <li>Matrix structure with 16 Intervention Areas each contributing to one or more of the four Programs.</li> </ul>
<ul style="list-style-type: none"> <li>Very limited reference to related thematic and sectoral policies.</li> </ul>	<ul style="list-style-type: none"> <li>Reviews the full range of thematic and sectoral policies and strategies (Annex 6) and responds to these where appropriate.</li> </ul>
<ul style="list-style-type: none"> <li>Limited involvement of ministries other than those directly responsible for agriculture and irrigation</li> </ul>	<ul style="list-style-type: none"> <li>Well-defined and important roles for many other ministries and agencies, some in leadership roles for particular elements of the plan.</li> </ul>
<ul style="list-style-type: none"> <li>Cost estimates only included investments.</li> </ul>	<ul style="list-style-type: none"> <li>Recurrent costs also included on the basis that investments cannot be undertaken effectively without adequate operational costs.</li> </ul>

<sup>8</sup> In an uncertain funding environment, the inclusion of activities and other sectoral frameworks does not ensure that these get funded (view chapters 5 on trade and nutrition -related investment frameworks as examples).

<sup>9</sup> The exact linkages between the NAIP and the main other plans and investment frameworks (NRP, JSP and MCCIP) are detailed in Annex 6.

<ul style="list-style-type: none"> <li>Highly centralised implementation arrangements with very limited involvement at district level and below.</li> </ul>	<ul style="list-style-type: none"> <li>Proposes decentralised implementation modalities in line with the decentralisation policy.</li> </ul>
<ul style="list-style-type: none"> <li>Limited provision for intra- and inter-agency coordination.</li> </ul>	<ul style="list-style-type: none"> <li>Coordination arrangements clearly specified and costed.</li> </ul>
<ul style="list-style-type: none"> <li>Investment highly concentrated in one focal area (food security) with the FISP consuming the bulk of GoM resources</li> </ul>	<ul style="list-style-type: none"> <li>More balanced investment portfolio across four Programs and 16IAs.</li> </ul>

60. **Timeframe.** The NAIP has a five-year implementation period. However, the agricultural transformation envisaged in the NAP and the ambitious Malabo and SDG targets require a longer timeframe to be achieved. The NAIP can thus be seen as the first of two or three investment plans for implementation of the NAP. It identifies what can realistically be done within the first five years of NAP implementation. After that, a second NAIP, within the same programmatic framework, can be developed with an updated budget and priorities.

61. **Objectives.** The NAIP adopts the goal of the NAP which is *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*. It has three related objectives at the impact level, to be measured through six indicators as shown in Table 3.1. These objectives mirror the Level I results areas and indicators of the CAADP Results Framework. The targets concerning poverty reduction and food and nutrition security are set below those of the Malabo Declaration for two reasons. First, Progress on stunting and other nutrition targets require many interventions in other areas, beyond the scope of the NAIP. Second, the NAIP ends in 2023, whereas the Malabo targets are set for 2025, and the SDGs for 2030.

**Table 3.1: Impact Level Objectives, Indicators, Baseline and Targets**

Objectives	Indicators	Baseline	Target
Broad-based and resilient agricultural growth	I. Consistent agricultural sector growth	4.3% a/	6%
	II. Increased share of agricultural GDP from commodities other than tobacco and maize	tbd	tbd
Improved well-being and livelihoods of Malawians	III. Increased share of population above the national poverty line	49.2% (2010/11)	65%
	IV. Rural poverty gap reduced	19.2%	15%
	V. Increased share of households resilient to climate and weather-related shocks (RIMA <sup>10</sup> )	tbd	25%
Improved food and nutrition security	VI. Reduction in Malawi's score in the IFPRI global hunger index <sup>11</sup>	27.2	<20
	VII. Reduction of stunting among 0-5 year-old children	37% (2015/16)	25%
	VIII. Reduction of underweight among 0-5 year old children	12%	5%
	IX. Reduced food insecurity <sup>12</sup>	Tbd	10%

a/ Average growth rate achieved during ASWAp implementation

<sup>10</sup>Resilience Index Measurement and Analysis (<http://www.fao.org/3/a-i5665e.pdf>)

<sup>11</sup>[www.globalhungerindex.org](http://www.globalhungerindex.org)

<sup>12</sup>As measured by the Food Insecurity Experience Scale (FIES) <http://www.fao.org/in-action/voices-of-the-hungry/fies/en/>

62. The three NAIP objectives are mutually reinforcing. Agricultural sector growth contributes to poverty reduction and Food and Nutrition Security (FNS). Improved FNS contributes to agricultural and overall growth through a healthier, better-educated and more productive workforce; and reduced poverty levels increase the demand for food products, stimulating agricultural sector growth. The main thrust of the NAIP is to stimulate broad-based agricultural-led growth, with specific measures to maximise the synergies with food and nutrition security, poverty reduction and overall economic growth.

### Objective 1: Broad-Based and Resilient Agricultural Growth

63. The commercialisation of smallholder farming will be the main source of growth with the highest contribution to poverty reduction and FNS. However, medium and large farms also have important roles to play, in view of the substantial amount of underutilised land under their control. These farms can also play important roles in linking smallholder farmers to markets by providing inputs and services and bulking production within out grower arrangements. Large, medium and small enterprises in the up- and downstream segments of the Agri-food system<sup>13</sup> are critical for providing inputs and services to farmers, adding value and linking farmers to markets. The smallholder and commercial segments of the Agri-food system are interlinked and need to grow in parallel to achieve robust growth and meet evolving market demands while successfully competing with imports. Hence, the NAIP will take a holistic approach looking beyond primary production to further develop input markets, transformation and trade.
64. In the context of strong population growth and a limited and fragile natural resource base, agricultural growth has to come mainly from productivity gains rather than through an expansion of the area under production, combined with interventions to improve resilience by preparing for and managing shocks. This especially applies to the smallholder-dominated areas under communal tenure where landholdings are very small and intensively utilised. In the estate sub-sector, a two-pronged approach is needed combining productivity increases and horizontal (area) expansion. Strengthening land tenure security is critical for investments and sustainable agricultural practices. In addition, land rental markets would allow more productive farmers to expand without requiring owners to give up their land permanently.

### Objective 2: Improved Well-Being and Livelihoods

65. While there is ample evidence that broad-based agricultural growth is an effective strategy for poverty reduction, the extent of that linkage depends on the type and quality of growth. Broad-based growth driven by productivity increases on small farms is the most effective and has the largest multipliers. But within the smallholder population, there is huge diversity in terms of assets, income levels and capabilities to respond to market opportunities; affected by factors such as gender, age, location and availability of family labour.
66. The NAIP recognises the heterogeneous nature of rural communities. Whilst the great majority or rural households are poor, there is a need to tailor programs/interventions to the needs of different categories of the poor. The NSSP classifies poor rural households into five categories: (i) ultra-poor labour constrained; (ii) ultra-poor but non-labour constrained; (iii) poor but food-secure; (iv) vulnerable to poverty; and (v) resilient to poverty. In addition to addressing the generic constraints facing smallholder farmers, specific targeting measures will be employed to address the needs of vulnerable/disadvantaged sub-groups. These will include measures to close the gender gap in agriculture, support youth employment and entrepreneurship, increase the access of remote areas to infrastructure, markets and support services, and to support labour-constrained households such as those affected by HIV-AIDS. The NAIP also incorporates strategies and interventions tailored to larger scale commercial farmers and agribusinesses.

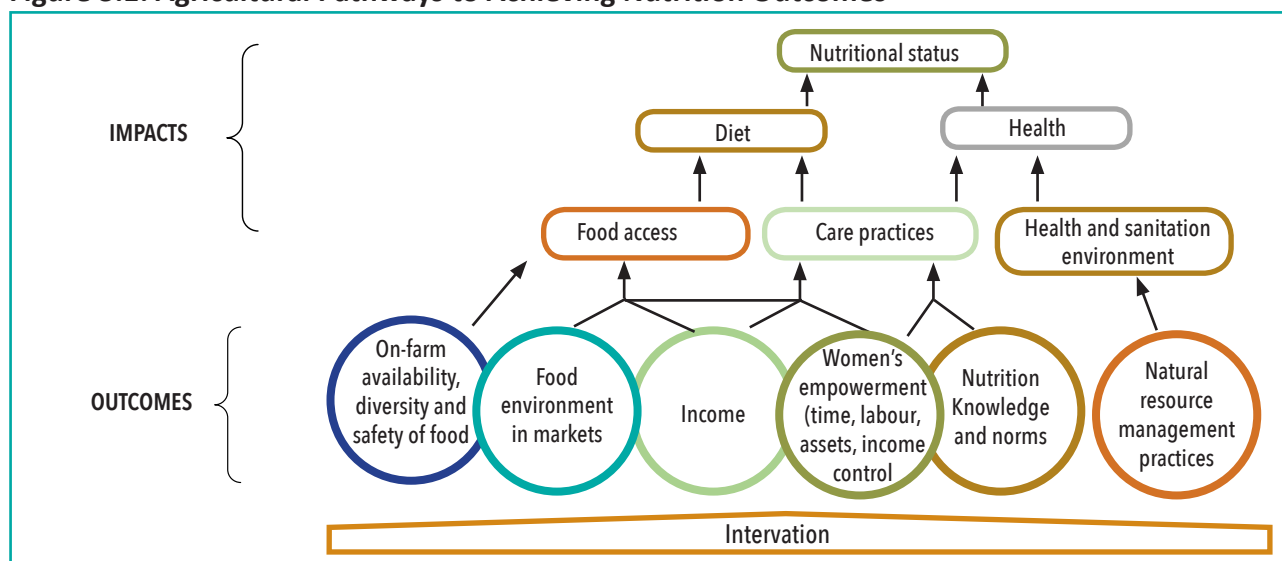
<sup>13</sup>Upstream refers to supply of inputs, technologies and services for production (seeds, breeding stock, fertilizer, machinery and equipment). Downstream includes all the processes after farm production, such as post-harvest handling, bulking, storage, transport and logistics, processing, trading and retailing.

67. Notwithstanding the above, the NAIP acknowledges that agriculture is not the only pathway out of poverty for all rural households. Labour-constrained rural households and/or those with very small land areas may pursue other pathways, including engaging in non-farm enterprises, non-farm employment or migration. Typically, such households pursue a portfolio of livelihood strategies - agricultural and non-agricultural, to provide for their food and nutritional needs. Different extension approaches and technologies are needed to support these farmers to increase and diversify their production. Hence, the NAIP will support different strategies for different segments of the farming population, including graduating beneficiaries of social protection Programs into agricultural production, linking subsistence farmers with markets, and creating employment opportunities in related value chains. This will be achieved in close coordination with the MNSPP and relevant stakeholders.

### Objective 3: Improved Food and Nutrition Security (FNS)

68. FNS builds on the concept of food security<sup>14</sup> but places more emphasis on the qualitative dimensions of achieving a healthy and balanced diet. Further emphasis is on the utilisation of available food through proper food handling and feeding practices, operating in a well-managed environment that has safe, hygienic and sanitary facilities. Food security is necessary, but not sufficient, to ensure nutrition and prevent malnutrition.
69. Food security has traditionally been at the centre of agricultural policies in Malawi. However, efforts have concentrated on achieving maize self-sufficiency, and despite some improvements, food insecurity and malnutrition remain serious challenges, with stunting levels still unacceptably high. The number of people who require food assistance can reach as high as six million (around a third of the population) in years of severe drought.
70. The NAIP targets the more comprehensive objective of FNS. Food insecurity and malnutrition has three dimensions: food access, care practices and health sanitation and environment. While FNS requires interventions from different sectors - health, water and sanitation, and education – targeted investments in agriculture have a critical role to play in addressing stunting, micronutrient deficiencies and other forms of malnutrition. Micronutrient deficiencies are closely associated with lack of dietary diversity. Agriculture-based interventions can also make important contributions to reducing stunting by increasing the availability of diverse and healthy foods in urban and rural areas; improving access through lower food prices and increased incomes, and by decreasing the gender gap in agriculture. The NAIP will contribute to FNS through six outcome areas that address the three main determinants of nutritional status as outlined in Figure 3.1.

**Figure 3.1: Agricultural Pathways to Achieving Nutrition Outcomes**



Source: FAO compendium on Nutrition Sensitive Investment (adopted from Herforth and Ballard, 2016)

<sup>14</sup>Food security is defined by FAO as a situation that exists “when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life”

### 3.2 Additional Strategic Considerations

71. **Gender and Youth:** The pivotal role of women in agricultural production, and the serious disadvantages experienced by both women and youth in rural communities demands that gender and youth are mainstreamed in all parts of the NAIP and that there are specific measures to help address the many inequalities and challenges they face. The attainment of this will be done through proper targeting where at least 50% of the participants in various interventions and 40% in decision making positions will be women.
72. **Social Protection:** The NAIP recognises the complementary roles of agricultural development and social protection. Social protection is a critical instrument in poverty reduction and FNS, but needs to be complemented by other sectoral interventions, including agriculture. In addition, social protection can enable poor households to participate in productive interventions, avoiding the risk that the very poor are excluded from, or at least not included in, production support interventions. Under the FISP reforms the focus is shifting from the FISP as an instrument of social protection to a productivity enhancement measure. This calls for the deployment of other social protection options, embracing skills development, health and education etc., to ensure that the potential synergies between social protection and agricultural development are realised.
73. **Resilience:** In Malawi sustained growth, poverty reduction and FNS are closely linked with increased resilience defined as: “the ability to prevent disasters and crises as well as to anticipate, absorb, accommodate or recover from them in a timely, efficient and sustainable manner”. This includes protecting, restoring and improving livelihood systems in the face of threats that impact agriculture, nutrition, food security and food safety. Agricultural growth has been erratic due to high and growing vulnerability to climatic variability exacerbated by the high dependence on a single staple food crop. Hence, resilience is a key priority, as evidenced by the recently launched NRP. The NAIP will promote diversification of agricultural production and exports to improve resilience in concert with well-targeted social protection. Diversification will also expand the synergies between agriculture-led growth and the rural and broader economy and contribute to dietary diversity according to the FAO guidelines on measurement of dietary diversity (see Table 4.2).
74. **Investment effectiveness:** In order to maximise the effectiveness of the public investments in achieving overall development objectives and leveraging private investments, the following strategies will be pursued:
  - Improvement of inter-sectoral coordination between agriculture and related sectors (including trade, industry, health, education, environment, finance and social protection), both at policy and Program level;
  - Improvement of the business enabling environment to stimulate private investment;
  - Better coordination with non-state actors and private sector in terms of policy development, implementation and investment promotion;
  - Strengthening implementation capacities, especially at local (district) level; and
  - More balanced allocation of funds between input subsidies and other key public investments in areas such as infrastructure (roads, water management and marketing), research, extension and capacity development, as well as sustainable land management.
75. **Value Chain Prioritisation:** The Malabo Declaration calls for the identification of priority value chains to foster Public Private Partnerships (PPPs). In Malawi, the need for diversification beyond maize and tobacco invites the question of which value chains to focus on. Selecting priority value chains is challenging and needs to consider the different views and priorities among actors, changing market conditions, and the fact that value chains score differently according to the assessment criteria employed. No single value chain (or set of value chains) is clearly superior in all key development outcomes. Rather, a portfolio of value chains is needed to address various policy objectives in a balanced way.

76. Initial identification of priorities is based on the IFPRI CGE model (see Annex 7), stakeholder consultations during the NAIP formulation process, prioritisation in other policy frameworks (e.g. decentralisation, gender, climate change) and literature review (including the initial results of the value chain studies conducted by the NAPAS Malawi project). The approach was to identify subsectors that score well according to key selection criteria such as: potential for poverty reduction; broad-based growth; climate change resilience; dietary diversity; diversification of production and trade; and potential for value addition; and that offer attractive investment opportunities to farmers and other private investors. Within these subsectors, priority value chains will be selected during the CAP-F process based on further consultations with the private sector. As NAIP implementation progresses, support to some value chains might be scaled down and others might be added, depending on the interests of stakeholders and changing market conditions. Based on these considerations, the following subsectors are proposed to receive priority:

- **Oilseeds** (cotton, soybean, and others) are important smallholder crops with good market potential and good prospects for export growth and value addition. They have good potential to contribute to poverty reduction and dietary diversity, both directly - through oil consumption - and indirectly, through increased incomes. The potential of oilseeds has already been identified under the NES and has been confirmed by the CGE model.
- **Grain Legumes** play an important role in soil fertility management and can be readily integrated into cereal farming systems. Groundnuts are an important smallholder crop with domestic and export market potential and a nutrient-rich food if aflatoxin is better managed. Pigeon peas have shown a strong growth in recent years and export markets might be diversified beyond India. Common beans and cowpeas can also contribute to diversifying farming systems and diets.
- **Horticultural crops**, especially vegetables and, to a lesser extent, fruit and nuts score highly in terms of their contribution to poverty reduction and dietary diversity. Development of vegetable production calls for coordination of production and marketing, and investments in small-scale irrigation, storage and transport facilities. Fruit and nuts include mangoes, bananas, papaya, oranges, Macadamia and cashew. Further studies and consultations are required to identify the fruit and nut value chains with the highest potential.
- **Livestock**, especially beef and dairy products, have strong domestic demand that will expand with growing incomes. The IFPRI model shows high potential in terms of poverty reduction, dietary diversity and overall growth. Further disaggregation of the analysis would be helpful in prioritising investments among the various livestock categories. Generally, the subsector requires better organisation and its competitiveness needs to be further analysed. There has been strong demand growth for poultry meat and the value chain has good backward linkages into grain legumes and maize. Small stock such as goats and backyard poultry make important contributions to food and nutrition security, income diversification and resilient livelihoods.
- **Roots and tubers** (cassava, Irish potato and sweet potato), have strong potential to contribute to food and nutrition security. Cassava is the second most important food crop after maize but also has good potential for industrial processing into starch, cassava flour, ethanol, beer and other products. It is drought-resistant, easy to cultivate and storable (in the ground or in dried form). NAPAS conducted roots and tubers value chain study to inform stakeholders and GIZ has also conducted a study on smallholder participation in cassava value chains.
- **Rice** is a value chain with good commercialisation and export potential and one company has recently constructed a large rice milling facility for this purpose. Malawi is producing rice with strong domestic and regional demand fetching price premia. There is a rice value chain coordination platform hence production and productivity could be increased significantly under both rain fed and irrigated conditions.



77. The identification of sub-sectors leaves sufficient flexibility for fine-tuning and selection of more specific value chains during the CAP-F process based on further consultations with the private sector and the recently completed value chain studies. Under the CAP-F, support to the priority value chains will be mainstreamed throughout the NAIP. Each priority value chain will select from the menu of intervention areas described in Chapter 4. The NAIP will support multi-stakeholder platforms for each priority value chain, which will develop value chain-specific strategies that articulate needs and priorities (see Chapter 6). Such platforms will also help to orchestrate public, private and non-state actors and facilitate PPPs. Such PPPs could involve infrastructure investments such as roads, irrigation and rural electrification to support private investments that ensure inclusion of local communities, whilst safeguarding the environment and FNS. PPPs would also include support services such as extension, business development, strengthening of farmer organisations and access to finance.
78. The identification of priority value chains does not mean that the NAIP will only support particular value chains. The main traditional crops, maize and tobacco, remain strategically important, along with the other agriculture export products, sugar, tea and coffee. In view of the diverse agro-ecological conditions and the need for farm-level diversification to increase resilience and FNS, the NAIP will also respond to local needs. Nevertheless, the above-mentioned subsectors and value chains will be prioritised in terms of financial, institutional and human resources allocation for research, extension as well as capacity development and infrastructure investments during NAIP implementation.

### 3.3 NAIP Architecture

#### The Four Programs

79. The NAIP departs from the ASWAp by using a matrix structure composed of four Programs and 16 IAs. The four Programs are:
- Program A: Policies, Institutions and Coordination for Results
  - Program B: Resilient Livelihoods and Agricultural Systems
  - Program C: Production and Productivity for Growth
  - Program D: Markets, Value Addition, Trade and Finance for Transformation
80. The four Programs are rather generic and aligned to the NAP and will therefore remain relevant over a medium to long term. As such, they can be used as basis for Program-based budgeting (PBB). This is important because achievement of the goal and objectives of the NAP and the Malabo Declaration will require a longer timeframe, beyond the five-year span of the NAIP. The objectives of the NAIP will remain valid over medium to longer term, whereas the targets are set for the five-year period of the NAIP. Each Program has a set of outcome statements and related indicators and targets (see Sections 4.1 – 4.4).
81. The four Programs can also be associated with different target groups and domains of the Agri-food system (see Table 3.2). This allows funders of the NAIP to allocate their resources according to target groups and Agri-food system and domains. It also serves to achieve a more balanced allocation of funds and distribution of activities across these different Agri-food domains.

**Table 3.2: NAIP Programs, Target Groups and Domains of the Agri-Food System**

Program	Target Group	Domain
A. Policies, institutions and coordination for results	All Agri-food system stakeholders	Policies, laws and institutions
B. Resilient livelihoods and agricultural systems	Net food buyers, vulnerable households and groups	Natural resource base; risk management
C. Production and Productivity for Growth	Commercialising smallholders Commercial farmers (medium and large)	Primary agricultural production
D. Markets, Value Addition, Trade and Finance for Transformation	FOs engaged in postproduction and marketing Companies engaged in value addition.	Upstream and downstream segments

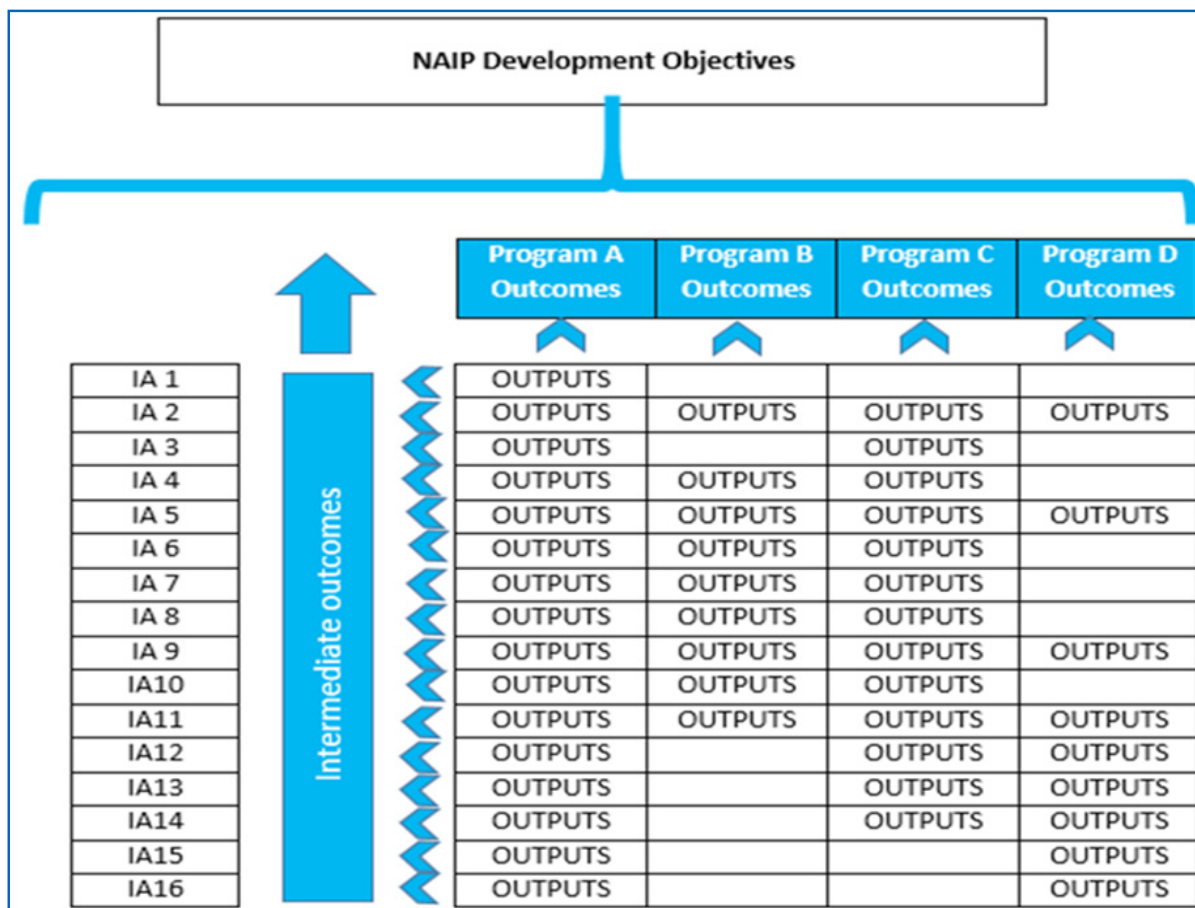
82. The four Programs are interconnected and their sequencing follows the typical development trajectories, at the household level but also within the broader Agri-food system. Program A (policies, institutions and coordination) provides a foundation for Programs B, C and D and for improved performance across the Agri-food system.
83. Improved resilience to climate change and other risks and shocks is a prerequisite for achieving FNS and reducing poverty in a sustainable way. Resilience is also important for the commercialisation of subsistence producers who tend to be very risk averse. Smallholder farmers need support to diversify into new agricultural enterprises, and better integrate into markets and value chains. Also markets for inputs, outputs, and support services (such as finance) need to be strengthened to support the farming sector and provide employment opportunities in the rural non-farm economy. Development also occurs in the opposite direction whereby urban investors and downstream players invest in farming through contracting relationships and out grower schemes. In the normal course of structural transformation, the importance of the downstream segments grows relative to primary production. The NAIP is designed to support this process.

### The 16 Intervention Areas (IAs)

84. In addition to the four Programs, the NAIP has 16 IAs. These IAs cluster activities in technical areas that are needed to achieve the objectives of the NAIP. The IAs resembles Sub-Programs under a conventional Program structure in which each sub-Program is below one (and only one) Program in a vertical “pillar” arrangement. In the matrix structure employed by the NAIP (see Figure 3.2) the IAs are placed horizontally, cutting across the four Programs. The matrix structure recognises that most of the IAs are crosscutting, address different domains in the Agri-food system, and target different stakeholder groups; including issues related to policies and institutions, resilience and livelihoods, sustainable production, value addition and trade. Each of the IAs therefore contributes to more than one Program. For example, the strengthening of farmer organisations (IA2) includes interventions to improve the legal and regulatory environment and institutional support structures (Program A), support to FOs to strengthen their governance, accountability and inclusiveness (Program B), training in agriculture production and in dealing with market partners (Program C), and capacity development in post-harvest handling, processing and trade (Program D).

85. Likewise, each Program needs contributions from multiple IAs. Under a conventional Program structure, each Program can have a maximum of 3 to 4 Sub-Programs, which often leads to “silos” with limited communication and coordination between Programs and Sub-Programs. Under the matrix structure most Programs are composed of activities and outputs from many if not most IAs (see Table 5.1 and Annex 1). While some IAs have their “natural homes” under one Program (e.g. IA 1), in most cases they contribute to two or more Programs. The advantage of the matrix structure is that the Sub-Programs are the same for all Programs. For example, Program A includes the generic interventions for institutional strengthening, policy and program coordination (IA 1) but also activities and outputs concerning policy, regulatory and institutional reforms and capacity development in most of the more specific, technical IAs.
86. The matrix can be used in several ways. Funds can be allocated by Program, but also by IA. Each cell of the matrix has activities and outputs with identified budget, targets and implementation partners. These outputs contribute to the overall development objectives of the NAIP in two ways: Vertically, via the Program outcomes (main results chain); and horizontally, via IAs and Intermediate Outcomes (IOs).
87. Figure 3.2 depicts the structure of the NAIP results framework resulting from the program matrix. The vertical results chain is the traditional one used under pillar-based Program structures. It shows a linear flow of results from activities, to outputs, outcomes and impacts. The limitation of this linear vertical flow is that each activity/output can only contribute to the outcomes of one Program (the one under which the activity/output is placed). In reality, activities and outputs often contribute to outcomes of several Programs. For example, the creation of an effective legal and regulatory framework for warehouse receipt finance not only contributes to an improved enabling environment (Program A) but also to enhanced access to markets and finance (Program D), which in turn provides incentives for improved production (Program C). The ability to access finance at harvest time increases the resilience of farming households and smoothens the availability of grains and legumes throughout the year (Program B). These horizontal effects are captured through the horizontal results chain whereby activities and outputs contribute to more specific intermediate outcomes (IOs) of the respective IAs. These IOs may contribute to the outcomes of one or several Programs but they also feed directly into the high-level development objectives of the NAIP. Figure 3.2 displays this in a schematic way and Annex 1 contains a complete Program matrix with all outputs for each Program and IA, together with the objectives, outcomes statements and outcome indicators for each Program and the outcomes and IOs for each IA.

Figure 3.2: NAIP Results Framework



88. The above matrix structure has the following advantages:

- In line with the PBB guidelines, it allows for a limited number of Programs (up to four per sector) with long-term validity and avoids Sub-Programs;
- It facilitates a more holistic design of interventions taking into account the interconnectedness of policy domains and technical areas across different segments of the Agri-food system; thereby overcoming “silos”;
- Since budgets can be allocated by Programs and by IAs, balancing of priorities across Agri-food system domains, target groups and across technical areas becomes easier; and
- Crosscutting issues are not assigned to separate pillars where they risk being marginalised, but literally cut across the Programs. By making them explicit as IAs, they remain visible and therefore do not get diluted (a risk of mainstreaming crosscutting issues).

### Links between the NAIP and the NAP

89. The NAP and the NAIP have similar content but are structured in different ways. The 16 IAs of the NAIP are derived directly from the eight PPAs of the NAP. Table 3.3 shows the linkages between NAP PPAs and NAIP IAs and Programs. Some PPAs are quite broad (e.g. PPA 3.1: Sustainable Agricultural Production and Productivity, and PPA 3.4: Agricultural Market Development, Agro Processing and Value Addition); others are comparatively narrow and specific (e.g. PPA 3.2: Sustainable Irrigation Development, and PPA 3.3: Mechanisation of Agriculture). Within the broader PPAs, 2-3 IAs (with one specific intermediate outcome) have been identified; for the

narrower PPAs, only one IA is identified. Activities and outputs are bundled into IOs and largely reflect the content of the 54 Policy Statements of the NAP and the strategies under these. The IA structure also allows integrating key activities and outputs from other relevant policies and investment frameworks (NRP, JSP, and MCCIP), where these have been found critical to achievement of NAIP objectives (see Annex 6 for details).

**Table 3.3: NAP Policy Priority Areas and NAIP Intervention Areas**

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

\* The NAP Policy Priority Areas are sequenced and clustered following the above narrative

### 3.4 NAIP Programs

#### Program A: Policies, Institutions and Coordination for Results

**Development Objective:** To improve the policy and regulatory environment, stakeholder coordination and accountability.

90. A supportive legal and policy environment, capable and accountable institutions and effective coordination mechanisms are prerequisites for achieving the objectives of the NAIP. The Programme is anchored on Malawi's comprehensive set of policies, strategies and plans which are highlighted in Annex 6; and includes a number of global, continental and regional policy frameworks, treaties and commitments. Programme A is also linked to national policies and strategies including higher level national development plans (MGDS III and Vision 2020), the NAP, sub-sectoral and thematic policies relating to agriculture, and related policy areas including gender, climate change, resilience, food and nutrition security.
91. Program A addresses the need for legal, regulatory and policy reforms along with effective coordination mechanisms between various actors - public, non-state and private. The Program will strengthen implementation capacity for service delivery at all levels by among others increasing staffing levels, infrastructure and funding as well as strengthening farmer organisations. Program A will also enhance the availability and quality of data and information to inform implementation of the NAIP and monitor progress. It is expected to deliver the following **outcomes**:
1. Strengthened capacity for evidence-based planning, implementation and review of policies and Programs;
  2. Effective and inclusive policy design, implementation and review processes mainstreamed;
  3. Improved coordination of public and private stakeholders in agriculture;
  4. Public agricultural service delivery capacity enhanced according to its mandate; and
  5. Enabling environment for agribusiness investments improved.
92. Program **outcome indicators** and targets are summarised in Table 3.4, to the extent available<sup>15</sup>.

**Table 3.4: Program A: Outcome Indicators and Targets**

Indicator	Target	Means of Verification
A1: MoAIWD provides its policy, oversight, coordination and service functions efficiently	Improvements	Stakeholder survey Sector level M&E system Report
A2: Technical working groups, high-level public-private coordination forum and value chain platforms implement their work plans effectively	Improvements	Meeting minutes, stakeholder feedback and JSR reports
A3: Institutionalised Management Information system for agricultural sector in place	1	Management Information System generated reports
A4: New Alliance and CAP-F Policy commitments implemented by due date	All implemented	Annual New alliance and CAP-F reports
A5: Effective coordination of service-providers at all levels		JSR reports
A6: Ratio of extension workers to farmers	1:1,000	Aggregated District level information reports
A7: Malawi's ranking in Ease of Doing Business Index	100	Ease of Doing Business Reports (World Bank)
A8: Number of days taken to license inputs that have already been accredited in other SADC countries	90 days	MoAIWD data, private sector feedback
A 9: Malawi's ranking in the 'Enabling the Business of Agriculture (EBA)' index	Improvement by 15%	Annual Enabling the Business of Agriculture (World Bank)

<sup>15</sup>The indicators and targets will be revised during the start-up phase of the NAIP funded under Program A.

93. Given the essential and crosscutting nature of Program A, it contributes to almost all IAs, and vice versa. Key outputs include:
- Strengthening and funding of MoAIWD to finance operational and recurrent costs for oversight and implementation of the NAIP;
  - Effective coordination structures within and between sectors, actors, and levels of implementation (from Central to field);
  - National M&E system and performance assessment framework in place, JSR reports published bi-annually and relevant surveys conducted regularly;
  - Policies and related legal and regulatory frameworks revised, improved and their implementation supported in the areas of farmer organisations and cooperatives, food safety and quality, land tenure, plant protection, seeds, Livestock and fisheries Master Plans, fertiliser policy and bill, FISP, agro forestry, water user’s associations;
  - Institutions established, reformed and strengthened, in areas such as food safety, land registration, seed certification, fertiliser regulation, cooperatives and registration of moveable collateral. Reform of ADMARC, refurbishment of soil laboratories and quarantine facilities, accreditation of laboratories, and strengthening of farmer organisations. Capacity for extension, disease control and animal health at district level strengthened;;
  - Multi-stakeholder fora established and strengthened, such as a high-level platform for improved public private coordination and dialogue (in relation to the CAP-F), value chain, district level nutrition coordination, food safety multi-stakeholder, research planning and implementation and monitoring of FISP reforms;
  - Developing tools, methodologies and capacities including a farmer registry for improving targeting of interventions to different categories of farmers and linkages with the unified beneficiary registry of MNSSP; and
  - Databases created and maintained on: farmer organisations, district-level extension service providers, varieties being released and their adoption rates, disaster prone areas (mapping), national tree cover, market information (ICT-based), non-tariff trade barriers.

### Program B: Resilient Livelihoods and Agricultural Systems

**Development Objective:** To strengthen resilience of livelihoods and natural resource base for agriculture.

94. This Program aims at sustainable utilisation of the natural resource base for agricultural production and improved livelihoods for farming households under the challenges imposed by climate change. It contains activities to promote sustainable use of land, water, fisheries and forestry resources, including adaptation measures to reduce the impact of climate change and support production systems and livelihoods strategies. The Program also includes measures to strengthen rural livelihoods by enhancing food and nutrition security, strengthening grassroots organisations, and helping subsistence farmers and vulnerable groups to increase their production and incomes. The program also includes interventions to strengthening resilience and adaptation to climatic (or other) shocks for sustained progress in FNS and to enhance the ability of individuals or community groups to participate in markets. Program B has foundations on Malawi’s global and regional commitments detailed in Annex 6.

95. Program B will also support subsistence farmers to increase the scale and productivity of their agricultural activities and help them to identify the most suitable activities and technologies. It complements other Programs such as the NSSP, the Climate Change Investment Plan and the NRP. Many of the outputs are harmonised with the NRP, which has similar objectives. Others, like irrigation, which is also a priority in the NRP, are included under Program C due to the production-oriented nature of the activities. The NAIP will also support environmental and other initiatives which promote sustainable intensification. It is expected to deliver the following **outcomes**:

1. Increase in dietary diversity and reduction in food insecurity
2. Improved food safety and sanitation environment
3. Improved natural resource management for sustainable agriculture and livelihoods
4. Incidence and impact of pest and diseases in crop, livestock and fisheries production reached

Program **outcome indicators** and targets are summarised in Table 3.5.

**Table 3.5: Program B: Outcome Indicators and Targets**

Indicator	Target	Means of Verification
B1. Number of households, children under 5, and women meeting the 6-food group minimum dietary diversity requirement	25% increase	Specialised M&E study report based on FAO's guidelines for measuring dietary diversity <sup>16</sup>
B2. Aflatoxin levels in groundnuts and maize	10 ppb a/	Malawi Program on Aflatoxin Control reports
B3: Size of sustainable fisheries and aquaculture (within biologically sustainable levels) in % of GDP	Tbd	Department of Fisheries annual report
B4: Annual increase in area under sustainable land and water management	15,000 ha	Department of Land Resources annual report
B5: Woody biomass levels	15% increase	Satellite photography, e.g. <a href="http://www.globalforestwatch.org">www.globalforestwatch.org</a>
B6: Number of people requiring food assistance	Max. 5% per annum	MVAC reports
B7: Percentage reduction in livestock mortality rates	Chickens 10%, Pigs 8%, Cattle 3%	DAHLD annual report
B8: percent of crop area affected by pest outbreaks per year	Less than 0.05%	Department of Crop Development annual report

a/ ppb = parts per billion

96. Program B includes activities from most IAs. Some indicative outputs are listed below:

- Nutrition-related activities such as school feeding, nutrition education, nutrition fairs, establishment of integrated homestead farming, cooking demonstrations; sensitisation on food hazard impacts and management;
- Groups or farmer organisations established, members trained and supported in enterprise selection;

<sup>16</sup>FAO (2010). Guidelines for Measuring Household and Individual Dietary Diversity. Nutrition and Consumer Protection Division.



- Strategic grain reserves equipped and facilities rehabilitated;
- Rural households trained on risk management and disaster preparedness, and early warning information disseminated in a timely way;
- Ensuring that vulnerable farming households are also supported through NSSP to ensure complementarity of social protection and production interventions;
- Facilities and stocks in place to respond to major pest and disease outbreaks;
- Farmers trained on small stock management and pass on schemes successfully implemented; farmers produce manure and organic fertiliser;
- Catchment management enhanced through training and institutional strengthening;
- Agricultural and protected land is owned and natural resource management committee is functional;
- Agroforestry activities through large-scale tree planting and related farmer training;
- Community awareness campaigns on HIV Aids implemented; and
- Area under draft animal power and conservation agriculture expanded.

### Program C: Production and Productivity for Growth

**Development Objective:** To increase production and productivity of a more diversified agricultural sector

97. Program C includes core activities related to increasing production and productivity of crops, livestock and fisheries in line with agro-ecologic and market conditions. The Program supports the commercialisation and professionalization of farming. It targets commercially oriented smallholder farmers as well as medium and large farms, with activities oriented towards women and youth entrepreneurs in agriculture. It seeks to reduce productivity gaps across a broad range of crop, livestock and fisheries enterprises and support farmers in diversifying production towards high-value crops and livestock breeds in the priority value chains. Important activities include: (i) generation and dissemination of agricultural technologies and knowledge; (ii) helping farmers to select the most appropriate enterprises and technologies; (iii) improved access to quality inputs through strengthened input supply chains; (iv) support to farmer organisations to strengthen farmer to farmer knowledge transfer and collective action in dealing with market access; (v) improved access to mechanisation services; and (vi) sustainable expansion of irrigated farming.
98. The production orientation of Program C is based on its close alignment with the productivity focus of the NAP as shown in Table 1, Annex 6. Other important policy anchor points for Programme C include, but are not limited to the policies on agricultural extension, fisheries, livestock, seed, fertiliser and irrigation.
99. The main **outcomes** of program C are :
1. Increased productivity and production of priority value chains;
  2. Increased access to and control over productive assets;
  3. Timely access to a broader range of quality inputs enhanced;
  4. Increased access to sustainable mechanisation services;
  5. Increased adoption of GAP and technologies generated; and
  6. Sustainable increase of diversified crop production and productivity under irrigation

Program **outcome indicators** and targets are summarised in Table 3.6.

**Table 3.6: Program C: Outcome Indicators and Targets**

Indicator	Target	Means of Verification
C1: productivity of target crops and livestock numbers	See targets in Annex 2	Crops and livestock specific reports
C2: Number of farmers with land rights recorded under the new land Registries (by sex and age)	tbd	Records of District Land Registries; MoLHUD
C3: Percentage increase in farmers using improved seeds	100%	Agricultural Production Estimate Surveys reports
C4: Fertiliser usage per ha of arable land	60 kg/ha	MoAIWD and specific survey reports
C5: Share of land prepared with mechanised CA implements	tbd	Department of Land Resources report
C7: Cropping intensity on existing and new irrigation schemes	150%	Department of Irrigation report

100. Program C includes activities from most IAs. Some indicative outputs are listed below:

- Strengthening of agricultural extension and support services including equipment and facilities, on-farm participatory research trials/demos on improved crop varieties and technologies, training of lead farmers, promotion of GAPs through field days, and specialised extension services for specific crops;
- Aquaculture development including restocking of dams, fish cage and pond culture, aquaculture demos, and training for fishers (men, women, youth) on improved management and technologies;
- Rehabilitation of existing irrigation schemes and establishment of new ones, training for irrigation associations and water user associations(WUAs), and provision of specialist extension services to irrigation farmers;
- Support for farm mechanisation including training for machinery operators and mechanics, health and safety training and mechanisation demonstrations;
- Training of farmers on the use of market information, sensitisation of farmer organisations and agribusinesses on contract farming, and capacity building in agribusiness operations; and
- Financial literacy and management skills training campaigns for farmers, women and youth.

#### **Program D: Markets, Value Addition, Trade and Finance for Transformation**

**Development Objective:** To enhance market access, value addition, trade, and access to finance

101. Agricultural transformation requires improved access to markets, increased value addition, increased agricultural exports and trade, and better access to finance. Program D covers these areas by focusing on the downstream segments of agricultural value chains. The main target groups are agribusiness enterprises and farmer organisations engaged in these downstream activities. It includes investment in transport, marketing and storage infrastructure to improve market access and reduce post-harvest losses. Efforts to boost intra-African trade will receive special priority. It also covers training and capacity development for farmers and other private actors on technical and managerial aspects related to processing, marketing and storage, including the use of innovative instruments such as warehouse receipts and commodity exchanges. Private agribusiness investments will be promoted through Agri-food parks and special economic zones

for agro-processing and exports (complementing measures to enhance the business enabling environment under Program A). Through trade facilitation and export promotion, the Program will improve access of farmers and agribusiness to regional and global markets as well as to a broader range of quality inputs. Program D will also improve access to finance for farmers and other value chain actors through technical assistance and new financing and risk management instruments.

102. Program D is linked to the Malabo objective on intra-African trade and the SADC and COMESA regional agricultural development and trade strategies; as well as various national policies on trade and private sector development that are detailed in Annex 6. These include policies related to exports, trade, industries, private sector development, contract farming and financial inclusion among others. Implementation of the strategies and policies will be achieved through the following **outcomes**:

1. Greater efficiency and transparency of agricultural markets and better market accessed;
2. Increased diversification of agricultural exports, with special emphasis on intra-African trade;
3. Increased number of farmers/FOs linked to markets and finance;
4. Volume and inclusiveness of private investment agribusiness enhanced;
5. Increased agricultural value addition and processing; and
6. Post-harvest losses reduced.

103. Program **outcome** indicators and targets are summarised in Table 3.7.

**Table 3.7: Program D: Outcome Indicators and Targets**

Indicator	Target	Means of Verification
D1: Share of agricultural produce sold on markets	tbd	Production and productivity survey reports
D2: Share of agricultural exports other than tobacco	60%	Annual reports from MoITT, ITC, WTO
D3: Share of high-value and processed products in agricultural exports	20% increase	Annual Reports from MoITT, MITC, WTO
D4: Percentage volume of intra-African agricultural trade	20% increase	Annual Reports from MoITT, COMESA SADC
D5: Number of farmers under contract farming	20% increase	Annual reports from MoITT; farmer organisation apexes, NA and CAP-F frameworks, CFTC
D6: Privately managed storage capacity	240,000 tonnes	Annual reports from MoITT, Ware House Receipt System and Commodity Exchange regulators and Private Sector surveys. .
D7: Ratio of private agricultural investments to GDP	20% increase	Annual Economic reports
D8: Percentage reduction in post-harvest losses	50% reduction	Specialised surveys reports by DAPS
D9: Lending to agric. SMEs and farmers	tbd	RBM statistics, bank-data, MFIs and SACCOs
D10: Reduction in gap between farm gate and wholesale prices	tbd	Price surveys reports
D11: Domestic Food Price Volatility Index reduced	10%	Biennial Review reporting

104. Program D includes activities from most IAs. Some indicative outputs are listed below:
- Formation of agribusiness farmer organisations, training for FO leaders, linkage of FOs to commodity exchanges and increased number of FOs engaging in contract farming operations;
  - Upgrading of food safety and quality control systems and training for FOs, processors and traders. Inspection of processors, traders and food premises for quality control and food hygiene;
  - Post-harvest storage facilities improved and farmers and SMEs trained in warehouse receipt systems, post-harvest management, value addition and commodity exchanges. Rural infrastructure (roads, cold stores, markets) constructed or rehabilitated;
  - Establishment of fish landing sites and fish marketing facilities;
  - Support for agricultural mechanisation including a feasibility study on establishment of a machinery fund and incentives to increase importation of tractors and conservation agriculture equipment; and
  - Improved access to finance for value addition and marketing including provision of start-up capital and matching grant

### 3.5 The Intervention Areas

105. This section provides an overview on the 16 Intervention Areas including their objectives/outcomes, IOs and outputs. Outputs are grouped under the respective Programs to which they contribute (view Table 3.3 in Chapter 3 and Annex 1).

#### IA1: Policy, Program and Stakeholder Coordination and M&E

**Outcome:** Effective mechanisms for multi-sectoral and multi-stakeholder coordination to support Program implementation, M&E are in place.

**Intermediate Outcomes:**

- IO 1.1: MoAIWD fully operational and core funding provided to finance operational and recurrent costs for oversight and implementation of the NAIP.
- IO 1.2: Improved coordination of policies and Program implementation partnerships and mutual accountability at all levels.
- IO 1.3: M&E systems and performance management in agriculture functioning and up to date.

106. IA 1 deals with crosscutting issues of institutional capacity, coordination and M&E. The outcomes are based on the CAADP Results Framework level 3 outcomes under “Strengthening Systemic Capacity for Effective Execution and Delivery of Results”. In particular it aims for the twin outcomes of “strengthened capacity for evidence-based planning, implementation and review” and “improved multi-sectoral coordination, partnerships and mutual accountability”. IA 1 recognises the pivotal role of MoAIWD in the implementation of the NAIP, decentralisation process and the recommendations of the CFA, as well as the need for enhanced implementation and coordination capabilities in MoAIWD and its associated agencies. The proposed approach, which is further elaborated in Chapter 6, draws on the lessons learned from implementation of the ASWAp.
107. Successful implementation of the NAIP requires strong leadership and implementation capacity in MoAIWD, including timely and transparent disbursement of sufficient funding for MoAIWD recurrent and implementation costs (such as payment of salaries, maintenance of vehicles and regular monitoring and supervision visits at various levels). The NAIP therefore includes core funding for MoAIWD accordingly under Intermediate Outcome 1.1. While such costs are not always included in NAIPs, it is important to incorporate these and acknowledge that the lack of funding for such activities leads to lack of implementation for all other activities or projects.

108. Results oriented coordination implemented by a range of government and non-government actors, with progress jointly measured under agreed indicators and against a consensus on the baseline situation, is critical for successful implementation. Coordination is needed at different levels: between sectors e.g., concerning the linkages between agriculture and trade, social protection, climate change and the environment; within the agricultural sector e.g., between specific sub-sector policies, Programs and projects, between stakeholders e.g., public sector entities, DPs, NSAs, and private sector, including farmers, within stakeholder groups e.g., between private companies and farmers of different sizes and in different value chains, and between different levels of implementation e.g. national level, ADD level, district level, and below.

#### **IO 1.1: MoAIWD fully operational and core funding provided to finance operational and recurrent costs for oversight and implementation of the NAIP**

##### **Outputs (Program A):**

- Streamlined and strengthened MoAIWD according to the institutional and capacity assessment in view of decentralization.
- MoAIWD and District Councils' staff vacancies filled with suitably qualified personnel.
- MoAIWD and District Councils with sufficient budget to be fully functional at EPA, District, ADD and HQ levels;
- MoAIWD and District Councils vehicle fleet is continuously maintained.

#### **IO 1.2: Improved coordination of policy and Program implementation partnerships and mutual accountability at all levels**

##### **Outputs (Program A):**

- Intra-ministerial coordination via the NAIP Coordination Troika, consisting of the Department of Agriculture Planning Services (DAPS), Controller of Agriculture Extension and Technical Services (CAETS) and the Controller of Agricultural Services and Institutions (CAS) functioning.
- Inter-ministerial coordination via the Executive Management Committee (EMC) and the NAIP Secretariat, which pro-actively engages with all ministries relevant to NAIP implementation.
- Multi-stakeholder (including inter/intra ministerial) coordination via the ASWG, the TWGs, high-level public private sector coordination to be established under the CAP-F, and coordination structures at the level of priority value chains.
- The coordination between headquarters and the field via the various district level structures such as the District Agriculture Development Office (DADO), the District Stakeholder Panel (DSP) and the DAEECC functioning.

#### **IO 1.3: M&E systems and performance management in agriculture functioning and up to date**

##### **Outputs (Program A):**

- Sector-wide M&E systems in place which consolidates information from district structures and below to a standardised, automated Management Information System at national level.
- Various sector-wider output, production and topic-specific surveys undertaken periodically including a baseline survey for the NAIP and bi-annual surveys on critical output and outcome data linked to the Unified Beneficiary Registry being developed by MoFEP&D.
- Biannual Malabo progress reports and periodic SDG reporting carried out.

109. **Implementation:** The coordination and implementation mechanisms are described in more detail in Chapter 6. The implementation of the sector-wide M&E system and related MIS will build on the NAP M&E strategy. According to that strategy, DAPS in MoAIWD will have primary responsibility for implementing the M&E strategy and will collaborate with (among others) the National Statistical Office, MoFEP&D, MoITT, and MoLHUD. MoAIWD will benefit from technical assistance for M&E from the Lilongwe University of Agriculture and Natural Resources as well as financial support from Development Partners. In September 2017, MoAIWD initiated development of a new sector-wide M&E system through a draft concept paper for the creation of a National Agricultural Management Information System.

## IA2: Strengthening Farmer Organisations

### Outcome: Performance and outreach of farmer organisations strengthened at all levels

#### Intermediate Outcomes:

- IO 2.1: Legal framework and institutional support for FOs strengthened.
- IA 2.2: Strong, well-organised and inclusive FOs conduct business and provide services to their members.

110. FOs are critical to achieve economies of scale in production and accessing inputs, markets and support services, especially for smallholders. Likewise, provision of support services, training and extension can be implemented more efficiently and sustainably if strong FOs can serve as an interface and gradually take over some of the support functions. FOs are also critical to strengthen farmers' bargaining position in markets and make their voices heard in the policy space. The importance of FOs is clearly reflected in Malawi's NAP as well as the policies on farmer organisations, agricultural extension, marketing, gender and youth. However, only about a third of Malawi's farmers are members of FOs affiliated with one or other of the two apex farmer organisations (FUM and NASFAM) and poor farmers are not well represented in this number. Not all of the decentralised FOs function well. Some farmers are members of Savings and Credit Cooperatives affiliated with the Malawi Union of Savings and Credit Cooperatives (MUSCO) which helps them to interact with financial institutions. Most irrigation farmers are members of WUAs but many of them struggle to be effective. While a large number of actors are involved in establishing and strengthening FOs, there is limited coordination of approaches and geographic coverage. Often, support driven by the need to meet project targets rather than the creation of efficient, accountable organisations able to serve their members on a sustainable basis.

### IO 2.1: Legal framework and institutional support for FOs strengthened

#### Outputs (Program A):

- The Cooperatives Act is revised.
- An inclusive FO Development Strategy is in place which addresses the need to engage poor farming households.
- An Agricultural Cooperative Institute is established.
- FO supporting institutions (including apexes and specialised service providers) have been strengthened and capacity gaps in gender-related aspects have been addressed.
- A FO database has been established and is updated regularly.

## IO 2.2: Strong, well-organised and inclusive FOs conduct business and provide services to their members

### Outputs (Program B):

- 17,000 groups are supported to establish formalised FOs and have received basic training, including group dynamics, enterprise selection and management. This will include specific initiatives for youth and women groups.

### Outputs (Program C):

- 390 FOs have been trained on enterprise management and business development.
- 500 leaders of promising FOs have received long term training packages with a view to ensuring that FOs can assess their management capacity and take decisions accordingly and to improve their business models and receive Malawi Bureau of Standards (MBS) certification.

### Outputs (Program D):

- 250 FOs have been supported to successfully engage in contract farming arrangements.
- 250 agri-business oriented FOs have been formed and supported.
- 150 FOs are linked to warehouses receipt systems and/or commodity

111. **Implementation:** MoAIWD and MoITT support FO strengthening but through slightly different approaches and with different objectives. Both ministries will continue providing these services with MoAIWD developing FOs capacity for production and extension services to their members, and MoITT focusing on business management. Periodic coordination meetings will contribute to harmonising approaches and avoiding overlaps. Government will also take the lead in updating the legislative environment, in consultation with NSAs. Umbrella bodies will take the lead in strengthening FOs in terms of being facilitators of change and in the long-term training packages to develop the FOs as institutions and decision-makers in their own right. Stronger FOs are also expected to engage directly with the private sector to enhance their production and agro-processing, and sell profitably to the market.

### IA3: Public Agricultural Services Delivery

**Outcome:** MoAIWD's capacity strengthened to provide relevant, market-oriented agricultural extension services in conjunction with/complementary to private sector providers.

#### Intermediate Outcomes:

- IO 3.1 Capacity of public sector institutions to provide agricultural extension services strengthened.
- IO 3.2 Public extension workers at decentralised levels are equipped with adequate transport, office, technical and housing facilities

112. This Intervention Area focuses on the capacity of the public sector to deliver services, while farmer-farmer eg. lead farmer approach and farmer field school approach and community capacity building are captured under other IAs (including IA9). This relates more to the Local Government structures, as a consequence of decentralisation. The extension policy outlines pluralistic, decentralised and demand-driven extension services provided by public and non-state actors. However, the public extension system needs to be upgraded to play its role envisaged in the policy.

113. Field extension staff lack basic facilities such as bicycles or motorbikes, as well as office space and decent accommodation. The NAIP will adopt a two-pronged approach by both increasing the number of frontline extension workers and providing them with the transport, equipment and skills needed to be effective. The NAIP will further improve office space and accommodation. In addition, there is a need to maintain a distinction between public and private goods/services so that the Government concentrates on the former and does not crowd-out the private sector in the latter..

### **IO 3.1: Capacity of public sector institutions to provide agricultural extension services strengthened**

#### **Outputs (Program A):**

- Extension Policy incorporates a pluralistic and innovation-driven approach including non-traditional extension methods and ICT-based approaches.
- Staff externally trained (100 staff short term, 225 staff to BSc level, 225 staff to MSc level and 20 staff to PhD level). Selection of staff and specific courses will be based on a training needs assessment.
- 3,000 frontline staff are trained on technical issues (including fisheries, communication, food safety, GAPs, agroforestry, trans-boundary diseases, conservation agriculture, water harvesting and extension approaches, etc.).
- Public Veterinary Service gap analysis completed to inform investment strategy for animal health services.
- 150 students have graduated from refurbished Malawi College of Fisheries, both diploma and certificate levels, and including an upgrading of these facilities to standards.
- Extension worker vacancy rate is reduced from 46% to 10%; and HQ/ADD vacancy rate reduced from 35% to 20%. This includes recruitment of EPA level food and nutrition specialists, district level M&E officers and agri-business officers and 61 researchers (crop and legumes breeders, livestock breeders and veterinary specialists).
- Members of staff affected by HIV and AIDS receive a nutrition supplement, to enable them to keep working despite their circumstance.

### **IO 3.2: Public extension workers at decentralised levels are equipped with adequate transport, office, technical and housing facilities**

#### **Outputs (Program A):**

- All EPAs (204) have maintained office buildings, with a source of power and a housing facility.
- All Districts (28) have maintained office buildings.
- 13 border post offices and houses are maintained; to monitor cross-border trade, disease control and matters.
- 50 vehicles and 2,000 motorbikes are procured for field operation.
- ICT packages are available at 28 districts, 8 research stations and 14 national level offices, including both internet/communications systems and hardware.
- 26 laboratories are equipped, including veterinary labs, bio-security labs, fisheries and chicken hatcheries and agricultural research stations in general.
- All four Government livestock farms have electricity.
- Eight fisheries vessels are available, with the necessary equipment and of both larger and smaller scale.
- All 22 Residential Training Centres are rehabilitated.
- 15,000 front line staff and lead farmers have the necessary equipment, including protective gear, scales and tools, as well as monitoring and surveillance equipment and motorcycles.



114. **Implementation:** MoAIWD, in cooperation with other Government Institutions such as MoTPW, OPC and MoFEP&D will be responsible for implementation of the activities. The IA covers all MoAIWD Departments which have a field presence, including DAES, DARS, DAHLD, Fisheries and others. These investments are linked to the decentralisation process, where some assets may be handed over to the District Councils. While majority of expenditures are investments expected to be financed by Government, Development Partners are also expected to contribute.

#### IA4: Diversification, availability and consumption of Nutritious Foods

**Outcome:** Diverse, nutritious foods are available and consumed.

**Intermediate Outcomes:**

- IO 4.1: Improved implementation, coordination and monitoring of nutrition-related activities in the agricultural sector.
- IO 4.2: Smallholder farmers are linked to food purchase for institutional feeding Programs.
- IO 4.3: Nutrition education is widely available at all levels, including grassroots.

115. Improved FNS features at the impact level of the results chain of the NAIP. Most IAs contribute to FNS through at least one of its four dimensions: availability, access, utilisation and stability: through increased production and productivity of a greater diversity of crop and livestock products, better functioning of rural markets, and improved storage and post-harvest handling. IA9 describes the support that poor farmers will receive for increasing and diversifying their production. However, recognising that increased production is not in itself sufficient, FNS has been incorporated into an IA to emphasise some specific interventions focusing on improved coordination of nutrition-related activities and increased nutrition awareness. IA 5 addresses food safety, another key dimension of FNS.
116. IA 4 is firmly rooted in CAADP and the Malabo Declaration, the AU Declaration on Nutrition Security, Compact 2025, the global initiative on Scaling up Nutrition and Priority Area 3 of the COMESA Regional Agriculture Policy. It also responds to Priority Area II of the NAP, the Malawi National Nutrition Policy, the draft National Nutrition Strategic Plan and the draft Agriculture Sector Food and Nutrition Strategy.

#### IO 4.1: Improved implementation, coordination and monitoring of nutrition-related activities in the agricultural sector

**Outputs (Program A):**

- All districts have Nutrition Coordination Committees which meet regularly
- National semi-annual nutrition fora are undertaken
- The Nutrition Policy is updated to capture all dimensions of FNS
- District-level nutrition data is collected annually for improved surveillance of nutrition activities and outcomes

#### IO 4.2: Smallholder farmers are linked to food purchase for institutional feeding Programs

**Outputs (Program B):**

- School feeding Programs are improved, through local sourcing of foods and advocating for more diversified food packages used, including e.g. fruits.

### IO 4.3: Nutrition education is widely available at all levels, including grassroots

#### Outputs (Program B):

- Four cooking demonstrations have been delivered annually per EPA, using local, indigenous and diversified ingredients.
- 115,000 households are sensitised each year on nutrition-related topics.
- 1 million integrated homestead gardens established at household level.
- Annual village level nutrition fairs and national nutrition campaigns undertaken, including dissemination of information through flyers, radio and guidelines for extension workers.
- All EPAs have nutrition care groups (as envisaged under the draft Agricultural Food and Nutrition Strategy) which are operational.

#### Program D

- 500,000 farmers trained on food processing for improved nutritional outcomes

117. **Implementation:** MoHP (Department of Nutrition) and MoAIWD are the co-lead institutions for this IA. At local level, this is supported by extension workers (under MoAIWD) who interact with farmers on a daily basis and provide a channel for dissemination of messages, and by Food and Nutrition Officers at EPA level. Front line staff members, under Ministry of Gender, Disabilities and Social Welfare also provide an avenue for dissemination of messages and interaction with the most vulnerable households. Cash transfer Programs may provide the income required for households to invest in nutrition and to invest in their children. For a number of activities MoAIWD may take the lead, for example in integrated home gardens and cooking demonstrations.

### IA5: Food Safety and Quality Standards

**Outcome:** Food safety and quality standards are established and mainstreamed.

#### Intermediate Outcomes:

- IO 5.1: Appropriate and adequate food safety policy, legislation and quality control system is in place.
- IO 5.2: Knowledge on food safety issues is enhanced along the value chain.
- IO 5.3: Quality control activities undertaken.

118. Food safety quality standards are at their infancy in Malawi. Although food safety is included in Priority Area II of the NAP, implementation of this policy has not taken place. MBS is mandated to carry out quality control services including in areas such as agro-processing, however, the coverage of its operations is limited. MoAIWD and MoHP also have important roles to play in food safety and quality. Most agricultural value chains are covered only partially and the majority of Malawians buy their daily food through informal channels. Supermarkets with certified products are mainly an urban phenomenon and larger food processors account for a small share of total food consumed. However, physical, chemical and biological food contaminants are a threat to food safety – especially aflatoxin, which has serious impacts on child growth and cognitive development. It is estimated that 40% of commodities in local markets in Africa exceed allowable aflatoxin levels. Potential export markets impose strict food quality and safety standards which Malawian exporters cannot always satisfy. However, Malawi has not yet developed a comprehensive food safety and quality policy, and this needs to be done before a food safety law can be enacted.

### IO 5.1: Appropriate and adequate food safety legislation is in place, through the following outputs

#### Outputs (Program A):

- A food safety and quality policy is developed (in progress) and a food safety law is enacted.
- A food safety and quality control agency is established.
- Quality standards have been developed, such as monitoring mechanisms for mycotoxins, and residue levels for pesticides and additives.

### IO 5.2: Knowledge on food safety issues enhanced along the value chain

#### Outputs (Program A):

- TWGs and Government officers trained on food safety and quality standards.
- Multi-stakeholder platforms meeting regularly, involving, amongst others, the National Codex Committee, the Malawi Program on Aflatoxin Control and service providers.
- Rapid assessment of food safety hazards available.
- Data on aflatoxin is regularly updated in the Africa Aflatoxin Management System.

#### Outputs (Program B):

- Information on aflatoxin and other food-borne diseases is widely disseminated.

#### Outputs (Program C):

- 1.3 million Farmers/ fishermen are trained on food safety, including aflatoxin control, and fish sanitation and diseases.
- 900 FOs, SMEs, cooperatives and other commercial producers are trained on food safety management.

#### Outputs (Program D):

- 5,642 food processors trained on different aspects of food safety and quality, such as HACCP standards, marketing, branding, advertising and packaging.

### IO 5.3: Quality control activities undertaken

#### Outputs (Program A):

- Establishment of a department within the Food Agency for process control, product examination and certification.
- Two food laboratories accredited by COMESA.
- A quality control system, including a database for registration of all food premises.

#### Outputs (Program D):

- 140 inspection visits undertaken, to abattoirs, and other food processing facilities.
- 150 monitoring visits to food premises including quarterly audit and accreditation visits.

119. **Implementation:** MoITT and its subsidiaries like MBS and Malawi Investment and Trade Centre (MITC) have an important role to play in this IA, as well as MoAIWD through extension services delivery and the private sector (including farmers) in upholding food standards. Supervision and quality control is a core public function, and substantial public resource is expected to finance this.

### IA6: Empowerment and Tenure Security

**Outcome:** Women and youth empowered and land tenure security enhanced,

#### Intermediate Outcomes:

- IO 6.1: Implementation of the Land Policy supported,
- IO 6.2: Increased participation of women and youth in agricultural value chains and institutions,

120. The minimal inclusion of youth, women and vulnerable groups in the agricultural sector hampers Malawi's growth. It has been estimated that closing the gender gap may increase crop yields by 7.3% per annum and increase GDP by 1.8% (UN Women, 2015). At the same time a growing population and increasing land scarcity makes it difficult for rural youth to make a start in farming. Empowerment of women, youth and vulnerable people including disabled and people living with HIV and AIDS is, therefore, mainstreamed into the NAIP, especially under Programs B and C. The following are examples of some of the gender and youth mainstreaming measures that are included in other Programs and IAs: Measures to encourage participation of women in Farmer Organisations;
- Measures to encourage participation of women in Farmer Organisations;
  - Promotion of gender and youth responsive extension approaches;
  - Review of the agricultural sector gender and HIV strategy;
  - Gender disaggregated guidelines for disaster response;
  - Training for Government staff in gender and youth mainstreaming;
  - Gender and age disaggregation of all performance targets and indicators; and
  - Targets for gender and youth participation in training programs, and access to financial services.
121. In parallel with the above mainstreaming measures, empowerment, coupled with the related issue of land tenure is included as a separate intervention area. IA6 includes activities to organise and train groups of women and youth, review strategies, training and extension materials, and sensitise rural households and service providers on gender relations and land tenure. Access to land is tackled from both the tenure security perspective, and the problem of accessing land for larger scale investments.
122. The importance of equitable and secure access to land is well recognised in a number of continental and regional policy frameworks, as well as nationally through the National Land Policy. However, until recently Malawi lacked an appropriate legal and regulatory regime to achieve its policy objectives. IA 6 supports the implementation of the recently approved Land Law in the demarcation and registration of rural land, and includes specific measures to ensure that women, youth and other vulnerable groups are empowered regarding secure access to land.

#### **IO 6.1: Implementation of the Land Policy supported**

##### **Outputs (Program A):**

- 28 District land registries are established and operational.
- Institutional aspects of the Land Policy are implemented, including the development of subsidiary regulations and a roadmap for implementation.

##### **Outputs (Program B):**

- Annual District-level awareness meetings on the laws for acquiring land for investments.
- Annual EPA level sensitisation meetings on land rights, for community members and local and traditional leaders.

##### **Outputs (Program C):**

- 91,000 ha of land registered, comprising individual land holdings with priority for women, youth and vulnerable groups, registration through FOs, and piloting registration of customary estates.

### IO 6.2: Increased participation of women and youth in agricultural value chains and institutions

#### Outputs (Program A):

- 30 Government focal persons trained on gender issues.
- Agricultural training curricula updated on gender, HIV/AIDS and youth issues.

#### Outputs (Program B):

- 202,500 households have improved gender relations, through household mentoring methodologies.
- 17,640 women and youth groups are strengthened and empowered in relation to land tenure security.
- A strategy on decent employment is developed, dealing with issues of working conditions and child labour in the agricultural sector.

#### Outputs (Program D):

- 300 agribusiness SMEs owned/operated by women and youth are trained on various technical and business aspects.
- 2,000 youth and women agribusiness entrepreneurs receive business mentorship.

123. **Implementation:** MoLHUD is the lead public agency in relation to land tenure, while MoGCDSW is the primary lead on gender issues, in conjunction with Ministry of Labour and Youth on youth issues and MoAIWD on mainstreaming gender and youth issues in the agriculture sector. In addition to these efforts, many stakeholders, projects and programs support these issues.. Each stakeholder has a role to play to ensure quality and equitable outcomes. The private sector must be encouraged to promote equality amongst their staff as public actions alone cannot solve the issues. Considering the multiplicity of these players, coordination will be critical.

### IA7: Disaster Risk Management Systems

**Outcome:** Capacity to manage disasters and reduce their impact strengthened.

#### Intermediate Outcomes:

- IO 7.1: Strategic grain reserves (physical and virtual) in place to ensure household-level FNS during natural disasters.
- IO 7.2: Disaster preparedness strengthened.

124. The increased frequency of climate-induced food security crises requires improved disaster preparedness, early warning and response capacity. This falls within the scope of NAP Priority Area III on Agricultural Risk Management, the guidelines on management of the Strategic Grain Reserve and national policies on social protection. IA 7 includes measures to strengthen the coping capacities immediately after climate-induced disastrous events and to strengthen longer-term adaptation planning to reduce the impacts of such events. Activities include awareness creation and training at community level, promotion of technologies such as local storage facilities and drought/flood tolerant varieties, zoning and mapping, and management of food reserves. The latter requires the proper management of specialised institutions such as ADMARC and NFRA to minimising market distortions and uncertainties. The IA complements activities in other IAs which also contribute to improved resilience, such as GAPs, IPM, sustainable natural resource management, and irrigation development. Disasters related to pest and disease outbreaks are covered under IA 8.

125. On an annual basis, 5-10% of Malawians are food insecure and require food aid, from the SGR and through humanitarian channels. A budget for the average food aid expenditures has been included in order to enable better coordination between emergency response and recovery/development activities and actors within the overall framework of the NAIP. Food aid will be combined with other disaster risk management programs under NSSP which can deliver additional support in the form of cash, near-cash or kind, to food insecure households during emergencies. Use of public works programs would also support disaster-affected households through cash or food for work, and contribute to disaster preparedness through building or rehabilitating community assets (e.g., feeder roads and irrigation works).

#### **IO 7.1: Strategic Grain Reserves (physical and virtual) to ensure household-level FNS during natural disasters**

##### **Outputs (Program B)**

- 240,000 tonnes of grain stored (with a minimum of 90,000 tonnes at all times), incurring storage and management costs as well as replenishment after years of crisis.
- 54 storage facilities rehabilitated and maintained, including 15 metallic silos, 34 concrete silos at Kanengo and five warehouses at Limbe.
- Food is distributed to 5% of Malawian households, possibly more in years of crisis.

#### **IO 7.2: Disaster preparedness strengthened**

##### **Outputs (Program A):**

- Weather stations established in each EPA, including systems for staff training, maintenance, data collection and analysis.
- 50,000 ha of land is zoned and mapped for disaster preparedness.

##### **Outputs (Program B):**

- 50,000 households have grain storage facilities (silos, sealed bags etc.).
- 20,250 farmers trained on disaster risk preparedness and management and, including on-farm demonstrations and awareness creation on drought tolerant varieties.
- Early warning messages disseminated, including establishment of an SMS-based dissemination system and regular coordination amongst institutions and actors.

##### **Outputs (Program C):**

- Piloting insurance products: including product design, development of indices and use of remote sensing and GPS data.
- Rehabilitating maize storage silos and ensuring that they are continuously maintained and in use.

126. **Implementation:** The Department of Disaster Management Affairs under the Office of the Vice President is the main responsible entity for disaster risk reduction and coordination, while NFRA is responsible for maintaining the strategic grain reserves and MNSSP provides social protection ADMARC and NFRA are responsible for procurement of grain. For weather stations, MoLGRD and the Metrological Department are important players. MoAIWD will be responsible for household level demonstrations and on-farm storage. Coordination between these stakeholders will be critical to achieve the priorities, and the TWG for agriculture risk management may consider this in its constituency. From the side of MoAIWD, interventions are guided by the Risk Management Strategy.

## IA8: Pest and Disease Management

**Outcome:** Major pests and diseases are controlled and major outbreaks managed effectively.

**Intermediate Outcomes:**

- IO 8.1: Infrastructure is in place to prevent and handle disease outbreaks.
- IO 8.2: Pests and diseases outbreaks are monitored and controlled.
- IO 8.3: Animal health preventive measures.
- IO 8.4: Biotechnology usage up-scaled.

127. Outbreak of crop pests and diseases is a recurrent issue in Malawi. In addition, animal health is an important investment area, currently only handled mainly by the public sector. Preventing and/or controlling major pests and diseases and managing their impacts is a core public function. The main approach promoted is Integrated Pest and Disease Management (IPDM), which complements GAPs, the adoption of drought and flood tolerant varieties, and crop selection based on agro-ecological zone. IPDM contributes to increased productivity and decreased use of pesticides. In order to minimise the risk of exotic pests and disease incursions from outside Malawi, border protection facilities and procedures must be maintained to a high standard.

### IO 8.1: Infrastructure is in place to prevent and handle disease outbreaks

**Outputs (Program C):**

- Suitable quarantine and other facilities are available, including dip tanks and mist blowers, fish quarantining facilities, livestock quarantining facilities, improvement of laboratories, related offices, and human capacity development within all of these areas.
- Border protection posts are staffed and equipped to maintain a high degree of bio security protection.
- Strategic reserves of pest and disease control materials are always in stock.

### IO 8.2: Pests and diseases outbreaks are monitored and controlled

**Outputs (Program C):**

- 2 million ha of agricultural land monitored and controlled for pests, including surveillance of migratory and emerging pests.

### IO 8.3: Animal health preventive measures undertaken

**Outputs (Program B):**

- Procedures for bio-security of fisheries and livestock in place; including surveillance, vaccinations, deworming and disease screening of poultry, cattle, goats and other livestock.
- 500,000 farmers are trained annually on animal health and disease prevention.
- 5 million poultry vaccinations are implemented per annum.
- Large-scale vaccination and dipping of cattle twice a year (2.6 – 4.0 million cattle).
- Goat stock dewormed annually (6.5 – 10.0 million goats).
- Pigs dewormed and vaccinated annually (1.8 – 4.0 million pigs).
- Dairy cattle screened for ticks and TB (71,000 – 106,500 cows).
- Vaccines supplied, with the required cold-chains established to maintain them.

#### IO 8.4: Biotechnology usage up-scaled

##### Outputs (Program A):

- 20 staff trained on biotechnology and chemical analysis.
- Plant protection regulation reviewed.

##### Outputs (Program B):

- 100 plant clinics established, including development of biotechnology for these.
- Agricultural biotechnologies applied through development and commercial distribution.
- Five groups for IPM/IPDM implementation are established in each EPA.

##### Outputs (Program C):

- 15,000 farmers are trained on IPM annually.
- Agricultural and food imports and exports inspected at border posts for pests and diseases.

128. **Implementation:** GoM, especially MoAIWD in partnership with private companies and suppliers of equipment, are the main implementers of this IA. Activities will mainly be funded by the government. DPs might be requested to finance IPM and upgrading of quarantine facilities, and farmers are expected to co-finance vaccination and other animal health activities.

#### IA9: Agricultural Innovation Systems

**Outcome:** Demand-driven, pluralistic innovation system generates and disseminates relevant and adequate technologies to all farmers.

##### Intermediate Outcomes:

- IO 9.1: Efficient research partnerships established in a participatory and demand-driven way, including on-farm research.
- IO 9.2: Relevant, evidence-based extension advice delivered in a demand-driven and participatory way.

129. The development, adaptation and dissemination of new agricultural technologies are at the core of sustainable productivity increase, diversification and adaptation to climate change. Climate-smart approaches, which seek to balance sustainable productivity increase to meet the needs of a growing population in addressing the challenges of adapting to climate change and reducing agriculture's carbon footprint to the extent possible, are a key element of this IA. IA 9 responds to a number of important policy foundations. The importance of agricultural research is recognised in MGDS III and the NAP and elaborated in the Agricultural Research Master Plan.
130. Approaches to research and extension have been fragmented, poorly co-ordinated, and lacking focus on key priorities. Moreover, the dominant supply-driven approaches were often not in line with farmer priorities and market requirements, resulting in limited uptake. The innovation systems approach aims at strengthening the integration of research organisations, extension service providers, and end users, to improve the quality and relevance of new technologies. Emphasis is on a consultative approach for identifying best practices in adaptation to climate change and for scaling up of such practices and climate smart agriculture. This calls for gender and youth sensitive processes in setting research priorities and extension approaches and technologies that address the specific needs of the target groups.



131. Participatory approaches should be at the forefront of technology adoption. In addition to offering new technologies, service providers should act as facilitators for peer-to-peer learning, choice of enterprises and technologies, and their adaptation to local conditions. The Extension Policy is expected to confirm the relevance of the pluralistic and innovation-driven approach, albeit with some modifications to incorporate non-traditional extension methods and ICT-based approaches. IA9 will enhance the capacity of the public sector to play a leading and coordinating role, including coordination between extension and research (also addressed under IA1) through strengthened decentralised structures to ensure better communication between grassroots and central level.

#### **IO 9.1: Efficient research partnerships established in a participatory and demand-driven way, including on-farm research**

##### **Outputs (Program A):**

- Research coordination activities including establishment of research Programs at research station level; national plant breeder's fairs, and coordination meetings amongst public, private and CGIAR research institutions.
- The Malawi Industrial Research and Technology Development Centre (MIRT) strengthened, to produce technologies that reduce post-harvest losses.
- Two stakeholder meetings for technology release are conducted annually.
- The Agricultural Research and Extension Trusts' diversification plan is developed.
- Competitive research grants are provided to 50 students.

##### **Outputs (Program B):**

- Germplasm is conserved, to preserve livestock and plant varieties as well as wild crops.
- The Malawi Plant Genetic Centre is re-furbished.

##### **Outputs (Program C):**

- 18 micro-nutrient bio-fortified varieties are developed.
- About 10 new varieties or technologies developed and released annually in areas demanded by farmers, companies or extension workers.
- About five feed technologies developed annually, for both livestock and fisheries.
- About 45,000 on-farm participatory demos on GAPs conducted annually, on improved varieties, indigenous crops, conservation agriculture and other issues identified by farmers.
- Detailed analysis of site-specific constraints affecting agricultural performance carried out.

**IO 9.2: Relevant, evidence-based extension advice delivered in a demand-driven and participatory way****Outputs (Program A):**

- District-level databases on extension established.
- Livestock master plan developed.
- Two agricultural resource centres are operational per district.
- GAP guidelines are continuously updated, including development of appropriate messages on climate resilience, post-harvest management, and conservation agriculture.

**Outputs (Program B):**

- 225,000 farmers participating in goat pass-on Programs, with 45,000 goats annually distributed.
- 150,000 farmers participating in chicken pass-on schemes, with 180,000 chickens annually distributed.
- 4,500 beekeepers trained on apiculture.
- Livestock committees revamped in 2,800 villages.

**Outputs (Program C):**

- The number of lead farmers increased from 20,000 to 35,000.
- 10,000 clusters (as an innovative extension approach) are functional every year.
- 1,000 farmer field schools are established.
- 1,000 green belts are operational per year.
- 1,000 model villages established per year.
- 22,000 annual field days on GAPs.
- 300,000 ha annually cultivated under GAPs.
- 800,000 farmers annually receive specialised extension services with special attention to priority value chains.
- 190,000 ha annually intercropped with nitrogen fixing plants.
- Annual district agricultural fairs are undertaken.
- Various productive inputs are supplied to farmers for demonstration purposes.
- 400 farmers using stall feeding methods.
- 1,020 grazing areas and 100 water points established.
- 50,000 fodder trees planted by dairy farmers.
- 5,000 farmers per annum trained on deep pond fish production systems.
- 8 fish pond/cage culture schemes established, and potential aquaculture sites are mapped.
- 15 dams restocked with fish.

**Outputs (Program D):**

- 245 value addition groups are formed and trained in priority value chains.
- 410,000 farmers trained annually on post-harvest management, including cost-effective drying, storage and shelling methods.
- 2,930 FOs trained on processing, including MBS requirements, support to milk producer's associations, quality standards, and with market requirements.
- Equipment distributed for reducing post-harvest losses for demonstration purposes

132. **Implementation:** MoAIWD is the lead agency for both extension and research, but this is also an intervention area which requires a large extent of coordination amongst a range of stakeholders; an area which has been particularly challenging in the past. This includes mainly NGOs, CSOs, CGIAR institutions and academia.

#### IA10: Access to Inputs

**Outcome:** Farmers have timely access to a broader range of quality inputs at reasonable cost.

**Intermediate Outcomes:**

- IO 10.1: Efficient seed supply systems established.
- IO 10.2: FISP reforms advanced.
- IO 10.3: Supply chains for organic and in-organic fertiliser strengthened.
- IO 10.4: Livestock and fisheries gene pool improved and breeding stock made available to farmers.

133. Timely access to agricultural inputs (seeds, fertiliser and crop protectants, breeding stock and fingerlings) that are well-suited to local conditions is critical for enhancing productivity and adapting to climate change. The importance of access to inputs is recognised in the SADC Regional Agricultural Policy and accompanying Investment Plan, as well as the NAP under Policy Priority Area IV. Specific reference to inputs also appears in the national seed and fertiliser policies. Since 2006, the FISP has been the dominant government Program in this area which has attracted the bulk of public spending for the sector. FISP reforms are ongoing and related stakeholder discussions, studies and pilots will be financed by the NAIP. While the future size and scope of the program are uncertain, the 2016/17 targets have been used for the NAIP budget (900,000 beneficiaries). Beyond the FISP, input markets need to be strengthened. Improved access to seeds has been highlighted as policy priority by companies participating in the New Alliance, including reforms to facilitate importation of varieties licensed in neighbouring SADC countries. The Seed Services Unit, which is responsible for seed certification, is currently undergoing reforms to be more efficient and closer to the farmers. An improved regulatory framework is also required to facilitate importation of other inputs such as inoculants, livestock, day-old chicks, veterinary drugs and fertiliser.

#### IO 10.1: Efficient seed supply systems established

**Outputs (Program A):**

- Import procedures for seeds and other inputs are simplified, especially for seeds which are approved for use in another SADC country.
- Procedures for testing and release of new climate adapted varieties revised and streamlined.
- The Seed Bill enacted.
- A semi-autonomous Seed Services Unit (SSU) is established.

**Outputs (Program C):**

- FISP is implemented with increased participation of the private sector.
- Under FISP 900,000 farmers annually receive vouchers for legume and maize seeds.
- 10,000 import permits are issued annually, including the Phytosanitary certificates.
- 950 community seed banks established and connected to seed pass-on Programs.
- Quantity of basic seed produced increased from 105 to 325 tonnes per annum.
- 13,000 tonnes of seed multiplied by farmers, including setting up of demo plots.
- Seed Services Unit annually inspects 25,000 ha of seed multiplication (15,000 ha currently).
- 75 ha of nurseries for tree and vegetable seedlings are established.

### IO 10.2: FISP reforms advanced

#### Outputs (Program A):

- FISP reform options studied.

#### Outputs (Program C):

- FISP reform options piloted.
- FISP reform options monitored and discussed amongst stakeholders.

### IO 10.3: Supply chains for organic and in-organic fertiliser strengthened

#### Outputs (Program A):

- The Pesticides Control Board is strengthened.
- A semi-autonomous fertiliser regulatory body is established.
- Three soil labs are refurbished.
- Options for domestic fertiliser manufacturing evaluated.

#### Outputs (Program B):

- 2,000,000 farmers produce manure and inorganic fertiliser.
- National soil maps updated.

#### Outputs (Program C):

- 900,000 farmers annually receive vouchers for fertiliser subsidies under FISP; to a large extent through private sector distributors, and by providing co-financing.
- 300 fertiliser samples analysed annually.
- Area-specific fertiliser recommendations developed.

### IO 10.4: Livestock and fisheries gene pool improved and breeding stock made available to farmers

#### Outputs (Program A):

- Livestock conservation protocols developed.

#### Outputs (Program B):

- Small stock multiplication through farmer breeders, reaching up to 1,000 goats.

#### Outputs (Program C):

- 5,000,000 fingerlings produced annually, including establishment of hatcheries and certification of private hatchery operators.
- 5,000,000 fingerlings restocked annually, including designation of fish breeding grounds and sanctuaries and restocking of indigenous fish.
- 60,000 (up from 10,000) livestock artificially inseminated annually.
- Livestock breeding animals sourced, increased from 3,450 to 10,000 animals annually, though both imports of improved breeds and restocking of Government livestock farms.
- 1,400 heifers passed-on, through implementation of a pass-on Program.



134. **Implementation** will be led and coordinated by MoAIWD in collaboration with private sector and farmers. FISP reforms will be designed, implemented and evaluated by a multi-stakeholder group consisting of MoAIWD, DPs, Academia, NSAs/CSOs, farmers and private sector. Over time, the role of the private sector in input supply chains including FISP implementation will increase and farmers will be expected to co-finance larger share of the cost with the possible exception of subsidies linked to environmental services.

#### IA11: Sustainable Natural Resource Management and Climate Resilience

**Outcome:** Natural resources are sustainably managed and the resilience of production systems is enhanced.

**Intermediate Outcomes:**

- IO 11.1: Water resources are managed and used sustainably.
- IO 11.2: Land use planning and zoning updated and implementation capacity enhanced.
- IO 11.3: Area under agro-forestry expanded and management capacities enhanced.
- IO 11.4: Lake and rivers fisheries resources are efficiently and sustainably managed.

135. Climate change, land degradation and deforestation are major threats to Malawi's ecosystem and rural livelihoods. The focus of this IA is on adaptation to climate change according to the UNFCCC definition<sup>17</sup>. The NAIP's response is anchored on a number of Malawi's global and regional commitments on climate change adaptation and mitigation including UNFCCC, the Paris Agreement and COMESA Regional Agricultural Policy. Climate change response is also included as a cross-cutting theme in many national policies and strategies; MGDS III, the National Resilience Plan and a number of national climate change related policies which contribute to the national Climate Change Investment Plan and policies on land resource conservation and natural resource management.
136. This IA includes measures to enhance the resilience of production systems and promote sustainable management of natural resources. This includes improved land use planning based on zoning and protected areas; sustainable management of fisheries; sustainable management of water resources through catchment management approaches; conservation of genetic resources; up scaling of agroforestry; sustainable intensification of livestock production; organic manure production and use; inter-cropping with legumes; irrigation development; aquaculture development; and enhancement of community and household resilience. These measures are in line with the National Resilience Plan and the MSSP and respond to the commitments of the Intended Nationally Determined Contribution and Climate Change Investment Plan. Also

<sup>17</sup>UNFCCC defines Adaptation to climate change as actions taken to help communities and ecosystems cope with changing climate conditions

important are the National Catchment Management and Infrastructure Development Guidelines under MoAIWD that will guide this intervention area. In some cases it may be possible to use social protection programs to promote the adoption of climate resilient practices, and to use public works programs to build community infrastructure facilities that support climate change adaptation.

#### **IO 11.1: Water resources are managed and used sustainably**

##### **Outputs (Program B):**

- 200,000 farmers trained annually on rainwater harvesting.
- Improved rainwater harvesting and soil moisture management technologies developed.
- 3 dams and 1 deep well constructed per district.
- Catchment area management strengthened
- 1,500 livestock watering points established.

#### **IO 11.2: Land use planning and zoning updated and implementation capacity enhanced**

##### **Outputs (Program B):**

- Agricultural and protected areas are zoned in all 28 districts.
- District level natural resource management committees are functional through capacity development.

#### **IO 11.3: Agro-forestry areas expanded and management capacities enhanced**

##### **Outputs (Program A):**

- Legislative framework for agro-forestry developed and incentive mechanisms identified.
- Tree-cover density targets on agricultural land established at national level.

##### **Outputs (Program B):**

- 150,000 farmers are trained annually in climate resilient agro-forestry practices.
- 2,000,000 ha of farmer-managed natural generation tree-planted areas established.
- 22,500 mini-tree nurseries established and properly managed.
- At least 30,000 ha and 2,500 km of river banks are planted with trees.

#### **IO 11.4: Lake and rivers fisheries resources are efficiently and sustainably managed**

##### **Outputs (Prog. A):**

- Legal / regulatory framework for fisheries management revised strengthened.
- Fisheries master plan developed.

##### **Outputs (Prog. B):**

- Annual census on fish and aquatic environment undertaken.
- HIV/AIDS community awareness campaigns conducted.

##### **Outputs (Prog. C):**

- 30,000 fisher folk including women and youth trained on improved technologies such as aquaponics and identification of exotic fish species.
- Fisheries technologies developed and analysed, including offshore deep-water fishing.

##### **Outputs (Prog. D):**

- 20 fish landing and marketing facilities and two docking stations/break-ways established.

137. **Implementation:** MoAIWD and MoNREM are the lead agencies under this IA, in coordination with NGOs and researchers. This must also be coordinated with the MNSSP and the public works Program catchment management approaches. Government is expected to be a major financier with development partners also contributing. Important Programs to coordinate with include Local Development Fund's Public Works Programs' Catchment Management Approach, as well as work under WFP's Food for Assets interventions.

#### IA12: Sustainable Irrigation Development

**Outcome:** Use of irrigation sustainably increased.

**Intermediate Outcomes:**

- IO 12.1: Area under functional irrigation systems increased.
- IO 12.2 Irrigation schemes are properly managed and maintained.

138. Malawi has well-developed policies in irrigation development and a detailed Irrigation Master Plan, both of which are linked to the national policies on water and environmental protection. There are two institutions with responsibilities for irrigation development: MoAIWD and the GBA. However, irrigation development has always lagged behind Malawi's national ambitions in this area, largely due to lack of finance for the substantial investments needed and limited technical capacity for system design and construction.
139. Malawi's irrigation potential is estimated at 408,000 hectares of which 107,000 ha (26%) has been developed with about 46 percent on estates and 54 percent smallholder. Most strategic plans identify irrigation as having potential for adaptation to climate change, sustainable intensification, food security and trade promotion. In line with the Irrigation Master Plan, and overshooting the NAP objective, the NAIP targets to increase the irrigated area by 43,700 ha.

#### IO 12.1: Area under functional irrigation systems increased

**Outputs (Program A):**

- Capacity for planning and implementation of irrigation work and scheme management is strengthened.

**Outputs (Program C):**

- 36,800 ha of irrigation schemes developed.
- 5,100 ha of irrigation schemes rehabilitated.



### IO 12.2 Irrigation schemes are properly managed and maintained according to their economic potential

#### Outputs (Program A):

- Irrigation Code of Practice developed and their implementation monitored.
- WUA Law enacted.

#### Outputs (Program C):

- 100 irrigation associations have their performance assessed annually.
- 64 new WUAs are established and all existing WUAs are trained annually.
- Extension services are provided to farmers in irrigated schemes.

#### Outputs (Program D):

- Irrigation farmers are linked to markets and finance.
- 50 matching grants are disbursed for irrigation investments.

140. **Implementation:** Key stakeholders include MoLHUD in terms of land identification and in ensuring tenure security for all involved parties (covered under IA6); MoAIWD in coordinating irrigation projects as well as leading their design and implementation in partnership with the private sector and in provision of extension services. The Green Belt Authority (GBA) is also a major player in irrigation development and in engagement with private sector.

### IA13: Mechanisation

**Outcome:** Improved access to and use of mechanisation services by farmers.

#### Intermediate Outcome:

- IO 13.1: Knowledge and skills of providers and users of mechanisation services strengthened.
- IO 13.2: Availability and quality of mechanisation equipment and services enhanced.

141. The majority of Malawian farmers continue to use rudimentary hand tools for all farm operations including harvesting and processing. This is highly inefficient and burdens millions of households, making agriculture unattractive, particularly to the youth. Mechanisation is a crucial input for crop production and one that has been underdeveloped and underfinanced in Malawi. Mechanisation is an often-overlooked climate change adaptation measure that, in concert with other activities, can improve the resilience of farming systems. Mechanisation reduces hard labour, relieves labour shortages, improves productivity and timeliness of operations, and contributes to climate adaptation. NAIP will aim at increasing the use of machinery in farming and agro-processing activities by 50 percent. This will be achieved in full harmony with environmental considerations, including the full integration of conservation agriculture principles.

### IO 13.1: Knowledge and skills of providers and users of mechanisation services strengthened

#### Outputs (Program A):

- Standards for safety measures and safeguards are developed.

#### Outputs (Program C):

- 425 Health and safety trainings are conducted.
- 750 machinery operators/mechanics are trained.
- 300 mechanisation demos are conducted.



### IO 13.2: Availability and quality of mechanisation equipment and services enhanced

#### Outputs (Program C):

- Government mechanisation schemes make more tractors and CA equipment available.

#### Outputs (Program D):

- Incentives are provided to increase the importation of tractors and CA implements by private sector.
- Feasibility study on machinery fund is conducted.

142. **Implementation:** While MoAIWD is responsible for maintaining Government-owned facilities with tractor and draught animals for hire, the private sector is expected to lead this intervention area. Many of these private stakeholders are farmers themselves, through their farmer organisations.

### IA14: Agricultural Markets and Trade

**Outcome:** Enhanced efficiency and inclusiveness of agricultural markets and trade

#### Intermediate Outcomes:

- IO 14.1: Availability and quality of market information enhanced
- IO 14.2: Government price policies are evidence based, transparent and predictable
- IO 14.3: Effectiveness, scope and fairness of contract farming improved
- IO 14.4: Scope and efficiency of commodity exchanges and warehouse receipt systems enhanced
- IO 14.5: Domestic market access improved
- IO 14.6: Access to regional and global markets and regional trade enhanced

143. MMalawi has a comprehensive set of policies concerning agricultural marketing and trade, and is party to a number of regional trade agreements that promote intra-African and sub-regional trade. Malawi is a participant in the EIF (linked to WTO), and supports the SADC and COMESA ambitions to improve regional agricultural trade. IA 14 is also founded on several national trade and private sector policy frameworks including the National Trade Policy, National Export Policy, and the TIP-SWAp.
144. Notwithstanding the sound policy foundations, the efficiency and inclusiveness of agricultural markets are hampered by gaps in market infrastructure, information and asymmetries between farmers and downstream actors. Moreover, market interventions through trade policy measures and public grain storage often creates uncertainty for value chain players, reduces prices and margins and leads to under-investment in production and storage. This calls for improved market information and analytical capacity by government along with better coordination between public and private actors. Rural roads and market infrastructure are critical to improve market access, reduce postharvest losses and improve product quality. Commodity exchanges, warehouse receipt systems and contract farming are effective instruments in building more structured markets. An enabling legal and regulatory environment and effective oversight are needed to realise the full potential of these instruments ensuring fairness, competitiveness and security for market participants.

### IO 14.1: Availability and quality of market information enhanced

#### Outputs (Program C):

- Various sources of market information are integrated in an ICT-based market information system accessible to large numbers of farmers and other value chain actors.
- Farmers and other value chain actors as well as public sector decision-makers are trained in analysing and using market information.

### **IO 14.2: Government price policies are evidence based, transparent and predictable**

#### **Outputs (Program A):**

- ADMARC reforms are implemented.
- Evidence-based market intervention and price policy is developed.
- The analytical capacity of GoM to analyse market and price trends is strengthened.
- Continuous consultations are held with private market players to inform market and price policy interventions.

### **IO 14.3: Effectiveness, scope and fairness of contract farming improved**

#### **Outputs (Program C):**

- and stakeholders are sensitised on its content.
- The capacity of FOs and agribusiness to engage in contract farming is strengthened.
- Increased number of farmers operating under contract farming arrangements.
- The Competition and Fair Trade Commission is strengthened through the establishment of a contract farming unit.

### **IO 14.4: Scope and efficiency of commodity exchanges and warehouse receipt systems enhanced**

#### **Outputs (Program D):**

- 400,000 tonnes of additional quality storage capacity in rural areas is built or rehabilitated through private investments of PPPs.
- Farmers and SMEs trained in warehouse receipt systems and commodity exchanges.
- Strengthened capacity of warehouse operators in warehouse operations and use of warehouse receipts.
- Increased value of warehouse receipt financing, through linking of FOs, SMEs and banks to the warehouse receipt systems and commodity exchanges.

### **IO 14.5: Domestic market access improved**

#### **Outputs (Program D):**

- 5,000 km of rural feeder roads rehabilitated/upgraded, giving priority to supporting PPPs involving farmers and agribusinesses in priority value chains.
- 7,500 km of rural feeder roads spot improved.
- Rural cold storage facilities established, including 316 milk bulking centres and five large cold storage facilities for fruits and vegetables.
- 251 Rural market facilities rehabilitated, including livestock markets (two per district), food retail and wholesale markets.

### IO 14.6: Access to regional and global markets and regional trade enhanced

#### Outputs (Program A):

- Technical capacity of MoITT to negotiate and implement trade agreements in agriculture strengthened.
- Policies related to agricultural trade revised and updated.
- Database on non-tariff barriers to trade established.
- Trade bans and non-tariff trade barriers in agriculture reduced.
- Barcode institution established.

#### Outputs (Program D):

- Trade promotion for agricultural exports on regional and global markets undertaken through market research, participation in expos/fairs.

145. **Implementation:** This IA covers a range of activities which fall under different mandates and require the collaboration of various public and private actors. Leadership will be provided by MoITT (IO 4 and 6), Ministry of Transport (IO 5), and shared between MoITT and MoAIWD (IO 1-3). The High-Level Public Private Coordination Mechanism to be established under the CAP-F and the value chain platforms will play important roles.

### IA15: Inclusive Private Investments in Agribusiness

**Outcome:** Increased agro-processing, value addition and investments into the domestic markets

#### Intermediate Outcomes:

- IO 15.1: Enabling agribusiness environment and public-private dialogue strengthened
- IO 15.2: Principles for Responsible Agricultural Investment (PRAI) mainstreamed
- IO 15.3: Technical and Business skills of cooperatives and SMEs in agribusiness enhanced
- IO 15.4: Agribusiness investment promotion and PPPs implemented

146. The policy foundations for IA 15 are in the Malabo Declaration and Malawi's Private Sector Development Policy and Strategy, the TIP-SWAp, and the policy on PPPs. These recognise that the government can promote private investments through an improved business-enabling environment including stable and predictable policies, supporting legislation and infrastructure and support services. Promotional measures may include tax incentives and special economic zones for agro-processing. Regular consultations between public and private stakeholders will be undertaken through a high-level stakeholder forum in the context of the CAP-F. This will be complemented by multi-stakeholder platforms within priority value chains which will serve to identify PPPs for maximising socio-economic investment impact. The latter will be ensured by applying the PRAI. Such investments are most successful if properly screened at appraisal stage and monitored by competent government entities and civil society.

### IO 15.1: Enabling agribusiness environment and public-private dialogue strengthened

#### Outputs (Program A):

- A high-level public-private coordination forum is established to discuss policy, regulatory and institutional reforms and monitoring their implementation.
- Tax and non-tax based incentive mechanisms for priority value chains are established, based on a review of the existing incentive framework.
- The regulatory and institutional frameworks for cotton and tobacco subsectors are strengthened.

#### Outputs (Program D):

- A National Agricultural Fair and centre for excellence is established.

### IO 15.2: The PRAI are mainstreamed

#### Outputs (Program A):

- Relevant stakeholders sensitised and trained on the PRAI.
- Guidelines are developed for screening investors and investment proposals, especially those requiring access to land and/or proposed for PPPs.
- PRAI and related operational guidelines are translated into Chichewa and common local languages.

### IO 15.3: Technical and business skills of cooperatives and SMEs in agribusiness enhanced

#### Outputs (Program D):

- 150 Cooperatives and SMEs are trained on various business aspects, such as market research, marketing, development of business plans, etc.
- 150 Cooperatives and SMEs are trained on various technical aspects related to post-harvest handling and agro processing.

### IO 15.4: Agribusiness investments and PPPs promoted

#### Outputs (Program D):

- 6 additional priority commodity value chain platforms in value chains are established and existing platforms function effectively, supported by technical assistance.
- Agribusiness potential mapped at regional/district level and five Special Economic Zones for agribusiness established in high potential areas.
- Investment commitments under New Alliance fully implemented.
- 36 abattoirs in rural and urban centres established.
- 75 rural agro-processors are connected to the electricity grid (last mile connectivity).
- Annual agribusiness investment fora and fairs undertaken at national and district levels, in order to identify PPPs.

147. **Implementation:** Agribusiness development is under the mandate of both MoITT and MoAIWD but also requires collaboration with other public entities, such as local governments, MITC, and entities responsible for rural roads and electricity. Moreover, close coordination with private actors including agribusiness companies, cooperatives and farmer organisations is critical. The High-level Coordination Forum and the value chain platforms will play important roles in orchestrating these various actors. Civil society and NSAs play important roles as service providers and in the implementation of the PRAI.

### IA16: Access to a Broader Range of Agri-Financial Services Enhanced

**Outcome:** Improved access to agricultural finance by all target groups

#### Intermediate Outcomes:

- IO 16.1: Enabling environment for Agri-finance strengthened and specific policy instruments established
- IO 16.2: Farmers, especially women and youth are able to use financial services more effectively
- IO 16.3: Investment support and start-up activities and adoption of innovative technologies by FOs and SMEs, with preference to youth and women

148. Malawi's Financial Sector Development and Financial Inclusion Strategies emphasise the importance of improved access to financial services in rural areas to support agricultural and agro-industrial investment and trade. IA 16 responds to these strategies by measures to increase the diversity, quality and accessibility of financial services (including banks, MFIs, SACCOS and agribusiness) and by sharing risks. The capacity of farmers and other value chain actors to interact with financial service providers will also be strengthened. Access to finance is one of the most critical constraints facing farmers and other food system actors. Farmers and Agri-related enterprises need access to a broad range of financial services including credit, savings, insurance and money transfer. Currently, the supply of financial services is very limited, especially in rural areas. While the spread of Village Savings and Loan Groups is an important step towards financial inclusion, their contribution to agricultural finance is quite limited. Banks and agribusiness are the main sources of finance but loans are mostly limited to larger farmers and enterprises and to a few highly structured value chains (tobacco, sugarcane and tea). Nevertheless, there are opportunities emerging from warehouse receipt financing and the spread of mobile phones and other ICT delivery channels.

#### **IO 16.1: Enabling environment for Agri-finance strengthened and specific policy instruments established**

##### **Outputs (Program A):**

- Feasibility studies and consultations to identify new financing instruments (including a TA facility to support financial service providers, a risk-sharing mechanism and a re-financing mechanism)<sup>18</sup>.
- At least one financing instruments will be established and their management outsourced to independent service providers.
- A low-cost, electronic registry for movable collateral is established to help reduce collateral constraints.

#### **IO 16.2: Farmers, women and youth able to use financial services more effectively**

##### **Outputs (Program C):**

- Financial literacy campaigns targeting 220,000 farmers.
- Farmers, especially women and youth, and their organisations receive training to strengthen their financial literacy and financial management skills.

#### **IO 16.3: Investment support and start-up activities and adoption of innovative technologies by FOs and SMEs, with preference to youth and women**

##### **Outputs (Program D):**

- 140 SMEs (with priority to women and youth) annually received matching grants for business start-ups for agro-enterprises.
- 250 agribusiness SMEs receive matching grants for investments in environmentally friendly technologies to expand their operations.

<sup>18</sup>The latter might also include the feasibility of establishing an Agricultural Development Bank, as advocated by some stakeholders.

149. **Implementation:** Rural and agricultural finance is a complex area that requires strong coordination with various actors and policy frameworks. The availability and cost of finance to agriculture depends on improved macroeconomic stability, reduced inflation and lower domestic government borrowing rates (T-bills), as well as on an improved legal and regulatory environment. Activities will, therefore, be led by the MoFEP&D and include collaboration with the Reserve Bank of Malawi (RBM), MoITT, MOAIWD and representatives of financial institutions. Implementation will be closely aligned to the Financial Sector Strategy 2016-20 and the Financial Inclusion Strategy 2015-20 both of which identify rural financial inclusion and agricultural/SME finance as priorities. The NAIP will facilitate coordination of rural finance policies with agricultural sector priorities regarding improved farmer access to financial services.

## Chapter 4: Budget and Financing

### 4.1 Methodology

150. The NAIP budget has been developed through a bottom-up approach whereby contributions were received from various stakeholders including all MoAIWD Departments as well as other Ministries and Agencies (MoITT, MITC, MoLHUD). Costs for activities and outputs have been estimated based on unit costs and physical targets over the five-year life of the NAIP. Some of the very detailed activities and cost estimates were consolidated into more generic activities, some of which were further consolidated into more aggregate outputs. The cost estimates are further grouped by Intermediate Outcomes (IOs), Intervention Areas (IAs) and Programs.
151. This Chapter presents the NAIP and its budget at the consolidated output level, not at the level of detailed activities. It starts by presenting the budget by Program and IA using the matrix structure. In addition, the budget is displayed according to the following classifiers:
- Sub-sector (crops, livestock, and fisheries)
  - Main investment areas (inputs, infrastructure and institutional strengthening.)
  - Expenditure type (recurrent versus investment)
  - Implementation level (central versus field)
  - Year
152. Readers seeking more disaggregated cost information at the level of each activity/budget line can refer to the Excel budget file underpinning the aggregate budget presented here. The detailed cost tables can be filtered and aggregated according to a number of classifiers through the use of pivot tables. In addition to the classifiers mentioned above, the Excel file contains additional classifiers for each budget line which allows the budget to be viewed from various angles. For example, activities and outputs can be grouped by NAP Policy Priority Area or Strategy which facilitates monitoring the implementation of the NAP through the NAIP. The classifiers are helpful to guide resource allocation and monitor implementation, as well as to consider the balance between the various Programs, IAs and institutions.

## 4.2 Budget Overview

### Budget by Program and Intervention Area

153. The NAIP budget is estimated at USD 3.219 billion over a five-year implementation period, USD 643 million per annum on average. This represents a 16% increase over the ASWap, which had a total budget of USD 2.2 billion over a four-year period, averaging USD 550 million per year. Table 5.1 provides an overview the budget allocation by IA and by Program.

**Table 4.1: Total NAIP Budget by Program and IA (in USD'000)**

	Program A	Program B	Program C	Program D	Total	Share of total by IA
IA1	181,896	-	-	-	<b>181,896</b>	5.7%
IA2	3,317	5,048	7,157	501	<b>16,023</b>	0.5%
IA3	93,949	-	-	-	<b>93,949</b>	2.9%
IA4	576	208,669	-	-	<b>209,245</b>	6.5%
IA5	4,895	580	3,400	1,910	<b>10,785</b>	0.3%
IA6	15,325	10,199	2,398	4,690	<b>32,612</b>	1.0%
IA7	18,157	392,872	1,500	-	<b>412,529</b>	12.8%
IA8	2,844	215,822	13,434	-	<b>232,100</b>	7.2%
IA9	3,992	20,471	196,096	211,603	<b>432,161</b>	13.4%
IA10	6,195	15,494	338,993	-	<b>360,682</b>	11.2%
IA11	3,283	55,894	4,299	1,257	<b>64,733</b>	2.0%
IA12	810	-	394,793	384	<b>395,987</b>	12.3%
IA13	70	-	15,320	40,085	<b>55,475</b>	1.7%
IA14	13,922	-	13,250	495,351	<b>522,523</b>	16.2%
IA15	1,330	-	-	166,389	<b>167,719</b>	5.2%
IA16	21,850	-	3,430	5,430	<b>30,710</b>	1.0%
<b>Total</b>	<b>372,408</b>	<b>925,050</b>	<b>994,071</b>	<b>927,600</b>	<b>3,219,129</b>	
<b>Share by Program</b>	11.6%	28.7%	30.9%	28.8%	<b>100%</b>	100%

154. The overall budget distribution among the four Programs is balanced. Under **Program A** (11.6% of the budget) the main items are personal emoluments for MoAIWD staff, collection and utilisation of quality data, and maintenance of EPA-level infrastructure. The largest items under **Program B** (28.7% of the budget) are the delivery of food aid, the establishment of homestead gardens to enhance FNS, and the monitoring and control of major pests and diseases. Under **Program C** (30.9% of the budget) the largest expenditures are establishment and rehabilitation of irrigation schemes, FISP seed and fertiliser and artificial insemination. Under **Program D** (28.8% of the budget) the largest items are the rehabilitation and upgrading of rural feeder roads, followed by the investment amounts pledged by the NA Companies and the construction of on-farm storage facilities. Annex 4 presents the outputs by Program and related budget allocation.

155. The detailed activities (budget lines) under each of the four Programs can be used as a basis for preparing the MoAIWD budget under the proposed Program-based budgeting (PBB) approach. This would be done only for the activities (co)-financed and implemented by MoAIWD during the given year.

156. Table 4.2 shows the shares of the IAs in the total budget for each Program. It shows the relative contributions of the IAs by Program. It also links the IAs to the NAP Policy Priority Areas (PPAs) which allows calculation of the total expenditures and budget shares of each PPA in the NAIP budget.



**Table 4.2: Relative Budget Shares of Programs by IAs and NAP Policy Priority Area**

NAP Policy Priority Areas	NAP Intervention Areas	Program A	Program B	Program C	Program D	Resource allocation per IA (% / USD million)
3.8: Institutional Dev. Coordination & Capacity Development	IA1: MoAIWD, Coordination and M&E	48.8%				5.7%
	IA2: Farmer-Based Organisations	0.9%	0.5%	0.7%	0.1%	0.5%
	IA3: Public Agricultural Services Delivery	25.2%		0.0%		2.9%
3.5: Food & Nutrition Security	IA4: Food and Nutrition Security	0.2%	22.6%	0.2%		6.5%
	IA5: Food Safety and Quality Standards	1.3%	0.1%	0.3%	0.2%	0.3%
3.7: Empowerment of Youth, Women & Vulnerable Groups	IA6: Empowerment and Tenure Security	4.1%	1.1%	0.2%	0.5%	1.0%
	IA7: Disaster Risk Reduction Systems	4.9%	42.5%	0.2%		12.8%
3.6: Agricultural Risk Management	IA8: Pest and Disease Management	0.8%	23.3%	1.4%		7.2%
	IA9: Agricultural Innovation System	1.1%	2.2%	19.7%	22.8%	13.4%
3.1: Sustainable Production & Productivity	IA10: Access to Inputs	1.7%	1.7%	34.1%		11.2%
	IA11: Natural Resource Management	0.9%	6.0%	0.4%	0.1%	2.0%
	IA12: Sustainable Irrigation Development	0.2%		39.7%		12.3%
3.3: Mechanisation	IA13: Mechanisation			1.5%	4.3%	1.7%
3.4: Market Development, Agro-processing & Value Addition	IA14: Agricultural Markets and Trade	3.7%		1.3%	53.4%	16.2%
	IA15: Agri-business Development	0.4%		0.0%	17.9%	5.2%
	IA16: Access to Finance	5.9%		0.3%	0.6%	1.0%
	<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>3,219.1</b>
	<b>Total per Program (USD million)</b>	<b>372.4</b>	<b>925.0</b>	<b>994.1</b>	<b>927.6</b>	<b>3,219.1</b>
	<b>Relative share of Program</b>	<b>10.9%</b>	<b>28.8%</b>	<b>31.6%</b>	<b>28.8%</b>	<b>100%</b>

157. Expenditures are also distributed reasonably well across IAs, especially if compared to the ASWAp where expenditures were highly skewed towards Pillar 1 and sub-Program 1.1 (FISP). Broken down by IAs, the largest ones are as summarised in Table 4.3 below:

**Table 4.3: Share of Biggest IAs in Total Budget**

Intervention Areas		Share of budget
IA14	Agricultural Markets and Trade	16.2%
IA9	Agricultural Innovation System	13.4%
IA7	Disaster Risk Reduction Systems	12.8%
IA12	Sustainable Irrigation Development	12.3%
IA10	Access to Inputs	11.2%

#### Budget by Main Subsectors and by Investment Categories

158. The NAIP budget analysis presented at main subsectors, activities and investments specific to crop value chain levels amount to 45% of the total budget (USD 1,455.5 million), followed by livestock (7%, USD 219.7 million) and fisheries (1%, USD 39.5 million). The remaining 46.7% of the budget are not specifically linked to any of these subsectors but are related to generic investment and activities cutting across subsectors. Table 5.3 shows the budget allocations of the main types of expenditures and their respective shares in the overall NAIP budget. The largest category is infrastructure (28%) followed by on farm investments (15%), institutional strengthening (11%), and seasonal inputs (9%). Overall, this represents a more balanced investment portfolio than under the ASWAp, including a much lower share of the FISP and a larger share of investments in other productivity-enhancing assets, services and infrastructure.

**Table 4.4: Budget by Main Investment Categories (Sub-totals and share of total budget)**

Type of investment		Total (USD million)	Share of total NAIP budget
<b>Infrastructure</b>	Irrigation, roads, market infrastructure, storage and agro-processing,	906.5	28%
<b>Farm level investments</b>	Perennial crops, livestock farm level storage, FNS (homestead gardens)	478.2	15%
<b>Institutional strengthening</b>	hardware, systems and training of key institutions and coordination mechanisms	365,4	11%
<b>Seasonal inputs</b>	Seeds, fertiliser, pesticides, fingerlings	304.2	9%
<b>Training and sensitisation</b>	Awareness creation and training of private AFS actors (farmers, processors and FOs).	183.6	6%
<b>Research</b>	Research programmes and HR strengthening	89.6	3%
<b>Equipment and machinery</b>	Farm-level and downstream equipment and implements	46.2	1%
<b>Other<sup>19</sup></b>			27%

<sup>19</sup> For this reason, some output targets are round numbers whereas in other cases there are specific targets resulting from various outputs targets of similar dis-aggregated activities which were combined to a more generic, higher level output.

### Budget by Program and Year

159. Table 4.5 shows the distribution of the budget by Program and year. The amount per annum is relatively stable, with a slight progression from USD 619 million in year 1 to USD 672 million in years 5. This progression reflects the sequencing of some of the activities and a gradual increase of investments over time. For example, legal and regulatory reforms, feasibility studies, strategies and master plans, as well as institutional reforms are mainly budgeted during years 1 and 2, many of which trigger an increase in other activities and investments in following years.

**Table 4.5: Budget by Program and Year (in USD'000)**

	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Program A</b>	77,754	80,257	82,123	65,917	66,356
<b>Program B</b>	173,320	179,068	183,895	190,520	198,247
<b>Program C</b>	178,142	187,915	194,652	203,276	230,087
<b>Program D</b>	190,262	192,521	185,896	181,080	177,841
<b>Total</b>	<b>619,478</b>	<b>639,761</b>	<b>646,565</b>	<b>640,794</b>	<b>672,530</b>

### Budget by Expenditure Category

160. Capital expenditure accounts for 62% of the budget while 38% are recurrent costs (see Table 4.6). This marks a major departure from the ASWAp which was dominated by recurrent expenditure items. This change reflects the reduced share of the FISP in the budget and an increased share of investments in productive infrastructure. The largest recurrent expenditure items include food aid, FISP subsidies, monitoring and control of pests and diseases, and staffing costs. Activities related to capacity development, training, and coordination are also classified as recurrent costs. The largest capital investments are related to irrigation, rehabilitation of feeder roads, post-harvest drying equipment and storage, nutrition-related investments at household level (kitchen gardens), and research.

**Table 4.6: Breakdown by Expenditure Category**

	USD '000	%
<b>Capital</b>	2,001,743	62.2%
<b>Recurrent</b>	1,217,386	37.8%
<b>Total</b>	<b>3,219,129</b>	<b>100.0%</b>

### Budget by Expenditure Level

161. Table 4.7 shows the level at which the budgeted activities will be implemented. Overall, 85% of the budget is allocated to the decentralised and field-level activities, whereas 15% is for activities at central/national level. Only Program A contains mainly central/national level activities whereas the other three Programs mainly consist of field level activities. However, this does not imply that an equivalent share of the budget needs to be transferred to the districts. First, several large-ticket items combine local and central level expenditures. For example, FISP and Food Aid require centralised procurement and local distribution and such breakdown within activities has not been done in the NAIP budget. Second, in view of the capacity constraints at district level in terms of fiduciary management, a substantial share of the budget will be managed centrally or through Program Implementation Units (PIUs). As local capacities improve in the course of the decentralisation process, an increasing share of human, technical and financial resources will be transferred to the districts.

**Table 4.7: Expenditure Level by Program**

	Central level		Local level	
	USD '000	%	USD '000	%
Program A	259,383	70%	113,025	30%
Program B	51,237	6%	873,812	94%
Program C	125,618	13%	868,453	87%
Program D	49,593	5%	878,006	95%
<b>Total</b>	<b>485,831</b>	<b>15%</b>	<b>2,733,298</b>	<b>85%</b>

## 4.3 Financing Availability

### General

162. This chapter combines the available information on the funding from various sources and identifies the gap that requires additional resource mobilisation in order to fully fund the Plan. The estimates are mainly based on budget projections such as Medium-Term Expenditure Frameworks (MTEFs) for key ministries and ongoing/pipeline projects of the main DPs, as well as on funding patterns and disbursement trends over the past five years. The Agricultural Sector Performance Expenditure Review (AgPER) covering the period from 2000 to 2013 and the ASWAp Review (2016) are further sources of information. In view of the scope of the NAIP beyond the core mandate of MoAIWD, funding projections in adjacent areas (e.g. nutrition and trade) were also assessed. Three different sources of funding were considered:

- **On-budget Sources:** GoM funding to MoAIWD (as shown in the MTEF); funding to MoITT which relates to agricultural sector objectives (also in the MTEF); GoM transfers to districts (related to agriculture); and DP on-budget support to MoAIWD, districts or other ministries and agencies (e.g. projects financed by WB, IFAD or AfDB).
- **Off-budget Sources:** donor funding, CGIAR funding from outside the DCAFS group, NGO financing from outside the donor group, and DARS off-budget income.
- **Non-traditional Sources** which are not aligned to the NAIP but may still contribute to its objectives. This includes private sector funding (from farmers, domestic private sector, and foreign investments), grants from development funds, climate change funds or similar, as well as financing from other sectors that support the NAIP objectives, for example humanitarian disaster response.

163. These sources are described in detail below and quantified where possible. Historically, the agricultural sector has received substantial funding from GoM and DPs, even though there has been a declining trend in recent years. The past two years have seen both lower levels of FISP expenditure, and less Government resource allocation to the sector. Donor funding has been affected by domestic fiduciary issues and global trends such as reduced availability of traditional ODA. On the other hand, new funding sources are appearing including charitable foundations and new DPs from emerging countries.

## MoAIWD MTEF

164. Historically, GoM Funding for MoAIWD as a share of the government budget was high, although most of it was allocated to the FISP. In most years, over 90% of the allocated funds were disbursed. GoM provides three-year projections for ORT under the MTEF. However, personal emoluments and the development budget components are not projected, as staffing levels are set outside the budgeting process, and the development budget is mainly counterpart funding for DP-funded projects. Both the AgPER and ASWAp reviews confirmed that the share of capital expenditure in the GoM budget has been very low, generally below 5%, since 2008 (see Table 4.8). However, capital items are often budgeted under ORT instead of the development budget which makes the picture less clear.

**Table 4.8: Historical Budget Allocations for MoAIWD**

	2011/12	2012/13	2013/14	2014/15	2015/16	5-year Ave
Share of approved GoM budget to MoAIWD*	12%	16%	19%	19%	18%	17%
GoM allocation to Development (Part II)*	4.5%	2%	3%	4.5%	2%	3%
MoAIWD Personal Emoluments (billion MKW)	3.4	3.8	3.9	4.6	6.7	4.5

\* Mainly used for co-financing for projects financed by DPs.

165. Table 4.9 displays the ORT projections for MoAIWD from FY 2016/17 until 2020/21, based on the current PBB system. The budget allocation pattern in Table 5.11 means that over 95% of the recurrent budget will be allocated to the Agricultural Productivity and Risk Management Program, which includes the FISP. ORT funding levels are expected to grow from the current MK 69.4 billion to MK 101.6 billion in 2021. The projection applies a 10% annual growth rate, which is in line with the current inflation rate.

**Table 4.9 MoAIWD ORT Projections**

Program	Projected Recurrent Budget (MKW millions)						2016/17 (USD millions)
	2016/17 (*)	2017/18 (*)	2018/19 (*)	2019/20 (**)	2020/21 (**)	Total	
Agric Productivity & Risk Management	68,439	75,283	82,811	91,092	100,202	417,827	95.59
Water Resources Development, Management & Supply (***)	43	47	52	57	63	262	---
Livestock & Fisheries Production	314	346	380	419	460	1,919	0.44
Sustainable Rural Development	173	190	209	230	253	1,055	0.24
Management & Administration	436	480	528	580	639	2,663	0.61
<b>Total</b>	<b>69,406</b>	<b>76,347</b>	<b>83,981</b>	<b>92,379</b>	<b>101,617</b>	<b>423,730</b>	<b>96.94</b>

Source: (\*) GoM, MTEF Projections; (\*\*) Authors projections

Note: (\*\*\*) Resources for Water Development are not included in the NAIP projections, and thus not included in the totals

166. Ideally, the MTEF budget projections should be the basis for medium-term expenditure planning of interventions. However, experience shows that this is not the case, as Treasury provides annual ceiling allocations to the sectors including Agriculture. The disregard for the MTEF is driven by a number of factors including annual variations in the national resource envelope as well as changes in national policy priorities

167. Given the uncertainties about future inflation and funding levels, the 2016/17 budget, converted into USD, is used as the baseline for projection. This results in an estimated budget of USD 485 million for MoAIWD during the NAIP implementation period. To this, PE and Development Budget projections need to be added. Irrespective of the uncertainties, it is likely that the agricultural sector will continue to receive a substantial share of the national budget. Even though FISP expenditures, historically a major budget allocation, are decreasing, funding is expected to be re-directed towards other agricultural sector requirements, such as irrigation development and agricultural commercialisation.

#### DCAFS Funding Commitments and Disbursements

168. **Funds committed:** The current portfolio of DCAFS projects (see Table 4.10) indicates a financing commitment of USD 1.172 billion, with USD 749 million (64%) yet to be disbursed. The projects have different implementation periods and are currently aligned to the ASWAp framework. While some projects are phasing out, there are several large pipeline projects, of which seven have been identified with a total budget of USD 544 million. Taken together, undisbursed commitments relating to ongoing and pipeline projects from the DCAFS members add up to USD 1,293 million during the NAIP implementation period, or USD 259 million per annum

**Table 4.10: DCAFS Commitments to the Agricultural Sector February 2017 (USD Million)**

Commitments	Committed Amount	Disbursements to date	Carryover	Per year
On-going projects	1,1712	423	749	
Pipeline projects (2017- 2026)	544		544	
<b>Total</b>	<b>1,716</b>	<b>423</b>	<b>1,293</b>	<b>259</b>

Source: DCAFS data base & contacts with development partners

169. **Funds Disbursed:** Table 4.11 displays annual disbursement rates of DCAFS donors between 2010/11 and 2016/17. These fluctuated between USD 102 million and USD 198 million, with an average of USD 155 million. This shows that the binding constraint is not the overall level of committed funds but the disbursement rate. Hence, rather than resources commitments, DCAFS disbursements are dependent upon several factors including the absorption capacity of partner institutions, issues related to governance and fiduciary practices, as well as changing donor priorities (global, amongst countries and within countries, between sectors and within the sector). The latter includes short-term reallocation of resources from agricultural development into emergency response in response to natural disasters.

**Table 4.11: DCAFS Disbursements, 2010/11 to 2015/16 (USD millions)**

Year	USD millions
2010/11	160
2011/12	139
2012/13	117
2013/14	102
2014/15	188
2015/16	186
2016/17	198
Total	892
<b>Average per annum</b>	<b>155</b>

Source: DCAFS data base

170. The NAIP's emphasis on strengthening institutions and implementation capacity at all levels (under Program A) is expected to contribute to increasing disbursement rates, building on the positive trends during the past two years. Hence, over the NAIP implementation period, average DCAFS disbursements of around USD 200 million per year are expected. Moreover, since the NAIP includes a budget for emergency response in the form of food aid, a large share of emergency response funding will remain within the agricultural sector, contributing to a more stable resource envelope and improved coordination between development and emergency response programming. In consequence, DCAFS funding for risk management and food aid under MVAC needs to be added to the resource envelope. According to the DCAFS Secretariat, average disbursements for food and other emergency assistance amount to around USD 40 million per annum during the last decade.

### Allocation of DCAFS Committed Funds by NAIP Programs

171. Table 4.12 maps the committed DCAFS funds according to the NAIP Programs. Program C would receive around 60% of DCAFS funding in both current and pipeline projects, while an increasing share of financing is being directed towards Program B. This presents a significant change from the ASWAp where most funding was allocated to Pillar 1: Food Security and Risk Management. An analysis of larger DCAFS projects (see Annex 3, 4 and 5 for details) shows that the NAIP matches many of the evolving DP priorities in areas such as irrigation and water development, market development, capacity building and risk management. Overall, DCAFS donor support is focused largely on Program C whereas Programs B and D are comparatively underfunded. The allocation to Program A activities is in line with this Program's share in the NAIP budget. This calls for some rebalancing of DP funding from program C into programs B and D.

**Table 4.12: Allocation of DCAFS Funds Committed by NAIP Programs**

	A: Enabling Environment:	B: Resilience	C: Production & Productivity	D: Markets	Total
<b>On-going projects</b>					
Allocation	162	83	596	207	1,048
(%)	15%	8%	57%	20%	100%
<b>Pipeline commitments</b>					
Allocation	11	88	351	95	544
(%)	2%	16%	64%	17%	100%
<b>Total</b>	172	170	947	302	1,592
(% share)	11%	11%	60%	19%	100%

Notes: projections used for pipeline projects which are still tentative and the commitments contain activities which are non-agricultural sector and hence not included

Source: DCAFS database and own projections

## NGO Funding

172. A recent study by the Civil Society Agricultural Network (CISANET) indicated that besides the off-budget support from DCAFS donors, NGOs also mobilise significant funding from other sources including funds mobilised by their head offices, funds received from non-DCAFS donors, and from domestic sources. Thus NGOs are regarded as an independent source of funding for NAIP.
173. A survey was implemented to estimate future funding levels of NGOs. Responses were received from 21 NGOs and are summarised in Table 4.13. However, except for a few larger on-going projects, NGOs were not able to provide financial projection for more than one year, given their dependence on largely unpredictable donor funding. This concern is understandable considering the variability in donor funding to the NGOs, which for the period 2007/08 and 2011/12, oscillated between USD 40 million and USD 100 million (World Bank, 2014). A total investment of USD 44 million was planned for fiscal year 2017/18, a slight increase from the USD 40 million yearly average captured by the 2015 CISANET report, most likely caused by a higher response rate than for that study. USD 44 million is at par with expenditure levels over the past five years and therefore this level is used for projections for the NAIP implementation period. Almost two thirds of the total NGO investment (62%) targets household resilience, followed by agriculture production at 25% and about 13% percent for both value chain development and institutions pillars.

**Table 4.13: Projected NGO Funding during NAIP Implementation Period (USD million)**

	Total	A: Enabling Environment	B: Resilience	C: Production & Productivity	D: Markets
2017/18 planned	44.5	2.6	27.8	11.2	2.9
5 year projection	222.6	12.9	138.9	56.0	14.7
Percent	100%	6%	62%	25%	7%

Source: Primary data collected from 17 NGOs

174. The projected NGO investments are substantial, but the uncertainty of funding levels has implications for the financing plans. The NAIP, therefore, outlines more stable funding modalities for the sector, and seeks to strengthen collaboration between the NGOs and Ministries (for example through the use of NGOs as service providers), which is a guiding principle of the NGO Act, to ensure continuity of the NGO interventions.

## Funding for Research Institutions

175. According to the AgPER, research institutions contributed about 8% of the funding to the sector; the majority through CGIAR institutions and some through DARS income-generating activities (see Table 4.14). Funding research is a CAADP indicator and the area has been underfinanced in the past. The CGIAR funding for Research and Development investments comprise both DCAFS and non-DCAFS resources. Out of the seven CGIAR centres represented in Malawi four made information available on their expected budget during the NAIP period. Overall, the projected contributions are small, declining and less predictable.

**Table 4.14: Combined R&D Projected Financing**

Institution	Funding Amounts (USD million)					Total	Annual Average
	2016/17	2017/18	2018/19	2019/20	2020/21		
CGIARs combined*	4.00	4.09	3.84	3.26	2.70	17.89	3.60
DARS off-budget **	0.60	0.60	0.60	0.60	0.60	3.00	0.60
<b>Total</b>	<b>4.60</b>	<b>4.69</b>	<b>4.44</b>	<b>3.86</b>	<b>3.30</b>	<b>20.89</b>	<b>4.20</b>

\* The figures here are tentative as they are from four of the six CGIAR institutions contacted.

\*\*the DARS figures are projections of the AgPER data of 0.6 million in 2011/12

Sources: CGIARs and AgPER



## Non-Traditional Financing Sources

176. Non-traditional sources provide substantial funding for the agricultural sector. Some of these are from related sectors such as climate change, resilience or private sector development. Examples include the; Global Environmental Facility (GEF), Gates Foundation, McDonalds Fund and Rockefeller Foundation. There is also a group of bilateral donors who are not resident in Malawi and not part of the DCAFS group but provide substantial funding to the sector. In addition, there are small national and international groups or initiatives which provide financing, including national NGOs. While the amounts provided by each source within these categories is comparatively small, and monitoring is a challenge, their aggregate financial contributions can be substantial.

## Private Sector Financing

177. Quantifying private investments in agriculture is challenging due to the lack of reliable data. The only current data on agriculture private investments is the New Alliance/Grow Africa data base. However, the data are self-reported by participating companies and are not verified independently. Moreover, the 29 companies (19 domestic and 10 international) that have signed Letters of Intent under the NA and GA frameworks only represent a subset of the private sector in agriculture. The total investment made by these companies in 2015/16 was US\$41.9 million and cumulative investments since the start of NA/GA in Malawi amount to US\$81.5 million. The remaining commitments of USD 148 million have been included in the NAIP budget. Future investments by other private actors, including companies and farmers of different sizes, are unknown and difficult to project at national level.

178. However, international evidence<sup>20</sup> shows that farmers are the main financiers of the sector and are expected to make important contributions through co-financing of most NAIP activities. The private sector including farmers is expected to co-finance activities amounting to USD 1.4 billion (46% of the total NAIP budget). Such financing would be in cash or in-kind for a broader range of investments and services<sup>21</sup>. Private agribusiness and SMEs receiving matching grants or participating in PPPs will also make contributions. Assuming an average co-financing share of 20%, this would result in USD 293 million being mobilised by the private sector. Combined with the USD 148 million of investments pledged under the NA/GA, total private financing would be at least USD 441 million.

## Other Related Sectors

179. Given the broader scope of the NAIP beyond the confines of MoAIWD, two other important sectors have also been considered as sources of funding: trade and nutrition.

180. **Nutrition** is a key area for investment and coordination. Most nutrition Programs are implemented by the MoHP Department of Nutrition and HIV/AIDS. Given that nutrition is not a traditional sector with a dedicated ministry, public financing is split between the various spheres of influence, including MoHP for health-related activities, MoAIWD for extension and water, sanitation and hygiene. To strengthen coordination the DPs have formed the DoNUTS group which maintains a database (see Annex 5, Appendix 5.2) of donor financed projects in that area. Most projects focus on child health, hygiene and sanitation, malnutrition management and related areas. These are complementary to some of the agriculture sector investments under the NAIP. The fact that the DCAFS and DoNUTS groups have full time coordinators is possibly a starting point for closer collaboration in project design, implementation and review. However, in terms of financing, these activities are not included on the supply side of the NAIP.

<sup>20</sup> FAO (2012) The State of Food and Agriculture: Investing in Agriculture for a Better Future

<sup>21</sup> The main ones reflected in the NAIP budget include FISP vouchers, other inputs and equipment for production and postproduction, as well as the construction and rehabilitation of transport, storage and marketing infrastructure

181. **Trade, Industry, Private Sector and SME development.** In an agro-based economy like Malawi, agriculture and trade are closely interlinked – one cannot thrive without the other. The same applies to private sector development and industrialisation. In terms of funding, there is a need to coordinate resources and implementation to maximise synergies between the two sectors. As with other sectors, funding comes from both public and donor resources. Projections from the public comes from MTEF ORT projections, while donor financed projects are monitored and coordinated in the Private Sector Development Group (see Table 4.15).

**Table 4.15: MoITT ORT projections 2016/17 - 2020/21**

Program	Projected Recurrent Budget (MKW millions)						2016/17 (USD millions)
	2016/17 (*)	2017/18 (*)	2018/19 (*)	2019/20 (**)	2020/21 (**)	Total	
Trade Development & Facilitation	73	77	80	84	93	73	0.102
Industrial Development	91	95	100	105	116	91	0.127
Private Sector Development	40	42	44	46	51	40	0.056
Small Scale Business Development	123	129	136	142	157	123	0.172
<b>Total</b>	<b>327</b>	<b>343</b>	<b>360</b>	<b>378</b>	<b>417</b>	<b>327</b>	<b>0.456</b>

Source: (\*) GoM, MTEF Projections; (\*\*) Projections provided by MoITT. Selected Programs only (budget related to administration and tourism not presented)

182. The MTEF projections show a 5% annual increase in recurrent resource allocation to MoITT, compared to 10% for the agriculture sector. Furthermore, the MoITT recurrent budget allocations are much smaller than MoAIWD. The MoITT resource envelope (excluding administration and tourism related expenditures) amounts to less USD 0.5 million per annum. The potential for MoITT financing of NAIP activities is therefore limited. Other sources of funding will, therefore, have to be allocated to trade-related activities.
183. Donor financing in the trade sector seems to be less in quantity and less coordinated than in the agricultural sector (see Annex 5, Appendix 5.3). From the donor perspective, there are several dominant themes, such as value addition, business environment, manufacturing, skills development, and access to finance amongst others. However, most of these initiatives are underfunded. Additional funding might be sourced from “Aid for Trade Funds” under the EIF and through challenge fund mechanisms supporting private sector development.

### Summary on Resource Mobilisation

184. Table 4.15 provides a summary of projected resource availability, funding targets and the financing gap for the NAIP. The aggregation of the various funding sources reveals an availability of about USD 400 million for the 2016/17 fiscal year (baseline)<sup>22</sup>. DCAFS donors are expected to contribute USD 240 million, MoAIWD USD 111 million, whereas NSAs will contribute around USD 50 million. This figure does not include funding from other domestic and foreign sources, on which no data were available. Extrapolated over five-years, the total funding from identified public sources and NSAs is projected at around USD 2.0 billion. Adding USD 441 million of private sector co-financing results in a total funding envelope of 2.4 billion under the baseline scenario. The resulting funding gap amounts to USD 776 million, approximately 24% of the NAIP budget including food aid. The baseline scenario does not include some funding sources for the sector that could not be quantified: these include non-aligned donor funding outside the DCAFS group and other government resources, such as transfers to the districts for agricultural activities and to the GBA.

<sup>22</sup>While the actual MVAC Response budget was much higher due to the drought, the 10-year average amount is used for the baseline scenario.

185. While the baseline scenario is based on recent funding sources that have been clearly identified, the NAIP is expected to mobilise additional funds and to improve absorption capacity. The commitment of DPs, Treasury and others to increase funding levels to agriculture depends on the existence of a coherent and nationally-owned investment framework and on absorption and implementation capacity. The NAIP provides such an investment framework and focuses on strengthening the implementation capacity of government and NSAs at all levels, especially under Program A. It may, therefore, be assumed that additional resources could be mobilised from the main traditional funders, Treasury and DCAFS; as well as from non-traditional sources. Scenario 2 in table 5.20, therefore, assumes a moderate increase in MoAIWD's budget, as well as for the funding levels of DCAFS donors and NSAs. For DCAFS, the average committed funding of USD 259 million is considerably higher than the baseline scenario. Hence, a 15% increase of the amount disbursed (USD 30 million per annum) is projected under Scenario 2, resulting from increased DCAFS commitments and improving implementation capacity. This scenario also assumes that USD 150 million can be mobilised from non-traditional funding sources, such as foundations and philanthropy, non-DCAFS donors, funds from other sectors such as environment and climate change, and government resources provided to the districts. As shown in the right-hand column of Table 4.16, if these sources are considered, the funding gap is substantially reduced to USD 334 million (approximately 10% of the budget). If the budget for food aid (which is highly unpredictable) is taken out, the funding gap reduces to 24% and 10% under the two scenarios, respectively.
186. The financing scenarios embodied in Table 5.15 are subject to the challenges and uncertainties of funding from multiple sources. However, even the more ambitious Scenario 2 is deemed achievable in view of the broader scope of the NAIP and the related possibility to access non-traditional funding sources, including for adjacent sectors. The funding gap could be addressed through any or all of the following strategies: aligning additional DPs to the NAIP, increasing government funding, increasing DP disbursement rates, and mobilising non-traditional funding sources, including the private sector. Alternatively, and subject to funding availability, some investments could be scaled-down or deferred. Decisions on the latter will be made each year during the AWPB process based on the actual funding envelope available. The ability to mobilise resources also depends on the progress and performance of the NAIP implementation itself.

**Table 4.15: Summary of Projected Resource Availability, and Funding Targets and Financing Gap (USD million)**

Funding source	2016/17 projected	5-year Scenario 1	% increase	Increment over 5 years	5-year Scenario 2
MoAIWD:					
- ORT	96.9	484.7	+10%	48.5	533.2
- Development	4.8	24.2	+50%	12.1	36.3
- PE	9.3	46.5	+50%	23.2	69.7
<b>- Subtotal MoAIWD</b>	<b>111.0</b>	<b>555.4</b>		<b>107.1</b>	<b>639.2</b>
DCAFS					
- Development	200.0	1,000.0		150.0	1,150.0
- MVAC response	40.0	200.0	+15%		200.0
<b>- Sub-total DCAFS</b>	<b>240.0</b>	<b>1,200.0</b>		<b>150.0</b>	<b>1,350</b>
NGOs	44.5	222.5	+25%	55.6	278.1
CGIARs	4.2	21.0	+25%	5.25	26.2
Other domestic and foreign sources a/				150.0	150.0
<b>Subtotal public and NSAs</b>	<b>399.8</b>	<b>1,998.9</b>		<b>467.9</b>	<b>2,443.5</b>
Private Sector co-financing b/		441.0			<b>441.0</b>
<b>Total</b>	<b>399.8</b>	<b>2,439.9</b>	<b>+23%</b>	<b>467.9</b>	<b>2,884.2</b>
<b>NAIP budget</b>		<b>3,219.0</b>			<b>3,219.0</b>
<b>Funding gap</b>		<b>779.1</b> <b>(24%)</b>			<b>334.4</b> <b>(10.3%)</b>
NAIP BL for food aid		343.0			343
Funding gap without food aid c/		626.1 (19.4%)			191.4 (5.9%)

a/ Existing funds in agric. Sector that are not aligned to NAIP plus additional funds mobilised

b/ New Alliance, NAIP co-financing

c/ Net of NAIP budget for food aid and DCAFS funding for emergency/disaster response

## 4.4 Funding Mechanisms

187. The NAIP build on the funding mechanisms used under the ASWAp and continue the progression from scattered projects towards program support and pooled funding. In line with the Paris Declaration and the Malawi Development Cooperation Strategy, donors have agreed to align their support with national strategies, increase the use of country systems, make funding more predictable, and reduce transaction costs by harmonizing procedures and streamlining delivery. According to the Development Cooperation Strategy, the order of preference is general budget support, sectoral budget support, pooled/basket funds and lastly project modalities. However, GoM recognises that some DPs are unable to employ the pooled approach due to their own policies and guidelines regarding traceability of funds and results. Currently a large number of DP projects use project modality with varying degrees of alignment and use of country systems. Hence, whilst GoM preferences are clear, progress towards greater alignment and use of national systems will be gradual, depending on NAIP implementation performance and improvement of public financial management systems.
188. In line with the above, the NAIP will be financed through a menu of funding modalities, whereby a progression towards pooled funding mechanisms, increased use of country systems and stronger alignment with the NAIP programmatic structure, implementation mechanisms and results framework is envisaged. The main DP funding modalities are depicted in Box 3.

### Box 3: DP Funding Modalities under the NAIP

**Sectoral budget support** is a form of general budget support earmarked for the agricultural sector. This modality is fully on-budget and could be used by GoM for any NAIP related activity.

**Pooled Program Funding** allows DPs to jointly fund parts of the NAIP. Within the pooled funding arrangements, DP may earmark their funding to certain Programs or IAs or to specific activities and outputs therein. Implementation would be through government institutions and systems. The pooled funding commitment would be governed by a joint financing agreement signed by multiple DPs.

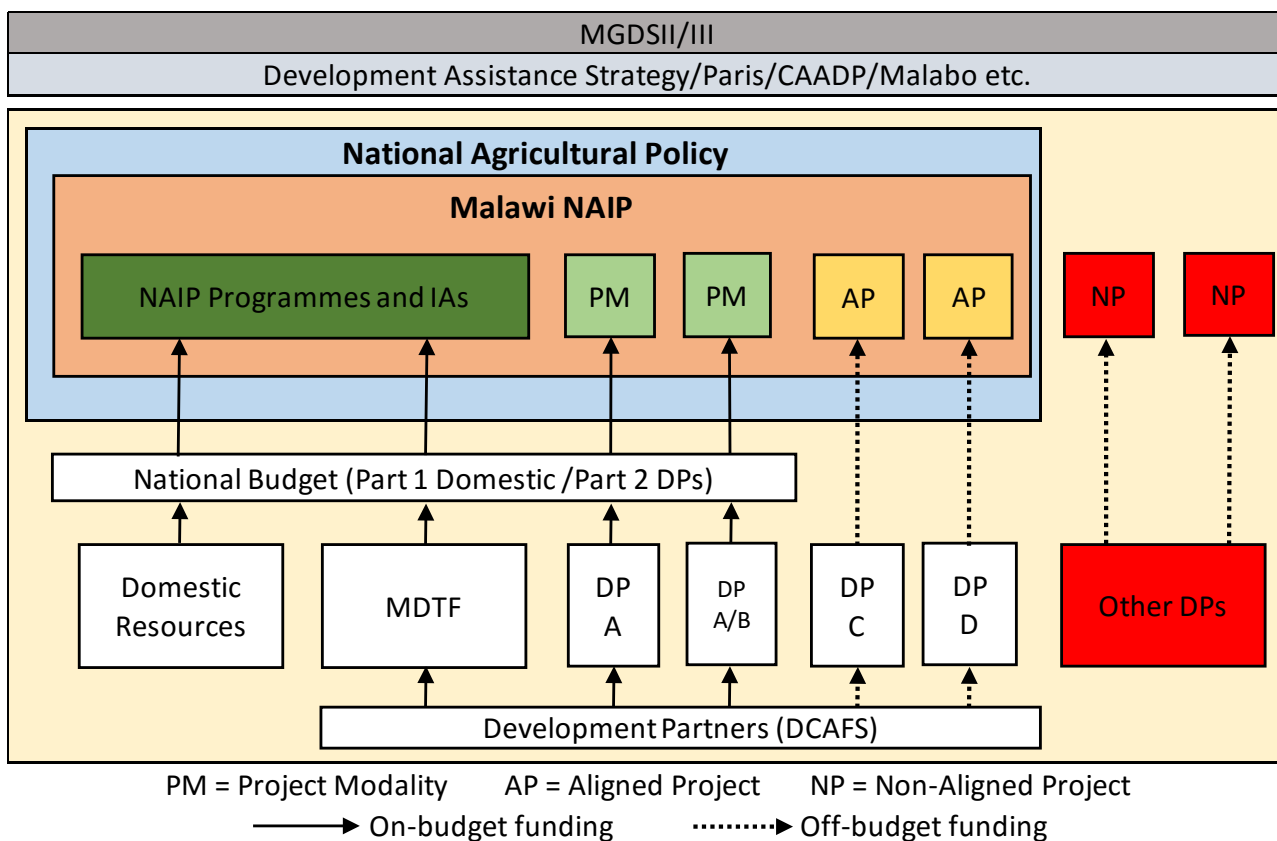
**Co-Funding** involves the commitment of multiple DPs to a single, common work plan and budget. This arrangement applied under the ASWAp through the ASWAp Support Program (ASWAp-SP) funded by the World Bank, GEF and Norway (implemented through the Multi-Donor Trust Fund, MDTF). Co-funded work plans will be identifiable within the overall NAIP investment plan, and that they will be on-budget and make full use of government systems.

**Parallel Funding** is another intermediate step from discrete projects towards programmatic support, whereby two or more DPs align their funding to closely linked work plans. These work plans and related funding will be closely related to specific NAIP Programs and IAs and activities therein. Joint project preparation, implementation support and supervision, and the use of common indicators reduce transaction costs and strengthen DP harmonization and alignment with the NAIP.

**Discrete Projects** are still the main funding and implementation modality in agriculture. Still, projects vary in their degree of alignment and use of country systems. Projects of International Financing Institutions are funded through the national budget but implemented through PIUs hosted in line ministries. Bi-lateral projects tend to be off budget and make limited use of government systems for implementation. During the ASWAp efforts were made to reduce the number of PIUs and mainstream project activities within g structures. This process is expected to continue under the NAIP leading to a reduction of stand-alone projects and their close alignment with the NAIP (view chapter 7.1).

189. The proposed NAIP funding structures shown in Figure 4.1. Funding will come from domestic and foreign sources. Domestic resources will be channelled through the national budget to MoAIWD and other implementing agencies. Some donor funding will also be channelled through the national budget, whereas another part will remain off-budget. On budget support includes sector budget support and pooled funding mechanisms such as the MDTF, but can also be implemented through various project modalities (PM) including discrete projects, co-funding and parallel funding.

**Figure 4.1: NAIP Funding Modalities**



190. The Government will continue to invite development partners to pool funding in the MDTF established under the ASWAp. Some DPs funding is expected to support implementation of NAIP activities through a project modality where money goes through the budget but is implemented through PMUs (DP A). In some cases, DPs may co-finance such projects (DP A/B). There are also DPs who do not finance NAIP components through the national budget, but whose activities are aligned with the NAIP and can, therefore, be called aligned projects (AP) as long as their activities, outcomes and outputs are closely linked to NAIP Programs and IAs (view chapter 7.1). Non-aligned projects (NP) are those funded by non-DCAFS donors and have no formal linkages with the NAIP.
191. The envisaged transition process will entail: (i) an increasing share of funding through budget support and pooled funding mechanisms, with a growing number of DPs using this modality; (ii) an increasing number of DPs using the PM rather than AP mechanism; and (iii) a declining number of NPs and their alignment to the NAIP, at least as APs. A certain number of DP funded projects implemented by CSOs, NGOs, CGIAR centres, FOs and agribusiness will remain off-budget. These can be considered APs as long they contribute to the NAIP budget and results framework.

## Chapter 5: Governance, Implementation and Coordination

192. The NAIP is an investment plan for the agricultural sector. As such, a range of government ministries, departments and agencies, along with NSAs and the private sector will play a role in its implementation. This calls for clear demarcation of responsibilities among the actors, within a well-defined framework for governance, management and coordination. At national level, the Cabinet Committee on the Economy will provide political guidance and facilitate speedy clearance of policies and regulations while MoAIWD will provide leadership in the policy processes, planning, coordination and M&E. In addition a wide range of implementation partners will be responsible for financial, implementation and technical support at the relevant levels of the sector. The multiple levels at which these partners operate emphasizes the need for strong and well-defined coordination arrangements: within MoAIWD; between ministries and other government agencies; and between government and non-state actors. The following sections describe the proposed coordination mechanisms in greater detail: between actors, between sectors, within MoAIWD and at local assembly level.

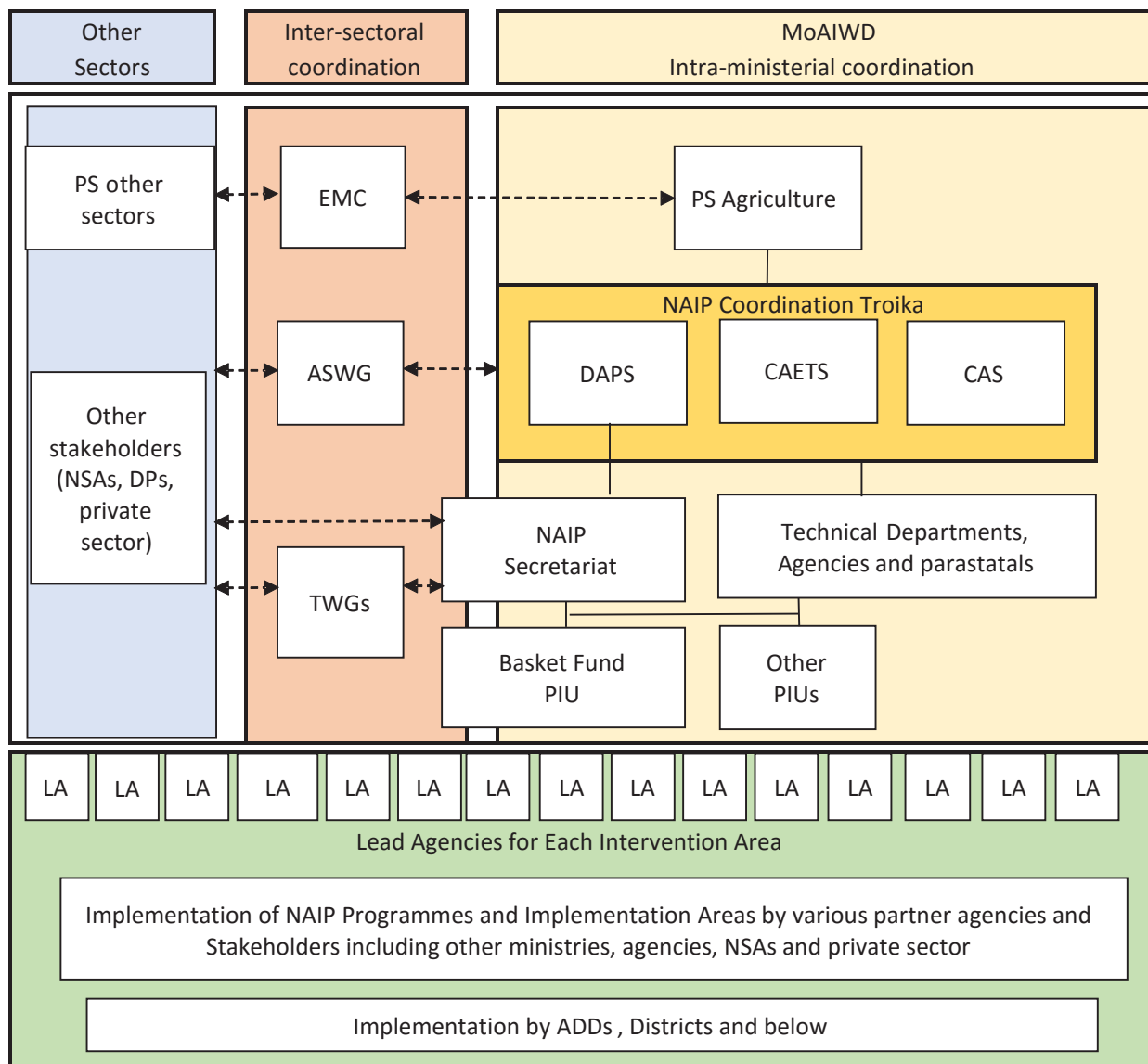
### 5.1 Overall governance and Implementation Structure

193. An overview of the proposed management structure is given in Figure 6.1. Ultimate decision-making authority on all issues related to the NAIP will rest with the Principal Secretary (PS) of MoAIWD. **The Executive Management Committee (EMC)** is the main instrument for inter-ministerial coordination. Chaired by the PS of MoAIWD, the EMC is composed of the PSs of all ministries and agencies participating in NAIP implementation. The EMC will be the overall governing body for the NAIP and will act in the role of a Steering Committee at the level of GoM. It will provide strategic direction and inter-ministerial coordination, oversee implementation of key policy decisions, endorse annual work plans and budget allocations as well as monitor progress on NAIP implementation.

194. The **Agricultural Sector Working Group (ASWG)** provides a similar function for all stakeholders, including DPs, CSOs and private sector. The entire management structure of the NAIP shown in Figure 5.1 is expected to coordinate horizontally with other sectors through their respective ministries, agencies, NSAs and private businesses; as well as vertically with the various NAIP Programs and Intervention areas via their respective lead agencies. Intra-ministerial coordination will be led by the NAIP Coordination Troika, composed of DAPS, CAETS and CAS as detailed in Section 5.3.

195. The **NAIP Secretariat** will have dedicated full-time staff to oversee the implementation of NAIP on a day-to-day basis. The secretariat will be located within the DAPS but functionally report to TROIKA. The Secretariat shall concentrate full-time on NAIP management, coordination and be kept free from routine ministerial duties. Its responsibilities will include: consolidating work plans, liaising with DPs, convening meetings of the ASWG and TWGs, ensuring timely reporting, monitoring progress against the NAIP performance indicators, coordinating the annual progress review, and preparing proposals for the EMC's review and endorsement.

**Figure 5.1: Overview of NAIP Governance and Implementation Structure**



DAPS = Director of Ag. Planning Services CAETS = Controller of Ag. Extension and Technical Services  
 CAS = Controller of Ag. Services and Institutions ASWG = Agricultural Sector Working Group  
 TWGs = Technical Working Groups LA=Lead Agencies

196. The action-radius of the NAIP Secretariat also goes beyond MoAIWD to involve other ministries, NSAs and the private sector, in order to oversee the full performance of the NAIP, not only the parts implemented by MoAIWD. The Secretariat will work pro-actively with ministerial and district staff as well as structures of the other participating ministries and organisations. This includes coordination platforms for DP support to other ministries' projects related to the agriculture sector.. The NAIP Secretariat will report to Director of Planning; and technical matters are also reported to the ASWG. The ASWG will receive a technical report from the NAIP Secretariat prior to every ASWG meeting.



197. For the envisaged continuation of the **basket fund (Multi Donor Trust Fund)**, there will be a **Program Implementation Unit (PIU)** for the management of that support to be housed in the DAPS. As under the ASWAp, basket fund resources will be channelled not only through MoAIWD but also through other participating ministries and agencies. In view of the preferred funding modalities of many DPs, there will still be a number of other **PIUs** to manage donor-funded projects and donor support<sup>23</sup>. Consequently, the NAIP secretariat will also provide overall coordination for all projects aligned to the NAIP. For proper coordination and monitoring of project performance all PIUs within the Ministry of Agriculture, Irrigation and Water Development will be housed in the DAPS and efforts will be made to reduce their number by using programme approach. Even though the management functions performed by these PIUs will continue to be kept separate from the NAIP Secretariat, housing them under one roof with the NAIP Secretariat will make coordination and reporting easier. As M&E of NAIP rests in the DAPS, the NAIP Secretariat will provide additional staff to assist DAPS in its sector-wide monitoring function to inform the EMC, ASWG and JSRs.

## 5.2 Key Actors' Roles and Responsibilities

### National Government Agencies

198. Table 5.1 displays the main actors involved in the implementation of each of the 16 IAs. Each IA will have a **Lead Agency (LA)** responsible for overall management of the respective activities, coordination of implementing partners and monitoring progress to the ASWG as described below. Normally, the LA will be the Ministry or institution with the main mandate for the activities under the respective IA.
199. In cases where mandates overlap or activities fall under different Ministries, arrangements will have to be worked out on how responsibilities could best be split to ensure coherent implementation and reporting. Depending on specificity of each IA, possibilities include: (i) dividing the LA function between two ministries with clear demarcation on roles and responsibilities (e.g. IA 6); (ii) one Ministry taking the coordination and monitoring function for the entire IA and the other ministry for the activities and outputs under its mandate (e.g. IAs 2 and 15); (iii) the LA function could be shared on a rotational basis; or (iv) be delegated to a third party, including a parastatal or NSA.
200. In addition to its overall lead in managing the implementation of the NAIP, **MoAIWD**, participates in the implementation of all 16 IAs and assumes the LA function in at least seven: IA 1, 3, 8, 9, 10, 12 and 13. In case of four IAs, MoAIWD would co-lead, as an important part of the activities also fall under the mandates of MoITT (IA 2 and 14), MoHP (IA 4), and MoNREM (IA15). MoITT will have responsibilities under four of the IAs, but other Ministries or agencies have specialised responsibilities in only one or two IAs.

<sup>23</sup> Especially when DPs use different modalities, e.g. basket/pool funds and project funding.

**Table 5.1: NAIP Intervention Areas by Main Implementer and Lead Agency**

Intervention Areas	Main implementers	Lead Agency
IA1: Implementation, Coordination and M&E	Line Ministries, Local Assemblies, Parastatals, NSAs, A&R* PS**	MoAIWD, Local Assemblies
IA2: Farmer-Based Organisations	MoITT, MoAIWD, Local Assembly, NSAs, Private Sector	MoITT or MoAIWD (tbd)
IA3: Public Agricultural Services Delivery	MoAIWD, MoLGRD, A&R, Local Assembly	MoAIWD
IA4: Diverse, Nutritious Food Available and Consumed	MoHP, MoAIWD, MoGCDSW, MNSSP NGO/CSO, A&R, Local Assembly	MoHP & MoAIWD
IA5: Food Safety and Quality Standards	MoITT (MBS, MITC), MoAIWD, MoHP, A&R, /CGIAR, RTCDT, NGO/CSOs	MoITT
IA6: Empowerment and Tenure Security	MoLHUD, MoGCDSW, MoAIWD, Local Assembly NGO/CSOs, A&R	MoLHUD & MoGSWCD
IA7: Disaster Risk Reduction Systems	MoNREM, DODMA, MoAIWD (NFRA ADMARC), MoLGRD, Private Sector, NGO/CSOs, A&R	MoNREM, NFRA
IA8: Pest and Disease Management	MoAIWD, ARET, NGOs/CSOs, A&R, Private Sector	MoAIWD
IA9: Agricultural Innovation Systems	MoAIWD, A&R, NGOs/CSOs, Private Sector	MoAIWD
IA10: Access to Inputs	MoAIWD, MoNREM, Private Sector, A&R, NGOs/CSOs	MoAIWD
IA11: Natural Resource Management	MoNREM, MoAIWD, MoTPW, A&R, NGOs/CSOs	MoNREM & MoAIWD
IA12: Sustainable Irrigation Development	MoAIWD, GBA, MoITT, MoLHUD, NGOs/CSOs, Private Sector	MoAIWD
IA13: Mechanisation	MoAIWD, Private Sector, NGOs/CSOs, A&R	MoAIWD
IA14: Market Systems and Access to Markets	MoITT (MITC, CFTC), MoAIWD (ADMARC), MoLGRD, Private Sector, NGOs/CSOs	MoITT
IA15: Agri-Business	MoAIWD, MoITT, MoFEP&D, Private Sector	MoAIWD
IA16: Access to Finance	MoAIWD, MoITT, MoFEP&D, RBM	MoAIWD/MoFEP&D

\*Academia and Research\*\*Private sector

201. Table 5.2 shows the roles and responsibilities of each line ministry and their affiliated agencies and parastatals in the implementation of each IA. In many cases, MoAIWD (and other Ministries) will be both a coordinator and a service provider, sometimes engaging NSAs in service delivery (e.g. extension, training of FOs). In other cases, MoAIWD will only have a minor role in implementation and its main function will be to coordinate different state and non-state actors, provide overall strategic guidance, ensure quality and coherence in approaches, methodologies and services, and monitor progress. The budget file contains a detailed account of which actor is expected to participate in implementation of each budget line. In general, MoAIWD's role in the implementation of the NAIP will be in line with the recommendations of the CFA.

**Table 5.2: Key National Government Agencies and Responsibilities under the NAIP**

Agency*	Key Roles and Responsibilities	IAs
MoAIWD	Overall responsibility for management, coordination and M&E (LA)	IA1
	Strengthening FOs in extension methodologies and service provision (Co-LA)	IA2
	Strengthening public sector capacity for effective agricultural service delivery and coordination of service providers at all levels (LA)	IA3
	Extension support for nutrition education, homestead gardens, supply of school feeding programs, etc. (Co-LA with MoHP)	IA4
	Extension support for food safety and quality improvements	IA5
	Extension support to women and youth	IA6
	Extension support on drought-tolerant varieties and on-farm grain storage (LA)	IA7
	Pest and disease management (LA)	IA8
	Agricultural research and extension on priority VCs, demonstrations etc. (LA)	IA9
	Provision of agricultural inputs, FISP reform, seed systems, fertiliser etc. (LA)	IA10
	Sustainable NRM and climate resilience (Co LA, with MoNREM)	IA11
	Irrigation development and rehabilitation (LA)	IA12
	Safety standards for mechanisation and enhanced service provision (LA)	IA13
	Market information, infrastructure, pricing policies, etc.(Co-LA, with MoITT)	IA14
	Enabling environment for agribusiness investments and PPPs (Co-LA MoITT)	IA15
	Collaboration with other institutions in expanding financial services	IA16
MoLGRD/ Local Assemblies	Meteorological services and weather stations for disaster risk management	IA7
	Construction of wells, dams, and fish landing sites	IA11
	Rehabilitation of feeder roads, public marketing and storage infrastructure	IA14
MoFEP&D	Fiscal incentives for agribusiness investments in priority VCs	IA15
	Legal and regulatory environment for rural financial services (Co-LA with RBM)	IA16
MoGCDSW	Disseminate messages on nutrition and interact with vulnerable households	IA4
	Legal and gender issues in relation to land tenure	IA6
MoHP	Nutrition-related sensitisation, training and district level coordination of various stakeholders (Co-LA with MoAIWD)	IA4
	Provision of technical advice and training on food safety issues and formulation of food safety standards and protocols	IA5
MoITT	Strengthening of FOs/Cooperatives in marketing and value addition, improve enabling environment for cooperatives (Co-LA, with MoAIWD)	IA2
	Implementation of Food quality and safety standards (LA, through MBS)	IA5
	Support to PPPs and market linkages of irrigators	IA12
	Commodity exchanges and development of warehouse receipting systems (LA)	IA14
	Trade policy and negotiation of trade agreements	
	Promotion of private investment; agribusiness training (Co LA with MoAIWD);	IA15
	Coordinate with MoFEP&D, RBM and MoAIWD in relevant activities	IA16
MoLHUD	Land demarcation and registration (LA)	IA6
	Zoning and land use planning (with MoNREM and MoLGRD)	IA12
	Land tenure aspects of irrigation rehabilitation and development	IA12
	Implementation of Principles for Responsible Agricultural Investments	IA15
MoNREM	Disaster risk reduction (LA)	IA7
	Area-specific soil fertility management recommendations (with MoAIWD)	IA10
	Sustainable natural resource management and climate resilience (with MoAIWD)	IA11
MoTPW	Development of roads, markets and other rural infrastructure	IA14
RBM	Legal and regulatory environment for rural financial services	IA16

\*Includes affiliated agencies and parastatals      LA = Lead Agency    Co-LA = Co Lead Agency

## NSAs and the Private Sector

202. NSAs, academia and research, and the private sector play important complementary roles in the implementation of almost all IAs. NSAs include a wide range of international, national and local NGOs and CSOs with networks and capacities in rural areas. Their main roles relate to service provision and capacity development at local and higher levels but also participation in policy processes and coordination fora at all levels. Despite their limited own resources (see chapter 5), they play important roles in implementing projects funded by DPs and could also be contracted by GoM as service providers. Academic and Research organisations (including CGIAR centres) play key roles in development, testing and adaptation of agricultural technologies, but also in monitoring, evaluation and knowledge management at the Program level.
203. The private sector comprising farmers, cooperatives, agribusiness, financial and non-financial service providers, and related associations and apexes. It has a dual function as service provider and co-financier. Many service functions can be outsourced to competent private service providers (including farmer and industry organisations), either on a fully commercial or cost-sharing basis. In case of PPP arrangements, investments will be implemented by the private sector with public sector sharing the costs and risks and overseeing implementation. Such arrangements will be used in agribusiness and value chain development, agricultural finance, irrigation development and mechanisation. Overall, the private sector will play important roles in some or all of the following activities.
- Investment in developing supply, storage and distribution channels for agricultural inputs (e.g. Seeds, fertilisers and agro-chemicals) including under the FISP voucher system;
  - Investment in and management of facilities for national or international trade in agricultural commodities (e.g., commodity exchanges and warehouse receipt systems);
  - Importation or production of mechanised farming equipment (e.g. tractors, conservation agriculture equipment, sprayers and harvesters);
  - Storage facilities for grain and perishable commodities (e.g. fruit, vegetables and fish,);
  - Investment in the rehabilitation and/or development of new irrigation systems;
  - Farm mechanisation services (e.g. cultivation, planting, spraying and harvesting.);
  - Investment in financial institutions to increase outreach to farmers and rural entrepreneurs;
  - Investment in livestock and fisheries development; and
  - PPPs in agriculture enterprises.

## 5.3 Coordination Arrangements

### General

204. This section describes the existing coordination mechanisms and their proposed enhancements in more detail. A distinction is made between coordination mechanisms within the government (intra- and inter-ministerial), between GoM and other stakeholders, and between the public and the private sector.
205. To overcome the coordination challenges experienced under ASWAp, the following principles will guide coordination under the NAIP:
- **Coordination for results:** Coordination as an end in itself must be avoided; rather, it must be seen as a means to an end, with successful implementation and results being the ultimate aim of all coordination efforts. In this respect, NAIP calls for professional coordination that should be matched with adequate funding with clear allocation of human and financial resources to the various coordination tasks. Full-time coordinators can be justified with respect to critical NAIP platforms (such as the NAIP Secretariat and key Working Groups); and,
  - **Existing coordination platforms:** Should be used and strengthened before establishment of new ones is considered. Coordination, implementation and reporting responsibilities must be clearly allocated and defined with the most suitable actors/platforms strengthened in accordance with their mandates.
206. Coordination arrangements are considered in four ways: (i) inter-sectoral coordination (between stakeholders in agriculture and adjacent sectors); (ii) intra-sectoral coordination, between departments and institutions within MoAIWD; between MoAIWD and other key institutions and stakeholders in the sector (iii) vertical coordination within GoM, especially between head office and decentralised implementation structures at district levels and below; (iv) coordination between public and private/non-state actors.
207. Inter-ministerial coordination must take place at the sector level (between the ministries and agencies listed in Table 5.2) and at multi-sector level under the MGDS III (between policy frameworks such as the NAP, and the other relevant plans, strategies, policies detailed in Chapter 2 and Annex 6). In view of the broader scope of the NAIP, effective inter-ministerial and inter-sectoral coordination is very important, both at the level of the NAIP, as well as under MGDS III, to ensure that the broader targets of the Malabo Declaration are met.
208. The leadership role and multiple responsibilities of MoAIWD (see Table 5.1) and the experiences under the ASWAp both indicate that effective intra-ministerial coordination within MoAIWD is equally critical for successful NAIP implementation. This includes the full alignment of the Ministry's Annual Work Plan and Budget to the NAIP, coordination in planning and implementation between departments at national level; and between headquarters and the field levels where most activities will be implemented. The latter will become even more important with full implementation of the Decentralisation reforms, where implementing staff have shifted to the Local Assemblies. Improved two-way communication, a clearer demarcation of roles, and a sustained flow of resources to the districts will be required. The important roles of other ministries, parastatals and NSAs in managing and implementing most IAs calls for effective coordination within and across sectors.
209. Improving dialogue and coordination with the private sector has emerged as an important issue at national and continental level, as reflected in the Malabo Declaration and the recent AU Initiative to establish CAP-Fs to complement the second-generation NAIPs. This has recognised the importance of the private sector as investor and service provider and the need for more effective and inclusive public-private coordination, including through PPPs. In Malawi, such dialogue has already been established with the New Alliance framework, and others. This dialogue and coordination will be strengthened under NAIP.

## Existing Coordination Structures

210. Existing structures can be divided into Government and multi-stakeholder platforms, as in the Table 5.3 below. Most of these structures serve inter-ministerial coordination, as representation is across government (OPC, EMC, HLF even DCG). Also the SWG and TWGs include representation by other ministries and NSAs. Only the Senior Management Team and departmental meetings are specifically for intra-ministerial (MoAIWD) coordination.

**Table 5.3: Existing Coordination Structures**

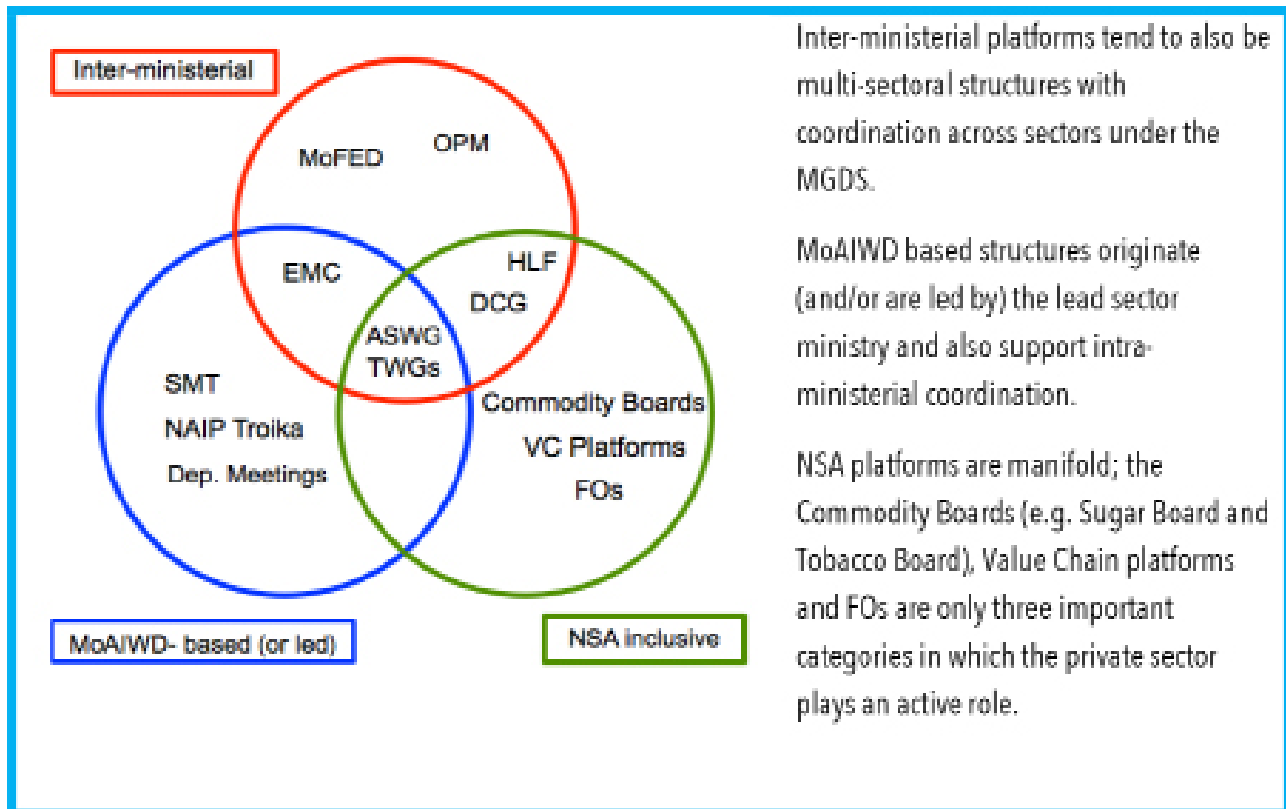
	GoM Platforms	Multi-Stakeholder Platforms
Multi-Sector	Office of the President and Cabinet (OPC)	High Level Forum (HLF) Public-Private Dialogue Forum (PPDF)
	Executive Management Committee (EMC)	Development Cooperation Group (DCG)
Sector	Senior Management Team (SMT)	Agricultural Sector Working Group (ASWG)
Sub-Sector	Departmental Meetings	Technical Working Groups (TWGs) Commodity Platforms

## Inter-Sectoral and Inter-Ministerial Coordination

### Existing Structures

211. **Inter-Sectoral Coordination Platforms:** The OPC, the HLF and the DCG all have both inter-ministerial and inter-sectoral coordination mandates. These platforms guide implementation under a range of policies, Programs and plans that include the overarching MGDS (under leadership of the MoFEP&D), the National Resilience Plan (coordinated by the OPC), the National Export Strategy (under MoITT), the National Climate Change Investment Plan (coordinated by the OPC and MoNREM).
212. The HLF and the DCG include membership by non-state actors. The HLF is the highest dialogue platform between government and stakeholders such as DPs, private sector, NGOs, civil society and academia. It is co-chaired by the MoFEP&D and a DP representative. The HLF meets once a year to discuss progress under the Development Cooperation Strategy and towards MGDS targets. The DCG meets twice a year to prepare the work of the HLF. It provides inputs to the HLF and follows up on action points emerging from the HLF. Sector Working Groups forward issues to the DCG.
213. **Inter-Ministerial Coordination:** The main platform is the **EMC** which was established during the ASWAp to provide strategic direction for inter-ministerial coordination, oversee implementation, endorse work plans and monitor progress. Inter-ministerial coordination is especially important for cross-sectoral issues such as creating an enabling business environment, managing climate change, food and nutrition security and creating opportunities for women and youth.
214. **Non-State Actors:** Important platforms for NSAs are the **ASWG** and its subsidiary TWGs. The ASWG is one of a range of such groups established by OPC in 2008 to coordinate action under the MGDS. The ASWG was intended as a public-private dialogue platform as well as one for inter-ministerial coordination. TWGs are an extension of SWGs tasked to guide and inform technical implementation. The TWGs include non-state actors and also have inter-ministerial representation.

Figure 5.2: Existing Coordination Structures



### Proposed Arrangements

215. To ensure that inter-sectoral coordination improves and that the NAIP undertakings are properly guided and that policies and regulations receive due attention to speed up reforms in the sector, the following institutional arrangements are proposed:

- **Cabinet Committee:** For proper political guidance and speedy reform facilitation the Cabinet Committee on the Economy shall guide the NAIP implementation. The Committee shall meet biannually to review progress on policy reforms and other related instruments in the sector.
- **The EMC:** The current EMC structure under the ASWAp will be maintained as per stakeholders desire though it was not effective during ASWAp implementation. Under NAIP, the EMC will meet twice a year and be attended by the Principal Secretaries and NAIP Coordinators of all participating ministries (generally the head of planning). Participation at the highest level is critical to ensure follow-up on action points and report on progress. In case of consecutive non-attendance or lack of engagement, the PS of MoAIWD should table the matter to Cabinet and to the ASWG for redress.
- **The ASWG:** The Agriculture Sector Working Group arrangement will be strengthened with the Agriculture PS as a chair. The ASWG will have representation from the LA ministries at the highest level preferably at the Director or PS levels. Alternatively, the NAIP Coordinators should represent the participating ministries. The ASWG should meet at least twice a year and communicate NAIP progress and obstacles to the DCG prior to their bi-annual meetings.
- **TWGs: A clear demarcation will be drawn between the ASWG roles and that of the TWGs.** The TWGs will focus on technical issues and practical implementation while the ASWG will focus on the (horizontal) NAIP IAs and policies. The ASWG will coordinate implementation according to the four (vertical) NAIP Programs, as shown in Table 5.4 below:

**Table 5.4: Demarcation of Roles between ASWG and TWGs**

	<b>ASWG</b>	<b>TWGs</b>
Purpose	Policy dialogue and coordination	Technical dialogue and coordination
Focus	Policies, plans and budgets	Technical implementation
Composition	<b>Broad-based and inclusive</b> Policy and decision makers from Government (inter-ministerial), private sector, NGOs, civil society, academia and DPs	<b>Lean and action-oriented</b> Technical staff from Government (inter-ministerial where necessary), strong private sector representation, NGOs, civil society, academia and DPs
Functions	<ul style="list-style-type: none"> <li>• Report and review NAIP implementation progress across ministries and departments</li> <li>• Report and review the role of NSAs including barriers to optimum use of NSA potential</li> <li>• Review and discuss AWPBs and advise on improved alignment to the NAIP</li> <li>• Assess TWGs request for support</li> <li>• Based on TWG advice, carry out vetting of (DP/NGO supported) projects to assure NAIP compliance</li> <li>• Monitor adherence to Codes of Conduct MoUs in the agriculture sector</li> <li>• Encourage and coordinate joint government-DP M&amp;E missions</li> </ul>	<ul style="list-style-type: none"> <li>• Support LAs in coordination and monitoring implementation under the IAs concerned</li> <li>• Analyse implementation bottlenecks and identify solutions</li> <li>• Identify potential areas for public-private cooperation</li> <li>• Report to the ASWG on progress and challenges to implementation</li> <li>• Advise the ASWG on AWPBs</li> <li>• Set-up Task Forces to address priority issues and apply for support when necessary</li> <li>• Streamline and harmonise implementation approaches</li> <li>• Maintain an overview of relevant DP/NGO projects and ensure that these contribute to NAIP targets</li> <li>• Coordinate geographic implementation; avoid project overlaps, aim to fill gaps</li> <li>• Advise ASWG on vetting of projects</li> </ul>
Chair	Permanent Secretary Agriculture	Department Director / Co-chair: NSA
Meeting	Two – four times per year	As needed, but no less than 4x/year, prior to the ASWG meetings

- **The TWGs** The number of TWGs will be limited and focused on technical areas where coordination between different actors is critical. Therefore, not all areas need to be covered by TWGs, since essential coordination of reporting functions will be carried out by the LAs. The number and thematic coverage of TWGs can also be modified during implementation, based on performance and changing needs. On this basis, the following TWGs are initially :



**Table 5.5: Proposed List of TWGs**

TWG/Issue	IAs	Rationale
TWG 1: Strengthening Farmer Organisations	2	<ul style="list-style-type: none"> <li>Critical crosscutting technical area with many actors (MoAIWD, MoITT, NSAs, private sector)</li> </ul>
TWG 2: Land Tenure	6	<ul style="list-style-type: none"> <li>New Land Law is technically complex, under MoLHUD but requires dialogue with MoAIWD, local government, local authorities, farmers and private sector</li> </ul>
TWG 3: Agricultural Innovation Systems	9	<ul style="list-style-type: none"> <li>Improved coordination between research and extension,</li> <li>Coordinate demand-driven technology development and dissemination</li> </ul>
TWG 4: Input supply	10/13	<ul style="list-style-type: none"> <li>FISP reforms require stakeholder coordination. Same for developing stronger input supply chains/markets for seeds, fertiliser, pesticides, breeding stock and mechanisation and policy, institutional and regulatory frameworks</li> <li>Improve the input supply systems including seed systems as demanded by the diversification drive</li> </ul>
TWG 5: Markets, Trade and Emergency Response	7/8/14	<ul style="list-style-type: none"> <li>Need to better harmonise market interventions (through ADMARC, strategic grain reserves, food aid, trade restrictions) with objectives of market development and trade promotion</li> </ul>
TWG 6: Natural Resources Management and Irrigation	11/12	<ul style="list-style-type: none"> <li>Would facilitate better integration of irrigation development and catchment management approaches</li> </ul>
TWG 7: Value Addition and Access to Finance	15/16	<ul style="list-style-type: none"> <li>These areas are closely linked and require collaboration between various Ministries and Actors (MoAIWD, MoITT, MoFEP&amp;D, MITC, RBM and financial institutions)</li> </ul>
TWG 8: Nutrition	IA 4 and 5	<ul style="list-style-type: none"> <li>Requires effective coordination with non-agricultural stakeholders and Programs.</li> </ul>

- **The private sector** will have an active role in setting the agenda especially in the TWGs. Unblocking the bottlenecks to private investment requires that their needs are taken seriously. Therefore, a co-chairing arrangement of government and private sector is proposed, which is especially helpful in TWGs that deal with the enabling environment for private investment (e.g. those concerned with access to inputs, mechanisation, commodity markets, value addition and agro-processing).
- **Task Forces** are another mechanism to ensure TWGs become more action-oriented. The task forces will be a flexible mechanism to tackle critical issues within a technical area. They will be ad-hoc, temporary and specialist groups with clearly defined deliverables within a specific time frame.
- **Lead Agencies of IAs** serve to manage the implementation of the IAs, coordinate with other key implementing partners where needed, and report on progress to the NAIP Secretariat and their respective TWGs. The TWGs will provide technical guidance in case of implementation problems. The EMC and ASWG will oversee the performance of the IAs.
- Coordination will be made more professional and **results-oriented**, requiring the allocation of resources in NAIP budget, especially in IA1. This includes resources for:
  - **Capacity development:** The culture of “results-oriented coordination” should be internalised. A performance-based allocation of resources for capacity development of the ASWG, TWGs and LAs will ensure that this happens.

- **Strengthening of district and grassroots structures:** NAIP resources will be allocated to implementation levels at the district level and below such as the District Agriculture Development Office, the District Agriculture Extension Coordinating Committee, the District Stakeholder Panel, Area Stakeholder Panel and the Village Agriculture Committee. This includes resources for TA to clearly define the role of these various structures, in particular that of the District Agriculture Committee (see section on Coordination for Implementation).
- **Recruitment of coordination professionals:** Effective coordination needs people dedicated to the task. The NAIP budget includes resources for staff such as the CAETS and CAS, the NAIP Secretariat, and for TA to support TWGs.
- **Operational costs of coordination:** Budget allocations are included for the operational costs of coordination structures such the Coordination Troika, the NAIP Secretariat, the ASWG and TWGs. There is also a budget allocation for meetings by various coordinating bodies from the EMC at the top, to the Village Agriculture Committees at the bottom.
- **Follow-up on action-points:** The ASWG and its TWGs will be responsible for follow-up on action points from their meetings. Under ASWAp, the commitment of the private sector dwindled as recommendations were often not actioned and representation by ministries other than MoAIWD was not sustained. Under the NAIP, ASWG and TWGs will receive budget resources to follow up on agreed action points<sup>24</sup>. TWGs will be able to access these resources through submitting proposals for their use. This should motivate TWGs to become solution-oriented drivers of change.

216. While initially all above-mentioned implementation and coordination mechanisms will be funded under the NAIP, subsequent funding will be performance-based. The performance will be assessed periodically by TWG members (in case of LAs and professional facilitators/TA) and as part of the JSR for all platforms and mechanisms.

## Intra-Ministerial Coordination Arrangements

### Existing Structures

217. Intra-ministerial coordination takes place at national level for planning, budgeting, monitoring and reporting. Within MoAIWD the Director of Agricultural Planning Services has the mandate for intra-ministerial coordination, including the coordination of investments. Other positions with important coordination roles include: (i) the CAETS who is responsible for coordinating the technical departments; and (ii) the Controller of Agricultural Services and Institutions (CAS) supervising trusts and parastatals. The CAETS and CAS are placed below the PS and above the Departments, in a position of oversight. As support officers to the PS, the CAETS and the CAS are in the direct decision-making line.

### Proposed Arrangements

218. Based on these structures, planning and management of the NAIP will work as follows:
- A **NAIP Coordination Troika** comprising the DAPS, CAETS, CAS will be formed in the MoAIWD with DAPS as the chair. The NAIP Troika will ensure that NAIP implementation is the central purpose of MoAIWD departments and institutions, and that a Program-based budget will anchor and guide coordination efforts. The CAETS and the CAS will be responsible for aligning their departments and institutions with the NAIP. DAPS will additionally be responsible for alignment and harmonisation across partners and projects.
  - The **Senior Management Team** will be brought under the CAETS and its function of intra-ministerial decision-making will be revived and strengthened. The SMT already exists as a

<sup>24</sup>This may include resolving challenges (e.g. in sanitary and phyto-sanitary regulation); providing evidence for decision-making (e.g. studies and analyses) or the strengthening of capacities (e.g. through exchange visits, TA support).

platform for intra-ministerial coordination consisting of Department Directors and Program Managers and coordinated by CAETS.

- All technical departments and institutions under MoAIWD as well as Local Assembly will integrate the **NAIP as their core business**. Making NAIP implementation the core business throughout MoAIWD also includes the measures shown below and in Table 5.4:
  - **Work Plans and Budgets** will be based on the NAIP and will classify each activity by IA, outcome and target.
  - **Directors of Departments** will be designated NAIP Coordinators and may appoint Coordination Officers for specific coordination and monitoring tasks. Departmental Meetings will be held regularly and structured around the discussion of progress towards NAIP outcomes and outputs. Any challenges towards NAIP progress will be reported to the Troika.
  - **Program Managers** will be NAIP Coordinators at Agriculture Development Division (ADD) level responsible for (1) coordination of integrated supportive supervision and mentorship in districts within their respective ADDs; (2) facilitating capacity building initiatives at district level in the areas of planning, resource mobilisation, monitoring, and evaluation and reporting; and (3) facilitating ADD level NAIP reviews and preparation of ADD reports.
  - **The head of Agriculture at the Local Assembly** will become NAIP Coordinator at district level. They will report directly to the District Commissioners and various coordination platforms at district level to ensure coordination with other sectors (e.g. health, environment). These are to report directly to the ADDs, who consolidate, and submit to the NAIP Secretariat.

**Table 5.6: Intra-Ministerial Coordination Roles**

Actor/Office	Coordination Position	Function and Tasks
DAPS	Hosts the NAIP Secretariat and chairs the NAIP Coordination Troika	<ul style="list-style-type: none"> <li>• Coordination of MoAIWD investments and alignment of activities to the NAIP</li> <li>• Responsible for NAIP implementation and M&amp;E</li> </ul>
CAETS	Member of the NAIP Coordination Troika	<ul style="list-style-type: none"> <li>• Engaging with Directors of the technical Departments to implement the NAIP</li> </ul>
CAS	Member of the NAIP Coordination Troika	<ul style="list-style-type: none"> <li>• Engage institutions under the MoAIWD to implement the NAIP</li> </ul>
Directors of Departments	NAIP Coordinators at Departmental level	<ul style="list-style-type: none"> <li>• Ensure that the NAIP is the core business in their Departments</li> <li>• Direct implementation, working closely with Planning Officers in the Departments</li> <li>• Coordinate across departments in MoAIWD through SMT of the MoAIWD</li> <li>• Report to PS and the SMT on NAIP implementation</li> </ul>
Program Managers (PMs)	ADD-level NAIP Coordination Officers	<ul style="list-style-type: none"> <li>• Coordinate NAIP implementation at ADD level</li> <li>• Liaise with national-level HQs</li> <li>• Support NAIP implementation for each of the technical departments represented in the eight ADDs</li> </ul>
DADOs	District-level NAIP Coordination Officers	<ul style="list-style-type: none"> <li>• Coordinate NAIP implementation at district level</li> <li>• Liaise through ADDs with national-level HQs</li> <li>• Liaise with the District Commissioner</li> <li>• Liaise with District Directors of Planning to ensure coordination with other relevant sectors</li> </ul>

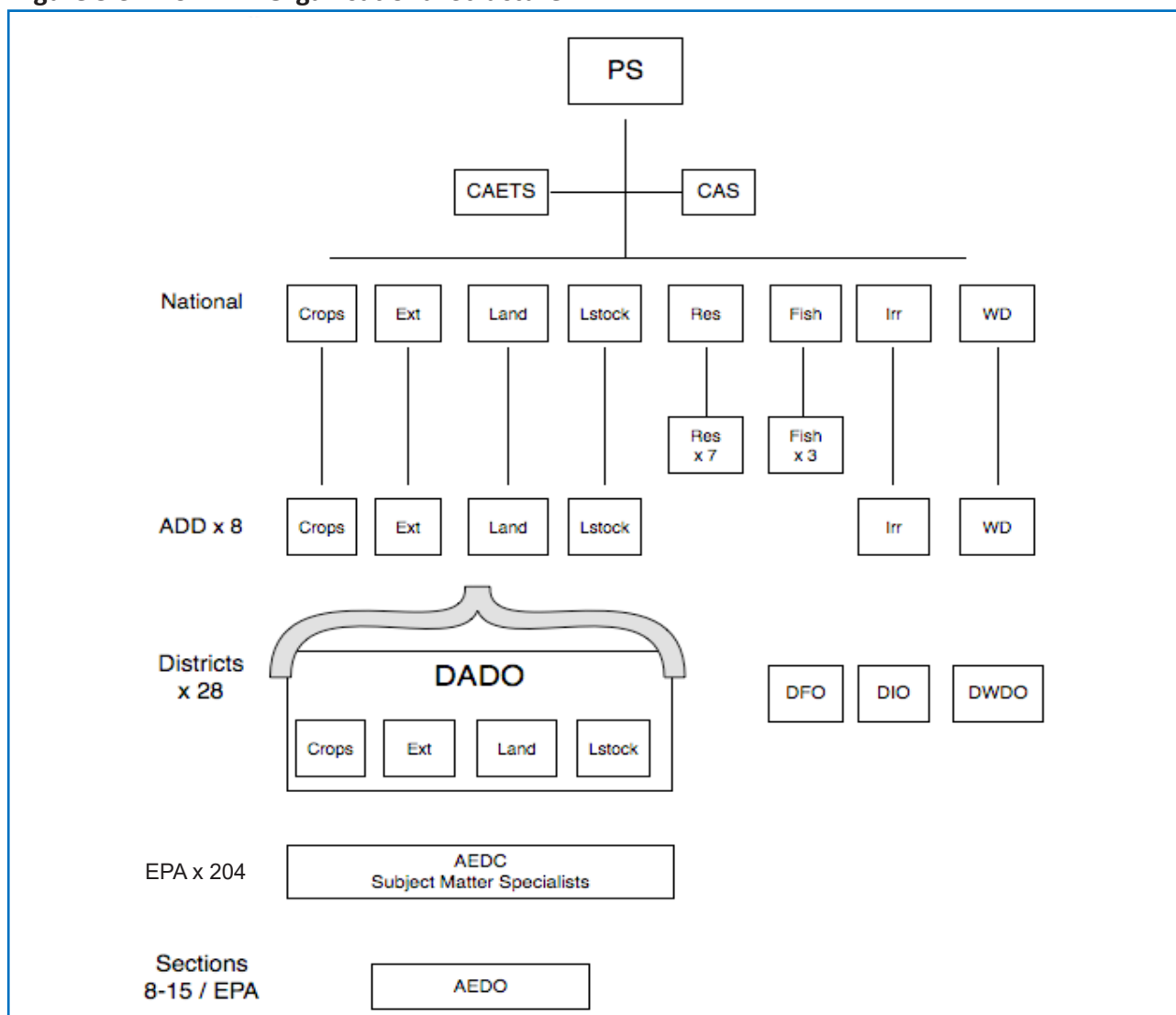
219. Supporting measures to ensure that the implementation and coordination arrangements will be put into practice and will function effectively are:
- Coordination must be part of **job descriptions** to ensure that these tasks are resourced and implemented, and include appropriate staff capacity development; and
  - A clear **communication strategy** should be elaborated by MoAIWD to make sure that all relevant persons and platforms remain informed. A budget line for communications is included in the NAIP budget.

## Coordination at Decentralised Levels

### Existing Structures

220. As shown in Figure 5.3 the MoAIWD technical departments at national level are replicated in all eight ADDs<sup>25</sup>. At district level, the departments are again replicated, but the merger between Agriculture and Irrigation & Water Development, as well as Fisheries (yet an earlier merger) has not taken place to the extent that these departments are part of District Agriculture Development Office. Instead, there are separate district offices for these departments, all of which are represented on the District Executive Committee (DEC) and the DAEC. For efficiency and for purposes of reducing office maintenance and operational budgets, it is expected that these offices will be merged into the overall district structures, as per the decentralised process.

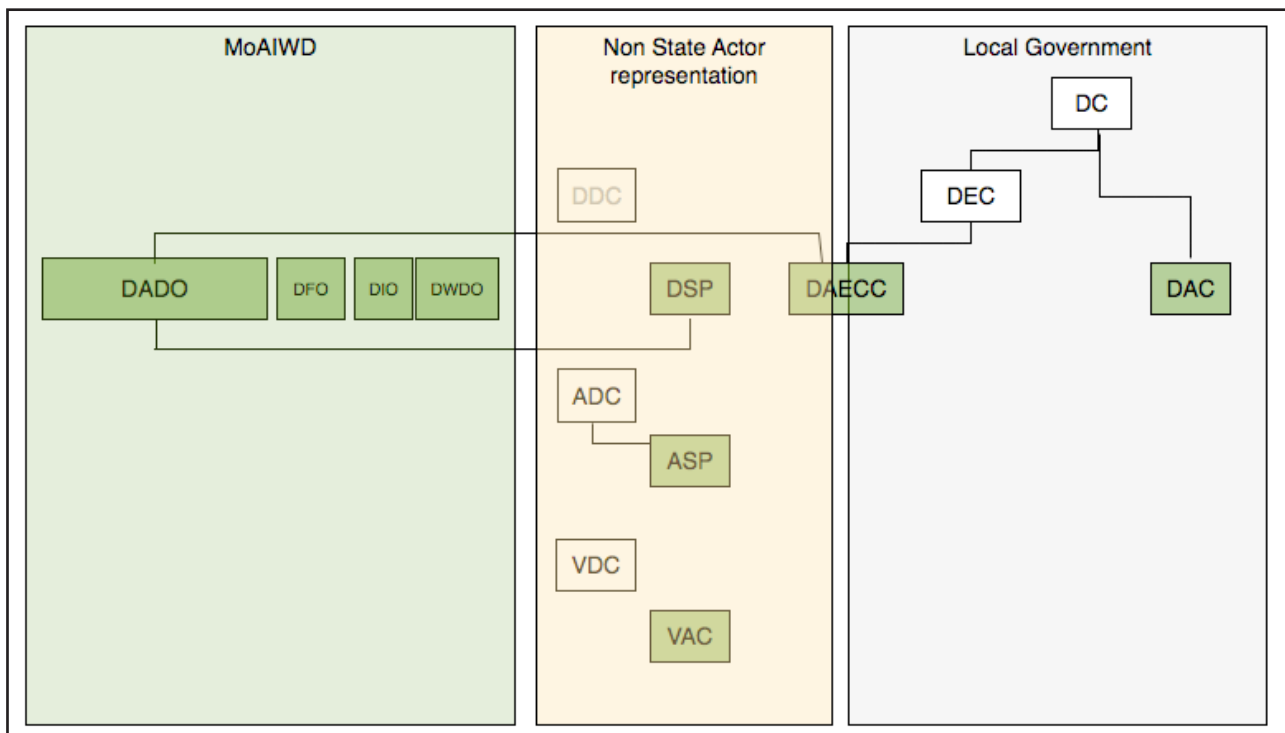
**Figure 5.3: MoAIWD Organisational Structure**



<sup>25</sup>The exception is the Department of Fisheries which is only represented in three ADDs and the Research Department that is situated in seven agro-ecological regions.

221. At the district level, national government structures interact with Local Government structures and structures that have NSA representation. In Figure 5.4, structures that discuss agriculture are highlighted in green. Structures are divided into those belonging to MoAIWD (left), those in which NSAs take part (centre) and those of Local Government (right).
222. The District Stakeholder Panel (DSP) has government staff (DADOs and other MoAIWD Officers) and representatives of the private sector, farmers, CSOs and NGOs. Similar structures at lower levels are the Area Stakeholder Panel (ASP) and the Village Agriculture Committee (VAC). At all these levels MoAIWD staff are represented, which represents an opportunity for upward information flow from beneficiaries of the NAIP. The upstream and downstream communication between the VAC, ASP and DSP need to be strengthened as part of NAIP implementation.

**Figure 5.4: Linkages between implementation structures**



223. Local Government structures have the District Council (DC) at the top. Below this is the multi-sectoral District Executive Committee (DEC) comprised of technical officers from government and NGOs. The DAEC is a sub-committee of the DEC of which the DADO and other MoAIWD officers are members. It is one of the more effective public-private structures at the district level. The District Agriculture Committee (DAC) consists of elected councillors, but seems to be one of the less effective agriculture platforms at the district level. It mirrors the national level Parliamentary Committee on Agriculture, but the links between this committee and the DAC need to be clarified.

### Proposed Arrangements

224. There is general agreement that the existing structures at the district level are too complex with overlap in roles and functions. For example, the linkage and division of roles between the DSP and the DAEC is not clear: both have government–NSA participation, and both are public-private platforms. Under NAIP there is a need to come up with a leaner and simpler structure. It is imperative that the connection to the field via the sub-national structures is effective. This must become a working relationship, as the thrust of the NAIP must be at field and at farm level. How best to make use of the structures that are available, which ones to strengthen, which ones to merge, which to abandon, are issues that need to be addressed under Program. The following are proposals for analysis and action:

- Decentralisation needs to be pro-actively supported by MoAIWD with care to retain sufficient connection to the DADOs to still make effective use of this layer in NAIP implementation;
- The DSP should be strengthened in its task of district-level coordination. It is proposed that the DADO serves as DSP Secretary, with an elected chairperson (possibly a NSA);
- The division of roles between the DAECC and the DSP needs clarification and the possibility of merging these structures should be assessed;
- Tasks of the DSP and/or DAECC, or indeed of a merger of the two, should include: tracking how various sectors are aligning the NAIP into their core business; developing work plans with a clear division of labour towards NAIP implementation at district level; and facilitating reviews and reports on NAIP implementation;
- The Area Stakeholder Panel (ASP) and Village Action Committees (VACs) will continue to be used at Traditional Authority and Village level. However, it is recommended that linkages between VAC, ASP and DSP be strengthened so that an upward and downward communication can take place;
- Strengths and weaknesses of the DAC should be assessed, as well as the possibility of strengthening its link to Parliamentary Committee on Agriculture (at national level). A decision should then be made to either strengthen or abandon the DAC;
- Efforts should be made to keep coordination of NAIP under one roof at district level and ADD should be strengthened in their coordination and monitoring functions, including harmonising and scrutinising annual work plans from the districts and ensuring their compliance with the NAIP;
- An assessment should be made on the need for (and the use of) Performance Contracts for ADD Program Managers and DADOs; and
- A working relationship should be established at district level between platforms in agriculture (e.g. DADO and DAECC) and those in other NAIP sectors such as the District Social Support Committee and Community Social Support Committee under the MNSSP.

### Private Sector Coordination

225. Improved coordination between public and private actors is key to a successful NAIP. The Malabo Declaration invites countries to establish a CAP-F in order to: (i) achieve policy reforms through multi-stakeholder engagements and institutional support systems; and (ii) establish collaborations for improving the efficiency of priority value chains. The CAP-F should be aligned with the priority investments and value chains under the NAIP and serve as a dynamic registry for partnerships and private investments that support the NAIP. The CAP-F should identify policy initiatives to stimulate agribusiness investment through a multi-stakeholder (government/private sector) group to jointly identify key issues and monitor implementation.
226. In Malawi, the CAP-F would rest on two main building blocks: (i) the NA/GA framework; and (ii) value chain specific multi-stakeholder platforms. Malawi joined the NA in 2013 and the initial Country Corporation Agreement (CCA) included 35+ policy commitments and 27 Letters of Intent for investments by private companies. In April 2015, the CCA was revised and the number of policy commitments reduced to 15. Under the NAIP the CCA will be updated and upgraded in the form of a CAP-F, according to the CAP-F implementation guidelines<sup>26</sup>. This will require a review of the policy commitments, including their implementation status and relevance during the NAIP implementation period. A list of high-priority issues should be identified in close collaboration with the private sector in order not to dilute efforts. The process should be guided by an inclusive group composed of the original NA/GA companies but also new companies and representatives

of SMEs and farmers. A high-level public private dialogue forum with broad participation from key ministries and private sector representatives should be created to address issues involving several ministries, and to monitor implementation. The forum should meet periodically (e.g., bi-annually) to review progress on policy reforms, investments commitments and PPPs, and discuss new issues as they arise. The forum could be established as a subsidiary of the Public Private Dialogue Forum (PPDF) under the High Level Forum under the auspices of the Malawi Confederation of Chambers of Commerce and Industry (MCCCI). It should be aligned with the NAIP governance structure.

#### Box 4: Elements of a CAP-F

**Coordination:** this is fundamental to inclusive value chain development but is often under-resourced. Only when a single private sector actor dominates a value chain can they viably take on the burden of coordination. In most situations, the initiative and funding for coordination must come from a government or development partner, at least until the value chain matures to establish and self-fund its own mechanisms.

**Policy Change:** The viability of each agribusiness partnership will be constrained by specific policy issues within each value chain. The success of a CAP-F depends on simultaneously getting government to commit to key policy reforms, alongside companies committing to investments.

**Investment Mobilisation:** Whilst CAP-Fs are focused primarily on mobilising private sector investment, they also seek to mobilise or align catalytic investments from government, development partners and non-state actors. These two types of investment are described separately.

**Mutual Accountability:** This is the process by which two or more parties hold one another accountable for the commitments they have voluntarily made to one another. It is a key principle for CAADP implementation, because agricultural transformation requires diverse cross-sector partners to act in concert.

*Source: CAP-F Implementation Guide*

227. At the level of priority value chains, multi-stakeholder platforms and TWGs already exist in several of them including oilseeds, legumes, rice, dairy and roots and tubers. The platforms can facilitate collective action for developing priority value chains in close coordination with private actors. This could include the formulation of subsector or value chain strategies and the identification of investment priorities and opportunities for PPPs, along with specific policy issues and critical gaps in infrastructure, services and technologies. Attention should be paid to the participation of small, medium and large entrepreneurs and smallholder farmers. Under IA 15, value chain platforms will be enhanced through TA to support the implementation of agreed activities and report back to stakeholders.

<sup>26</sup>Grow Africa and CAADP (August 2017) Country Agribusiness Partnership Frameworks (CAP-F): An Implementation Guide for Governments and their Partners.

## 5.4 Risks and Risk Mitigation

228. The NAIP is subject to a number of **generic risks** that affect all development programs and projects in Malawi. These include: (i) the willingness of the private sector to participate; (ii) limited capacity in Government institutions and human resources; (iii) the challenge of coordinating NAIP investments within and between institutions; (iv) ensuring that the primary target group (smallholders) participate fully and that women, youth and other disadvantaged groups are included; (v) managing environmental and climate risks; and (vi) coordinating multiple funding modalities.
229. These challenges need to be addressed in a situation where all stakeholders, particularly smallholder farmers, are routinely confronted by a number of risks which deliver setbacks in their efforts to achieve better livelihoods. These risks include extreme weather events, exacerbated by climate change; commodity price fluctuations; uncertain tenure of land and water resources; disability or illnesses; pest and disease outbreaks, uncertainties about the availability and price of farm inputs etc. The NAIP recognises the heavy dependence on rain-fed cropping, and the low ability of farming households to manage risks, and consequently the need to make significant investments in resilience.
230. All of the risks mentioned above are considered to be “background risks” that have to be confronted and managed with or without the NAIP. The NAIP includes many initiatives that are intended to mitigate these risks. Packages of GAPs are expected to improve the resilience of farming systems to climate variability and climate change. Investments in irrigation development are also a useful adaptation measure. Marketing and value addition will reduce exposure to commodity price fluctuations, land tenure security will be improved, and the capacity to manage pest and disease challenges will be enhanced. Through these and other measures the NAIP will bring about a progressive reduction in the risk exposure of Malawi’s farmers. In other words, the risks associated with implementing the NAIP are less than those of not implementing it. Without the NAIP Malawi’s farmers face an uncertain future with the real possibility that recent improvements will stall or even reverse under the influences of land degradation and climate change.
231. But there are also risks that the NAIP will fail to deliver according to expectations. These risks are recognised in the design of the NAIP which also includes measures to reduce their probability and impact. The initial step in designing the NAIP was a thorough assessment of the ASWAp experience to identify lessons learned. The proposed implementation and coordination arrangements were informed by the ASWAp experience. The consultative process by which the NAIP was prepared also has an important function of building awareness, ownership and commitment to the Plan.
232. **Institutional capacity** is a well-known risk for agricultural development initiatives in Malawi. The Plan recognises the critical role that institutions will play and incorporates institutional capacity building measures in each Program and IA. Successful implementation will also depend on the availability of competent management and technical personnel at central, ADD and district levels. This will require inclusion of decentralisation process and the recommendations of the CFA into the NAIP capacity building plan.
233. The **decentralisation process** accentuates the institutional capacity risks. Whilst decentralisation has been underway for a decade the first transfers of staff from central ministries to Districts took place in 2016. This poses a challenge to the agricultural sector in terms of direct influence over frontline staff, but is also an opportunity to ensure that planning is more responsive to local needs. However, it is yet to be finalised how administrative and fiscal decentralisation will happen and to what extent. MoLGRD will have an important role to play in this and improved coordination between it and MoAIWD is essential. The NAIP budget identifies activities at district level (including administration and staff costs), which may or may not be transferred to MoLGRD for decentralised administration during the course of the NAIP.



234. **Private sector participation** is a key element of the NAIP. The ASWAp experience demonstrates that full participation of the private sector cannot be assumed. Consequently, the Programme will include specific measures to motivate investment by smallholder and commercial farmers by facilitating access to inputs, technologies, markets and financial services, and creating an enabling environment that is attractive to private investment in the sector. The private sector will be represented in the NAIP advisory and governance bodies such as the ASWG. Formulation of the CAP-F during the early stages of implementation provides a further opportunity to develop productive agribusiness partnerships.
235. **Inclusive transformation** is another significant challenge. Smallholders are the primary target group of the NAIP, although the role of commercial agriculture and agro-industries is also vital to a commercially viable sector. There is a risk that smallholders, particularly women, youth and disadvantaged groups, will fail to participate fully in the process. To minimise this risk, the NAIP includes interventions such as strengthening farmer organisations, and facilitating access to rural financial services that will enable small scale farmers to undertake profitable investments.
236. There is a risk of **environmental degradation** due to un-sustainable natural resource management practices. It is envisaged that the NAIP will stimulate increased agricultural activity employing the principles of sustainable agricultural intensification based on technologies which are both more productive and more resilient and sustainable. However, mitigation of possible adverse effects will also be considered where necessary. The NAIP will also implement training programs in climate-smart farming practices, including conservation agriculture, agro-forestry, IPM and sustainable natural resource management.
237. The existence of a **financing gap** and the need to mobilise funding from multiple (national and international) sources presents a significant challenge. Within MoAIWD, within Government generally and amongst stakeholders there is a continued struggle for resources which, at times, hampers the strategic decision-making and prioritisation processes. The availability of funding tends to influence priority-setting as much as (or more than) strategic considerations. At the same time Government priorities can shift, for example if the FISP reform agenda changes. Factors external to Malawi may also affect the sector, for example reduced funding or changing priorities of development partners.
238. **Financing arrangements** also present an element of risk. Whilst GoM has a preference for general and sectoral budget support and on-budget project finance, it is anticipated that a number of Development Partners will opt for other funding modalities, including discrete and earmarked project funding, bilateral arrangements etc. (see Figure 5.1 on funding modalities). The risk lies in weak coordination of budget processes among the participating agencies and also among Development Partners. Different Development Partners also have differing requirements for reporting, accounting and auditing systems. As the NAIP is expected to attract non-traditional development partners there may be need to comply with additional donor requirements. There is therefore need to strengthen the capacity to manage multiple sources of funds within the Government financial system whilst maintaining high standards of traceability and control.

239. Several measures are needed to ensure the **continuing relevance and validity** of the NAIP over a five-year implementation period. Circumstances are always changing: new priorities may emerge, new partnerships and changes in domestic or international relations may drastically influence the course of NAIP implementation. Several steps have been taken to ensure continued validity of the NAIP, including: (i) identification of generic and long-lasting programs, within which policy priorities and intervention areas can be easily changed; (ii) a non-prescriptive and flexible approach in value chain selection, as markets change over time; and (iii) various levels of stakeholder fora and coordination bodies to monitor implementation and ensure continued validity.
240. All of the above risks are significant, but need to be considered in comparison to the risks associated with a less ambitious approach to sector development, which imply a high likelihood of continuing poverty, food insecurity, environmental degradation and rural economic stagnation. Against this background, and the proposed risk mitigation measures, the case for implementing the NAIP is compelling.

## Chapter 6: Alignment, Mutual Accountability and Monitoring

### 6.1 Alignment

241. Successful implementation of the NAIP requires alignment of all actors in the sector to its programmatic structure, results framework and implementation arrangements, reinforced by mutual accountability mechanisms and an effective monitoring system for the sector. The main instrument for alignment is the CAADP Compact through which all stakeholders (including GoM, DPs, CSOs and private sector) have subscribed to the values and principles of the CAADP framework. These principles include: (i) evidence-based programming, implementation and monitoring of policies through inclusive stakeholder engagement; and (ii) alignment of all stakeholders to a nationally-owned investment plan rooted in the Maputo and Malabo Declarations. The CAADP process also includes joint sector review and accountability mechanisms at national, regional and continental levels. In line with the Malabo Declaration and NAIP, the CAADP compact will be updated and signed by the same stakeholder categories as the first CAADP Compact, and along the partnership principles of the Malabo Agreement: Government, DPs, private sector, farmer organisations, civil society, NGOs, academia as well as the African Union Commission, NEPAD and COMESA.
242. In order to assume full ownership of the NAIP and lead its implementation, MoAIWD needs to fully align its own systems and processes to it. This includes alignment of (i) Annual Work Plans and Budgets of MoAIWD, as well as relevant parts of those of other key Ministries, Departments and Agencies, and of districts, to the NAIP programmatic structure; (ii) effective use of the governance structures described in Chapter 6 to ensure inter-ministerial coordination around the NAIP; and (iii) consistent allocation of national budget to the NAIP implementing agencies at national and district level by MoFEP&D.
243. Development Partners will align their support to the NAIP in line with the Malawi Development Cooperation Strategy. Key principles include alignment to and use of national systems, harmonisation of procedures, increased predictability of donor funding, involvement of NSAs, and mutual accountability. This implies the following steps during NAIP implementation: (i) reducing the number and fragmentation of projects and increased use of sector budget support, under the MDTF; (ii) bringing more projects on budget and reducing the number of PMUs, including through joint and parallel financing structures; (iii) strengthening the alignment of projects by clearly indicating to which IA and Program they contribute, not only at the outcome level but at the level of outputs and intermediate outcomes. Such alignment of project activities and related targets and budgets will enable MoAIWD to lead and manage NAIP implementation more effectively, by guiding Development Partner support towards under-resourced areas and avoiding duplication in other areas. All new projects in the agriculture sector will have to be cleared upfront by MoAIWD at the national level and Local Assemblies. This will be instrumental for achieving equitable and efficient distribution of activities and investments.
244. In order to formalise such arrangements, the CAADP Compact will be complemented through subsidiary agreements between the main actors operating in the sector. The Code of Conduct will provide a framework for all stakeholders on the principles of engagement in the sector. In addition MoUs should be used between financing partners, mainly between Development Partners and Government, but also in some cases with larger NGOs or private sector financiers, to align projects to specific IAs and Programs. These MoUs will also be agreed and implemented at District level. In the case of pooled funding, a Joint Financing Agreement may replace the MoUs. These mechanisms, additional to the Compact, are described in Table 6.1 below.

**Table 6.1: Proposed Alignment Mechanisms for NAIP Implementation and Monitoring**

	<b>Code of Conduct</b>	<b>MoU</b>	<b>Joint Financing Agreement</b>
<b>Scope</b>	Agriculture Sector	NAIP	Pooled Fund
<b>Aim</b>	To ensure alignment to the National Agriculture Policy	To agree on implementation arrangements, objectives, targets and indicators	To define the terms for the joint funding pool for NAIP implementation
<b>Signatories</b>	Actors funding more than a defined amount to the agricultural sector	Partners contributing funds to NAIP implementation	Partners contributing to the NAIP pooled fund
<b>Planning</b>	Partners plan specific activities aligned to the NAIP	Partners identify specific NAIP activities for earmarked funding	Partners fund the NAIP in an un-earmarked fashion
<b>Monitoring</b>	Common indicators in the Agriculture PAF but possible use of own M&E	Joint M&E arrangements against common indicators of the Agriculture PAF	Common performance indicators for pool fund disbursements
<b>Finance modality</b>	Projects, both on and off budget	Funds earmarked for NAIP budget lines but not pooled	Pooled fund in government held account jointly managed with DPs
<b>Synchronisation</b>	Partners may use own programming cycles but must indicate following year commitments in line with national budget cycle	Partners subscribe to a harmonised disbursement and implementation schedule aligned to the national budget cycle	Partners have common disbursement and implementation aligned to the national budget cycle

245. In addition to different NAIP related government ministries and agencies, mechanisms will also be put in place to strengthen coordination and alignment for DPs that support NAIP-related activities in other sectors and through other ministries. This includes the DP group in nutrition (DoNUTS) but also DPs in other adjacent sectors such as trade, private sector development, social development, and climate change.

## 6.2 Mechanisms for Mutual Accountability

246. All actors engaged in the sector will be required to fully align their financial, technical and implementation support to the NAIP. Following a renewal of the CAADP Compact and the signature of the aforementioned subsidiary instruments, stakeholders will be held accountable for their commitments to the NAIP. GoM is accountable to the general public in Malawi, to the main beneficiaries of the NAIP and to its financing partners for their commitments under the NAIP. GoM is also accountable for its continental and global commitments, to which the NAIP is expected to contribute. DPs are accountable for their pledges and commitments to the sector under the Development Cooperation Strategy. NSAs are accountable for their roles in NAIP implementation and for increased alignment of their operations to the NAIP. The private sector is accountable for investment commitments and pledges made under the New Alliance Country Cooperation Agreement and CAP-F for their roles as co-financiers and implementers within PPP arrangements.

247. Several accountability mechanisms for GoM's activities in agriculture are already in place. These include general democratic control instruments such as the Parliamentary Committee responsible for Agriculture which plays an important role in monitoring the agriculture budget implementation. These are complemented by mutual accountability mechanisms through which two or more parties are accountable for their commitments. Mutual accountability is a core principle to support the CAADP agenda and related mutually agreed goals at continental, regional and national level. As one of the six principles of the Paris Declaration on aid effectiveness, mutual accountability aims to increase the incentives and collective responsibility for governments and development partners to achieve their development goals.
248. Mutual accountability can be generated through engagement of a range of actors in governance and oversight. Several multi-stakeholder platforms already exist which coordinate different actors, jointly review implementation progress and highlight issues to be addressed. These platforms include the ASWG at the highest level, the TWGs, the value chain platforms and the high-level public-private coordination and dialogue forum for agriculture, to be established and reinvigorated during the CAP-F process. The JSR has taken place since 2011, coordinated by MoAIWD. It has grown in strength, and in 2015 the private sector actively participated. To reflect the spirit of public-private cooperation of the NAIP, the JSR will be strengthened as an accountability mechanism by requiring that all players in the sector report areas of their engagement, progress on implementation as well as challenges and opportunities. The JSR is a coordination mechanism that builds consensus around key issues. It will be further supported under the NAIP; in particular by the NAIP Secretariat which will have full-time staff dedicated to such coordination, monitoring and evaluation meetings.
249. Under the Malabo Declaration, countries have agreed to a biennial review (BR) mechanism for regular country progress reporting to the African Union Assembly. The BR aims to reinforce mutual accountability and peer learning to deliver on the Malabo targets. A reporting template has been designed that includes 43 performance targets and indicators clustered into 23 performance categories which contribute to the seven commitments of the Declaration. The NAIP is a key instrument towards achieving the Malabo targets and as such, its M&E framework will feed into relevant BR indicators.

### 6.3 The NAIP M&E System

250. Key to achieving the NAIP goal is a sound monitoring and evaluation system in which quality data is generated, analysed, and used to timely inform operational and strategic decisions of implementers, policy makers and funders at community, district and national levels. Recent evaluations of the ASWAp revealed serious gaps in monitoring and evaluation of agriculture interventions in Malawi. In addition, separate reviews for two large scale projects, the ASWAp Support Project (ASWAp SP), a Multi-Donor Trust Fund project under the ASWAp; and the Agriculture Infrastructure Support Project (AISP); as well as a Mid-Term Evaluation of the Smallholder Irrigation and Value Addition Project (SIVAP) identified similar challenges in M&E. Key challenges include: (1) lack of timely data due to late or non-reporting; (2) Poor data quality; (3) Weak data utilization at all levels of the system; and (4) Weak governance of M&E across the sector.
251. As a consequence, major programmes are conceived and implemented without sound evidence to back up choice of interventions. Where such evidence is used, the data are often outdated and of low quality. Significantly, the majority of the data collected are simply meant to meet reporting requirements at national and international levels rather than enhancing learning and sound managerial decisions at each level of the Agriculture Sector. The need for an effective monitoring and evaluation system is widely acknowledged within the Agriculture sector. In 2013, through technical assistance from the Japan International Cooperation Agency (JICA), a Monitoring and Evaluation Plan for ASWAp was developed.

252. The ASWAp M&E plan identified specific challenges including: (1) The paper-based nature of data collection and transfer which leads to poor adherence to reporting timelines as well as poor quality and incomplete data; (2) The multiplicity of projects and programmes with independent monitoring and evaluation systems which weakens, rather than strengthening, the capacity of the Ministry to effectively monitor results across projects and programmes; (3) Loss of learning from M&E results of completed projects due to unaligned systems as well as weak mechanisms for impact evaluations. To deal with these challenges, the ASWAP M&E plan proposed gradual and optimal computerization, specifically through operation of an Agriculture Management Information System. The ASWAP M&E plan envisioned that the system was to enhance: (1) Common understanding among the stakeholders on the ongoing activities, changing policy environment and their overall results; (2) Accountability for results amongst stakeholders at all levels of the agriculture sector; (3) Efficient response and action on results from monitoring and evaluation data and analysis; and (4) Improved quality of data collection and handling for evidenced-based and informed decision making.
253. To strengthen monitoring, evaluation, research and learning, the MoAIWD is leading the development of a sector-wide National Agriculture Management Information System (NAMIS). Specifically, the NAMIS will strengthen data collection by replacing the predominantly paper based data collection tool with electronic data collection, reporting and analysis at all levels of the Agriculture Sector. Key initiatives in the NAMIS process will include: (1) Single data reporting system for all players in the agriculture sector; (2) development and operationalizing dashboards for each level of implementation and decision making; (3) integration of social accountability tools including community score card system at implementation level to both improve community participation and data quality; (4) Web-based data access; (5) intra-operability with relevant other Management Information Systems When fully operational; and (6) institutionalisation of key national level surveys. The NAMIS will thus significantly improve efficiency and quality of data collection, reporting, analysis and use at all levels, thereby enhancing capacity of managers and policy makers to make evidence-based decisions for improved agriculture outcomes in the country.
254. The NAMIS will, therefore, have the following structure:
- At the community level, field staff and enumerators will collect data using tablets;
  - Primary data will be transferred electronically to EPA level. Any data not collected electronically, will be entered manually on to the EPA computer and checked for accuracy;
  - At the District level, data from departments and EPAs will be stored on a server where a senior officer will undertake quality checks before submitting the data to the national level; and
  - At the national level, the system will receive data from district levels and will be sorted and uploaded to different dashboards. A web-based information system will be developed to enable access to information by stakeholders and the general public.

Overall, therefore, the NAIP will address the challenges of monitoring, evaluation and learning under IA1 (Program A), in line with the CAADP Level 3 outcome targets, in particular: (i) strengthened capacity for evidence-based planning, implementation and review; and (ii) improved multi-sectoral coordination, partnerships and mutual accountability

## Structure of M&E system

255. Table 6.2 shows the structure of the NAIP M&E system, in line with the overall Program matrix structure described in Chapters 3 and 4. Annex 1 provides a comprehensive overview of the NAIP objectives, indicators and targets at impact, outcome and intermediate outcome levels, along with the main outputs. Annex 2 gives more details on the quantitative impact and outcome targets and baseline values, while annex 3 and 4 contain detailed output targets by IA and Program, respectively.
256. The NAIP budget includes approximately 700 activities with related targets which are consolidated into 257 composite outputs. Each output falls under a specific Program and an IA. As described in Chapter 4, there is a vertical results chain (outputs => Program outcomes => development objectives), and a horizontal results chain (outputs => IA intermediate outcomes => development objectives). Under the vertical results chain, for example, 103 outputs contribute to the eight outcome indicators of Program A, whereas 54 outputs contribute to the eight outcome indicators of Program B. Under the horizontal results chain, each IA has one outcome and between two and six intermediate outcomes, totalling to 48 intermediate outcomes across all 16 IAs. The outputs under each IA feed into the respective intermediate outcomes which then contribute to the impact-level objectives and indicators. In line with the matrix structure, most IAs are composed of outputs under more than one Program. Five IAs (2, 5, 9, 11 and 13) cut across all four Programs, and eight IAs are composed of activities and outputs under three Programs. Only in case of IAs 1 and 3, all outputs are under one Program (A), due to its specific nature.

**Table 6.2: NAIP M&E System Structure**

Impact objectives						Total
						3
Impact indicators						9
Development Objectives						4
	Program à	A	B	C	D	
<b>Outcome statements</b>		4	4	6	6	20
<b>Outcome indicators</b>		10	8	7	10	35
<b>Intermediate Outcomes</b>		<b>Outputs</b>	<b>Outputs</b>	<b>Outputs</b>	<b>Outputs</b>	
IA 1	3	16				16
IA 2	2	5	1	2	3	11
IA 3	2	16				16
IA 4	3	4	9			13
IA 5	3	10	1	2	3	16
IA 6	2	3	5	1		9
IA 7	2	3	6	1		10
IA 8	4	2	8	7		17
IA 9	2	8	6	18	4	36
IA 10	4	10	3	17		30
IA 11	4	4	13	2	1	20
IA 12	2	3		4	2	9
IA 13	2	1		5	2	8
IA 14	6	9		6	8	23
IA 15	4	5			8	13
IA 16	3	4	2		4	10
<b>Total</b>	<b>48</b>	<b>103</b>	<b>54</b>	<b>65</b>	<b>35</b>	<b>257</b>
Activities (budget lines)						<b>702</b>

257. All targets at activity and output level have been defined for each Program and IA (view Annexes 3 and 4). The 35 outcome indicators (at the Program level) constitute the key indicators for the NAIP. They are monitorable on an annual basis and, if presented consistently at the JSR and other fora, provide a snap-shot of sector performance. The IAs have corresponding intermediate outcomes but does not have related indicators, as this would prove too complex a reporting system. Rather, the achievement towards the intermediate outcomes will be measured through the sum of the outputs. Baseline and target figures for the outcome (35) and impact (9) indicators are presented to the extent that they are readily available. Some of these indicators may need to be revised and gaps concerning baselines and target values be filled.
258. Further developing and fine-tuning of the RF, including the indicators, targets and baseline values, will be done as part of the start-up activities during the first year of NAIP implementation, with Technical Assistance from a specialised service provider. As a general principle, the number of indicators should be limited, in order to reduce the complexity of the system. To the extent possible, indicators should be items that are already reported as part of the national accounting and statistics system and are required for the biennial review. Some outcome level indicators still require specific surveys to establish baseline and target values.

## Roles and Responsibilities

**Table 6.3: Proposed Allocation of M&E Responsibilities**

Coordination Entity	Level of monitoring	Lead Agency	Reporting Frequency
<b>Impact Level</b>			
ASWG	Impact	NAIP Secretariat /DAPS	To be reported on at baseline, mid-term (year 3) and end-line (year 5), through national accounts or specialised surveys
<b>Outcomes/Program Level</b>			
ASWG	Progr A	NAIP Secretariat /DAPS	Bi-annual (or annual) <sup>27</sup> reporting on outcomes in the context of the JSR and as bases for strategic planning and AWPBs
	Progr B	NAIP Secretariat /DLRC	
	Progr C	NAIP Secretariat/DAES	
	Progr D	NAIP Secretariat	
<b>Outputs/Intervention Area (IAs)</b>			
Lead Implementing Agencies	IA1	MoAIWD	Bi-annual reporting on outputs and annual reporting on intermediate outcomes every year at the JSR Results are to be validated by the respective TWGs and the ASWG
	IA2	MoAIWD, MoITT	
	IA3	MoAIWD	
	IA4	MoHP& MoAIWD	
	IA5	MoITT	
	IA6	MoLHUD & MoGSWCD	
	IA7	MoNREM – NFRA	
	IA8	MoAIWD	
	IA9	MoAIWD	
	IA10	MoAIWD	
	IA11	MoNREM & MoAIWD	
	IA12	MoAIWD	
	IA13	MoAIWD -	
	IA14	MoITT	
	IA15	MoITT & MoAIWD	
	IA16	MoFEP&D & RBM	

<sup>27</sup>For specific outcomes such as production and productivity and stakeholder satisfaction with public service provision, targeted surveys might be implemented annually, to be decided by key stakeholders during implementation.



259. The DAPS in MoAIWD has primary responsibility for M&E and will collaborate with the National Statistical Office, MoITT, MoLHUD, among others. In view of the magnitude of the task and the need to consolidate data from different sources and implementing partners, it is proposed to align the responsibility for data collection and reporting closely to the NAIP implementation structure. Hence, responsibility will rest with the NAIP Secretariat which is also in charge of coordinating the implementation of the NAIP. The Secretariat will be supported by a technical service provider during an initial period, until baseline data collection has been completed, the M&E system is operational and the capacity has been built in DAPS and other agencies to ensure continuity. At the level of each IA, the LA will be responsible for data collection and reporting on outputs and intermediate outcomes. The NAIP Secretariat will consolidate the data for each Program and report on outcome and development indicators. Data on investments and policy commitments under the CAP-F will also be consolidated by the NAIP secretariat. The EMC and the ASWG will monitor the establishment and operation of the system through the JSR. The TWGs can help the LAs in facilitating data collection, if needed.
260. Reporting on the SDGs and towards the Biennial Review under the Malabo declaration also falls within IA1. This includes the training as well as support to the Biennial Review contact person (most likely the Director of Planning of MoAIWD) as well as his/her participation in relevant CAADP events.
261. To address funding constraints for sector wide M&E, it is recommended that each new project or Program supporting the agricultural sector irrespective of the funding source (be it government or donor financed) earmarks a percentage (1-2%) of its budget towards strengthening the design and operation of a sector wide M&E system. In addition to informing the sector wide system, individual projects/Programs may also report on specific indicators requested by their respective donors.
262. The general approach to M&E recognises that a large amount of work remains to be done in the detailed design of a comprehensive M&E system and to ensure that the system is operational from the outset. Long term TA is required to design the M&E system and develop sector-wide monitoring tools, as well as for supporting MoAIWD in M&E efforts. It is important that the TA be initiated as soon as possible after approval of the NAIP, and DPs are encouraged to finance this, possibly through pooled/basket funding. The outputs envisaged from the TA include:
- A Performance Assessment Framework (PAF) further developing and fine-tuning the Results Framework which is part of this NAIP, as well as identifying the data sources and baseline figures. The PAF will consist of a limited number of mostly outcome indicators.
  - Executing or supporting various studies at output-outcome-and impact levels to capture baseline data and re-evaluate and possibly update the targets of the NAIP.
  - Development and implementation of reporting formats and other data collection tools for front line staff.
  - Development of a sector-wide M&E system capturing both decentralised and headquarters levels.

## Annex 1: High-level Results Framework and Program Structure

This annex shows the results framework embedded in the matrix structure. The quantitative targets and baseline values are displayed in annex 2 (outcome level) and annexes 3 and 4 (output level). The detailed activity-level targets are in the budget file.

Goal	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			
Impact objectives	Program A	Program B	Program C	Program D
Impact indicators	Policies, Institutions and Coordination for Results	Resilient Livelihoods and Agricultural Systems	Production and Productivity for Growth	Markets, Value Addition, Trade and Finance for Transformation
Program Development Objectives	To improve policy and regulatory framework, results-oriented stakeholder coordination and more effective and accountable institutions	To strengthen resilience of livelihoods and natural resource base for agriculture	To increase Production and productivity of a more diversified agricultural sector	To enhance market access, value addition, trade and access to finance
Program Outcome Statements				
	<ul style="list-style-type: none"> <li>1. To achieve consistent and broad-based agricultural growth</li> <li>2. To improve well-being and livelihoods of Malawians</li> <li>3. To improve food &amp; nutrition security</li> </ul>	<ul style="list-style-type: none"> <li>i. Consistent agricultural sector GDP growth</li> <li>ii. Growing share of agricultural GDP from commodities other than tobacco and maize</li> <li>iii. Share of the population living above the national poverty line;</li> <li>iv. Rural poverty gap</li> <li>v. Share of households resilient to climate and weather-related shocks</li> <li>vi. Reduction in Malawi's score in the Global Hunger Index</li> <li>vii. Reduction of stunting among 0-5 year-old children</li> <li>viii. Reduction of underweight among 0-5 year-old children</li> <li>ix. Food insecurity</li> </ul>	<ul style="list-style-type: none"> <li>- Increased productivity and production of priority value chains;</li> <li>- Increased access to and control over productive assets</li> <li>- Enhanced timely access to a broader range of quality inputs</li> <li>- Increased access to sustainable mechanisation services</li> <li>- Increased adoption of GAP and technologies generated</li> <li>- Sustainable increase of diversified crop production and productivity under irrigation</li> </ul>	<ul style="list-style-type: none"> <li>- Greater efficiency and transparency of agricultural markets and better market access</li> <li>- Increased diversification of agricultural exports with special emphasis on Intra-African trade</li> <li>- Increased number of farmers/FOs linked to markets and finance</li> <li>- Volume and inclusiveness of private investment/agribusiness enhanced</li> <li>- Increased agricultural value addition and processing</li> <li>- Post-harvest losses reduced</li> </ul>
	<ul style="list-style-type: none"> <li>- Strengthened capacity for evidence-based planning, implementation and review of policies and programs (CAADP)</li> <li>- Improved coordination of public and private stakeholders in agriculture</li> <li>- Enhanced Public agricultural service delivery capacity according to its mandate</li> <li>- Improved enabling environment for agribusiness investments</li> </ul>	<ul style="list-style-type: none"> <li>- Increased dietary diversity and reduced in food insecurity</li> <li>- Improved food safety and sanitation environment</li> <li>- Improved natural resource management for sustainable agriculture and livelihoods</li> <li>- Reduced incidence and impact of pest and diseases in crop, livestock and fisheries production</li> </ul>		

<p><b>Outcome Indicators</b></p>	<ul style="list-style-type: none"> <li>- MoAIWD provides its policy, oversight, coordination; and service functions efficiently</li> <li>- Technical Working Groups, High-Level Public-Private Coordination Forum and Value Chain Platforms implement their work plans effectively</li> <li>- Institutionalise M&amp;E system for the agricultural sector in place</li> <li>- New Alliance and CAP-F policy commitments implemented by due date</li> <li>- Effective coordination of service providers at all levels</li> <li>- Ratio of extension workers to farmers</li> <li>- Improvement in Malawi's ranking in Enabling the Business of Agriculture Index</li> <li>- Faster licensing of inputs that have already been accredited in other SADC countries</li> </ul>	<ul style="list-style-type: none"> <li>- Increase in Number of households, children under 5, and women meeting the 6-food group minimum dietary diversity requirement</li> <li>- Reduction in aflatoxin levels in groundnuts and maize</li> <li>- Size of sustainable fisheries and aquaculture (within biologically sustainable levels) in % of GDP</li> <li>- Annual increase in area under sustainable land and water management</li> <li>- Increase in Woody bio-mass</li> <li>- Reduction in individuals requiring food assistance</li> <li>- Reduction in Livestock mortality rates</li> <li>- Reduction in crop area severely affected by pest outbreaks per year</li> </ul>	<ul style="list-style-type: none"> <li>- Increase in productivity of target crops, livestock production and aquaculture</li> <li>- Number of farmers with land rights recorded under the new Land Registry (by sex and age)</li> <li>- Increase in Percentage of farmers using improved seeds</li> <li>- Increase in Fertiliser usage per ha of arable land</li> <li>- Increase in Share of land prepared with mechanised conservation agriculture implementations</li> <li>- Increase in Cropping intensity on existing and new irrigation schemes</li> </ul>	<ul style="list-style-type: none"> <li>- Increase in Share of agricultural produce sold on markets</li> <li>- Increase in Share of agricultural exports other than tobacco</li> <li>- Increase in Share of high-value and processed products in agricultural exports</li> <li>- Increase in Volume of Intra-African agricultural trade</li> <li>- Increase in Number of FOs under contract farming</li> <li>- Increase in Privately managed storage capacity</li> <li>- Increase in Ratio of private agricultural investments to GDP</li> <li>- Reduction in Post-harvest losses</li> <li>- Increase in lending to Agri-SMEs and farmers</li> <li>- Reduction in gap between farm gate and wholesale prices</li> <li>- Reduction in Domestic food price volatility</li> </ul>
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Intermediate outcomes	Outputs Program A	Outputs Program B	Outputs Program C	Outputs Program D
<b>IA1: Coordination &amp; M&amp;E</b>				
<b>Outcome: Effective mechanisms for multi-sectoral and multi-stakeholder coordination to support program implementation, monitoring and evaluation in place</b>				
IO 1.1 MoAIWD fully operational and core funding provided to finance operational and recurrent costs for oversight and implementation of the NAIP	<ul style="list-style-type: none"> <li>- MoAIWD restructured according to the Core Function Analysis</li> <li>- Increased staff levels maintained and paid</li> <li>- MoAIWD fully operational at EPA, District, AAD and HQ levels</li> <li>- HQ-ADD-District monitoring of field activities</li> <li>- Vehicle fleet continuously maintained</li> </ul>			
IO 1.2 Improved coordination of policy and program implementation partnerships and mutual accountability at all levels.	<ul style="list-style-type: none"> <li>- Coordination troika functional</li> <li>- Improved intra-ministerial coordination structures</li> <li>- EMC, NAIP secretariat and STM functional</li> <li>- Sector targeting harmonised</li> <li>- SWG and TWGs functioning as planned</li> <li>- Village, EPA, District and ADD coordination structures functional</li> </ul>			
IO 1.3 M&E systems and performance management in agriculture functioning and up to date	<ul style="list-style-type: none"> <li>- National M&amp;E systems functioning satisfactorily</li> <li>- Sector-wide HQ and decentralised MIS system in place</li> <li>- Performance Assessment Framework developed for the agricultural sector</li> <li>- Sector wide output, outcome, baseline and topic-specific surveys</li> <li>- Biennial Malabo and SDG reporting</li> </ul>			

<b>IA 2: Strengthening Farmers Organisations</b>			
<b>Outcome:</b> Performance and outreach of farmer organisations strengthened at all levels			
IO 2.1 Legal framework and institutional support for FOs strengthened	<ul style="list-style-type: none"> <li>- Cooperatives act revised</li> <li>- FO Development Strategy in place</li> <li>- Agricultural Cooperative Institute established</li> <li>- FO supporting institutions strengthened</li> <li>- FO database established and updated</li> </ul>		
IO 2.2 Strong, well-organised and inclusive FOs conduct business and provide services to their members		<ul style="list-style-type: none"> <li>- Training of groups to establish FOs and chose enterprises</li> </ul>	<ul style="list-style-type: none"> <li>- FOs trained on enterprise and business</li> <li>- Long-term training of FO leaders</li> </ul>
<b>IA 3: Public Agricultural Services Delivery</b>			
<b>Outcome:</b> MoAIWD's capacity strengthened to provide relevant, market-oriented agricultural extension services			
IO 3.1 Capacity of public sector institutions to provide agricultural extension services strengthened	<ul style="list-style-type: none"> <li>- Extension policy updated</li> <li>- Training needs assessment</li> <li>- External training of staff (short course, BSc, MSc, PhD)</li> <li>- Technical training of frontline staff</li> <li>- Public Veterinary Service Gap analysis completed</li> <li>- Students graduate from refurbished Malawi Fisheries College</li> <li>- Recruitment of EPA, District level staff and researchers</li> <li>- HIV/AIDS nutrition supplements provided</li> </ul>		<ul style="list-style-type: none"> <li>- FOs producing under contract</li> <li>- Agribusiness FOs formed</li> <li>- FOs linked to warehouses / commodity exchanges</li> </ul>

<p>IO.3.2 Public extension workers at decentralised levels are equipped with adequate transport, office, technical and housing facilities</p>	<ul style="list-style-type: none"> <li>- EPA, district and boarder level office and housing structures and office structures upgraded to minimum acceptable standards</li> <li>- motorbikes and vehicles procured</li> <li>- ICT packages available at all levels</li> <li>- Laboratories upgraded;</li> <li>- Government farms have electricity</li> <li>- Fisheries vessels available</li> <li>- Agriculture Training Centres rehabilitated</li> <li>- Front line staff have equipment available as per their area of expertise</li> </ul>			
<p><b>IA 4 Food and Nutrition Security</b></p>				
<p><b>Outcome:</b> Diverse, nutritious foods available and consumed</p>				
<p>IO 4.1 Improved implementation, coordination and monitoring of nutrition related activities in the agricultural sector</p>	<ul style="list-style-type: none"> <li>- Nutrition stakeholders coordinated at all levels</li> <li>- Semi-annual national level nutrition forums undertaken</li> <li>- Nutrition Policy updated</li> <li>- Nutrition data collected annually at district level</li> </ul>			
<p>IO 4.2 Smallholder farmers linked to food purchase for institutional feeding programs</p>		<ul style="list-style-type: none"> <li>- School feeding programs improved</li> <li>- Orchards established in schools</li> </ul>		
<p>IO 4.3 Nutrition education is widely available at all levels including grassroots</p>		<ul style="list-style-type: none"> <li>- Cooking demonstrations undertaken</li> <li>- Households sensitised on nutrition</li> <li>- Integrated homestead gardens established</li> <li>- Village level nutrition fairs undertaken</li> <li>- Nutrition Care groups established at EPAs</li> <li>- Farmers sensitized on bio-fortified varieties</li> <li>- Farmers trained on food processing</li> </ul>		

<b>IA 5: Food safety and Quality Standards</b>			
<b>Outcome:</b> Food safety and quality standards established and mainstreamed			
IO 5.1 Appropriate and adequate food safety policy, legislation and quality control systems in place	<ul style="list-style-type: none"> <li>- Food Safety and Quality Law enacted</li> <li>- Food safety and quality control organization established</li> <li>- Product-specific standards developed</li> </ul>		
IO 5.2 Knowledge of food safety issues enhanced along the value chain	<ul style="list-style-type: none"> <li>- Ag and Trade TWGs trained on food safety</li> <li>- Multi-stakeholder forum established and meets regularly</li> <li>- Rapid assessment of food hazards</li> <li>- Africa Aflatoxin Management System updated</li> </ul>	<ul style="list-style-type: none"> <li>- Information on aflatoxin and other food-borne diseases widely disseminated</li> </ul>	<ul style="list-style-type: none"> <li>- Farmers/fishermen trained on food safety management</li> <li>- FOs and SMEs trained on food safety management</li> </ul>
IO 5.3 Quality control activities undertaken	<ul style="list-style-type: none"> <li>- Department on process control, product examination and certification established within Food Agency</li> <li>- Laboratories accredited internationally</li> <li>- Quality control system developed</li> </ul>		<ul style="list-style-type: none"> <li>- Food processors trained on food handling</li> </ul>
			<ul style="list-style-type: none"> <li>- Inspection visits to food processing facilities</li> <li>- Monitoring visits (including audit and accreditation)</li> </ul>
<b>IA 6: Empowerment and Tenure Security</b>			
<b>Outcome:</b> Women and youth empowered and land tenure security enhanced			
IO 6.1 Implementation of the Land Policy supported	<ul style="list-style-type: none"> <li>- District level land registries established</li> <li>- Implementation of institutional aspects of the Land Policy</li> </ul>	<ul style="list-style-type: none"> <li>- District level awareness meetings on land for investment undertaken</li> <li>- Sensitization of community leaders/EPA level on land rights</li> </ul>	<ul style="list-style-type: none"> <li>- Registration of land</li> </ul>
IO 6.2 Increased participation of women and youth in agricultural value chains and institutions	<ul style="list-style-type: none"> <li>- Government staff trained on gender issues</li> <li>- Update of agricultural curricula on gender and HIV/AIDS issues</li> </ul>	<ul style="list-style-type: none"> <li>- Intra-household gender relations improved</li> <li>- Women/youth groups strengthened</li> <li>- Strategy on decent employment developed</li> </ul>	

<b>IA 7: Disaster Risk Management Systems</b>			
<b>Outcome:</b> Capacity to manage disasters and reduce their impact strengthened			
IO 7.1 Strategic grain reserves (physical and virtual) in place to ensure household-level FNS during natural disaster		<ul style="list-style-type: none"> <li>- Grain stored in Strategic Grain Reserves</li> <li>- Storage facilities rehabilitated</li> <li>- Food delivered to food insecure households</li> </ul>	
IO 7.2 Disaster preparedness strengthened	<ul style="list-style-type: none"> <li>- Weather stations established at EPA level</li> <li>- Disaster prone areas are zoned and mapped</li> <li>- Gender responsive guidelines in place for disaster response</li> </ul>	<ul style="list-style-type: none"> <li>- Household level silos in place</li> <li>- People trained on risk management and preparedness</li> <li>- Early warning information disseminated</li> </ul>	<ul style="list-style-type: none"> <li>- Agricultural insurance pilots supported</li> </ul>
<b>IA 8: Pest and Disease Management</b>			
<b>Outcome:</b> Major pests and diseases are controlled and major outbreaks managed effectively			
IO 8.1 Infrastructure is in place to prevent and handle disease outbreaks			<ul style="list-style-type: none"> <li>- Quarantine and other facilities in place</li> <li>- Border protection posts strengthened and equipped</li> <li>- Strategic reserved of pest and disease control materials in stock</li> </ul>
IO 8.2 Pest and disease outbreaks are monitored & controlled			<ul style="list-style-type: none"> <li>- Crops monitored and controlled for pests and diseases</li> </ul>
IO 8.3 Animal health preventive measures		<ul style="list-style-type: none"> <li>- Bio-security procedures for fish and livestock in place</li> <li>- Farmers trained on animal hygiene and disease prevention</li> <li>- Poultry vaccinations</li> <li>- Cattle vaccination, dipping, screening</li> <li>- Goat and pig de-worming</li> </ul>	
IO 8.4 Biotechnology usage up-scaled	<ul style="list-style-type: none"> <li>- Staff trained</li> <li>- Plant protection regulation reviewed</li> </ul>	<ul style="list-style-type: none"> <li>- Plant clinics established</li> <li>- Biotechnologies for pest and disease control released</li> <li>- EPA level groups established</li> </ul>	<ul style="list-style-type: none"> <li>- Farmers trained on IPM</li> <li>- Imports/exports inspected at border posts for pests and diseases</li> </ul>



### IA9: Agricultural Innovation Systems

**Outcome:** Demand-driven and pluralistic innovation systems generates and disseminates relevant and adequate technologies to all farmers

<p>IO 9.1 Efficient research partnerships established in a participatory and demand driven way, including on-farm research</p>	<ul style="list-style-type: none"> <li>- Research activities coordinated effectively</li> <li>- MIRT strengthened</li> <li>- Stakeholder technology release meetings conducted</li> <li>- ARET diversification plan</li> <li>- Students received research grants</li> </ul>	<ul style="list-style-type: none"> <li>- Germplasm conserved</li> <li>- Malawi Plant and Genetic Centre refurbished</li> </ul>	<ul style="list-style-type: none"> <li>- Micro-nutrient bio-fortified crops developed</li> <li>- Improved varieties and technologies developed</li> <li>- On-farm participatory research/GAPs trials conducted</li> <li>- Analysis undertaken of site-specific constraints</li> </ul>	
<p>IO 9.2 Relevant, evidence-based extension advice delivered in a demand-driven and participatory way.</p>	<ul style="list-style-type: none"> <li>- District level databases on extension established</li> <li>- Livestock Master Plan developed</li> <li>- Agricultural Resource Centres operational</li> <li>- GAP guidelines continuously updated</li> </ul>	<ul style="list-style-type: none"> <li>- Farmers involved in small stock pass-on and trained on small-stock management</li> <li>- Farmers involved in poultry pass-on and trained on small-stock management</li> <li>- Bee-keepers trained</li> <li>- Village-level livestock committees revamped</li> </ul>	<ul style="list-style-type: none"> <li>- Lead farmers trained and identified</li> <li>- Clusters, farmer field schools, green belts and model villages implemented</li> <li>- Field days on GAPs undertaken</li> <li>- Land under GAP</li> <li>- Farmers receive extension services related to the production they are undertaking</li> <li>- Intercropping with nitrogen-fixing legumes undertaken</li> <li>- District agricultural fairs undertaken</li> <li>- Inputs supplied to farmers for demonstrations</li> <li>- Stall feeding undertaken</li> <li>- Grazing areas and water points established</li> <li>- Fodder trees planted</li> <li>- Farmers trained on deep pond fish production</li> <li>- Cage cultures established</li> <li>- Dams restocked</li> </ul>	<ul style="list-style-type: none"> <li>- Value addition groups formed</li> <li>- Farmers trained on post-harvest management</li> <li>- SMEs/Coops trained on processing</li> <li>- Equipment distributed for post-harvest demos</li> </ul>

IA 10: Access to inputs			
Outcome: Farmers have timely access to a broader range of quality inputs at reasonable costs			
IO 10.1 Efficient seed supply systems established	<ul style="list-style-type: none"> <li>- Import procedures simplified</li> <li>- Procedures for testing and release improved</li> <li>- Seed Bill passed</li> <li>- Seed Services Unit restructured</li> </ul>		<ul style="list-style-type: none"> <li>- FISP implemented with increased private sector participation</li> <li>- Farmers receive vouchers for co-financing of legume and seed inputs</li> <li>- Import permits and Phytosanitary certificates issued</li> <li>- Community seed banks established</li> <li>- Basic seed production increased</li> <li>- Seed multiplied by farmers</li> <li>- SSU inspection of fields</li> <li>- Nurseries for tree and vegetable seedlings established</li> </ul>
IO 10.2 FISP reforms advanced	<ul style="list-style-type: none"> <li>- FISP reform options studied</li> </ul>		<ul style="list-style-type: none"> <li>- FISP reform options piloted</li> <li>- FISP reform options monitored and discussed amongst stakeholders</li> </ul>
IO 10.3 Supply chains for organic and in-organic fertiliser strengthened	<ul style="list-style-type: none"> <li>- Pesticide Control Board strengthened</li> <li>- Semi-autonomous fertiliser regulatory body established</li> <li>- Soil labs refurbished</li> <li>- Options for domestic fertilizer manufacturing evaluated</li> </ul>	<ul style="list-style-type: none"> <li>- Farmers produce manure and inorganic fertiliser</li> <li>- National soil maps updated</li> </ul>	<ul style="list-style-type: none"> <li>- FISP fertiliser vouchers distributed</li> <li>- Fertiliser samples analysed for quality</li> <li>- Area-specific fertiliser recommendations provided</li> </ul>
IO 10.4 Livestock and fisheries gene pool improved and breeding stock made available to farmers	<ul style="list-style-type: none"> <li>- Livestock conservation protocols developed</li> </ul>	<ul style="list-style-type: none"> <li>- Small stock multiplication through farmer breeders</li> </ul>	<ul style="list-style-type: none"> <li>- Production and restocking of fingerlings</li> <li>- Artificial insemination of livestock conducted</li> <li>- Livestock breeding animals sourced</li> <li>- Heifer pass-on scheme implemented</li> </ul>

<b>IA 11: Sustainable Natural Resource Management and Climate Resilience</b> <b>Outcome:</b> Natural resources are sustainably managed and the resilience of production systems is enhanced			
IO 11.1 Water resources are managed and used sustainably		<ul style="list-style-type: none"> <li>- Farmers trained on rain water harvesting</li> <li>- Improved soil moisture management techniques developed</li> <li>- Deep wells and dams established</li> <li>- Catchment area management strengthened</li> <li>- Livestock watering points established</li> </ul>	
IO 11.2 Land use planning and zoning updated and implementation capacity enhanced		<ul style="list-style-type: none"> <li>- Agricultural and protected areas zoned</li> <li>- District NRM committees functional</li> </ul>	
IO 11.3 Agro-forestry areas expanded and management capacities enhanced	<ul style="list-style-type: none"> <li>- Legislative framework for agro-forestry developed and incentive mechanisms identified</li> <li>- National tree cover density targets established</li> </ul>	<ul style="list-style-type: none"> <li>- Farmers trained on climate-resilient agro-forestry practices</li> <li>- Farmer-managed natural generation tree planted areas established</li> <li>- Tree mini-nurseries established</li> <li>- Trees planted on river banks and agricultural land</li> </ul>	
IO 11.4 Lake and rivers fisheries resources are efficiently and sustainably managed	<ul style="list-style-type: none"> <li>- Legal and regulatory framework revised</li> <li>- Fisheries master plan developed</li> </ul>	<ul style="list-style-type: none"> <li>- Annual census on fisheries stocks</li> <li>- HIV/AIDS baseline data disseminated and community awareness campaigns conducted</li> </ul>	<ul style="list-style-type: none"> <li>- Fishermen, -women and youth trained on improved management and technologies</li> <li>- Fisheries technologies developed</li> <li>- Fish landing sites and marketing facilities established</li> </ul>

<b>IA 12: Irrigation Development</b>			
<b>Outcome:</b> Use of irrigation sustainably increased			
IO 12.1 Area under functional irrigation systems increased	- Capacity for planning and implementation of irrigation work strengthened	- Irrigation schemes rehabilitated/ established	- Matching grants disbursed for irrigation investment - Irrigation farmers linked to markets and finance
IO 12.2 Irrigation schemes are properly managed and maintained according to their economic potential	- Irrigation Codes of Practice (ICoP) for management developed and monitored - WUA law enacted	- Irrigation associations performance assessed - WUAs established trained annually - Extension services provided to farmers in irrigated areas	
<b>IA 13: Mechanisation</b>			
<b>Outcome:</b> Improved access to and use of mechanisation services by farmers			
IO 13.1 Knowledge and skills of providers and users of mechanization services strengthened	- Standards for safety measures and safeguards developed	- Health and safety trainings conducted for machinery operators - Machinery operators and mechanics trained - Undertake mechanization demos	- Incentives provided to increase importation of tractors and CA implements by private sector - Feasibility study on machinery fund conducted
IO 13.2 Availability and quality of mechanization equipment and services enhanced		- Draught animal services improved - More tractors and CA-compliant rippers available through Government mechanization schemes	

IA 14: Agricultural Markets and Trade				
Outcome: Enhanced Efficiency and Inclusiveness of Agricultural Markets and Trade				
IO 14.1 Availability and quality of market information enhanced			<ul style="list-style-type: none"> <li>- ICT based market information system operational</li> <li>- Farmers and others trained on analysing/using market information</li> </ul>	
IO 14.2 Government price policies are evidence based, transparent and predictable	<ul style="list-style-type: none"> <li>- ADMARC reformed</li> <li>- Pricing policy developed</li> <li>- GoM staff analytical capacity strengthened</li> <li>- Private sector consultation mechanism established</li> </ul>			
IO 14.3 Effectiveness, scope and fairness of contract farming improved			<ul style="list-style-type: none"> <li>- FOs and agri-businesses sensitised on new contract farming strategy</li> <li>- Capacity of FO's to engage in contract farming enhanced</li> <li>- More farmers farm under contract</li> <li>- Contract farming unit established under the CFIC</li> </ul>	
IO 14.4 Scope and efficiency of commodity exchanges and warehouse receipt systems enhanced				<ul style="list-style-type: none"> <li>- Warehouse storage capacity increased</li> <li>- Farmers and SMEs trained in warehouse receipt systems and commodity exchanges</li> <li>- Warehouse operators trained</li> <li>- Value of incremental warehouse receipt finance increased</li> </ul>
IO 14.5 Domestic market access improved				<ul style="list-style-type: none"> <li>- Rural feeder roads spot improved and rehabilitated</li> <li>- Rural cold storage facilities established</li> <li>- Rural market facilities established</li> </ul>

IO 14.6 Access to regional and global markets and regional trade enhanced	<ul style="list-style-type: none"> <li>- Government staff trained on agricultural trade issues</li> <li>- Agriculture trade-related policies updated</li> <li>- Non-trade barrier database established</li> <li>- Trade bans and non-trade barriers reduced</li> <li>- Barcode institution established</li> </ul>			- Active international trade promotion undertaken
<b>IA 15: Inclusive Private Investments in Agribusiness</b>				
<b>Outcome:</b> Increased agro-processing, value addition and investments into the domestic markets				
IO 15.1 Enabling agribusiness environment and public-private dialogue strengthened	<ul style="list-style-type: none"> <li>- High-level public-private coordination forum established (CAP-F)</li> <li>- Tax/non-tax incentive mechanisms in place</li> <li>- Regulatory and institutional frameworks for cotton and tobacco subsectors strengthened</li> </ul>			- National Agricultural Fair and Centre of Excellence established
IO 15.2 Principles for Responsible Agricultural Investments (PRAI) mainstreamed	<ul style="list-style-type: none"> <li>- Awareness creation and outreach activities conducted</li> <li>- Procedures and guidelines developed, translated into local languages and adopted</li> </ul>			
IO 15.3 Technical and Business Skills of COOPS and SMEs in agribusiness enhanced				- Coops/SMEs trained in various business aspects related to value addition/post-harvest/agro-processing

IO 15.4 Agribusiness investment promotion and PPPs implemented				<ul style="list-style-type: none"> <li>- Increased number of commodity platforms</li> <li>- Special economic zones developed</li> <li>- New Alliance investment commitments implemented</li> <li>- Rural abattoirs established</li> <li>- Agro-processors connected to the electricity grid</li> <li>- Investment and agro-processing fairs undertaken</li> </ul>
<b>IA16: Access to a broader range of Agri-financial services enhanced</b> <b>Outcome:</b> Improved access to agricultural finance by all target groups				
IO 16.1 Enabling environment for Agri-finance strengthened and specific policy instruments established	<ul style="list-style-type: none"> <li>- Feasibility studies and expert consultations for new Agri-finance support instruments conducted</li> <li>- Technical Assistance facility established.</li> <li>- Risk management and finance facilities established</li> <li>- Movable collaterals registry established.</li> </ul>			
IO 16.2 Farmers, women and youth able to use financial services effectively		<ul style="list-style-type: none"> <li>- Financial literacy campaigns conducted</li> <li>- Farmer, women and youth groups capacitated with financial literacy and management skills</li> </ul>		<ul style="list-style-type: none"> <li>- Women and youth owned SMEs trained on various technical and business aspects</li> <li>- Youth receive agribusiness mentorships</li> </ul>
IO 16.3 Investment support and start-up activities and adoption of innovative technologies by FOs and SMEs, with preference to youth and women				<ul style="list-style-type: none"> <li>- Women and youth provided with start-up capital for agro-enterprises</li> <li>- SMEs supported with matching grants to invest in environmentally-friendly technologies</li> </ul>

## Annex 2: Key Performance Indicators

Impact Indicators	Unit	Baseline (2015/16)/ or reference period	5 year target (2022/23)	Means of verification	Comments
Consistent agricultural sector GDP growth	Percent p.a.	4.3%	6% p.a.	National accounts	Baseline is average achieved during ASWAp implementation. Malabo target
Growing share of agricultural GDP from commodities other than tobacco and maize	Percent	tbd <sup>28</sup>	tbd	National accounts	Measures diversification as prerequisite for increased resilience and broad-based growth
Increase in share of population above the national poverty line	Percent	49.2% (2010/11)	65%	Integrated Household Surveys (NSO)	Agriculture to contribute 50% to SDG target (2030). NAIP to contribute 60% to Malabo target by 2022
Rural poverty gap reduced <sup>29</sup>	Percent points	19.2%	15%	Integrated Household Surveys	CAADP RF 2015-25 indicator towards Malabo target
Increase in share of households resilient to climate and weather-related shocks	RIMA score	Tbd	25%	Resilient Index Measurement and Analysis <sup>30</sup> , specialised surveys	CAADP RF 2015-25 indicator towards Malabo target (30%)
Reduction of Malawi's scope in IFPRIs Global Hunger Index	Score	27.2	<20	www.globalhungerindex.org	CAADP RF 2015-25 indicator towards Malabo target
Reduction of stunting among 0-5 year old children	Percent	37% (2015/16)	25%	Demographic Health Survey (DHS) (2015/16)	CAADP RF 2015-25 indicator towards Malabo target
Reduction of underweight among 0-5 year old children	Percent	12%	5%		Malabo target
Reduction in food insecurity	FIES score	tbd	10%	Food Insecure Experience Scale (FIES) <sup>31</sup> FAOSTAT	Target is back to 2010/12 level. CAADP RF 2015-25 indicator towards Malabo target

<sup>28</sup> Agricultural GDP minus production value of maize and tobacco.

<sup>29</sup> Poverty gap is the average consumption shortfall of the population relative to the poverty line.

<sup>30</sup> <http://www.fao.org/3/a-i5665e.pdf>

<sup>31</sup> <http://www.fao.org/in-action/voices-of-the-hungry/fies/en/>



Program A: Policies, Institutions and Coordination for Results						
Outcomes	Indicators	Unit	Baseline	Target	Means of Verification/Comments	
1. Strengthened capacity for evidence-based planning, implementation and review of policies and Programs (also a CAADP outcome)	A1: MoAIWD provides its policy, oversight, coordination and service functions efficiently	Qualitative		Improvement	Stakeholder survey, Sector-level M&E system	
	A2: Technical working groups, high-level public-private coordination forum and value chain platforms implement their work plans effectively	Qualitative	n/a	Improvement	Meeting minutes, stakeholder feedback and JSR	
	A3: Institutionalised M&E mechanisms for the agricultural sector	Systems	0	1	System able to monitor data on expenditures, outputs and outcomes bi-annually, as per NAIP structure (CAADP indic.)	
2. Improved coordination of public and private stakeholders in agriculture	A4: New Alliance and CAP-F Policy commitments implemented by due date	Number	15	All implemented.	Revised commitments under CAP-F to be added.	
3. Public agricultural service delivery capacity enhanced according to its mandate	A5: Effective coordination of service providers at all levels	Qualitative			Stakeholder feedback and JSR	
	A6: Increased ratio of extension workers to farmers	Ratio	1:3,000	1:1,000	Aggregation of district level information	
4. Enabling environment for agribusiness investments improved	A7: Malawi's ranking in Ease of Doing Business Index improved	Rank on index	110 (2017)	100	Annual Ease of Doing Business Report (World Bank)	
	A8: Faster licensing of inputs that have already been accredited in other SADC countries	Days	913 (fertiliser) 579 (seeds)	90 days 90 days	EBA country reports	
	A9: Malawi's ranking in the Enabling the Business of Agriculture (EBA) Index	Rank on index	33/62 countries		EBA reports	
	A10: Increased private investment in agriculture	USD million	tbd		25% increase	BR indicators

### Program B: Resilient Livelihoods and Agricultural Systems

	Indicators	Unit	Baseline	Target	Means of Verification/Comments
1. Increase in dietary diversity and reduction in food insecurity	B1: Increase in the number of households, under 5-year old children/women meeting 6-food group minimum dietary diversity requirement <sup>32</sup>	Percent	tbd	25% increase	Specialised M&E study based on FAO's guidelines for measuring dietary diversity
	B2: Reduction in number of people requiring food assistance per year	Percent	tbd	5%	MVAC reports
2. Improved food safety and sanitation environment	B3: Aflatoxin levels in groundnuts and maize reduced	Parts per billion (ppb)	70 ppb 35 ppb	10 ppb 10 ppb	Malawi Program on Aflatoxin Control Reports
	B4: Size of sustainable fisheries and aquaculture (within biologically sustainable levels) in % of GDP	Percent	N/A	N/A	SDG indicator
3. Improved natural resource management for sustainable agriculture and livelihoods	B5: Annual increase in area under sustainable land and water management	ha	10,500	15,000	Department of Land Resources Annual report (CAADP indicator)
	B6: Woody bio-mass increased	tbd	tbd	15% increase	Satellite photography, e.g. <a href="http://www.globalforestwatch.org">www.globalforestwatch.org</a>
4. Incidence and impact of pest and diseases in crop, livestock and fisheries production reduced	B7: Crop area severely affected by pest outbreaks per season	ha	2,800-5,300 ha per year (armyworm)	0 h (for all outbreaks)	Department of Crop Development annual reports
	B8: Livestock mortality rates reduced (chicken, pigs and cattle)	Percent	30% 28% 10%	10% 8% 3%	Department of Animal Health and Livestock Development

<sup>32</sup>This indicator is currently not measured at national level in Malawi, and the share from food groups in the diet may be used as a proxy.

Program C: Production and Productivity for Growth						
Outcomes	Indicators	Unit	Baseline	Target	Means of Verification/Comments	
1. Increased productivity and production of priority value chains	C1a:					
	Average pulses yield	MT/ha	0.92	1.5	38% increase	
	Groundnut production	MT/year	350,000	700,000	50% increase	
	Oilseeds productivity	MT/ha	2.8	5.0	50% increase	
	Rice production	MT/year	110,000	220,000	100% increase	
	C1b: Production and productivity increase for livestock and fisheries:					
	Aquaculture catch	MT/year	4,984	10,000	100% increase	
	Chicken stock	Millions	97	110	100% increase	
	Goats stock	Millions	7	10	50%	
	Pigs stock	Millions	4	5.5	50%	
Cattle stock	Millions	1.5	2.0	50%		
Dairy cattle	Thousand	80	106	50%		
Livestock units owned per household	Average	1.35	1.80	50%		
2. Increased access to and control over productive assets	C2: Number of farmers with land rights recorded under the new land Registries (by gender and age)	Farmers	0	tbd	Records of district land registries, MoLHUD	
3. Timely access to a broader range of quality inputs enhanced	C3: Number of farmers using improved seeds	Farmers	1.5 million	3.2 million	APES – 3 <sup>rd</sup> round. Bi-annual production/ productivity surveys (Malabo indicator)	
4. Increased access to sustainable mechanisation services	C4: Increased fertiliser usage per ha of arable land	kg/ha	43.2 (2013)	60	World Development Indicators (Malabo BR indicator)	
	C5: Increased share of land prepared with mechanised conservation agriculture implements	ha	Tbd	tbd	Department of Land Resource	
5. Increased adoption of GAP and other technologies	C6: Number of farmers using Integrated Pest Management	farmers	Tbd	tbd	Production surveys	
6. Sustainable increase of diversified crop production and productivity under irrigation	C7: Increased cropping intensity on existing and new irrigation schemes	Percent	Tbd	150%	Department of Irrigation	

**Program D: Markets, Value Addition, Trade and Finance for Transformation**

Outcome	Indicators	Unit	Baseline	Target	Means of Verification/Comments
1. Greater efficiency and transparency of agricultural markets and better market access	D1: Increased share of smallholder farmers producing for the market	Percent	20%	30%	Annual/bi-annual outcome production & productivity survey
	D2: Domestic Food Price Variability Index Increase farmer shares in terminal market price for select commodities	Percent	tbd	10%	Malabo indicator (target 7.5% by 2025) MAFAP reports
2. Increased diversification of agricultural exports, with special emphasis on intra-African trade	D3: Increased share of agricultural exports other than tobacco	Percent	34.2% <sup>34</sup> (2016)	60%	MoITT, ITC ( <a href="http://www.trademap.org">http://www.trademap.org</a> )
	D4: Increased share of high-value and processed products in agricultural exports	Unit values	tbd	20% increase	MoITT, ITC ( <a href="http://www.trademap.org">http://www.trademap.org</a> )
	D5: Increased value of regional agricultural trade	USD	tbd	20% increase	MoITT, COMESA SADC
3. Increased number of farmers/FOs linked to markets and finance	D6: Increased number of farmers under contract farming	Farmers	tbd	20% increase	MoITI; farmer organization apexes, NA and CAP-F frameworks, CFTC
	D7: Percentage of smallholder farmers accessing financial services	Percent	5%	10%	RBM statistics and data from banks, MFIs and SACCOs
4. Volume and inclusiveness of private investment agribusiness enhanced	D8: Increased privately managed storage capacity	MT increased	tbd	240,000 MT	MoITT, WHR and CE regulators, PS surveys.
5. Post-harvest losses reduced	D10: Reduction of post-harvest losses in priority value chains	Percent	tbd	50% reduction	Specialised surveys (Malabo, CAADP, SDG indicator)

<sup>33</sup>Baseline reports are available for groundnuts, maize, seed cotton, sugar cane, tea and tobacco (2014). To be updated during mid-term and towards the end of the NAIP.

<sup>34</sup>Malawi's total agricultural exports in 2016 amounted to USD 844.9 million (calculated as all exports minus the following item classifications: 39, 84, 40, 85, 87, 73, 61, 64, 74, 99, and 30. Tobacco exports USD 555.6 million (HS 24, tobacco, all types and products). Based on ITC Trade Maps.

## Annex 3: NAIP Budget by Program

All values are in constant 2017 US dollars

### Program A

IA	IO	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>01</b>	<b>Improved multi-sectoral coordination, partnerships and mutual accountability</b>									
		204 EPA level structures meet biannually	meetings	4,080	408,000	408,000	408,000	408,000	408,000	2,040,000
		28 District coordination structures meet 2-4 /year	meetings	1,660	342,500	347,000	342,000	342,000	342,000	1,715,500
		628 village level structures meet 2/year	meetings	7,906	938,600	125,600	938,600	125,600	125,600	2,254,000
		ADD level coordination functional	meetings	40	27,936	27,936	27,936	27,936	27,936	139,682
		ASWG meets 4 times per year	meetings	20	44,000	44,000	44,000	44,000	44,000	220,000
		Biannual coordination meetings for FO's, CSOs, private sector and sub-sectors	meetings	10	2,000	2,000	2,000	2,000	2,000	10,000
		Coordination trioka functional	lump sum	1	14,000	14,000	14,000	14,000	14,000	70,000
		EMC functional	meetings	10	12,000	12,000	2,000	2,000	2,000	30,000
		Intra-ministerial coordination structures imp.	TA	3	10,000	10,000	5,000	0	0	25,000
		MoAIWD com strategy developed	strategy	1	50,000	0	0	0	0	50,000
		NAIP secretariat functional	lump sum	5	110,000	80,000	80,000	80,000	80,000	430,000
		Sector targeting in harmonised	lump sum	5	11,000	11,000	11,000	10,000	10,000	53,000
		STM functional	meetings	20	54,000	4,000	4,000	4,000	4,000	70,000
		TWGs meet as per TOR + high attendance	meetings	270	313,000	313,000	313,000	313,000	313,000	1,565,000
	<b>Increased capacity to generate, analyse and use data, information, knowledge and innovations</b>									
		Outcome level surveys bi-annually	survey	6	100,000	500,000	0	500,000	100,000	1,200,000
		Production-level surveys annually	survey	15	735,000	735,000	735,000	735,000	735,000	3,675,000
		Specific surveys undertaken as required	lump sum	5	180,000	40,000	0	0	100,000	320,000
	<b>M&amp;E systems and performance management in agriculture functioning and up to date</b>									
		National level M&E systems improved	lump sum	1	720,000	480,000	350,000	400,000	350,000	2,300,000
		Performance Assessment Framework developed for the agricultural sector	lump sum	1	40,000	40,000	0	0	0	80,000
		Sector-wide HQ/ decentralised MIS	lump sum	1	1,040,000	1,040,000	790,000	790,000	790,000	4,450,000
	<b>MoAIWD operational and recurrent costs covered</b>									
		Vehicle fleet continuously maintained	vehicles	450	100,000	200,000	200,000	200,000	200,000	900,000

IA	IO	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
		<b>MoAIWD operational, recurrent costs</b>								
		HQ-ADD-District monitoring of field	lump sum	5	6,385,555	6,385,555	6,385,555	6,385,555	6,385,555	31,927,777
		Increasing staffing levels maintained/paid	lump sum	5	16,000,000	19,200,000	20,800,000	22,400,000	24,000,000	102,400,000
		MoAIWD function (EPA/District/ADD/HQ)	lump sum	5	4,120,000	4,120,000	4,120,000	4,120,000	4,120,000	20,600,000
		<b>02 Legal framework and institutional support for FOs strengthened</b>								
		Agricultural Cooperative Institute established	lump sum	1	0	500,000	250,000	250,000	250,000	1,250,000
		Cooperative Act revised	act	1	175,000	0	0	0	0	175,000
		Farmers Organizations Develop Strategy	act	1	0	50,000	0	0	0	50,000
		FO database established and updated	lump sum	5	120,415	117,915	117,915	117,915	117,915	592,077
		Gender capacity gaps are identified	reports	5	0	150,000	100,000	0	0	250,000
		TA to 5 FO supporting institutions	TA	10	500,000	500,000	0	0	0	1,000,000
		<b>03 Capacity of public sector institutions to provide agricultural extension services strengthened</b>								
		100 staff receive short-term training	staff	100	200,000	200,000	200,000	200,000	200,000	1,000,000
		150 students graduated from refurbished Malawi College of Fisheries	staff	150	75,000	140,000	140,000	140,000	120,000	615,000
		20 staff upgraded to PhD level	staff	20	200,000	200,000	200,000	200,000	200,000	1,000,000
		Field Food and Nutrition Officers (EPA) recruited	staff	204	540,000	194,400	0	0	0	734,400
		Field Food and Nutrition Officers trained	staff	204	113,980	113,980	113,980	113,980	113,980	569,901
		225 staff upgraded to BSC level	staff	225	900,000	900,000	900,000	900,000	900,000	4,500,000
		225 staff upgraded to MSC level	staff	225	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000	6,750,000
		28 district level M&E officers recruited	staff	28	16,800	0	0	0	0	16,800
		300 agri-business officers recruited	staff	300	540,000	540,000	0	0	0	1,080,000
		Extension staff trained (various technical)	staff	3,000	1,324,382	1,308,871	1,276,922	1,267,922	1,272,122	6,450,218
		61 researchers recruited	staff	61	558,000	360,000	90,000	90,000	0	1,098,000
		HR management in MoAIWD modernised	lump sum	1	10,500	10,500	10,500	500	1,000	33,000
		MoAIWD re-structured	lump sum	1	3,150,000	0	30,000	30,000	0	3,210,000
		HIV/AIDS nutrition supplements (Staff)	lump sum	1	11,175	11,175	11,175	11,175	11,175	55,873
		Training needs assessment undertaken	lump sum	1	15,000	0	0	0	0	15,000
		<b>Public extension workers at decentralised levels equipped and housed to do their job</b>								
		10 7-ton lorries available	lorries	10	0	0	500,000	0	0	500,000
		100 vehicles procured for field operations	vehicles	100	6,500,000	0	0	0	0	6,500,000

IA	IO	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
	13	border post office/houses maintained	Sites	13	530,498	530,498	795,747	795,747	795,747	3,448,237
	204	EPAs maintained with office, power and housing facilities	EPAs	204	5,200,000	5,000,000	5,000,000	5,000,000	5,000,000	25,200,000
	22	Agriculture Training Centres rehabilitated	centres	22	250,000	250,000	250,000	250,000	100,000	1,100,000
	28	district offices maintained	Districts	28	75,000	75,000	75,000	90,000	105,000	420,000
	3500	motorbikes procured for frontline staff	motorbikes	3,500	3,000,000	4,500,000	3,000,000	0	0	10,500,000
	8	Housing at research stations improved	Stations	8	100,000	100,000	100,000	100,000	0	400,000
	50	ICT packages available at 28 districts, 8 research stations and 14 national level offices	ICT packages	50	350,000	350,000	350,000	350,000	350,000	1,750,000
<b>04</b>	<b>Improved implementation, coordination and monitoring of nutrition related activities in the agricultural sector</b>									
	28	district level District Nutrition Coordinating Committees operational	meetings	140	56,000	56,000	56,000	56,000	56,000	280,000
	1	Nutrition policy enhanced	policy	1	50,000	0	0	0	0	50,000
	20	Regional nutrition data collected annually	surveys	20	39,111	39,111	39,111	39,111	39,111	195,554
	10	Semi-annual nutrition forums undertaken	meetings	10	10,000	10,000	10,000	10,000	10,000	50,000
<b>05</b>	<b>Adequate food safety legislation is in place</b>									
	1	Product-specific quality standards developed	lump sum	1	184,920	109,920	109,920	34,920	34,920	474,602
	<b>Appropriate and adequate food safety legislation is in place</b>									
	1	Food Safety and Quality Bill and Act developed	agency	1	0	0	150,000	0	0	150,000
	1	Food safety and quality control agency established	agency	1	150,000	0	0	150,000	0	300,000
	1	product-specific quality standards developed	lump sum	1	0	75,000	0	75,000	75,000	225,000
	<b>Knowledge of food safety issues enhanced along the value chain</b>									
	45	45 TWG members and Government offices trained on food safety issues	trainings	45	143,173	143,173	143,173	143,173	143,173	715,866
	35	Multi-stakeholder platforms meet regular	meetings	35	40,000	40,000	40,000	40,000	40,000	200,000
	5	Regular data updating on aflatoxin	lump sum	5	134,761	134,761	134,761	134,761	134,761	673,806
	61	Surveys on food safety undertaken	survey	61	560,000	0	0	0	560,000	1,120,000
	<b>Quality control activities undertaken</b>									
	2	laboratories accredited internationally	labs	2	0	200,000	0	200,000	0	400,000
	3	laboratories accredited internationally	labs	2	0	0	0	150,000	0	150,000
	4	laboratories accredited internationally	labs	2	11,733	11,733	11,733	11,733	11,733	58,666
	1	Quality control system developed	system	1	0	0	0	27,000	100,000	127,000

IA	IO	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>06</b>	<b>Implementation of the Land Policy supported</b>									
		28 District land registries established	systems	28	375,000	3,420,000	3,420,000	3,420,000	3,420,000	14,055,000
		Land Policy institutional aspects implemented	lump sum	5	258,000	218,000	208,000	118,000	58,000	860,000
	<b>Participation of women and youth in agricultural value chains and institutions increased</b>									
		Gov't staff trained as gender focal persons	staff	200	0	50,000	50,000	0	0	100,000
		Ag training curricula updated (gender/HIV)	Lump sum	1	309,522	0	0	0	0	309,522
		Ag Sector gender/ HIV strategy reviewed	strategy	1	0	50,000	0	0	0	50,000
<b>07</b>	<b>Disaster preparedness strengthened</b>									
		Early warning info disseminated	Lump sum	5	204,000	204,000	154,000	154,000	154,000	870,000
		Land zoned/mapped for disaster prepared	ha	50,000	943,408	1,188,408	698,408	698,408	698,408	4,227,039
		Weather stations established at each EPA	stations	204	1,750,000	2,700,000	3,200,000	3,120,000	3,120,000	13,890,000
<b>08</b>	<b>IPM and biotechnology for plant protections widely adopted</b>									
		20 staff trained in biotechnology	staff	20	139,682	419,045	558,726	838,089	838,089	2,793,631
		Plant protection regulation reviewed	policy	1	0	0	50,000	0	0	50,000
<b>09</b>	<b>Relevant, evidence based extension advice delivered</b>									
		2 ag resource centres operational per dist.	centres	63	104,761	104,761	104,761	140,793	34,920	489,997
		District level databases on extension established	databases	28	251,427	293,331	209,522	209,522	209,522	1,173,325
		GAP guidelines continuously updated	guidelines	5	145,713	215,999	145,713	145,713	145,713	798,852
		Livestock master plan developed	strategy	1	500,000	0	0	0	0	500,000
	<b>Efficient research partnerships</b>									
		2 tech release stakeholder meetings/annually	meetings	10	41,904	41,904	41,904	41,904	41,904	209,522
		ARET diversification plan developed	study	1	0	50,000	0	0	0	50,000
		Capacity of national repository centres (plant, livestock, fish genetics) upgraded	Lump sum	1	0	0	150,000	0	0	150,000
		MIRT strengthened	Lump sum	1	0	50,000	0	0	0	50,000
		Research coordination activities	meetings	20	62,000	52,000	42,000	32,000	32,000	220,000
		Research grants provided to 50 students	students	50	100,000	100,000	100,000	100,000	100,000	500,000
<b>10</b>	<b>Efficient seed supply systems established</b>									
		Import procedures simplified	Lump sum	1	150,000	75,000	150,000	0	0	375,000
		Procedure for releasing new varieties revised and streamlined	(blank)		30,000	30,000	0	0	0	60,000



IA	IO	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
		Seed bill passed	Lump sum	1	29,333	29,333	0	0	0	58,666
		Semi-autonomous Seed Services Unit established	Lump sum	1	846,152	423,076	0	0	0	1,269,228
		<b>FISP reforms advanced</b>								
		FISP reform options monitored and discussed amongst stakeholders	Lump sum	5	175,000	175,000	175,000	175,000	175,000	875,000
		FISP reform options piloted	Lump sum	5	765,000	765,000	765,000	765,000	765,000	3,825,000
		FISP reform options studied	studies	2	150,000	100,000	0	0	0	250,000
		<b>Livestock and fisheries gene pool improved and breeding stock made available to farmers</b>								
		Livestock conservation protocols developed	Lump sum	1	10,000	10,000	10,000	10,000	10,000	50,000
		<b>Supply chains for organic and in-organic fertiliser strengthened</b>								
		3 soil labs refurbished	labs	3	488,885	509,838	509,838	20,952	0	1,529,513
		Semi-autonomous fertiliser regulatory body established	agency	1	24,444	0	977,771	0	0	1,002,215
		<b>11 Agro-forestry areas expanded and management capacities enhanced</b>								
		Legal framework for agro-forestry developed and incentive mechanisms identified	studies	1	25,000	25,000	100,000	75,000	25,000	250,000
		Tree-cover density on agricultural land established at national level	studies	1	750,000	0	75,000	150,000	150,000	1,125,000
		<b>Lake and rivers fisheries resources are efficiently and sustainably managed</b>								
		Annual census on fish and aquatic environment undertaken	survey	5	119,841	119,841	119,841	119,841	119,841	599,204
		Fisheries master plan developed	studies	1	0	0	0	200,000	0	200,000
		Legal/regulatory framework for fisheries management strengthened	Lump sum	1	422,236	244,443	555,475	230,475	230,475	1,683,103
		<b>12 Area under functional irrigation systems increased</b>								
		Capacity for planning/implementation of irrigation/management strengthened at national level	Lump sum	2	105,793	105,793	105,793	105,793	105,793	528,965
		<b>Irrigation schemes are properly managed and maintained according to their economic potential</b>								
		Codes of conduct for irrigation management developed & monitored	plans	1,200	62,952	42,000	42,000	42,000	42,000	230,952
		WUA Act enacted	Lump sum	1	0	50,000	0	0	0	50,000
		<b>13 Knowledge and skills of providers and users of mechanization services strengthened</b>								
		Standards for safety measures/safeguard developed	standard	1	13,968	13,968	13,968	13,968	13,968	69,840

IA	IO	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
14		<b>Enabling environment for Agri-finance strengthened and specific policy instruments established.</b>	Lump sum	5	100,000	0	0	0	0	100,000
			Increased incremental value of warehouse receipt financing							
		<b>MARKET INFO availability and use enhanced</b>								
		ICT-based MIS operational	systems	1	978,888	978,888	978,888	978,888	978,888	4,894,442
		<b>Regional and international trade facilitated</b>								
		Barcode institution established	institution	1	0	0	0	0	62,857	62,857
		Government staff trained on trade issues	lump sum	1	225,936	225,936	225,936	225,936	225,936	1,129,678
		Non-trade barrier database established	database	1	0	253,768	0	0	0	253,768
		Trade bans/ non-trade barriers reduced	lump sum	1	158,612	158,612	158,612	158,612	158,612	793,060
		Trade-related policies updated	lump sum	1	366,586	368,053	369,519	240,942	240,942	1,586,042
		<b>Scope and efficiency of ComEX and WR systems enhanced</b>								
		Increased incremental value of warehouse receipt financing	USD	50,000,000	295,566	345,566	295,566	295,566	295,566	1,527,831
		<b>Transparent and rules-based market and trade policies</b>								
		ADMARC successfully reformed	studies	2	1,100,000	1,000,000	0	0	0	2,100,000
		Analytical capacity strengthened	trainings	6	75,644	75,644	75,644	15,644	15,644	258,222
		Pricing policy developed	policy	1	100,000	155,873	0	0	0	255,873
		Private sector consult mechanism established	meetings	25	192,062	192,062	192,062	192,062	192,062	960,311
15		<b>Enabling agribusiness environment and public-private dialogue strengthened</b>								
		Regulatory framework/support institutions for cotton/tobacco strength	Lump sum	1	70,000	170,000	170,000	20,000	70,000	500,000
		High-level public-private coordination forums established and effective	meetings	20	54,000	54,000	54,000	54,000	54,000	270,000
		National Agricultural fair grounds and centre for excellence established	Lump sum	1	0	0	200,000	100,000	100,000	400,000
		Tax/non-tax incentive mechanisms developed	Lump sum	1	0	50,000	100,000	0	0	150,000
		<b>Principles for Responsible Agricultural Investments (PRAI) mainstreamed</b>								
		Awareness creation and outreach activities conducted	investments	20	60,000	50,000	50,000	50,000	50,000	260,000
		Procedures/ guidelines developed/adopted	investments	20	150,000	0	0	0	0	150,000

IA	IO	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>16</b>	<b>Enabling environment for Agri-finance strengthened and specific policy instruments established.</b>									
		Establish movable collateral registry	system	1	100,000	0	0	0	0	100,000
		Feasibility studies/ expert consultations to foster access to finance conducted	Lump sum	5	100,000	0	0	0	0	100,000
		Strengthen enabling environment	Lump sum	5	0	100,000	0	0	0	100,000
		<b>Grand Total</b>		<b>530,854</b>	<b>72,429,246</b>	<b>68,470,159</b>	<b>66,735,867</b>	<b>62,495,028</b>	<b>63,183,760</b>	<b>333,314,061</b>

## Program B

IA	IO	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>02</b>	<b>Strong, well-organised and inclusive FOs conduct business and provide services to their members</b>									
		17030 groups trained	groups	17,030	649,522	1,289,522	689,522	889,522	1,289,522	4,807,612
		FOs receive long-term training packages	FOs	390	8,311	8,311	8,311	8,311	8,311	41,555
<b>04</b>	<b>Institutional feeding programs</b>									
		Orchards established at schools	schools	5,000	200,000	200,000	200,000	200,000	200,000	1,000,000
		School feeding programs improved	Lump sum	5	61,682	61,682	81,682	81,682	101,682	388,411
		1 million integrated household farming (IHF) gardens established		1,000,000	40,000,000	40,000,000	40,000,000	40,000,000	40,000,000	200,000,000
		Hhs directly sensitised on nutrition	hhs	575,000	230,000	350,000	350,000	350,000	350,000	1,630,000
		204 EPA level nutrition care groups operational annually	groups	1,020	204,000	204,000	204,000	204,000	204,000	1,020,000
		4 cooking demos/EPA annually delivered	hhs	3,140	2,512	2,512	2,512	2,512	2,512	12,560
		500,000 households trained on food processing, storage and conservation	hhs	500,000	100,000	100,000	100,000	100,000	100,000	500,000
		Annual village food/ nutrition fair	meetings	3,140	314,000	314,000	314,000	314,000	314,000	1,570,000
		Nutrition campaigns (with related meetings & materials) undertaken	campaigns	10	115,936	115,936	115,936	115,936	115,936	579,678
<b>05</b>	<b>Knowledge of food safety issues enhanced along the value chain</b>									
		Information on aflatoxin disseminated	Lump sum	5	<b>220,000</b>	<b>95,000</b>	<b>95,000</b>	<b>85,000</b>	<b>85,000</b>	<b>580,000</b>
<b>06</b>	<b>Implementation of the Land Policy supported</b>									
		Annual district awareness meetings on acquiring land for investment conducted	meetings	140	560,000	560,000	560,000	560,000	560,000	2,800,000
		Sensitise communities on land rights	meetings	1,020	494,190	494,190	494,190	494,190	498,381	2,475,143
		Hhs strengthened on gender relations	hhs	200,000	1,025,000	1,025,000	1,025,000	1,025,000	25,000	4,125,000
		Participation of women and youth in agricultural value chains and institutions increased	groups	2,640	126,539	134,920	141,904	155,873	239,682	798,919
<b>07</b>	<b>Disaster preparedness strengthened</b>									
		20250 People trained on disaster risk management and preparedness	farmers	20,250	240,873	273,373	175,873	175,873	175,873	1,041,863
		50,000 households with food storage facilities in place	hhs	50,000	2,564,666	2,564,666	2,639,666	2,339,666	2,339,666	12,448,331
		Gender responsive guidelines in place for disaster response	guidelines	1	0	20,000	20,000	0	0	40,000

IA	IO	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
		<b>Strategic grain reserves (physical and virtual in place to respond undertaken to reduce impacts natural disasters on household-level FNS.</b>								
		240,000 MT of grain stored	MT	1,200,000	5,800,000	5,800,000	5,800,000	5,800,000	5,800,000	29,000,000
		54 storage facilities rehabilitated	silos	54	3,000,000	2,100,000	750,000	250,000	0	6,100,000
		Food delivered to 5% of Malawian households	people	4,578,825	56,250,000	61,875,000	68,062,500	74,868,750	82,355,625	343,411,875
		<b>08 Adequate infrastructure in place to handle disease outbreaks</b>								
		500 litres of herbicides and pesticides always in stock	litres	2,500	5,000	5,000	5,000	5,000	5,000	25,000
		Quarantine and other facilities available	lump sum	1	3,034,458	2,934,458	1,565,579	963,412	535,846	9,033,753
		<b>Animal health preventive measures</b>								
		5 million poultry vaccinations annually	chicken	27,000,000	69,841	69,841	69,841	69,841	97,777	377,140
		Cows vaccinated/dipped twice a year	cattle	16,500,000	2,600,000	2,950,000	3,300,000	3,650,000	4,000,000	16,500,000
		Dairy cows screened for TB/ticks	cattle	443,750	495,870	557,853	619,837	681,821	743,804	3,099,185
		Goat stock dewormed annually	goats	41,250,000	1,625,000	1,843,750	2,062,500	2,281,250	2,500,000	10,312,500
		Pigs dewormed and vaccinated annually	pigs	14,025,000	3,600,000	4,550,000	5,500,000	6,450,000	7,950,000	28,050,000
		Procedures on biosafety of animals and fish in place	lump sum	1	50,000	0	0	0	0	50,000
		Vaccination boxes in place	lump sum	1	1,000,000	0	0	0	0	1,000,000
		500,000 farmers trained annually on animal hygiene and disease prevention	farmers	2,500,000	125,000	125,000	125,000	125,000	125,000	625,000
		<b>IPM and biotechnology for plant protections widely adopted</b>								
		100 plant clinics established	plant clinics	100	20,000	20,000	20,000	20,000	75,873	155,873
		5 groups per EPA formed and trained to implement IMP in their community	groups	1,020	51,000	51,000	51,000	51,050	51,000	255,050
		Agricultural biotechnologies applied	lump sum	5	370,952	363,968	227,936	220,952	213,968	1,397,777
		<b>Monitoring &amp; control</b>								
		2 million ha monitored and controlled for pests annually	ha	10,000,000	30,680,231	30,722,135	30,526,581	30,163,409	30,107,536	152,199,892
		<b>Pests and diseases outbreaks are monitored and controlled</b>								
		2 million ha monitored and controlled for pests annually	ha	10,000,000	360,000	360,000	360,000	360,000	360,000	1,800,000

IA	IO	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>09</b>	<b>Relevant, evidence based extension advice delivered</b>									
	150,000	farmers active in chicken pass-on groups	farmers	150,000	24,000	24,000	24,000	24,000	24,000	120,000
	180,000	chickens annually distributed to pass-on schemes	chicken	900,000	1,257,134	1,257,134	1,257,134	1,257,134	1,257,134	6,285,670
	225,000	farmers active in goat pass-on programs	farmers	166,667	97,301	97,301	97,301	153,174	153,174	598,250
	36400	farmers annually trained on small stock management	farmers	182,000	301,992	301,992	301,992	301,992	301,992	1,509,958
	45,000	farmers active in chicken pass-on groups	farmers	45,000	31,428	31,428	31,428	31,428	31,428	157,142
	45,000	goats annually distributed to pass-on schemes	goats	225,000	2,199,985	2,199,985	2,199,985	2,199,985	2,199,985	10,999,923
	4500	bee keepers trained	farmers	4,500	3,352	5,587	2,794	838	0	12,571
		Livestock committees revamped in 2800 villages	committees	2,800	7,000	7,000	7,000	8,400	9,800	39,200
	<b>Efficient research partnerships</b>									
		Animal Genetic Resources Centre established	lump sum	2	0	200,000	0	0	0	200,000
		Germplasm conserved	species	3,000	33,496	33,496	82,384	82,384	82,384	314,144
		Malawi Plan Genetic Centre refurbished	lump sum	1	0	83,809	0	0	0	83,809
<b>10</b>	<b>Livestock/fisheries breeding</b>									
		Small stock multiplication through farmer breeders	goats	1,000	1,578,798	1,578,798	1,578,798	1,578,798	1,578,798	7,893,988
	<b>Supply chains for organic and in-organic fertiliser strengthened</b>									
		2 million farmers annually involved in manure and inorganic fertiliser production	farmers	10,000,000	1,019,045	1,019,045	1,019,045	1,019,045	1,019,045	5,095,223
		Investigate options for fertiliser production and transport	lump sum	1	0	200,000	0	0	0	200,000
		National soil maps updated	maps	8	702,140	702,140	366,904	366,904	366,904	2,504,994
		Pesticides Control Board strengthened	lump sum	1	0	50,000	50,000	50,000	0	150,000
<b>11</b>	<b>Agro-forestry areas expanded and management capacities enhanced</b>									

IA	IO	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
		150,000 farmers trained annually in agro-forestry practices	farmers	750,000	350,000	350,000	350,000	350,000	350,000	1,750,000
		2 million ha of farmer managed natural generation tree-planted areas established	ha	2,000	560,000	560,000	560,000	560,000	560,000	2,800,000
		22,500 mini-tree nurseries established and properly managed	nurseries	22,500	2,550,000	2,550,000	2,550,000	2,550,000	2,550,000	12,750,000
		At least 30,000 ha and 2,500 km of river banks planted with trees	ha	30,000	180,000	180,000	180,000	180,000	180,000	900,000
<b>Lake and rivers fisheries resources are efficiently and sustainably managed</b>										
		HIV/AIDS baseline data disseminated and community awareness campaigns conducted	studies	1	6,984	26,984	6,984	6,984	6,984	54,920
<b>Land use planning and zoning updated and implementation capacity enhanced</b>										
		Agricultural and protected areas zoned	ha	82,500	2,394,214	1,672,214	1,504,596	1,497,612	1,497,612	8,566,246
		District level natural resource management committees functional	committees	140	253,968	253,968	253,968	253,968	253,968	1,269,841
<b>Sustainable use and management of water resources</b>										
		1 deep well established per district	wells	28	0	245,000	245,000	245,000	245,000	980,000
<b>Water resources are managed and used sustainably</b>										
		1500 livestock watering points established	points	1,500	75,000	75,000	75,000	75,000	75,000	375,000
		200,000 farmers trained annually on rain water harvesting	farmers	1,000,000	50,000	50,000	50,000	50,000	50,000	250,000
		3 dams constructed per district	dams	84	2,000,000	2,000,000	2,000,000	2,000,000	400,000	8,400,000
		Catchment area management strengthened	ha	1,000,000	1,466,738	1,419,277	1,175,787	721,822	1,151,343	5,934,966
		Improved rainwater harvesting and soil moisture management technologies developed	farmers	1,000,000	2,252,824	2,252,824	2,252,824	2,252,824	2,252,824	11,264,118
<b>Grand Total</b>				<b>1,514,956</b>	<b>175,649,980</b>	<b>181,568,099</b>	<b>184,486,293</b>	<b>190,879,339</b>	<b>198,128,367</b>	<b>930,712,079</b>

## Program C

IA	IO	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>02</b>	<b>Strong, well-organised and inclusive FOs conduct business and provide services to their members</b>									
		150 FO's linked to warehouses or commodity exchanges	FO's	150	15,000	15,000	15,000	15,000	15,000	75,000
		250 agri-business FO's formed	FO's	250	51,819	51,819	51,819	51,819	51,819	259,094
		500 FO leaders trained	people	500	30,171	30,171	30,171	30,171	30,171	150,856
<b>05</b>	<b>Knowledge of food safety issues enhanced along the value chain</b>									
		Processors/SMEs trained on food handling	SMEs	5,642	244,500	249,148	266,795	271,894	264,246	1,296,582
	<b>Quality control activities undertaken</b>									
		80 inspection visits of processors undertaken	visits	80	57,524	57,524	57,524	57,524	57,524	287,618
		monitoring of food premises	visits	70	65,069	65,069	65,069	65,069	65,069	325,347
<b>09</b>	<b>Relevant, evidence based extension advice delivered</b>									
		245 value addition groups formed	groups	245	24,500	24,500	24,500	24,500	24,500	122,500
		2930 FO's trained on processing	FO's	2,930	600,000	730,000	780,000	520,000	300,000	2,930,000
		410,000 farmers trained annually on post-harvest management	farmers	2,050,000	410,000	410,000	410,000	410,000	410,000	2,050,000
		Equipment distributed for reducing post-harvest losses	equipment	2,050,000	41,300,000	41,300,000	41,300,000	41,300,000	41,300,000	206,500,000
<b>11</b>	<b>Lake and rivers fisheries resources are efficiently and sustainably managed</b>									
		20 Fisheries landing sites and marketing facilities and 2 docking stations established	facilities	22	279,363	174,602	174,602	453,965	174,602	1,257,134
<b>12</b>	<b>Irrigation schemes are properly managed and maintained according to their economic potential</b>									
		500 matching grants disbursed for irrigation investments	grants	500	104,761	104,761	104,761	104,761	104,761	523,806
		Irrigation farmers linked to markets and finance	linkages	50	66,349	66,349	66,349	66,349	66,349	331,744
<b>13</b>	<b>Availability and quality of mechanization equipment and services enhanced</b>									
		Feasibility study on machinery fund conducted	studies	1	50,000	0	0	0	0	50,000



IA	IO	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>14</b>	<b>Domestic market access improved</b>									
		5,000 km of rural feeder roads rehabilitated/upgraded	kms	5,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	250,000,000
		7500 km of rural feeder roads spot-improved	kms	7,500	18,750,000	18,750,000	18,750,000	18,750,000	18,750,000	93,750,000
		Rural cold storage facilities established	MT	5,000	1,811,427	1,811,427	1,811,427	1,811,427	1,811,427	9,057,134
		Rural market facilities established and rehabilitated	facilities	251	1,050,950	1,257,933	1,501,201	1,374,665	1,490,000	6,674,749
		Rural market facilities rehabilitated	centres	316	3,000,000	3,000,000	3,000,000	3,000,000	3,800,000	15,800,000
<b>Regional and international trade facilitated</b>										
		Active international trade promotion undertaken	lump sum	1	2,031,563	2,129,340	2,227,117	1,757,787	1,738,231	9,884,037
<b>Scope and efficiency of Com EX and WR systems enhanced</b>										
		400,000 MT additional quality storage capacity established	MT	400,000	26,850,000	26,780,000	18,950,000	15,050,000	11,150,000	98,780,000
		Farmers and SMEs trained in warehouse receipt systems and commodity exchanges	entities	500	100,000	100,000	100,000	175,000	175,000	650,000
		Increased incremental value of warehouse receipt financing	entities	1,551	1,075,548	2,053,319	2,542,204	2,542,204	2,542,204	10,755,480
<b>15</b>	<b>Agribusiness investment promotion and PPPs implemented</b>									
		36 abattoirs (rural/urban) established	abattoirs	36	155,000	255,000	255,000	330,000	180,000	1,175,000
		5 special economic zones for agribusiness developed	zones	5	473,733	523,733	523,733	822,937	1,237,982	3,582,119
		6 additional commodity value chain platforms established and existing platforms fully functional	platforms	10	622,349	722,349	822,349	922,349	1,022,349	4,111,745
		75 Agro-processors connected to electricity	SMEs	75	1,200,000	2,000,000	2,000,000	1,200,000	1,100,000	7,500,000
		Investment commitments under New Alliance fully implemented	percent	100	29,600,000	29,600,000	29,600,000	29,600,000	29,600,000	148,000,000
		Undertake annual agribusiness investment fora/fairs national/district levels	lump sum	5	190,000	190,000	190,000	190,000	190,000	950,000

IA	IO	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>Technical and Business Skills of Cooperatives and SMEs in agribusiness enhanced</b>										
		150 trainings for coops conducted on various technical and business aspects related to value addition	lump sum	150	60,000	60,000	60,000	60,000	60,000	300,000
		300 trainings provided for agribusiness SMEs, women and youth on various technical and business aspects	SMEs	300	130,000	140,000	140,000	140,000	140,000	690,000
		Business mentorship for 2000 youths and women agribusiness entrepreneurs facilitated	people	2,000	800,000	800,000	800,000	800,000	800,000	4,000,000
		Training of SMEs	SMEs	400	13,968	13,968	13,968	13,968	13,968	69,841
		150 trainings for coops in agribusiness management	lump sum	150	60,000	60,000	60,000	60,000	60,000	300,000
<b>16 Enabling environment for agri-finance strengthened and specific policy instruments established.</b>										
		Feasibility studies and expert consultations on new instruments to foster access to finance conducted	studies	3	100,000	0	0	0	0	100,000
		Feasibility studies and expert consultations on new instruments to foster access to finance conducted	studies	3	150,000	0	0	0	0	150,000
		Technical assistance, refinance and risk sharing facilities established	lump sum	1	600,000	7,500,000	12,400,000	400,000	400,000	21,300,000
<b>Investment support provided to agribusiness SMEs, with priority to women and youth</b>										
		140 SMEs (with priority to women and youth) annually receive matching grants for business start-up	SMEs	700	586,044	586,044	586,044	586,044	586,044	2,930,219
		50 SMEs (with priority to women and youth) annually received matching grants for business expansion through environmentally friendly investments.	SMEs	250	500,000	500,000	500,000	500,000	500,000	2,500,000
<b>Grand Total</b>				<b>86,859</b>	<b>183,209,638</b>	<b>192,112,055</b>	<b>190,179,633</b>	<b>173,457,432</b>	<b>170,211,246</b>	<b>909,170,005</b>

## Program D

IA	IO	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>02</b>	<b>Strong, well-organised and inclusive FOs conduct business and provide services to their members</b>									
		250 groups producing under contract	groups	250	20,040	26,720	33,400	40,080	46,760	167,000
		390 FO's receive long-term training packages	FO's	390	1,465,000	1,450,000	1,650,000	1,100,000	1,300,000	6,965,000
<b>03</b>	<b>Public extension workers at decentralised levels equipped and housed to do their job</b>									
		15,000 front line staff have required equipment	staff	15,000	3,558,728	3,768,250	3,558,728	3,558,728	3,558,728	18,003,162
		26 laboratories and related facilities maintained	labs	26	560,946	393,330	386,346	141,904	41,904	1,524,430
		4 Government livestock farms have electricity	farms	4	83,808	83,808	0	0	0	167,616
		8 fisheries vessels available	vessels	8	350,000	50,000	0	0	0	400,000
<b>04</b>	<b>Nutrition education</b>									
		13100 farmers annually sensitised on bio fortified varieties	farmers	65,500	393,000	393,000	393,000	393,000	393,000	1,965,000
<b>05</b>	<b>Knowledge of food safety issues enhanced along the value chain</b>									
		Farmers and fishermen trained on food safety and aflatoxin management	farmers	200,170	771,500	771,500	154,000	154,000	154,000	2,005,000
		FO's/SMEs trained on food safety and aflatoxin management	FO's	900	279,070	279,070	279,070	279,070	279,070	1,395,350
<b>06</b>	<b>Implementation of the Land Policy supported</b>									
		91000 ha of land registered	ha	91,000	75,600	315,600	315,600	315,600	75,600	1,098,000
		<b>Participation of women and youth in agricultural value chains and institutions increased</b>								
		Strategy developed on decent employment	study	1	100,000	50,000	0	0	100,000	250,000
		<b>Strong, well-organised and inclusive FOs conduct business and provide services to their members</b>								
		17030 groups trained	groups	17,030	210,000	210,000	210,000	210,000	210,000	1,050,000
<b>07</b>	<b>Disaster preparedness strengthened</b>									
		Crop or livestock insurance products piloted	lump sum	1	500,000	500,000	500,000	0	0	1,500,000
<b>08</b>	<b>IPM and biotechnology for plant protections widely adopted</b>									
		25,000 farmers trained on IPM	farmers	5,000	375,000	375,000	375,000	375,000	375,000	1,875,000
		Imports and exports inspected for pests and diseases	lump sum	5	500,000	500,000	500,000	500,000	500,000	2,500,000

IA	IO	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost	
09	Relevant, evidence based extension advice delivered	# of lead farmers increased from 20 to 35 thousand	lead farmers	150,000	4,465,652	5,170,952	4,520,952	5,270,952	6,020,952	25,449,460	
		10,000 clusters operational per year	villages	50,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000	
		100 water points established	water points	100	225,000	300,000	405,000	450,000	120,000	1,500,000	
		1000 FFS operational per year	farmer field schools	5,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000	
		1000 green belts operational per year	villages	5,000	500,000	500,000	500,000	500,000	500,000	2,500,000	
		1000 model villages operational per year	villages	5,000	500,000	500,000	500,000	500,000	500,000	2,500,000	
		1020 grazing areas established	areas	1,020	1,020,000	1,020,000	1,020,000	1,020,000	1,020,000	5,100,000	
		11 min-feed mills established for poultry feeds	mills	11	0	7,200	21,600	21,600	21,600	28,800	79,200
		15 dams restocked with fish	dams	15	20,952	62,856	167,616	62,856	0	314,280	
		190,000 ha annually intercropped with nitrogen fixing plants	ha	950,000	1,630,000	1,480,000	1,480,000	1,480,000	1,480,000	1,480,000	7,550,000
		22000 annual field days on GAP	field days	110,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	5,500,000
		300,000 ha annually under GAP	ha	1,500,000	1,443,160	1,489,200	1,533,130	1,568,720	13,609,650	19,643,860	
		400 farmers using stall feeding	farmers	400	5,880	6,860	7,350	8,330	10,780	39,200	
		400,000 farmers receive annual specialised extension on crops they are producing	farmers	2,000,000	800,000	800,000	800,000	800,000	800,000	800,000	4,000,000
		5000 fish farmers annually trained on deep pond fish production system	farmers	25,000	707,000	707,000	707,000	707,000	707,000	700,000	3,528,000
50000 fodder trees planted amongst farmers	trees	50,000	2,500	2,500	2,500	2,500	2,500	2,500	12,500		
8 pond or cage culture schemes established	schemes	8	50,000	97,777	97,777	97,777	97,777	97,777	441,108		
Annual district agricultural fairs undertaken	fairs	140	420,000	420,000	420,000	420,000	420,000	420,000	2,100,000		
Inputs supplied to farmers for demonstration purposes	lump sum	5	1,270,000	1,270,000	1,270,000	1,270,000	1,270,000	1,270,000	6,350,000		
<b>Efficient research partnerships</b>											
18 micro-nutrient bio-fortified crops developed	technologies	18	289,682	289,682	339,682	339,682	339,682	339,682	1,598,410		
about 10 new varieties or technologies developed & released annually	technologies	10	17,000,000	17,000,000	17,000,000	17,000,000	17,000,000	17,000,000	85,000,000		
about 45000 on-farm participatory demos on GAP conducted annually	demos	229,000	978,000	1,020,000	1,380,000	1,476,000	2,016,000	6,870,000			

IA	IO	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
		about 5 feed technologies developed annually	technologies	5	204,000	204,000	204,000	204,000	204,000	1,020,000
		Detailed analysis of site-specific constraints affecting ag performance	lump sum	5	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000
<b>10</b>		<b>Efficient seed supply systems established</b>								
		900,000 farmers annually receiving voucher for legume seed subsidy	farmers	4,500,000	6,480,000	6,480,000	6,480,000	6,480,000	6,480,000	32,400,000
		900,000 farmers annually receiving voucher for maize seed subsidy	farmers	4,500,000	2,250,000	2,250,000	2,250,000	2,250,000	2,250,000	11,250,000
		950 community seed banks established	seed banks	950	69,000	72,600	77,400	82,200	85,800	387,000
		FISP program implemented	lump sum	5	115,000	115,000	115,000	115,000	115,000	575,000
		Ha of seed multiplication fields inspected by SSU increased from 15,000 to 25,000	ha	107,555	155,550	170,000	200,000	250,000	300,000	1,075,550
		Import procedures simplified	certificates	50,000	140,000	140,000	140,000	140,000	140,000	700,000
		Nurseries for trees and vegetables established	ha	75	9,750	29,750	9,750	9,750	9,750	68,750
		Quantities of basic seed produced increased from 105 to 325 MT annually	MT	2,505	31,395	89,700	149,500	209,300	269,100	748,995
		Quantities of seed multiplied by farmers	MT	13,000	269,750	330,980	357,690	367,600	884,590	2,210,610
		<b>Livestock and fisheries genepool improved and breeding stock made available to farmers</b>								
		# livestock artificially inseminated annually increased from 10000 to 60000	inseminations	300,000	3,112,857	6,062,857	9,062,857	12,062,857	18,062,857	48,364,285
		5 million fingerlings produced annually	fingerlings	25,000,000	1,294,889	1,334,889	1,334,889	1,330,000	1,330,000	6,624,667
		5 million fingerlings restocked annually	fingerlings	25,000,000	1,291,904	1,291,904	1,291,904	1,291,904	1,291,904	6,459,520
		Heifer pass-on scheme implemented	livestock	1,400	201,120	301,680	502,800	586,600	754,200	2,346,400
		Livestock breeding animals sourced increased from 3450 to 10000 annually	livestock	20,750	6,176,700	6,752,000	6,377,500	6,452,800	6,503,000	32,262,000
		Livestock conservation protocols developed	lump sum	1	750,000	500,000	0	0	0	1,250,000
		<b>Supply chains for organic and in-organic fertiliser strengthened</b>								
		300 fertiliser samples analysed annually	samples	1,500	121,000	121,000	121,000	121,000	121,000	605,000
		900,000 farmers annually receiving voucher for fertiliser subsidy	farmers	4,500,000	37,350,000	37,350,000	37,350,000	37,350,000	37,350,000	186,750,000
		Area-specific fertiliser recommendations developed	maps	10	211,296	191,296	191,296	435,741	435,741	1,465,370

IA	IO	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>11</b>	<b>Lake and rivers fisheries resources are efficiently and sustainably managed</b>									
		50,000 fisher folk including women and youth trained on improved technologies	fishermen	50,000	730,000	750,000	754,889	754,889	734,889	3,724,667
		Fisheries technologies developed and analysed	lump sum	5	117,714	114,222	114,222	114,222	114,222	574,602
<b>12</b>	<b>Area under functional irrigation systems increased</b>									
		36,800 ha of irrigation schemes are developed	ha	36,800	65,802,745	69,591,945	73,381,145	77,170,345	81,906,845	367,853,025
		5,100 ha of irrigation schemes are rehabilitated	ha	5,100	2,375,841	3,298,241	4,681,841	6,065,441	7,449,041	23,870,405
	<b>Irrigation schemes are properly managed and maintained according to their economic potential</b>									
		100 irrigation associations trained annually	FO's	500	50,000	50,000	50,000	50,000	50,000	250,000
		64 new WUAs established and all existing WUAs trained annually	WUAs	1,230	43,280	46,480	49,680	52,880	56,080	248,400
		Advanced extension services provided to farmers in irrigated areas	ha	8,000	487,321	502,321	532,321	532,321	517,321	2,571,605
<b>13</b>	<b>Availability and quality of mechanization equipment and services enhanced</b>									
		Draught animal services improved	animals	197	115,836	115,836	115,836	115,836	115,836	579,180
		Government mechanization schemes make more tractors and CA-compliant rippers available to farmers	equipment	72	544,112	328,224	78,224	328,224	578,224	1,857,008
		Incentives provided to increase importation of tractors and CA implements by private sector	tractors	500	8,006,985	8,006,985	8,006,985	8,006,985	8,006,985	40,034,925
	<b>Knowledge and skills of providers and users of mechanization services strengthened</b>									
		300 mechanization demos conducted	demos	300	41,880	41,880	41,880	41,880	41,880	209,400
		425 Health and safety trainings conducted	farmers	425	2,508,750	2,513,125	2,513,125	2,517,500	2,521,875	12,574,375
		750 machinery operators/mechanics trained	artisans	750	20,000	20,000	20,000	20,000	20,000	100,000
<b>14</b>	<b>Effectiveness, scope and fairness of contract farming improved</b>									
		Capacity of FOs to engage in contract farming enhanced	FO's	550	196,600	198,100	197,100	197,600	196,100	985,500
		Contract Farming strategy disseminated / stakeholders sensitised	FO's	1,000	196,700	246,700	246,700	246,700	196,700	1,133,500
		Increased number of farmers operating under contract farming arrangements	farmers	100,000	397,800	397,800	397,800	397,800	397,800	1,989,000

IA	IO	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
		<b>MARKET INFO availability and use enhanced</b>								
		Farmers able to access and use market information systems	farmers	1,500,000	613,968	1,100,000	1,613,968	2,100,000	3,113,968	8,541,904
<b>16</b>		<b>Farmers, women and youth able to use financial services effectively</b>								
		Farmers, women and youth groups capacitated on financial literacy and management skills	groups	600	600,000	600,000	600,000	600,000	600,000	3,000,000
		Financial literacy campaigns conducted	lump sum	5	26,600	35,000	42,000	56,000	140,000	299,600
		Financial literacy campaigns conducted targeting 220,000 farmers	lump sum	5	66,285	64,190	0	0	0	130,475
		<b>Grand Total</b>		<b>913,927</b>	<b>187,847,146</b>	<b>197,219,010</b>	<b>204,281,053</b>	<b>213,270,174</b>	<b>240,414,911</b>	<b>1,043,032,294</b>

## Annex 4: NAIP Budget by Intervention Areas

All values are in constant 2017 US dollars

### Intervention Area 1

IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>Improved multi-sectoral coordination, partnerships and mutual accountability</b>										
A		204 EPA level structures meet biannually	meetings	4,080	408,000	408,000	408,000	408,000	408,000	2,040,000
		28 District coordination structures meet 2-4 times per year	meetings	1,660	342,500	347,000	342,000	342,000	342,000	1,715,500
		628 village level structures meet biannual	meetings	7,906	938,600	125,600	938,600	125,600	125,600	2,254,000
		ADD level coordination functional	meetings	40	27,936	27,936	27,936	27,936	27,936	139,682
		ASWG meets 4 times per year	meetings	20	44,000	44,000	44,000	44,000	44,000	220,000
		Biannual coordination meetings for FO's, CSOs, private sector and sub-sectors	meetings	10	2,000	2,000	2,000	2,000	2,000	10,000
		Coordination troika functional	lump sum	1	14,000	14,000	14,000	14,000	14,000	70,000
		EMC functional	meetings	10	12,000	12,000	2,000	2,000	2,000	30,000
		Intra-ministerial coordination structures	TA	3	10,000	10,000	5,000	0	0	25,000
		MoAIWD communication strategy developed	strategy	1	50,000	0	0	0	0	50,000
		NAIP secretariat functional	lump sum	5	110,000	80,000	80,000	80,000	80,000	430,000
		Sector targeting in harmonised	lump sum	5	11,000	11,000	11,000	10,000	10,000	53,000
		STM functional	meetings	20	54,000	4,000	4,000	4,000	4,000	70,000
		TWGs meet as per TOR with high attend	meetings	270	313,000	313,000	313,000	313,000	313,000	1,565,000
<b>Increased capacity to generate, analyse and use data, information, knowledge and innovations</b>										
A		Outcome level surveys bi-annually	survey	6	100,000	500,000	0	500,000	100,000	1,200,000
		Production-level surveys annually	survey	15	735,000	735,000	735,000	735,000	735,000	3,675,000
		Specific surveys undertaken as required	lump sum	5	180,000	40,000	0	0	100,000	320,000
<b>M&amp;E systems and performance management in agriculture functioning and up to date</b>										
A		National level M&E systems improved	lump sum	1	720,000	480,000	350,000	400,000	350,000	2,300,000
		PAF developed for the agricultural sector	lump sum	1	40,000	40,000	0	0	0	80,000
		Sector-wide HQ and decentralised MIS	lump sum	1	1,040,000	1,040,000	790,000	790,000	790,000	4,450,000
<b>MoAIWD operational and recurrent costs covered</b>										
A		Vehicle fleet continuously maintained	vehicles	450	100,000	200,000	200,000	200,000	200,000	900,000



IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>MoAIWD operational, recurrent costs</b>										
	A	HQ-ADD-District monitoring of activities	lump sum	5	6,385,555	6,385,555	6,385,555	6,385,555	6,385,555	31,927,777
		Increasing staffing levels maintained	lump sum	5	16,000,000	19,200,000	20,800,000	22,400,000	24,000,000	102,400,000
		MoAIWD functional at EPA, District, ADD and HQ levels	lump sum	5	4,120,000	4,120,000	4,120,000	4,120,000	4,120,000	20,600,000
		<b>Grand Total</b>		<b>495</b>	<b>31,757,592</b>	<b>34,139,092</b>	<b>35,572,092</b>	<b>36,903,092</b>	<b>38,153,092</b>	<b>176,524,959</b>

## Intervention Area 2

IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>Legal framework and institutional support for FOs strengthened</b>										
	A	Agricultural Cooperative Institute established	lump sum	1	0	500,000	250,000	250,000	250,000	1,250,000
		Cooperative Act revised	act	1	175,000	0	0	0	0	175,000
		Farmers Organizations Development Strategy developed	act	1	0	50,000	0	0	0	50,000
		FO database established and updated regularly	lump sum	5	120,415	117,915	117,915	117,915	117,915	592,077
		Gender capacity gaps are identified	reports	5	0	150,000	100,000	0	0	250,000
		TA provided to 5 FO supporting institutions	TA	10	500,000	500,000	0	0	0	1,000,000
<b>Strong, well-organised and inclusive FOs conduct business and provide services to their members</b>										
	B	17030 groups trained	groups	17,030	649,522	1,289,522	689,522	889,522	1,289,522	4,807,612
		390 FO's receive long-term training packages	FO's	390	8,311	8,311	8,311	8,311	8,311	41,555
	C	250 groups producing under contract	groups	250	20,040	26,720	33,400	40,080	46,760	167,000
		390 FO's receive long-term training packages	FO's	390	1,465,000	1,450,000	1,650,000	1,100,000	1,300,000	6,965,000
	D	150 FO's linked to warehouses or commodity exchanges	FO's	150	15,000	15,000	15,000	15,000	15,000	75,000
		250 agri-business FO's formed	FO's	250	51,819	51,819	51,819	51,819	51,819	259,094
		500 FO leaders trained	people	500	30,171	30,171	30,171	30,171	30,171	150,856
		<b>Grand Total</b>		<b>1,571</b>	<b>3,035,279</b>	<b>4,189,459</b>	<b>2,946,139</b>	<b>2,502,819</b>	<b>3,109,499</b>	<b>15,783,195</b>

## Intervention Area 3

IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>Capacity of public sector institutions to provide agricultural extension services strengthened</b>										
	A	100 staff receive short-term training	staff	100	200,000	200,000	200,000	200,000	200,000	1,000,000
		Stud. graduate from M Col. of Fish.	staff	150	75,000	140,000	140,000	140,000	120,000	615,000
		20 staff upgraded to PhD level	staff	20	200,000	200,000	200,000	200,000	200,000	1,000,000
		Field Food/Nutrition Officers re. (EPA)	staff	204	540,000	194,400	0	0	0	734,400
		Field Food and Nutrition Off. trained	staff	204	113,980	113,980	113,980	113,980	113,980	569,901
		225 staff upgraded to BSC level	staff	225	900,000	900,000	900,000	900,000	900,000	4,500,000
		225 staff upgraded to MSC level	staff	225	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000	6,750,000
		28 district level M&E officers recruited	staff	28	16,800	0	0	0	0	16,800
		300 agri-business officers recruited	staff	300	540,000	540,000	0	0	0	1,080,000
		Ext. staff trained on various tech. issue	staff	3,000	1,324,382	1,308,871	1,276,922	1,267,922	1,272,122	6,450,218
		61 researchers recruited	staff	61	558,000	360,000	90,000	90,000	0	1,098,000
		HR mgt in MoAIWD modernised	lump sum	1	10,500	10,500	10,500	500	1,000	33,000
		MoAIWD re-structured	lump sum	1	3,150,000	0	30,000	30,000	0	3,210,000
		HIV/AIDS nutrition supplements (staff)	lump sum	1	11,175	11,175	11,175	11,175	11,175	55,873
		Training needs assessment	lump sum	1	15,000	0	0	0	0	15,000
<b>Public extension workers at decentralised levels equipped and housed to do their job</b>										
	A	10 7-ton lorries available	lorries	10	0	0	500,000	0	0	500,000
		Vehicles procured for field operations	vehicles	100	6,500,000	0	0	0	0	6,500,000
		border post offices/houses maintained	Sites	13	530,498	530,498	795,747	795,747	795,747	3,448,237
		Offices, power and housing at EPAs	EPAs	204	5,200,000	5,000,000	5,000,000	5,000,000	5,000,000	25,200,000
		22 Ag Training Centres rehabilitated	centres	22	250,000	250,000	250,000	250,000	100,000	1,100,000
		28 district offices maintained	Districts	28	75,000	75,000	75,000	90,000	105,000	420,000
		Motorbikes for frontline staff	motorbikes	3,500	3,000,000	4,500,000	3,000,000	0	0	10,500,000
		Housing at research stations improved	Stations	8	100,000	100,000	100,000	100,000	0	400,000
		ICT packages at 28 districts, 8 research stations and 14 national level offices	ICT packages	50	350,000	350,000	350,000	350,000	350,000	1,750,000
	C	Front line staff have required equip	staff	15,000	3,558,728	3,768,250	3,558,728	3,558,728	3,558,728	18,003,162
		Labs and related facilities maintained	labs	26	560,946	393,330	386,346	141,904	41,904	1,524,430
		Govt livestock farms with electricity	farms	4	83,808	83,808	0	0	0	167,616
		8 fisheries vessels available	vessels	8	350,000	50,000	0	0	0	400,000
<b>Grand Total</b>				<b>1,461</b>	<b>29,563,817</b>	<b>20,429,811</b>	<b>18,338,397</b>	<b>14,589,955</b>	<b>14,119,655</b>	<b>97,041,636</b>

## Intervention Area 4

IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>Improved implementation, coordination and monitoring of nutrition related activities in the agricultural sector</b>										
	<b>A</b>	28 district level District Nutrition Coordinating Committees operational	meetings	140	56,000	56,000	56,000	56,000	56,000	280,000
		Nutrition policy enhanced	policy	1	50,000	0	0	0	0	50,000
		regional nutrition data collected annually	surveys	20	39,111	39,111	39,111	39,111	39,111	195,554
		semi-annual nutrition forums undertaken	meetings	10	10,000	10,000	10,000	10,000	10,000	50,000
<b>Institutional feeding programs</b>										
	<b>B</b>	Orchards established at schools	schools	5,000	200,000	200,000	200,000	200,000	200,000	1,000,000
		school feeding programs improved	lump sum	5	61,682	61,682	81,682	81,682	101,682	388,411
<b>Nutrition education</b>										
	<b>B</b>	1 million integrated household farming (IHF) gardens established	hhs	1,000,000	40,000,000	40,000,000	40,000,000	40,000,000	40,000,000	200,000,000
		115,000 hhs annually directly sensitised on nutrition	hhs	575,000	230,000	350,000	350,000	350,000	350,000	1,630,000
		204 EPA level nutrition care groups operational annually	EPAs	1,020	204,000	204,000	204,000	204,000	204,000	1,020,000
		4 cooking demos per EPA annually delivered	demos	3,140	2,512	2,512	2,512	2,512	2,512	12,560
		500,000 households trained on food processing, storage and conservation	hhs	500,000	100,000	100,000	100,000	100,000	100,000	500,000
		Annual village food and nutrition fairs	meetings	3,140	314,000	314,000	314,000	314,000	314,000	1,570,000
		nutrition campaigns (with related meetings & materials) undertaken	campaigns	10	115,936	115,936	115,936	115,936	115,936	579,678
	<b>C</b>	13100 farmers annually sensitised on bio fortified varieties	farmers	65,500	393,000	393,000	393,000	393,000	393,000	1,965,000
<b>Grand Total</b>				<b>157,287</b>	<b>41,776,241</b>	<b>41,846,241</b>	<b>41,866,241</b>	<b>41,866,241</b>	<b>41,886,241</b>	<b>209,241,204</b>

## Intervention Area 5

IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>Adequate food safety legislation is in place</b>										
A		product-specific quality standards developed	lump sum	1	184,920	109,920	109,920	34,920	34,920	474,602
<b>Appropriate and adequate food safety legislation is in place</b>										
A		Food Safety and Quality Bill and Act developed	agency	1	0	0	150,000	0	0	150,000
		Food safety and quality control agency established	agency	1	150,000	0	0	150,000	0	300,000
		product-specific quality standards developed	lump sum	1	0	75,000	0	75,000	75,000	225,000
<b>Knowledge of food safety issues enhanced along the value chain</b>										
A		45 TWG members and Government offices trained on food safety issues	trainings	45	143,173	143,173	143,173	143,173	143,173	715,866
		Multi-stakeholder platforms meet regularly	meetings	35	40,000	40,000	40,000	40,000	40,000	200,000
		Regular data updating on aflatoxin and other food-borne diseases	lump sum	5	134,761	134,761	134,761	134,761	134,761	673,806
		Surveys on status of food safety undertaken	survey	61	560,000	0	0	0	560,000	1,120,000
B		Information on aflatoxin and other food hazards disseminated	lump sum	5	220,000	95,000	95,000	85,000	85,000	580,000
C		Farmers and fishermen trained on post-harvest management and food safety	farmers	200,170	771,500	771,500	154,000	154,000	154,000	2,005,000
		FO's/SMEs trained on food safety including aflatoxin management	FO's	900	279,070	279,070	279,070	279,070	279,070	1,395,350
D		Processors/SMEs trained on food handling	SMEs	5,642	244,500	249,148	266,795	271,894	264,246	1,296,582
<b>Quality control activities undertaken</b>										
A		2 laboratories accredited internationally	labs	2	0	200,000	0	200,000	0	400,000
		3 laboratories accredited internationally	labs	2	0	0	0	150,000	0	150,000
		4 laboratories accredited internationally	labs	2	11,733	11,733	11,733	11,733	11,733	58,666
		Quality control system developed	system	1	0	0	0	27,000	100,000	127,000
D		80 inspection visits of processors undertaken	visits	80	57,524	57,524	57,524	57,524	57,524	287,618
		monitoring of food premises	visits	70	65,069	65,069	65,069	65,069	65,069	325,347
<b>Grand Total</b>				<b>14,238</b>	<b>2,862,251</b>	<b>2,231,898</b>	<b>1,507,046</b>	<b>1,879,144</b>	<b>2,004,497</b>	<b>10,484,837</b>

## Intervention Area 6

IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>Implementation of the Land Policy supported</b>										
	<b>A</b>	28 District land registries established	systems	28	375,000	3,420,000	3,420,000	3,420,000	3,420,000	14,055,000
		Land Policy institutional aspects implemented	lump sum	5	258,000	218,000	208,000	118,000	58,000	860,000
	<b>B</b>	Annual district awareness meetings on acquiring land for investment conducted	meetings	140	560,000	560,000	560,000	560,000	560,000	2,800,000
		Sensitization of community members on land rights	meetings	1,020	494,190	494,190	494,190	494,190	498,381	2,475,143
	<b>C</b>	91000 ha of land registered	ha	91,000	75,600	315,600	315,600	315,600	75,600	1,098,000
<b>Participation of women and youth in agricultural value chains and institutions increased</b>										
	<b>A</b>	200 Government staff trained as gender focal persons	staff	200	0	50,000	50,000	0	0	100,000
		Agricultural training curricular updated on gender, HIV/AIDS	lump sum	1	309,522	0	0	0	0	309,522
		Agriculture Sector gender and HIV strategy reviewed	strategy	1	0	50,000	0	0	0	50,000
	<b>B</b>	200,000 hhs strengthened on gender relations	hhs	200,000	1,025,000	1,025,000	1,025,000	1,025,000	25,000	4,125,000
		2640 Women/youth groups strengthened	groups	2,640	126,539	134,920	141,904	155,873	239,682	798,919
	<b>C</b>	Strategy developed on decent employment	study	1	100,000	50,000	0	0	100,000	250,000
<b>Strong, well-organised and inclusive FOs conduct business and provide services to their members</b>										
	<b>C</b>	17030 groups trained	groups	17,030	210,000	210,000	210,000	210,000	210,000	1,050,000
<b>Grand Total</b>				<b>27,270</b>	<b>3,533,852</b>	<b>6,527,711</b>	<b>6,424,695</b>	<b>6,298,663</b>	<b>5,186,662</b>	<b>27,971,584</b>

## Intervention Area 7

IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>Disaster preparedness strengthened</b>										
	<b>A</b>	Early warning info disseminated	lump sum	5	204,000	204,000	154,000	154,000	154,000	870,000
		Land zoned and mapped for disaster preparedness	ha	50,000	943,408	1,188,408	698,408	698,408	698,408	4,227,039
		Weather stations established at each EPA	weather stations	204	1,750,000	2,700,000	3,200,000	3,120,000	3,120,000	13,890,000
	<b>B</b>	20250 People trained on disaster risk management and preparedness	farmers	20,250	240,873	273,373	175,873	175,873	175,873	1,041,863
		50,000 households with food storage facilities in place	hhs	50,000	2,564,666	2,564,666	2,639,666	2,339,666	2,339,666	12,448,331
		Gender responsive guidelines in place for disaster response	guidelines	1	0	20,000	20,000	0	0	40,000
	<b>C</b>	Crop or livestock insurance products piloted	lump sum	1	500,000	500,000	500,000	0	0	1,500,000
<b>Strategic grain reserves (physical and virtual in place to respond undertaken to reduce impacts natural disasters on household-level FNS.</b>										
	<b>B</b>	240,000 MT of grain stored	MT	1,200,000	5,800,000	5,800,000	5,800,000	5,800,000	5,800,000	29,000,000
		54 storage facilities rehabilitated	silos	54	3,000,000	2,100,000	750,000	250,000	0	6,100,000
		Food delivered to 5% of Malawian households	people	4,578,825	56,250,000	61,875,000	68,062,500	74,868,750	82,355,625	343,411,875
<b>Grand Total</b>					<b>71,252,947</b>	<b>77,225,447</b>	<b>82,000,447</b>	<b>87,406,697</b>	<b>94,643,572</b>	<b>412,529,108</b>

## Intervention Area 8

IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>Adequate infrastructure in place to handle disease outbreaks</b>										
	<b>B</b>	500 litres of herbicides and pesticides always in stock	litres	2,500	5,000	5,000	5,000	5,000	5,000	25,000
		Quarantine and other facilities	lump sum	1	3,034,458	2,934,458	1,565,579	963,412	535,846	9,033,753
<b>Animal health preventive measures</b>										
	<b>B</b>	5 million poultry vaccinated /year	chicken	27,000,000	69,841	69,841	69,841	69,841	97,777	377,140
		Cows vaccinated/dipped 2x/year	cattle	16,500,000	2,600,000	2,950,000	3,300,000	3,650,000	4,000,000	16,500,000
		Dairy cows screened for TB/ticks	cattle	443,750	495,870	557,853	619,837	681,821	743,804	3,099,185
		Goat stock dewormed annually	goats	41,250,000	1,625,000	1,843,750	2,062,500	2,281,250	2,500,000	10,312,500
		Pigs dewormed/vaccinated /year	pigs	14,025,000	3,600,000	4,550,000	5,500,000	6,450,000	7,950,000	28,050,000
		Procedures on biosafety of animals and fish in place	lump sum	1	50,000	0	0	0	0	50,000
		Vaccination boxes in place	lump sum	1	1,000,000	0	0	0	0	1,000,000
		500,000 farmers trained/year on animal hygiene / disease prevent.	farmers	2,500,000	125,000	125,000	125,000	125,000	125,000	625,000
<b>IPM and biotechnology for plant protections widely adopted</b>										
	<b>A</b>	20 staff trained in biotechnology	staff	20	139,682	419,045	558,726	838,089	838,089	2,793,631
		Plant protection regulation reviewed	policy	1	0	0	50,000	0	0	50,000
	<b>B</b>	100 plant clinics established	clinics	100	20,000	20,000	20,000	20,000	75,873	155,873
		5 groups per EPA formed and trained to implement IMP in their community	groups	1,020	51,000	51,000	51,000	51,050	51,000	255,050
		Agricultural biotechs applied	lump sum	5	370,952	363,968	227,936	220,952	213,968	1,397,777
	<b>C</b>	25,000 farmers trained on IPM	farmers	5,000	375,000	375,000	375,000	375,000	375,000	1,875,000
		Imports and exports inspected for pests and diseases	lump sum	5	500,000	500,000	500,000	500,000	500,000	2,500,000
<b>Monitoring &amp; control</b>										
	<b>B</b>	2 million ha monitored and controlled for pests annually	ha	10,000,000	30,680,231	30,722,135	30,526,581	30,163,409	30,107,536	152,199,892
<b>Pests and diseases outbreaks are monitored and controlled</b>										
	<b>B</b>	2 million ha monitored and controlled for pests annually	ha	10,000,000	360,000	360,000	360,000	360,000	360,000	1,800,000
<b>Grand Total</b>				<b>4,597,804</b>	<b>45,102,033</b>	<b>45,847,050</b>	<b>45,917,000</b>	<b>46,754,823</b>	<b>48,478,894</b>	<b>232,099,801</b>

### Intervention Area 9 (part 1 - Relevant, evidence-based extension advice delivered)

IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>Relevant, evidence based extension advice delivered</b>										
	<b>A</b>	2 agricultural resource centres operational per district	centres	63	104,761	104,761	104,761	140,793	34,920	489,997
		District level databases on extension established	databases	28	251,427	293,331	209,522	209,522	209,522	1,173,325
		GAP guidelines continuously updated	guidelines	5	145,713	215,999	145,713	145,713	145,713	798,852
		Livestock masterplan developed	strategy	1	500,000	0	0	0	0	500,000
	<b>B</b>	150,000 farmers active in chicken pass-on groups	farmers	150,000	24,000	24,000	24,000	24,000	24,000	120,000
		180,000 chicken annually distributed to pass-on schemes	chicken	900,000	1,257,134	1,257,134	1,257,134	1,257,134	1,257,134	6,285,670
		225,000 farmers active in goat pass-on programs	farmers	166,667	97,301	97,301	97,301	153,174	153,174	598,250
		36400 farmers annually trained on small stock management	farmers	182,000	301,992	301,992	301,992	301,992	301,992	1,509,958
		45,000 farmers active in chicken pass-on groups	farmers	45,000	31,428	31,428	31,428	31,428	31,428	157,142
		45,000 goats annually distributed to pass-on schemes	goats	225,000	2,199,985	2,199,985	2,199,985	2,199,985	2,199,985	10,999,923
		4500 bee keepers trained	farmers	4,500	3,352	5,587	2,794	838	0	12,571
		livestock committees revamped in 2800 villages	committees	2,800	7,000	7,000	7,000	8,400	9,800	39,200
	<b>C</b>	# of lead farmers increased from 20 to 35 thousand	lead farmers	150,000	4,465,652	5,170,952	4,520,952	5,270,952	6,020,952	25,449,460
		10,000 clusters operational per year	villages	50,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000
		100 water points established	water points	100	225,000	300,000	405,000	450,000	120,000	1,500,000
		1000 FFS operational per year	farmer field schools	5,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000
		1000 green belts operational per year	villages	5,000	500,000	500,000	500,000	500,000	500,000	2,500,000
		1000 model villages operational per year	villages	5,000	500,000	500,000	500,000	500,000	500,000	2,500,000
		1020 grazing areas established	areas	1,020	1,020,000	1,020,000	1,020,000	1,020,000	1,020,000	5,100,000



IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
		11 min-feed mills established for poultry feeds	mills	11	0	7,200	21,600	21,600	28,800	79,200
		15 dams restocked with fish	dams	15	20,952	62,856	167,616	62,856	0	314,280
		190,000 ha annually intercropped with nitrogen fixing plants	ha	950,000	1,630,000	1,480,000	1,480,000	1,480,000	1,480,000	7,550,000
		22000 annual field days on GAP	field days	110,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	5,500,000
		300,000 ha annually under GAP	ha	1,500,000	1,443,160	1,489,200	1,533,130	1,568,720	13,609,650	19,643,860
		400 farmers using stall feeding	farmers	400	5,880	6,860	7,350	8,330	10,780	39,200
		400,000 farmers receive annual specialised extension on crops they are producing	farmers	2,000,000	800,000	800,000	800,000	800,000	800,000	4,000,000
		5000 fish farmers annually trained on deep pond fish production system	famers	25,000	707,000	707,000	707,000	707,000	700,000	3,528,000
		50000 fodder trees planted amongst farmers	trees	50,000	2,500	2,500	2,500	2,500	2,500	12,500
		8 pond or cage culture schemes established	schemes	8	50,000	97,777	97,777	97,777	97,777	441,108
		Annual district agricultural fairs undertaken	fairs	140	420,000	420,000	420,000	420,000	420,000	2,100,000
		Inputs supplied to farmers for demonstration purposes	lump sum	5	1,270,000	1,270,000	1,270,000	1,270,000	1,270,000	6,350,000
	<b>D</b>	245 value addition groups formed	groups	245	24,500	24,500	24,500	24,500	24,500	122,500
		2930 FO's trained on processing	FO's	2,930	600,000	730,000	780,000	520,000	300,000	2,930,000
		410,000 farmers trained annually on post-harvest management	farmers	2,050,000	410,000	410,000	410,000	410,000	410,000	2,050,000
		Equipment distributed for reducing post-harvest losses	equipment	2,050,000	41,300,000	41,300,000	41,300,000	41,300,000	41,300,000	206,500,000

## Intervention Area 9 (Part 2 – Efficient research partnerships)

IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>Efficient research partnerships</b>										
<b>A</b>		2 technology release stakeholder meetings conducted annually	meetings	10	41,904	41,904	41,904	41,904	41,904	209,522
		ARET diversification plan developed	study	1	0	50,000	0	0	0	50,000
		Capacity of national repository centres (plant, livestock, fisheries genetics) upgraded	lump sum	1	0	0	150,000	0	0	150,000
		MIRT strengthened	lump sum	1	0	50,000	0	0	0	50,000
		Research coordination activities undertaken	meetings	20	62,000	52,000	42,000	32,000	32,000	220,000
<b>B</b>		Research grants provided to 50 students	students	50	100,000	100,000	100,000	100,000	100,000	500,000
		Animal Genetic Resources Centre established	lump sum	2	0	200,000	0	0	0	200,000
		Germplasm conserved	species	3,000	33,496	33,496	82,384	82,384	82,384	314,144
		Malawi Plan Genetic Centre refurbished	lump sum	1	0	83,809	0	0	0	83,809
		18 micro-nutrient bio-fortified crops developed	technologies	18	289,682	289,682	339,682	339,682	339,682	1,598,410
<b>C</b>		about 10 new varieties or technologies developed & released annually	technologies	10	17,000,000	17,000,000	17,000,000	17,000,000	17,000,000	85,000,000
		about 45000 on-farm participatory demos on GAP conducted annually	demos	229,000	978,000	1,020,000	1,380,000	1,476,000	2,016,000	6,870,000
		about 5 feed technologies developed annually	technologies	5	204,000	204,000	204,000	204,000	204,000	1,020,000
		Detailed analysis of site-specific constraints affecting ag performance	lump sum	5	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000
		<b>Grand Total</b>		<b>321,196</b>	<b>83,127,819</b>	<b>84,062,254</b>	<b>83,789,026</b>	<b>84,283,185</b>	<b>96,898,598</b>	<b>432,160,881</b>

## Intervention Area 10

IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>Efficient seed supply systems established</b>										
	A	Import procedures simplified	lump sum	1	150,000	75,000	150,000	0	0	375,000
		Procedures for releasing new varieties revised and streamlined	(blank)		30,000	30,000	0	0	0	60,000
		Seed bill passed	lump sum	1	29,333	29,333	0	0	0	58,666
		Semi-autonomous Seed Services Unit established	lump sum	1	846,152	423,076	0	0	0	1,269,228
	C	900,000 farmers annually receiving voucher for legume seed subsidy	farmers	4,500,000	6,480,000	6,480,000	6,480,000	6,480,000	6,480,000	32,400,000
		900,000 farmers annually receiving voucher for maize seed subsidy	farmers	4,500,000	2,250,000	2,250,000	2,250,000	2,250,000	2,250,000	11,250,000
		950 community seed banks established	seed banks	950	69,000	72,600	77,400	82,200	85,800	387,000
		FISP program implemented	lump sum	5	115,000	115,000	115,000	115,000	115,000	575,000
		Ha of seed multiplication fields inspected by SSU increased from 15,000 to 25,000	ha	107,555	155,550	170,000	200,000	250,000	300,000	1,075,550
		Import procedures simplified	certificates	50,000	140,000	140,000	140,000	140,000	140,000	700,000
		Nurseries for trees and vegetables established	ha	75	9,750	29,750	9,750	9,750	9,750	68,750
		Quantities of basic seed produced increased from 105 to 325 MT annually	MT	2,505	31,395	89,700	149,500	209,300	269,100	748,995
		Quantities of seed multiplied by farmers	MT	13,000	269,750	330,980	357,690	367,600	884,590	2,210,610
<b>FISP reforms advanced</b>										
	A	FISP reform options monitored and discussed amongst stakeholders	lump sum	5	175,000	175,000	175,000	175,000	175,000	875,000
		FISP reform options piloted	lump sum	5	265,000	265,000	265,000	265,000	265,000	1,325,000
		FISP reform options studied	studies	2	150,000	100,000	0	0	0	250,000

IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>Livestock and fisheries gene pool improved and breeding stock made available to farmers</b>										
	A	Livestock conservation protocols developed	lump sum	1	10,000	10,000	10,000	10,000	10,000	50,000
	C	# livestock artificially inseminated annually increased from 10000 to 60000	inseminations	300,000	3,112,857	6,062,857	9,062,857	12,062,857	18,062,857	48,364,285
		5 million fingerlings produced annually	fingerlings	25,000,000	1,294,889	1,334,889	1,334,889	1,330,000	1,330,000	6,624,667
		5 million fingerlings restocked annually	fingerlings	25,000,000	1,291,904	1,291,904	1,291,904	1,291,904	1,291,904	6,459,520
		Heifer pass-on scheme	livestock	1,400	201,120	301,680	502,800	586,600	754,200	2,346,400
		Livestock breeding animals sourced increased from 3450 to 10000 annually	livestock	20,750	6,176,700	6,752,000	6,377,500	6,452,800	6,503,000	32,262,000
		Livestock conservation protocols developed	lump sum	1	750,000	500,000	0	0	0	1,250,000
<b>Livestock/fisheries breeding</b>										
	B	Small stock multiplication through farmer breeders	goats	1,000	1,578,798	1,578,798	1,578,798	1,578,798	1,578,798	7,893,988
<b>Supply chains for organic and in-organic fertiliser strengthened</b>										
	A	3 soil labs refurbished	labs	3	488,885	509,838	509,838	20,952	0	1,529,513
		Semi-autonomous fertiliser regulatory body established	agency	1	24,444	0	977,771	0	0	1,002,215
	B	2 million farmers/year produce manure/inorganic fertiliser	farmers	10,000,000	1,019,045	1,019,045	1,019,045	1,019,045	1,019,045	5,095,223
		Investigate options for fertiliser production and transport	lump sum	1	0	200,000	0	0	0	200,000
		National soil maps updated	maps	8	702,140	702,140	366,904	366,904	366,904	2,504,994
		Pesticides Control Board strengthened	lump sum	1	0	50,000	50,000	50,000	0	150,000
	C	300 fertiliser samples analysed annually	samples	1,500	121,000	121,000	121,000	121,000	121,000	605,000
		900,000 farmers annually receive voucher for fertiliser subsidy	farmers	4,500,000	37,350,000	37,350,000	37,350,000	37,350,000	37,350,000	186,750,000
		Area-specific fertiliser recommendations developed	maps	10	211,296	191,296	191,296	435,741	435,741	1,465,370
<b>Grand Total</b>				<b>2,533,547</b>	<b>65,999,008</b>	<b>69,250,885</b>	<b>71,613,941</b>	<b>73,520,451</b>	<b>80,297,689</b>	<b>360,681,974</b>

## Intervention Area 11

IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>Agro-forestry areas expanded and management capacities enhanced</b>										
	<b>A</b>	Legal framework for agro-forestry dev& incentive mechanisms identified.	studies	1	25,000	25,000	100,000	75,000	25,000	250,000
		Tree-cover density on agricultural land established at national level	studies	1	750,000	0	75,000	150,000	150,000	1,125,000
	<b>B</b>	Trainings in agro-forestry practices	farmers	750,000	350,000	350,000	350,000	350,000	350,000	1,750,000
		farmer managed natural generation tree-planted areas established	ha	2,000	560,000	560,000	560,000	560,000	560,000	2,800,000
		Mini-nurseries established/well managed	nurseries	22,500	2,550,000	2,550,000	2,550,000	2,550,000	2,550,000	12,750,000
		30,000ha/2500km river banks plant	ha	30,000	180,000	180,000	180,000	180,000	180,000	900,000
<b>Lake and rivers fisheries resources are efficiently ad sustainably managed</b>										
	<b>A</b>	Annual census fish/aquatic environment	survey	5	119,841	119,841	119,841	119,841	119,841	599,204
		Fisheries masterplan developed	studies	1	0	0	0	200,000	0	200,000
		Fisheries masterplan developed	studies	1	4,889	4,889	4,889	4,889	4,889	24,444
		Legal/regulatory framework for fisheries management revised/strengthened	lump sum	1	422,236	244,443	555,475	230,475	230,475	1,683,103
	<b>B</b>	HIV/AIDS baseline data disseminate	studies	1	6,984	26,984	6,984	6,984	6,984	54,920
	<b>C</b>	Fisher folk (+women/ youth trained)	fishermen	50,000	730,000	750,000	754,889	754,889	734,889	3,724,667
		Fisheries techs developed/ analysed	lump sum	5	117,714	114,222	114,222	114,222	114,222	574,602
	<b>D</b>	20 Fisheries landing sites/marketing facilities + 2 docking stations established.	facilities	22	279,363	174,602	174,602	453,965	174,602	1,257,134
<b>Land use planning and zoning updated and implementation capacity enhanced</b>										
	<b>B</b>	Agricultural/ protected areas zoned	ha	82,500	2,394,214	1,672,214	1,504,596	1,497,612	1,497,612	8,566,246
		District natural resource management committee	committee	140	253,968	253,968	253,968	253,968	253,968	1,269,841
<b>Sustainable use and management of water resources</b>										
	<b>B</b>	1 deep well established per district	wells	28	0	245,000	245,000	245,000	245,000	980,000

IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>Water resources are managed and used sustainably</b>										
	<b>B</b>	1500 livestock watering points	points	1,500	75,000	75,000	75,000	75,000	75,000	375,000
		Farmers trained on rain water harvesting	farmers	1,000,000	50,000	50,000	50,000	50,000	50,000	250,000
		3 dams constructed per district	dams	84	2,000,000	2,000,000	2,000,000	2,000,000	400,000	8,400,000
		Catchment area management strengthened	ha	1,000,000	1,466,738	1,419,277	1,175,787	721,822	1,151,343	5,934,966
		Rainwater harvesting/soil moisture management techs	farmers	1,000,000	2,252,824	2,252,824	2,252,824	2,252,824	2,252,824	11,264,118
		<b>Grand Total</b>		<b>238,902</b>	<b>14,588,770</b>	<b>13,068,263</b>	<b>13,103,075</b>	<b>12,846,489</b>	<b>11,126,647</b>	<b>64,733,245</b>

### Intervention Area 12

IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>Area under functional irrigation systems increased</b>										
	<b>A</b>	Capacity for planning and implementation of irrigation work and scheme management strengthened at national level	lump sum	2	105,793	105,793	105,793	105,793	105,793	528,965
	<b>C</b>	36,800 ha of irrigation schemes are developed	ha	36,800	65,802,745	69,591,945	73,381,145	77,170,345	81,906,845	367,853,025
		5,100 ha of irrigation schemes are rehabilitated	ha	5,100	2,375,841	3,298,241	4,681,841	6,065,441	7,449,041	23,870,405
<b>Irrigation schemes are properly managed and maintained according to their economic potential</b>										
	<b>A</b>	Codes of conduct for irrigation management developed and their implementation monitored	plans	1,200	62,952	42,000	42,000	42,000	42,000	230,952
		WUA Act enacted	lump sum	1	0	50,000	0	0	0	50,000
	<b>C</b>	100 irrigation associations trained annually	FO's	500	50,000	50,000	50,000	50,000	50,000	250,000
		64 new WUAs established and all existing WUAs trained annually	WUAs	1,230	43,280	46,480	49,680	52,880	56,080	248,400
		Advanced extension services provided to farmers in irrigated areas	ha	8,000	487,321	502,321	532,321	532,321	517,321	2,571,605
	<b>D</b>	500 matching grants disbursed for irrigation investments	grants	500	104,761	104,761	104,761	104,761	104,761	523,806
		Irrigation farmers linked to markets and finance	linkages	50	66,349	66,349	66,349	66,349	66,349	331,744
		<b>Grand Total</b>		<b>7,835</b>	<b>69,099,042</b>	<b>73,857,890</b>	<b>79,013,890</b>	<b>84,189,890</b>	<b>90,298,190</b>	<b>396,458,902</b>

## Intervention Area 13

IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>Availability and quality of mechanization equipment and services enhanced</b>										
	C	Draught animal services improved	animals	197	115,836	115,836	115,836	115,836	115,836	579,180
		Government mechanization schemes make more tractors and CA-compliant rippers available to farmers	equipment	72	544,112	328,224	78,224	328,224	578,224	1,857,008
		Incentives provided to increase importation of tractors and CA implements by private sector	tractors	500	8,006,985	8,006,985	8,006,985	8,006,985	8,006,985	40,034,925
	D	Feasibility study on machinery fund conducted	studies	1	50,000	0	0	0	0	50,000
<b>Knowledge and skills of providers and users of mechanization services strengthened</b>										
	A	Standards for safety measures and safeguards developed	standard	1	13,968	13,968	13,968	13,968	13,968	69,840
	C	300 mechanization demos conducted	demos	300	41,880	41,880	41,880	41,880	41,880	209,400
		425 Health and safety trainings conducted	farmers	425	2,508,750	2,513,125	2,513,125	2,517,500	2,521,875	12,574,375
		750 machinery operators/mechanics trained	artisans	750	20,000	20,000	20,000	20,000	20,000	100,000
<b>Grand Total</b>					<b>11,301,531</b>	<b>11,040,018</b>	<b>10,790,018</b>	<b>11,044,393</b>	<b>11,298,768</b>	<b>55,474,728</b>

## Intervention Area 14

IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>Domestic market access improved</b>										
D		5,000 km of rural feeder roads rehabilitated/ upgraded	kms	5,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	250,000,000
		7,500 km of rural feeder roads spot-improved	kms	7,500	18,750,000	18,750,000	18,750,000	18,750,000	18,750,000	93,750,000
		Rural cold storage facilities established	MT	5,000	1,811,427	1,811,427	1,811,427	1,811,427	1,811,427	9,057,134
		Rural market facilities established and rehabilitated	facilities	251	1,050,950	1,257,933	1,501,201	1,374,665	1,490,000	6,674,749
		Rural market facilities rehabilitated	centres	316	3,000,000	3,000,000	3,000,000	3,000,000	3,800,000	15,800,000
<b>Effectiveness, scope and fairness of contract farming improved</b>										
C		Capacity of FOs to engage in contract farming enhanced	FO's	550	196,600	198,100	197,100	197,600	196,100	985,500
		Contract Farming strategy disseminated / stakeholders sensitised	FO's	1,000	196,700	246,700	246,700	246,700	196,700	1,133,500
		Increased number of farmers operating under contract farming arrangements	farmers	100,000	397,800	397,800	397,800	397,800	397,800	1,989,000
<b>Enabling environment for agri-finance strengthened and specific policy instruments established.</b>										
A		Increased incremental value of warehouse receipt financing	lump sum	5	100,000	0	0	0	0	100,000
<b>MARKET INFO availability and use enhanced</b>										
A		ICT-based market information system operational	systems	1	978,888	978,888	978,888	978,888	978,888	4,894,442
C		Farmers able to access and use market information systems	farmers	1,500,000	613,968	1,100,000	1,613,968	2,100,000	3,113,968	8,541,904
<b>Regional and international trade facilitated</b>										
A		Barcode institution established	institution	1	0	0	0	0	62,857	62,857
		Government staff trained on trade issues	lump sum	1	225,936	225,936	225,936	225,936	225,936	1,129,678
		Non-trade barrier database established	database	1	0	253,768	0	0	0	253,768
		Trade bans and non-trade barriers reduced	lump sum	1	158,612	158,612	158,612	158,612	158,612	793,060
		Trade-related policies updated	lump sum	1	366,586	368,053	369,519	240,942	240,942	1,586,042
D		Active international trade promotion undertaken	lump sum	1	2,031,563	2,129,340	2,227,117	1,757,787	1,738,231	9,884,037
<b>Scope and efficiency of ComEX and WR systems enhanced</b>										
A		Increased incremental value of warehouse receipt financing	USD	50,000,000	295,566	345,566	295,566	295,566	295,566	1,527,831



IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
	D	400,000 MT additional quality storage capacity established	MT	400,000	26,850,000	26,780,000	18,950,000	15,050,000	11,150,000	98,780,000
		Farmers and SMEs trained in warehouse receipt systems and commodity exchanges	entities	500	100,000	100,000	100,000	175,000	175,000	650,000
		Increased incremental value of warehouse receipt financing	entities	1,551	1,075,548	2,053,319	2,542,204	2,542,204	2,542,204	10,755,480
<b>Transparent and rules-based market and trade policies</b>										
	A	ADMARC successfully reformed	studies	2	1,100,000	1,000,000	0	0	0	2,100,000
		Analytical capacity strengthened	trainings	6	75,644	75,644	75,644	15,644	15,644	258,222
		Pricing policy developed	policy	1	100,000	155,873	0	0	0	255,873
		Private sector consultation mechanism established	meetings	25	192,062	192,062	192,062	192,062	192,062	960,311
<b>Grand Total</b>					<b>2,321,091</b>	<b>109,667,850</b>	<b>111,579,020</b>	<b>99,510,834</b>	<b>97,531,938</b>	<b>521,923,387</b>

## Intervention Area 15

IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>Agribusiness investment promotion and PPPs implemented</b>										
	D	36 abattoirs (rural/urban) established	abattoirs	36	155,000	255,000	255,000	330,000	180,000	1,175,000
		5 special economic zones for agribusiness developed	zones	5	473,733	523,733	523,733	822,937	1,237,982	3,582,119
		6 commodity value chain platforms established; existing platform functional	platforms	10	622,349	722,349	822,349	922,349	1,022,349	4,111,745
		Agro-processors connected to electric.	SMEs	75	1,200,000	2,000,000	2,000,000	1,200,000	1,100,000	7,500,000
		Investment commitments under New Alliance fully implemented	percent	100	29,600,000	29,600,000	29,600,000	29,600,000	29,600,000	148,000,000
		Annual agribusiness investment/fora and fairs at national and district levels	lump sum	5	190,000	190,000	190,000	190,000	190,000	950,000
<b>Enabling agribusiness environment and public-private dialogue strengthened</b>										
	A	Reg. framework + support institutions for cotton/tobacco strengthened	lump sum	1	70,000	170,000	170,000	20,000	70,000	500,000
		High-level public-private coordination forums established and effective	meetings	20	54,000	54,000	54,000	54,000	54,000	270,000
		National Agricultural Fair grounds and centre for excellence established	lump sum	1	0	0	200,000	100,000	100,000	400,000
		Tax and non-tax incentive mechanisms developed	lump sum	1	0	50,000	100,000	0	0	150,000
<b>Principles for Responsible Agricultural Investments (PRAI) mainstreamed</b>										
	A	Awareness creation and outreach activities conducted	investments	20	60,000	50,000	50,000	50,000	50,000	260,000
		Procedures and guidelines developed and adopted	investments	20	150,000	0	0	0	0	150,000
<b>Technical and Business Skills of Cooperatives and SMEs in agribusiness enhanced</b>										
	D	150 trainings for coops on various tech/business aspects of value add.	lump sum	150	60,000	60,000	60,000	60,000	60,000	300,000
		Trainings for agribusiness SMEs, women, youth on technical/business	SMEs	300	130,000	140,000	140,000	140,000	140,000	690,000
		Business mentorship for 2,000 youths/ women agribusiness entrepreneurs facilitated	people	2,000	800,000	800,000	800,000	800,000	800,000	4,000,000
		Training of SMEs	SMEs	400	13,968	13,968	13,968	13,968	13,968	69,841
		150 trainings for coops in agribusiness management	lump sum	150	60,000	60,000	60,000	60,000	60,000	300,000
<b>Grand Total</b>					<b>33,639,050</b>	<b>34,689,050</b>	<b>35,039,050</b>	<b>34,363,254</b>	<b>34,678,299</b>	<b>172,408,705</b>

## Intervention Area 16

IO	P	Outputs	Unit	Target	Cost Y1	Cost Y2	Cost Y3	Cost Y4	Cost Y5	Total cost
<b>Enabling environment for agri-finance strengthened and specific policy instruments established.</b>										
A		Establish movable collateral registry	system	1	100,000	0	0	0	0	100,000
		Feasibility studies and expert consultations on new instruments to foster access to finance conducted	lump sum	5	100,000	0	0	0	0	100,000
		Strengthen enabling environment	lump sum	5	0	100,000	0	0	0	100,000
D		Feasibility studies and expert consultations on new instruments to foster access to finance conducted	studies	3	100,000	0	0	0	0	100,000
		Feasibility studies and expert consultations on new instruments to foster access to finance conducted	studies	3	150,000	0	0	0	0	150,000
		Technical assistance, refinance and risk sharing facilities established	lump sum	1	600,000	7,500,000	12,400,000	400,000	400,000	21,300,000
<b>Farmers, women and youth able to use financial services effectively</b>										
C		Farmers, women and youth groups capacitated on financial literacy and management skills	groups	600	600,000	600,000	600,000	600,000	600,000	3,000,000
		Financial literacy campaigns conducted	lump sum	5	26,600	35,000	42,000	56,000	140,000	299,600
		Financial literacy campaigns conducted targeting 220,000 farmers	lump sum	5	66,285	64,190	0	0	0	130,475
<b>Investment support provided to agribusiness SMEs, with priority to women and youth</b>										
D		140 SMEs (with priority to women and youth) annually receive matching grants for business start-up	SMEs	700	586,044	586,044	586,044	586,044	586,044	2,930,219
		50 SMEs (with priority to women and youth) annually received matching grants for business expansion through environmentally friendly investments.	SMEs	250	500,000	500,000	500,000	500,000	500,000	2,500,000
<b>Grand Total</b>				<b>132</b>	<b>2,828,929</b>	<b>9,385,234</b>	<b>14,128,044</b>	<b>2,142,044</b>	<b>2,226,044</b>	<b>30,710,294</b>

## Annex 5: DCAFS Funded Projects

Financier	Program/ Project Name	Budget (USD Million)	Project Period	Disbursement Last Year USD Million	Disbursement to date (USD Million)	Possible carry over for NAIP
WB	Shire River Basin Management Project	125.000	2012-2018	20.83	70.30	54.70
WB	Malawi Drought and Resilience Recovery Project	104.000	2016-2018	0.00	0.00	104.00
WB	Malawi Floods Emergency Recovery Project	80.000	2015-2019	15.00	40.00	40.00
DFID	Enhancing Community Resilience (Climate Change)	43.474	N/A	10.64	35.67	7.80
IFAD	SAPP	41.303	2012-2021	2.96	11.72	29.58
USAID	United in Building and Advancing Life Expectations (UBALE)	40.000	2014-2019	10.29	12.29	27.71
AfDB	SIVAP-GAFSP	39.600	2013-2018	6.10	18.31	21.29
USAID	Agricultural Diversification	38.000	2016-2021	0.00	3.11	34.89
EU	Support to the implementation of the GBA	37.200	2014-2019	0.81	0.81	36.39
EU	Rural Roads improvement Program (RrIMP)	37.100	2016-2020	0.00	0.00	37.10
RNE	ASWAp-SP	33.000	2013-2017	3.85	7.69	25.31
Flanders	Support to ASWAp-SP	17.900	2013-2020		9.65	8.25
EU	Support to the implementation of the ASWAp (MDIF + other technical cooperation)	32.210	2013-2017	0.16	15.60	16.61
WB	ASWAp-SP (Agricultural Sector Wide Approach - Support Project)/AF1	30.000	2012-2017	3.39	17.01	12.99
WB	Agricultural Productivity Program for Southern Africa (APPSA)	29.800	2013-2019	4.97	4.62	25.18
IFAD	RLEEP	25.288	2009-2017	8.08	14.54	10.75
AfDB	AIYAP	22.400	2012-2017		0.00	22.40
USAID	Malawi Improved Seed Systems and Technologies	21.000	2014-2018	6.00	12.90	8.10
DFID	Malawi Agriculture Catalytic Fund (MACF)	20.953	2013-2021	4.01	11.01	9.94
USAID	Njira Project	20.000	2014-2019	4.26	8.00	12.00
EU	Farm Income Diversification Program Phase II (FIDP II)	19.080	2015-2019	0.90	0.90	18.18
AfDB	FCRBSP	16.800	2017-2018		0.00	16.80
Irish Aid	ASWAp-SP MDTF	15.939	2013-2016	3.94	15.94	0.00
RNE	NASFAM Strategic Development Plan III	15.380	2012-2017	2.77	11.28	4.10
USAID	Strengthening Agriculture and Nutrition Extension Services	15.000	2015-2020	0.44	3.50	11.50
UNDP	Green Climate Fund	12.300	N/A			12.30
RNE	We Effect - Malawi Lake Basin Program	12.292	2014 - 2019	1.72	5.51	6.78

Financier	Program/ Project Name	Budget (USD Million)	Project Period	Disbursement Last Year USD Million	Disbursement to date (USD Million)	Possible carry over for NAIP
DFID	Malawi Oilseeds Sector Transformation Program (MOST)	11.830	2013-2018	3.16	6.73	5.11
RNE	TLC Management for Adaptation to Climate Change	11.230	2014 - 2019	1.78	5.81	5.42
RNE	Development Fund - Sustainable Agriculture Lead Farmer Program	10.769	2014 - 2019	2.61	5.05	5.72
Germany	More Income and Employment in Rural Areas (MIERA)	10.400	2015 - 2019	0.00	3.80	6.60
Irish Aid	Root and Tuber Crops for Agricultural Transformation in Malawi (RTC-ACTION Malawi)	10.130	2016-2020	0.00	1.02	9.11
Irish Aid	Malawi Seed Industry Development Project Phase II (MSIDP II)	10.130	2016-2020	0.00	1.02	9.11
USAID	Malawi Resilience Program	10.000	2016-2017	0.00	10.00	0.00
DFID	DFID-Dairy (SHMPA) + Heifer International	9.663	2014-2017	2.83	6.60	3.06
EU	Global Climate Change Alliance (GCCA)	8.480	2015-2019	0.00	0.00	8.48
Germany	Food and Nutrition Security Program (FNSP)(part of German funded global program)	8.250	2014-2017	0.00	0.38	7.87
DFID	Malawi Innovation Challenge Fund (MICF)	8.000	2013-2019	2.05	3.81	4.20
RNE	AICC - Malawi Agriculture Partnership (MAP)	8.000	2014-2019	1.42	3.35	4.65
WFP	Home grown school feeding to support resilience building	8.000	2014-2017	0.05	1.14	6.86
Germany	Green Innovation Centres in the Agriculture and Food Sector	8.000	2015 - 2019	0.00	3.20	4.80
USAID	Fisheries Integration of Society and Habitats (FISH)	6.950	2014 -019	3.50	4.56	2.39
FAO	Strengthening Community Resilience to Climate Change	6.084	2015-2019	0.11	1.41	4.68
USAID	Borlaug Higher Education Agricultural Research and Development (BHEARD)	6.000	2013-2018	2.30	4.30	1.70
Flanders	Marketing Capacity Building Project for Smallholder Farmers	5.850	2015-2020	1.46	1.46	4.39
JICA	Project for Promoting Catchment Management Activities in Middle Shire (COVAMS II)	5.674	2013-2018	1.49	4.61	1.07
Flanders	Marketing Capacity Building Project for Smallholder Farmers	4.998	2015 -2020	0.00	0.70	4.30
JICA	Enhancing Capacity for Medium Scale Irrigation Scheme Development, O&M	4.441	2015-2020	0.53	1.52	2.92
Flanders	Strengthening Farmer Organizations and Rural Structured Trade Mechanisms	3.899	2014-2018	1.17	2.89	1.01
WFP	Food Assistance for Asset Creation Program to Support Resilience Building	3.600	2014-2017	0.28	0.38	3.22
WFP	Purchase for Progress (P4P) to promote resilience building	3.346	2014-2017	0.68	1.12	2.23
EU	Promoting Responsible Land Governance for Sustainable Agriculture in Malawi	3.180	2015-2018	0.00	0.00	3.18
USAID	New Alliance Policy Acceleration Support (NAPAS) Activity	3.138	2014-2017	1.08	1.18	1.96
FAO	Emergency support to smallholder farmers affected by El Niño in Southern Africa	2.820	2016-2017	0.00	0.00	2.82
WFP	Rural Resilience (R4) Initiative	2.580	2014-2017	0.10	0.15	2.43

Financier	Program/ Project Name	Budget (USD Million)	Project Period	Disbursement Last Year USD Million	Disbursement to date (USD Million)	Possible carry over for NAIP
FAO	Pesticide Risk Reduction in Malawi (FSP)	2.550	2015- 2018	0.00	1.07	1.48
USAID	ASWAp-SP Multi Donor Trust Fund	2.500	2013-2018	0.00	2.50	0.00
JICA	Supplementary Budget (WFP)	2.500	2015	2.50	2.50	0.00
DFID	Support to Program monitoring and Evaluation	2.027	2011-2017	0.69	1.60	0.43
USAID	Feed the Future Bridging Activity	2.000	2016-2018	0.00	3.50	-1.50
Irish Aid	Enhancing Smallholder Productivity and Returns through Climate Smart Agriculture (CSA)	1.940	2016-2021	0.23	0.23	1.71
Flanders	Agroforestry Food Security Program II	1.820	2013- 2018	0.47	0.57	1.25
Flanders	Right to Food	1.625	2014- 2019	0.28	1.01	0.62
Flanders	Scaling up Radio and ICT's in enhancing Extension Delivery	1.358	2014- 2019	0.26	0.90	0.46
FAO	Enhanced Agriculture Emergency Response to tackle the negative effects of El Niño	1.111	2016- 2018	0.00	0.00	1.11
USAID	Development Credit Authority (DCA)	1.056	2016-2021	0.00	1.10	-0.04
USAID	Development Credit Authority (DCA)	1.052	2013- 2019	N/A	N/A	
FAO	Strength integrated adaptation planning and implementation in Southern Africa smallholder ag	0.855	2016- 2019	0.00	0.00	0.85
Flanders	Support to Livestock Extension and Training Services	0.845	2012- 2015	0.00	0.16	0.69
Flanders	Assessing/ enhancing the capacity, performance/ impact of pluralistic ag extension system in M.	0.504	2016-2019	0.00	0.19	0.31
FAO	Incr. resilience to climate change in the fishery sector of southern Lake Malawi and Malombe	0.470	2016- 2017	0.00	0.04	0.43
AfDB	SIVAP-ADF	0.354	2013- 2018		0.26	0.09
Flanders	Strengthening District Stakeholder Panels For Improved Extension Service Delivery.	0.260	2013- 2015	0.04	0.14	0.12
FAO	Strengthening linkages between small actors and buyers in the Roots and Tubers sector in Africa	0.192	2014- 2018	0.00	0.12	0.07
FAO	National Adaptation Plans - Climate Smart Agriculture	0.074	2014- 2017	0.03	0.05	0.03
FAO	Enhanced Capacities for Effective Mobilization/Use of Resources for Food Security and Nutrition	0.066	2014- 2018	0.00	0.09	-0.03
Mary' Meals	School Feeding Program	6.090	2017-2018	0.00	0.00	6.09
China	TA_ South-South Cooperation (SSC) with the PR China in support of ASWAp: Phase II	1.139	2016- 2018	NA	N/A	N/A
	<b>Total</b>	<b>1172.848</b>	<b>2015.000</b>	<b>142.204</b>	<b>422.556</b>	<b>748.101</b>

## DCAFS Pipeline Projects

Financier	Program/ Project Name	Budget (USD Million)	Project Period	Disbursement Last Year USD Million	Disbursement to date (USD Million)	Possible carry over for NAIP
WB	Agricultural Commercialization Project	95.00	2017-2023	0	0	95.00
WB	Shire Valley Irrigation Transformation Project	265.00	2017-2026	0	0	265.00
WB	Nutrition sensitive Agriculture Project	3.00	2018-2020	0	0	3.00
EU	Afikepo (Nutrition Enhancement)	74.20	2017- 2022	0	0	74.20
EU	Kulima Project	106.00	2017-2022	0	0	106.00
Flanders	Strengthening Farmer Groups	1.06	2017-2022	0	0	1.06
IFAD	Rural Finance Project		TBA	0	0	
	<b>Total</b>	<b>544.26</b>				<b>544.26</b>

## Appendix 5.1: Mapping of DCAFS projects by NAIP pillar

Donor	NAIP program	Program A			Program B			Program C			Programme D					Total project Cost	
		Public mgt system	Capacity building	HIV & AIDS & Nutrition	Gender	Risk mgt	Diversification	Sustainable Lang mgt	Maize Sufficient	Irrigation and Water mgt	Results & mkt research	Farmer-led extension	Agric. Exports	Agro-processing	Market dvpt		
	<b>Project</b>																
WB	Shire River Basin Management Project	22.875	20.125			10.750			17.375	9.375	44.500						125.00
WB	Malawi Drought and Resilience Recovery Project					3.000			55.000								58.00
WB	Malawi Floods Emergency Recovery Project					4.000			22.000								26.00
DFID	Enhancing Community Resilience/ Climate Change					11.000			11.000	22.000							44.00
IFAD	SAPP	2.065	2.891	0.000	2.065	0.000	5.782	0.000	0.000	0.000	0.000	3.717	24.782	0.000	0.000	0.000	41.30
USAID	United in Building and Advancing Life Expectations (UBALE)		4.000		2.000	4.000	16.000	6.000	6.000		4.000						40.00
AfDB	SIVAP-GAFSP		7.470								26.460			6.710			40.64
USAID	Agricultural Diversification					0.938	18.760	4.690	0.704		29.760			2.345	3.752	11.725	42.91
EU	Support to the implementation of the GBA	2.976	4.464														37.20
EU	Rural Roads improvement Program (RiMP)	2.412	2.412													32.277	37.10
RNE	ASWAp-SP	2.145	1.980	0.017	0.017	0.990	1.980	0.541	10.897	0.000	0.000	0.000	1.201	0.000	0.000	12.936	32.70
Flanders	Support to ASWAp-SP		4.475			4.475	4.475									4.475	17.90
EU	Support to the implementation of the ASWAp (MDTF+ other technical cooperation)	2.094	1.933	0.161	0.161	0.966	1.933	0.528	10.636	0.000	0.000	0.000	1.172	0.000	0.000	12.626	32.21
WB	ASWAp-SP (Agricultural Sector Wide Approach - Support Project) AF1	2.010						3.000								24.990	30.00
WB	Agricultural Productivity Program for Southern Africa (APPSA)	14.870	2.891									8.582	3.457				29.80
IFAD	RLEEP	2.529		0.000	1.517	0.000	0.000	0.000	0.000	0.000	0.000	2.023	1.517	0.000	10.115	7.586	25.29



	NAIP program	Program A			Program B			Program C			Programme D				
		Public mgt system	Capacity building	HIV & AIDS & Nutrition	Gender	Risk mgt	Diversification	Sustainable Lang mgt	Maize Sufficient	Irrigation and Water mgt	Results & mkt research	Framed-led extension	Agric. Exports	Agro-processing	Market dvpt
AfDB	AIYAP		1.620							15.600			5.190		22.41
USAID	Malawi Improved Seed Systems and Technologies		1.050		1.050		5.250		5.250		4.200			5.250	22.05
DFID	Malawi Agriculture Catalytic Fund (MACF)									16.915				4.038	20.95
USAID	Njira Project		2.000		1.000	2.400	4.000	4.000		3.600		2.000			19.00
EU	Farm Income Diversification Program Phase II (FIDP II)		4.388											4.848	18.93
AfDB	FCRBSP								16.800						16.80
Irish Aid	ASWAp-SP MDTF	1.040		0.800	0.080	0.480	0.260	0.960	5.300	0.000	0.000	0.580	0.000	6.248	15.75
RNE	NASFAM Strategic Development Plan III		1.924	0.085	0.500	0.900	1.200	1.400	0.900	0.100		2.500	1.000	1.017	12.43
USAID	Strengthening Agriculture and Nutrition Extension Services		5.700									9.300			15.00
UNDP	Green Climate Fund					12.300									12.30
RNE	We Effect - Malawi Lake Basin Program		0.750		1.230		2.460	1.230				1.230	0.500	0.615	8.02
DFID	Malawi Oilseeds Sector Transformation Program (MOST)													11.830	11.83
RNE	TLC Management for Adaptation to Climate Change		0.720		0.009	0.180	2.180	4.174		0.886		0.720	0.860	0.450	10.18
RNE	Development Fund - Sustainable Agriculture Lead Farmer Program		3.008	0.050	0.450		2.450	1.580		0.250		0.540	1.011	0.500	9.84
Germany	More Income and Employment in Rural Areas (MIERA)	0.250	2.500										2.750	5.000	10.50
Irish Aid	Root and Tuber Crops For Agricultural Transformation in Malawi (RTC-ACTION Malawi)							5.065			5.065				10.13
Irish Aid	Malawi Seed Industry Development Project Phase II (MSIDP II)							5.065			5.065				10.13

	NAIP program	Program A			Program B			Program C			Programme D					
		Public mgt system	Capacity building	HIV & AIDS & Nutrition	Gender	Risk mgt	Diversification	Sustainable Lang mgt	Maize Sufficient	Irrigation and Water mgt	Results & mkt research	Extension	Agri. Exports	Agro-processing	Market dvpt	Total project Cost
USAID	Malawi Resilience Program							5.000		5.000						10.00
DFID	DFID-Dairy (SHMPA) + Heifer International						9.660									9.66
EU	Global Climate Change Alliance (GCCA)		2.374							3.053						8.48
Germany	Food and Nutrition Security Program (FNSP) (part of German funded global program)		4.000		0.200		0.800		1.400							6.40
DFID	Malawi Innovation Challenge Fund (MICF)															0.00
RNE	AICC - Malawi Agriculture Partnership (MAP)		0.950	0.150	0.250	1.700	0.700	1.200			1.100				2.050	8.10
WFP	Home grown school feeding to support resilience building		0.560		0.320	6.800									0.320	8.00
Germany	Green Innovation Centres in the Agriculture and Food Sector (part of a German funded global program)		2.000			3.000				2.000					0.500	8.00
USAID	Fisheries Integration of Society & Habitats (FISH)		1.738	0.348	0.348	0.695	1.738				1.043				0.695	6.95
FAO	Strengthening Community Resilience to Climate Change	1.217	1.217	0.304	0.304	0.304	0.456	0.304		0.456	0.608					6.08
USAID	Borlaug Higher Education Agricultural Research and Development (BHEARD)		6.000													6.00
Flanders	Marketing Capacity Building Project for Smallholder Farmers										2.925					5.85
JICA	Project for Promoting Catchment Management Activities in Middle Shire (COVAMS II)						5.674									5.67
Flanders	Marketing Capacity Building Project for Smallholder Farmers	0.250	0.250	0.250	0.250	0.750					0.250				1.249	4.998

NAIP program	Program A			Program B			Program C			Programme D					
	Public mgt system	Capacity building	HIV & AIDS & Nutrition	Gender	Risk mgt	Diversification	Sustainable Lang mgt	Maize Sufficient	Irrigation and Water mgt	Results & mkt research	Farmer-led extension	Agric. Exports	Agro-processing	Market dvpt	Total project Cost
JICA							4.444		4.444						4.444
Flanders														3.899	3.899
WFP		0.360			1.440	0.360	0.540		0.540		0.360				3.600
WFP															0.000
EU		1.049					1.049								3.148
USAID		3.138													3.138
FAO					0.705	0.705		0.705						0.705	2.820
WFP		0.774			1.806										2.580
FAO							2.040			0.510					2.550
USAID		0.165	0.001	0.001	0.075	0.150	0.041	0.826	0.000	0.091	0.000	0.000	0.980	0.980	2.480
JICA															0.000
DFID															0.000
USAID						1.200	0.200							0.600	2.000
Irish Aid							1.940								1.940
Flanders							0.910				0.910				1.820
Flanders															0.000

	NAIP program	Program A			Program B			Program C					Programme D					Total project Cost
		Public mgt system	Capacity building	HIV & AIDS & Nutrition	Gender	Risk mgt	Diversification	Sustainable Lang mgt	Maize Sufficient	Irrigation and Water mgt	Results & mkt research	Frame-led extension	Agric. Exports	Agro-processing	Market dvpt			
Flanders	Scaling up Radio and ICT's in enhancing Extension Delivery										1.358					1.358		
FAO	Enhanced Agriculture Emergency Response to tackle the negative effects of El Niño in Malawi 2016					0.278	0.278	0.278							0.278	1.112		
USAID	Development Credit Authority (DCA)		1.056													1.056		
USAID	Development Credit Authority (DCA)		1.052													1.052		
FAO	Strengthening integrated adaptation planning and implementation in Southern Africa smallholder agric		0.855													0.855		
Flanders	Support to Livestock Extension and Training Services															0.000		
Flanders	Assessing and enhancing the capacity, performance and impact of pluralistic agricultural extension system in Malawi										0.504					0.504		
FAO	Increasing resilience to climate change in the fishery sector of southern Lake Malawi and Malombe					0.470										0.470		
AfDB	SIVAP-ADF										0.350					0.350		
Flanders	Strengthening District Stakeholder Panels For Improved Extension Service Delivery.															0.000		
FAO	Strengthening linkages between small actors and buyers in the Roots and Tubers sector in Africa						0.048					0.048	0.048		0.048	0.192		
FAO	National Adaptation Plans - Climate Smart Agriculture	0.015	0.015			0.044										0.074		

	NAIP program	Program A			Program B			Program C					Programme D					Total project Cost
		Public mgt system	Capacity building	HIV & AIDS& Nutrition	Gender	Risk mgt	Diversification	Sustainable Lang mgt	Maize Sufficient	Irrigation and Water mgt	Results & mkt research	Farmer-led extension	Agric. Exports	Agro-processing	Market dvpt			
FAO	Enhanced Capacities for Effective Mobilization and Use of Resources for Food Security and Nutrition	0.007	0.013			0.013	0.026									0.066		
Mary's Meals	School Feeding Program			6.090												6.090		
China	Technical Assistance _South-South Cooperation (SSC) with the PR China in support of ASWAp: Phase II						1.139									1.139		
	<b>Total Resource Allocation by Intervention Areas</b>	57.97	103.85	8.26	11.75	62.61	105.02	158.62	162.87	29.27	62.66	8.14	39.23	159.97	1049.23			
	<b>Totals Resource Allocation by NAIP Program</b>		161.82			82.62					597.46			207.34				
	<b>Program Resource Envelope as %age of Total</b>		15.42			7.87					56.94			19.76	100.00			
	<b>Pipeline Projects</b>																	
WB	Agricultural Commercialization Project													95	95.00			
WB	Shire Valley Irrigation Transformation Project							265							265.00			
WB	Nutrition sensitive Agriculture Project					3									3.00			
EU	Afikepo (Nutrition Enhancement)					74.2									74.20			
EU	Kulima		10.6			10.6	74				10.6				105.80			
Flanders	Strengthening Farmer Groups										1.06				1.060			
	<b>Total Pipeline Resource Allocation by NAIP Prog.</b>		10.6			87.8					350.66			95	544.06			
	<b>Pipeline Program Resource Envelope % of Total</b>		1.95			16.14					64.45			17.46	100.00			
	<b>GRAND TOTALS BY NAIP PROGRAM</b>		172.42			170.42					948.12			302.34	1593.29			
	<b>% Program Resource Allocations</b>		10.82			10.70					59.51			18.98	100.00			

## Appendix 5.2: Priorities of Larger (USD 10 million +) DCAFS Financed Projects

Project	Funder	Coverage	Major Activities
Multi Donor Trust Fund (ASWAp-SP)	Various	All districts; the roads improvement component covers 10 districts	The project targets 1.2 million farmers, 50% of whom female. It promotes lead farmer concepts in extension service delivery; promoting legumes adoption; promoting conservation farming; rehabilitating rural roads; capacity building in land administration and management services
Malawi Drought Recovery and Resilience Project	World Bank	T24 districts for climate smart component 15 districts for resilience component	Procurement and distribution of maize to meet immediate food security needs; providing inputs for assets creation activities; promotion of drought tolerant crops and livestock distribution; improvement of critical irrigation schemes; catchment area conservation; water supply improvement; improving early warning systems; amongst others
Agricultural Productivity Program for Southern Africa (APPSA)	World Bank	5 districts	Technology generation, including upgrading of research infrastructure; capacity development; and strengthening of seed, regulatory and related services; amongst others
The Malawi Agricultural Infrastructure and Youth in Agribusiness Project (AIYAP)	AfDB	2 districts of Nkhata Bay and Nkhota-Kota	Developing two large scale irrigation targeting 10,000 beneficiaries with special focus on youth (about 50%); promoting youth ownership of agribusiness; and ensuring youth access to funding/credit through seed funds, amongst others.
United in Building and Advancing Life Expectations (UBALE)	USAID	Several districts	Targets 250,000 farmers and successfully linking them to markets; increasing resiliency to shocks for households and communities; and supporting systems and structures for reducing chronic malnutrition and food insecurity while building resilience.
Shire Valley Irrigation Project, Phase I	WB	2 districts of Chikwawa and Nsanje	Establishing market-linked smallholder farming ventures; and developing professionally operated irrigation services.
Green Belt Authority (GBA)	EU	Mostly lake shore districts	Institutional capacity building (National Irrigation Fund); grants for the medium scale irrigation schemes, etc.
Farm Income Diversification Program (FIDP) II	EU	Operates in 12 districts in Northern, Central and Southern Region	Supporting smallholder agriculture production and diversification; agri-business development; social and farmer group development.
Sustainable Agricultural Production Program (SAPP)	IFAD	Operates in 6 districts, Lilongwe and Chitipa	Targets 200,000 farmers in undertaking adaptive research, knowledge management, farmer access to seed and promotion GAPs
Feed the Future Malawi Agricultural Diversification Activity (AgDiv)	USAID	Mchinji, Lilongwe Rural, Dedza, Ntcheu, Balaka, Machinga, Blantyre Rural, and Mangochi districts	Fosters inclusive and sustainable growth and improves the nutritional status of women and children through a proven nutrition-sensitive approach of layering agriculture and nutrition behaviour change interventions in rural communities. Increases the competitiveness of high-value, nutrient-rich value chains through support for agricultural enterprises and increased access to markets and finance.
The Enhancing Community Resilience Program (ECRP)	DFID		Incorporating natural resource management and risk reduction, and community capacity building in advocacy
Feed the Future Malawi Agricultural Diversification Activity (AgDiv)	USAID	Mchinji, Lilongwe Rural, Dedza, Ntcheu, Balaka, Machinga, Blantyre Rural, and Mangochi districts	The Feed the Future Malawi AgDiv for Incomes and Nutrition activity fosters inclusive and sustainable growth in Malawi's agricultural sector and improves the nutritional status of women and children under five through a proven nutrition-sensitive approach of layering agriculture and nutrition behaviour change interventions in rural communities, while at the same time increasing the competitiveness of high-value, nutrient-rich value chains through support for agricultural enterprises and increased access to markets and finance.

### Appendix 5.3: DoNUTS funded projects,

Program	Funding Partner	Budget	Time Frame	Interventions
Pathways to Sustainable Food Security Social Protection	USAID	USD 30m	2015-2020	Nutrition education and community sanitation and hygiene; and strengthening nutrition governance
Organised Network of Services for Everyone's Health	USAID	USD 105m	2016-2022	Primary health care, management of moderate and severe malnutrition; and strengthening nutrition governance
Health Sector Support	DFID	GBP 13m	2016-2020	Primary health care management of moderate and severe malnutrition; and water and sanitation.
One World No Hunger	KFW	EUR 1 m	2017-2022	Nutrition education, community sanitation and hygiene; primary health care, management of moderate and severe malnutrition; maternal and young child feeding and care practices

Source: DoNUTS data base

### Appendix 5.4: Projects Supporting TIP SWAP

Program	Financier	Objective/activities
Agro-processing and Value addition project	Enhanced Integrated Framework (EIF)	Seeks to develop regulatory framework for Agro-Processing Special Economic Zones
The Business Enabling Environment Project	EIF	Establishing MITC as a one-stop shop for investors. Reviewing and updating the Investment and Promotion Act Establishing a MITC office in Mozambique
A Manufactures Strategy	UNDP & EU	Investor Profile Mapping for the manufactures sub-sector; Developing an Investor Facilitation Program for the manufactures sub-cluster Establishing of industrial forums for the manufactures sub-cluster
Sugar Cane Products Strategy	EU	Feeder roads to reduce cane haulage distance for smallholder growers Smallholder irrigation schemes development in Dwangwa
Malawi Oilseed Sector Transformation Program	DFID & USAID	Investor profiles and marketing grant schemes; improved extension services amongst others
Competitiveness and Job Creation Support Project/Skills Development Project	ILO, World Bank	Skills deficit at various stages of the value chain

Source: MoIT

## Annex 6: Policy and Institutional Framework

### Introduction

1. Malawi has a very wide range of sectoral and sub-sectoral policies which are usually for a five-year period, though not always systematically updated. Many of these are linked to global, continental and regional policy frameworks, treaties and commitments. To implement national policies, various plans, investment frameworks and strategies exist. While the NAIP is the implementation tool of the National Agricultural Policy (NAP), it also responds to a number of adjacent sectoral policies that are: (i) relevant for achieving its objectives; and (ii) whose objectives depend to a significant extent on agriculture. The alignment of the NAIP with adjacent policy frameworks is guided by the need to: (i) ensure consistency and coherence; (ii) address critical resource gaps in overlapping policy and investment areas; and (iii) avoid multiple programming of resources for the same activities in various investment frameworks. It is also important in view of Malawi's commitments under the Malabo Declaration which stretch beyond the agricultural sector.
2. In view of the large number of policies, strategies, agreements and commitments with relevance to the NAIP, a comprehensive coverage is beyond the scope of this annex. Rather, the most important and relevant policy frameworks and strategies at international, continental, regional and national level are described, in that order.

### 6.1 International Policy Frameworks

3. Malawi is signatory to the main international commitments related to agriculture, including the **Sustainable Development Goals** (SDGs, 2015) and the Malabo Declaration (2014). The SDGs are globally agreed upon goals to be achieved by 2030. While the agricultural sector is mainly captured under SDG 2 (Zero Hunger), several objectives and interventions of other goals are directly relevant to the agricultural sector, including 5, 6, 12, 14, and 15. The targets include achieving zero hunger, gender equality, empowerment to women and girls, availability and sustainable management of water and sanitation for all, sustainable consumption and production patterns, that water bodies are conserved and sustainably used; and that terrestrial ecosystems are protected, restored and promoted, forests managed sustainably, desertification combatted and land degradation and biodiversity losses are halted. This calls for integrated and holistic approaches, looking beyond one sector at a time.
4. Notwithstanding its very low emissions, Malawi is a Party to the **United Nations Framework Convention on Climate Change** (UNFCCC) and the **Paris Climate Agreement** of December 2015. Under these agreements Malawi has made firm commitments to move the country's development pathways towards a green economy based on national circumstances and capabilities. These commitments are defined under Malawi's **Intended Nationally Determined Contribution** (INDC) in direct response to decisions adopted at the 19th and 20th Sessions of the Conference of the Parties (COP19 and 20). The INDC aims at achieving the objective of the UNFCCC as set out in Article 2 of the Convention and also contribute to sustainable development. These international policy commitments on climate change have guided the development of the national climate change and resilience policies (see below), with which the NAIP is aligned. Alignment with the major global climate agreements is also significant in terms of potential access to climate funding, for example through the Green Climate Fund (GCF).
5. The **Enhanced Integrated Framework (EIF)** is a global initiative of the World Trade Organisation (WTO) which brings together partners and resources to support least developed countries (LDCs) in harnessing trade for poverty reduction, inclusive growth and sustainable development. It provides financial and technical support to build trade capacity in 50 countries of which Malawi is one. The EIF is an aid-for-trade program designed to help participating countries develop sustainable trade strategies. The EIF is recognized under Goal 8a of SDG.



6. The EIF has supported Malawi in identifying and quantifying the trade costs constraining Malawi's competitiveness within regional and international markets. The TIP-SWAp (see below) was launched to support the implementation of the NES. Under the TIP-SWAp, a Joint Sector Strategy was developed to support the incorporation of trade activities into the sector strategies. Targeted strategic support in certain sectors has been provided with a strong emphasis on value chain addition and increased productivity. The NAIP aligns with the EIF mainly through Program D and IAs 14 and 15. It pursues better integration between the agricultural and trade agendas through an active role of MoITT in NAIP implementation and the integration of a number of activities and investments related to agricultural trade and exports.
7. **CAADP.** The main goal of CAADP is to enhance agriculture-led economic growth, eliminate hunger, reduce poverty, food and nutrition insecurities, and enable the expansion of exports. The CAADP process seeks to improve agricultural development through coherent a long-term framework that guides the planning and implementation of priority development and investment areas in current and future revisions of the national agricultural development and food security strategy. It helps to identify strategic options and sources of pro-poor growth for the agriculture sector, build knowledge management systems in the sector and embrace peer review mechanisms to enhance collective responsibility and local ownership. The compact sets the context for joint sector policy, budgetary and investment dialogue, and commitments to align, scale up and improve the quality of long-term sector investment. The compact confirms and provides consensus around the goals and priorities that Malawi has set to accelerate agricultural growth and improve FNS, and the partnerships and assistance that are required to achieve these goals. The NAIP is the main instrument to implement the CAADP process at country level.
8. The Scaling Up Nutrition is another global initiative that Malawi is party to, which also aims to support strategic investments and interventions to help eliminate under nutrition

## 6.2 Continental and Regional Agricultural and related Policies and Strategies

9. The **Malabo Declaration** on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods resulted from the AU meeting of heads of state and government in June 2014, already summarized in chapter 2.
10. During the same meeting, the Heads of State also signed the African Union "**Declaration on Nutrition Security** for Inclusive Economic Growth and Sustainable Development in Africa." The Declaration: (i) reaffirms the commitment of the Member States to end hunger by 2025; (ii) commits to bring down child stunting to 10% and underway to 5%, focusing on the first 1000 days is the only window of opportunity during which permanent and irreversible physical and mental damage would be avoided; (iii) commits Member States to positioning this goal as a high-level objective in national development plans and strategies. It further calls on Member States that have not yet done so to consider participation in the study on the Cost of Hunger in Africa; and requests the AU Commission, the RECs and development partners to facilitate establishment of a mechanism to monitor progress towards the elimination of child under-nutrition.
11. Malawi is also a participant in **Compact 2025** which was launched by IFPRI in November 2015 as a new initiative for ending hunger and undernutrition by 2025. It is designed to support countries in achieving the Malabo and SDG long-term targets of eradicating hunger and undernutrition. Compact 2025 brings stakeholders together to set priorities, innovate and learn, fine-tune actions, build on successes, and synthesise shareable lessons in order to accelerate progress. The Compact 2025 Scoping Report of May 2016 reports on a roundtable discussion for assessing how to end hunger and undernutrition in Malawi by 2025. The roundtable identified key knowledge, policy, and implementation gaps as well as opportunities, potential synergies, and priority areas for action.

12. Formulation of the NAIP recognises the SADC **Regional Agricultural Policy** (RAP) of 2013 and its accompanying **Investment and Implementation Plan** for the period 2017-2022. The purpose of the RAP is to “define common agreed objectives and measures to guide, promote and support actions at regional and national levels in the agricultural sector of the SADC Member States in contribution to regional integration and the attainment of the SADC Common Agenda”. The overall objective of the Policy is to contribute to sustainable agricultural growth and socio-economic development. The Policy has four specific objectives each with a number of strategies:
- Enhance sustainable agricultural production, productivity and competitiveness through: (i) improved land administration, use and management; (ii) productivity-enhancing inputs; (iii) farm support systems and services; and (iv) forestry and fisheries development. Aligned with NAIP Program C and IAs 3, 9, 10, 11, 12 and 13.
  - Improve regional and international trade and market access for agricultural products through: (i) improving the efficiency and effectiveness of the region’s input and output markets and stimulating broad farmers’ participation; (ii) improving the regional and international trade environment for agriculture; and (iii) improving the development of agriculture-related market infrastructure. Aligned with NAIP Program D and IAs 10, 14 and 15.
  - Improve private and public-sector engagement and investment in agricultural value-chains through: (i) value chain promotion and mobilisation of financial capital for agriculture, agro-industry and agri-business. Private sector engagement is mainstreamed in the NAIP, especially through Program D and IAs 14, 15 and 16 and through the CAP-F process.
  - Reduce social and economic vulnerability of the region’s population in the context of FNS and the changing economic and climatic environment through: (i) addressing chronic and transitory vulnerability to the diversity of food security risks in a changing economic environment; (ii) addressing climate change, variability and related vulnerability; (iii) mitigating gender-related vulnerability and marginalisation; (iv) mitigating HIV/AIDS related vulnerability and marginalisation; (v) mitigating the vulnerability of migrant/mobile rural people; and (vi) fighting against unemployment and marginalisation of the rural youth. FNS, climate change, vulnerability and gender issues are all mainstreamed in the NAIP as well as incorporated specifically in Program B and IAs 4, 5, 6, and 7
13. The purpose of the Investment and Implementation Plan is to define the financial resources that the region commits to mobilise, the priority areas where investment is to be made, and how that investment will be accessed and utilised by Member States. It also presents avenues by which the region expects to leverage public and private sector financing for the development of agriculture and related sectors. The total cost of the Plan is USD 565 million, to be mobilised through contributions by SADC Member States, PPPs, development partners, etc. Member states have agreed that the funds will be managed following the governance structure, rules and procedures that are/shall be adopted by the SADC ministers responsible for agriculture and food security.
14. The Investment and Implementation Plan defines the means by which the RAP will be implemented. It outlines priority programmes and sub-programmes, where investment needs to be focused. The Investment will be operationalised through an instrument-based implementation mechanism including “facilities”, under which is one or more “windows” that are each supported by one or more “measures”. Through the instrument-based mechanism, a programme, where applicable, can be implemented by drawing financial resources from one or more facilities.

15. The **COMESA Regional Agriculture Policy and Investment Framework (2010-2014)** is the base document from which the **COMESA Regional CAADP Compact** and its accompanying Agriculture Policy and Investment framework have been prepared. These documents define the priority areas for CAADP regional investments and are intended to facilitate investment in areas where individual countries cannot effectively invest alone. It is an overarching framework that:
- Provides guidance to, and expedites, interventions that already exist at regional level, towards enhancing economic growth and food security.
  - Promotes new regional policies and investments where gaps exist.
  - Clarifies synergies and coordination among regional initiatives in agriculture-led economic growth and poverty reduction.
16. The goal of the Policy and the regional compact is to “contribute, through better policy coordination, policy implementation and budget support for agriculture, forestry and fisheries, to sustainable agricultural production and productivity, food security and regional integration, enhance competitiveness, and improve markets and trade of agricultural, fisheries and forestry products. It identifies three main priority areas and six crosscutting priorities:
- Priority Area 1: Agricultural production and productivity with a focus on staple foods, livestock produce, fisheries and forest produce
  - Priority Area 2: Removing barriers to agricultural trade and linking farmers to markets with a focus on corridors (corridor development)
  - Priority Area 3: Reducing social and economic vulnerability and enhancing resilience and food and nutrition security
- Cross-cutting priority areas are: (i) gender and age mainstreaming; (ii) human and institutional capacity development and strengthening; (iii) information and knowledge management; (iv) climate change; (v) resource mobilisation, and (vi) improved coordination.
17. Whilst the NAIP is a country-specific plan, it complements the COMESA Regional Policy and Compact which identifies regional priorities. Priority Area 1 aligns closely with NAIP Program C including IAs 9, 10, 11, 12 and 13. The NAIP complements Priority Area 2 through its support for markets and trade under Program D and IA 14. There is also support for Priority Area 3 via NAIP’s food and nutrition security, empowerment and disaster risk management initiatives under Program B and IAs 4, 6 and 7. The COMESA cross-cutting priorities are also reflected in the NAIP.

## 6.3 National Policies and Strategies

### Malawi Growth and Development Strategy MGDS III

The overarching national development plan is the Malawi Growth and Development Strategy. The third phase (MGDS III) was prepared in parallel with the NAIP and is currently in draft form pending publication. It covers the period 2017 to 2022 and is the fourth medium-term national development strategy aligned to the country’s long-term development aspirations articulated in Vision 2020<sup>35</sup>. The five key priority areas (KPAs) are summarized in chapter 2. KPA 1 recognises that the agricultural sector is the mainstay of the economy which can significantly support industrial development. However, its potential is hampered by dependency on rain fed agriculture with its attendant challenges stemming from climate change and poor water management. The agricultural content of MGDS III is derived from the National Agricultural Policy which was developed and approved in 2016 (see following paragraph). Since the NAIP operationalizes the NAP, it is also aligned with MGDS III.

<sup>35</sup>The previous development strategies that were developed to implement Vision 2020 were the Malawi Poverty Reduction Strategy Paper (MPRSP), and MGDS I and II.

18. The integration of agriculture and climate change in one KPA underlines the strong linkages between the two. A number of strategies are proposed including adaptation and mitigation of climate change impacts. Adaptation will protect against the effects of climate change, thereby reducing vulnerability of communities and ecosystems. MGDS III notes that investment in climate change adaptation has been found to have the largest multiplier effect on poverty alleviation, education, health, agriculture and water development, economic growth, urbanisation and governance.
19. While addressing the challenges in agriculture, other areas such as environment, forestry, water resources, parks and wildlife, women and youth productivity, health, education, energy, industrial production and transportation will also be leveraged. This is in recognition of the fact that efforts to improve agricultural productivity and sustainability will not yield meaningful results unless water resource management and transportation infrastructure which enhances rural access are improved. This priority area will contribute to higher productivity and resilience.

### Sectoral and Sub-Sectoral Development Plans

20. Malawi has a wide range of sectoral and sub-sectoral policies, plans and strategic frameworks. The main policy document for the agricultural sector is the **National Agricultural Policy**. The most relevant related sectors include the mandates of MoITT, MoLHUD, MoLGRD, MoHP, MoNREM, and MoFEP&D.

### The National Agricultural Policy (NAP)

21. The development of a comprehensive NAP is an important step forward. In the past, the ASWAp served as substitute for a sector policy. Development of a NAP is also timely delivery of a key policy commitment of Government under the New Alliance Framework. The NAIP will be the main implementation tool for the NAP, and is aligned to the policy and its objectives.
22. The NAP is intended to guide the design and implementation of the various subsector policies and strategies. Its emphasis is on farmer-led agricultural transformation and commercialisation that entails treating farming as a business. The policy will facilitate and harness dynamic transitions taking place within farming communities, in particular the movement of farming households into non-traditional high-value agricultural value chains and increased engagement in profitable off-farm and non-agricultural livelihoods. The NAP identifies eight PPAs:
  1. Sustainable agricultural production and productivity
  2. Sustainable irrigation development
  3. Mechanisation of agriculture
  4. Agricultural market development, agro-processing and value addition
  5. Food and nutrition security
  6. Agricultural risk management
  7. Empowerment of youth, women and vulnerable groups in agriculture
  8. Institutional development, coordination and capacity strengthening
23. Within these PPAs, there are a number of Policy Statements (totalling 54) with specific activities identified. These are further divided into strategies (equivalent to activities under the NAIP). The NAP also highlights the main implementing agencies for each strategy. Given the different scope of the PPAs, these have been divided into more manageable 16 IAs under the NAIP. Most of the 54 Policy Statements and underlying strategies are reflected in the IAs. Table 1 below shows how the 16 NAIP IAs have been linked to the eight PPAs.

**Table 1: NAP PPAs and NAIP Intervention Areas**

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

24. In some cases, PPAs and/or strategies have placed under a different IA or have been clustered in a slightly different manner under the respective intermediate outcomes. This has resulted from a prioritization exercise during the NAIP formulation process, the integration of inputs provided by key stakeholders from adjacent sectors during that process, and, in some cases, to improve the coherence of the NAIP. The NAIP budget file allows tracing the linkages between NAP strategies and NAIP activities, outputs, IAs and Programs.

### Sub-Sectoral and Thematic Strategies and Plans within the Agricultural Sector

25. Within the Agricultural Sector and under the NAP umbrella, there is a large number sub-sectoral and thematic strategies, policies and plans including, but not limited to the following:

- Agricultural Extension and Advisory Services Strategy (currently being developed)
- Agricultural Research Master Plan (currently being updated)
- Agricultural Risk Management Strategy
- Contract Farming Strategy (currently adopted by MoAIWD but awaiting Amendment of the Competition and Fair Trade Act)
- Cotton Strategic Plan for Malawi (2011-2016)
- Crop Production Policy
- Farmer Organisation Development Strategy (2016)
- Fertiliser Strategy (2007) – to be updated once the Policy is approved
- Fisheries and Aquaculture Policy (2016-2021)
- Food Security Policy (August 2006)
- Guidelines for Sustainable Land Management Voucher System Implementation, Catchment Management, Conservation Agriculture, and Strategic Grain Reserve Management;

- HIV/AIDS Agricultural Sector Policy and Strategy
- Land Resource Conservation Policy
- Livestock Policy (currently being updated)
- National Fertiliser Policy (currently being developed)
- National Fisheries Policy (2016-21)
- National Irrigation Policy (2016), Development Strategy (2012) and Irrigation Master Plan (2015)
- Seed Policy (going through approval process, currently with OPC)
- Strategic Plan for the Tobacco Industry (2012-2017)

The most relevant subsector policies are briefly described below.

26. The **National Livestock Policy** defines MoAIWD's mandate to develop the livestock industry in the country. The policy also serves as an operational tool to guide the implementation of the National Livestock Development Master Plan. The goal of the policy is to contribute towards improved household, national food security and poverty reduction through sustainable private sector and farmer demand driven livestock services. The NAIP will finance the development of a Livestock Development Master Plan and includes a broad range of livestock-related activities such as improved veterinary services, livestock biosecurity services, pass-on schemes, feeding technologies and the establishment of village livestock committees, among others.
27. The **Contract Farming Strategy** (2016) aims at creating an enabling environment for contract farming activities to take place in Malawi in an efficient, competitive and fair manner. The ultimate impact sought is to create wealth, and to reduce poverty and inequality by increasing profitable market access for farmers and buyers of agricultural output, through contract farming arrangements where appropriate. Contract farming is addressed under Program D, IA 14 which will promote contract farming in conjunction with the Fair Trade Commission.
28. The **National Irrigation Policy** (2016) aims at addressing critical issues affecting the irrigation sector that include spatial and temporal water shortages, customary land tenure disputes, and poor operation and maintenance of infrastructure. The NIP attempts to provide solutions to these challenges by addressing three priority areas of sustainable irrigation development, management and capacity development. The Policy is well anchored in the **National Water Policy**, Agriculture Policy, **National Environmental Policy** and others and forms the foundation for the **Irrigation Sector Master Plan**. The NAIP will support the implementation of the first five-year episode of the master plan under Program C, IA 12.
29. The **National Fisheries Policy (2012-17)** is designed to meet the challenges and emerging issues of the fisheries sector, and to provide linkages with the emerging cross-cutting policies, plans and activities of national and regional bodies where they affect or interact with fisheries. The goal of the Policy is to promote sustainable fisheries and aquaculture development in order to contribute to economic growth in Malawi. It expects to achieve four key outcomes: (i) enhanced capacity to sustainably manage and develop fisheries and aquaculture; (ii) improved protein and micronutrient intake for Malawians; (iii) increased decent employment opportunities, including outside the fisheries sector; and (iv) increased earnings for people and government from fish exports and domestic trade. The Fisheries Policy is reflected in the NAIP through a number of measures to improve fisheries and aquaculture productivity under Program C, capacity building for fisheries institutions under Program A (IA 3), food safety (IA 5), hatcheries (IA 10), and improved lake and rivers fishery management (IA 11) etc.

30. The **National Agricultural Extension and Advisory Strategy** is currently being prepared to replace the expired National Extension Policy. The review focuses on establishing the extent to which the policy changed the extension approach from supply-driven to demand-driven services and how decentralisation of the extension services increases the chances for farmers to participate both in the decision-making process and in accessing the services. The overall conclusion of the review was that the Extension Policy principles remain relevant and in line with best practice. However, there are some gaps relating to ICT-based extension and poor linkages with nutrition and other innovation stakeholders. The new Strategy therefore builds on past successes while eliminating or mitigating implementation challenges that have previously negatively affected the quality of extension services. The review report was released and has formed the basis for development of the successor strategy, which awaits the final validation by stakeholders. It is expected to continue the pluralistic extension approach but placing a stronger focus on strengthening the capacity of the public sector to guide and coordinate extension service provision at all levels. Extension services receive multiple mentions in the NAIP and are a core element of the capacity building to be undertaken in Program A; as well as being a central part of the innovation systems approach to be implemented under IA 9.

## Other related Policies and Strategies

31. Whilst the NAIP is firmly rooted in the NAP, there are a number of other important policies and strategies developed by other ministries and agencies that have an important influence on the objectives and implementation modalities of the NAIP. These are briefly reviewed as follows:

### A) Trade and private sector development

32. The **National Trade Policy** (2017-21) aims to make Malawi a globally competitive export-oriented economy, generating higher and sustainable livelihoods through trade. It proposes structural transformation of the productive sector and linking value chains to regional and global export markets and prioritises market access (especially non-tariff barriers), business environment, narrow productive base, high entry cost for small scale producers and traders, and implementation gap. The **National Export Strategy (NES)**, 2013-18, provides a roadmap for how to build the productive base, and achieve competitive export growth. It sets a realistic plan for how the productive base of the economy can be developed in a way that ensures export competitiveness and to maximise the contribution of exports to economic and social development through the development of the private sector in a manner that is balanced with economic empowerment of the rural and urban poor, smallholder farmers, youth and women.

33. The NES builds on **Private Sector Development Policy and Strategy**, the new **National Energy Policy** and the **Greenbelt Initiative**, amongst others. It identifies four priority actions: (i) developing export clusters that can complement the exports of traditional products such as tobacco and tea; (ii) improving the enabling environment for private sector growth; (iii) developing institutions that are key for sustainable growth; and (iv) addressing the skills gap which is this is critical for job creation and economic empowerment. Priority clusters in the NES are oilseed products, sugar cane products and manufacturing.

34. The **National Industrial Policy** (2017-21) aims to increase the proportion of manufacturing in GDP through structural transformation of the Malawian economy. It has seven objectives: (i) to enhance the provision of appropriate skills and technology; (ii) to improve business environment for the manufacturing sector; (iii) to improve access to key business services; (iv) to support provision of support infrastructure (enablers); (v) to facilitate participation of MSMEs in manufacturing and provide market linkages; (vi) to address the environmental and social sustainability concerns of industrialisation; and (vii) to address the governance challenge in terms of policy formulation and implementation. The expected policy outcomes are: (i) increased productivity of the industrial sector; (ii) increased diversification of industrial products; (iii) increased value addition of primary products; and (iv) reduced trade deficit.

35. The main implementation vehicles are the **Trade, Industry and Private Sector (TIP) Sector Wide Approach (TIP-SWAp)** and the Joint Sector Plan. While the TIP-SWAp has formally ended, the coordination structures within and across ministries are still in place, especially the commodity-specific groups for product and standards development, as well as coordination and information sharing amongst stakeholders.
36. The **Joint Sector Plan** is a prioritised investment plan, similar to the NAIP, for the trade sector, developed in 2016. It identifies the investments required under the trade sector, which is heavily under-financed. The NAIP co-finances several activities under these frameworks, to be implemented by MoITT and its subsidiaries (including MITC, MBS and others). The activities are those which are relevant to agriculture and to meeting the NAIP's overall development objectives and only if not financed elsewhere or through line ministry funding. The trade policy and export strategy are reflected in the NAIP under Program D and IA 14 which promotes market and trade development. The NAIP also includes a number of interventions from the JSP directly related to agriculture as well as some which are wider in scope as these did not have secured funding at the time of NAIP development but are seen as critical to development of the sector. Appendix 6.2 attached indicates the linkages between the JSP and the NAIP.
37. In view of its particular relevance, a detailed mapping showing how specific areas of the JSP are captured under the NAIP can be found in appendix 6.2

## B) Food and Nutrition Security

38. The nutrition area of the NAIP is guided by the **Malawi National Nutrition Policy, 2016-2020**, the draft **National Nutrition Strategic Plan, 2017-2021** and the draft **Agriculture Sector Food and Nutrition Strategy 2017-2021**.
39. The **National Nutrition Policy** is intended to provide a guiding framework to uphold the government's commitment to eliminate malnutrition. It aims at ensuring that evidence-based nutrition interventions are developed and implemented in alignment with the overall national development agenda, the Scaling-up Nutrition movement and global declarations and commitments to which Malawi is a signatory.
40. The policy vision is "a well-nourished Malawian population that effectively contributes to the economic growth and prosperity of the country". The goal is "to attain optimal nutrition for all Malawians by 2020 with emphasis on children under the age of five, pregnant and lactating women, and other vulnerable groups". The expected outcomes of this policy are:
- Reduced number of children under 5 who are stunted by 20 percent
  - Reduced rate of anaemia in children and women of reproductive age by 25 percent
  - Reduced rate of infants born with low birth weight by 15 percent
  - No increase in the rate of overweight among children, adolescents, and adults
  - Increased rate of exclusive breastfeeding in the first 6 months by 20 percent
  - Wasting in children, adolescents, and adults is reduced and maintained at less than 5 percent
  - Improved multi-sectoral programming and coordination of nutrition interventions
  - Increased funding, commitment, and accountability for nutrition
  - Increased capacity and leadership for nutrition



41. The policy has eight priority areas which include: (i) prevention of undernutrition; (ii) gender equality, protection, participation and empowerment; (iii) treatment and control of acute malnutrition; (iv) prevention and management of over nutrition and nutrition-related non-communicable diseases; (v) social mobilisation and behaviour change communication; (vi) nutrition during emergency situations; (vii) creating an enabling environment for nutrition; and (viii) nutrition research and surveillance. A detailed outline of each priority area, strategy and activities is provided in a separate National Nutrition Strategic Plan. The draft Strategic Plan specifies the detailed strategies and activities required to achieve the outcomes of the Policy in each of the eight priority areas.
42. Of particular relevance is the draft **Agriculture Sector Food and Nutrition Strategy** which spans the same five-year time frame as the NAIP. The strategy is based on the guiding principles that the agriculture and food sector has the primary role of feeding people, and that food systems provide for all people's nutritional needs and contribute to economic growth. It is therefore essential that an enabling policy environment support programmes and investments in agriculture and food systems. The goal of the strategy is to "achieve a sustainable and diverse food system and nutrition education that contributes to a well-nourished nation and economic growth. This will be pursued via nine strategic objectives:
1. Ensure stable availability of all food groups through sustainable and diversified production
  2. Ensure stable access to all food groups
  3. Ensure stable utilisation of all food groups for diversified diets
  4. Strengthening nutrition education, behaviour change communication strategy and systems
  5. Strengthening capacity by improving leadership and management capacity systems and procedures
  6. Improving staffing levels through filling of existing vacancies and recruiting new staff in critical specialised areas
  7. Enhance a coordinated implementation arrangement to improve active participation of all stakeholders
  8. Improving resource allocation to institutions to ensure that agriculture and nutrition programs have adequate human, physical and financial resources.
  9. Ensure clear agriculture and nutrition indicators and a good progress tracking system
43. The Strategy will be implemented by all stakeholders involved in agriculture and nutrition-related activities at national, district as well as community level. It advocates for close linkages between agricultural and nutrition programmes to ensure that the country achieves FNS. Implementation will be coordinated by MoAIWD in collaboration with MoHP. The two institutions will ensure that the strategy is implemented as planned and provide policy guidance to agriculture sector stakeholders during the implementation process. Other agencies involved in implementing the strategy include MoLGRD, MoEST, MoGCDSW, MoLYSMD, MoICT, MoITT, MoFEP&D, MoJCA, the Ministry responsible for Climate Change, CSOs, NGOs and CBOs.
44. The **Multi-Sectoral Nutrition Policy and Strategic Plan (2017-2021)** 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 galvanise the nation towards the Malabo and SDG long-term targets of eradicating under nutrition.

45. In light of these policies, nutrition is one of the major underlying themes of the NAIP as part of the food security thrust and includes measures such as nutrition education, school feeding, bio-fortified crop selection, nutrition in agricultural extension services etc. Nutrition is also a key element of Program B and IA 4 which supports improved implementation of nutrition-related activities in the agricultural sector, institutional feeding programmes and nutrition education at grassroots level.

### C) Resilience and Climate Change

46. The **National Resilience Plan** is an overarching framework, monitored and developed by OPC. The plan draws on five sub-sectors identified as pivotal to breaking the cycle of food insecurity. The sectors/sub-sectors include agriculture and food security (MoAIWD), catchment protection and management (MoNREM); control of floods through dams, dykes and river training (MoAIWD); early warning systems (MoNREM); and social support programs (MoFEP&D). The resilience plan brings together a number of sectoral key indicators into one holistic picture. It includes programs and outputs where MoAIWD is designated the implementer, as well as others. The plan has five components: (i) Agriculture and Food Security (completely covered under the NAIP); (ii) Catchment Protection and Management (substantially covered under IA 11); (iii) Flood Control (where construction of dams and disaster risk management are included under the NAIP); (iv) Early Warning Systems (with major interventions included under IA 7); and (v) Social Support Programs (where the focus in the NAIP is on coordination with the MNSSP). The details are provided in Appendix 6.1 attached.

47. Malawi's climate change planning framework is guided by its membership of the UNFCCC. The national guiding documents include the National Environmental Policy (2004) and the National Climate Change Policy (2012), as well as three implementation frameworks, namely the National Climate Change Investment Plan (NCCIP, 2013-2018); the Malawi National Adaptation Plan (NAP), currently under development; and the National Adaptation Program of Action to Combat Climate Change (2006). The NCCIP has identified four key priority areas to promote climate change management in Malawi as: adaptation; mitigation; climate change research, technology development and transfer; and capacity building. Under the four themes, a total of 11 programs will be pursued in the implementation of the NCCIP.

48. Climate change mitigation and adaptation measures are mainstreamed in many parts of the NAIP, particularly under Programs B and C. Specific adaptation measures are incorporated in IA 7 (disaster risk management), IA 9 (climate-smart agricultural technologies), IA 10 (climate adapted varieties), IA 11 (sustainable NRM and climate resilience) and IA12 (irrigation). Mitigation measures include tree planting (IA 10), the promotion of agricultural practices with a lower carbon footprint (IA 9 and 10), and the reduction of post-harvest losses (IA 14). The NAIP is also aligned to the **Climate Change Investment Plan** as shown in Appendix 6.3 attached.

### D) Gender and Youth

49. The **National Gender Policy** (2015) aims to mainstream gender in the national development process to enhance participation of women and men, girls and boys for sustainable and equitable development for poverty eradication. The policy is rooted in Malawi's constitution which recognises and promotes gender equality, and in the various versions of the MGDS. It also has linkages to policies covering health, food and nutrition security, HIV and AIDS, education, agriculture, environment, and youth; as well as a number of international agreements and conventions.

50. The goal of the gender policy is “to reduce gender inequalities and enhance participation of women, men, girls and boys in socio-economic development processes.” It seeks to achieve seven broad objectives: (i) to advocate for increased access, retention and completion to quality education for girls and boys; (ii) to ensure women, men, boys and girls sexual and reproductive health rights, and HIV/AIDS status are improved; (iii) to strengthen gender mainstreaming in all sectors of the economy; (iv) to reduce poverty among women and other vulnerable groups through economic empowerment; (v) to promote women’s participation in decision making positions in both politics and public life; (vi) to reduce gender based violence; and (vii) to strengthen the capacity of the national gender machinery.
51. The policy targets the following six priority areas: (i) gender in education and training; (ii) health; (iii) agriculture, food security and nutrition; (iv) natural resources, environment and climate change; (v) economic development; and (vi) governance and human rights. The policy also prioritises gender perspective in gender based violence and capacity of the national gender machinery.
52. As a cross-cutting issue gender is mainstreamed throughout the NAIP through measures such as minimum participation rates for women, youth and other vulnerable/disadvantaged groups and disaggregation of indicators by gender. In parallel with the mainstreaming measures the gender policy is also reflected in IA 6 through initiatives to ensure that women, youth and other vulnerable groups are empowered regarding secure access to land.
53. The vision of the **National Youth Policy** (2103) is an educated, healthy, well trained, cultured, vibrant and productive youth. The goal is to create an enabling environment for all young people to develop to their full potential in order to contribute significantly to personal and sustainable national development. The design and implementation of appropriate youth development and empowerment programs will facilitate the creation of an enabling environment where the youth are able to contribute effectively to national development. The NAIP reflects the key elements of the youth policy under Program B including participation of youth in FOs (IA 2), empowerment of women and youth in relation to land tenure security (IA 6) and numerous other youth and gender mainstreaming initiatives.

#### D) Financial Inclusion

54. Issues of financial inclusion and poverty reduction are owned by MoFEP&D, and of particular relevance to the NAIP are the **Financial Sector Development Strategy**(2016 – 20) and the **Financial Inclusion Strategy (2015 – 20)**, as well as the **National Social Support Policy**(currently being updated). The Malawi Social Support Program (MNSSP) operationalises the latter, based on its vision of “enhancing the quality of life for those suffering from poverty and hunger, and improved resilience of those who are vulnerable to risks and shocks”. MSSP has been successful in providing Social Cash Transfers (SCTs) to the ultra-poor and labour constrained households, and is currently developing a Unified Beneficiary Registry to improve and simplify its targeting. MNSSP is funded by several donors through the Local Development Fund. Linkages with the MNSSP are within NAIP Programs A and B and IA 4 and 9. IA 16 and Program A and D contribute to the implementation of the Financial Sector Development Strategy and Financial Inclusion Strategy in the agricultural sector.

## E) Land Tenure

55. The **National Land Policy** is owned by MoLHUD, and addresses the constraints to Malawi's social and economic development caused by land ownership and user rights issues. The policy provides an institutional framework for land management and procedures for more effective land based investment selection and land market transactions. It also sets forth, as a national guideline for action, the incorporation of desirable principles of land use and management, effective civic education and broad public appreciation of the constraints and trade-offs that need to be made. The Land Policy was approved in 2016 and will be implemented under the new **Land Law** which was also enacted in 2016. The new policy and law poses different regime than past policies, with more focus on formalising customary systems. MoLHUD is undertaking a national campaign on the land laws to educate stakeholders on what the laws mean and how they will affect society. The NAIP will address the challenges of implementing the far-reaching provisions of the new law, under IA 6 which incorporates measures to empower women and youth in relation to land tenure security.

## F) Decentralisation

56. The **Decentralisation Policy** (1998), and its implementation tool, the draft **Integrated Rural Development Strategy** are the mandate of MoLGRD. These are being implemented gradually with line ministry staff being moved to local government bodies in 2016. This means that, in future, implementation of agricultural programs will be through Local Governments and their staff, to a much higher extent than through the current structures. It also means that local development priorities and those of the agricultural sector may become more aligned and harmonised in terms of planning and implementation. The decentralisation process embraces many aspects of governance in Malawi, none more so than agricultural extension services at District level and below. This is reflected particularly in Program C and IA 9 which supports the development of decentralised management structures in the agricultural extension system. The decentralisation policy also informs the overall NAIP implementation and coordination arrangements described in Chapter 6 of the main report.

## 6.4 Agricultural Sector Stakeholders

57. Implementing various agricultural policy objectives requires coordinated activities of a broad range of state and non-state actors – Government and its subsidiaries (parastatals, boards and trusts); non-state actors like NGOs and CSOs; private sector (including farmers, farmers organizations and private sector companies of different kinds and sizes); and donors. This section provides a brief overview of the key stakeholders and their main roles.
58. **Government** as a whole has a dual function: provision of public goods and services to its people; and to provide an enabling environment for stakeholders to operate through strong, transparent and implemented policies. As identified in the NAP, the ministries directly responsible for implementation of NAIP are: MoAIWD (the lead ministry), MoFEP&D, MoITT, MoLHUD, MoNREM, MoHP, MoLGRD, MoTPW and MoGSWCD. Other important ministries, though not directly part of NAIP implementation, include Ministry of Foreign Affairs; Ministry of Justice and Constitutional Affairs, Ministry of Labour and Vocational Training, Ministry of Youth Development and Empowerment and Ministry of Education

59. **The Ministry of Agriculture, Irrigation and Water Development (MoAIWD)** is the government agency with overall responsibility for implementation of the NAIP. It is expected to undertake a lead role through its departments and units, which may be subject to significant re-organisation according to the recent **Core Functional Analysis (CFA)**, and development of a Strategic Plan for implementation of its recommendations. The re-organisation process is envisaged to off-load non-core functions to non-state actors, while focusing on core functions of Government. These are defined as: policy formulation (including provision of guidelines and standards), stakeholder coordination, M&E of implementation of all functions and activities in the sector.
60. The CFA, which was finalised in July 2016, recommends a major re-structuring of upper management hierarchy MoAIWD which will have a bearing on the way that the NAIP is managed and coordinated. The objective of the exercise was to streamline MoAIWD functions so that technical departments focus only on those functions that are core to their mandates. It is expected that once the shedding off of functions takes place and they are relocated to players in the sector who possess the necessary capacities, it will result in the public service in the agriculture sector becoming more effective and efficient in the delivery of services to beneficiaries.
61. The CFA recommended a high-level re-organisation of the Ministry structure which reflects the strategic intent of the MoAIWD. It does not go down to the Departmental and Unit structures, and does not consider issues related to the merging of the irrigation and agricultural ministries which took place during the course of the exercise. The key recommendations of the CFA are summarised in Box 1.

### Box 1: Core Functional Analysis: Key Recommendations

#### Options for the Structure of MoAIWD

- **Option 1:** Chief Director has responsibility for technical operations including the ASWAp/NAIP Secretariat. All Support Services Departments report to the PS. This will ensure that there is focus on value addition required from these support areas and that priority is given towards stakeholder engagement via the ASWAp/NAIP.
- **Option 2:** Chief Director has responsibility for administrative functions and support service departments including the Department of Commercialisation. The ASWAp/NAIP would remain a Unit under the Planning Services Department. The coordination and supervision of agriculture-related State Corporations and Institutions should also come under this office.

Both Options reduce the number of positions reporting directly to the PS (currently around 20) providing better scope for coordination and supervision. They will ensure that the PS's span of control is narrowed, but has better focus in terms of overall supervision of the Ministry.

In view of the importance of commercialisation in the growth of the sector and in the achievement of the government's goals of poverty reduction and food security, there is need to create a separate department to deal with agriculture commercial issues. The department will house units such as Agri-business (currently under DAES), Trade and Marketing (currently under DAPS) and any others that can drive the commercialisation agenda and will report to the Chief Director.

It is recommended that for better coordination and to ensure that there is a focus on the major stakeholders, directorates be established which can house departments or functions that are more or less closely related. The proposed directorates will be: Lands, Extension and Crop Development; and Animal and Fisheries Development. The DARS, in view of its cross cutting nature, will stand alone and report directly to the Chief Director where the CD has responsibility for all Technical departments. Below the directorates will be Departments and specialised Units.

ADDs will continue to offer technical backstopping services to districts and carry the Ministry's mandate at regional level. DADOs are in the process of being integrated into the decentralised structure under the District Commissioners. Once the process is finalised, the DADOs will no longer be part of the Ministry's structure.

62. MoITT plays an important role in creating an enabling environment and incentives for private investors, in areas such as trade policies, cooperatives, SME development, and investment promotion. It is the lead implementing agency for the NES, with important linkages to the agricultural sector.
63. To undertake various commercial and service oriented services on behalf a Government, a number of **parastatals, boards and trusts** are established. Parastatals, public boards and various line-ministry subsidiaries have been key for development of the agricultural sector and have in some cases substituted for private sector which has not always been vibrant in Malawi. Most of these have been formed through Acts of Parliament and have access to public funds. Their roles are both in provision of public goods and on a profit-making basis, such as State-Owned Enterprises, or research institutions which operate on a cost recovery basis and Trusts. Trusts do not regularly access public funding but may get Government support for accessing credit or donor funding.
64. The **Agricultural Technologies Clearing Committee (ATCC)** formed under MoAIWD and is mandated to pass agricultural technologies which have been tested in Malawi's conditions and have scientifically proven to be viable and demand-driven to increase productivity to both smallholder farmers as well as commercial farmers to improve livelihoods and economic development in the country. Varieties may be developed by public or private research services, but need to pass through this committee before being released into the public.
65. The **Agricultural Research and Extension Trust (ARET)** is a research institution responsible for conducting research and providing technical and extension services on tobacco. The Trust was established on 1st September 1995 to foster development and dissemination of technologies for Malawi's tobacco industry. It amalgamated the services of two institutions, Tobacco Research Institute of Malawi (TRIM) and the Estate Extension Service Trust (EEST), who separately provided research and extension services respectively. ARET is entirely owned and controlled by tobacco farmers, who provide funding to the Trust through a levy.
66. **ADMARC** is a parastatal which was established to promote Malawi economy by increasing the volume and quality of agricultural exports, to develop new foreign markets for consumption of Malawian agricultural produce and to support Malawi's farmers. ADMARC plays a role in supplying inputs and providing extension services to farmers, making it easy for farmer to access inputs and providing them with ready market for their produce. Government has also used ADMARC to regulate the price of key commodities like maize.
67. **The Malawi Bureau of Standards (MBS)** is a statutory organization established in 1972 that is responsible for the preparation and publication of standards; promotion of standards and quality in Malawi; implementation of Malawi standards through relevant conformity assessment programs; National Metrology System. The MBS is governed by a Board of Directors (Malawi Standards Board) which is appointed by Government.
68. **The Green Belt Initiative (GBI)** was a Presidential Initiative of 2010, aiming to increase the irrigated area in the country, through coordination of actors and attracting private sector investment. The initiative has had a slow start. Recently, the GBI has undergone transformation to become Green Belt Authority (GBA). The Authority is responsible for: (i) marketing irrigation projects to investors; (ii) conducting market analyses and; (iii) conducting feasibility studies of potential irrigation schemes and promoting PPPs and Joint Ventures in irrigation.

- 69. National Food Reserve Agency (NFRA)** deals with management and maintenance of physical food stocks and financial resources for tackling national food insecurity and responding to emergency needs of vulnerable populations. The Mandate of NFRA includes procuring, store and releasing grain as determined by the Trustees in line with procedure and operations manual. NFRA has recently developed new guidelines for transparent management of the Strategic Grain Reserves.
- 70. Malawi Investment and Trade Centre (MITC)** is a trade and investment promotion agency which acts as a one-stop for business start-ups and potential investors. MITC provides support to potential investors and facilitates exports across sectors. Specifically, it analyses prospective project for financial, social and environmental concerns; coordinated pre-planning and evaluation of sites and post-site visits; sources joint venture domestic and national partners; and profiling local investment opportunities.
- 71. Reserve Bank of Malawi (RBM).** The mandate of the Reserve Bank is to regulate the banking sector, to provide for the supervision of banks and financial institutions; and for matters connected therewith. From ensuring price stability which makes farm inputs prices predictable to determining exchange rate policy which affects farmer incomes especially on exportable crops, the central bank is key.
- 72. National Statistics Office (NSO)** is responsible for collection, compilation, analysis, abstraction, publication and dissemination of statistical information; and for matters connected therewith and incidental thereto. NSO provides information for decision making which includes export information, population statistics and trends in the economy.
- 73. Malawi Plant Genetic Resource Centre** is based at Chitedze Agricultural Research Station, making it the country's depository centre of plant germplasm. The MPGRC is key in making agriculture adaptive to changing climate conditions, producing drought resistant crops, high yielding varieties and more productive livestock in terms of meat, milk and other products.
- 74. Root and Tuber Crops Development Trust (RTCDT)** has a mission is to spearhead the development of a vibrant root and tuber crops industry. RTCDT is central to promote root and tuber crops which have become more important in food security drive due to their resilient to drought and dry spell. The root and tuber crops also play a key role in food processing.
- 75. The Competition and Fair-Trading Commission (CFTC)** has a mandate to regulate, monitor, control and prevent acts or behaviours which would adversely affect competition and fair trading in Malawi.

### Appendix 6.1: Linkages between the National Resilience Plan (NRP) and the NAIP

NRP Program	NRP Strategy / target	NAIP outputs/targets/activities
<b>Component: Agriculture and Food Security</b>		
Promote large scale irrigation development through the Green Belt initiative	Strong emphasis on irrigation under GBA and PPPs Targets 33,300 ha under development by 2012	Strong emphasis on irrigation under GBA, MoAIWD (DoI) and PPPs Targets 36,800 ha in 5 years
Diversification of agricultural production	50% of households adopting improved practices 80% of households meeting minimum dietary requirements # schools implementing school feeding	IA9; target to be established Development objective, and IA4 Only dialogue meetings included, direct interventions included under MNSSP
	The NRP lists a number of concrete targets in terms of the number of breeders for each type of livestock etc.	Given the “enabling environment” an output-based approach of the NAIP, these are not explicitly mentioned in the NAIP; increases in stocks are the intermediate outcomes.
	Animal Disease Control Programs	Has received additional attention under IA5 with more ambitious targets
	Small-scale agro-processing and integration of smallholders into value chains	Main strategies of the NAIP, with several outputs is handled under IA 15 in more detail and with more ambitious targets
	Establishment of an agricultural cooperative bank	IA16 includes the preliminary analytical work
	Research into improved varieties (including pest and drought resilient)	Mainstreamed, and specifically under IA9, with more ambitious targets, but also more focus on adoption
	Seed and marketing systems	Elevated to the level of an IA, number 10
Promote climate smart agriculture program	Climate smart agriculture	Mainstreamed under the NAIP, with specific interventions detailed under IA11.
	138,000 ha with applied manure	7,5 million farmers targeted to be producing manure
	169,600 ha under agro-forestry	Targets 2 million ha + planting of 30,000 ha on riverbanks
	34,300 ha under conservation agriculture and 211,200 farmers practicing rainwater harvesting.	CA is handled under IA10, targeting and is to be mainstreamed in agricultural practice; 1 million farmers practicing rainwater harvesting
Strategic Grain Reserve Management	Rehabilitation of silos at Kanengo, Mzuzu, Luchenza and Mangochi	Rehabilitation of Kanengo sites included under IA7
Improving access to farm inputs	FISP reform to 30% budget reduction; 900,000 beneficiaries	Included under IA10, based on the reform outcomes (900,00 beneficiaries)
Create special grain export processing zone facility	Legislative framework in place	IA15 includes establishment of 5 zones
Promote production and supply of quality fish seed (fingerlings) to improve and sustain fish production	Maintain 7 farms/hatcheries; produce 4 million fingerlings; train 130 farmers (amongst others)	IA10 targets production of 5 million fingerlings and 9 hatcheries; training of farmers mainstreamed



<b>NRP Program</b>	<b>NRP Strategy / target</b>	<b>NAIP outputs/targets/activities</b>
Promote Integrated Aquaculture Agriculture (IAA) to maximise agricultural productivity	Identification of 3000 farmers	IA5 and IA12 include a number of activities on aquaculture, including establishment of 5 schemes; training of farmers mainstreamed
Promote stocking of fish in existing small waterbodies including dams to rebuild local fisheries	Restocking of 50 dams & 50 waterbodies	15 dams targeted for restocking, based on potential of current dams; construction of more dams included as separate activity
	Training of farmers	Mainstreamed in the NAIP
Promote use of solar tent fish dryers in processing in Central and Northern Malawi	Procurement of 30 million fingerlings over 5 years	5 million fingerlings targeted to be restocked annually
Promote use of energy efficient smoking kilns to improve quality of smoked fish products and minimise wastage of fuel woods in central and northern Malawi	Construction of 25 solar tents and training of 250 communities	Mainstreamed as technology development
Develop value added products from sundried and smoked fish products	2500 communities trained	Mainstreamed under training of (fish)farmers
	Technology development and linking of 250 processors	Mainstreamed in value addition activities
<b>Component: Catchment protection and management</b>		
Increase forest cover	50,000 ha planted with trees	2 million ha targeted under IA11
Promote management systems and technologies that protect fragile lands (river banks, dambo areas, steep slopes and hilly areas and water catchment areas)	60% river banks under protected management regimes	Under IA1, 30,000 ha and 2,500 km of river banks; other specific targets not included; 1 million ha under catchment management practices
Integrate environmental management/ resilience building standards in infrastructure development		Not explicitly included in NAIP
Promote alternative (from bio-mass) and efficient sources of energy		Energy management not included in NAIP
Communication, Education and Public Awareness (CEPA)		Not explicitly included in NAIP

NRP Program	NRP Strategy / target	NAIP outputs/targets/activities
<b>Component: Flood Control by construction of Dykes, Dams and River Training</b>		
		Construction of dams included for water management
<b>Component: Early Warning Systems</b>		
Enhance early warning system	Installation of weather, hydrological, conventional weather and hydrological systems	Weather stations at EPA level (204) included under IA 7
	Systems and platforms for dissemination of early warning messages improved	Included under IA7
<b>Component: Social Support Programs</b>		
	Related to MNSSP	Strategies of coordination are included

## Appendix 6.2: Linkages between the Joint Sector Plan and the NAIP

JSP pillar	JSP activity	NAIP output/activity
<b>Pillar 1: Market Development and Access</b>		
Market Development - Oilseeds	Develop extension coordination platform	Platform is in place and detailed under the Extension Policy – support is provided to establishment of databases (IA9)
	Implement SADC seed harmonization protocols and develop semi-autonomous Seed Services Unit	Both included under IA10
	Facilitate linkage of seed companies to smaller irrigation schemes for the production of oilseeds crops	A strategy of the NAIP, mainstreamed
	Simplifying of existing export procedures related to oilseeds crops	IA14 includes several measures (for all crops)
	Implement diversification plan for the Agriculture Research and Extension Trust	Included under IA9
Market Development - Sugar Cane Products (SCP)	Develop SCP regulatory framework	Support to TIP-SWAP TWGs included (IA1); no references to specific commodities
	Implement SCP cluster extension services strategy	Not detailed out to specific commodities
	Implement access to land strategy for all priority clusters including SCP	IA6 includes a number of activities related to the updated Land Policy
Market Development - Manufacturing	TWGs; TA; Advisory and Support Centre;	Support to TIP-SWAP TWGs included (IA1);
	Investor Facilitation Program for manufactures sub-clusters	Not included
	Regulatory framework for Special Economic Zones and Export Processing Zones	Included under IA15
	Information package on access to finance	Training of farmers included under IA16
Market Development - Tobacco	Support to integrated production system	A strategy of the NAIP
	CFTC to ensure appropriate regulatory framework	A strategy under the NAIP, but no commodity-specific references
Market Development - Tea	Implementation and enactment of the Land Bill	Included under IA5
Market Access - Trade Policy and Trade Agreements	Improve trade policies and capacities	Studies on trade policy included under IA5 and IA14

<b>JSP pillar</b>	<b>JSP activity</b>	<b>NAIP output/activity</b>
Market Access – Trade Facilitation	National Trade Facilitation Committee meetings; Automated systems for customs and borders; audit; Malawi Revenue Authority; Risk Management Unit, Commercial Court; Remove multiple tariffs	Not included, but complimentary activities towards trade facilitation are the thrust of IA14
	Establish one-stop border posts	A strategy of the NAIP; included under trade studies (IA14)
	Review Control of Goods Act	Not explicitly included, but various activities related to ag border posts (IA3) and quarantine facilities (IA8)
	Establish SMS system to disseminate market prices to farmers	Review of subsidiary legislation included under IA14
	Various studies on export bans	Included under IA14, with specific reference to NES
	Implement the MAPAC	Included under IA14 on trade studies
	Promote agricultural exports	MAPAC activities included and upgraded to full IA (IA 5)
	Promote commercial production and agro-processing	A strategy of the NAIP
		A strategy of the NAIP
<b>Pillar 2: Private Sector Development</b>		
Access to inputs – energy	Identify and address export information gaps	Various trade studies included under IA14
Access to inputs – farm inputs	Reform seed policy	IA 15 includes establishment of rural electrification for agro-processors, but national level initiatives not included
	Improve targeting and implementation of FISP, increase focus on seeds	Included under IA10
	Implement MoU on Harmonization of SADC and COMESA seed protocols	Included under IA10
Access to inputs – land	Fast-track implementation of amendments to land registration, including automated lands registry and land information management systems	Included under IA10 with a wide range of activities
	Allocate significant investments in the capacity of land administration	Included under IA10 with a wide range of activities
	Support mechanization of small-scale agriculture to improve land productivity and reduce pressure on land	IA13 deals explicitly with mechanization
	Implement Financial Sector Development Policy	
	Development and implementation of Warehouse Receipt and Commodity Exchange Regulatory Framework	Included under IA14

<b>Pillar 3: Skills Development and Business Advisory Services</b>		
Access to Business Advisory Services – Extension	Coordination program, training farmers, strengthening DAES and targeting NES priority crops	Training of farmers included under IA9, and DAES strengthening under IA3 (and IA1)
Access to Business Advisory Services – Cooperatives Support	Strengthen capacity of smallholder enterprises and cooperatives to better implement strategies for cooperatives empowerment	Integral part of IA2
	Collaborate with stakeholders on processing and product marketing	Strategy of IA2
	Promote good corporate governance and accountability	Not directly included but implied through TA for certification etc.
	Facilitate and mobilise producers/traders and service providers to be trained in quality, standards, pricing, labelling, export procedures and business management	Included under IA14
	Organise buyer-seller meetings to facilitate connection to markets	Included under IA14
	Develop a training program on quality control in existing cooperatives	TA included under IA2

### Appendix 6.3: Linkages between the Climate Change Investment Plan (CCIP) and the NAIP

CCIP Investment Areas		CCIP objectives	NAIP interventions
<b>Adaptation</b>			
Integrated Watershed Management Program	Integrated land use management plans in priority watersheds and reservoirs with strong capacity on governance and monitoring systems	IA7 includes preparation of disaster-resilient land use plans, and IA11 on general agricultural land use planning	
	Improve forest and land cover on degraded areas of watersheds and reservoirs by promoting community forest restocking using a landscape approach	Improvement of forest cover is included under IA11, and issues of land cover in GAP guidelines, mainstreamed and up scaled under IA9.	
	Reduce sediment load in key selected reservoirs served by selected catchment areas	Not included	
	Improve soil fertility and land use management in key areas	As above (IA 9 and 11)	
	Enhance sustainable irrigation farming systems in selected districts prone to climate change effects	Irrigation farming systems are an overarching priority of the NAIP, under IA12	
	Promote climate change adaptive agricultural technologies targeting climate change prone areas	Climate change adaptive properties are mainstreamed in research (IA9), as well as under pest and disease management (IA8)	
Improving Climate Change Community Resilience through Agriculture Production	Increase household income through sustainable agricultural diversification in selected districts prone to climate change	Increased household income is an overarching target of the NAIP	
	Develop transport infrastructure that will withstand climate change impacts	Roads included under IA15 are up to climate change / all year standards	
	Enhance mainstreaming of climate change related disaster risk management in all sectoral planning processes	IA7 is dedicated to Disaster Risk Management, including specific support to M&E systems and training of farmers in panning	
Climate Change Proofing of Infrastructure Development	Improve disaster risk management information systems		
	Improve community based early warning systems for various sectoral development programs and projects		
	Strengthen preparedness capacity for effective response and recovery		
<b>Mitigation Investments</b>			
Reduction of Emissions from Deforestation and Forest Degradation (REDD+)	Increase area under afforestation and reforestation	Specific targets are included on agro-forestry and tree-planting under IA11	
<b>Climate Change Research, Technology Development and Transfer</b>			
Climate Change Adaptation Technology Development	Generate climate change adaptation technologies suitable for Malawi	Agricultural research, improved varieties etc. is mainstreamed with climate change adaptation technologies (drought, pest tolerant etc.	
	Promote climate change adaptation technologies suitable for Malawi		

## Annex 7: Value Chain Prioritisation

### Background

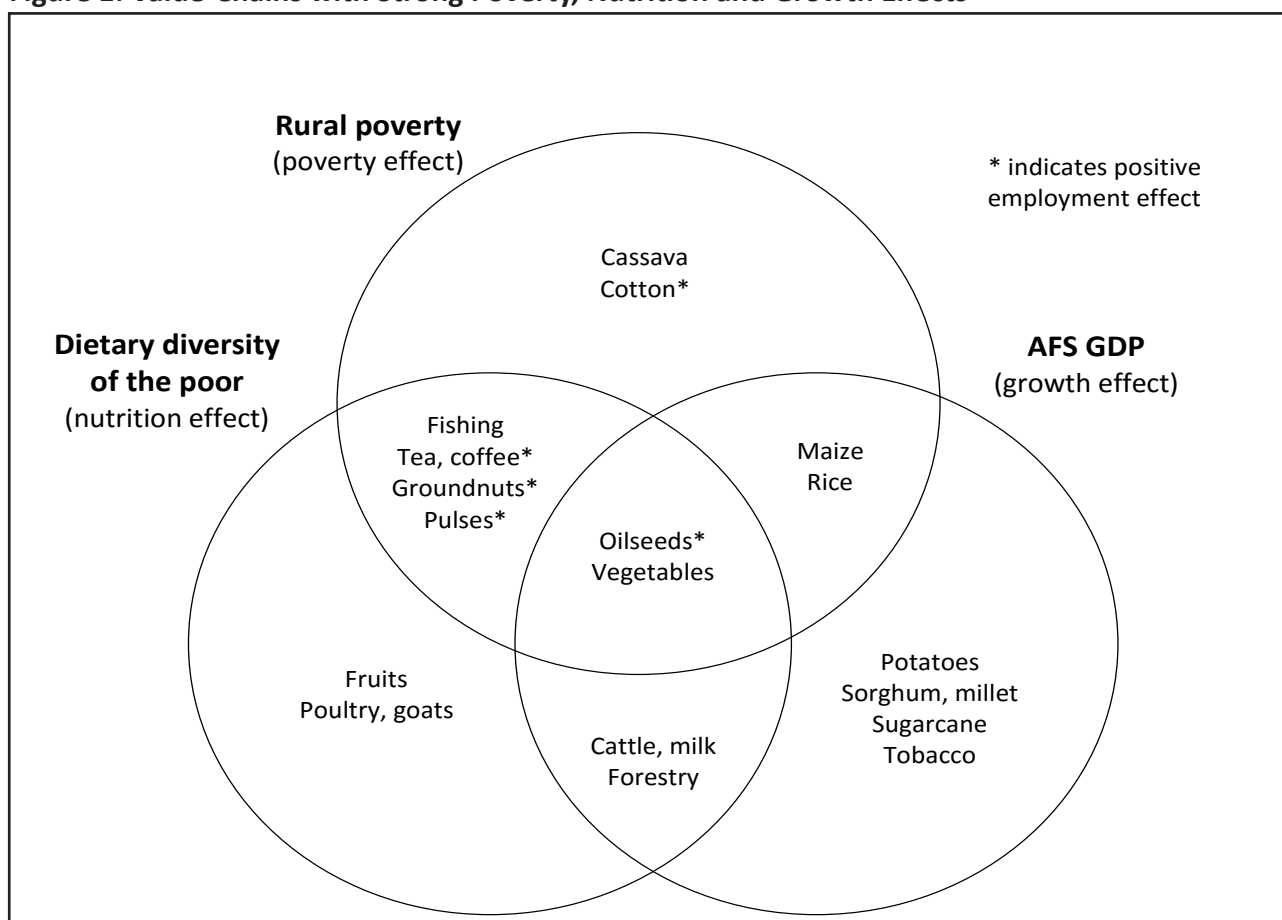
1. The key role of the private sector in the NAIP is consistent with the Malabo Declaration's invitation for countries to establish a Country Agribusiness Partnership Framework (CAP-F). The purpose of the CAP-F is to: (i) enabling policy reforms through multi-stakeholder engagement and institutional support systems; and (ii) collaborations that will allow sharing of resources and capabilities for improving the efficiency of priority value chains. The CAP-F should be aligned with and complement the priority investments and value chains under the NAIP.
2. Value chain prioritisation is an important element of the CAP-F process. Initial identification of priorities is based on the IFPRI CGE model, stakeholder consultations, prioritisation in other policy frameworks and literature review. The approach was to identify priority subsectors that score well according to key selection criteria, such as potential for poverty reduction, broad-based growth, dietary diversity, diversification of production and trade, and potential for value addition. Within these subsectors, priority value chains will be selected during the CAP-F process based on further consultations with the private sector as more information from value chain studies becomes available. Currently the NAPAS Malawi project has conducted 12 value chain studies that can be the basis for selection of value chains to be developed. These include groundnut, pigeon peas, roots and tubers (cassava, sweet potato, Irish potato, and yams), macadamia nuts, tea, coffee, tomato, banana, and mango. GIZ is also conducting several value chains under the MIERA project.
3. Under the CAP-F, support to the priority value chains will be mainstreamed throughout the NAIP. Each priority value chain will select from a menu of intervention areas. The NAIP will support coordination platforms for each priority value chain, which will develop value chain-specific strategies that articulate needs and priorities. Such platforms will also help to orchestrate public, private and non-state actors and facilitate PPPs.

### General Approach to Value Chain Prioritisation

4. The need for diversification of the agricultural sector poses the question: "which value chains other than maize and tobacco to focus on"? Prioritising value chains would allow a more focused use of limited public resources and institutional capacity and facilitate coordination and synergies between different NAIP intervention areas and actors in the agri-food system. This does not mean that the NAIP will only support these value chains; in view of the diversity of agro-ecologic conditions, the need for household-level diversification for food and nutrition-security purposes and resilience, and changing market opportunities there is need for balancing support for priority VC and other, location specific VCs. However, priority value chains would receive specific attention in targeting public investments, support services and policy reforms under the NAIP. For example, research efforts, the release of new varieties, access to inputs, technologies and extension services would be focused on the respective value chains.
5. Efforts to promote public-private partnerships with agribusiness would also be centred on these priority VCs and would involve continuous dialogue between public and private actors through multi-stakeholder value chain platforms to address specific policy, legal and regulatory issues or institutional bottlenecks. It would also include PPPs whereby public infrastructure investments in roads, irrigation or rural electrification would be linked to private investments in a way that maximises inclusion of local communities safeguarding the environment and food and nutrition security. PPPs would also entail partnerships in providing support services such as extension, business development, strengthening of farmer organisations and access to finance.

6. Selecting priority value chains is, however, not without challenges, in view of different views and priorities among actors, changing market conditions, and lack of a comprehensive assessment capturing all relevant criteria through a consistent methodology. Selecting priority VCs is also about managing trade-offs, as VCs score differently on key development dimensions. There is no single value chain (or set of VCs) that is clearly superior in all key development outcomes. Rather, a portfolio of VCs is needed to address various policy objectives in a balanced way.
7. The Rural Investment and Policy Analysis (RIAPA) model developed by IFPRI and IFAD exemplifies these trade-offs. The CGE model allows assessing how agricultural growth originating from productivity increases in specific subsectors and value chain affects different policy outcomes, such as economic growth, growth of the agri-food system, employment creation, poverty reduction and dietary diversity<sup>36</sup>. The model captures the various consumption and production linkages within and between specific VCs and the rest of the economy, including trade-offs through competition for limited production factors. Figure 1 shows the ten highest ranked value-chains across three selected outcomes: (i) reducing the rural poverty headcount rate; (ii) diversifying poor rural households' diets; and (iii) promoting agri-food system GDP growth. Of these value chains, those with the strongest employment effects are marked with an asterisk.

**Figure 1: Value-Chains with Strong Poverty, Nutrition and Growth Effects**



Notes: Poverty effect uses rural headcount Poverty Growth Elasticities; nutrition effect uses poor rural households' Dietary Diversity Growth Elasticities; and growth and employment effects are for AFS only. Source: RIAPA CGE Model and SAM.

<sup>36</sup> The model compares the impact that 1% growth of agricultural GDP by 2020 originating from productivity increases in specific value chains has on various outcome dimensions. Agricultural subsectors differ in size, and so to achieve the same absolute increase in *total* agricultural value-added, it is necessary for smaller value-chains to expand more rapidly than larger ones. While such rapid growth may be difficult to achieve in reality, targeting the same absolute increase in agricultural GDP allows us to compare results across the different scenarios.



8. Figure 1 shows that only two products are in the top-ten on all three outcome indicators: vegetables and oilseeds (with the latter also featuring within the 10 most effective VCs for employment creation). Oilseeds<sup>37</sup> are a good option for achieving multiple objectives, even though they are not the most effective value chains for any particular outcome. Table 1 displays the top five value chains ranked according to their potential contribution to different development. The results show that traditional export crops such as tobacco and sugarcane score high on their contribution to overall economic growth and growth of the agri-food system. Tobacco also has an important positive impact on dietary diversity at household level, due to consumption and income linkages. Cotton is an effective value chain for employment generation and poverty reduction, but less effective in stimulating overall economic growth. Dairy and meat value chains are strong in contributing to economic growth and dietary diversity but are less effective in poverty reduction and employment generation.

**Table 1: Top-5 Value Chains Ranked According to Their Potential Contribution to Different Development Outcome Indicators**

Rank	GDP growth	Agri-food system growth	Employment	National poverty headcount
1	Cattle, milk	Cattle, milk	Cotton	Vegetables
2	Forestry	Sugarcane	Tea, coffee	Fishing
3	Sugar cane	Tobacco	Groundnuts	Cotton
4	Tobacco	Sorghum, millet	Oilseeds are	Tea, coffee
5	Maize	Oilseeds	Pulses	Rice
6	Vegetables	Vegetables	Cattle, milk	
7	Fishing	Cattle, milk	Vegetables	
8	Cotton	Fruits	Fruits	
9	Oilseeds	Tobacco	Pulses	
10	Rice	Sugarcane	Groundnuts	

\*Measured through respective elasticities in response to 1% growth of overall agricultural GDP resulting from productivity increased in the respective value chains.

9. The results of the CGE models are a starting point for the identification of priority subsectors/ value chains. However, for various reasons, additional information and analysis of specific value chains is needed.
- The model includes individual value chains but also clusters which complicates the comparisons. For example, oilseeds include sunflower and soybean, whereas cotton is analysed separately. Dairy and cattle production are lumped together, making it difficult to disaggregate which of the observed effects are due to dairy versus meat production.
  - While the rankings convey value-chains' relative strengths across outcome indicators, they do not show differences in absolute terms. For example, the first-ranked VC can be far more effective in achieving one outcome than the next best value-chain. Such a strong effect on one outcome might outweigh concerns about this value-chain's weaker effect on other outcomes.

<sup>37</sup>Soybean, sunflower, sesame, cotton etc.

- In addition to the outcomes covered in the CGE model, other criteria need to be considered for VC selection. These include (i) the feasibility of developing the respective sub-sectors/VC given their current structure, performance and governance; (ii) the interest of the private sector to invest in them; (iii) the alignment with existing policies (e.g., the priority subsectors identified under the NES, and the subsectors and commodities reflected in the NAP). Some outcomes require other indicators to be measured properly. For example, nutrition is measured through dietary diversity (contribution to a balanced food basket) but not based on the nutrition and health characteristics of individual crop and livestock products (e.g. in terms of micronutrient content, etc.).
  - The model also does not look at environmental aspects including impacts and potential constraints. For example, fisheries production might be constrained by the need to maintain fishing stocks, hence growth would have to reside mainly from aquaculture.
  - Export potential and competitiveness need to be considered.
10. Hence, the below selection of priority VCs is based on the results of the CGE model, stakeholder consultations, prioritisation in other policy frameworks (NES, ASWAp) and literature review. In any case, during NAIP formulation, value chain selection or prioritisation has to be carried out on the basis of limited information and based on the current market environment. However, at times, markets change rapidly and farmers and other private sector interest in specific VCs might not in reality materialise as anticipated during NAIP formulation.
11. Therefore, singling out a small number of target value chains for the next five years might be overly rigid. Rather, the approach is to select priority subsectors that score high on key selection criteria, such as their potential to contribute to poverty reduction, broad-based growth, dietary diversity, diversification of agricultural production and trade, and have potential for downstream value addition. Within these subsectors, priority value chains will eventually be selected based on further consultations with and interest from the private sector and as more information from VC studies becomes available. The selection of priority VCs will also be validated and fine-tuned during the CAP-F process. As NAIP implementation progresses, support to some VCs might be scaled down and other VCs might be added, depending on the responses and interests from key VC stakeholders and changing market trends. Based on the above considerations, the following subsectors are proposed to receive priority attention under the NAIP:
- **Oilseeds** (cotton, soybean, and others) are important smallholder crops with good market potential and prospects for export growth and downstream value addition. They have good potential to contribute to poverty reduction and dietary diversity, both directly - through oil edible oil consumption -, and indirectly, through increased incomes. The potential of oilseeds has already been identified under the NES and has been confirmed by the recent CGE model. There is an active Technical Working Group under the TIP/SWAP and a VC chain platform (in cotton) coordinating activities in the subsector. There is also an active private sector interest in these value chains.
  - **Legumes** are another subsector with promising potential for broad-based, smallholder inclusive growth, poverty reduction and dietary diversity. Groundnuts are an important smallholder crop with domestic and export market potential and a nutrient-rich food if aflatoxin infestation would be better managed. Pigeon peas have shown a strong growth in recent years and export markets might be diversified beyond India. Other legumes such as common beans and cowpeas could also contribute to diversifying farming systems and diets. Due to their nitrogen-fixing properties, legumes play an important role in soil fertility management and reduce the need for mineral fertiliser. They can be integrated into cereal farming systems through mixed cropping or crop rotation. A Legumes Trust has been established to coordinate development of the subsector.

- **Horticultural crops**, especially vegetables and, to a lesser extent, fruits score highly on the IFPRI model in terms of their contribution to poverty reduction and dietary diversity. They also contribute to overall growth, although to a lesser extent. While vegetables are a diverse category, the development of different types thereof requires similar interventions (e.g., coordination of production and marketing, investments in (cold) storage and transport and in irrigation). Moreover, the same actors are often involved at various levels of the value chain (seed suppliers, organised producers, wholesalers, processors and retailers). Hence, vegetables can be broadly considered as one value chain. Fruits are more diverse as they include mangoes, bananas, apples and oranges but also nuts such as macadamia and cashew. Further studies and stakeholder consultations are required to identify the fruit value chains with the highest potential for growth and value addition. Overall, development of fruit VCs is more challenging given investment requirements, gestation periods and post-harvest handling. Specific strategies may range from agro-forestry to out-grower schemes.
  - **Livestock**, especially beef cattle and dairy, have strong domestic demand that will further expand with growing incomes. The IFPRI model shows strong potential in terms of poverty reduction, dietary diversity and overall growth. However, the subsector would require better organisation and its competitiveness needs to be further analysed. There has been strong demand growth for poultry meat and the value chain has strong backward linkages into oilseeds and maize (even though, trade-offs with food security would have to be carefully managed in the latter case). Small stock such as goats and backyard poultry make important contributions to FNS, income diversification and more resilient livelihoods.
  - **Roots and tubers** (especially cassava, Irish potato and orange-fleshed sweet potato), have strong potential to contribute to food and nutrition security. Cassava has been the second important food crop after maize but also has good potential for commercialisation and value addition, such as through processing into starch, high-quality cassava flour, beer and other products. It is drought-resistant, easy to cultivate and storable.
  - **Rice** is a nice VC with good commercialisation and export potential. Malawi is producing high-quality rice with strong domestic and regional demand fetching price premia. There is a VC coordination platform and production and productivity could be increased strongly both on dryland and under irrigation.
12. The traditional crops, maize and tobacco, remain strategic and should not be neglected. The same applies to the traditional export crops such as sugar cane, tea and coffee. Nevertheless, activities should be better balanced between value chains and the above-mentioned subsectors should receive increasing attention under the NAIP. Support to the priority VCs should be mainstreamed throughout the NAIP. In other words, rather than having specific sub-components, each priority VC will draw from a menu of intervention areas. Under the CAP-F, the NAIP will support value chain coordination platforms for each priority VC. These platforms will develop VC specific strategies within the overall NAIP framework that will articulate specific needs and priorities. Such platforms will also help to orchestrate public, private and non-state actors and facilitate specific PPPs.

## Annex 8: List of Organisations Consulted

### GoM Ministries, Departments and Agencies

ADMARC	Agricultural Development and Marketing Corporation
DAES	Department of Agricultural Extension Services
DAHLD	Department of Animal Health and Livestock Development (MoAIWD)
DAPS	Department of Agricultural Planning Services (MoAIWD)
DARS	Department of Agricultural Research Services (MoAIWD)
DLRC	Department of Land Resources Conservation
MITC	Malawi Investment and Trade Centre
MoAIWD	Ministry of Agriculture, Irrigation and Water Development
MoFEP&D	Ministry of Finance, Planning and Economic Development
MoITT	Ministry of Industry, Trade and Tourism
MoTPW	Ministry of Transport and Public Works
MITC	Malawi Investment and Trade Centre
NFRA	National Food Reserve Agency
TCC	Tobacco Control Commission

### CIAR Agencies

CIAT	International Centre for Tropical Agriculture
CIP	International Potato Centre
IFPRI	International Food Policy Research Institute
IITA	International Institute of Tropical Agriculture

### United Nations Agencies

FAO	FAO Country Office, Malawi
	FAO Regional Office for Africa, Accra
	FAO Investment Centre, Rome
IFAD	International Fund for Agricultural Development
ILO	International Labour Office
UNW	United Nations Women
UNCDF	United Nations Capital Development Fund
UNICEF	United Nations Children's Fund
WFP	World Food Program

### Other International Organisations

AUC	African Union Commission
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## Development Partners and DP Groups

AGRA	Alliance for a Green Revolution in Africa
DFID	Department for International Development (UK)
EU	Delegation of the European Union
FICA	Flanders International Cooperation Agency
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
JICA	Japan International Cooperation Agency
USAID	United States Agency for International Development
WB	World Bank
DCAFS	Donor Committee on Agriculture and Food Security
DONUTS	Donors on Nutrition Security Group
German Embassy	
Irish Aid	
Norwegian Embassy	

## NGOs/CBOs

CONGOMA	Council for Non-Government Organisations in Malawi
CISANET	Civil Society Agriculture Network
NGO Board	NGO Board of Malawi
CW	Concern Worldwide
TLC	Total Land Care
FHi360	Family Health International
WVM	World Vision Malawi

## Farmer Organisations

FUM	Farmers Union of Malawi
NASFAM	National Smallholder Farmers' Association of Malawi

## Private Sector

Cotton Council
Cotton Ginners Africa Ltd.
Malawi Chamber of Commerce and Industry (MCCI)
Mtalimanja Holdings
Dairiboard Malawi Ltd.
Export Trading Group
Universal Industries
Sable Farming

## Academia

LUANAR	Lilongwe University of Agriculture and Natural Resources
UoP	University of Pretoria

## Programmes and Projects

FTF	Feed the Future
TIP SWAp	Trade, Industry and Private Sector SWAp
PACA	Partnership for Aflatoxins Control in Africa
RLEEP	Rural Livelihoods Economic Enhancement Programme
NA	New Alliance (for Food Security and Nutrition)
GA	Grow Africa
NAPAS	New Alliance Policy Accreditation Support
SANE	Strengthening Agriculture and Nutrition Extension Services in Malawi

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Designed by  
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P.O. Box 594,  
Lilongwe, Malawi

2018

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