Assessment of Fertilizer and Soil Health policies and regulatory frameworks in Malawi

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Introduction

- **The 2006 Abuja Africa Fertilizer Summit (AFS)**
  - Address challenges in productivity to achieve an African Green Revolution
  - Raise fertilizer use – from 8kg/ha to 50kg/ha by 2015
  - Elimination of taxes and tariffs on fertilizer/fertilizer raw materials.
  - Private Sector development for improved access of fertilizers to farmers
  - Improve fertilizer access through targeted subsidies
- **African Fertilizer and Soil Health Summit (AFS-II) in 2023**
  - Review the implementation progress of the 2006 Abuja declaration
  - Come up with a 10-year implementation plan

Objectives

- A stocktake and description of the current soil health and fertilizer policy ecosystem
- An assessment of fertilizer and soil health policies and regulations using the AIS-PPI tool
- An assessment of the Structure-Conduct-Performance (SCP) of the current fertilizer market in Malawi

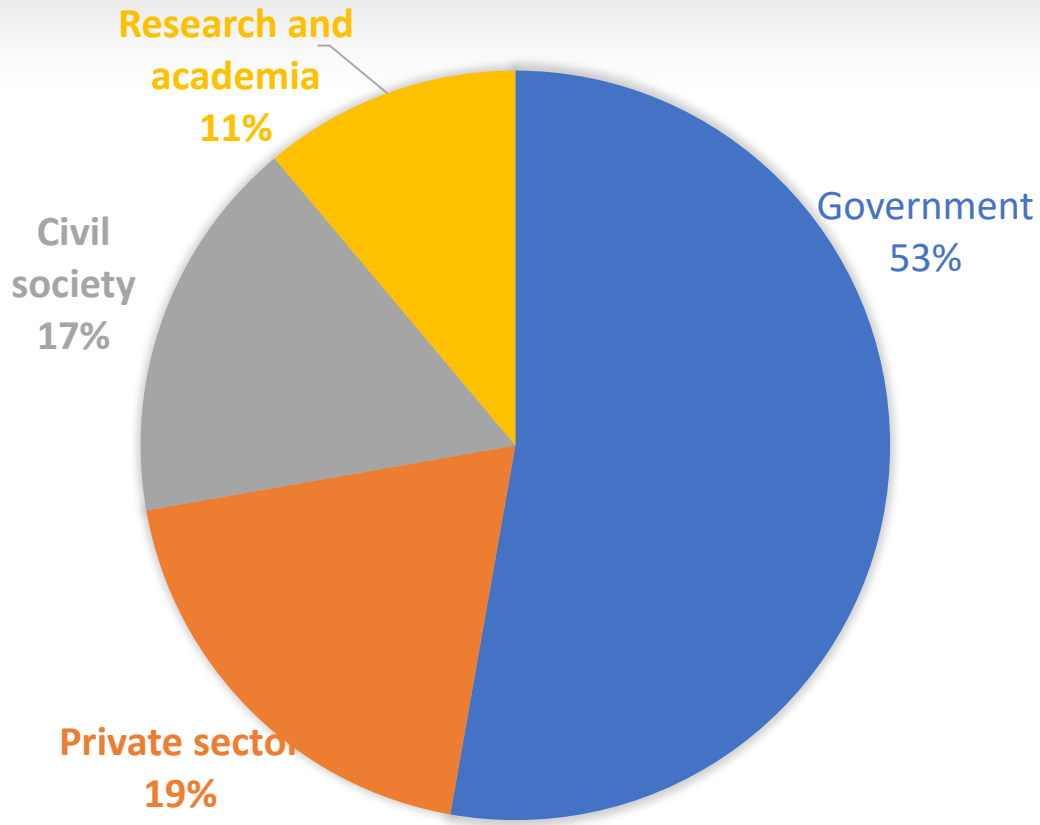
Methodology

The AIS-PPI Tool

- The tool provides policy practice assessment framework with indicators for policy formulation and for policy implementation.
- The tool has 4 thematic policy areas, each with policy dimensions
- Each policy dimension has measuring indicators with definitions
- AIS-PPI scores
- Assessment done by national experts – trained on tool, results validated

Literature review

Methodology: Composition of experts consulted



A stocktake of fertilizer and soil health policies

The National Fertilizer Policy (2021)

- It is the first-ever fertilizer policy in Malawi
- The policy defines a strategy for developing the industry and increasing access to fertilizer
- It is aligned with the Malawi 2063 MIP-1

Soil Health Policies

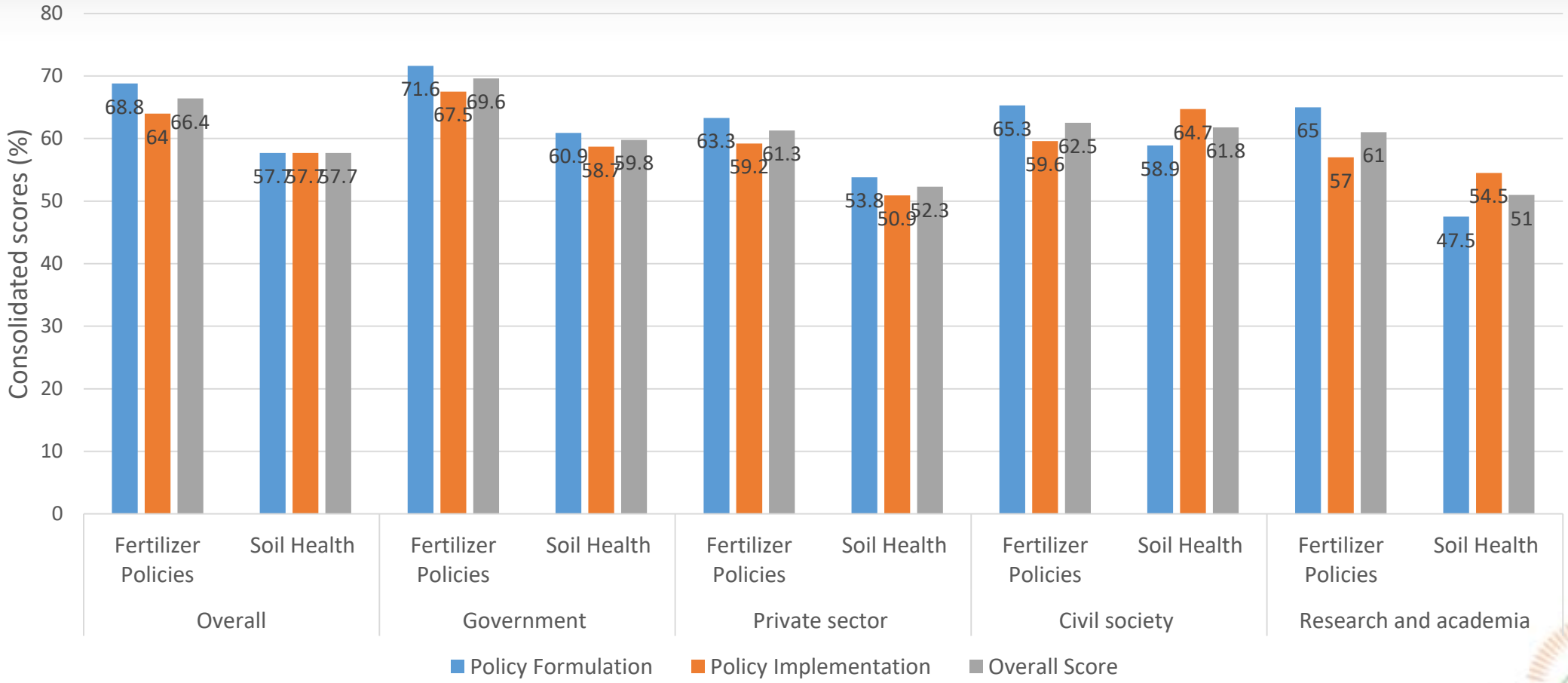
- Malawi does not have a standalone soil health policy
- Elements associated with soil health have been covered:
  - in the NFP (2021);
  - Climate Change Management Policy of 2016; and
  - National Land Resources Management Policy and Strategy of 2000.

A stocktake of fertilizer and soil health regulations

Regulatory framework for the fertilizer industry

- Fertilizer Bill (2022) –
- *expected to be enacted by the current sitting Parliament*
- The sector is currently regulated by the old – Fertilizers, farm seeds and remedies act (1970)
- Soil Health – (*proxy.* National Environmental Action Plan)

Consolidated assessment scores from AIS-PPI tool



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Justifications for scores– Fertilizer Policy and regulations

Policy Formulation and implementation

- Policy well-outlined, and aligned with national and inter. frameworks
- Implementation arrangements in place
- Implementation hindered by financing, human resource capacity
- Lack of proper documentation of lessons
- Bureaucracy on the releasing of innovations

Regulatory framework

- Current one outdated and not robust.
- A fertilizer bill in place

Justifications for scores – Soil Health
Policy and regulations

Policy Formulation and implementation

- NFP and NLRMPS may not encompass all issues of soil health
- LRCD fully equipped staff to manage soil health
- Soil and environmental management in curriculum at LUANAR
- The Malawi soil health consortium for coordinating mechanisms
- Development of soil maps, testing labs
- DARS slow in recognizing innovations as the system is still rigid.

Regulatory framework

- National Environmental Action Plan.

The S-C-P fertilizer markets in Malawi

Structure

- Market liberalized – ADMARC, SFFRFM, Private suppliers
- 570,000mt of fertilizers required annually, 12% blended locally, rest imported (500,000mt)
- Consumption by crop – Maize 70%; Tobacco 10%; Tea, Coffee, and Sugar 5%; Rest 10%

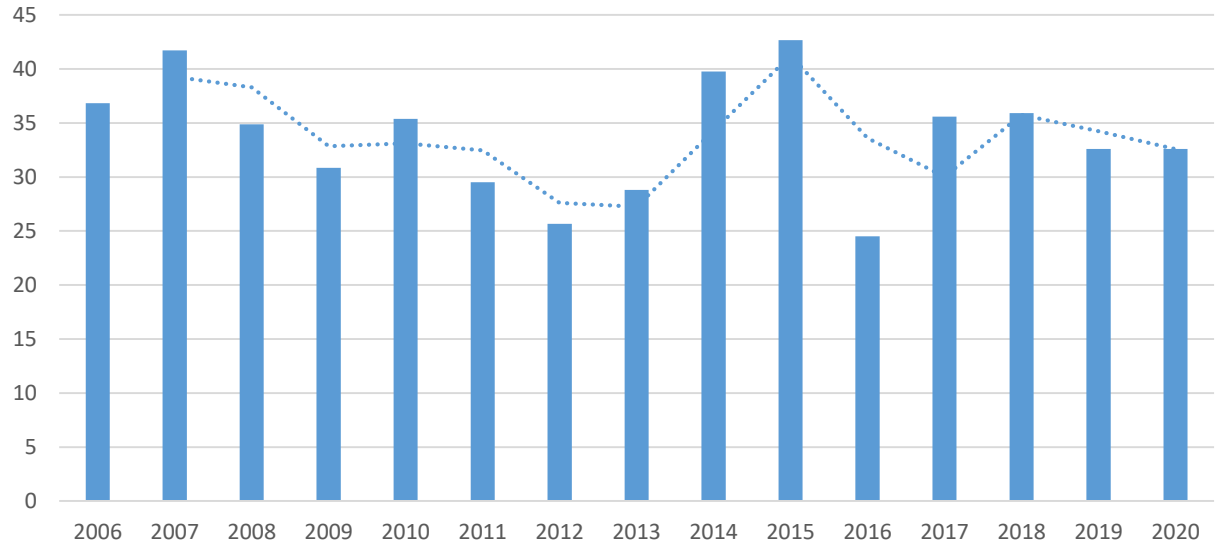
Conduct

- Exchange activities – FAM
- Determinants of prices – cost of importing, transportation and distribution, and profit margins
- Quality control, Research – MBS, DARS, Academia

The S-C-P fertilizer markets in Malawi

Performance

- Increase fertilizer consumption from 10kgs/ha to 55.8kgs/ha (NFP, 2021)



- Yield response rate - 11.82 kg maize/kg of N (NFP, 2021)
- 2020/21 & 2021/22, the gvt. allocated 45.2% and 49.9% of agricultural budget to subsidy

Recommendations

- **Policy formulation**
  - Enact the Fertiliser Bill to stimulate the development of the fertilizer industry
  - Come up with a standalone soil health policy and supportive legislative instruments to promote necessary interventions
- **Policy implementation**
  - Strengthen mutual accountability structures to track and coordinate implementation progress
  - Restructure the registration regime for new fertilizer technologies to make it cost-effective and responsive to the needs of the industry
  - Make fertilizer use profitable by increasing the nutrient use efficiency (NUE) crops

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Policy and Legislative Framework

Indicator	Average score	Justification for score
Problem and causality analysis, clarity and relevance of policy objectives	3.9	National Fertilizer Policy 2021 has well outlined the problems, relevance & objectives. It is well-aligned with other National development plans. However, the policy does not specify the optimal level of productivity and does not address issues of climate change as they relate to fertilizers.
Soundness of legal and regulatory framework	2.6	The current legal framework is outdated and not robust enough for the current environment. The draft Fertilizer bill hopes to address this despite seemingly overburdening the industry with bureaucracy.
Technical and economic soundness	3.3	The draft Fertilizer bill increases the cost of doing business in the industry which will burden the end users (farmers) and contradicts the objective of increasing investments in the industry. The policy is well balanced in defining the roles of stakeholders and safeguards including M&E

Policy Formulation Process

Indicator	Average Score	Justification for score
Breadth and depth of consultation, participation, advocacy, and validation.	3.9	An exhaustive stakeholder engagement was undertaken during policy formulation. However, not clear whether minority groups (especially the disabled) were included. Generally, the private sector feels their suggestions were systematically side-lined
Compliance with regional/international statutes and declarations	3.8	Complies with SDGs, Malabo Declaration 2014, COMESA and SADC Protocol on the fertilizer policy framework.
Guarantees and provisions for implementation and oversight	3.2	Provides for implementation arrangements that clearly define the roles of key stakeholders. However, institutional capacity in the industry is still weak. Oversight is mostly noninclusive enough. This may lead to "us vs them" feelings among implementers.

Institutional Framework for Integrating Science

Indicator	Average score	Justification for score
Integration of science within higher agricultural education training, research, and extension	3.4	The policy has stressed the need for science-based decision making especially on soils and fertilizers. However, serious gaps exist in the financial and human capacity, equipment, and sector coordination.
Arrangements for coordination of innovation	3.1	There is limited innovation in the industry because policymakers are only interested in the product, not the science and innovation that brings the product may initiate. Also, the policy emphasizes on inorganic fertilizers
Partnerships and collaboration to reduce transaction costs for innovation (PPCPs)	3.3	The policy has clearly defined institution arrangements but does not provide innovators an opportunity for bidirectional learning.

Institutional framework for connecting science

Indicator	Average score	Justification for score
Defined multi-sectorial programs at national level, regional and continental level with shared cross ministerial priorities	3.4	Policy promotes collaboration on matters of fertilizer by multiple players locally, though not adequate especially at regional and continental level. Different sectors which are important are working in isolation.
Analysis, documentation and communication of results and experiences	3.1	The documentation exists but not extensive but the major problem is communication the end user. The involvement of end users in providing feedback is lacking.

Institutional framework for strengthening science

Indicator	Average Score	Justification for score
Sustained basic Science capacity at the national and regional level (capacity for innovation)	3.3	The policy provides for improving the national capacity, especially at institutions of higher learning. But, funding limitations for basic science training, research, and equipment dampen this provision.
Capacity to scale up innovation	3	Upcoming young scientists have not been provided with opportunities to scale up their innovations because of the prohibitive legal framework. Also, there are no deliberate efforts to attract innovation at institutions of higher learning. Further, there is too much bureaucracy in releasing innovations.
Monitoring and Evaluation, Mutual Accountability	3.3	A detailed monitoring and evaluation plan for the policy was formulated, which specifies baselines and targets for a set of indicators for assessing performance. However, it is not clear whether this plan is being implemented.

Investment into AIS

2.4 Investment into AIS	Average Score	Justification for score
Public sector expenditure commitment, continuity and certainty into science and innovation	3	The public sector has shown commitment by increasing budgetary allocations to fertilizer access through the subsidy program, but limited funding to other sectors such as research, innovation, and extension is low.
Private sector participation and investment in science and innovation	2.9	There is low participation and investment of the private sector in science and innovation, lack of competitiveness in the fertiliser industry, lack of capital funds and lack of access to information
Civil society and donor commitment and resourcing for science and innovation	3.2	The policy acknowledges that civil society and donors will collaborate with the government in the implementation of the policy and that foreign direct investment in the industry will be supported. However, there have been varying degrees in commitment.

Policy and Legislative Framework

Indicator	Average score	Justification for score
Problem and causality analysis, clarity and relevance of policy objectives	3.1	We don't have a standalone soil health policy. The existing documents are outdated and hence may not encompass current issues
Soundness of legal and regulatory framework	2.4	There is no stand-alone act on soil health. The elements regulatory elements are addressed in the National Land Management Act, and National Environmental Action Plan. Hopefully, the Fertilizer bill addresses all the key issues
Technical and economic soundness	3	Policy statements in existing documents are sound but lack the backing of the corresponding actions. For instance, the high incidence of soil has negatively affected implementation and increased costs.

Policy Formulation Process

Indicator	Average Score	Justification for score
Breadth and depth of consultation, participation, advocacy, and validation.	3.2	There was wide participation at policy formulation, though not clear if the minority groups were represented
Compliance with regional/international statutes and declarations	2.9	The policy was developed under the auspices of the International Scheme for Conservation and Rehabilitation of African Lands. There is a need to align it to the regional and international declarations.
Guarantees and provisions for implementation and oversight	2.8	The policy provides for guarantees and provisions for implementation and oversight. However, it is not costed. Also, there is inadequate funding towards implementation

Institutional Framework for Integrating Science

Indicator	Average score	Justification for score
Integration of science within higher agricultural education training, research and extension	3.4	The LRCD has adequately staffed to deal with soil health and environmental management issues. Also, LUANAR has a specialized program to train research and extension agents.
Arrangements for coordination of innovation	3.1	The NLRMP is silent on coordination mechanisms. However, the existence of the Malawi Soil Health Consortium, with a Secretariat at LUANAR, and the National Environmental Action Plan are a plus.
Partnerships and collaboration to reduce transaction costs for innovation (PPCPs)	3.0	Fairly limited partnerships and coordination between the state and private sector to reduce the costs. No clear mechanism on shared responsibilities

Institutional framework for connecting science

Indicator	Average score	Justification for score
Defined multi-sectorial programs at national level, regional and continental level with shared cross ministerial priorities	2.8	Efforts are made at national level with shared cross ministerial priorities. However, there is need for specific priorities with baseline data to better follow impacts. Not much done at district and local level to substantiate any system established to facilitate sharing priorities, lessons, experiences and feedback from farmers.
Analysis, documentation and communication of results and experiences	2.8	Low level of undertaking demonstrations for learning, Challenges in documentation of the efforts for dissemination at national level There are no guidelines to follow in order to effectively share best bets in soil health innovations.

Institutional framework for strengthening Science

Indicator	Average Score	Justification for score
Sustained basic Science capacity at the national and regional level (capacity for innovation)	2.8	The involvement of the academia and RIs at the formulation stage. However, there is limited funding in basic research, and limited curriculum on soil health in secondary education. Government has largely focussed on National level but doesn't provide incentives for easy transfer and adoption of knowledge. Shortage of extension workers has compounded the problem.
Capacity to scale up innovation	2.9	The policies encourage participation of private sector, research institutions capacity to scale innovation While there are outlined strategies to encourage systems of innovation, investments are little due to limited resources Department of Agriculture Research has been slow in recognising innovations as the system is still rigid.
Monitoring and Evaluation, Mutual Accountability	2.7	Policy monitoring implementation process was provided for in the policy Monitoring and evaluation is not adequately done due to inadequate resources

Investment into AIS

2.4 Investment into AIS	Average Score	Justification for score
Public sector expenditure commitment, continuity and certainty into science and innovation	2.7	Need to make soil health a priority and give it adequate support Insignificant investment in soil health sector. Instead government through AIP, invests in inorganic fertilizers procurement and distribution. There's commitment by government though it's not adequate.
Private sector participation and investment in science and innovation	2.8	The policy is encouraging the private sector to support its implementation. However, Private sector participation has been very minimal. We have a few private sector partners working on issues of soil health, most concentrate on inorganic fertilizers There is good effort from private sector in investing in science and innovation.
Civil society and donor commitment and resourcing for science and innovation	2.9	The policy acknowledges civil society organizations to participate in the implementation of the policy. Civil society participation has been very minimal but donors have contributed substantial amount for staff capacity building in science and innovation. CSO and Development partners provide a platform for coordinating development partner support related to agriculture and fertiliser industry