

The Status of Fertiliser and Soil Health Policies and Regulations in Malawi Christone Nyondo, Boniface Nankwenya, Zephaniah Nyirenda, and Levison Chiwaula

Key Messages

- Malawi has the 2021 National Fertiliser Policy (NFP), the 2022 Fertiliser Act, and the 2000 National Land Resources Policy, but no standalone policy on soil health
- Providing appropriate fertiliser and soil health policies and regulations would boost the productivity
 of a wide range of crops.
- Soil health issues are largely addressed by the 2000 National Land Resources Policy and Strategy and the 2016 Climate Change Management Policy, and partially by the NFP
- Present fertiliser and soil health policies and regulations mainly target the production of maize, but the country needs to broaden this scope.
- Historically, Malawian policy makers have a strong track record for formulating policies and legislative frameworks, but implementation is hindered by budgetary shortfalls, limited human resource capacity, and long procedural delays
- Implementing a holistic program that provides sustained funding for research and development, and extension could improve crop response rates to fertilisers
- Providing adequate financial resources and restructuring the requirements for registering and releasing new technologies and innovations could strengthen implementation and make the registration regime more cost-effective and responsive to the needs of the sector.

Introduction

Low crop productivity stemming from low access to and utilisation of improved seeds, mineral fertilisers and poor soil health continue to constrain the growth of African agriculture, African Malawi inclusive. The Union Commission (AUC) is advocating for countryled, evidence-based initiatives, to accelerate smallholder farmers' access access to fertilisers and promote sustainable soil management as one way of addressing these challenges. To this end, the AUC, through the African Network of Agricultural Policy Research Institutes (ANAPRI) commissioned a series of background technical studies to generate evidence to inform the next set of national interventions to integrate into the continental action plan, for the next decade, that was launched at the Africa Fertiliser and Soil Health Summit, in Nairobi, in 2024.

This policy brief, focusing on Malawi, is part of a series summarizing the results of national assessments of fertiliser and soil health policies, strategies, legislation and the industrial organization of the fertiliser market. The policy brief also provides specific recommendations for consideration by the relevant authorities.

What was done

The assessment was conducted using the Innovation Agricultural Systems-Policy Practice Index (AIS-PPI), a tool developed by the Forum for Agricultural Research in Africa (FARA) to standardise similar assessments across the African continent. The AIS-PPI tool evaluates the country's performance using two composite indicators for policy formulation and implementation. If the AIS-PPI score is below 50%, it indicates that the country's policy formulation or implementation capacity is poor. A good score is expected to be above 50%. The Malawi assessment involved a panel of 37 experts from public and private institutions, research institutes, academia, and civil society institutions. This panel took stock of existing policies, strategies, and legislative instruments, and reviewed them to determine the status of fertiliser and soil health policy ecosystem. These desk reviews complemented by AIS-PPI indicator scores guided by personal knowledge of the industry and expert opinions. The assessment results were validated in two stages. First, by the expert panel after the consolidation of the scores. Second, at a national stakeholder event in December 2022 that involved key stakeholders in the fertiliser and soil health sub-sector.

Status of fertiliser and soil health policies and regulatory frameworks

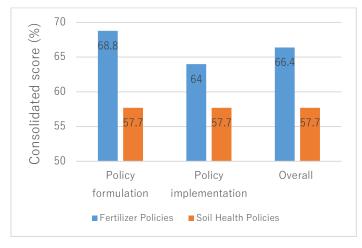
Malawi has a fertiliser policy, the National Fertiliser Policy (NFP), that was adopted in 2021, after several unsuccessful prior attempts but does not have a standalone soil health policy. The NFP is aligned with the National Agriculture Policy (NAP)". The main objective of the NFP (2021) is to increase affordable and profitable access to high-quality fertiliser by smallholder farmers through commercial channels. The policy recognises three types of fertilisers (inorganic, bio-organic, and organic), and provides a framework for blending crop and area-specific fertilisers. Blending crop and area-specific fertilisers could lead to the productivity growth of different crops, thereby contributing to the diversification drive promoted by the Malawi government.

The NFP is regulated by the Fertiliser Act of 2022. Before enacting the Fertiliser Act, the Farm Feeds and Remedies Act of 1970 regulated the sector. However, Malawi does not have a standalone soil health policy and regulatory framework. The NFP addresses some elements of soil health but other elements are addressed by the Climate Change Management Policy of 2016 and the National Land Resources Management Policy and Strategy (2000)^{III}.

Formulation and implementation of policies

Malawi scores highly on the AIS-PPI tool on policy formulation indicators but lowly on policy implementation. According to the panel of experts. Malawi has a well-established system for identifying policy issues and formulating corresponding policies but performs poorly at implementing them (See Figure 1). The poor implementation ability emanates from inadequate financial and human resource capacities, and delays caused by onerous bureaucratic procedures when releasing fertiliser-related technologies and innovations.

Figure 1: Summary of results for policy formulation and implementation indicator scores



Source: Authors' computation based on stakeholders' scores of policy formulation and implementation indicators

Fertiliser market structure

Before the agriculture sector was liberalised in the 1980s, the fertiliser market in Malawi was dominated by two government parastatals, namely the Agricultural Development and Marketing Corporation (ADMARC) and the Smallholder Farmers Fertiliser Revolving Fund of Malawi (SFFRFM). The liberalisation led to increased competition, with over twenty registered fertiliser firms now operating in Malawi.

Malawi is an importer of fertilisers and sources most of its inorganic and bio-organic fertilisers primarily from the Middle East, Eastern Europe, Asia, and South Africa. Only about 50,000 MT (i.e., 12% of its total national consumption) is locally blended by the Malawi Fertiliser Company (MFC) and Optichem (2000) Limited.

Inorganic fertilisers are distributed mainly through the subsidy program and commercial outlets. Subsidised fertilisers are distributed primarily through government parastatals (such as ADMARC and SFFRFM) and the private sector. Subsidised fertilisers exclusively target maize production. undermining the government's diversification objective. Other commercial outlets are private estates, through direct imports, and informal agro-dealers.

Fertiliser market conduct

Fertiliser companies mainly interact through the Fertiliser Association of Malawi (FAM), a grouping of private players. This Consortium was formed in 2007 and supplies more than 90% of the fertiliser consumed in Malawi. About 90% of the domestic market price of fertilisers is determined by the cost of importing, transportation and distribution iv,v. The Kwacha-to-Dollar exchange rate movements are also important cost determinants of domestic retail prices.

Quality control for all types of fertilisers is done by the Malawi Bureau of Standards (MBS). MBS conducts this through pre-inspections and sample testing at the border entry points.

Most fertilisers supplied in Malawi are based on a blanket recommendation. Before 2018, the recommendation for NPK was 23:21:0+4S, before being adapted to 23:10:5+6S+1Zn in 2018. However, the country has about 23 main fertiliser straights, compounds, and blends that are readily available^{vi}.

The lack of a comprehensive soil information database is hampering the development of area and crop-specific fertiliser blends. Developing such blends is important for directly responding to soil and crop-specific requirements across agroecological zones. Currently, there are efforts, led by the Ministry of Agriculture (MoA), to develop fertiliser blends that meet the needs of farmers, across the board, with different soils and crops.

Market performance

Malawi's inorganic fertiliser use has increased from 10 kg/ha in 2005 to 55.8 kg/ha in 2016 partly due to the implementation of the Farm Input Subsidy Program. This increase is

significant because it exceeds the target of 50 kg/ha set in the 2006 Abuja declaration.

Government budget documents show budgetary allocations to the MoA are skewed towards the subsidy program. The Malawian government allocates more than 10% of its annual budget to the agricultural sector, on average, surpassing the 10% target set by the 2003 Maputo declaration. The subsidy program takes up over 50% of this budget and crowds out investments in extension, research and other agricultural development programs.

Crop response rates

Crop response rates to nitrogen (N) fertiliser application have been falling from around 18kgs/ 1kg of Nitrogen (N) in the mid-80s to mid-90s to less than 5kgs/ 1kg N in 2020vii. These lower rates have also been observed elsewhere within the SSA region, such as in Nigeria, Tanzania and Zambiaviii. The low rates have been attributed to low soil organic carbon and blanket fertiliser recommendations that fail to address the diverse deficiencies in soil quality across Malawiix.

Policy recommendations

 Consider implementing the National Fertiliser Policy and Fertiliser Act in full, to improve both the institutional and programmatic ecosystem of the country. This is critical especially now that Malawi has both of them in place.

- Consider introducing a standalone soil health policy and a regulatory framework to decisively address the soil health issues constraining agricultural diversification and productivity in the country.
- Consider strengthening (and wherever necessary creating) mutual accountability structures to track the implementation progress of policy activities and coordinate the responsibilities assigned to stakeholders at the policy formulation stage.
- Consider restructuring the requirements for registering and releasing new fertiliser technologies to make them cost-effective and responsive to the needs of the sector.

- Consider investing more in economic and social infrastructure, such as railway lines and better roads to reduce transportation costs and improve the utilization of inputs.
- Consider implementing a holistic program to provide sustained funding for research, development, and extension to improve the crop response rates to fertiliser, reduce the cost of fertiliser and increase fertiliser use profitability.

This Policy Brief is not for citation. For additional resources and to cite this work, please refer to:

MwAPATA Technical Reports.

Technical report version soon to be available at: http://www.mwapata.mw/publications

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