



National Consultative Workshop
on Soil Nutrition and Soil Health Interventions
“Re-imagining Soil Nutrition and Soil Health Policies and Interventions in Malawi”
December 6th, 2022

1. Introduction

A Consortium of MwAPATA Institute, Ministry of Agriculture, Civil Society Agriculture Network (CISANET), Alliance for Africa Partnership (AAP), the Lilongwe University of Agriculture and Natural Resources (LUANAR), GIZ-Green Innovation Centers and the Food and Agricultural Organization (FAO) of the United Nations organized a day-long national consultation workshop at Ufulu gardens hotel in Lilongwe on 6th December 2022. The objective of the workshop was to review the status of fertilizer and soil health policies, strategies, legislation, and current and emerging interventions addressing soil health issues in the country. The workshop also aimed at commencing the process of consolidating issues to be included in a country position paper to be presented during the high-level discussions at the African Union Commission (AUC) Fertilizer and Soil Health Summit scheduled for June 2023, in Abuja, Nigeria.

The workshop brought together stakeholders in the fertilizer, soil health, and agroecology sub-sectors from the public sector, private sector, academia, civil society, development partners, farmer organizations, and national research institutes (RIs). Specific presentations were made, in line with the conference theme, to lay the ground for plenary and breakout sessions where stakeholders` agreed on specific practical interventions to accelerate fertilizer use (all fertilizers) and enhance soil and water management in the country. The key takeaways are summarized in section 2.

2. Key take-home points from the workshop and their associated recommendations
- The productivity of major staples, including maize and potatoes, is falling due to poor soil fertility, land and water management, and plant nutrition in general;
 - The results of soil chemical analysis have shown that soil nutrient deficiencies in the country vary widely across the agroecological zones. Consequently, the blanket fertilizer recommendation that the country is currently following does not fully address the common micronutrient deficiencies, including Zinc (Zn), Boron (B), Selenium (se), and magnesium (Mg).
 - These can be better addressed using area and crop-specific recommendations espoused in the National Fertilizer Policy (NFP) of 2021, hence the need to implement the NFP (2021) fully;
 - Also, to optimize crop yields, the updated soil fertility status maps that are generated at the Extension Planning Area (EPA) level by the Ministry of Agriculture (MoA) should be used to optimize fertilizer use and guide the identification and implementation of appropriate area specific soil health management recommendations. For instance, inorganic fertilizer application is encouraged on fields with adequate soil organic carbon, while agricultural lime is encouraged on acidic soils; and
 - The current soil maps can facilitate the identification of areas that are suitable for inorganic fertilizer use and those that will initially require amelioration with agricultural lime.
 - The joint creation of soil maps and sharing of soil analysis results should be encouraged;
 - The use of agricultural lime in districts with acidic soils, should be promoted;
 - The Malawi soil health consortium, which is based at LUANAR, should be supported to effectively undertake its roles of facilitating, tracking, and coordinating soil health interventions; and
 - A regulatory and standardization framework for organic and other emerging fertilizers should be put in place.

- While the NFP (2021) and the recently enacted Fertilizer Bill (2022) are expected to stimulate the development of the fertilizer industry, the country needs to come up with and fully implement a stand-alone and all-encompassing soil health policy and corresponding bill/act;
- In an assessment that was done by MwAPATA to ascertain the status of fertilizer and soil health policies, strategies, and regulatory frameworks in Malawi, it was found that Malawi scores very well on policy formulation indicators but poorly on policy implementation indicators due to the following issues:
 - Poor financing and human resource capacity constraints; and
 - Inadequate monitoring, learning, documentation, and dissemination of lessons; and
 - Too much bureaucracy on the release of technologies and innovations
 - There is a need to restructure the registration regime for new fertilizer technologies and soil health technologies to make the process cost and time effective, as well as responsive to the needs of the subsector; and
 - Public-private partnerships should be encouraged during technology generation, trial, release, and dissemination;
- While the allocation of government funds to the MoA has steadily improved, the composition has not. The subsidy program continues to dominate the MoA budget and hence, there is a need for:
 - political will to reform the subsidy program to unbundle resources for other programs in the MoA, such as extension, agricultural research, and livestock development, among others;
 - Government should adopt a holistic and incentive-based approach in the AIP.
 - Complementary soil fertility interventions should be integrated into the AIP; and
 - Participation in the AIP should be conditional on the adoption of at least one of these complementary interventions.

- Low literacy levels among farmers, high costs of fertilizers and soil analysis services, small landholding sizes, and blanket fertilizer recommendations continue to hinder agricultural growth and overall production.
- Also, there is a Knowledge gap regarding the existing productivity-enhancing technologies and existing financing opportunities available to farmers.
 - There is a need to increase the local capacity for manufacturing and blending fertilizers;
 - There is a need to explore the possibility of the SADC region establishing a fertilizer plant to cater to the needs of the region because that could be the most cost-effective way of doing it; and
 - There is a need to standardize and promote the production of organic fertilizers (e.g., Mbeya fertilizers).
- There are multiple soil health interventions promoted in Malawi and these include conservation agriculture, push-pull, compost and manure application, crop-livestock integrated farming, agroforestry using leguminous trees, and permaculture.
 - There is a need to increase the capacity and number of extension workers to support the implementation of fertilizer and soil health interventions among smallholder farmers.

3. Conclusion

Overall, the stakeholders at the workshop agreed to take a multidimensional approach to address soil health challenges and avoid blanket recommendations. What remains is to implement the agreed interventions to enhance soil fertility. The joint stakeholder collaboration will be critical for the successful implementation of these proposed recommendations