



Legal Review and Analysis of the Fertilizer Regulatory Framework in Southern African Development Community

LEGAL ANALYSIS SUBMITTED TO THE AFRICAN FERTILIZER AND AGRIBUSINESS PARTNERSHIP (AFAP) FOR THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY(SADC) SECRETARIAT UNDER THE PROJECT *TO SUPPORT DEVELOPMENT OF A SADC HARMONIZED REGIONAL FERTILIZER REGULATORY FRAMEWORK*, SUPPORTED BY THE FOOD AND AGRICULTURAL

Submitted by the New Markets Lab



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Acronyms and Abbreviations

ACTESA	Alliance for Commodity Trade in Eastern and Southern Africa
AFAP	African Fertilizer and Agribusiness Partnership
AGRA	Alliance for a Green Revolution in Africa
AOAC	Association of Official Analytical Chemists
AU	African Union
CAADP	Comprehensive Africa Agriculture Development Program
COMESA	Common Market for Eastern and Southern Africa
DRC	Democratic Republic of Congo
EAC	East African Community
ECOWAS	Economic Community of Western African States
FAO	Food and Agriculture Organization of the United Nations
Ha	Hectare
IFA	International Fertilizer Association
IFDC	International Fertilizer Development Center
IPNM	Integrated Plant Nutrient Management
ISO	International Organization of Standardization
Kg	Kilogram
NAP	National Agricultural Policy
NARS	National Agricultural Research Services
NFRC	National Fertilizer Regulatory Commission
NML	New Markets Lab
REC	Regional Economic Community
SADC	Southern African Development Community
SDGs	Sustainable Development Goals
SPS	Sanitary and Phytosanitary Measures
SSA	Sub-Saharan Africa
TBT	Technical Barriers to Trade
TFTA	Tripartite Free Trade Agreement
UN	United Nations
USD	United States Dollar
USAID	United States Agency for International Development
WTO	World Trade Organization



Executive Summary

This report was developed through a partnership between the African Fertilizer and Agribusiness Partnership (AFAP) and the New Markets Lab (NML),¹ a center for law and development which has worked extensively on the regulation of agricultural inputs, in support of efforts by the Southern African Development Community (SADC) to harmonize fertilizer regulation. The report was commissioned by the Food and Agricultural Organization of the United Nations (FAO) under the project *Support Towards the Development of a SADC Harmonized Fertilizer Regulatory Framework*.

Fertilizer legal and regulatory frameworks serve to promote agricultural productivity and food security through improved access, availability, and affordability of quality fertilizer. Streamlining rules and regulations applicable to activities along the fertilizer value chain can enable supply chain actors to pursue their business interests and create an enabling environment that is crucial for growing and sustaining fertilizer markets. At the national level, countries typically regulate the fertilizer industry through several interconnected legal instruments, which often include a fertilizer policy, a fertilizer act or law, fertilizer regulations, and subsidiary guidelines. These legal instruments are all related, but each plays a distinct role in the regulation of the fertilizer industry, collectively influencing the cost of doing business and overall investment in the fertilizer sector. National fertilizer legislation and regulations should be aligned with regional and international good regulatory practices, as well as with regional fertilizer instruments to which the respective country is a party. This alignment extends the benefits of effective national regulatory systems to the regional level when a country is a Member State of a regional economic community (REC), especially because fertilizer is highly dependent upon cross-border trade.

Regional regulation of fertilizer movement and quality control procedures can be important for ensuring product efficacy, weight of shipping containers, and consistency of chemical components with what has been declared. Quality control issues for fertilizer are paramount and have significant implications across borders, and harmonizing rules can help trace fertilizer products and enforce fertilizer standards, ultimately helping to address the challenge of counterfeit or adulterated fertilizers.

While the benefits of harmonization of regional rules on fertilizer are evident, the effectiveness of harmonized regional fertilizer rules is highly dependent on the domestication and implementation of regional rules within the national fertilizer regulatory framework. Domestication is subject to

¹ More information on the New Markets Lab can be found at <https://www.newmarketslab.org/>. NML is a law and development center with comparative expertise developed through ongoing research, previous project work, international programs, and case-studies, and the organization has significant experience with international law and good regulatory practices, including through African RECs (for example, NML's team includes lawyers from different jurisdictions, including the EAC and COMESA).



the willingness of the respective country to align its national laws with harmonized regional fertilizer rules, and it can also be affected by membership in different RECs with differing approaches to harmonized fertilizer regulation. Moreover, countries within one REC can be at different stages of economic development, which can impact the adoption and implementation of harmonized regional fertilizer rules.

This assessment responds to these opportunities and challenges to draw lessons for approaches on harmonization of regional fertilizer rules in SADC, focusing on its sixteen Member States, that is, Angola, Botswana, Comoros, Democratic Republic of Congo (DRC), Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Tanzania, Zambia, and Zimbabwe. International, regional, and national best practices embedded in international agreements, continental and regional regulatory instruments, and national laws will be highlighted throughout the assessment to note options for regional emphasis and provisions based on those best practices that could be adopted in the SADC regional fertilizer regulatory framework. This analysis was based on extensive desktop research, reports from consultants, and discussions from validation meetings held by FAO and AFAP in the SADC Member States.

The assessment includes the history of fertilizer legal and regulatory efforts in African RECs and SADC as well as an analysis the legal nature of regional fertilizer instruments and key differences across regions, with findings on the relevant instruments for harmonization of fertilizer regulation in SADC, and discussion of international, continental, regional, and national rules relevant to fertilizer. The Report concludes with an assessment of good practices on fertilizer regulation, a comparative assessment of SADC countries' fertilizer regulatory systems benchmarked against these best practices, and regulatory options for the SADC harmonized fertilizer regulatory framework. The key findings from the assessment are summarized below.

A harmonized fertilizer regulatory framework for SADC will need to align with existing international, continental, and regional fertilizer regulatory commitments and frameworks for good regulatory practices at the national and regional levels. At the international level, the World Trade Organization (WTO) covered agreements include obligations related to fertilizer measures under the 1995 WTO Agreement on Technical Barriers to Trade (TBT Agreement), which governs technical regulations and standards, and the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement), which governs measures related to human, animal, or plant life or health. These two instruments contain provisions related to fertilizer standards and labeling (TBT Agreement) and permitted fertilizer residue in food (SPS Agreement). The FAO 2019 International Code of Conduct for the Sustainable Use and Management of Fertilizers (The Code), although a soft law instrument, also includes good practices on fertilizer regulation that can be adopted at the national and regional levels. The Code, among other things, calls for countries to develop and implement a fertilizer policy; legal and regulatory system focused on fertilizer quality control; registration; penalties for non-compliance; appropriate safety measures for the



production, distribution, storage, handling, transport, and application of fertilizers; evidence-based SPS measures and standards (consistent with WTO rules); and limitations and guidelines on harmful content of fertilizer products. The Code encourages international harmonization of quality assurance methods, including weights, labeling, and packaging. The United Nations Sustainable Development Goals (SDGs) of the 2030 Sustainable Development Agenda also include guiding principles relevant to national and regional level fertilizer regulation, including SDG 1 (No Poverty), 2 (Zero Hunger), 6 (Clean Water and Sanitation), 9 (Industry, Innovation and Infrastructure), 13 (Climate Change), 14 (Life Below Water), and 15 (Life on Land).²

At the continental level, several instruments relevant to fertilizer regulation have also been adopted. These include the 2003 Maputo Declaration on Agriculture and Food Security, the 2006 Abuja Declaration on Fertilizer for an African Green Revolution, and the 2014 Malabo Declaration on Accelerated Agricultural Growth and Transformation for Share Prosperity and Improved Livelihoods (2014 Malabo Declaration) under the Comprehensive Africa Agriculture Development Programme (CAADP). These were generally designed to improve fertilizer availability, affordability, and access in order to increase fertilizer use, double agricultural productivity, end hunger, and halve poverty by 2025. Under the Maputo Declaration, for instance, African countries made a pledge to allocate at least 10 percent of their national budgets to agriculture and rural development to stimulate agricultural growth, reduce poverty, and build food and nutrition security. Under the Abuja Declaration, countries committed to increase fertilizer use to at least 50 kilograms of nutrients per hectare by 2015, harmonize policies and regulations to ensure duty- and tax-free movement of fertilizers across regions, and develop capacity for quality control. Regional harmonization to improve fertilizer quality assurance is also one of the many action points under the 2014 Malabo Declaration. Most of these commitments are yet to be encapsulated and implemented by most African countries and within the different RECs.

At the regional level, some RECs have, or are in the process of developing, regional fertilizer regulations encompassing good practices that could also be adopted under a SADC regional fertilizer regulatory framework. The Economic Community for West African States (ECOWAS) has developed regional fertilizer rules (Regulation C/Reg.13/12/12 Relating to Fertilizer Quality Control in the ECOWAS Region) which incorporate good practices on fertilizer regulation, including free movement of fertilizers, truth in labeling, standard quality and labeling requirements, inspection and analysis requirements, tolerance limits for nutrient deficiency, weight and maximum allowable metal limits, licensing of fertilizer producers and dealers, right to appeal and confidentiality, modalities on regulation of manufacturing and import, and administrative oversight. The East African Community (EAC) is also in the process of putting in place regional fertilizer rules under a draft Fertilizer Policy and Bill (currently at an advanced stage of enactment).

² United Nations, “Transforming Our World: The 2030 Agenda For Sustainable Development,” (A/RES/70/1) (New York, 25 to 27 September 2015).



The draft Fertilizer Bill includes good practices such as administrative arrangements at the national and regional levels; registration of fertilizer, including laboratory and field testing parameters; provisions on manufacturing; licensing of fertilizer dealers; rules on fertilizer packaging, labeling, storage, and disposal; acts that constitute violations including dealing in unregistered, adulterated, misbranded, and sub-standard fertilizer; penalties for violation; and appeals and dispute settlement mechanisms. The Common Market for Eastern and Southern Africa (COMESA) is also in the process of developing harmonized regional fertilizer rules and, has through the Joint Program on Fertilizer Policy Harmonization, in collaboration with AFAP and NML,³ developed the Guidelines for Regional Harmonization of Fertilizer Regulations in COMESA, which also reflect good fertilizer regulatory practices. At the continental level, the African Continental Free Trade Area (AfCFTA), which will continue to be developed through additional protocols, currently incorporates the principles of the WTO SPS and TBT Agreements, including the obligation to maintain science-based measures, preference for international harmonization, and encouragement to align with international standards where they exist.

This report's assessment of international, continental, and regional, and national fertilizer legal and regulatory instruments focuses on the following good regulatory practices:

- Establish or maintain a **national and regional fertilizer policy and institutional framework** to monitor implementation of fertilizer legal and regulatory instruments at the national and regional levels.
- Develop a **national and regional quality control system**, including fertilizer quality standards that cover uniform particle size, moisture content, nutrient content for compound fertilizers, and maximum presence levels of heavy metals like cadmium, selenium, mercury, and arsenic, inspection and analysis processes, integrity (reliability) of packaging, and proper and correct labeling. Quality control should cover fertilizer products, facilities, and dealer registration or licensing rules.
- Maintain rules on **transparency and due process**, including streamlined rules on appealing against administrative decisions and protection of business information under rules on confidentiality.
- Develop and implement rules on **cross-border trade** requirements, including streamlined regulations on import and export of fertilizer, rules on exemption of fertilizer from tariffs and custom duties, and mutual recognition of fertilizer certification by other SADC member countries.
- Incorporate rules on **environmental protection**, including streamlined regulations on proper fertilizer storage, use, and disposal.

³ New Markets Lab and African Fertilizer and Agribusiness Partnership (AFAP) for the Alliance for a Green Revolution in Africa (AGRA) through the U.S. Agency for International Development (USAID), "Guidelines for Regional Harmonization of Fertilizer Regulations in COMESA", 2017.



- **Focus on enforcement** of fertilizer quality standards through penalties such as fines, imprisonment sentences, damages, confiscation, and destruction of adulterated or substandard fertilizers, among others.
- Consider other relevant provisions, such as streamlined national rules on fertilizer use promotional programmes, such as subsidies and bulk procurement processes.

Regulatory instruments have to be in place adopting these principles in order for fertilizer regulatory good practices to effectively apply at the national and regional levels, and countries have to implement relevant rules and procedures in practice. Currently, several countries within the SADC region do not have a fertilizer-specific legal and regulatory framework, including Angola, Comoros, DRC, Eswatini, Lesotho, Madagascar, and Seychelles (highlighted in red in Table 1 below). While other SADC countries do have some form of legal and regulatory framework in place for fertilizer, some only cover certain regulatory practices (noted in yellow in Table 1 below). Moreover, with the exception of Malawi, which has recently passed a Fertilizer Policy, none of the SADC countries has a fertilizer-specific policy, yet, as the Code highlights, a Fertilizer Policy can be an important component of the legal and regulatory system for fertilizer, providing a foundation of principles and guidelines upon which binding legislation (under an act or law) and regulations should be based. Notably, however, even without a policy framework, some countries in the SADC region, such as South Africa and Tanzania, have developed comprehensive fertilizer legal and regulatory instruments that embody a wide range of the fertilizer regulatory practices as shown in Table 1 below. A detailed presentation of SADC Member States' current status regarding fertilizer regulatory good practices is presented in Section III and summarized in Annex I.



Table 1: Legal and Regulatory Frameworks on Fertilizer (Benchmarked Against Regulatory Good Practices) in SADC Member States

Country	Legal Framework	Dedicated Fertilizer Regulatory Authority	Quality Standards	Registration Requirements			(A) Packaging (B) Labeling		Cross-border Trade Requirements	Enforcement	SADC Internal Tariff Exemption	Transparency and Due Process		Environmental Protection	
				(A)Product, (B)Facility (C)Dealer Licensing	A	B	C	A				B	(A)Appeals (B)Confidentiality	A	B
<i>Angola</i>															
<i>Botswana</i>									TBD						
<i>Comoros</i>											TBD				
<i>DRC</i>															
<i>Eswatini</i>											TBD				
<i>Lesotho</i>											TBD				
<i>Madagascar</i>															
<i>Malawi</i>									TBD						
<i>Mauritius</i>									TBD						TBD
<i>Mozambique</i>															
<i>Namibia</i>											TBD				
<i>Seychelles</i>											TBD				
<i>South Africa</i>									TBD						
<i>Tanzania</i>											TBD				
<i>Zambia</i>									TBD						
<i>Zimbabwe</i>									TBD						
Key		Legal framework in place				No legal framework currently in place					<i>Registration required</i>	<i>not</i>		<i>Tariffs on Fertilizer Import</i>	

Source: New Markets Lab 2021. Table based on SADC Member States legal and regulatory framework.



I. Introduction: History of Regional Fertilizer Regulation in African RECs and SADC

Fertilizer use within the SADC region remains critically low, especially among smallholder farmers, with negative effects on agricultural productivity and food and nutrition security.⁴ While fertilizer application in some SADC countries like South Africa is relatively high at 55 kilograms(kg) per hectare(ha), the average fertilizer use per hectare in the SADC region still remains low. For instance, fertilizer use was about 20kg/ha in 2009 to 2012,⁵ which is well below the Abuja Declaration target of 50kg/ha.⁶ Fertilizer affordability, availability, and access remain major challenges caused by prohibitively expensive fertilizer prices, likely due to restricted markets and high transport costs, as well as limited farmer knowledge on use of fertilizer.⁷ With the exception of a few countries in the SADC region engaged in local fertilizer production and blending, most of the fertilizer used in the region is imported, with high transportation and storage costs, much of which is transferred to the farmer.⁸ Further, the rules on quality control, including fertilizer standards, product and dealer registration, and packaging and labeling, among others, are not streamlined in some countries and are completely non-existent in others (see Table 1 above). While fertilizer subsidy programmes aimed at increasing fertilizer use are common within the SADC Partner States, many governments face financial challenges to sustain these programmes, and most subsidy programmes, unless designed and tailored as “smart subsidies”, run the risk of having negative effects on the market that could consequently discourage private sector investment.

⁴ African Fertilizer Financing Mechanism, Promotion of Fertilizer Production, Cross-Border Trade and Consumption in Africa, African Development Bank, June 2018. Available at: https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Study_sponsored_by_UNECA_AFFM_on_promotion_of_fertilizer_production_cross-border_trade_and_consumption_in_Africa.pdf.

⁵ AGRA, Africa Agriculture Status Report: The Business of Smallholder Agriculture in Sub-Saharan Africa (Issue 5). Nairobi, Kenya.

⁶ The New Partnership for Africa’s Development (NEPAD) Planning and Coordinating Agency, The Abuja Declaration on Fertilizers for an African Green Revolution: Status of Implementation at Regional and National Levels June 2011, CAADP June 2001. Available at: <https://africafertilizer.org/wp-content/uploads/2017/04/Seventh-Progress-Report-on-the-Abuja-Declaration-on-Fertilizers-for-an-African-Green-Revolution.pdf>.

⁷ New Markets Lab, Economic Impact Assessment and Legal Review and Analysis of the East African Community Seed and Fertilizer Legislation, Study for Emerge Centre for Innovations-Africa for the East African Community Secretariat Under the *Partnership Toward Catalyzing the Implementation of CAADP-Malabo 2017-2020*, Supported by the Alliance for a Green Revolution in Africa, 19 December 2019.

⁸ African Fertilizer Financing Mechanism, Promotion of Fertilizer Production, Cross-Border Trade and Consumption in Africa, African Development Bank, June 2018. Available at: https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Study_sponsored_by_UNECA_AFFM_on_promotion_of_fertilizer_production_cross-border_trade_and_consumption_in_Africa.pdf.



A. Summary of African Regional Harmonization of Fertilizer Regulation

Regional harmonization of fertilizer regulations within SADC is particularly timely and has the potential to unleash considerable growth in the agricultural sector. Following regional harmonization of fertilizer regulation in ECOWAS, and the ongoing fertilizer regulatory harmonization efforts under the EAC, the process of adopting harmonized SADC fertilizer rules will bring considerable benefits in the individual SADC Partner States and at the regional level. Once regional rules are adopted, this system could help streamline cross-border procedures to reduce the cost of importing fertilizer and boost regional and international fertilizer trade, bringing gains to all stakeholders involved. SADC Member States could benefit from each other's strengths, with transfer of technology from countries with advanced fertilizer research, manufacturing, and blending capacities, like South Africa and Tanzania. RECs have used regional harmonization efforts to link national and regional markets, achieving economies of scale, creating opportunities along value chains, and improving livelihoods across different industries in the agricultural sector.⁹ Harmonizing legal and regulatory frameworks on fertilizer at the regional level will also be critical for facilitating investment, increasing the availability of high-quality fertilizer, and improving fertilizer trade across borders.

Regional regulation of fertilizer movement and quality control procedures can be important for ensuring product efficacy, weight of shipping containers, and consistency of chemical components with what has been declared. It can also simplify and increase transparency of legal procedures including acquiring licenses, shorten procedures for evaluating new fertilizer products, establish uniformity in rules on quality control across countries, and improve rules and regulations that directly impact participation of the private sector in the fertilizer industry.¹⁰ Quality control issues for fertilizer are paramount and have significant implications across borders, and aligning rules can help trace fertilizer products and enforce fertilizer standards, ultimately helping to address the challenge of counterfeit or adulterated fertilizers.

Regional harmonization also brings some challenges. First, at the national level, countries within a regional bloc are often at different stages of developing legal and regulatory systems in fertilizer. This is true within SADC, as some countries have advanced regulatory systems, some lack fertilizer-specific rules, and others have notable gaps in legal and regulatory frameworks. This will

⁹ NML, Economic Impact Assessment and Legal Review and Analysis of the East African Community Seed and Fertilizer Legislation, Study Emerge Centre for Innovations-Africa for the East African Community Secretariat Under the *Partnership Toward Catalyzing the Implementation of CAADP-Malabo 2017-2020*, Supported by the Alliance for a Green Revolution in Africa, 19 December 2019. See also, NML in collaboration with the AFAP for the AGRA through the USAID, "Guidelines for Regional Harmonization of Fertilizer Regulations in COMESA", 2017.

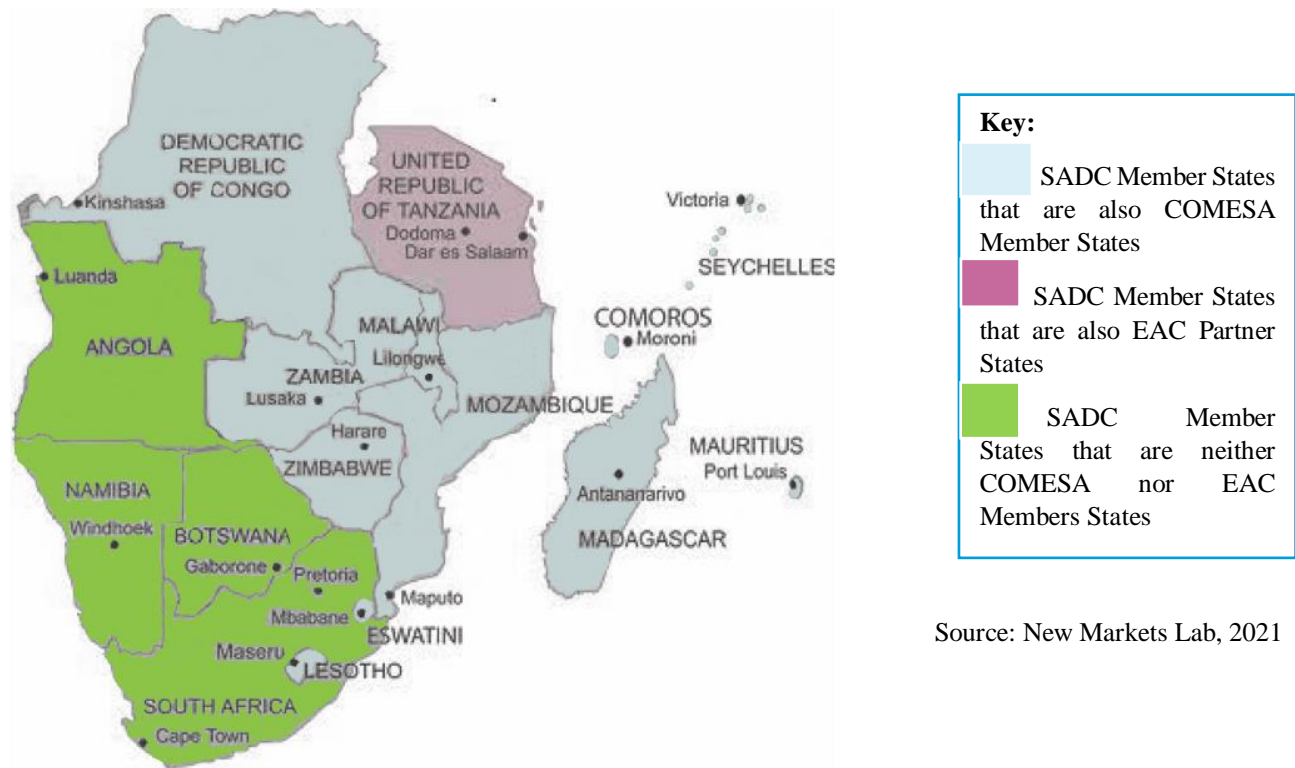
¹⁰ NML, Economic Impact Assessment and Legal Review and Analysis of the East African Community Seed and Fertilizer Legislation, Study Emerge Centre for Innovations-Africa for the East African Community Secretariat Under the *Partnership Toward Catalyzing the Implementation of CAADP-Malabo 2017-2020*, Supported by the Alliance for a Green Revolution in Africa, 19 December 2019.



affect implementation of a SADC harmonized fertilizer regulatory framework once developed and adopted. Moreover, countries tend to be at different levels of economic and agricultural development overall, which creates differences in the level of investment and cost that will be necessary to comply with regional rules on fertilizer.

Further, most countries in Southern Africa, including the sixteen SADC Member States, are members of more than one REC, which means that obligations, standards, and rules may differ (see Figure 1 below on SADC Member States and their Membership in SADC, COMESA, and the EAC). Within SADC, Comoros, Eswatini, DRC, Madagascar, Malawi, Mauritius, Seychelles, Zambia, and Zimbabwe are all also Member States of COMESA, which is also considering regional fertilizer regulation but does not yet have a system in place. Tanzania is a member of the EAC, which is at an advanced stage of developing regionally harmonized rules on fertilizer under the EAC Fertilizer Policy and Bill. Because of these overlapping regional rules, countries will have to watch for alignment between obligations and their implementation in SADC, the EAC, and, later, under COMESA as well. With this in mind, the comparative assessment of the different regional regulatory systems for fertilizer contained in this Report will highlight some of these existing and possible differences.

Figure 1: SADC Member States and Their Membership in SADC, COMESA, and the EAC



Source: New Markets Lab, 2021



ECOWAS is the only REC with a regional regulation on fertilizer in effect, namely the ECOWAS 2012 Fertilizer Regulation. This regional regulation is also included as a benchmark, as are good international practices. ECOWAS provides a useful yardstick, although existing regulatory practices within SADC may call for approaches that differ from those adopted in ECOWAS. For example, registration of fertilizer is already common within the SADC region, likely calling for an approach that streamlines registration efforts rather than eliminates registration of fertilizer. While this would represent a notable difference between the SADC and ECOWAS rules, other good practices, such as the right to appeal and confidentiality, could track with the precedent that ECOWAS sets. Understanding these options and possible differences is important for national governments and has broader implications for regional and continental harmonization, including under the AfCFTA.

B. History of Legal and Regulatory Harmonization for Fertilizer in SADC

SADC's efforts to harmonize fertilizer rules come at a particularly critical time, since agricultural inputs such as fertilizer have been identified as priorities to drive agricultural productivity and food and nutrition security in the region.¹¹ In 1992, the SADC Treaty was adopted by SADC Member States with objectives including promoting sustainable and equitable economic growth in the region through harmonization and development of policies aimed at progressive elimination of obstacles to free movement of goods among Member States.¹² The SADC Treaty provides for Member States to coordinate and harmonize sectoral policies,¹³ of which agriculture is identified as a key area of cooperation under the SADC Treaty.

A Memorandum of Understanding (MoU) on Standardization, Quality Assurance, Accreditation and Metrology¹⁴ was adopted in 2000, establishing a formal framework for harmonization and cooperation amongst national institutions. This MoU provides for mutual recognition of measurements, accreditations, and quality standards by SADC Member States that are aligned with regional and international standards. In 2003, the SADC Regional Indicative Strategic Development Plan (RISDP) was developed to provide a roadmap for the agricultural sector. The

¹¹ SADC, Regional Agricultural Policy (RAP) Country Summary Agricultural Policy Review Reports, January 2011, p. 123, 259, available at https://www.sadc.int/files/7113/5293/3509/Regional_Agricultural_Policy_Review_Reports_2011.pdf.

¹² Article 5 of the Consolidated Text of the Treaty of the Southern African Development Community, available at: https://www.sadc.int/files/5314/4559/5701/Consolidated_Text_of_the_SADC_Treaty_-_scanned_21_October_2015.pdf.

¹³ Article 21(1) of the Consolidated Text of the Treaty of the Southern African Development Community, available at: https://www.sadc.int/files/5314/4559/5701/Consolidated_Text_of_the_SADC_Treaty_-_scanned_21_October_2015.pdf.

¹⁴ Memorandum of Understanding on Standardization, Quality Assurance, Accreditation and Metrology, 2000, available at: <https://www.sadc.int/files/5613/5333/8302/SQAM.pdf>.



RISDP emphasized improving the institutional and regulatory framework for the agricultural sector, which includes fertilizer and other agricultural inputs.

In 2004, the Dar-es-Salaam Declaration on Agriculture and Food Security in the SADC Region was passed, whereby SADC Member States committed to ensuring fair trade in fertilizer and encouraging exploitation of mineral deposits in the region to promote fertilizer manufacturing in order to meet fertilizer demand in the region.¹⁵ The SADC Regional Agricultural Policy (RAP)¹⁶ was later developed in 2011, providing for harmonization of fertilizer policies as a key input and objective,¹⁷ along with the proposal to create regional fertilizer associations.¹⁸ With these background instruments, SADC initiated the process of developing Harmonized Regional Guidelines on the Use and Disposal of Agrochemicals and Fertilizers in 2016.¹⁹ This process of regional harmonization on fertilizer has been underway since.

Nevertheless, there is currently no instrument that includes any binding obligation on SADC Member States related to the harmonization of fertilizer regulations. For now, all of the existing instruments noted above can merely serve as guidelines for SADC Member States to achieve common measures and objectives.²⁰ Within the SADC institutional framework, the Food, Agriculture and Natural Resources (FANR) Directorate of the SADC Secretariat is mandated with developing, promoting, coordinating, and facilitating the harmonization of policies and programmes in order to increase agricultural and natural resources production and promote trade, as well as to ensure food security and economic development in the region on a sustainable basis.²¹ The harmonization process for fertilizer regulation will have to be led by FANR.

A summary of the timeline for relevant regional milestones and input harmonization measures in SADC is described in Table 2 below.

¹⁵ Provision 1(c) and(d) of the 2004 Dar-es-Salaam Declaration on Agriculture and Food Security in the SADC Region of 2004, available at: <https://www.resakss.org/sites/default/files/SADC%202004%20Dar-es-Salaam%20Declaration%20on%20Agriculture%20and%20Food%20Security.pdf>.

¹⁶ SADC, RAP Country Summary Agricultural Policy Review Reports, January 2011, available at https://www.sadc.int/files/7113/5293/3509/Regional_Agricultural_Policy_Review_Reports_2011.pdf.

¹⁷ SADC, RAP Country Summary Agricultural Policy Review Reports, January 2011, p. 123, 259, available at https://www.sadc.int/files/7113/5293/3509/Regional_Agricultural_Policy_Review_Reports_2011.pdf.

¹⁸ SADC, RAP Country Summary Agricultural Policy Review Reports, January 2011, p. 153, available at https://www.sadc.int/files/7113/5293/3509/Regional_Agricultural_Policy_Review_Reports_2011.pdf.

¹⁹ See, <https://www.sardc.net/en/southern-african-news-features/sadc-developing-harmonised-agrochemicals-fertilizer-guidelines/>.

²⁰ NML in collaboration with the AFAP for the AGRA through the USAID, “Guidelines for Regional Harmonization of Fertilizer Regulations in COMESA”, 2017.

²¹ SADC, RAP Country Summary Agricultural Policy Review Reports, January 2011, available at https://www.sadc.int/files/7113/5293/3509/Regional_Agricultural_Policy_Review_Reports_2011.pdf.



Table 2: Timeline of Regional Milestones and Fertilizer Harmonization Measures in SADC

Timeframe	Measure
1992	• SADC Treaty adopted by SADC Member States
2000	• MoU on Standardization, Quality Assurance, Accreditation and Metrology adopted
2003	• SADC RISDP developed.
2004	• Dar-es-Salaam Declaration on Agriculture and Food Security in the SADC Region passed.
2011	• SADC Regional Agricultural Policy developed.
2015	• RISDP revised.
2016	• Process of developing Harmonized Regional Guidelines on the Use and Disposal of Agrochemicals and Fertilizers in SADC initiated.
2020	• RISDP Revised

II. International, Continental, Regional, and National Rules Relevant to Fertilizer

Rulemaking usually happens at different levels and through different legal instruments, and these distinctions are important for the comparative assessment in Section III. International, continental, and regional fertilizer regulatory instruments provide a guiding (sometimes binding) framework for national and regional level fertilizer regulation. They also set best practices upon which harmonized regional fertilizer regulations and national fertilizer legal systems can be tailored.

A. International Rules Applicable to Fertilizer

All SADC members are also members of the WTO, and the WTO covered agreements contain obligations related to fertilizer measures. Relevant instruments include the 1995 WTO TBT Agreement, which governs technical regulations and standards, and the WTO SPS Agreement, which governs measures related to human, animal, or plant life or health. These two instruments establish rules and principles for WTO Member States, including all SADC Member States, that will impact issues such as fertilizer standards and labeling (TBT Agreement) and regulations on permitted fertilizer residue in food (SPS Agreement). The TBT Agreement requires that technical regulations, which are mandatory government measures, and standards (measures with which compliance is not mandatory) are applied and maintained in a way that does not hinder international trade. Technical regulations should not be trade-restrictive and should be published



once adopted.²² Where they exist, international standards should be followed.²³ Relevant international fertilizer standards that could be incorporated into national and harmonized SADC regional fertilizer regulations, include the fertilizer standards set by the International Organization on Standardization (ISO) and fertilizer analysis methods set by the Association of Official Analytical Chemists (AOAC).

The WTO SPS Agreement, on the other hand, applies to measures that relate to human, animal, or plant life or health, such as permitted fertilizer residues in food.²⁴ In cases where plant propagating material is the final product consumed as food, SPS rules apply to avoid harm to human and animal health. SPS measures must be science-based and not cause arbitrary or unjustifiable discrimination, and they should be based on international standards where they exist.²⁵

In addition to these instruments, FAO developed the Code in 2019, which is a soft law instrument that guides countries in the regulation of fertilizer to enable its sustainable and responsible use and management for agriculture and other plant production purposes in order to avoid negative impacts on human, animal, and soil health and the environment. The Code, among other things, calls for countries to implement a fertilizer policy, quality control mechanism, registration system, where appropriate, penalties for non-compliance, and regulation of the composition and quality of fertilizers. The Code also covers appropriate safety regulations for the production, distribution, storage, handling, transport, and application of fertilizers; evidence-based SPS measures and standards (consistent with WTO rules); and limitations and guidelines on harmful contents of fertilizer products. Further, it encourages international harmonization of quality assurance methods, including weights, labeling, and packaging. Fertilizer regulation is also related to several of the SDGs of the 2030 Sustainable Development Agenda, including SDG 1 on No Poverty, 2 on Zero Hunger, 6 on Clean Water and Sanitation, 9 on Industry, Innovation and Infrastructure, 13 on Climate Change, 14 on Life Below Water, and 15 on Life on Land.

²² Article 2 of the WTO TBT Agreement.

²³ Article 2 of the WTO TBT Agreement. See also: World Trade Organization (WTO), The WTO Agreement Series: Sanitary and Phytosanitary Measures, page 16, available at: https://www.wto.org/english/res_e/booksp_e/agrmtseries4_sps_e.pdf.

²⁴ Article 5 of the WTO SPS Agreement. See also: WTO, The WTO Agreement Series: Sanitary and Phytosanitary Measures, page 16, available at: https://www.wto.org/english/res_e/booksp_e/agrmtseries4_sps_e.pdf.

²⁵ Article 2 of the WTO SPS Agreement.



B. African Continental Rules Applicable to Fertilizer

At the continental level, African countries, including those in SADC, have made commitments related to fertilizer in the 2003 Maputo Declaration,²⁶ the 2006 Abuja Declaration on Fertilizer for an African Green Revolution,²⁷ and the 2014 Malabo Declaration²⁸ under CAADP, which, among other things, are designed to improve farmers' access to fertilizers in order to double agricultural productivity, end hunger, and halve poverty by 2025. Regional harmonization aimed at fertilizer quality assurance is one of the many action points under the 2014 Malabo Declaration.²⁹ The Abuja Declaration recognized organic and inorganic fertilizers as strategic commodities and also called upon African Union (AU) Member States to accelerate farmers' access to fertilizer in the region through measures to reduce the cost of procuring fertilizer at the national and regional levels and regional harmonization through the RECs.³⁰ It also urged an increase in the level of fertilizer use from the average at the time of eight kilograms (kg) per hectare (ha) to an average of at least 50 kg per ha by 2015.³¹ Under the Maputo Declaration, African countries pledged to allocate at least 10 percent of their national budgets to agriculture and rural development to stimulate agricultural growth, reduce poverty, and build food and nutrition security. All these goal remains unfulfilled by most SADC Member States, which are yet to incorporate the commitments in the continental instruments in their national policies, legal and regulatory frameworks, and practices. Harmonization of fertilizer regulations under SADC shows alignment in recognizing the

²⁶ African Union, Declaration on Agriculture and Food Security in Africa, Assembly/AU/Decl.7 (II), available at: <https://scalingupnutrition.org/wp-content/uploads/2017/12/Maputo-declaration-on-agriculture-and-food-security.pdf>.

²⁷ African Fertilizer Financing Mechanism, Promotion of Fertilizer Production, Cross-Border Trade and Consumption in Africa, African Development Bank, June 2018. Available at: https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Study_sponsored_by_UNECA__AFFM_on_promotion_of_fertilizer_production_cross-border_trade_and_consumption_in_Africa.pdf.

²⁸ African Union, Malabo Declaration on Accelerated Agricultural Growth and Transformation for Share Prosperity and Improved Livelihoods, Malabo, Equatorial Guinea June 26-27, 2014. Available at: https://au.int/sites/default/files/documents/31247-doc-malabo_declaration_2014_11_26.pdf.

²⁹ African Union, Malabo Declaration on Accelerated Agricultural Growth and Transformation for Share Prosperity and Improved Livelihoods, Malabo, Equatorial Guinea June 26-27, 2014. Available at: https://au.int/sites/default/files/documents/31247-doc-malabo_declaration_2014_11_26.pdf.

³⁰ African Fertilizer Financing Mechanism, Promotion of Fertilizer Production, Cross-Border Trade and Consumption in Africa, African Development Bank, June 2018. Available at: https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Study_sponsored_by_UNECA__AFFM_on_promotion_of_fertilizer_production_cross-border_trade_and_consumption_in_Africa.pdf.

³¹ NML in collaboration with the AFAP for the AGRA through the USAID, "Guidelines for Regional Harmonization of Fertilizer Regulations in COMESA", 2017. See also, NML, Economic Impact Assessment and Legal Review and Analysis of the East African Community Seed and Fertilizer Legislation, Study Emerge Centre for Innovations-Africa for the East African Community Secretariat Under the *Partnership Toward Catalyzing the Implementation of CAADP-Malabo 2017-2020*, Supported by the Alliance for a Green Revolution in Africa, 19 December 2019.



importance of fertilizer in the region in tandem with the instruments relevant to fertilizer at the continental level.

In addition, the AfCFTA is now operational and will increasingly incorporate rules relevant to regulation of agricultural inputs like fertilizer at the continental level. The Agreement Establishing the AfCFTA incorporates disciplines contained in the WTO SPS and TBT Agreements, including the obligation to maintain science-based measures, preference for international harmonization, and encouragement to align with international standards where they exist. A number of SADC Member States have ratified the AfCFTA, including Eswatini, Namibia, South Africa, DRC, Zimbabwe, and recently Tanzania.

C. Regional Instruments Relevant to Fertilizer and Key Differences Across Regions

At the regional level, where RECs develop and adopt rules, their binding nature on Member States depends upon the kind of instrument the rules are embedded within and the legal system/s followed within the particular REC. Regional rules and regulations will often need to go through a process of “domestication” at the national level in order to become fully actionable,³² and, even when domestication is not required, such as in countries that follow a civil code legal system, it is still common to some degree in practice. In countries that follow a common law legal system, which is prevalent in SADC, COMESA, and the EAC, domestication will require going through a legislative or parliamentary process at the national level.³³ Overall, many regional laws require corresponding changes in national law, regulations, and guidelines in order to become operational.

Within the main areas of law covered by the SADC Treaty, namely trade, industry, finance, investment, agriculture, infrastructure, services, natural resources, human development, and security, all are regulated under SADC Protocols. Article 5 of the SADC Treaty calls upon Member States to cooperate in all areas necessary to realize regional integration and development on the basis of balance, equity, and mutual benefit. Member States must coordinate and harmonize their overall macroeconomic and sectoral policies in the various areas of SADC law. Sector-specific regulations are advanced under MoUs. Once an MoU is approved by the Council of Ministers, and the required minimum number of respective sector ministers sign on to it (usually two-thirds), it enters into force. These MoUs are not automatically legally binding instruments upon SADC

³² NML, Economic Impact Assessment and Legal Review and Analysis of the East African Community Seed and Fertilizer Legislation, Study Emerge Centre for Innovations-Africa for the East African Community Secretariat Under the Partnership Toward Catalyzing the Implementation of CAADP-Malabo 2017-2020, Supported by the Alliance for a Green Revolution in Africa, 19 December 2019. See also, Katrin Kuhlmann, “Harmonizing Regional Seed Regulations in Sub-Saharan Africa: A Comparative Assessment,” NML and SFSA, September 2015.

³³ Katrin Kuhlmann, “Harmonizing Regional Seed Regulations in Sub-Saharan Africa: A Comparative Assessment,” NML and SFSA, September 2015.



Member States, in contrast to the rules and regulations under other RECs, unless and until the rules are domesticated into national law and regulation.

The other three RECs compared in this assessment, COMESA, the EAC, and ECOWAS, have different rulemaking approaches. The EAC system is perhaps the most binding system of regional law within the four RECs assessed. All major legal instruments under the EAC are binding upon EAC Partner States, which must amend their national frameworks in order to comply with obligations under regional legal and regulatory frameworks.³⁴ In the event of legal conflict between the EAC rules and national rules, the EAC system will govern, and EAC laws will take precedence over conflicting national laws or regulations.³⁵ In COMESA, Member States are also legally bound by regional regulations, and domestication and implementation are required of COMESA Member States.³⁶ In the case of ECOWAS, formal alignment of national regulatory frameworks with regional rules works a bit differently, particularly for countries that follow a civil law system, because the regional rules become part of a country's national legal framework in their entirety once gazetted.³⁷ However, some degree of domestication is often still required to address inconsistencies in rules and regulations, and a few ECOWAS countries, namely Ghana and Nigeria, follow common law legal systems, which require a process of domestication similar to the EAC, COMESA, and SADC.

Among the RECs, only ECOWAS has developed regional fertilizer rules under Regulation C/Reg.13/12/12 Relating to Fertilizer Quality Control in the ECOWAS Region. The ECOWAS Fertilizer Regulation embodies a number of good practices, including free movement of fertilizers, truth in labeling, standard quality and labeling requirements, inspection and analysis requirements, tolerance limits for nutrient deficiency, weight and maximum allowable metal limits, licensing of fertilizer producers and dealers, right to appeal and confidentiality, modalities on regulation of manufacturing and import, and administrative oversight (see Figure 2 below on the key aspects of the ECOWAS 2012 Fertilizer Regulation).

The regulatory approach taken in ECOWAS focuses more on ex post control, or enforcement, rather than an ex ante approach to market regulation that imposes regulatory requirements prior to market entry (registration).³⁸ Instead, ECOWAS follows a truth-in-labeling approach, where

³⁴ Katrin Kuhlmann, "Harmonizing Regional Seed Regulations in Sub-Saharan Africa: A Comparative Assessment," NML and SFSA, September 2015.

³⁵ Article 8 of the EAC Treaty.

³⁶ Katrin Kuhlmann, "Harmonizing Regional Seed Regulations in Sub-Saharan Africa: A Comparative Assessment," NML and SFSA, September 2015.

³⁷ NML, Economic Impact Assessment and Legal Review and Analysis of the East African Community Seed and Fertilizer Legislation, Study Emerge Centre for Innovations-Africa for the East African Community Secretariat Under the Partnership Toward Catalyzing the Implementation of CAADP-Malabo 2017-2020, Supported by the Alliance for a Green Revolution in Africa, 19 December 2019. See also, Katrin Kuhlmann, "Harmonizing Regional Seed Regulations in Sub-Saharan Africa: A Comparative Assessment," NML and SFSA, September 2015.

³⁸ NML, Economic Impact Assessment and Legal Review and Analysis of the East African Community Seed and Fertilizer Legislation, Study Emerge Centre for Innovations-Africa for the East African Community Secretariat Under



registration of fertilizer is not required and there are no lists or registries of approved fertilizers for cross-border trade but rather an obligation to comply with each Member State's quality standards. For instance, the 2012 ECOWAS Fertilizer Regulation mandates that countries not adopt and maintain lists of pre-approved fertilizers that can be sold in the region but rather calls upon countries to follow principles of mutual recognition and allow the free movement of fertilizers as long as the imported fertilizer is subjected to the same quality control measures and level of inspection as if it were produced within the country.³⁹ An alternative to the truth in labeling approach adopted under ECOWAS is requiring the licensing and registration of fertilizer producers, dealers, and facilities rather than registration of fertilizer. This way the government still has control over the actors engaged in the fertilizer market, without limiting the types of fertilizer made available. These practices also reduce the number of required government inspections (e.g., inspection of fertilizer production facilities), rather than requiring one or more inspections for each fertilizer product being traded.

In contrast, an ex-ante regulatory approach is reflected in the draft EAC Fertilizer Bill, which provides for the registration of fertilizers and regional and national fertilizer lists.⁴⁰ It is notable that SADC Member States with legal frameworks already have ex ante regulatory approaches in place, which is an important consideration for fertilizer harmonization within the region. Consequently, a simplified registration process could be an option for the SADC regulation.

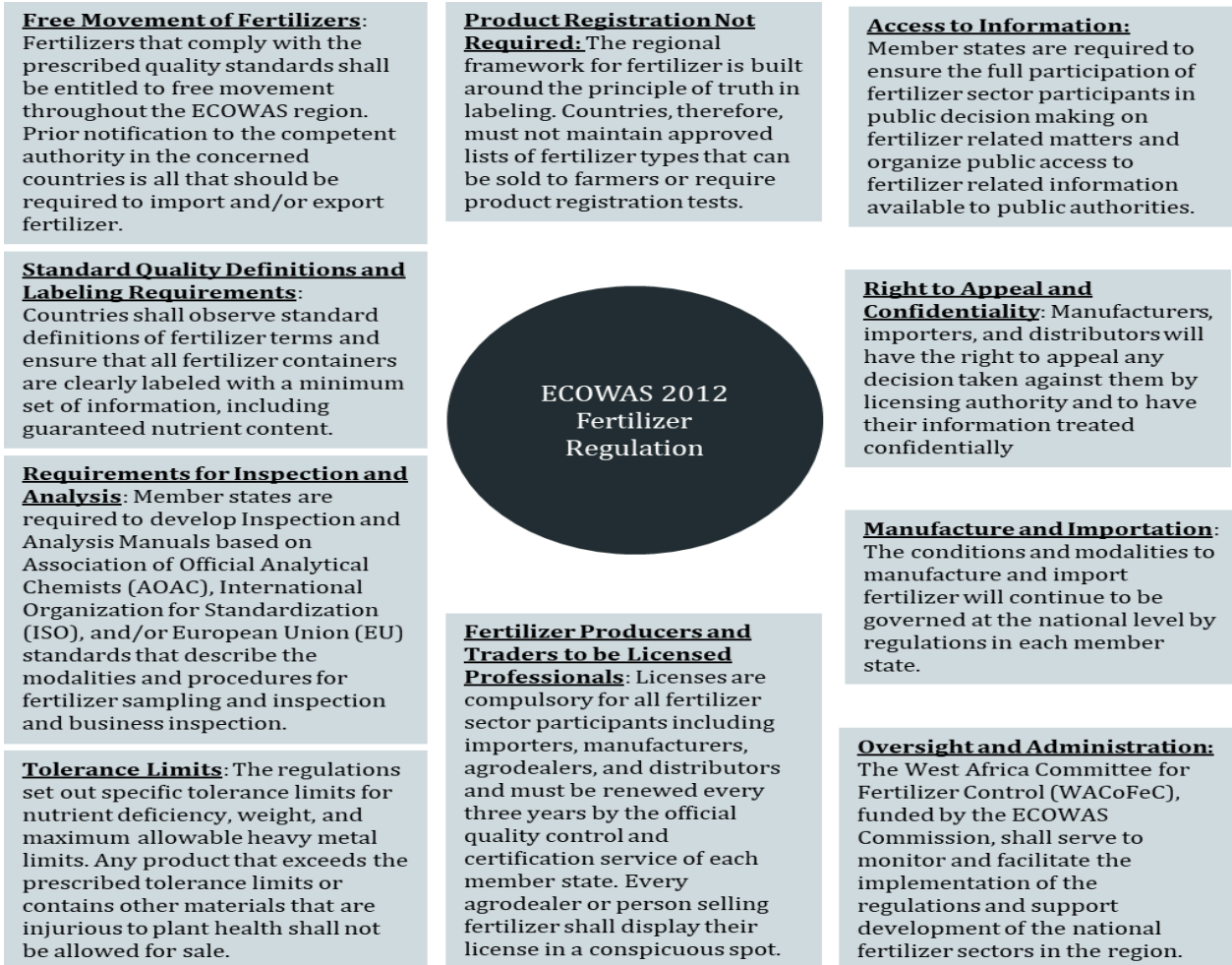
the Partnership Toward Catalyzing the Implementation of CAADP-Malabo 2017-2020, Supported by the Alliance for a Green Revolution in Africa, 19 December 2019.

³⁹ NML, Economic Impact Assessment and Legal Review and Analysis of the East African Community Seed and Fertilizer Legislation, Study Emerge Centre for Innovations-Africa for the East African Community Secretariat Under the Partnership Toward Catalyzing the Implementation of CAADP-Malabo 2017-2020, Supported by the Alliance for a Green Revolution in Africa, 19 December 2019.

⁴⁰ NML, Economic Impact Assessment and Legal Review and Analysis of the East African Community Seed and Fertilizer Legislation, Study Emerge Centre for Innovations-Africa for the East African Community Secretariat Under the Partnership Toward Catalyzing the Implementation of CAADP-Malabo 2017-2020, Supported by the Alliance for a Green Revolution in Africa, 19 December 2019.



Figure 2: Key Provisions of the ECOWAS Fertilizer Regulation⁴¹



Source: ECOWAS 2012 Fertilizer Regulations adapted by © 2019, New Markets Lab; also see John C. Keyser et al (2015)

The ECOWAS Fertilizer Regulation includes other good regulatory practices for fertilizer, many of which are noted above. The ECOWAS rules harmonize quality control standards throughout the region by adopting common definitions for fertilizer terms, establishing harmonized packaging

⁴¹ Figure based on the ECOWAS Fertilizer Regulation, as included in NML in collaboration with the AFAP for the AGRA through the USAID, “Guidelines for Regional Harmonization of Fertilizer Regulations in COMESA”, 2017, See, John C. Keyser, et al., Towards an Integrated Market for Seeds and Fertilizers in West Africa, January 2015. World Bank. Available at: <https://documents1.worldbank.org/curated/en/886471468119063004/pdf/936300REVISED00REVISED0FINAL0T00DC.pdf>. See also, NML, Economic Impact Assessment and Legal Review and Analysis of the East African Community Seed and Fertilizer Legislation, Study Emerge Centre for Innovations-Africa for the East African Community Secretariat Under the Partnership Toward Catalyzing the Implementation of CAADP-Malabo 2017-2020, Supported by the Alliance for a Green Revolution in Africa, 19 December 2019.



and labeling conditions, and benchmarking inspection requirements against international standards like those set by the AOAC.⁴²

The other RECs, including the EAC, of which Tanzania is a member, are at advanced stages of establishing regional fertilizer rules. The EAC has a draft Fertilizer Policy and Bill that have moved forward within the regional process. COMESA has also made strides to regionally regulate fertilizer, and harmonization of fertilizer regulations have been led by COMESA's implementing agency, the Alliance for Commodity Trade in Eastern and Southern Africa (ACTESA) through the Joint Program on Fertilizer Policy Harmonization, in collaboration with AFAP.⁴³ In the context of this initiative, NML and AFAP developed the *Guidelines for Regional Harmonization of Fertilizer Regulations in COMESA*.⁴⁴ This document describes and expands upon different regulatory good practices that could provide useful guidance for the harmonization efforts in SADC.

D. National Instruments Relevant to Fertilizer

At the national level, countries tend to regulate the fertilizer sector through several legal instruments, which typically include a fertilizer policy, fertilizer act or law, fertilizer regulations, and subsidiary guidelines or other measures. These legal instruments are all related, but each plays a distinct role in the regulation of the fertilizer sector.

Typically, countries adopt general instruments in the form of policies that define principles and strategies for guiding government actions.⁴⁵ Policies do not tend to be binding, since they generally do not create rights and obligations. Some of the SADC Member States have adopted specific

⁴² NML in collaboration with the AFAP for the AGRA through the USAID, "Guidelines for Regional Harmonization of Fertilizer Regulations in COMESA", 2017. See, John C. Keyser, et al., *Towards an Integrated Market for Seeds and Fertilizers in West Africa*, January 2015. World Bank. Available at: <https://documents1.worldbank.org/curated/en/886471468119063004/pdf/936300REVISED00REVISED0FINAL0T00DC.pdf>. See also, NML, *Economic Impact Assessment and Legal Review and Analysis of the East African Community Seed and Fertilizer Legislation*, Study Emerge Centre for Innovations-Africa for the East African Community Secretariat Under the *Partnership Toward Catalyzing the Implementation of CAADP-Malabo 2017-2020*, Supported by the Alliance for a Green Revolution in Africa, 19 December 2019.

⁴³ NML in collaboration with the AFAP for the AGRA through the USAID, "Guidelines for Regional Harmonization of Fertilizer Regulations in COMESA", 2017.

⁴⁴ NML in collaboration with the AFAP for the AGRA through the USAID, "Guidelines for Regional Harmonization of Fertilizer Regulations in COMESA", 2017.

⁴⁵ African Fertilizer Financing Mechanism, *Promotion of Fertilizer Production, Cross-Border Trade and Consumption in Africa*, African Development Bank, June 2018. Available at: https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Study_sponsored_by_UNECA__AFFM_on_promotion_of_fertilizer_production_cross-border_trade_and_consumption_in_Africa.pdf. See also, NML, *Economic Impact Assessment and Legal Review and Analysis of the East African Community Seed and Fertilizer Legislation*, Study Emerge Centre for Innovations-Africa for the East African Community Secretariat Under the *Partnership Toward Catalyzing the Implementation of CAADP-Malabo 2017-2020*, Supported by the Alliance for a Green Revolution in Africa, 19 December 2019.



policies for the fertilizer sector, as noted in Table 3 below. Governments also adopt laws or acts that function as binding legal measures. Laws or acts are accompanied by regulations, which are also legally binding, but differ from laws and acts in two ways. First, regulations are usually adopted through administrative processes, not legislative or parliamentary processes, which makes them more flexible and easier to change.⁴⁶ Second, regulations tend to be more detailed than laws and will often operationalize the provisions contained in more overarching laws.

Within SADC, countries are at vastly different levels regarding fertilizer regulation. Of the 16 SADC Member States, only Malawi has adopted a Fertilizer Policy. Angola, DRC, Eswatini, Lesotho, Madagascar, and Seychelles completely lack a fertilizer-specific policy and legal framework. The rest of the countries, namely Botswana, Malawi, Mauritius, Mozambique, Namibia, South Africa, Tanzania, Zambia, and Zimbabwe have legal and regulatory systems for fertilizer in place (see Table 3 below). An adequate policy, legal, and regulatory framework for fertilizer at the national level is key for creating an enabling environment for activities along the fertilizer value chain and is the backbone for implementation of regional fertilizer rules. Inadequacy or absence of policy, legal, and regulatory instruments will not only negatively impact the development of national fertilizer value chains, but it will also affect regional market growth.

Table 3: Fertilizer Policy, Legal, and Regulatory Frameworks Within the SADC Region

Country	Fertilizer Policy, Legal, and Regulatory Framework		
	Policy	Law	Regulations
Angola	No	No*	No
Botswana	No	Yes Agrochemicals Act of 1999 Cap 35:09.	Yes Agrochemical regulations of 2003.
Comoros	No	No	No
DRC	No	No	No
Eswatini	No	No	No
Lesotho	No	No	No
Madagascar	No	No	No
Malawi	Yes	Yes* Fertilizer and Farm Feeds and Remedies Act (1970).	Yes Fertilizer Regulations (GN.142/1970 as amended by GN 64/1996).
Mauritius	No	Yes Chemical Fertilizers Control Act (1980).	Yes Chemical Fertilizers Control (License) Regulations 1980.

⁴⁶ NML and AFAP, Legal Review of the Malawi National Fertilizer Policy, and Regulatory Options for the Fertilizer Bill and Draft Regulations, AGRA 2021.



Mozambique	No	Yes Decree No. 11/2013 approving the Regulation on Fertilizers.	Yes Ministerial Decision No. 32/2015 approving the Internal Regulation of the Technical Advisory Committee on Fertilizers.
Namibia	No	Yes* Fertilizer, Farm Feeds, Agricultural Remedies Act no:36 of 1947 revised in 1977.	Yes Regulations on the Registration of Fertilizers, Farm Feeds, Sterilizing Plants and Agricultural Remedies (GN No. 112 of 25 June of 2007, revised by GN No. 311 of 9 December of 2020).
Seychelles	No	No	No
South Africa		Yes* Fertilizers, Farm Feeds, Seeds and Remedies Act 36, 1947.	Regulations regarding fertilizers, R. 732 of 2012.
Tanzania	No	Yes Fertilizer Act, 2009.	Yes Fertilizers Regulations of 2011 (as amended in 2017). Fertilizer (Bulk Procurement) Regulations, GI No. 49 of 2017.
Zambia	No	Yes Agriculture (Fertilizers and Feed) Act Cap 226.	Yes Agriculture (Fertilizers) Regulations, S.I 476 of 1969.
Zimbabwe	No	Yes Fertilizers, Farm Feeds and Remedies Act [Chapter 18:12].	No.

*Legal instrument is being developed or revised.

Source: New Markets Lab 2021. Table based on SADC Member States' legal and regulatory framework.

When SADC's regional fertilizer regulatory framework is developed, SADC Member States will be expected to develop or amend their fertilizer legal and regulatory frameworks in alignment. Formal alignment with regional regulations, either by direct incorporation into national legal frameworks or amendment of national laws and regulations, is just a first step, however. Countries must implement and operationalize these rules in a way that makes them effective and enforceable. In practice, implementation is more difficult to accomplish than changes to the rules themselves and poses additional challenges for countries, given that it often happens through a number of steps taken over time.⁴⁷ It also necessitates the coordination of private and public stakeholders involved in the process of implementing these rules. Even though formal alignment of national frameworks

⁴⁷ See, e.g., East African Community Seed and Plant Varieties Bill (EAC Seed Bill), 2018, Section 54 and Section 56. See also, Katrin Kuhlmann and Yuan Zhou, "Seed Policy Harmonization in the EAC and COMESA: The Case of Kenya," NML and Syngenta Foundation for Sustainable Agriculture, September 2015.



with regional rules is a necessary first step, successful implementation of these systems often involves a series of smaller, day-to-day actions, rather than high-level commitments.⁴⁸

III. Good Regulatory Practices for Fertilizer, Options for the SADC Harmonized Fertilizer Regulatory Framework, and Comparative Assessment of SADC Countries' Fertilizer Regulatory Systems

International, continental, and regional rules relevant to fertilizer, as discussed in the section above, establish a set of regulatory good practices and principles to guide the development of national and regional fertilizer legal frameworks. Alignment of national and regional fertilizer regulatory frameworks with international and regional good practices not only affords legitimacy to national and regional fertilizer regulatory systems, but it can also enable access to wider fertilizer markets and stimulate private sector participation and investment, which, in turn, can enhance accessibility, availability, and affordability of fertilizers for farmers. Figure 3 below summarizes key fertilizer policy, legal, and regulatory good practices based on international and regional rules and guidelines.

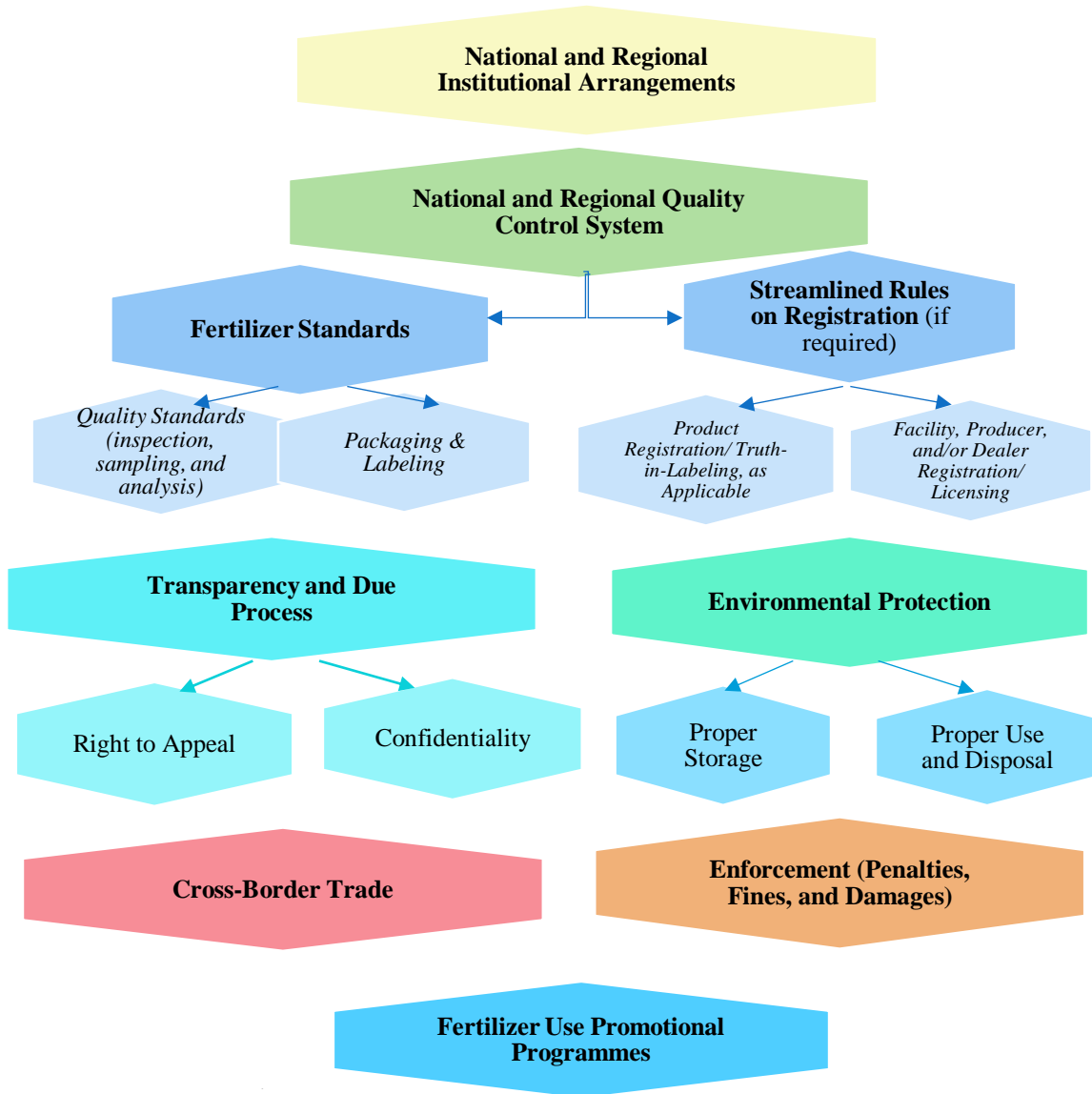
The following section benchmarks the national fertilizer regulatory frameworks in SADC against fertilizer good regulatory practices, including some that are included in the international, regional, and national frameworks. Given the different status of fertilizer regulations at the national level, regional regulations could act as minimum standard with which countries should comply; however, having a harmonized regional system does not necessarily mean that every country must have uniform laws and regulations. Regional harmonization usually allows countries to approach implementation of regional standards in various ways as long as they meet the underlying standards.⁴⁹

⁴⁸ Katrin Kuhlmann and Yuan Zhou, "Seed Policy Harmonization in the EAC and COMESA: The Case of Kenya," NML and Syngenta Foundation for Sustainable Agriculture, September 2015.

⁴⁹ Katrin Kuhlmann, NML for the Syngenta Foundation for Sustainable Agriculture. "Harmonizing Regional Seed Regulations in Sub-Saharan Africa: A Comparative Assessment," September 2015.



Figure 3: Good Regulatory Practices for Fertilizer



Source: New Markets Lab, 2021. Adapted from international and regional fertilizer regulatory instruments and good practices.



A. *Dedicated National and Regional Fertilizer Regulatory Authority*

International and regional fertilizer regulatory rules recognize that national and regional regulation of the quality, production, sale, and distribution of fertilizers requires appropriate institutional arrangements and regulatory frameworks.⁵⁰ At the national level in most countries, some sort of national fertilizer regulatory body will serve to monitor implementation of fertilizer legal and regulatory instruments, including a country's policy, a fertilizer act or law, regulations, and any other relevant legal instruments. This coordinating institution can take different forms and may fall within the relevant department within the ministry responsible for agriculture or a National Fertilizer Regulatory Authority (NFRA) and/ or a Fertilizer Board. A regulatory authority at the national level can coordinate with designated regional authorities concerned with matters of fertilizer within the relevant regional REC.⁵¹

Within the SADC region, some Member States have fertilizer regulatory bodies, while others have not yet established a legal framework and hence have no dedicated institution responsible for fertilizer regulation (see Table 4 below). It is important to note that there the fertilizer regulatory authority can take a form well-suited to the national framework, and, in any event, the national institutional framework in place should be well facilitated and with sufficient capacity to monitor and regulate activities along the fertilizer value chain, including enforcement of fertilizer quality standards, laws, and regulations. Without a functional institutional system, there is heightened risk of adulterated and counterfeit fertilizers, improper fertilizer use and disposal, and threats to human and environmental safety.⁵²

⁵⁰ Under the ECOWAS Fertilizer Regulations, the Draft EAC Fertilizer Policy and Bill, and the International Code of Conduct for the Sustainable Use and Management of Fertilizers, national fertilizer regulatory institutions have been recognized as critical to the implementation of fertilizer rules. See also, NML, "Economic Impact Assessment and Legal Review and Analysis of the East African Community Seed and Fertilizer Legislation", Study for Emerge Centre for Innovations-Africa for the East African Community Secretariat Under the *Partnership Toward Catalyzing the Implementation of CAADP-Malabo 2017-2020*, Supported by the Alliance for a Green Revolution in Africa, 19 December 2019. See also NML in collaboration with the AFAP for the AGRA through the USAID, "Guidelines for Regional Harmonization of Fertilizer Regulations in COMESA", 2017.

⁵¹ Draft EAC Fertilizer Policy, 2020.

⁵² Draft EAC Fertilizer Policy, 2020.



Table 4: SADC Countries’ Fertilizer Institutional Frameworks

Country	Dedicated Fertilizer Regulatory Institution
Angola	Department of Agriculture and Plant Protection of National Directorate of Agriculture and Livestock in the Ministry of Agriculture and Fisheries.
Botswana	The Registrar of Agrochemicals, Agrochemicals Inspectors, Police and the National Agrochemicals Committee.
Comoros	No dedicated fertilizer regulatory institution
DRC	The National Fertilizers and Related Inputs Service under the Ministry of Agriculture.
Eswatini	No dedicated fertilizer regulatory institution.
Lesotho	No dedicated fertilizer regulatory institution.
Madagascar	No dedicated fertilizer regulatory institution.
Malawi	Department of Agricultural Research Services.
Mauritius	The Agricultural Chemistry Division under the aegis of Ministry of Agro Industry and Food Security.
Mozambique	Technical Advisory Committee on Fertilizer under the Ministry of Agriculture and Rural Development.
Namibia	Registrar of Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies under the Ministry of Agriculture, Water and Land Reform.
Seychelles	No dedicated fertilizer regulatory institution
South Africa	Registrar of Fertilizers under the Department of Agriculture, Forestry and Fisheries.
Tanzania	Tanzania Fertilizer Regulatory Authority (TFRA).
Zambia	Registrar of Fertilizers
Zimbabwe	Agricultural Research and Innovation Directorate of the Ministry of Lands, Agriculture, Fisheries, Water and Rural Resettlement.

Source: New Markets Lab 2021. Table based on SADC Member States legal and regulatory framework.

At the regional level within SADC, fertilizer harmonization efforts could include a mandate for the creation of national entities responsible for fertilizer regulation, especially in the countries in which they are nonexistent. The regional fertilizer framework could also include a provision that dedicates a regional office within SADC to oversee the implementation of the harmonized regional fertilizer regulatory framework. To avoid creation of a new office at the regional level which might be expensive to maintain, the dedicated fertilizer office could fit within existing institutions. The harmonized fertilizer regulations could also recommend that, in addition to fulfilling key roles at the national level, fertilizer regulatory authorities maintain open channels of communication at the regional level and coordinate closely with other Member States to enable the free movement of fertilizer across a region.

B. Streamlined Quality Control System

Fertilizer quality is a central factor in fertilizer regulation. International and regional measures and guidelines, including the International Code of Conduct for the Sustainable Use and Management of Fertilizers, the ECOWAS Fertilizer Regulations, and the draft EAC Fertilizer Policy and Bill cover regulatory quality control, which is central to improving fertilizer trade and use at the national level. Fertilizer quality must be assured along the entire fertilizer supply chain in order to



address issues such as adulteration and counterfeiting. An effective national and regional quality control system would greatly facilitate national, regional, and international fertilizer trade and enhance fertilizer use. Intertwined with quality assurance are fertilizer standards, a quality control system (which may take the form of registration of fertilizer or a well-implemented truth in labeling system), registration of fertilizer dealers, and packaging and labeling. To streamline fertilizer quality control, each of these issue areas, discussed in greater detail below, should be reflected in the national and regional fertilizer regulatory framework.

1) Quality Standards

Fertilizer standards set out detailed procedures for fertilizer sampling, inspection, and chemical analysis. A typical quality inspection and analysis process covers uniform particle size, moisture content, nutrient content for compound fertilizers, and presence and levels of heavy metals like cadmium, selenium, mercury, and arsenic as well as proper documentation, integrity (reliability) of bags, and proper and correct labeling.⁵³ In accordance with the WTO TBT Agreement, national and regional fertilizer standards should align with international standards where possible, such as those under ISO and the AOAC.⁵⁴

Harmonized regional fertilizer regulations under SADC could set harmonized fertilized standards with maximum levels of potentially harmful elements permitted in fertilizer products. This approach would align with the SADC MOU on Standardization, Quality Assurance, Accreditation and Metrology,⁵⁵ which aims to progressively eliminate technical barriers to trade amongst the SADC Member States, and between SADC and other regional and international trading blocks, and calls for the promotion of an infrastructure for quality assurance in the Member States and harmonization of quality standards and technical regulations in support of the objectives of the SADC Protocol on Trade. Harmonization of fertilizer quality standards is a good regulatory practice that has been adopted, for instance, under the ECOWAS Fertilizer Regulations and EAC Fertilizer Standards. Regionally harmonized fertilizer quality standards can create an enabling environment for free movement of fertilizer across borders and limit the retesting of fertilizer that already meets recognized regional quality standards. For this reason, the SADC harmonized

⁵³ NML, Economic Impact Assessment and Legal Review and Analysis of the East African Community Seed and Fertilizer Legislation, Study Emerge Centre for Innovations-Africa for the East African Community Secretariat Under the Partnership Toward Catalyzing the Implementation of CAADP-Malabo 2017-2020, Supported by the Alliance for a Green Revolution in Africa, 19 December 2019. See also NML in collaboration with the AFAP for the AGRA through the USAID, “Guidelines for Regional Harmonization of Fertilizer Regulations in COMESA”, 2017.

⁵⁴ New Markets Lab, Economic Impact Assessment and Legal Review and Analysis of the East African Community Seed and Fertilizer Legislation, Study Emerge Centre for Innovations-Africa for the East African Community Secretariat Under the *Partnership Toward Catalyzing the Implementation of CAADP-Malabo 2017-2020*, Supported by the Alliance for a Green Revolution in Africa, 19 December 2019. See also NML in collaboration with the AFAP for the AGRA through the USAID, “Guidelines for Regional Harmonization of Fertilizer Regulations in COMESA”, 2017.

⁵⁵ MOU on Standardization, Quality Assurance, Accreditation and Metrology in the SADC region, 2000. Available at: <https://www.sadc.int/files/5613/5333/8302/SQAM.pdf>.



regional fertilizer framework could require that national quality standards are aligned where appropriate and that mutual recognition is applied.

Currently, some SADC Member States have detailed fertilizer standards for organic, inorganic, foliar, and blended fertilizers, while others have few standards and some do not have any standards in place at all (see Table 5). The variation in the type and nature of standards is another important reason for focus on regional quality standards. The main body responsible for implementing and monitoring the regulatory framework for standards is generally the Bureau of Standards within a country, which inspects the quality of fertilizers imported and distributed and enforces standards nationally. The national legal framework, in alignment with regionally harmonized fertilizer regulations, should emphasize the importance of building the infrastructure necessary for implementing standards, including the enhancement of laboratory capacity; hiring, training, equipping, and funding fertilizer inspectors and laboratory technicians; and establishing the authority and resources to carry out activities under the regulations.

Table 5: SADC Countries' Fertilizer Quality Standards

Country	Fertilizer Quality Standards
Angola	No legal framework currently in place.
Botswana	There are fertilizer standards for organic fertilizer, agricultural liming materials, and blends
Comoros	No legal framework currently in place.
DRC	No legal framework currently in place.
Eswatini	Fertilizer standards are comprised of nutrient specifications only. These are for chemical fertilizers only and are not mandatory. There are no standards for organic fertilizers.
Lesotho	Fertilizer standards are comprised of technical specifications that give a summary of the chemical and safety requirements for the fertilizers. Since there is no law or regulations, these are not mandatory. There are no standards for organic fertilizers.
Madagascar	No legal framework currently in place.
Malawi	There are currently 15 standards for inorganic and organic fertilizers under the Malawi Bureau of Standards Act. If the standard for the blend has not been created, MBS can only provide a voluntary certification based on provided parameters. There are no standards yet for microbial, bio-fertilizers and organics.
Mauritius	There are fertilizer standards for inorganic fertilizers There are also rules on sampling and analysis of fertilizers. Mauritius has one public, two parastatal, and three private laboratories offering fertilizer tests.
Mozambique	Fertilizer standards exist for inorganic fertilizers and they are mandatory. There are no standards for limestone, foliar, organic fertilizers, bio fertilizers, microbial technologies, bio stimulants. Formulations exist for MAP - Ammonia Mono Phosphate and Potassium chloride. There are rules on inspection, sampling, and analysis of fertilizers
Namibia	There are no official standards for any type of fertilizers. However, there are guidelines on fertilizer standards in line with the EU standards for table grapes and dates, which Namibia exports to the EU market. These standards include maximum levels for heavy metals such as cadmium and lead.
Seychelles	TBD
South Africa	Fertilizer standards exist for inorganic and organic fertilizers. These standards are mandatory and enforceable. There are rules on fertilizer inspection, sampling, analysis, and testing.



Tanzania	Fertilizer standards exist for inorganic and organic fertilizers. Rules exist on fertilizer inspection, sampling and testing.
Zambia	TBD
Zimbabwe	Fertilizer standards exist but are comprised of nutrient content specifications only. Rules exist on fertilizer sampling, analysis, and testing.

2) Streamlined Regulatory Framework on Packaging and Labeling of Fertilizer

Improper labeling and branding reduces competition and denies farmers the information they need to make purchase decisions, which raises the costs of transactions. Streamlined rules on proper packaging and labeling are good regulatory practices that can guarantee trust between buyers and sellers and are included in the Code, and the draft EAC Fertilizer Policy and Bill and EAC Fertilizer Standards. The national regulatory and institutional frameworks should ensure that packaging and labeling requirements are complied with by enforcing appropriate fines and penalties for violations and applying market surveillance techniques, including spot checks and inspections at multiple points along the value chain such as at blending factories, distribution centers, and retail shops.

Packaging regulations should prescribe the kind of packaging that would be acceptable for solid and liquid fertilizers. If fertilizer is not properly packaged, it could affect its quality. Regulations should describe the appropriate packaging for liquid and solid fertilizers to ensure that the containers do not affect the chemical and nutrient composition of the contents, such as through oxidation. For purposes of environmental protection, countries like Tanzania have prohibited the packaging of solid fertilizer in polythene bags, but they do allow polythene lining of particular specifications inside UV-stabilized woven polypropylene to ensure that fertilizer is not affected by weather conditions. Regulations could also allow packaging of different weights and volumes of fertilizer, including 5, 10, 25, and 50 kilograms for solid fertilizer and 5, 10, and 20 liters for liquid fertilizer. Allowance of smaller fertilizer packages would improve fertilizer accessibility, especially among smallholder farmers.

In line with labeling good practices, regulations should require that the label on the fertilizer package be correct, accurate, and as thorough as possible, providing as much detailed information as possible about the fertilizer in a manner that does not confuse consumers. The label should include the name of the fertilizer, name and address of the manufacturer and distributor, nutrient content, net content by mass in kilogram, country of origin or manufacture, batch number, production and expiry date, and handling instructions. The information on the label should be affixed on a conspicuous part of the fertilizer package, marked legibly and indelibly, and written in the local language and in English. Some of these labeling and packaging requirements already exist in some SADC countries, while they are absent in others (Table 6 below).



Harmonization of regional rules on fertilizer packaging and labeling could further enable streamlining these processes at the national level, especially in countries where these rules are nonexistent. It would also align with regional obligations under the MOU on Standardization, Quality Assurance, Accreditation and Metrology in the SADC Region⁵⁶ to harmonize legal metrology legislation, including uniform pack sizes and information on package labels.

Table 6: Packaging and Labeling Rules in SADC Countries.

Country	Rules on Packaging	Rules on Labeling
Angola	No legal framework currently in place.	No legal framework currently in place.
Botswana	The regulations include rules on packaging.	The regulations include detailed rules on labeling.
Comoros	No legal framework currently in place.	No legal framework currently in place.
DRC	No legal framework currently in place.	No legal framework currently in place.
Eswatini	No legal framework currently in place.	No legal framework currently in place.
Lesotho	No legal framework currently in place.	No legal framework currently in place.
Madagascar	No legal framework currently in place.	No legal framework currently in place.
Malawi	The fertilizer quality standards include rules on packaging for certain fertilizers.	Fertilizer containers are required to be duly labeled in English showing the fertilizer specifications.
Mauritius	Fertilizers should be sold in completely sealed containers.	Fertilizers should be properly labelled in accordance with the Act.
Mozambique	Packages containing fertilizers must have a label approved by the Registrar and allow good safety in handling through their durability and resistance that do not compromise the quality of the product or pose a danger to public, animal, or environmental health.	The Decree requires fertilizer to have a label issued by the Registrar. The details of the label are determined by the Registrar.
Namibia	No legal framework currently in place.	It is an offence to sell any fertilizer with a false or misleading statement in connection with the contents of the fertilizer container on which the statement is printed or written
Seychelles	No legal framework currently in place.	No legal framework currently in place.
South Africa	Fertilizers must be packaged in sound and sealed or closed containers or other packaging as the nature of the fertilizer may allow, as long as the requirements under the regulations are met.	Fertilizer containers must have an approved label that follows the detailed prescribed requirements under the regulations.

⁵⁶ MOU on Standardization, Quality Assurance, Accreditation and Metrology in the SADC region, 2000. Available at: <https://www.sadc.int/files/5613/5333/8302/SQAM.pdf>.



Tanzania	The regulations include detailed prescription packaging for solid and liquid fertilizers and their volumes.	The regulations include detailed prescriptions of what should be included on the label and how it should be affixed.
Zambia	No legal framework currently in place.	No legal framework currently in place.
Zimbabwe	No legal framework currently in place. The Act provides for fertilizer to be packaged according to rules prescribed under the Regulations, but Regulations are not currently in place.	No legal framework currently in place. The Act provides for fertilizer to be labelled according to rules prescribed under the Regulations, but Regulations are not currently in place.

3) Quality Assurance Through Fertilizer Product Registration and Procedures for Truth-in-Labeling

Policy, legal, and regulatory systems often control fertilizer quality prior to its entry into the market through fertilizer registration requirements; quality control may also be focused on product that is already on the market through truth in labeling and strategic enforcement mechanisms, such as unannounced inspections of wholesale or retail premises.⁵⁷ If required ex ante, fertilizer registration tends to be based on existence of an approved list, and only fertilizer and fertilizer components that meet the set conditions are approved, entered onto the list of approved fertilizer, and allowed to be imported and sold.⁵⁸ If applied, fertilizer registration requirements should be science-based and as expedient and accessible as possible in order to facilitate private sector investment in the fertilizer sector.

As a good regulatory practice, fertilizer product registration requirements, processes, and procedures should be as simple and streamlined as possible, with the fewest number of testing seasons and infrequent renewal periods. The length of testing fertilizer should, for instance, not exceed one season,⁵⁹ and fertilizer blends of already registered fertilizers should not be subject to

⁵⁷ NML in collaboration with the AFAP for the AGRA through the USAID, “Guidelines for Regional Harmonization of Fertilizer Regulations in COMESA”, 2017.

⁵⁸ NML, Economic Impact Assessment and Legal Review and Analysis of the East African Community Seed and Fertilizer Legislation, Study Emerge Centre for Innovations-Africa for the East African Community Secretariat Under the *Partnership Toward Catalyzing the Implementation of CAADP-Malabo 2017-2020*, Supported by the Alliance for a Green Revolution in Africa, 19 December 2019.

⁵⁹ Regulation 4(2) of the Tanzania Fertilizer (Amendment) Regulations, 2017. Available at: [https://www.tanzania.go.tz/egov_uploads/documents/THE_FERTILIZER\(AMENDMENTS\)_REGULATIONS_2017_sw.pdf](https://www.tanzania.go.tz/egov_uploads/documents/THE_FERTILIZER(AMENDMENTS)_REGULATIONS_2017_sw.pdf). See also, NML and AFAP, Support for the Establishment of a Regional Policy and Regulatory Framework for East and Southern Africa: Country Action Plan Tanzania, USAID an AGRA under the Scaling Seeds And Technologies Partnerships project, 2017. Available at: <https://www.afap-partnership.org/wp-content/uploads/2017/06/Country-Action-Plan-Tanzania.pdf>. See also, Franklin Simtowe, Support for the Establishment of a Regional Fertilizer Policy and Regulatory Framework in East and Southern Africa: An Assessment of National Fertilizer Policies, Regulations and Standards for Tanzania, AFAP 2015. Available at: https://www.researchgate.net/publication/297351031_An_Assessment_of_National_Fertilizer_Policies_Regulations_and_Standards_for_Tanzania.



additional registration requirements.⁶⁰ When required, registration of fertilizer products should allow new and innovative products to enter the market in a streamlined fashion, while maintaining safety and quality.

Most SADC, EAC, and COMESA member countries have opted for registration of fertilizer products. Unfortunately, some SADC Member States require testing of fertilizer for up to three seasons, including blends from already registered fertilizers, while others have been reported to have bureaucratic processes and limited capacity to actually conduct the required efficacy and laboratory tests. At the regional level, although the ECOWAS Fertilizer Regulation adopts truth-in-labeling rather than fertilizer product registration, the SADC Member States, with which there is some overlap with COMESA and EAC, require that fertilizer be registered under their national laws (Table 7). With this in mind, the SADC fertilizer regulatory harmonization efforts could consider promoting streamlined fertilizer registration approaches at the regional level in line with already existing practices in most SADC countries that require registration of fertilizer and maintain a list of registered and approved fertilizers that can be traded in the respective countries.

Table 7: SADC Countries’ Quality Assurance Approaches Through Fertilizer Product Registration/Truth-in-Labeling

Country	Quality Assurance Approaches
Angola	No legal framework currently in place.
Botswana	Fertilizers must be registered except those in direct transit to another country or those intended for research and experimental purposes. Registration requires payment of the registration fee, submission of the evaluation results from efficacy trials conducted in a country with similar environmental conditions (since Botswana currently lacks the capacity to conduct efficacy trial), and laboratory test results. The registration of a product is valid for five years subject to renewal. There is a list of registered fertilizers.
Comoros	No legal framework currently in place.
DRC	No legal framework currently in place.
Eswatini	No legal framework currently in place.
Lesotho	No legal framework currently in place.
Madagascar	No legal framework currently in place.
Malawi	New fertilizers and blends are required to be registered. The Department of Agricultural Research Services (DARS) requires that companies provide evidence of three seasons/years of field trial data prior to registration. While this requirement is not established under any

⁶⁰ Draft EAC Fertilizer Bill. See also, Tanzania Fertilizer Regulatory Authority, Fertilizer Register Book for Registered Fertilizers and Fertilizer Supplements, March 2021. Available at: https://www.tfra.go.tz/uploads/documents/en-1614843022-March%202021%20Fertilizer%20Register_Book%20English.pdf. Page 2 of the Fertilizer Register Book provides that, “Trials are conducted for new fertilizers which contains new nutrients or microorganisms which had never been registered in Tanzania, for new formulations/blends which contain existing nutrients or already register nutrients prior to its registration it requires only laboratory analysis to test its conformity to the standards field evaluation should be optional.”



	regulatory instrument, DARS still applies it as an internal policy before approving and registering any fertilizer. If the product has been used within SADC, it will be trialed on local soils for a year. If the product has not been used within SADC, it has to be trialed for 3 years. The three-year period can be reduced to one and a half or two years if the product is being trialed on irrigated soil. The trails have to be done in all four agro-ecological zones of Malawi. There is a list of registered fertilizers.
Mauritius	No registration required.
Mozambique	Fertilizer must be registered prior to being traded, and registration is valid for five years. Registration requires payment of the prescribed fees and provision of supportive documentation with results of efficacy and laboratory tests carried out within the country or in the SADC region, as well as a draft label that meets the legal requirements. There is a list of registered fertilizers.
Namibia	All fertilizer must be registered prior to sale. The Registrar conducts an investigation on the fertilizer sample provided at application to assess whether the fertilizer is suitable and sufficiently effective for use. Registration is valid for the time described in the certificate of registration. There is a list of registered fertilizers.
Seychelles	No legal framework currently in place.
South Africa	All fertilizers must be registered. Registration requirements differ according to the fertilizer group within which the fertilizer falls. The fertilizer must be tested with a certificate of analysis from an independent ISO 17025 accredited laboratory or Agri Laboratory Association of Southern Africa (AgriLASA) affiliated laboratories provided as proof of meeting standards, and a guaranteed analysis that was obtained in the current year of application for registration. Group 3 fertilizers containing natural or synthetic substance(s) or organism(s) should be accompanied by experimental results conducted under controlled environmental conditions in order to determine the biological efficacy of the particular fertilizer when required and a risk assessment satisfying that the fertilizer has no adverse effect on animal health, human health or environment. The registration is valid for three years. There is a list of registered fertilizers.
Tanzania	For new fertilizers, the TFRA director or an authorized person carries out laboratory and field tests for one cropping season in at least two agro-ecological zones so as to determine suitability for use. Fertilizer must be tested based on analytical methods described in the third schedule of the regulations. Blends are not to be subjected to field testing as long as the results of the laboratory test and soil analysis show that the blend is suitable for use (Regulation 4). Fertilizer is not subject to re-registration. There is a list of registered fertilizers.
Zambia	No registration required.
Zimbabwe	Fertilizers must be registered. Samples are sent to Chemistry and Soils Institute Laboratory for Analysis. There must be proof of registration in another country. Registration is valid for one year.

Truth-in-labeling approaches, such as the approach reflected in the ECOWAS rules, tend to replace affirmative registration or an approved fertilizer list prior to import and sale of fertilizer. Instead, fertilizer must be truthfully labeled to show the components contained in the fertilizer.⁶¹ Truthful

⁶¹ NML in collaboration with the AFAP for the AGRA through the USAID, “Guidelines for Regional Harmonization of Fertilizer Regulations in COMESA”, 2017. See also, Joshua Ariga, Shannon B. Keating, Katrin Kuhlmann, Nicole M. Mason, and Maria Wanzala-Mlobela, “Creating an Enabling Environment for Private Sector Investment in Fertilizer Value Chains in Sub-Saharan Africa: Empirical Evidence and Knowledge Gaps.” IFDC, Michigan State University, AFAP, and NML, December 2018, available at: <https://www.canr.msu.edu/contentAsset/raw-data/4a52893d-8628-45df-b5bf-58919af58063/fileAsset/byInode/1?random=32601>. See also, New Markets Lab,



labeling can improve consumer confidence and minimize border delays, with fertilizer subject to inspection and other quality control measures as needed.⁶² In general, the truth-in-labeling approach is considered to be more market-conducive and can help to ease government administrative costs and foster transactions based on trusting the nutrient content information on the bag. It does, however, require sufficient enforcement capacity and institutions, including accredited laboratories with sufficient equipment and trained staff, which most countries within the SADC region lack.

4) Streamlined Rules on Facility, Producer, and Dealer Registration and Licensing

As part of quality assurance, most countries with a fertilizer regulatory framework in sub-Saharan Africa maintain requirements for the registration and licensing of fertilizer facilities, importers, exporters, producers, distributors, and sellers. The terms differ depending upon the type of license and the role of the licensee in the fertilizer value chain. Expensive and bureaucratic registration and licensing requirements can affect investment in the fertilizer sector and delay availability of quality fertilizer to farmers. Licensing and registration processes should be simple and inexpensive, with measures effective enough to ensure quality fertilizer on the market, but also not too stringent so as to curtail private sector investment and engagement in the fertilizer sector.⁶³ The processes should be streamlined and transparent⁶⁴ without creating additional costs, bureaucratic hurdles or create overlapping requirements, which would inhibit private sector engagement and investment.⁶⁵ As a good regulatory approach, where a fertilizer facility, producer,

Economic Impact Assessment and Legal Review and Analysis of the East African Community Seed and Fertilizer Legislation, Study Emerge Centre for Innovations-Africa for the East African Community Secretariat Under the *Partnership Toward Catalyzing the Implementation of CAADP-Malabo 2017-2020*, Supported by the Alliance for a Green Revolution in Africa, 19 December 2019.

⁶² Ibid.

⁶³ NML in collaboration with the AFAP for the AGRA through the USAID, “Guidelines for Regional Harmonization of Fertilizer Regulations in COMESA”, 2017. See also, Joshua Ariga, Shannon B. Keating, Katrin Kuhlmann, Nicole M. Mason, and Maria Wanzala-Mlobela, “Creating an Enabling Environment for Private Sector Investment in Fertilizer Value Chains in Sub-Saharan Africa: Empirical Evidence and Knowledge Gaps.” IFDC, Michigan State University, AFAP, and NML, December 2018, available at: <https://www.canr.msu.edu/contentAsset/raw-data/4a52893d-8628-45df-b5bf-58919af58063/fileAsset/byInode/1?random=32601>.

⁶⁴ NML, Economic Impact Assessment and Legal Review and Analysis of the East African Community Seed and Fertilizer Legislation, Study Emerge Centre for Innovations-Africa for the East African Community Secretariat Under the *Partnership Toward Catalyzing the Implementation of CAADP-Malabo 2017-2020*, Supported by the Alliance for a Green Revolution in Africa, 19 December 2019.

⁶⁵ Joshua Ariga, Shannon B. Keating, Katrin Kuhlmann, Nicole M. Mason, and Maria Wanzala-Mlobela, “Creating an Enabling Environment for Private Sector Investment in Fertilizer Value Chains in Sub-Saharan Africa: Empirical Evidence and Knowledge Gaps.” IFDC, Michigan State University, AFAP, and NML, December 2018, available at: <https://www.canr.msu.edu/contentAsset/raw-data/4a52893d-8628-45df-b5bf-58919af58063/fileAsset/byInode/1?random=32601>. See also, New Markets Lab in collaboration with the African Fertilizer and Agribusiness Partnership (AFAP) for the Alliance for a Green Revolution in Africa (AGRA) through the U.S. Agency for International Development (USAID), “Guidelines for Regional Harmonization of Fertilizer Regulations in COMESA”, 2017.



importer, or exporter is required to be registered, it should be only once or once every 10 years instead of frequently.⁶⁶ For the importer, separate import permits should not be required for each fertilizer consignment.⁶⁷ For fertilizer dealer registrations, licenses should be valid for at least three years, with simplified renewal processes.

Currently within the SADC Member States, some countries do not have fertilizer legal frameworks and thus do not require facility or dealer registration or licensing, some have fertilizer regulatory frameworks but do not require fertilizer or dealer registrations or licensing, and others require both facility and dealer registration with varied validity lengths (Table 8). Regional fertilizer regulations under SADC could streamline and harmonize some of these facility and dealer licensing requirements to ease trade in fertilizer within the SADC region.

Table 8: SADC Countries' Rules on Fertilizer Facility and Dealer Registration

Country	Fertilizer Facility Registration	Producer and Dealer Registration
Angola	No legal framework currently in place.	No legal framework currently in place.
Botswana	No legal framework currently in place.	All fertilizer producers and dealers must be registered. Prior to issuance of the license, the Registrar confirms that the applicant successfully completed the prescribed training course and that the fertilizer is registered.
Comoros	No legal framework currently in place.	No legal framework currently in place.
DRC	No legal framework currently in place.	No legal framework currently in place.
Eswatini	No legal framework currently in place.	No legal framework currently in place.
Lesotho	No legal framework currently in place.	No legal framework currently in place.
Madagascar	No legal framework currently in place.	No legal framework currently in place.
Malawi	MBS visit the factory for an initial audit to ensure compliance. MBS conduct a test of a sample and on approval, the manufacturer can begin distribution. Monitoring is done every quarter by MBS, after 3 or 4 consecutive instances, the manufacturer is given a full certificate.	No legal framework currently in place.
Mauritius	No legal framework currently in place.	Fertilizer producers and dealers are required to obtain a license issued by the Agricultural Chemistry Division,

⁶⁶ NML and AFAP, A Comparative Analysis of Fertilizer Accessibility in Ethiopia, Malawi, Mozambique and Tanzania, Study Commissioned by USAID and AGRA under the Scaling Seeds and Technologies Partnership, 2017. Available at: <https://www.afap-partnership.org/wp-content/uploads/2017/06/Comparative-Analysis.pdf>.

⁶⁷ New Markets Lab and AFAP, A Comparative Analysis of Fertilizer Accessibility in Ethiopia, Malawi, Mozambique and Tanzania, Study Commissioned by USAID and AGRA under the Scaling Seeds and Technologies Partnership, 2017. Available at: <https://www.afap-partnership.org/wp-content/uploads/2017/06/Comparative-Analysis.pdf>.



		Ministry of Agro Industry and Food Security. This license is valid for one year only and is renewable.
Mozambique	The construction and operation of a fertilizer plant should be with the authorization of the Registrar.	Any importer, exporter or trader of Fertilizers is required to be registered by the registrar, National Directorate of Agricultural Health and Biosafety.
Namibia	No legal framework currently in place.	No legal framework currently in place.
Seychelles	No legal framework currently in place.	No legal framework currently in place.
South Africa	Not required.	Not required.
Tanzania	Fertilizer Plants are required to be registered by the TFRA once they meet the criteria in the regulations. The license issued is valid for three years.	All fertilizer dealers are required to have a license issued by the Fertilizer Board. Once issued a license, the TFRA enters the licensee's name in the register. The dealer license is valid for a period of not more than two years.
Zambia	Fertilizer plants have to be registered by the registering officer appointed by the Minister responsible for agriculture prior to operation.	Not required.
Zimbabwe	No legal framework currently in place.	No legal framework currently in place.

C. Transparency and Due Process (Confidentiality and the Right to Appeal)

Confidentiality and the right to appeal are also good practices that should be included in both national and regional fertilizer regulatory frameworks. Given that many of the provisions included in national and regional fertilizer laws and regulations involve administrative procedures where public entities have the power to determine who can participate in the fertilizer market and under which conditions, the right of market actors to appeal these decisions is critical.⁶⁸ The fertilizer regulatory framework should address appeals and designate competent authorities to handle them, with the regulations prescribe the procedural rules to be followed. This will guarantee that all actors in the value chain are given fair and transparent treatment when applying for a license or registration. In line with this good regulatory practice, as reflected in the ECOWAS 2012 Fertilizer Regulations and draft EAC Fertilizer Bill, the harmonized regional fertilizer rules under SADC

⁶⁸ NML, Economic Impact Assessment and Legal Review and Analysis of the East African Community Seed and Fertilizer Legislation, Study Emerge Centre for Innovations-Africa for the East African Community Secretariat Under the *Partnership Toward Catalyzing the Implementation of CAADP-Malabo 2017-2020*, Supported by the Alliance for a Green Revolution in Africa, 19 December 2019



could require Member States to establish streamlined national rules on handling appeals of administrative decisions.

The information shared with the fertilizer regulatory authorities during licensing and registration is sometimes business confidential information, the protection of which is critical to fair competition in the fertilizer sector. The national and regional regulatory frameworks should prioritize confidentiality of key business information provided by applicants during the licensing and registration processes. Transparency and due process are already recognized in some SADC Member States (Table 9), and incorporation of relevant provisions at the regional level could result in scaling these practices to other countries within SADC.

Table 9: Rules on Transparency and Due Process

Country	Rules on Appeals	Rules on Confidentiality
Angola	No legal framework currently in place.	No legal framework currently in place.
Botswana	Appeals lie to the Minister or court of law	No legal framework currently in place.
Comoros	No legal framework currently in place.	No legal framework currently in place.
DRC	No legal framework currently in place.	No legal framework currently in place.
Eswatini	No legal framework currently in place.	No legal framework currently in place.
Lesotho	No legal framework currently in place.	No legal framework currently in place.
Madagascar	No legal framework currently in place.	No legal framework currently in place.
Malawi	No legal framework currently in place.	No legal framework currently in place.
Mauritius	No legal framework currently in place.	No legal framework currently in place.
Mozambique	No legal framework currently in place.	No legal framework currently in place.
Namibia	Appeals handled by the Minister responsible for agriculture.	Any official who obtains information in exercise of their duties under the law will not disclose such information.
Seychelles	No legal framework currently in place.	No legal framework currently in place.
South Africa	Appeals handled by the Director General of the Department of Agriculture, Forestry and Fisheries, within 60 days from the date of receiving the decision in contention.	It is an offence for officials to disclose any business information received during performance of their duties, except to the Minister when required.
Tanzania	Appeals handled by the Minister within thirty days of receiving the decision complained of. The Minister may hear the appeal through the Appeals Board constituted by the Minister.	No legal framework currently in place.
Zambia	Appeals handled by the Minister responsible for agriculture.	Any official who obtains information in exercise of their duties under the law will not disclose such information. Certain information is protected from disclosure by the fertilizer producer including any secret process, formula or



		preparation process. This does not include fertilizer ingredients (not the percentages) and costs of production (not the overhead charges), which the producer shall disclose to the Minister when required.
Zimbabwe	Appeals handled by the Minister or court of law	It is an offence for any person to disclose, except to the Minister or when required to do so by any court or under any law, any information acquired in the exercise of any function under the Act in relation to the business or affairs of any other person or to use that information for personal gain.

D. Environmental Protection (Rules on Fertilizer Storage, Use, and Disposal)

Good fertilizer storage conditions, especially for blends, are required to avoid caking, water damage, and other types of losses.⁶⁹ Improper and excessive fertilizer use and disposal can pollute and harm the environment. For instance, improper use and storage of fertilizers may enhance emission of greenhouse gas (GHG), contributing to global warming and exacerbating climate change. Improper disposal leads to pollution of water bodies through runoff, while unsafe storage may lead to natural disaster, as evidenced by the disaster in Lebanon in 2019. It is thus important that the national and regional fertilizer frameworks consider environmental safety a priority through encouraging soil testing to ascertain nutrient deficiencies, building farmer knowledge around optimal use of fertilizers to mitigate the environmental impacts of fertilizer use, and establishing other policies and procedures to address disposal and storage. Within SADC, only Botswana, Mozambique, and Tanzania have detailed rules on fertilizer storage, use, and disposal (see Annex 1). Provisions on fertilizer storage, use, and disposal could be adopted within the SADC regional framework.

E. Cross-border Trade Requirements (Tariffs, Import/Export License)

The MOU on Standardization, Quality Assurance, Accreditation and Metrology in the SADC Region requires SADC Member States to mutually recognize fellow members quality assurance certification in order to eliminate technical barriers to trade and ensure free movement of goods in the SADC region. As a good regulatory practice recognized under other SADC industry-specific

⁶⁹ John C. Keyser, Marjatta Eilitta, Georges Dimithe, Gbolagade Ayoola, & Louis Sene, ‘Towards an Integrated Market for Seeds and Fertilizers in West Africa, 2015. Washington, DC: World Bank Group. <http://documents.worldbank.org/curated/en/2015/01/23804243/towards-integrated-market-seeds-fertilizers-west-africa>.



regional regulatory instruments such as the MOU on the SADC Harmonized Seed Regulatory System, and harmonized fertilizer regulatory instruments in other regions such as the ECOWAS 2012 Fertilizer Regulations and draft EAC Fertilizer Bill, fertilizers that comply with regional quality standards should be traded freely across the region. National regulations could still require a form of notification or licensing in form of an import or export permit as a control mechanism. Regional harmonization efforts should aim to reduce transport costs by reducing or removing border taxes, roadblocks, and escort systems; introducing one-stop border processes; and improving trade corridors.⁷⁰

Implementation of good practices, including the long-term options noted above, at the regional and national levels will, of course, require the investment of resources and national and regional capacity building initiatives. This process will take time, coordination, and cooperation. However, following all of the good practices in this section, many of which are recommended for inclusion in the proposed SADC harmonized fertilizer regulations, could help expand the fertilizer sector within SADC and further develop agricultural markets within the region. In light of larger harmonization initiatives, and given that most SADC Member States are members of other RECs, SADC harmonization efforts could also have positive spill-over effects within the tripartite region and at the continental level.

1) Tariffs and Custom Duties

Within SADC, there are zero import tariff zones with respect to goods like fertilizer that originate from Member States or those that have undergone substantial value addition. This is similar to other RECs, and aligns with the Abuja Declaration of 2006, which calls for harmonization of fertilizer policies and regulations to ensure duty- and tax-free movement of fertilizers across regions. Countries like Botswana, South Africa, Malawi, Tanzania, Zambia, and Zimbabwe, have a zero-rated value added tax on all fertilizer imports regardless of origin. Nevertheless, some form of tax on fertilizer continues to exist in most SADC Member States. For instance, in Malawi fertilizer is exempt from import tax but a 0.5 percent cess fee is charged. In Mozambique, fertilizer imports are free of a custom duty of 2.5 percent but micronutrients are subject to an additional 17% value added tax because the current Customs Tariff Book does not differentiate fertilizers for agriculture and for non-agriculture.

Elimination of all taxes on fertilizer imports would increase fertilizer availability, access, and use, as well as improve productivity and food security. Taxes or tariffs on fertilizers translate into increased prices and reduce financial accessibility for smallholder farmers. While tax and custom

⁷⁰ New Markets Lab in collaboration with the African Fertilizer and Agribusiness Partnership (AFAP) for the Alliance for a Green Revolution in Africa (AGRA) through the U.S. Agency for International Development (USAID), “Guidelines for Regional Harmonization of Fertilizer Regulations in COMESA”, 2017.



duties are not regulated under the fertilizer laws and regulations, relevant customs provisions should address the issue of taxes on fertilizer and their ingredients. Countries should further analyze the impact of the tax and tariff regimes on the importation, distribution, and use of fertilizer and advise on ways to promote availability and access of quality fertilizer, for instance through provision of incentives such as tax exemption. This would, for instance, facilitate investment in the fertilizer sector nationally and regionally. Harmonization efforts could focus on ensuring that SADC Member States implement the zero import tariff on fertilizer.

F. Enforcement of Fertilizer Regulations (Penalties, Fines, and Damages)

National fertilizer regulatory frameworks should include effective punitive measures against all acts that compromise the quality of fertilizer in the market, including trading without the required registrations and licenses, obstruction of officials from conducting their legal duties, improper packaging and labeling, and trading in counterfeit and substandard fertilizer, among other things. Such punitive measures would ensure compliance with fertilizer laws and regulations and improve implementation of fertilizer quality standards, encouraging the use of quality fertilizer that stimulates crop productivity and protection of plant, human, and animal life and health as well as environmental protection from the adverse effects of using substandard fertilizer. For legal and regulatory violations, punitive measures can include fines and penalties (including imprisonment for serious violations) and cancellation or suspension of registration or licenses, along with damages under civil litigation involving an affected party. The harmonized regional fertilizer regulations under SADC could consider requiring that Member States include measures regarding enforcement of fertilizer quality standards, similar to the Draft EAC Fertilizer Bill. This is aligned with the Abuja Declaration of 2006 which calls for harmonization of fertilizer policies and regulations to ensure the development of capacity for quality control.

Table 10: Rules on Enforcement of Fertilizer Regulations in SADC Countries

Country	
Angola	No legal framework currently in place.
Botswana	The Act imposes penalties against improper labeling and packaging, dealing in fertilizer without a license, and sale of unregistered fertilizer, among others.
Comoros	No legal framework currently in place.
DRC	No legal framework currently in place.
Eswatini	No legal framework currently in place.
Lesotho	No legal framework currently in place.
Madagascar	No legal framework currently in place.
Malawi	Sale of improperly labeled, counterfeit, or substandard fertilizer is an offence under the Regulations.



Mauritius	The Act imposes fines, penalties, and imprisonment sentences for sale of counterfeit fertilizer or affixing a false or misleading label to a fertilizer container.
Mozambique	Violation of the regulatory provisions constitutes an administrative offense punishable by fertilizer seizure, confiscation, fine, initiation of criminal proceedings against public health, or a combination of these. The owner is responsible for removing and/or destroying fertilizers in an irregular situation under the terms established in the Regulations, as well as environmental compensation, if applicable.
Namibia	The Act imposes penalties including confiscation and destruction of fertilizer, fines, imprisonment, against anyone who sells substandard or adulterated fertilizer, improperly labeled fertilizer containers, or other offences.
Seychelles	No legal framework currently in place.
South Africa	The Act imposes penalties, including fines and imprison sentences, against anyone who sells unregistered, counterfeit, adulterated, or improperly labeled fertilizer.
Tanzania	The Act imposes penalties, including fines, imprisonment, and damages against anyone who sells unregistered, counterfeit, or improperly labeled fertilizer.
Zambia	The Act and regulations include penalties, fines, and imprisonment sentences for the sale of counterfeit or fake fertilizer.
Zimbabwe	The Act imposes penalties, including confiscation and destruction of fertilizer, fines, and imprisonment, against anyone who sells substandard or adulterated fertilizer, improperly labeled fertilizer containers, or other offences.

G. Other Relevant Issues

While often more of an issue for domestic policy, public subsidies also affect trade in fertilizer. The WTO Agreement on Agriculture establishes global disciplines for agricultural subsidies, including input subsidies, while the WTO Agreement on Subsidies and Countervailing Measures establishes disciplines on industrial subsidies. Even when not regulated at the regional level, differences in subsidy programs within the region can lead to variations in price, which can discourage regional harmonization. The same is true of bulk procurement programs.

IV. Conclusion

SADC's effort to develop a harmonized regional fertilizer regulatory framework is a commendable development. In creating a regional regulatory framework for fertilizer, existing good practices should be considered alongside country rules and practices. This will ensure establishment of an enabling environment conducive to development of the national and regional fertilizer industry and improve cross-border regional trade. Streamlined regional fertilizer rules will enable SADC Member States to leverage each other's strengths in the fertilizer industry, including improving access to fertilizer ingredients from the region to enable fertilizer manufacturing and blending, importing quality fertilizers from SADC countries that manufacture them, reducing transport costs and importing expenses, enabling technology transfer from countries in the region with advanced



regulatory and institutional fertilizer systems, and ensuring access to quality fertilizers in the region by recognizing fertilizers from countries with sufficient capacity and facilities like equipped laboratories to test fertilizers in accordance with recognized international and regional standards, among others. The regional fertilizer rules under SADC, once aligned with good regulatory practices, will ease availability, access, and affordability of fertilizer, especially for smallholder farmers within the region.

The effectiveness of regional rules will, however, depend upon the willingness of SADC Member States to align their national laws with the regional regulatory framework, as well as implementation efforts in practice. This legal assessment has revealed that a considerable number of SADC Member States lack a fertilizer policy to guide the fertilizer industry in the respective countries, and some completely lack a legally binding regulatory framework for fertilizer. Moreover, even within those SADC Member States that have a legally binding fertilizer legal framework (Fertilizer Act or Regulations), some are not aligned with international and regional good practices, which continues to create challenges to fertilizer trade. As regional fertilizer harmonization moves forward under SADC, greater focus will be needed on supporting Member States without fertilizer legal frameworks in order to fill gaps in national legal and regulatory systems that will align with international and regional fertilizer regulatory good practices. Some consultants from SADC Member States reported challenges with enforcement of fertilizer quality standards, associated with under-equipped laboratories that are unable to effectively test fertilizer and under-capacitated regulatory institutions that struggle to conduct field efficacy trials, among other issues, which contributes to the sale of adulterated or counterfeit fertilizer. Harmonization efforts will also have to focus on building individual countries' resource and institutional capacities that can enable them to implement national and regional rules in practice.



Annex I: Detailed Table on SADC Member States' Status Regarding Fertilizer Regulatory Good Practices

Fertilizer Regulatory Framework							
Angola	Botswana	Comoros	DRC	Eswatini	Lesotho	Madagascar	Malawi
No legal framework for fertilizer currently in place. 2020 Draft Law on Pesticides and Fertilizers.	Agrochemicals Act of 1999 Cap 35:09 and Agrochemical regulations of 2003.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	Fertilizer and Farm Feeds and Remedies Act (1970) and Regulations. Draft Fertilizer Law is being developed. Fertilizer Policy, 2021. 2006 National Fertilizer Strategy.
Mauritius	Mozambique	Namibia	Seychelles	South Africa	Tanzania	Zambia	Zimbabwe
Chemical Fertilizers Control Act (1980) and Chemical Fertilizers Control (License) Regulations 1980.	Fertilizer Management Regulation - Decree 11/2013 of 10 of April. A new fertilizer Law is currently being drafted. Ministerial Decision No. 32/2015 approving the Internal Regulation of the Technical Advisory Committee on Fertilizers.	Fertilizer, Farm Feeds, Agricultural Remedies Act no.36 of 1947 last revised in 1977. The Act is currently under revision. Regulations on the Registration of Fertilizers, Farm Feeds, Sterilizing Plants and Agricultural Remedies (GN No. 112 of 25 June of 2007, revised by GN No. 311 of 9 December of 2020).	No legal framework currently in place.	Fertilizers, Farm Feeds, Seeds and Remedies Act 36, 1947 (under revision) and the Regulations regarding fertilizers, R. 732 of 2012.	Fertilizer At, 2009 and 2011 Fertilizers Regulations (as amended in 2017). Fertilizer (Bulk Procurement) Regulations, GI No. 49 of 2017.	Agriculture (Fertilizers and Feed) Act Cap 226, and Agriculture (Fertilizers) Regulations, S.I 476 of 1969.	Fertilizers, Farm Feeds and Remedies Act [Chapter 18:12].
Dedicated Fertilizer Regulatory Authority							
Angola	Botswana	Comoros	DRC	Eswatini	Lesotho	Madagascar	Malawi
Department of Agriculture and Plant Protection of National Directorate of Agriculture and Livestock in the Ministry of Agriculture and Fisheries.	The Registrar of Agrochemicals, Agrochemicals Inspectors, Police and the National Agrochemicals Committee.	No legal framework currently in place.	The National Fertilizers and Related Inputs Service under the Ministry of Agriculture.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	Department of Agricultural Research Services.
Mauritius	Mozambique	Namibia	Seychelles	South Africa	Tanzania	Zambia	Zimbabwe
The Agricultural Chemistry Division under the aegis of Ministry of Agro Industry and Food Security.	Technical Advisory Committee on Fertilizer under the Ministry of Agriculture and Rural Development.	Registrar of Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies under the Ministry of Agriculture, Water and Land Reform.	No legal framework currently in place.	Registrar of Fertilizers under the Department of Agriculture, Forestry and Fisheries.	Tanzania Fertilizer Regulatory Authority (TFRA).		Agricultural Research and Innovation Directorate of the Ministry of Lands, Agriculture, Fisheries, Water and Rural Resettlement.
Quality Standards (Rules on inspection, sampling, and analysis and Technical specifications such as nutrient levels; safety heavy metal/contaminant levels; moisture levels; physical specs included)							
Angola	Botswana	Comoros	DRC	Eswatini	Lesotho	Madagascar	Malawi
No legal framework for fertilizer currently in place.	There are fertilizer standards for organic fertilizer, agricultural liming materials, and blends	No legal framework currently in place.	No legal framework for currently in place.	Fertilizer standards are comprised of nutrient specifications only. These are for chemical fertilizers only and are not mandatory. There are no standards for organic fertilizers.	Fertilizer standards are comprised of technical specifications that give a summary of the chemical and safety requirements for the fertilizers. Since there is no law or regulations, these are not mandatory. There are no standards for organic fertilizers.	No legal framework currently in place.	There are currently 15 standards for inorganic and organic fertilizers under the Malawi Bureau of Standards Act. If the standard for the blend has not been created, MBS can only provide a voluntary certification based on provided parameters.
Mauritius	Mozambique	Namibia	Seychelles	South Africa	Tanzania	Zambia	Zimbabwe
There are fertilizer standards for inorganic fertilizers There are rules on sampling and analysis of fertilizers. There are one public, two parastatals, and three private laboratories offering fertilizer testing.	Fertilizer standards exist for inorganic fertilizers, and they are mandatory. There are no standards for limestone, foliar, organic fertilizers, bio fertilizers, microbial technologies, bio stimulants. Formulations exist for MAP - Ammonia Mono Phosphate and Potassium chloride. There are rules on inspection, sampling, and analysis of fertilizers.	There are no official standards for any type of fertilizers. There are guidelines on fertilizer standards in line with the EU standards for table grapes and dates, which Namibia exports to the EU market. These standards include max levels for heavy metals such as cadmium and lead.	No legal framework currently in place.	Fertilizer standards exist for inorganic and organic fertilizers. These standards are mandatory and enforceable. There are rules on fertilizer inspection, sampling, analysis, and testing.	Fertilizer standards exist for inorganic and organic fertilizers. Rules exist on fertilizer inspection, sampling and testing.	TBD	Fertilizer standards exist but are comprised of nutrient content specifications only. Rules exist on fertilizer sampling, analysis, and testing.
Rules on Product Registration/ Truth in Labeling							
Angola	Botswana	Comoros	DRC	Eswatini	Lesotho	Madagascar	Malawi
No legal framework for fertilizer currently in place.	Fertilizers must be registered, except those in direct transit to another country or those intended for research and experimental purposes. Registration requires payment of the registration fee, submission of the evaluation results from efficacy trials conducted in a country with similar environmental conditions (since Botswana currently lacks the capacity to conduct efficacy trials), and laboratory test results. The registration of a product is valid for five years subject to renewal.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	New fertilizers and blends are required to be registered. Department of Agricultural Research Services (DARS) requires companies to provide evidence of three seasons/years of field trials data prior to registration. While this requirement is not based on any regulatory instrument, DARS still applies it as an internal policy before approving and registering any fertilizer. If the product has been used within a SADC country, it will be trialed on local soils for a year. If the product has not been used within SADC, it has to be trialed for 3 years. The three years can be reduced to one and a half or two years if the product is being trialed on irrigated soil. The trails have to be done in all four agro-ecological zones of Malawi. There is a list of registered fertilizers.

	There is a list of registered fertilizers.								
Mauritius	Mozambique	Namibia	Seychelles	South Africa			Tanzania	Zambia	Zimbabwe
No registration required.	Registration must be done prior to trade in fertilizer. The registration is valid for five years. Registration requires payment of the prescribed fees, supportive documentation with results of efficacy and laboratory tests carried out within the country or in the SADC region, and a label that meets the legal requirements. There is a list of registered fertilizers.	All fertilizer must be registered prior to sale. The Registrar conducts an investigation on the fertilizer sample provided at application to assess whether the fertilizer is suitable and sufficiently effective for use. Registration is valid for the time described in the certificate of registration. There is a list of registered fertilizers.	No legal framework currently in place.	All fertilizers must be registered. Registration requirements differ according to the fertilizer group within which the fertilizer falls. The fertilizer must be tested with a certificate of analysis from an independent ISO 17025 accredited laboratory or Agri Laboratory Association of Southern Africa (AgriLASA) affiliated laboratories provided as proof of meeting standards, and a guaranteed analysis that was obtained in the current year of application for registration. Group 3 fertilizers containing natural or synthetic substance(s) or organism(s) should be accompanied by experimental results conducted under controlled environmental conditions in order to determine the biological efficacy of the particular fertilizer when required and a risk assessment satisfying that the fertilizer has no adverse effect on animal health, human health or environment. The registration is valid for three years. There is a list of registered fertilizers.			For new fertilizers, the TFRA director or an authorized person carries out laboratory and field tests for one cropping season in at least two agro-ecological zones so as to determine suitability for use. Fertilizer must be tested based on analytical methods described in the third schedule of the regulations. Blends are not to be subjected to field testing as long as the results of the laboratory test and soil analysis show that the blend is suitable for use (Regulation 4). Fertilizer is not subject to re-registration. Tanzania maintains a list of registered fertilizers.	No registration is required.	Fertilizers must be registered. Samples are sent to the Chemistry and Soils Institute Laboratory for Analysis. There must be proof of registration in another country. Registration is valid for one year.
Rules on Fertilizer Facility, Producer, and Fertilizer Dealer Registration/ Licensing									
	Angola	Botswana	Comoros	DRC	Eswatini	Lesotho	Madagascar	Malawi	
Registration of Fertilizer Facility	No legal framework currently in place.	Under the Act, fertilizer should be packed according to regulations. The regulations, however, give no prescription of packaging requirements, except that of fertilizer waste.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	MBS visit the factory for an initial audit to ensure compliance. MBS conduct a test of a sample and, on approval, the manufacturer can begin distribution. Monitoring is done every quarter by MBS, and, after 3 or 4 consecutive instances, the manufacturer is given a full certificate.	
Producer and Fertilizer Dealer Registration	No legal framework for fertilizer currently in place.	All fertilizer producers and dealers must be registered. Prior to issuance of a license, the Registrar will confirm that the applicant successfully completed the prescribed training course and that the fertilizer is registered.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	Registration not required.	
	Mauritius	Mozambique	Namibia	Seychelles	South Africa	Tanzania	Zambia	Zimbabwe	
Registration of Fertilizer Facility	No legal framework currently in place.	The construction and operation of a fertilizer plant should be with the authorization of the Registrar.	Not required.	No legal framework currently in place.	Registration not required.	Fertilizer Plants are required to be registered by the TFRA once they meet the criteria in the regulations. The license issued is valid for three years.	Fertilizer plants have to be registered by the Registering officer appointed by the Minister responsible for agriculture prior to operation.	Not required.	
Producer and Fertilizer Dealer Registration and Licensing	Fertilizer producers and dealers are required to obtain a license issued by the Agricultural Chemistry Division, Ministry of Agro Industry and Food Security. This license is valid for one year only and is renewable.	Any importer, exporter or trader of Fertilizers is required to be registered by the registrar, National Directorate of Agricultural Health and Biosafety.	Not required.	No legal framework currently in place.	All fertilizer dealers are required to have a license issued by the Fertilizer Board. Once issued a license, the TFRA enters the licensee's name in the register. The dealer license is valid for a period of not more than two years.	Not required.	Not required.		
Rules on Packaging and Labeling									
	Angola	Botswana	Comoros	DRC	Eswatini	Lesotho	Madagascar	Malawi	
Rules on Packaging	No legal framework currently in place.	The regulations include rules on packaging.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	
Rules on Labeling	No legal framework currently in place.	The regulations include detailed rules on labeling.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	Fertilizer containers are required to be duly labeled in English showing the fertilizer specifications.	
	Mauritius	Mozambique	Namibia	Seychelles	South Africa	Tanzania	Zambia	Zimbabwe	
Rules on Packaging	Fertilizers should be sold in completely sealed containers.	Packages containing fertilizers must have a label approved by the Registrar and allow good safety in handling through durability and resistance that do not compromise the quality of the product or pose a danger to the	No legal framework currently in place.	No legal framework currently in place.	Fertilizers must be packaged in sound and sealed or closed containers or other packaging as the nature of the fertilizer may allow, as long as the requirements under the regulations are met.	The regulations include detailed prescription packaging for solid and liquid fertilizers and their volumes.	No legal framework currently in place.	No legal framework currently in place. The Act provides for fertilizer to be packaged according to rules prescribed under the Regulations; however, Regulations are not currently in place.	

		public, animals, or environmental health.						
Rules on Labeling	Fertilizers should be properly labelled in accordance with the Act.	All fertilizer is required to have a label issued by the Registrar.	It is an offence to sell any fertilizer with a false or misleading statement in connection with the contents of the fertilizer container on which the statement is printed or written.	No legal framework currently in place.	Fertilizer containers must have an approved label that follows the detailed prescribed requirements under the regulations.	The regulations include detailed prescriptions of what should be included on the label and how it should be affixed.	No legal framework currently in place.	No legal framework currently in place. The Act provides for fertilizer to be labelled according to rules prescribed under the Regulations; however, Regulations are not currently in place.

Rules on Transparency and Due Process (Rules on Appeals and Confidentiality)

	Angola	Botswana	Comoros	DRC	Eswatini	Lesotho	Madagascar	Malawi
Rules on Appeals	No legal framework currently in place.	Appeals lie to the Minister or court of law.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.
Rules on Confidentiality	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.
	Mauritius	Mozambique	Namibia	Seychelles	South Africa	Tanzania	Zambia	Zimbabwe
Rules on Appeals	No legal framework currently in place.	No legal framework currently in place.	Appeals handled by the Minister responsible for agriculture.	No legal framework currently in place.	Appeals handled by the Director General of the Department of Agriculture, Forestry and Fisheries, within 60 days from the date of receiving the decision in contention.	Appeals handled by the Minister within thirty days of receiving the decision in contention. The Minister may hear the appeal through the Appeals Board constituted by the Minister.	Appeals handled by the Minister responsible for agriculture.	Appeals handled by the Minister or court of law.
Rules on Confidentiality	No legal framework currently in place.	No legal framework currently in place.	Any official who obtains information in exercise of their duties under the law will not disclose such information.	No legal framework currently in place.	It is an offence for officials to disclose any business information received during performance of their duties, except to the Minister when required.	No legal framework currently in place.	Any official who obtains information in exercise of their duties under the law will not disclose such information. Certain information is protected from disclosure by the fertilizer producer including any secret process, formula, or preparation process. This does not include fertilizer ingredients (not percentages) and costs of production (not overhead charges), which the producer shall disclose to the Minister when required.	It is an offence for any person to disclose, except to the Minister or when required to do so by any court or under any law, any information acquired in the exercise of any function under the Act in relation to the business or affairs of any other person or to use that information for personal gain.

Environmental Protection (Rules on Fertilizer Storage, Use and Disposal)

	Angola	Botswana	Comoros	DRC	Eswatini	Lesotho	Madagascar	Malawi
Rules on Fertilizer Storage	No legal framework currently in place.	The regulations include rules on storage of fertilizers, including the nature of the storage facility.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	There is a quality standard on storage for fertilizer.
Rules on Fertilizer Use and Disposal	No legal framework currently in place.	Employers are required to provide workers with facilities and clothing to ensure safe handling or use of fertilizer.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.
	Mauritius	Mozambique	Namibia	Seychelles	South Africa	Tanzania	Zambia	Zimbabwe
Rules on Fertilizer Storage	The Act includes provisions on criteria to be met by the storage facility.	The Decree includes detailed rules on fertilizer storage and handling. Companies must also provide proof and evidence of ongoing training and implementation of the rules on Hygiene, Safety, Health and Environment at work.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	It is an offence under the Act to store fertilizer in a manner that could harm human health or the environment.	No legal framework currently in place.	No legal framework currently in place.
Rules on Fertilizer Use and Disposal		Use of Fertilizers must be handled with due care in order not to	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	Fertilizer plants are required to obtain an environmental impact assessment certificate	No legal framework currently in place.	No legal framework currently in place.

		endanger the health of the applicator, other people, animals and the environment.				from the relevant authority prior to licensing and registration. Appropriate protective gear is required to be used when handling fertilizer.		
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Rules on Cross Border Trade (Tariffs, Import and Export Requirements)

	Angola	Botswana	Comoros	DRC	Eswatini	Lesotho	Madagascar	Malawi
Tariffs	Fertilizer is tax exempt.	Fertilizer is exempt from value added tax.	TBT	Fertilizer is exempt from tax.	TBT	TBT	Fertilizer is tax exempt	Fertilizer is exempt from value added tax. A 0.5% cess fees is charged.
Import/Export Licenses	An import license must be obtained from the Department of Agriculture. It takes 48 hours to obtain the license. License duration or validity is 3 months.	TBD	No legal framework		No legal framework	No legal framework	No legal framework	One should obtain an import or export permit from the Ministry of Agriculture prior to importation or exportation of fertilizer. The Malawi Bureau of Standards (MBS) requires a pre-shipment sample to be sent for testing prior to bulk importing as part of the certification process. The sample is tested according to fertilizer standards. If the test results are satisfactory, an approval is given to the manufacturer and in country supplier.
	Mauritius	Mozambique	Namibia	Seychelles	South Africa	Tanzania	Zambia	Zimbabwe
Tariffs	Fertilizer is tax exempt.	2.5 percent customs duty and 17 percent value added tax is charged.	TBD	No legal framework currently in place.	Zero-rated tax on fertilizer imports.	TBD	Zero-rated tax on fertilizer imports.	Zero-rated tax on fertilizer.
Import/Export License	An import or export permit issued by the Ministry of Agriculture is required prior to import or export of fertilizer	An import or export permit issued by the Registrar is required prior to fertilizer import or export. The permit is valid for three months and may, if necessary, be extended for an equal period.	One must have an import permit issued by the Registrar prior to importation of fertilizer. Only registered fertilizer products can be imported.	No legal framework currently in place.	An import or export permit issued by the Ministry of Agriculture is required prior to fertilizer importation or exportation. All imported fertilizer must be registered, with the exception of fertilizer meant for experimental purposes with the approval of the Registrar. Fertilizer should be imported through prescribed ports under the regulations.	An import or export permit issued by the TFRA is required prior to importation or exportation of fertilizer. An import permit is issued after the TFRA confirms that the fertilizer and fertilizer business are registered and the fertilizer meets the quality standards.	TBD	TBD

Rules on Enforcement (Penalties/Fines/Imprisonment/Damages)

Angola	Botswana	Comoros	DRC	Eswatini	Lesotho	Madagascar	Malawi
No legal framework currently in place.	The Act imposes penalties against improper labeling and packaging, dealing in fertilizer without a license, and sale of unregistered fertilizer, among other things.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	Sale of improperly labeled, counterfeit, or substandard fertilizer is an offence under the Regulations.
Mauritius	Mozambique	Namibia	Seychelles	South Africa	Tanzania	Zambia	Zimbabwe
The Act imposes fines, penalties, and imprisonment sentences for selling counterfeit fertilizer or affixing a false or misleading label to a fertilizer container.	Violations of the provisions of the Regulations constitute administrative offenses punishable with fertilizer seizure, confiscation, fine, opening of criminal proceedings against public health or a combination of all these. The owner is responsible for removing and/or destroying fertilizers in an irregular situation under the terms established in these Regulations, as well as environmental compensation, if applicable.	The Act imposes penalties, including confiscation and destruction of fertilizer, fines, and imprisonment, against anyone who sells substandard or adulterated fertilizer, improperly labeled fertilizer containers, or other offences.	No legal framework currently in place.	The Act imposes penalties including fines and imprisonment sentences for selling unregistered, counterfeit, adulterated or improperly labeled fertilizer.	The Act imposes penalties including fines, imprisonment, and damages for selling unregistered, counterfeit, or improperly labeled fertilizer.	The Act and regulations include penalties, fines, and imprisonment sentences for sale of counterfeit or fake fertilizer.	The Act imposes penalties including confiscation and destruction of fertilizer, fines, imprisonment, against anyone who sells substandard or adulterated fertilizer, improperly labeled fertilizer containers, and other offences.

Streamlined Rules on Fertilizer Use Promotion Programmes (Including Subsidies and Bulk Procurement policies)

Angola	Botswana	Comoros	DRC	Eswatini	Lesotho	Madagascar	Malawi
No legal framework currently in place.	TBD	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	No legal framework currently in place.	TBD
Mauritius	Mozambique	Namibia	Seychelles	South Africa	Tanzania	Zambia	Zimbabwe