

# A Legal Guide to Strengthen the Ethiopian Fertilizer Market

---



**USAID**  
FROM THE AMERICAN PEOPLE



This Legal Guide was prepared under the ‘Support for the Establishment of a Regional Fertilizer Policy and Regulatory Framework for East and Southern Africa’ project, which is being implemented by the African Fertilizer and Agribusiness Partnership (AFAP) in partnership with the New Markets Lab (NML) with support from the Scaling Seeds and Technologies Partnership (SSTP) program of the Alliance for a Green Revolution in Africa (AGRA) through the U.S. Agency for International Development (USAID). The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of USAID.

## Table of Contents

Acronyms.....	5
Executive Summary .....	7
<b>Chapter One: Overview of the Agricultural Sector and Use and Supply of Fertilizer in Ethiopia.....</b>	<b>18</b>
<b>Overview of the Agricultural Sector in Ethiopia .....</b>	<b>18</b>
<b>Fertilizer Use in Ethiopia .....</b>	<b>21</b>
Production, Procurement, and Distribution .....	22
Supply System.....	24
Fertilizer Value Chain .....	25
<b>Chapter Two: Institutional, Policy, Legal, and Regulatory Framework for Fertilizer .....</b>	<b>29</b>
<b>Fertilizer Policy and Strategy .....</b>	<b>29</b>
<b>The Institutional Framework for Fertilizer .....</b>	<b>30</b>
<b>The Regulatory Framework .....</b>	<b>31</b>
Business Registration .....	33
Licensing .....	35
Quality Assurance .....	37
Importation.....	38
Product Registration and Standards .....	39
Packaging and Labeling .....	40
<b>Chapter Three: Implementation of Legal System Governing Fertilizer in Ethiopia and Regional Harmonization .....</b>	<b>42</b>
<b>Regulatory Implementation.....</b>	<b>42</b>
Institutional Fragmentation .....	42
Overlapping Institutional Mandates .....	43
Insufficient Implementing Frameworks and Regulatory Gaps .....	43
Absence of Appropriate Penalties .....	43
Implementation and Enforcement of Legal and Regulatory Frameworks .....	44
<b>Regional Integration.....</b>	<b>44</b>
<b>References .....</b>	<b>48</b>

## Table of Figures

Table 1: Summary of Key Regulatory Issues in Ethiopia.....	10
Table 2: Fertilizer Inland Costs in Ethiopia.....	27
Table 3: Business License Basic Requirements for Registration and Fees in Ethiopia.....	34
Table 4: Basic Requirements and Fees for Business Licenses in Ethiopia.....	35

Table 5: Institutions Involved in Ethiopian Fertilizer Regulation .....	42
Box 1: Ethiopia’s Inputs-Related Commitments Under the G8 Cooperation Framework to Support the New Alliance for Food Security and Nutrition .....	20
Box 2: Ethiopia’s Policy, Legal, and Regulatory Instruments for Fertilizer .....	29
Box 3: Structure of Ethiopia’s Fertilizer Proclamation .....	32
Box 4: Key Features of Ethiopia’s Draft Fertilizer Proclamation .....	40
Box 5: Key Provisions of the ECOWAS Fertilizer Regulations .....	47
Figure 1: Fertilizer Supply Chain in Ethiopia.....	26

## Acronyms

<b>ADLI</b>	Agricultural Development Led Industrialization
<b>AFAP</b>	African Fertilizer and Agribusiness Partnership
<b>AGRA</b>	Alliance for a Green Revolution in Africa
<b>AISCO</b>	Agricultural Input Supply Corporation
<b>AISE</b>	Agricultural Input Supply Enterprise
<b>AOAC</b>	Association of Official Analytical Chemists
<b>ATA</b>	Agriculture Transformation Agency
<b>AU</b>	African Union
<b>BoARD</b>	Bureau of Agriculture and Rural Development
<b>CAADP</b>	Comprehensive Africa Agriculture Development Program
<b>CCF</b>	Country Cooperation Framework
<b>COMESA</b>	Common Market for Eastern and Southern Africa
<b>DAP</b>	Diammonium Phosphate
<b>EAC</b>	East African Community
<b>ECAE</b>	Ethiopian Conformity Assessment Enterprise
<b>ECOWAS</b>	Economic Community of Western African States
<b>ESA</b>	Ethiopian Standards Agency
<b>ETB</b>	Ethiopian Birr
<b>EU</b>	European Union
<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>FOB</b>	Free on Board
<b>FTA</b>	Free Trade Agreement
<b>GDP</b>	Gross Domestic Product
<b>GTP</b>	Growth and Transformation Plan
<b>Ha</b>	Hectare
<b>IFDC</b>	International Fertilizer Development Centre
<b>IFPRI</b>	International Food Policy Research Institute
<b>IGAD</b>	Intergovernmental Authority on Development
<b>ISO</b>	International Organization for Standardization
<b>Kg</b>	Kilogram
<b>Km</b>	Kilometers
<b>MDGs</b>	Millennium Development Goals
<b>MoANR</b>	Ministry of Agriculture and Natural Resources
<b>MT</b>	Metric Ton
<b>NAIA</b>	National Agricultural Input Authority
<b>NAIVS</b>	National Agricultural Input Voucher Scheme
<b>NEPAD</b>	The New Partnership for Africa's Development
<b>NFIA</b>	National Fertilizer Industry Agency

<b>NML</b>	New Markets Lab
<b>PHRD</b>	Plant Health Regulatory Directorate
<b>R&amp;D</b>	Research and Development
<b>REC</b>	Regional Economic Community
<b>SADC</b>	Southern Africa Development Community
<b>SDGs</b>	Sustainable Development Goals
<b>SFC</b>	Sana'a Forum for Cooperation
<b>SNNPR</b>	Southern Nations, Nationalities and Peoples Region
<b>SSTP</b>	Scaling Seeds and Technologies Partnership Program
<b>TFTA</b>	Tripartite Free Trade Area
<b>UN</b>	United Nations
<b>USAID</b>	U.S. Agency for International Development
<b>USD</b>	United States Dollar
<b>VAT</b>	Value-Added Tax
<b>WTO</b>	World Trade Organization

## Executive Summary

Access to quality agricultural inputs, including fertilizer, will play an important role in achieving the goals that governments and non-state actors have set to eradicate poverty and ensure food security, including under the New Alliance for Food Security and Nutrition (New Alliance) and Sustainable Development Goals (SDGs). Ethiopia has taken a number of steps to advance these goals, generate sustainable growth in the agricultural sector, and address the needs of smallholder farmers and the rural poor. However, while Ethiopia has experienced gross domestic product (GDP) growth in the last decade, in 2014 an estimated 39 percent of its population still lived in poverty (World Bank 2015), and the agricultural sector continues to face challenges.

At present, access to agricultural inputs in Ethiopia, including fertilizer, remains quite limited, and use of such inputs is the exception rather than the rule. The key factors impacting limited use of agricultural inputs in Ethiopia (as in many other African countries) are availability and affordability of quality inputs, both of which are directly impacted by the legal and regulatory framework. A well-designed legal and regulatory system will play a critical role in enabling the development, access, and availability of high-quality agricultural inputs, contributing to a vibrant agricultural sector that will benefit Ethiopia's small-scale farmers. Legal systems also will play a role in creating robust food systems, strengthening food security, reducing rural poverty, and ensuring environmental sustainability.

Ethiopia has pledged to address certain priority policy challenges, including the development and implementation of domestic and regional agro-inputs policies that encourage greater private sector participation in production, marketing, and trade under the New Alliance (G8 Cooperation Framework, n.d.), and steps are underway to address these gaps. A well-designed legal and regulatory framework, with streamlined procedures for market entry and trade could encourage the availability of a wide-range of quality fertilizers that would cater to the different needs of farmers working in different soil and climatic conditions. Similarly, a well-designed legal and regulatory system could improve the affordability of quality fertilizer by reducing costs of importation, transport, and distribution. Conversely, a complex and inefficient regulatory system may discourage the availability and affordability of quality fertilizers through cumbersome requirements, thereby increasing costs.

Ethiopia's legal and regulatory framework has tremendous potential to impact the availability and affordability of fertilizer and other agricultural inputs. At present, however, the Ethiopian regulatory framework on fertilizer appears to be in a state of flux. The 1998 Fertilizer Manufacturing and Trade Proclamation, Proclamation No. 137/1998 (Fertilizer Proclamation) is the main legal instrument governing fertilizer trade in the country. However, full implementation of the Fertilizer Proclamation remains a challenge. The regulatory agency established by the Proclamation has been dissolved, creating a number of uncertainties in the Proclamation's

enforcement. In addition, the provisions of the Proclamation are very general. Although the Ethiopian Government announced its intention to develop additional regulations to add detail to the Proclamation, this aim has yet to materialize. This gap has left a number of important aspects of fertilizer regulation at a very general level. Nevertheless, these proposed regulations are one example of how Ethiopia's legal and regulatory framework continues to evolve and take shape over time.

Although the Fertilizer Proclamation envisions private sector participation in the fertilizer supply system, this remains a challenge in practice, rendering the main instrument of the legal system less relevant. At present, a government agency controls importation, and farmers' cooperative unions control distribution networks under the close supervision of the government. Limited private sector participation in fertilizer importation is evident in commercial horticultural production, particularly in the flower sector where commercial farmers can import fertilizers for their own farm use. Private sector participation in the importation of fertilizers remains limited due to restrictive foreign currency allocation policy.

The fertilizer industry in Ethiopia is in the process of transformation. The Government of Ethiopia development plan, the Growth and Transformation Plan II (GTP II), aims to nearly double the use of fertilizer from current levels in the next five years with the aim of revolutionizing agricultural production and productivity. Ethiopia must essentially double its fertilizer consumption to 1.2 million metric tons (MT) of fertilizer products to meet the GTP targets. Achieving this level of fertilizer use will require dealing with existing constraints and improving the value chain so that a larger volume of product can be handled without significant issue.

The approval of the new Draft Fertilizer Proclamation could significantly improve the regulatory environment by encouraging the participation of the private sector in the fertilizer supply chain and establishing an autonomous regulatory agency that will effectively enforce the regulatory framework. Further improving the legal and regulatory frameworks along the lines suggested by this Ethiopia Legal Guide could help the Government of Ethiopia achieve its development objectives by addressing the constraints at each stage of the value chain. Putting in place regulatory and institutional frameworks is, however, only a critical first step in building a vibrant fertilizer industry in the country. What will matter most is how effectively regulations are implemented and enforced. As part of this effort, the amount of imported fertilizer will need to significantly increase in the next five years. The Government of Ethiopia also is encouraging local blending to meet the different needs of farmers and also has established blending plants in partnership with donors. To date, a number of fertilizer production plants plans are under review and or being implemented in different regions of the country.



Recently, the Agricultural Transformation Agency (ATA), in collaboration with the Ministry of Agriculture and Natural Resources (MoANR), developed a new Draft Fertilizer Proclamation as well as a second draft proclamation to establish an autonomous regulatory agency. If and when approved, the new legal framework will signal a significant improvement and will address some of the limitations, loopholes, and gaps in the existing legal framework. The proposed changes will be highlighted throughout the Legal Guide.

This Legal Guide seeks to Strengthen the Ethiopian Fertilizer Market (Ethiopia Legal Guide or Legal Guide) has been developed by the New Markets Lab (NML) in collaboration with the African Fertilizer and Agribusiness Partnership (AFAP) under the ‘*Support for the Establishment of a Regional Fertilizer Policy and Regulatory Framework for East and Southern Africa*’ project, which is being implemented with support from the Scaling Seeds and Technologies Partnership (SSTP) of the Alliance for a Green Revolution in Africa (AGRA) through the U.S. Agency for International Development (USAID). The project is designed to contribute to the development of a regulatory environment that is conducive to open markets and encourage the harmonization of fertilizer policies in the region, thereby increasing the availability of a wide range of better quality fertilizer grades, types, and technologies to farmers in Eastern and Southern Africa at more affordable prices. The project covers Ethiopia, Malawi, Mozambique, and Tanzania, each of which is the subject of a separate Legal Guide.

Both primary and secondary data were used in the development of this Legal Guide, including legal texts, regulations, policy documents, studies, and reports collected from different sources. In particular, AFAP studies on the four focus countries provided useful information and data. NML and AFAP carried out consultations in July 2016 in Addis Ababa, Ethiopia with representatives of key stakeholders involved in the fertilizer industry, including government institutions, fertilizer companies, and farmer organizations. These consultations helped the partners gain knowledge of stakeholder priorities, experiences, and challenges with the legal and regulatory system.

The Ethiopia Legal Guide is structured in three chapters, which provide detailed information on the market, policy, legal, and regulatory framework for fertilizer and identify key regulatory challenges and approaches along the entire fertilizer value chain. Chapter One sets the context by providing background information on the Ethiopian agricultural sector and level of fertilizer use in the country. It also takes a cursory look at the fertilizer market along the entire supply chain, including manufacturing, distribution, and importation. Chapter Two examines the policy, legal, and regulatory frameworks governing fertilizer in Ethiopia. Chapter Two also assesses the legal and regulatory framework and raises implementation challenges that are likely to impact agricultural sector development. Chapter Three discusses these implementation challenges and presents efforts underway to encourage regional harmonization of fertilizer regulatory frameworks.

This Legal Guide is designed to articulate the legal and regulatory framework in the fertilizer supply chain and identify key regulatory challenges facing the fertilizer market. Since it is meant to serve as a guide, it could be used to share information on the legal and regulatory environment, facilitate discussion among stakeholders, and guide ongoing efforts to establish an enabling environment conducive to development of the fertilizer sector. The key legal and regulatory issues presented in the Legal Guide are summarized in Table 1 below.

*Table 1: Summary of Key Regulatory Issues in Ethiopia*

Issue	Current Status	Possible Approaches
Clarifying Overlapping Institutional Mandates	<ul style="list-style-type: none"> <li>• Overlap in mandates among regulatory agencies governing fertilizer can create a complex enabling environment. For example, the mandates of the MoANR and the Ministry of Trade overlap with regard to inspection and quality control of fertilizer.</li> <li>• While the Fertilizer Proclamation clearly empowers the MoANR to undertake testing and ensure quality, the Ministry of Trade claims the same authority under the Business Licensing Proclamation.</li> </ul>	<ul style="list-style-type: none"> <li>• Clarify and separate mandates to help improve the regulatory environment by avoiding multiple interventions from different institutions to achieve the same regulatory purpose.</li> </ul>
Addressing Gaps in Legal and Regulatory Framework	<ul style="list-style-type: none"> <li>• While the Fertilizer Proclamation provides the legal framework for the sector, Fertilizer Regulations are needed (and expected) to prescribe detailed rules. However, Regulations have not been issued, which has created significant problems in the enforcement of the Fertilizer Proclamation.</li> <li>• A revised Fertilizer Proclamation and draft proclamation to establish an autonomous regulatory agency have been proposed which would address some gaps in the legal and regulatory structure.</li> </ul>	<ul style="list-style-type: none"> <li>• Issue Regulations to facilitate the enforcement of the Fertilizer Proclamation and any subsequent proclamations.</li> <li>• Consider Directives under the Fertilizer Proclamation to further add certainty and support the anticipated Regulations. Additional detail regarding implementation of the Regulations would make the system more transparent.</li> </ul>
Filling Gap in Bio-Fertilizer Regulations	<ul style="list-style-type: none"> <li>• The Fertilizer Proclamation does not include provisions for bio-fertilizer. In addition, the Ethiopian government faces personnel capacity limitations and a lack of dedicated</li> </ul>	<ul style="list-style-type: none"> <li>• Establish necessary standards and regulations in response to the increasing role and unique features of bio-fertilizers, which would ensure its safe and</li> </ul>

	<p>laboratories for bio- fertilizer quality control.</p> <ul style="list-style-type: none"> <li>• Currently, the MoANR is in the process of developing draft registration guidelines, standards, and standard operating procedures (test methods) for bio-fertilizers. The Ethiopian Standards Authority (ESA) also has started developing Ethiopian Standards for bio-fertilizer. In addition, attempts are being made to establish a quality control lab for bio-fertilizer.</li> </ul>	sustainable use.
Addressing Regulatory Discretion	<ul style="list-style-type: none"> <li>• Ethiopia’s legal and regulatory frameworks provide significant discretion to the regulator in a number of important areas. While regulatory discretion is a standard legal drafting strategy, especially when providing details is either impracticable or undesirable, it does give rise to the possibility of varied interpretations and potential abuses, which creates uncertainty in the regulatory environment and market.</li> </ul>	<ul style="list-style-type: none"> <li>• Minimize this uncertainty by issuing detailed guidelines on the exercise of discretion in the different areas of regulation.</li> </ul>
Addressing Regulatory Fragmentation/Creating a One-Stop Service Center	<ul style="list-style-type: none"> <li>• Multiple government institutions are involved in fertilizer regulation, which creates a significant burden on fertilizer business and contributes to increased costs. Government institutions are located in different locations, and it can take several days to fulfill the requirements from all required agencies, as each requires separate paperwork.</li> </ul>	<ul style="list-style-type: none"> <li>• This challenge could be significantly reduced if the regulatory system were organized as a one-stop service center where all the requirements could be completed.</li> </ul>
Establishing an Autonomous Regulatory Agency and Institutional Stability	<ul style="list-style-type: none"> <li>• A number of regulatory agencies have been created and dissolved over the last two decades. The National Fertilizer Industry Agency (NFIA), the first autonomous agency to regulate fertilizer, was replaced by the National Agricultural Input Authority (NAIA), which was dissolved and replaced by the MoANR. The Draft Fertilizer Proclamation seeks to revive the NFIA.</li> <li>• This frequent institutional change has inhibited the development of institutional memory, regulatory experience, and regulatory capacity.</li> </ul>	<ul style="list-style-type: none"> <li>• Establish an autonomous regulatory agency to contribute to a stable and predictable regulatory environment. This could help in preserving regulatory expertise and experience for more efficient regulation of the fertilizer market. While particular challenges stem from Ethiopia’s current market structure, establishing an autonomous regulatory agency could play a constructive role as the market evolves.</li> </ul>
Defining Process for	<ul style="list-style-type: none"> <li>• Competence assurance is one of the key legal requirements for</li> </ul>	<ul style="list-style-type: none"> <li>• Define requirements for competence assurance as part of</li> </ul>

Competence Assurance Certificates	<p>engaging in the fertilizer business in Ethiopia, but the Fertilizer Proclamation leaves the details to be determined by the concerned regulatory agency. The MoANR has issued a directive on competence certificates for organic fertilizer but not for inorganic fertilizer.</p> <ul style="list-style-type: none"> <li>• It also is not clear which regulatory institution has the authority to issue a competence assurance certificates for fertilizer business (both the MoANR) and the Ministry of Trade claim authority).</li> </ul>	<p>the shift to a transparent and predictable regulatory system.</p> <ul style="list-style-type: none"> <li>• Clear confusion surrounding the authority of the competent regulatory organ. As a body with the required expertise in fertilizer issues, MoANR is likely in a better position to handle competence assurance certificates than the Ministry of Trade.</li> </ul>
Enhancing Fertilizer Standards	<ul style="list-style-type: none"> <li>• Ethiopia has 11 mandatory fertilizer standards, but lacks any standards for fertilizer blends. The government has begun to draft standards to fill this gap.</li> </ul>	<ul style="list-style-type: none"> <li>• Complete development of standards for fertilizer blends that are realistic and grounded in science.</li> </ul>
Building the Capacity of Cooperatives	<ul style="list-style-type: none"> <li>• Cooperative associations play an important role in Ethiopia’s fertilizer, serving as both wholesalers and retailers.</li> <li>• Cooperatives have limited capacity, however, including a lack of knowledge about laws and regulations, marketing, and proper use and handling of fertilizer.</li> </ul>	<ul style="list-style-type: none"> <li>• Build knowledge within cooperatives about laws and regulations and train them in the proper handling and use of fertilizer in order to help reduce product degradation, equip cooperatives with the ability to market their product, build demand by advising farmers on proper fertilizer use.</li> </ul>
Training Farmers	<ul style="list-style-type: none"> <li>• Smallholder farmers in Ethiopia are the most vulnerable stakeholders in the fertilizer value chain because of their lack of knowledge about their rights and obligations in fertilizer transactions.</li> </ul>	<ul style="list-style-type: none"> <li>• Train farmers on the aspects of the legal and regulatory system that impact them and enhance knowledge of their rights and obligations to make them informed partners in the fertilizer industry.</li> </ul>
Streamlining Fertilizer Registration Process	<ul style="list-style-type: none"> <li>• The requirements for fertilizer registration are unclear. The Fertilizer Proclamation contains a few general provisions on registration, with the expectation that Regulations will provide details; however, the Regulations envisioned by the Fertilizer Proclamation have not been issued, leaving a significant void in the regulatory framework.</li> <li>• Current regulations seem to provide no rules on registration of blends. This presents a challenge for blenders capable of formulating fertilizer to meet specific crop needs and soil</li> </ul>	<ul style="list-style-type: none"> <li>• Clarify requirements for fertilizer registration through Regulations or directives to create transparency and stability in the fertilizer regulatory system.</li> <li>• Exempt blend fertilizers from registration, which would enable farmers to obtain fertilizer blends that meet their soil needs. The quality of such fertilizers could easily be checked through testing. Alternatively, a simplified registration process for blends may be considered.</li> <li>• Some countries in Africa, such as Zambia and South</li> </ul>

	<p>deficiencies</p> <ul style="list-style-type: none"> <li>• Under current regulations, Ethiopia follows the approved list approach, whereby a fertilizer can be imported only if it is included on an established list. According to many stakeholders, this approach unnecessarily restricts the availability of fertilizers in the country and reduces options for the farmers. The fertilizer range registered in the country (ammonium phosphate (DAP) and urea) is not wide enough to cater to all soil types, crops, and agro-ecological conditions prevailing in Ethiopia.</li> </ul>	<p>Africa, have adopted a regulatory approach whereby the government maintains a list of nutrients rather than a list of fertilizer grades. Fertilizer products offered for sale must be properly labeled with a guaranteed analysis and weight, and quality is controlled through ex post (instead of ex ante) mechanisms. Such an approach would allow for regulated quality at the retail level without unduly restricting market introduction of new fertilizer compositions based on approved ingredients.</p> <ul style="list-style-type: none"> <li>• Although a good regulatory practice, ex post controls (leading up to and including truth-in-labeling approaches) do require sufficient enforcement capacity, and enhancing the capacity of Ethiopian regulatory agencies would be critical.</li> </ul>
<p>Increasing Private Sector Participation</p>	<ul style="list-style-type: none"> <li>• Currently, the importation of fertilizer is entrusted exclusively to a government enterprise, the Agricultural Input Supply Enterprise (AISE), while wholesale and retail are the exclusive domain of cooperatives.</li> <li>• The current foreign currency allocation policy remains prohibitive to private sector participation in the importation of fertilizers.</li> <li>• This structure, coupled with government price control of fertilizer and cooperatives' profit margins, does contribute to reasonable farmgate prices. Indeed, farmgate prices in Ethiopia are lower than those in the neighboring countries.</li> <li>• Many question arise concerning the sustainability the current system, however. Ethiopia aims to double its fertilizer use in the next five years, and it is unclear if the current supply system would be able to shoulder transactions of such a massive scale.</li> <li>• Current market participants lack the efficiency of</li> </ul>	<ul style="list-style-type: none"> <li>• Enhance supply of fertilizer and meet country's fertilizer use targets by allowing private actors to enter the fertilizer market and creating a level playing field for fair competition.</li> <li>• Private companies have the capacity to anticipate and respond to fluctuating markets without political constraints.</li> <li>• Allowing private sector to compete freely with the public sector would ensure a more sustainable fertilizer supply system in the country.</li> </ul>

	<p>management, profit motives, and flexibility that private firms possess to navigate the ups and downs of the fertilizer market. Further, a private company would not be constrained to internal bureaucracy, such as committee decisions, that are now prevalent.</p>	
Addressing Value-Added Tax (VAT) for Services	<ul style="list-style-type: none"> <li>Under current tax laws, fertilizer is exempt from customs duties and VAT in order to encourage fertilizer use and affordability. However, services related to fertilizer, such as port and transport services, are still subject to a 15 percent VAT.</li> </ul>	<ul style="list-style-type: none"> <li>Eliminate VAT for fertilizer-related services, which could lower the price of fertilizer and increase affordability of fertilizer in line with the government's regulatory goals.</li> </ul>
Estimating Annual Import Requirements and Quantitative Import Requirements	<ul style="list-style-type: none"> <li>Agricultural extension workers make annual fertilizer needs estimates. Regional agricultural bureaus consolidate the estimates from the districts (woredas) and pass it to the national level (MoANR). Imports are made based on these demand estimates. Such mechanisms often lead to over- or under-estimation of the actual demand for a planting season. Usually, extension workers overestimate demands, which results in carryover stocks.</li> <li>Ethiopia requires importers to import a minimum quantity of 25,000 MT, a requirement that could be difficult for small- and medium-sized enterprises to meet.</li> </ul>	<ul style="list-style-type: none"> <li>Develop a mechanism to make estimates based on realistic expectations of the performance of the agricultural sector. While carryover stocks can contribute to availing fertilizer at the right time for planting for next season and possibly prevent users from international upward price risks, depending on the design and operations of storage facilities and related storage costs, prices may be affected and quality of fertilizer deteriorated. This effect will influence access to fertilizer and lower yields at the farm level.</li> <li>Repeal minimum quantitative import restriction.</li> </ul>
Determining Fertilizer Prices	<ul style="list-style-type: none"> <li>MoANR sets fertilizer prices in Ethiopia. Prices and margins from the port to cooperative warehouses are determined by costs incurred by AISE, the sole importer, while cooperatives and farmer prices are determined by MoANR in consultation with cooperatives. There have been concerns raised that prices and profit margins are set at a very low level, which negatively affects the operation of the participants in the market.</li> </ul>	<ul style="list-style-type: none"> <li>Consult with stakeholders through a transparent process to ensure how best to achieve all the relevant elements of price formulation, including sustainability, prices, and margins need.</li> </ul>
Increasing Infrastructure Investment	<ul style="list-style-type: none"> <li>Transport is a significant component in fertilizer prices and a critical issue for Ethiopia as a landlocked country. The country</li> </ul>	<ul style="list-style-type: none"> <li>Invest in infrastructure development alongside regulatory change. While Ethiopia does not have much</li> </ul>

	<p>uses the Djibouti ports, but trucks transport bulk shipments of fertilizer to central warehouses and farmers. By the time the fertilizer arrives at the port of Djibouti, transport already represents up to 70 percent of the total cost, the highest cost component by a large margin.</p>	<p>control over international fertilizer prices, public investment in ports, roads, and rail networks will not only reduce transport costs but also would enable the private sector to expand into rural areas.</p> <ul style="list-style-type: none"> <li>• Expedite the rail links with Djibouti to significantly lower the cost of fertilizer.</li> <li>• In addition to rail infrastructure, Ethiopia would benefit by encouraging competition in the road transport sector.</li> </ul>
Improving Access to Finance	<ul style="list-style-type: none"> <li>• Farmers’ access to quality seed, fertilizer, and agrochemicals is limited by challenges in accessing finance.</li> </ul>	<ul style="list-style-type: none"> <li>• Address certain legal elements of financial services delivery and tools for financing and present innovative solutions to challenges with access to finance, such as those around institutional capability (legal structures for aggregation models, including cooperatives, and other financial services delivery mechanisms), risk management (creation of collateral registry), and bankability.</li> <li>• Focus on analysis and increased collaboration between regulators and financial services providers to develop models that could close gaps related to financing for seeds, fertilizers, and agrochemicals.</li> <li>• Create a business environment that encourages financial services penetration in rural areas to promote saving and allow access to loans. Loan guarantee programs, accompanied by better access to markets, could help encourage increased fertilizer use.</li> </ul>
Encouraging Regional Harmonization	<ul style="list-style-type: none"> <li>• Farmers near national borders share similar soils and farming systems with farmers in neighboring countries Regional harmonization of fertilizer rules and regulations would enable farmers in Ethiopia to benefit from fertilizers developed in neighboring countries without having to register each fertilizer blend anew.</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage development of a regional fertilizer strategy within COMESA to increase competition in the local market and allow manufacturers and suppliers the opportunity of operating in a larger market with fewer constraints. It also could reduce administrative costs by sharing resources and facilities within the regional</li> </ul>

	<ul style="list-style-type: none"> <li>Ethiopia is a member of the Common Market for Eastern and Southern Africa (COMESA), where regulatory harmonization for fertilizer is beginning to gain focus. Regional harmonization could become an important issue for Ethiopia as it aims to build fertilizer blending facilities and fertilizer factories. Ethiopia might also become a net exporter of fertilizer if current plans are implemented.</li> </ul>	<p>market.</p> <ul style="list-style-type: none"> <li>Ethiopia could take a lead on fertilizer harmonization efforts within COMESA, as stakeholders in Ethiopia's fertilizer market stand to benefit from a harmonized regional market, particularly given the landlocked nature of the country.</li> </ul>
Raising Awareness of the Legal and Regulatory System	<ul style="list-style-type: none"> <li>A number of stakeholders have reported that importers, suppliers, agrodealers, farmers, and even regulators themselves have limited knowledge and awareness about legal and regulatory frameworks.</li> <li>Limited knowledge of legal processes and difficulty accessing legal assistance leaves smallholder farmers vulnerable and undermines efforts to implement formal legal frameworks to regulate and strengthen the fertilizer market.</li> </ul>	<ul style="list-style-type: none"> <li>Address challenges through (i) increased dissemination of information regarding laws and regulations, particularly as these systems change over time, (ii) the provision of assistance to farmers in preparing or interpreting legal documents such as contracts, and (iii) the provision of transactional legal services to individuals working with the agricultural sector. All of these could be done in combination with the development of a legal education curriculum to train and equip lawyers with the necessary facilities for effective delivery of agricultural legal services to stakeholders.</li> </ul>
Establishing National Fertilizer Dialogue Platform	<ul style="list-style-type: none"> <li>One way of establishing a healthy fertilizer environment is by establishing a public-private forum where issues affecting fertilizer could be discussed and addressed on a regular basis. In Mozambique, the <i>National Platform for Dialogue and Promotion of Fertilizer Use</i> (AMOFERT) plays an important role for dialogue among a range of fertilizer industry stakeholders (public and private sectors with civil society).</li> <li>In addition to facilitating regular dialogue, such a forum also could improve understanding of the respective roles and responsibilities of the public and private sectors in the fertilizer market.</li> </ul>	<ul style="list-style-type: none"> <li>Establish fertilizer-specific platform to discuss fertilizer issues and promote public-private dialogue. Mozambique's Platform could provide a model; it has become a well-recognized forum in the country on issues related to fertilizer regulation and has initiated and drafted a new Fertilizer Act, which is currently being reviewed by the government.</li> <li>Alternatively, a special committee or task force could be established within an existing public-private dialogue forum that addresses fertilizer issues.</li> </ul>
Determining Profit Margins for Cooperatives	<ul style="list-style-type: none"> <li>Under current practice, the government determines the margins of profit for cooperatives, which is very low. While it may reduce the cost of fertilizer at the farmgate level in the short term, such a low profit margin has become a disincentive</li> </ul>	<ul style="list-style-type: none"> <li>Revise the profit margins and allow a realistic margin in order to serve as an incentive for cooperatives to make fertilizer available to farmers in due time and with care. Alternatively, the cooperatives may be allowed to fix</li> </ul>



	for cooperatives to work on fertilizer. It also may limit the cooperative's ability to extend value addition and other services to farmers.	their own profit margins with government oversight for any possible abuse.
--	---	--

*Source: New Markets Lab*

# **Chapter One:**

## **Overview of the Agricultural Sector and Use and Supply of Fertilizer in Ethiopia**

### **Overview of the Agricultural Sector in Ethiopia**

With a land area of 114 million hectares (ha), 51.3 million ha of which are arable, and a population of about 90 million, Ethiopia is the ninth largest and the second most populous nation in Africa and has tremendous potential for agricultural development (Taffesse et al 2011). Despite economic growth, however, an estimated 39 percent of the population (about 36 million people) survives on an income below the poverty line (World Bank 2015).

The Ethiopian economy relies heavily on agriculture, which contributes about 45 percent of the GDP, 85 percent of exports, and 80 percent of total employment (World Bank 2015). Ethiopia's agricultural sector includes a variety of crops in different regions and ecologies. Grains production, particularly cereals, is common, representing 89 percent of the total cultivated area and 78 percent of total agriculture production (Taffesse et al 2011). Other important grain crops include pulses and oilseeds (IFDC 2012).

Ethiopia has rich natural resources, diverse agro-ecological conditions, and adequate rainfall, all of which offer significant opportunities for improving agricultural production. Currently, however, only 40 percent of potential arable land is under cultivation (Gebremedhin and Peden, 2013) and productivity is low. Low productivity can be attributed to small farmers' limited access to agricultural inputs, financial services, improved production technologies, irrigation, agricultural output markets, and, more importantly, poor land management practices that have led to severe land degradation in some areas.

The agricultural sector also is characterized by low input, low output, and labor-intensive rain-fed farming systems reliant on the use of animal power (IFDC 2012). It is dominated by small-scale farmers who farm 95 percent of the cultivated land, mainly for subsistence needs (FAO 2011). There is a clear paradox in Ethiopia's agriculture: the farming community, which makes up 80 percent of the population, has not been able to feed itself, let alone provide food for the remaining 20 percent of the population. (World Bank, Ethiopia at a Glance, 2015). However, smallholder farming practices remain outdated, largely relying upon ox drawn ploughshares and dependent upon low-yielding traditional technologies with limited use of improved seeds, fertilizers, and chemicals. As a result, agriculture in Ethiopia is characterized by a low level of production, exposing a large swath of the population to persistent food shortages.

In terms of soil nutrients and fertility, Ethiopia has one of the highest rates of nutrient depletion in sub-Saharan Africa (Gebremedhin and Peden, 2013). The estimated annual nationwide loss of phosphorus and nitrogen resulting from the use of dung and crop residues for fuel is equivalent to the total amount of commercial fertilizer use (MoARD 2010). Use of fertilizer and improved seeds are limited despite government efforts to encourage the adoption of modern agricultural practices.

Successive regimes in the country have placed agriculture at the center of socio-economic development, with varying degrees of emphasis. In particular, agricultural productivity has been a focus of Ethiopia's development strategies since the country began the Agricultural Development Led Industrialization (ADLI) program in the early 1990s. As its name implies, the ADLI is centered around agriculture, both as driver of economic development in its own right and also as a basis for growth in other sectors. The agricultural sector is expected not only to meet the food needs of the country, but also to generate surplus for industrial growth by providing export products, food, raw materials, and a market for industrial output.

Ethiopia has recently embarked on an ambitious plan of becoming a middle-income country by 2020 through its first and second **Growth and Transformation Plans** (GTP I (2009/2010-2014/2015 and GTP II (2015/2016-2019/2020)). GTP I has been completed, with some growth targets achieved but others still in progress. GTP II is now being looked to as a plan for rapid, sustainable, and equitable economic growth that will translate into the creation of decent job opportunities and significant poverty reduction. It also is expected to bring about structural transformation by promoting agriculture as a major source of growth (IFPRI 2013).

Eradication of extreme poverty and hunger are commitments of the international community and part of the New Alliance commitments, Millennium Development Goals (MDGs), and, building upon these, the SDGs, which aim to eradicate poverty and hunger by 2030. Given that a large majority of the poor in Africa, including Ethiopia, live in villages and rely heavily upon agriculture, agricultural productivity and rural development are significant factors in all of these efforts. The New Alliance, launched in May 2012, was founded upon the understanding that investment in agriculture is key to ending hunger and poverty in Africa and that creating the conditions that will allow the African countries to improve agricultural productivity and develop their agroindustry by attracting more private investment in agriculture will help unlock this potential (New Alliance 2014).

The ten New Alliance participating countries, including Ethiopia, adopted 'Country Cooperation Frameworks' (CCFs), which list policy commitments, including those to reform or develop policies that will facilitate responsible private investment in agriculture in support of smallholder farmers. Notably, the Government of Ethiopia has made commitments to facilitate increased

access of inputs by developing or reforming policies and regulations to enhance the participation of the private sector in the production, importation, and distribution of inputs (New Alliance 2012; See Box 1 which outlines commitments related to inputs). Action on a number of commitments is in progress, and fully addressing identified constraints and implementing the government’s commitments could significantly improve the climate for private investment in agriculture, enhance food security, and address poverty.

***Box 1: Ethiopia’s Inputs-Related Commitments Under the G8 Cooperation Framework to Support the New Alliance for Food Security and Nutrition***

Objective	Framework Policy Actions (G8)
Increase private sector participation in seed development, multiplication, and distribution	1. Ratify seed proclamation.  2. Establish protocols to identify regulatory/ administrative changes, as necessary and encourages private sector that: <ul style="list-style-type: none"> <li>• allows market pricing of seeds, including at-risk farmer support system;</li> <li>• incentivizes the private sector to commercially multiply and distribute seed, including a focus on cooperatives;</li> <li>• links government research institutions to universities and extension services;</li> <li>• incentivizes international seed companies to operate in Ethiopian seed markets, with the exception of certain open/self-pollenated or indigenous crops, specifically teff, coffee, niger seed, and inset; and</li> <li>• allows cooperatives and individual farmers to source seed from any supplier.</li> </ul>
Increase ability of the private sector to access markets by reducing barriers to competitiveness and increasing transparency of requirements	3. Establish a one-window service that assists agriculture investors (domestic and foreign; small, medium and larger enterprises) to: <ul style="list-style-type: none"> <li>• obtain a business license;</li> <li>• secure access to land;</li> <li>• obtain market information on pricing and production availability;</li> <li>• identify added-value opportunities (e.g. agro-processing, grading and sorting, warehousing and storage, etc.);</li> <li>• identify livestock industry and commercial ranching opportunities (e.g. abattoirs, feed lots, etc.); and</li> <li>• access financing.</li> </ul> 4. Publish and disseminate business licensing procedures through local radio, internet and newspapers.  7. Refine, as necessary, policies regarding agrochemical importation that ensure consistent application of regulations to private sector distributors and commercial farms; and to generic chemicals and brand name chemicals

*Source: Adapted from G8 Cooperation Framework to Support the “New Alliance for Food Security and Nutrition” in Ethiopia*

Commitments to increase investment in agriculture also abound within African institutions. In 2014, the African Union (AU) launched the Comprehensive African Agriculture Development Program (CAADP), which, among other things, requires African governments to allocate 10 percent of their national budgets to agriculture to attain a six percent annual growth rate in the

agricultural sector and a 20 percent reduction in poverty for the entire continent. This commitment was reaffirmed by the AU Heads of State and Government in 2014 under the Malabo Declaration on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods, which pledged to end hunger in Africa by 2025 through, *inter alia*, doubling current agricultural productivity levels. Increased access to quality and affordable crop inputs will play a major role in these efforts.

In recognition of the urgent need for a strategic investment program to increase the availability and use of fertilizer throughout the continent, the AU Ministers of Agriculture convened in Abuja on 12 June 2006 and adopted the Abuja Declaration on fertilizers for an African green revolution. The Abuja Declaration has 12 resolutions, which include among others; promoting regional trade on fertilizers, increased usage of fertilizer to at least 50 kgs per ha, improving fertilizer value chain financing, improvement of distribution channels of fertilizers, promoting investment in fertilizer production and improving access to complimentary inputs such as improved seed varieties and draught power.

Ethiopia has emphasized fertilizer as an important mechanism for enhancing agricultural productivity and eradicating poverty. The country's agricultural policies and strategies clearly recognize the role of fertilizer and other inputs to increase agricultural productivity and call for the increased use of fertilizer and other inputs (GTP II). Indeed, the country aims to significantly increase agriculture production by scaling up the use of fertilizer to over two million tons over the next five years (GTP II).

The legal and regulatory environment will play a critical role in translating the broad goals of the public sector at the international, regional, and national levels into concrete action to enhance use of fertilizer and increase agricultural productivity. Depending upon their design and implementation, legal and regulatory frameworks can encourage or discourage the availability of and access to fertilizer. African governments should thus ensure that legal and regulatory systems facilitate, not inhibit, their desire to enhance agricultural productivity, *inter alia*, through increased use of fertilizer.

## **Fertilizer Use in Ethiopia**

Fertilizer use in Ethiopia has increased remarkably over the last decade and a half. Fertilizer use grew by 140,000 tons in the early 1990s to about 650,000 tons in 2012 (IFPRI 2013). Ethiopia used an average 23 kg of fertilizer per ha of arable land in 2008-2012, up from 17 kg per ha from 1998 to 2002 (USAID 2014). Fertilizer use in the country is low and far behind the Abuja Declaration targets (50 kg per ha). In contrast, other countries' use for the 2008 to 2012 period was as follows: Kenya (30 kg per ha), South Africa (53 kg per ha), and Egypt (605 kg per ha) (USAID 2014). Only 30 to 40 percent of Ethiopian smallholders use fertilizer, and those who do

apply on average only 37 to 40 kg/ha, which is significantly below recommended rates (Spielman, Alemu, and Kelemwork 2013). Low fertilizer use can be attributed to the high price of fertilizer and the lack of farmers' knowledge about fertilizer use (Kefyalew 2012).

Over time, the fertilizer-to-output price ratio in Ethiopia has increased substantially (Kefyalew 2012). Thus, the search for effective and sustainable policies to promote fertilizer use in Ethiopia should involve measures to lower this price ratio. This could entail either reducing fertilizer purchasing prices or increasing farm gate output prices, or both (USAID, 2014).

The government has expanded extension services to farmers and promoted use of fertilizer, and building upon these efforts could help more and more farmers understand the benefits and proper application of fertilizer.

Chemical fertilizer is used primarily in cereal production in Ethiopia. Cereals account for 90 percent of the country's total chemical fertilizer application; and during 2005/2006 to 2010/2011, only two regions, Oromia and Amhara, accounted for 70 percent of total use. Oromia alone accounted for about 40 percent of use (IFPRI 2013). The shares of the other two major cereal-growing regions (the Southern Nations, Nationalities, and Peoples' Region (SNNPR) and Tigray) were 10 percent and three percent, respectively (IFPRI 2013).

Urea and DAP are the two main types of fertilizers used in Ethiopia, which provides limited options to smallholders who face heterogeneous agro-ecological conditions and cultivate a variety of crops that need a more diverse set of fertilizers (IFDC 2012). Nonetheless, Ethiopia is one of the leading countries in mapping its soils, which subsequently inform the production of soil specific fertilizers. To date, ATA developed 14 fertilizers blends.

Ethiopia intends to increase use of bio-fertilizer, although a framework for the specific regulation of bio-fertilizers does not exist in Ethiopia. The Fertilizer Proclamation does not include provisions for bio-fertilizer. In addition, the Ethiopian government faces personnel capacity limitations and a lack of dedicated laboratories for bio-fertilizer quality control. Currently the MoANR is in the process of developing draft registration guidelines, standards, and operating procedures (test methods) for bio-fertilizers. The Ethiopian Standards Authority (ESA) also has started developing Ethiopian standards for bio-fertilizer. In addition, attempts are being made to establish a quality control lab for bio-fertilizer.

### *Production, Procurement, and Distribution*

Ethiopia is a net importer of fertilizer, and it imports fertilizer from overseas suppliers from countries including Saudi Arabia, Morocco, China, Russia, and Ukraine (USAID 2014). Over the past ten years, total fertilizer imports have increased by more than 50 percent, from less than

370,000 MT in 2002 to almost 570,000 MT in 2011, with a spike of 627,000 MT in 2009 (USAID 2014). In 2013, Ethiopia imported 900,000 MT of fertilizer (570,000 tonnes of DAP and 330,000 tonnes of urea) (USAID 2014). However, importation has not always matched the demand from farmers, often resulting in carryover stock. Fertilizer carryover stocks averaged 33 percent of imports between 2002 and 2011, with a high of 61 percent in 2002 and a low of 12 percent in 2007 (IFDC 2012).

The Government of Ethiopia has made DAP and urea accessible irrespective of the actual nutrient availability in the local soil and individual crop needs. That has led to net nutrient deficiencies in some cases, which limit agricultural production, and excess nutrients in other instances (USAID 2014). To alleviate this problem, the Government of Ethiopia has placed greater emphasis on local blending. The MoANR and the ATA, together with four cooperative unions located in four regions of the country, have completed the construction of four fertilizer blending factories. One of the factories has started production, while the others are expected to start production by the end of 2016. The construction of the blending factories was preceded by the first ever soil fertility study and digital soil fertility mapping project in the 2013/14 fiscal year in 162 Weredas (districts). The project revealed the soil in the country needed additional nutrients other than nitrogen and phosphorus. The Ethiopian Soil Information System (EthioSIS) project, which undertook extensive demonstrations in 30,000 sites both on farmers' plots and at farmer training centers, validated the introduction of new fertilizers to the soil. The blending factories are intended to increase production and farmer productivity in the country by supplying appropriate fertilizers.

Ethiopia also has embarked upon a large project to construct fertilizer factories. The Yayo Urea Fertilizer Factory is being built in the Oromia State with a sizable budget of Ethiopian birr (ETB) 11 billion. Thirty percent of the construction work has been completed. Ethiopia aims to meet most of its fertilizer needs through local blending and, in the future, to export blended fertilizer to neighboring countries.

Until 1992, the fertilizer market was completely controlled by the state parastatal, the Agricultural Input Supply Corporation (AISCO), renamed AISE in 1996, without private sector participation. The input supply market has gone through different reform measures since the end of the 1990s (Gebremedhin et al 2006). In 1993, the Government of Ethiopia removed the ban on private importation of fertilizer, and the government abolished fertilizer subsidies in 1997 (Demeke, 1998). In the context of overall economic reform measures, the Government of Ethiopia issued the Fertilizer Manufacturing and Trade Proclamation, Proclamation No. 137/1998 (the Fertilizer Proclamation) in 1998. At the same time, an autonomous fertilizer regulatory agency, the NFIA was established (although it was later dismantled and may now be reestablished under the Draft Fertilizer Proclamation). Together, the Fertilizer Proclamation and

the establishment of the NFIA were meant to encourage the involvement of the private sector in the fertilizer business (Gebremedhin et al 2006).

Few private companies (primarily the Ethiopian Amalgamated Limited) actively participated in fertilizer marketing until 1996, when companies established by regional governments entered the fertilizer market. By 1998, there were a total of four companies from the four major grain-producing regions in Ethiopia that were importing and distributing fertilizers alongside AISE. However, competition among government, private, and holding companies was short lived (Demeke 2013).

The share of private sector participation in fertilizer imports dropped from 28 percent in 1996 to zero in 2002 (Deneke 2013). It was difficult for the private sector to operate profitably due to the indirect support of the regional government that owned holding companies (Byerlee et al. 2007). These holding companies enjoyed larger market shares due to policy privileges that allowed them to be sole agents of AISE, because farmers who received fertilizer credits from the government were not allowed to purchase from private companies.

### *Supply System*

Since 2008, the Government of Ethiopia has assumed monopoly control over imports through the AISE and has granted exclusive marketing (distribution) to farmers' organizations. Currently, the market is not open to the private sector. It is worth noting that the existing legal framework does not exclude the private sector from the fertilizer market; the exclusion is thus a matter of practice rather than law.

As a landlocked country, Ethiopia makes use of the Djibouti Port, 950 kilometers (km) from Addis Ababa, the main entry point for most of its imports. The port has four berths capable of docking vessels exceeding 50,000 MT. There are no storage facilities at the port, and products are discharged, bagged, and loaded directly onto trucks, ready for distribution (IFDC 2012).

Once the cargo has been discharged at the port, AISE delivers the product directly to the cooperative union warehouses. If cooperatives are not ready to receive the product, it is delivered to AISE's main warehouses (Mekele, Addis, Nazaret, Shashemene, Komblocha) to be transferred later to the cooperatives (IFDC 2012). After fertilizer is transferred to the cooperative unions' warehouses, it is, in turn, distributed to the primary cooperatives, where farmers have direct access to the fertilizer for cash purchase; in some cases, it is obtained on a credit basis. In areas of the country where there are no cooperative unions, AISE takes on the role and responsibility of delivering directly to the primary cooperatives. AISE also can supply fertilizer to farmers directly without intermediaries (IFDC 2012). Notably, fertilizer is a priority area for



foreign currency allocation, but the policy only applies to AISE, which is deemed the sole importer, and excludes private companies.

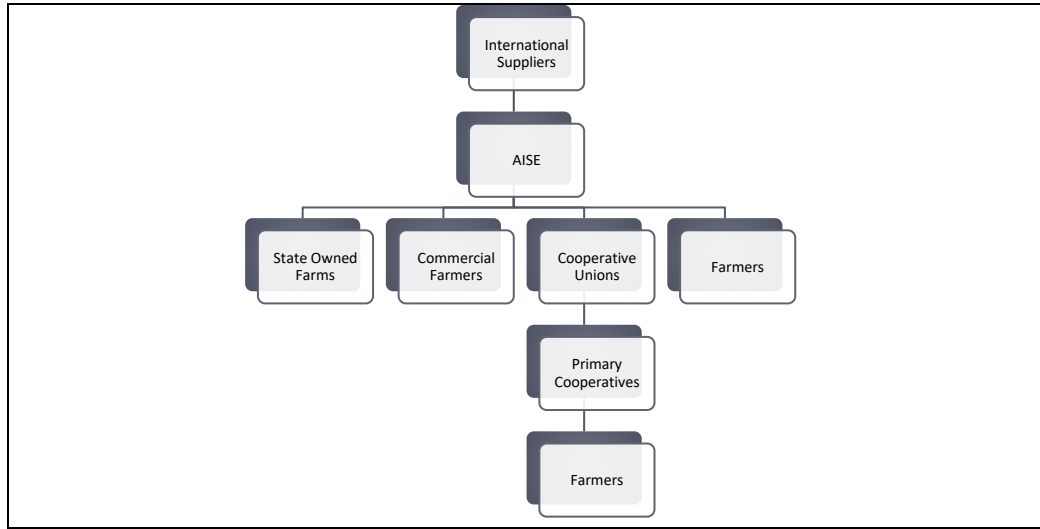
### *Fertilizer Value Chain*

As discussed, private sector participation in the fertilizer value chains remains limited. Government institutions and farmer cooperatives are involved at the different stages of the fertilizer value chain, from import planning to farm gate delivery of fertilizer. Import planning begins with a demand assessment conducted by the woreda (district) agricultural bureaus based on primary data collected by extension workers through community surveys. The estimates by the extension workers are reconciled by the woreda bureau offices and then sent to the zonal offices, where woreda-level data is aggregated and then sent to the Bureau of Agriculture and Rural Development (BoARD). Finally, the MoANR aggregates the regional estimates and sets national demand estimates. The net import requirement is determined by deducting the previous year's carry-over stocks from the current year's demand (IFPRI 2013).

Imports are carried out exclusively by AISE, which also is responsible for international procurement tenders and the preparation of tender documents. The logic behind giving monopoly power to AISE is to enable economies of scale, with the understanding that importing in large quantities gives a buyer (the government, in this case) more bargaining power to negotiate lower prices. In addition, large-scale imports arguably can reduce transaction costs and make value chain management more efficient.

Under current policy, the AISE is the sole importer, the cooperative unions are the wholesalers, and the primary cooperatives are the retailers. However, AISE also supplies fertilizer directly to farmers where cooperatives are not available, as well as supplying to commercial farms, state-owned farms, and research institutions. Figure 1 below illustrates the fertilizer value chain, centrally organized around AISE, with state and non-state actors revolving around the enterprise.

*Figure 1: Fertilizer Supply Chain in Ethiopia*



*Source: NML*

The BoARD plays an active role in the marketing and distribution of fertilizers. This includes facilitating the input credit guarantee to the Commercial Bank of Ethiopia, providing transportation facilities if needed, and ensuring on-time delivery of fertilizer. The BoARD also is involved in the determination of prices and margins. The AISE determines weighted average price of fertilizer at the central warehouse level. The BoARD then adds margins (both for unions or federations and for primary cooperatives) and determines loading and unloading costs, warehouse rent, bank interest rates, and other administrative costs (IFDC 2012).

The main cooperatives receive fertilizer on credit from unions and sell, mainly in cash, to smallholder farmers. However, in remote and food-insecure areas such as Amhara and SNNPR, farmers can receive fertilizer with a 50 percent down payment with the understanding that the remainder will be paid after harvest. Other sources of credit include microfinance and rotating savings and credit unions.

As a consequence of these practices, there is an implicit monopoly at each stage of the value chain. Government offices play a major role in regulating the value chain, fixing marketing margins and prices, and monitoring AISE and the cooperatives.

Inland transportation is a major operational consideration in the importation of fertilizer. The additional cost from Djibouti Port to a cooperative warehouse is USD 152.3 for DAP or 21 percent of the fertilizer import price (USAID 2014). Inland transportation accounts for 74 percent of the price, followed by insurance, bank commissions, and administrative costs totaling 19 percent; and clearing costs, inspections, re-bagging, and spillage losses totaling seven percent of total inland cost up to the AISE warehouse (IFDC 2012) (See Table 2).

*Table 2: Fertilizer Inland Costs in Ethiopia*

Cost	Percentage
<b>Insurance, bank commission, &amp; administration costs</b>	19
<b>Port Clearing, Inspection, Bagging, Spillage</b>	7
<b>Transport (Djibouti-Central Warehouse)</b>	74
<b>Total</b>	100

*Source: IFDC 2012*

For the 2012 cropping season, the average price of DAP per metric ton to the farmers was approximately USD 814 in Amhara, USD 864 in Tigray, USD 828 in Oromia, and USD 876 in SNNPR (USAID 2014). For urea, farmers paid USD 648 in Amhara, USD 641 in Oromia, USD 712 in Tigray, and approximately USD 700 in SNNPR (USAID 2014). While the price differential between landed costs and farmgate price is small, transportation costs account for a large part of the difference (IFDC 2012). The numbers show that the average retail prices in Ethiopia are lower than the average national retail prices in neighboring countries. Average DAP and urea prices in Ethiopia are about 15 percent lower than in Kenya, more than 30 percent lower than the price of urea in Malawi, about 11 to 12 percent lower than in Rwanda, and 23 percent lower than in Tanzania (IFDC 2012). The general consensus is that this can be attributed to bulk purchasing.

While fertilizer prices are competitive, such prices appear to come at the expense of the market participants. A primary cooperative is entitled to charge USD 1.70 per ton as a profit margin and USD 5.20 per ton in administrative costs. Although cooperatives have different sources of income, the assumption is that they are not established for profit but rather to provide services for their members. Hence, their profit margin is minimal.

A comparison with other countries corroborates the challenges faced by cooperative managers. Agrodealers in Kenya and Tanzania make five to eight percent of the total product cost, which are six to 10 times the primary cooperatives' profit margins in Ethiopia (IFPRI 2013). This disparity will need to be addressed in order for primary cooperatives to have a sustainable business model (IFDC 2012). The sustainability of the current policy regime depends heavily upon the sustainability of the primary cooperatives, which are small organizations with limited managerial skills (IFPRI 2013).

The role of the private sector is thus critical. Private companies have many advantages that make them more sustainable in the industry, such as better management efficiency and flexibility to

more easily adjust to the changes in the fertilizer market. Companies also can make decisions and respond to fluctuating markets more quickly and with fewer political constraints.

The involvement of the private sector in the fertilizer sector could bring innovation and dynamism to the market, thereby ensuring a more sustainable supply of fertilizer to farmers. The Government of Ethiopia might consider opening up the fertilizer market for competition to allow the development of a more efficient and stable fertilizer industry in the country, consistent with its goal of doubling the current use of fertilizer in the country over the next five years.

## Chapter Two: Institutional, Policy, Legal, and Regulatory Framework for Fertilizer

### Fertilizer Policy and Strategy

Ethiopia does not have a standalone policy on fertilizer, but some of its general policy documents address policy issues related to fertilizer. Enhancing agricultural production and productivity features prominently in the **GTPI** and **GTPII**, where a number of targets have been set, including in the agricultural sector. **GTPII** sets an ambitious plan for increasing agricultural production from 270 million quintals (or about 27 MT) in 2014/2015 (base year) to nearly double that (i.e., 414 million quintals by end of the plan year 2019/2020). This target is to be achieved through a massive increase in agricultural inputs, including fertilizer. Fertilizer use is projected to increase to 2.6 million MT by the end 2019/2020 (GTP II).

#### *Box 2: Ethiopia's Policy, Legal, and Regulatory Instruments for Fertilizer*

##### Current Instruments:

- Growth and Transformation Plan (GTP II)
- Agricultural Policy and Investment Framework (2010-2020)
- Fertilizer Manufacturing and Trade Proclamation No. 137/1998 (Fertilizer Proclamation)
- Commercial Registration and Business Licensing Proclamation No.686/2010 (Business Licensing Proclamation)
- MoANR Directive to Establish Criteria for Competence Certificate

##### Instruments under Development:

- Draft Fertilizer Proclamation
- Draft Proclamation to Establish the National Fertilizer Industry Agency (NFIA)

*Source: New Markets Lab*

Ethiopia's policies reflect a shift in production from subsistence to commercial agricultural production for domestic as well as export markets, with smallholder farmers integrated. The GTP also includes incentives for private investment in large commercial farming of high-value commodities (IFDC 2012). The success of the GTP will depend significantly upon macro-economic reforms, such as greater transparency, access to financial services, and land tenure

security in order to strengthen the ability to collateralize land use rights to create an enabling environment that will allow the private sector to thrive (IFDC 2012).

The Government of Ethiopia also has adopted the **Agricultural Policy and Investment Framework (2010-2020)**, which provides a strategic framework for estimating financing needs and the prioritization and planning of investments that will drive Ethiopia's agricultural growth and rural development over a ten-year period. The Framework embodies four strategic objectives:

- Increase agricultural productivity and production;
- Accelerate agricultural commercialization and agro-industrial development;
- Reduce degradation and improve productivity of natural resources; and
- Achieve food security and protect vulnerable households from natural disasters.

More specifically, the priority investment areas identified by the Framework include:

- Irrigation development;
- Seed and fertilizer supply and soil fertility management;
- Research;
- Market system and infrastructure investment;
- Agricultural credit; and
- Private sector support.

The Framework is designed to operationalize the GTP strategic plans by aligning the policies and the financing commitments of the country's development partners with the Government of Ethiopia.

## **The Institutional Framework for Fertilizer**

Ethiopia's institutional framework for fertilizer has seen a number of changes over the last two decades. As noted earlier on, the **NFIA** was the first autonomous regulatory agency in Ethiopia for fertilizer, established in the late 1990s but then later dismantled. Its mandate was to encourage private involvement in the fertilizer sector and ensure functioning import and trade processes to bring quality fertilizer into the country. However, NFIA was dissolved in 2002 and replaced by the **NAIA**, which was given the mandate of regulating both seeds and fertilizer. For fertilizer, the NAIA oversaw that the production, supply, distribution, and marketing of agricultural inputs was undertaken in an efficient and effective manner. Its powers and duties included formulating an agricultural input policy and strategy based on national rural development policies and strategies, in addition to implementing these upon approval, as well as

encouraging the private sector to actively participate in the production and distribution of agricultural inputs (Gebremedhin et al 2013).

In 2004, NAIA also was dissolved, and its powers and duties were transferred to the newly established Ministry of Agriculture and Rural Development (MoARD), now the **MoANR**. Today, the MoANR remains the regulatory body for input supply and agricultural marketing, including fertilizer (Gebremedhin et al 2013). The **Plant Health Regulatory Directorate (PHRD)** of the MoANR implements the regulation of fertilizers in Ethiopia. In addition to the MoANR (and possibly the NFIA, which may now be revived under the Draft Fertilizer Proclamation), the **Ethiopian Conformity Assessment Enterprise (ECAE)** (previously Quality and Standards Authority of Ethiopia) plays an important role in the fertilizer market. ECAE was empowered to carry out inspection on imported fertilizers, certify quality, and ensure that locally manufactured fertilizer complies with the quality requirement of specified standards.

Even in the face of an institutional change, an independent fertilizer regulatory agency could have limited purview under the current circumstances that prevail in the Ethiopian fertilizer market. First, as stated earlier, the government and/or cooperative unions, under the close supervision of the federal and regional governments, control each stage of the fertilizer value chain, and private companies are not part of the fertilizer business. An independent regulatory agency, which would operate under the strict direction and control of the government, would have little latitude. Second, the country imports only two fertilizer types (urea and DAP), which are already known to both international and Ethiopian markets. Internationally known suppliers work through an international bidding processes, which would naturally limit the role of an independent regulator in the market. As the government develops additional blends, these challenges may diminish.

In recent years, the ATA has been working to improve the regulatory environment for fertilizer. ATA helped with the preparation of the new draft Proclamation to establish an autonomous fertilizer agency, the NFIA, with the mandate of regulating fertilizer importation and trade in the country. The ATA also assisted in the preparation of a new draft Fertilizer Proclamation that would open up the fertilizer market to the private sector. These key proclamations have already been submitted to the MoANR for approval, but no action has been taken to push the drafts forward for approval by the Council of Ministers and ultimately the Parliament.

## **The Regulatory Framework**

A carefully designed and implemented fertilizer law and regulations can help facilitate availability, quality, and access to fertilizer by end users. By setting clear standards for fertilizer quality and efficacy, the legal system can mitigate investment risk and boost the confidence of fertilizer businesses and farmers. Apart from establishing basic requirements for the production,

trade, and sale of fertilizer, a well-designed fertilizer legal and regulatory system can streamline the fertilizer value chain and reduce costs. A well-designed system also can facilitate access to new fertilizer compounds by permitting new products to enter the country after a streamlined registration processes.

The main body of law regulating fertilizer in Ethiopia is the 1998 **Fertilizer Manufacturing and Trade Proclamation No. 137/1998 (the Fertilizer Proclamation)**. The scope of the fertilizer Proclamation extends to any person who is engaged in the business of fertilizer (Article 3 Fertilizer Proclamation). The Fertilizer Proclamation is divided into five sections, each section addressing a different aspect of fertilizer market (See Box 3).

***Box 3: Structure of Ethiopia's Fertilizer Proclamation***

Section One: General Provisions

- Definition of key terms
- Scope of the Proclamation

Section Two: Competence Assurance Certificate

- Application for competence assurance certificate
- General requirements for competence assurance certificate
- Grounds for refusal of competence assurance certificate
- Validity period and renewal of assurance certificate
- Suspension/cancellation of competence assurance

Section Three: Manufacturing, Handling, Dealing, Distribution of Fertilizer

- General requirements for manufacturing, handling, and dealing
- Restrictions on dealing with fertilizer
- Packaging and labeling of fertilizer
- Sub-standard and adulterated fertilizer
- Licensing

Section Four: Enforcement Bodies and their Duties

- Duties and powers of the Authority [Standards Authority]
- Duties and powers of the Agency [National Fertilizer Industry Agency]
- Duties and responsibilities of inspectors

Section Five: Miscellaneous

- Appeal
- Penalties for violations of the provisions of the Proclamation

*Source: Fertilizer Proclamation (1998)*



Enacted after the country's transition to a market economy in 1991, the Fertilizer Proclamation was meant to open up the fertilizer market to the private sector. With the expectation that the private sector would participate in the fertilizer market alongside government enterprises, the Fertilizer Proclamation established the NFIA as an autonomous regulatory body.

Since the fertilizer market is now under the purview of a government agency and farmer cooperative unions that are closely controlled by the regional governments with no private sector participation, the regulatory latitude established under the provisions of the Fertilizer Proclamation has diminished.

In order to engage in the fertilizer business, several requirements must be met, some of which are applicable to the fertilizer business specifically (provided for by the Fertilizer Proclamation) and others of which apply to any businessperson generally engaged in business activity in the country.

### *Business Registration*

The Fertilizer Proclamation does not contain rules specifically related to registration and licensing of fertilizer businesses. Any person who wishes to engage in the fertilizer business should go through the registration and licensing procedures provided for under the relevant laws that generally govern the registration and licensing of business (Article 29 Fertilizer Proclamation).

The **Commercial Registration and Business Licensing Proclamation No.686/2010 (Business Licensing Proclamation)** provides the general legal framework governing registration and licensing of businesses in Ethiopia. Any person, including companies that wish to engage in any commercial activity in the country, must be registered (Article 6(1) Business Licensing Proclamation). Engaging in commercial activities without first registering is prohibited. A person is required to register only once (although registrations must be renewed), even if commercial activities extend to a number of regions (Article 6(3) Business Licensing Proclamation). The requirements for registration are different for individual businesses and business organizations (other than share companies) and are summarized in Table 3 below.

Business registrations must be renewed, and thus registration is not a one-time exercise under the Business Licensing Proclamation. Renewal of commercial registration can be on an annual basis or for five years at once, provided the application is filed during the budget year of the registration. Unless renewed as provided for by Article 18, a commercial registration shall be cancelled. While the Business Licensing Proclamation does not list the specific requirements for

the renewal of a registration, some steps apply in practice, which are summarized together with the required fees in Table 3 below.

*Table 3: Business License Basic Requirements for Registration and Fees in Ethiopia*

<b>Services</b>	<b>Requirements</b>	<b>Fee</b>
New Registration (Sole/Individual Business)	<ul style="list-style-type: none"> <li>➤ Tax identification number</li> <li>➤ Bank confirmation of deposited capital</li> <li>➤ Proof of physical address (title deed/authenticated lease agreement/kebelle confirmation)</li> <li>➤ Valid identification card/passport</li> <li>➤ Two passport size photographs taken within the last six months</li> <li>➤ When the applicant is a foreign investor, an investment permit</li> </ul>	ETB 102
New Registration (Business Organizations)	<ul style="list-style-type: none"> <li>➤ Tax identification number</li> <li>➤ Bank confirmation of deposited capital</li> <li>➤ Proof of physical address (title deed/authenticated lease agreement/kebelle confirmation)</li> <li>➤ Valid identification card/passport of the manager</li> <li>➤ Two passport size photographs of the manager taken within the last six months</li> <li>➤ Authenticated Memorandum of Association and Articles of Association</li> <li>➤ Where the application is signed by an attorney; a power of attorney given by all of the founders</li> <li>➤ Where there are foreign nationals as members of the business organization; documents evidencing that the foreign nationals are considered as domestic investors or investment permits</li> </ul>	ETB 102
Renewal of Registration	<ul style="list-style-type: none"> <li>➤ Bank confirmation of deposited capital</li> <li>➤ Proof of physical address (title deed/authenticated lease agreement/kebelle confirmation)</li> <li>➤ Valid identification card/passport</li> <li>➤ Two passport size photographs taken within the last six months</li> </ul>	ETB 102

*Source: Business Licensing Proclamation*

Under Article 17 of the Business Licensing Proclamation, the registering body may decide to cancel a registration when:

- The business person has ceased to operate the business;
- The business person is lawfully prohibited from carrying on the business;
- The business person has violated the provisions of the Proclamation;
- The registration has not been renewed; or
- The businessperson has submitted false information or documents for registration.

The registering body will follow a set of procedures before it decides to cancel a business registration, and the business holding the registration in question shall be offered the opportunity to present its case before any decision of cancellation is made.

However, this is not the case when a business has ceased to operate, applied for the cancellation of a registration, or failed to renew a registration. Similarly, when a businessperson could not be reached at the address provided on the registration, the registering body may present its decision using the information it has at its disposal.

### *Licensing*

In addition to commercial registration, Article 31 of the Business Licensing Proclamation states that no person shall carry on a commercial activity without first obtaining a valid business license; the authorities are empowered to order the closure of any business operating without a valid license. The Ministry of Trade has identified specific licenses for the manufacture, wholesale, retail, import, and export of chemical fertilizers. The production of organic fertilizer requires a separate license.

Table 4 summarizes the basic requirements and fees for business licenses.

*Table 4: Basic Requirements and Fees for Business Licenses in Ethiopia*

<b>Services</b>	<b>Requirements</b>	<b>Fee</b>
New Business License (individual/sole business)	<ul style="list-style-type: none"> <li>• Valid business registration certificate</li> <li>• Competence assurance certificate</li> <li>• Documentation of the capital allocated for the commercial activity</li> <li>• Proof of physical address (title deed/authenticated lease agreement/kebele confirmation)</li> <li>• Two passport size photographs taken within the last six months</li> <li>• For a foreign investor, investment and residence permits</li> <li>• Where the application is submitted by an attorney, an authenticated power of attorney</li> </ul>	ETB 102

New Business License (business organizations)	<ul style="list-style-type: none"> <li>• Valid business registration certificate</li> <li>• Competence assurance certificate</li> <li>• Documentation of the capital allocated for the commercial activity</li> <li>• Proof of physical address (title deed/authenticated lease agreement/kebelle confirmation)</li> <li>• Authenticated original copies of memorandum and article of association of the business organization</li> <li>• Two passport size photographs of the manager taken within the last six months</li> <li>• For a foreign investor, investment and residence permits</li> <li>• Where the application is submitted by an attorney, an authenticated power of attorney</li> </ul>	ETB 102
Renewal of Business Licenses	<ul style="list-style-type: none"> <li>• Tax clearance (not older than one month)</li> <li>• Competence assurance certificate</li> <li>• Bank confirmation of capital</li> <li>• Proof of physical address (title deed/authenticated lease agreement/kebelle confirmation)</li> <li>• Two passport size photographs taken within the last six months</li> </ul>	ETB 102

In addition to the requirements under the Business Licensing Proclamation, the Fertilizer Proclamation requires that the licensing authority (the Ministry of Trade) shall ascertain that an applicant for a license for manufacturing, importation, wholesale, or retail of fertilizer has obtained a competence assurance certificate, which certifies the applicant has proper laboratory testing facilities and competent staff (detail is provided in the following subsection). (Article 20 Fertilizer Proclamation).

Licenses can be **suspended** for different reasons, including the following (Article 37 Business Licensing Proclamation):

- Failure to maintain health and sanitary conditions;
- Failure to protect the environment;
- Failure to maintain safety measures and standards of quality of goods and services;
- Engaging in illegal activities in connection with the business; and
- Failure to observe the obligations accompanying the issuance of the license.

Licenses also may be **cancelled** for a range of reasons, including (Article 39 Business Licensing Proclamation):

- Securing a license fraudulently;
- Using a license for purpose other than that for which it is issued;
- Using a license for unfair trade practices;
- Business is bankrupt or ceases to operate;
- Failure to renew the license in accordance with the requirements of the Business Licensing Proclamation;
- Cancellation of a commercial registration; and
- Determination of an appropriate government institution that carrying on the business poses harm to public health and safety or the national economy.

A business license must be renewed every calendar year. The requirements for the issuance of a new business licenses shall also apply to the renewal of business licenses (Article 36.14 Business Licensing Proclamation).

As can be seen from Tables 3 and 4 above, the direct costs for registration and licensing (fees) are lower than in other African countries. However, the procedures and requirements for business registration and licensing are still too cumbersome and lengthy, exposing applicants to significant indirect costs. The Government of Ethiopia is working to improve the business registration and licensing system by, among other things, amending existing legislation.

### *Quality Assurance*

Article 4 of the **Fertilizer Proclamation** stipulates that any person who wants to engage in the fertilizer business (import, wholesale, retail, export, and manufacture of fertilizer) shall obtain a competence assurance certificate from the **NFIA**. Entities engaged in the manufacture of fertilizer are required to have qualified personnel and to establish a laboratory to test the quality and contents of the fertilizer. The specific requirements for obtaining competence assurance certificates are not stated in the Fertilizer Proclamation. Article 5 of the Fertilizer Proclamation merely states that competence assurance certificates will be given to applicants who can fulfill the requirements set out by the **NFIA**.

A **Directive** issued by the **MoANR** sets requirements only for a competence assurance certificate for the production of organic fertilizer: a business plan, production process and environmental impact assessment; materials and inputs for the production of compost; adequate capital; qualified staff/employees; and, possession of land. In practice, the competence assurance requirements set for organic fertilizer apply to inorganic fertilizer as well.

The institutional authority for competence assurance certificates is not entirely clear. As part of its mandate for issuing licenses under the **Business Licensing Proclamation**, the **Ministry of Trade** has assumed the authority to issue competence assurance certificates for wholesale, retail, import, and export trade in fertilizer, yet the authority to issue competence certificates for the production of organic fertilizer and the manufacture of fertilizer are assigned to MoANR and the **Ministry of Industry** respectively. In practice, the Ministry of Industry does not provide competence assurance certificates for fertilizer manufacturing. The implications of this overlapping authority have not yet been tested in practice, since there are no private sector participants in the fertilizer industry.

The Fertilizer Proclamation stipulates that competence assurance certificates for fertilizer businesses should be renewed annually. However, it does not establish fees. Similarly, the MoANR Directive does not set fees for the issuance or renewal of competence assurance certificates. In practice, only business registration and licenses are renewed annually, which also involves fees.

A certificate of competence may be suspended or canceled on any of the following grounds (Article 11 Fertilizer Proclamation):

- Certificate has been obtained by material misrepresentation;
- Certificate has been assigned to another person without prior permission of the NFIA;
- Certificate has not been renewed pursuant to Article 10 of the Proclamation;
- Fertilizer does not conform to the quality requirements of the appropriate Ethiopian Standards on fertilizers; and
- License for fertilizer business activity has been canceled.

### *Importation*

Nearly all fertilizer in Ethiopia is imported. As a result, import requirements and procedures can have a significant impact on fertilizer availability and access. Importers of fertilizer must go through multiple procedures and institutions, mainly geared towards ensuring the quality and safety of the fertilizer to be imported into the country. Some requirements are applicable to the importation of any product, while others apply specifically to the importation of fertilizer.

Import licenses are issued by the **Ministry of Trade**. The **Fertilizer Proclamation** does not specifically require import permits, but, in practice, import permits are required and should be obtained for each consignment. There are no fees for the import permits.

Regulators provide two reasons for requiring an import permit for each consignment: quality control and data collection. However, the impact of the import permit on quality control is

unclear, since every consignment of fertilizer will have to go through the same quality control procedure irrespective of the import permit requirement. Requiring an import permit for each consignment may allow maintenance of up-to-date data on the fertilizer imported into the country, but such data should be readily available from customs records. Thus import permits could either be eliminated or issued for the entire period of the validity of the import license (one year) rather than done for each and every consignment.

The **ECAE** is also mandated to check on the quality of imported products, including fertilizer, upon arrival and collects samples to test the standards and quality of imported fertilizer. The cost for the test is 0.2 percent of the FOB price. Ethiopia imposes no import duty on fertilizer, including inorganic fertilizer, which is the only fertilizer currently being imported in practice. Similarly, no VAT is charged on fertilizer. However, a 15 percent VAT is levied on the port-related fees and charges for services as well as on the transport of the product from the port upcountry. In addition, Ethiopia requires imports to be a minimum 25,000 MT. Officially, this is to encourage bulk importation to take advantage of economies of scale, but the practice is not a legal requirement.

### *Product Registration and Standards*

The **Fertilizer Proclamation** requires that any fertilizer, whether manufactured locally or imported and stocked, that is ready for distribution and sale shall conform to requirements of Ethiopian standards (Article 13.1). There are currently 11 mandatory standards for urea and DAP, which are all based on relevant international standards. There are currently no standards for blends. Under the Fertilizer Proclamation, the **Quality and Standards Authority of Ethiopia** had the authority to both set standards and confirm if standards have been met. This has now changed with the shift in institutional framework for quality authorities, which separated standard setting from standard enforcement. Currently, the **ESA** sets standards and **the ECAE** undertakes the assessments to ensure that standards are met.

The Fertilizer Proclamation also requires that any fertilizer manufactured locally or imported and stocked that is ready for distribution and sale shall be registered by the NFIA for use as fertilizer (Article 13.2). However, the Fertilizer Proclamation does not include details for fertilizer registration. Regulations or Directives were meant to provide such details but have not been issued. The lack of detail on fertilizer registration has not been a substantial problem in practice, since Ethiopia only imports urea and DAP, both of which were already in use in the country and are known to both the international and national markets. As noted previously, Ethiopia follows the approved list approach, whereby only a fertilizer on an established list can be imported. Urea and DAP fertilizers are assumed to have been registered in Ethiopia. However, many stakeholders think that the current approach unnecessarily restricts the availability of fertilizers in the country and reduces options for the farmers. The situation could change with the

production of blends in with different nutrient contents, and some of these legal gaps might need to be addressed.

Some countries in Africa, such as Zambia and South Africa, have adopted a different regulatory approach whereby the government maintains a list of nutrients rather than a list of fertilizer grades. Fertilizer products offered for sale shall then be properly labeled with a guaranteed analysis and weight, and the quality control of the product is based on the truthfulness of the claims of the label (truth-in-labeling).

The fertilizer range registered in Ethiopia is not wide enough to cater to all soil types, crops and agro-ecological conditions that exist in the country, and an ex post approach, including a truth-in-labeling approach, would allow for regulation of quality at the retail level without unduly restricting private competition through the introduction of new compositions based on approved ingredients. Although a good regulatory practice, such an approach does require a degree of capacity to enforce, and enhancing the capacity of the regulatory agency could enable the government to begin to implement ex post regulatory controls (measures taken following market entry rather than before). It is important to note that such an approach can be achieved through a series of steps as capacity is strengthened. In any case, enhancing the capacity of the regulatory authority will be critical as Ethiopia's fertilizer market grows; that is, there will be an increase in the number of product sold as well as increased entry by the private sector.

### *Packaging and Labeling*

The Fertilizer Proclamation contains few provisions on packaging and labeling of fertilizer. Labels affixed on bags, as well as packaging materials for fertilizer bags, should comply with the relevant Ethiopian Standards (Article 15 Fertilizer Proclamation). The current provisions, however, are not detailed enough. The new Draft Fertilizer Proclamation will address labeling, among other things (Box 4).

#### *Box 4: Key Features of Ethiopia's Draft Fertilizer Proclamation*

- Detailed Provisions on Registration
- Detailed Provisions on Required Tests
- Separate Provisions Dealing with Organic, Inorganic, and Liquid Fertilizer
- Establishment of an Autonomous Regulatory Agency, i.e. the NFIA
- Clearer Provisions on Quality Assurance Requirements
- Additional Provisions on Labeling and Packaging
- Clearer Provisions on the Roles and Responsibilities of Enforcement Bodies

*Source: Draft Fertilizer Proclamation*



Box 4 above outlines the key features of the new draft Fertilizer Proclamation. Notably, additional provisions on packaging and labeling have been included which will help fill the gap highlighted above and increase clarity for both regulators and users alike. The new draft Fertilizer Proclamation will address other regulatory gaps as well, as highlighted throughout this chapter.

## Chapter Three: Implementation of Legal System Governing Fertilizer in Ethiopia and Regional Harmonization

### Regulatory Implementation

#### *Institutional Fragmentation*

Multiple institutions are involved in the implementation of the fertilizer regulatory framework in Ethiopia: Ministry of Trade, MoANR, ESA, and ECAE. As is true in many countries, institutional fragmentation remains a pressing challenge as the legal system is implemented in practice. The regulatory framework has not established a clear enough institutional division of labor, nor has a one-stop shop been created. At present, different institutions are involved in different aspects of the regulation of fertilizer, sometimes with overlapping mandates. In order to meet regulatory requirements, multiple institutions may need to be visited on multiple occasions, giving rise to undue hassle and cost. The new draft Fertilizer Proclamation, in its current form, does not address this issue. While it envisages the (re)establishment of the NFIA as an autonomous fertilizer regulatory agency, it does not aim to establish a one-stop shop. Fragmentation among regulatory institutions is likely to continue even with the entry into force of the revised Fertilizer Proclamation. However, given the country's ambitious development plans for expanding use of fertilizer and the expected involvement of the private sector in the fertilizer market, reducing unnecessary procedures and requirements will become increasingly important to reducing costs. Reduction of regulatory process and cost should translate into reductions in the price of fertilizer at farmgate level. Establishing the NFIA as a one-stop shop when it is revived could play an important role in facilitating a more efficient regulatory environment for fertilizer trade.

*Table 5: Institutions Involved in Ethiopian Fertilizer Regulation*

Institution	Task
Ministry of Trade	Business registration; business licenses; competence assurance certificates
ESA	Setting fertilizer standards
ECAE	Conformity assessment; quality control
MoANR	Quality assurance; product registration; import permits; inspection and quality control

*Source: New Markets Lab*

### *Overlapping Institutional Mandates*

There is currently an overlap of authority for issuing competence assurance certificates between the Ministry of Trade and MoANR. Both appear to have the mandate based on the relevant laws (MoANR under the Fertilizer Proclamation and Ministry of Trade under the Business Licensing Proclamation). The MoANR possesses the necessary expertise to issue competence assurance certificates for fertilizer, and the Ministry of Trade's role could be more clearly defined to include issuance of licenses based on the competence assurance certificates issued by the MoANR. There also is an overlap in inspection and quality control between the MoANR and ECAE, as both are entrusted with these powers. Clarification of the institutional mandates would help in creating a more transparent and predictable fertilizer regulatory environment.

A lack of institutional stability can also flow from institutional fragmentation and overlapping institutional mandates. A number of regulatory agencies have been created and dissolved over the last two decades. This frequent institutional shifting has inhibited the preservation of institutional memory, development of necessary regulatory experience, and overall regulatory capacity.

### *Insufficient Implementing Frameworks and Regulatory Gaps*

Another challenge is the absence of subsidiary legislation to enforce the Fertilizer Proclamation, which provides only a legal framework while remaining silent on critical details. The absence of regulations has created significant problems in the implementation of the Fertilizer Proclamation. This leaves a gap in critical areas such as requirements for competence assurance certificates and product registration.

Still another implementation challenges relates to critical gaps in the legal and regulatory system governing fertilizer blends and bio-fertilizer. Ethiopia currently lacks a policy on blending, and the regulatory framework actually seems to discourage blending. When coupled with Ethiopia's approved list approach, this has the effect of unduly restricting efforts to locally produce blends, which is increasingly important in order to fill the country's fertilizer needs and policy objectives.

### *Absence of Appropriate Penalties*

In addition, very severe penalties have been prescribed for violations of the Fertilizer Proclamation. For example, any person who intentionally offers for sale or sells adulterated or unregistered fertilizers will be punished with a term of imprisonment between eight and 10 years and a fine of ETB 25 to 35 thousand (Article 26.1 Fertilizer Proclamation). While penalties need

to be strict enough to deter adulteration, imprisonment for a period of 10 years for adulteration is quite extreme when compared to other countries' systems. This harsh penalty could make fertilizer trade an extremely risky business in Ethiopia and deter commercial activity. The draft Fertilizer Proclamation has retained the heavy penalty, however. One possibility to consider would be to reduce the term of imprisonment while increasing the fine amount to a level that would effectively deter adulteration.

### *Implementation and Enforcement of Legal and Regulatory Frameworks*

An overarching challenge to the implementation and enforcement of the legal and regulatory system is capacity. Establishing regulatory and institutional frameworks is just one crucial step, but laws and institutions will have a minimal effect if implementation is lacking or limited. The regulatory institutions face particular capacity challenges related to enforcing adulteration at the retail level when the product is sold from open bags. Capacity for enforcement should be strengthened, with a focus on increasing the number of trained inspectors. Improved testing and inspection capacity would not only bring down costs and improve the efficacy of fertilizer, but it also would allow for soil testing that could pave the way for blending soil-specific and crop-specific formulations, which, when properly tested and labeled, could fulfill a critical need in the market.

### **Regional Integration**

Since 1991, Ethiopia has undertaken economic reform largely unilaterally. Import tariffs have been reduced; prices have been deregulated; export subsidies have been abolished; and subsidies for agricultural inputs such as fertilizer, herbicide, and insecticide have been abolished, in addition to other major reform measures.

However, Ethiopia's participation in international and regional trade agreements has been limited. At the multilateral level, Ethiopia is one of the few African countries that is not yet a member of the World Trade Organization (WTO). The Government of Ethiopia applied for accession in 2003; however, negotiations remain ongoing and now span a 13-year period. WTO membership would help ensure predictability and transparency in the market and create a rule-based framework for business. The WTO, with its strong potential to influence positively the economic environment inside the country, also may help in facilitating policy reforms that create coordination and transparency. In addition, WTO rules could help build market-supporting mechanisms such as frameworks on standards, trade facilitation, intellectual property rights, administrative transparency in government agencies, and regulatory predictability. Further, WTO accession might help to "lock in" certain policies, thereby providing predictability and transparency for investors, foreign traders, and domestic businesses and improving the business

environment domestically. Ethiopia's accession to the WTO could thus benefit the country's input system, both directly and indirectly.

As movements to harmonize Africa's regions gain momentum, economic and trade policies are becoming much more than national issues. In addition to national level laws and regulations, trade is increasingly subjected to regional and multilateral treaties. Until recently, Ethiopia has not pursued regional economic integration with much focus, although Ethiopia is a member of COMESA, the Intergovernmental Authority on Development (IGAD), and the Sana'a Forum for Cooperation (SFC). Ethiopia participates in the COMESA Free Trade Area (FTA) in a limited way by granting (and profiting from in partner countries) a 10 percent duty discount on imports from other COMESA members. Nevertheless, at the 2015 COMESA Summit, Ethiopia committed to joining the COMESA FTA in a phased approach. In June 2015, Ethiopia also signed the Sharm El Sheikh Declaration Launching the COMESA-EAC-SADC Tripartite Free Trade Area (TFTA).

Expanded regional fertilizer markets could realize efficiencies and economies of scale in trade, manufacturing, research and development (R&D), and testing. Regional approaches can expand the market for fertilizer by harmonizing fertilizer policies among member states, allowing more efficient trade of fertilizer, and giving rise to acceptance of fertilizer compounds and shipments that have been approved or inspected by a member country. When well-implemented, regional efforts could help avoid duplicative testing and compliance costs and allow for the redistribution of fertilizer across borders as demand develops throughout the season. Achieving regional standards, however, would require regulatory cooperation and support to countries without adequate existing capacity for inspections, laboratory testing, and regulatory enforcement.

Some regulators appear to be reluctant to advance regional fertilizer harmonization based on the assertion that fertilizer is soil-specific, or, in other words, what is good in one region or sub-region might not be good in others. However, soil types and rainfall patterns cut across countries, meaning that neighboring countries are potentially the best, nearest source of supply and/or best market outlet for appropriate fertilizer types. Expanding input markets across borders, therefore, could be of significant benefit in achieving the economies of scale and savings on transport costs needed to bring input prices down and improve choice and availability (Keyser et al 2015). It also is important to note that harmonization can be misconstrued to mean creating uniform national regulations, but, as is true with international standards, regional harmonization often actually allows for differences in national legal and regulatory systems as long as regional standards are met (NML 2015).

The Abuja Declaration called for the AU Member States and Regional Economic Communities (RECs) to take appropriate measures to reduce the cost of fertilizer procurement at national and regional levels, particularly through the harmonization of policies and regulations to ensure duty-

and tax-free movement across regions and the development of capacity for quality control. Although this commitment was scheduled to be implemented by 2007, regional harmonization of fertilizer regulation has not progressed to a great degree in most regions. Regional fertilizer harmonization stands in contrast to harmonization of seed regulations, where there has been significant effort at the regional level, even though implementation challenges remain.

Some steps have been initiated to facilitate regional harmonization of fertilizer. For example, COMESA, in partnership with AFAP, has undertaken a review of national policies and regulations on fertilizer importation, manufacturing, distribution, and use, with the aim of developing recommendations for the establishment of a harmonized regulatory framework for the region. Ultimately, the COMESA initiative is aimed at facilitating free trade of fertilizers across borders in the region, but a process will need to be put in place to reach this goal.

Work also has begun to harmonize fertilizer regulation within the EAC. The *EAC Harmonized Regulatory Instruments and Procedures for the Fertilizer Market* was adopted in September 2014 as one of the priority activities in the implementation of the EAC Food Security Action Plan (AFAP 2015). However, these initiatives have not yet been translated into practical action. To begin with, the framework document has not been submitted to the EAC Heads of State for possible adoption and subsequent domestication by the member states. The different legal instruments in support of the framework also are yet to be developed. The EAC fertilizer harmonization effort is thus at a very initial stage, and it will likely take some time for a harmonized fertilizer regime to emerge in the EAC.

Efforts to harmonize fertilizer regulation also are underway in the Economic Community of West African States (ECOWAS), which provide an interesting benchmark for other regional work (See Box 5). The ECOWAS Council of Ministers formally enacted Regulation C/REG.13/12/12 Relating to Fertilizer Quality Control in the ECOWAS Region (ECOWAS 2012) at its ordinary session held in Abidjan on 2 December 2012. The regional regulations for fertilizer provide a detailed set of procedures for the functioning of domestic and regional fertilizer markets based on ex post regulation (truth in labeling approach) and harmonized quality control standards (Keyser et al 2015). Consistent with this approach, countries should not maintain approved lists of fertilizer types that can be sold to farmers and must allow importation of any type of fertilizer from another ECOWAS country as long as it is truthfully labeled and does not contain harmful substances. In principle, countries with such systems can freely trade fertilizer between one another, with imported fertilizer being subject to the same quality control procedures and level of inspections as it was in the country of origin, thereby improving consumer confidence and minimizing border delays (Keyser et al 2015). To support the ECOWAS Regulation, four implementing regulations also have been developed. However, the ECOWAS Commission has so far adopted none of the four implementing regulations for fertilizer (Keyser et al 2015).

### ***Box 5: Key Provisions of the ECOWAS Fertilizer Regulations***

- **Product Registration Not Required:** The regional framework for fertilizer is built around the principle of truth in labeling. Countries therefore must not maintain approved lists of fertilizer types that can be sold to farmers or require product registration tests.
- **Free Movement of Fertilizers:** Fertilizers that comply with the prescribed quality standards shall be entitled to free movement throughout the ECOWAS region. Prior notification to the competent authority in the concerned countries is all that should be required to import and/or export fertilizer.
- **Standard Quality Definitions and Labeling Requirements:** Countries shall observe standard definitions of fertilizer terms and ensure that all fertilizer containers are clearly labeled with a minimum set of information including guaranteed nutrient content.
- **Requirements for Inspection and Analysis:** Member states are required to develop Inspection and Analysis Manuals based on Association of Official Analytical Chemists (AOAC), International Organization for Standardization (ISO), and/or European Union (EU) standards that describe the modalities and procedures for fertilizer sampling and inspection and business inspection.
- **Tolerance Limits:** The regulations set out specific tolerance limits for nutrient deficiency, weight, and maximum allowable heavy metal limits. Any product that exceeds the prescribed tolerance limits or contains other materials that are injurious to plant health shall not be allowed for sale.
- **Fertilizer Producers and Traders to be Licensed Professionals:** Licenses are compulsory for all fertilizer sector participants including importers, manufacturers, agrodealers, and distributors and must be renewed every three years by the official quality control and certification service of each member state. Every agrodealer or person selling fertilizer shall display their license in a conspicuous spot.
- **Manufacture and Importation:** The conditions and modalities to manufacture and import fertilizer will continue to be governed at the national level by regulations in each member state.
- **Access to Information:** Member states are required to ensure the full participation of fertilizer sector participants in public decision making on fertilizer related matters and organize public access to fertilizer related information available to public authorities.
- **Oversight and Administration:** The West Africa Committee for Fertilizer Control (WACoFeC), funded by the ECOWAS Commission, shall serve to monitor and facilitate the implementation of the regulations and support development of the national fertilizer sectors in the region.
- **Right to Appeal and Confidentiality:** Manufacturers, importers and distributors will have the right to appeal any decision taken against them by licensing authority and to have their information treated confidentially.

*Source: John C. Keyser et al (2015)*

## References

African Fertilizer and Agribusiness Partnership (AFAP). An Assessment of National Fertilizer Policies, Regulations and Standards for Ethiopia, 2015.

African Fertilizer and Agribusiness Partnership (AFAP). Assessment of the Enabling Environment for Fertilizer Supply, Distribution and Trade in Ethiopia, 2016.

African Fertilizer and Agribusiness Partnership (AFAP). Support for the Establishment of a Regional Policy and Regulatory Framework for East and Southern Africa: Country Action Plan Ethiopia, 2016.

African Union. *Abuja Declaration on Fertilizer for an African Green Revolution*, Africa Fertilizer Summit, African Union Special Summit of the Heads of State of Government, Abuja Nigeria 13 June 2006, African Union (AU), Addis Ababa.

African Union. The Abuja Declaration on Fertilizers for an African Green Revolution - Status of Implementation at Regional and National Levels, Briefing Note, CAADP Program, New Partnership for Africa's Development Planning and Coordination Agency, Midrand, June 2011.

Byerlee, D., D. Spielman, D. Alemu, and M. Gautham. *Policies to Promote Cereal Intensification in Ethiopia: A Review of Evidence and Experience*. Discussion Paper 707. Washington, DC: International Food Policy Research Institute, 2007.

Commercial Registration and Business Licensing Proclamation No.686/2010.

Demeke M. Analysis of incentives and disincentives for wheat in Ethiopia. Technical notes series, FAO, Rome, and World Food Programme, 2013.

Demeke, M., V. Kelly, T. S. Jayne, A. Said, J. C. Le Valee, and H. Chen. *Agricultural Market Performance and Determinants of Fertilizer Use in Ethiopia*. Grain Market Research Project Working Paper No. 10. Addis Ababa: Ministry of Economic Development and Cooperation, Government of Ethiopia, 1998.

Economic Community of West African States (ECOWAS). Regulation C/REG.13/12/12 Relating to Fertilizer Quality Control in the ECOWAS Region. December 2012, Abuja.

Ethiopian Ministry of Finance and Economic Development. Growth and Transformation Plan (GTP) 2010/11-2014/2015, Addis Ababa, Ethiopia, 2010.



Ethiopian Ministry of Finance and Economic Development. Second Growth and Transformation Plan (GTPII) 2015/16-2019/2020, Addis Ababa, Ethiopia, 2010.

Food and Agriculture Organization. Land Use and Agricultural Inputs: Ethiopia, 2011.

Fertilizer Manufacturing and Trade Proclamation No. 137/1998.

Gebremedhin, B., Dirk H., and Azage T. Improving the Competitiveness of Agricultural Input Market in Ethiopia: Experience Since 1991. International Livestock Research Institute, 2006.

Gebremedhin, B.; Peden, D. Policies and Institutions to Enhance the Impact of Irrigation Development in Mixed Crop-Livestock. Addis Ababa, Ethiopia, 2002.

International Fertilizer Development Centre (IFDC). *Ethiopia Fertilizer Assessment*, Alabama, U.S.A, 2012.

International Food Policy Research Institute. Fertilizer in Ethiopia: Policies, Value Chain and Profitability, IFPRI Discussion Paper 01304 2013.

Kefyalew, E. Fertilizer Consumption and Agricultural Productivity in Ethiopia. Ethiopian Development Research Institute, Addis Ababa, Ethiopia, 2012.

Keyser, John, et al. Towards an Integrated Market for Seeds and Fertilizers in West Africa. World Bank, Jan. 2015.

New Alliance for Food Security and Nutrition (New Alliance). *Progress Report 2013-2014*. Available at <https://new-alliance.org/resource/2013-2014-new-alliance-progress-report>

New Alliance for Food Security and Nutrition (New Alliance). *Specific Commitments and Cooperation Frameworks* (2012). Available at <https://new-alliance.org/commitments>.

Spielman, D., D. Alemu, and D. Kelemwork. "Seeds, Fertilizer, and Agricultural Extension in Ethiopia." In *Food and Agricultural Policies in Ethiopia: Progress and Challenges*, 2013 edited by Dorosh and Rashid, 84-122. Philadelphia: University of Pennsylvania Press

Tafesse, M. *Small-Scale Irrigation for Food Security in Sub-Saharan Africa*; The ACP-EU Technical Centre for Agricultural and Rural Cooperation (CTA): Addis Ababa, Ethiopia, 2003.

Taffesse A., P. Dorosh and S. Asrat. Crop Production in Ethiopia: Regional Patterns and Trends, IFPRI Development Strategy and Governance Division/EDRI, ESSP II Working Paper 0016, 2011.

United States Agency for International Development (USAID). Improved Transport and Logistics for Ethiopia's Fertilizer Imports, 2014.

The World Bank. Ethiopia at a Glance, 2015.