
A Review of National Fertilizer Regulatory Authorities in Mozambique

PREPARED BY THE AFRICAN FERTILIZER AND AGRIBUSINESS PARTNERSHIP
(AFAP) FOR THE ALLIANCE FOR A GREEN REVOLUTION IN AFRICA (AGRA)'S
SCALING SEEDS AND TECHNOLOGIES PARTNERSHIPS (SSTP)



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This report forms part of a set of studies covering 4 countries (Mozambique, Malawi, Tanzania and Ethiopia) in Eastern and Southern Africa in Support for the Establishment of a Regional Fertilizer Policy and Regulatory Framework for East and Southern Africa.

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ACRONYMS

AGRA	Alliance for a Green Revolution in Africa
AFAP	African Fertilizer and Agribusiness Partnership
ACTESA	Alliance for Commodity Trade in East and Southern Africa
AMOFERT	Mozambican Association for Fertilizers
APC	Agribusiness Partnership Contract
CAADP	Comprehensive Africa Agricultural Development Program
CATERF	Technical Evaluation Committee for Registration of Fertilizer
CoC	Certificate of Conformity
COMESA	Common Market for East and Southern Africa
DNSA	Agricultural Services National Directorate
EC	Electrical Conductivity
FAK	Fertilizer Association of Kenya
FAO	Food and Agriculture Organisation
FRA	Fertilizer Regulatory Authority
IFA	International Fertilizer Association
IFDC	International Fertilizer Development Centre
IFPRI	the International Food Production Research Institute
IIAM	Agricultural Research Institute of Mozambique
INNOQ	Quality and Norms National Institute
ISPM	Manica Higher Polytechnic Institute
MASA	Ministry of Agriculture and Food Security
MIC	Industry and Commerce Ministry
NGO	Non-governmental Organisation
PAEI	Action Plan and Implementation Strategy
PAPA	Action Plan for Food Production
PEDSA	Strategic Plan for Development of Agricultural Sector
pH	potential Hydrogen ions
PICA	Integrated Plan of Agricultural Commercialization
PNEF	Strategic National Plan for Fertilizer
PROAGRI	Green Revolution Action for Food Production
PSI	Psi Pre Shipment Inspection
SGS	Societe Generale de Surveillance
SSTP	Scaling Seeds and Technologies Partnerships
TABIRA	Fertilizer Association Burundi
TDS	Total Dissolved Salts
UNAC	National Farmers Union
USAID	United States Agency for International Development

EXECUTIVE SUMMARY

An assessment of the national fertilizer regulatory authorities in Mozambique reveals that fertilizer production/importation, distribution, marketing and trade is regulated and controlled by multiple institutions. These institutions are established under different Acts of the Laws of Mozambique. In carrying out their mandates, these institutions also draw from their specific Acts, policies and regulations. This often leads to conflicts and/or overlaps and replication making it difficult to reach consensus on certain issues. Further, there is no national fertilizer-specific coordinating institution that guides and coordinates efforts of the various institutions to avoid overlaps and/or replication of efforts. The weak regulatory legal instruments and standards undermine comprehensive and effective coordination in fertilizer production, marketing and distribution.

In order to address these challenges, improve agricultural production and food security and establish mechanisms through which both the government and the private sector can effectively oversee the functioning of the fertilizer sector, this report makes the following recommendations:

- a) **Establishment a national fertilizer-specific authority - “One-Stop-Shop” Model:** To effectively coordinate the efforts of the various institutions that regulate and control fertilizer production/importation and distribution, there is need for Mozambique to establish a national fertilizer specific authority. This semi-autonomous authority would act as a one-stop shop facility for fertilizer compliance where fertilizer businesses could obtain all information pertaining to fertilizer regulation and legislation. Of particular importance the one stop shop model should have offices in all the port towns of Maputo, Beira and Nacala. Fertilizer suppliers should be able to register, acquire import permits, transit permits and trading licenses from such offices.
- b) **Speeding up national consultations on fertilizer law:** To date three consultations have been made in Nacala, Chimoio and Maputo spear headed by AMOFERT. Nonetheless the process needs to be accelerated and it should cover a large number of stakeholders in the fertilizer industry. Once the Fertilizer Law is enacted, the enforcement of approved fertilizer regulations will be enhanced.

- c) **Develop a fertilizer policy:** In collaboration with stakeholders in the fertilizer sector (both private and public sector), develop a fertilizer-specific policy.
- d) **Training and gazetting of fertilizer analysts and inspectors:** Like other COMESA member states, Mozambique does not have an adequate pool of qualified and gazetted fertilizer analysts and inspectors. To effectively enforce fertilizer rules and regulations, there is need for trained and gazetted fertilizer analysts and inspectors.
- e) **Gazette trained Ministry of Agriculture fertilizer analysts:** To give them the power to take to court all those who do not comply with laid down rules and procedures for fertilizer testing – litigation powers.
- f) **Refurbish and equip testing laboratories:** Mozambique needs support to rehabilitate its laboratories. With only one IIAM functioning laboratory, inspection and enforcement of fertilizer regulations remains weak. In addition, the absence of functioning soil laboratories makes it difficult to quantify soil nutrients requirements. Funding is also required to purchase laboratory apparatus, chemicals etc. and replace obsolete equipment to ensure only quality fertilizers reach the farmer.
- g) **Create awareness and linkages with national and regional fertilizer regulatory authorities:** There is need for the government of Mozambique and AMOFERT to conduct campaigns to create awareness and educate agrodealers, farmers and the general public on different fertilizers in the market, benefits and safe use of fertilizers, etc. Priority should also be given to working with other private sector stakeholders in the fertilizer sector, building the capacity of fertilizer regulators and creating linkages with national and regional fertilizer associations. An annual meeting of national fertilizer regulators to share experiences and emerging issues and working with regional fertilizer associations, and private sector forums such as the East and Southern Africa Fertilizer Trade Platform (ESAF), is also recommended.

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SECTION 1: INTRODUCTION

1.1 BACKGROUND

The economies of eastern and southern Africa are heavily dependent on agriculture. It is estimated that more than 70% of the population in this region is involved in agriculture and the majority of these producers are smallholders farming less than two hectares. Agriculture contributes on average 35% of GDP and employs 65% of the population. Therefore, agriculture is a critical driver of the future economic development of the region. However, while economies in many Africa countries have exhibited healthy growth - real GDP in sub-Saharan Africa grew at an average rate of 5% between 2003 and 2009 - this growth has not emanated from the agriculture sector (Camara and Edeme, 2013).

Despite its importance to the economy, the performance of the agriculture sector is poor. Cereal yields in sub-Saharan Africa are the lowest in the world, having stagnated at around 1 ton/ha for the past 50 years compared to 4 tons/ha in developing countries. The key reasons for the poor performance of the agriculture sector are the continued reliance on traditional agricultural practices in the region and the low adoption of modern productivity enhancing technologies such as mineral fertilizers and quality seeds of superior varieties which severely constrain increased yields in East and Southern Africa.

Farmers in the region use on average 10 kg of fertilizer per hectare, compared to their counterparts in Asia who consume on average 209 kg/ha. The result is severe soil nutrient depletion; the rates of soil nutrient depletion exceed 60 kg/ha (Wanzala and Groot, 2013). This low rate of usage is due to a number of reasons including: a thin network of agrodealers; lack of technical knowledge on appropriate fertilizers; lack of access to finance all along the value chain which prohibits the purchases of sufficient quantities to capture economies of scale; and high transport costs due to inadequate ports, rail and road networks. These factors result in high costs, putting fertilizer beyond the reach of most farmers.

The policy environment often exacerbates the situation. Government subsidy programs crowd out commercial demand and introduce uncertainty into the system, which creates disincentives for private companies to invest in distribution networks. Government's lack enforcement capacity to oversee quality control, which increases the risk of adulterated fertilizers, fosters distrust of fertilizer and discourages honest businesspeople from participating in the fertilizer trade. Fertilizer recommendations in many African countries are outdated due to defunct or non-existent research and extension systems.

Similarly, government subsidy programs often do not involve the private sector in planning and distribution. Hence the private sector has no incentive to identify which nutrients farmers need for their crops and soils and provide the appropriate blends. Moreover, government policy in many of these countries discourages blending. Many countries have a list of approved fertilizers. If the private sector wants to introduce a new fertilizer it must undergo efficacy testing, which can take three years thus imposing costs the private sector cannot afford. The list of approved fertilizer products also discourages cross-border trade and the development of regional markets. Countries have very strict specifications for approved fertilizers, and although often there are very minor differences in nutrient content these differences can result in the entry of a new fertilizer product being delayed or even denied.

The outcome of these constraints is that fertilizer markets in eastern and southern Africa have failed to reliably provide the right type of quality fertilizers to small-scale farmers in the rural interior in a timely manner and at an affordable price. If agriculture in the region is to become competitive, the performance of the fertilizer markets in the region needs to be improved.

Clearly no single intervention will address these constraints effectively. Rather, a number of interventions are required and many must be implemented simultaneously. These include: investments in ports, roads and rail infrastructure to reduce transport costs; provision of technical and business training to agro dealers; improving access to finance all along the fertilizer value chain; and development of market information systems. However, an

overarching factor to foster the growth of fertilizer markets is a stable and transparent policy and regulatory environment that is conducive to private sector investment.

This study support SSTP's mission to foster the creation of a stable and conducive fertilizer policy and regulatory environment in the region by doing the following:

- 1) Develop a regional policy and regulatory framework that can be used as a guide by countries in East and Southern Africa to embark on a policy reform agenda for the fertilizer sector that will result in higher levels of fertilizer use and concomitant higher levels of agricultural productivity and food security;
- 2) Prepare/revise draft fertilizer legislation for Mozambique- which is compatible with open markets and regional harmonization;
- 3) Review and critique of Mozambique's trade policies that impact fertilizer and recommendations for common trade policies; and
- 4) Develop a country action plan that details the requirements for establishing an effective fertilizer regulatory system for the country.

1.2 OBJECTIVES OF THE ASSESSMENT

This report presents a review of national fertilizer regulatory institutions in Mozambique. Specifically the report attempts to do the following;

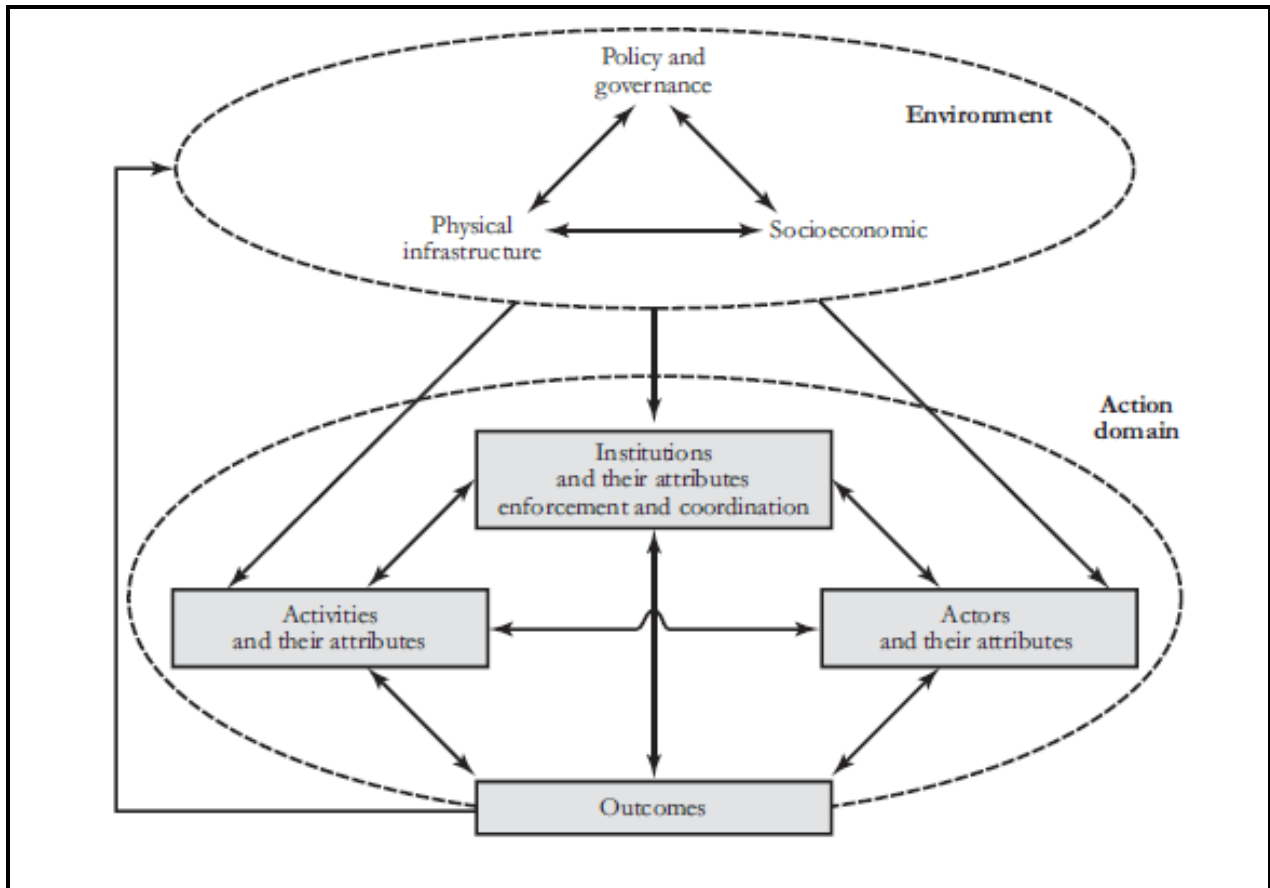
- a) Identify the presence of national fertilizer regulatory authorities in Mozambique and their inherent characteristics
- b) Recommend ways of strengthening these institutions for fertilizer regulation in Mozambique
- c) Recommend ways of facilitating linkages between these institutions in the fertilizer domain.

1.3 METHODOLOGY

Both primary and secondary data collection techniques were employed. Secondary data was gathered through a literature review of fertilizer policies in Mozambique. A number of

literature were consulted including previous work done by IFDC, AFAP, ACTESA, IFA, and FAO in Mozambique. In addition to this, national fertilizer policies and regulations were also reviewed. Primary data collection was done through interviews with key informants within the Mozambican fertilizer action domain. In particular the report identifies the relevant players in the Mozambican fertilizer domain and their attributes which have bearing on the fertilizer policy outcome consequently influencing the environment. Figure 1 indicates the schematic relationships and interaction of the environment and the fertilizer action domain of Mozambique.

Figure 1: A conceptual framework for institutional analysis



Adapted from: *Institutional Economics Perspective on African Agricultural Development, 2009; Kirsten et al*

SECTION 2: FERTILIZER LAWS AND REGULATIONS IN THE COMESA REGION

Over 80 percent of COMESA member states have legislation that regulates the production, importation, distribution and use of fertilisers. These are administered through one or more Ministries which include Ministries of Agriculture, Ministries of Trade, and Treasury. The Ministries of Agriculture have vested interests in the production, importation, marketing, distribution, standards and use of fertilizer. Ministries of Trade are concerned issues related to the importation, distribution and export of fertilizers, including setting and enforcing standards and the issuance of trade licenses while the Treasury has interest on revenues (fertilizer taxes and duties). Coordination of such activities requires the presence of strong institutions to avoid corruption and rent seeking behaviour among regulatory authorities.

According to a study undertaken by the International Food Production Research Institute (IFPRI, 2012) the countries that have promulgated specific legislations on fertiliser included Burundi, Tanzania, Mozambique, Kenya, Uganda Zambia, and Zimbabwe. Those that have fertiliser policies or strategies (drafts/final) include Ethiopia, Malawi, Kenya, Uganda, and Zimbabwe.

Table 1 indicates COMESA member states which have established national fertilizer specific regulatory authorities, national fertilizer laws and national fertilizer associations. Out of a total of 22 countries, only six (6) have established national fertilizer-specific regulatory authorities; and only five (5) have established national fertilizer associations.

Table 1: Presence of national fertilizer-specific regulatory Authorities (including fertilizer Laws) in COMESA member states

Country	National Fertilizer Specific Regulatory Authority	National Fertilizer Specific Law	National Fertilizer Trade Association
Burundi	NO	YES	YES (TABIRA)
Comoros			
Djibouti	NO	NO	NO
DRC	NO	NO	NO
Egypt			
Eritrea			

Ethiopia	YES	YES	NO
Kenya	NO	NO	YES (FAK)
Libya			
Madagascar	NO	NO	NO
Malawi	NO	YES (DRAFT)	YES
Mauritius	YES	YES	NO
Mozambique	YES	YES	NO
Seychelles	NO	NO	NO
Swaziland	NO	NO	NO
Rwanda	YES	YES	NO
South Sudan	N O	NO	NO
Sudan	YES	YES	NO
Tanzania	YES (TFRA)	YES	YES
Uganda	NO	NO	NO
Zambia	NO	NO	YES
Zimbabwe	YES	YES	YES (Informal)

Source: “Towards a framework for harmonization of fertilizer policies and regulations: A national and regional synthesis report”, 2014; AFAP stakeholder consultations July 2016

2.1 FERTILIZER REGULATIONS

Most COMESA member states have some form of fertiliser regulations in place particularly the two elements that pertain to registration of fertiliser operations and inspections. Regulations usually comprise of 6 distinct areas which include:

- (i) Registration of businesses and/or their products ;
- (ii) Inspection of fertilizer premises, products and records by authorized inspectors(taking samples, noting the legality of the labels, checking bag weights, inspecting records, etc.);
- (iii) Analysis of samples taken by inspectors;
- (iv) Financing of the regulatory program through registration and inspection fees;
- (v) Administration, enforcement, and assessment of penalties by a designated authority;
and,
- (vi) Publication of findings.

The challenge in fertilizer regulation, however, is that there are omissions of some of the elements within these regulations rendering them *incomplete*. The most common missing element is that of publications of results of fertiliser analysis, findings of inspections and court verdicts. Secondly, there are no internal country standard procedures or guidelines for

inspecting premises, sampling, penalization and appointing inspectors. This may compromise **transparency**. As such the theory of **incomplete contracts, moral hazards, shirking** and **adverse selection** may come into play in most fertilizer markets within the region. It is for this reason that little progress has been made in the coordination and harmonization of these activities at the regional level.

2.2 FERTILIZER REGULATORY AUTHORITIES

Institutions vested with the authority to administer the regulations vary from country to country. Nonetheless in each country the Ministry of Agriculture plays a central role in the development and administration of fertilizer regulations in the COMESA region. Apart from the Ministry of Agriculture (overall regulator), there are also a number of institutions which can undertake the inspections and/or analysis which include Bureaux of Standards and international bodies such as SGS etc. There is therefore, the question of whose inspection or analysis carries recognition – national bureaux or international bodies. Further, the documentation and inspections required for fertilizer trans-shipments within the region varies from country to country. There are also no clear policies or guidelines that ensure that revenue levied on inspections, registration and analysis is channelled back into enforcing the regulations. In some countries it goes to Treasury in others it is put in a pool of revolving funds within the Ministry that administers the regulation. Its use for strengthening the enforcement of the regulation cannot therefore be guaranteed.

2.3 FERTILISER REGULATIONS ENFORCEMENT CAPACITY

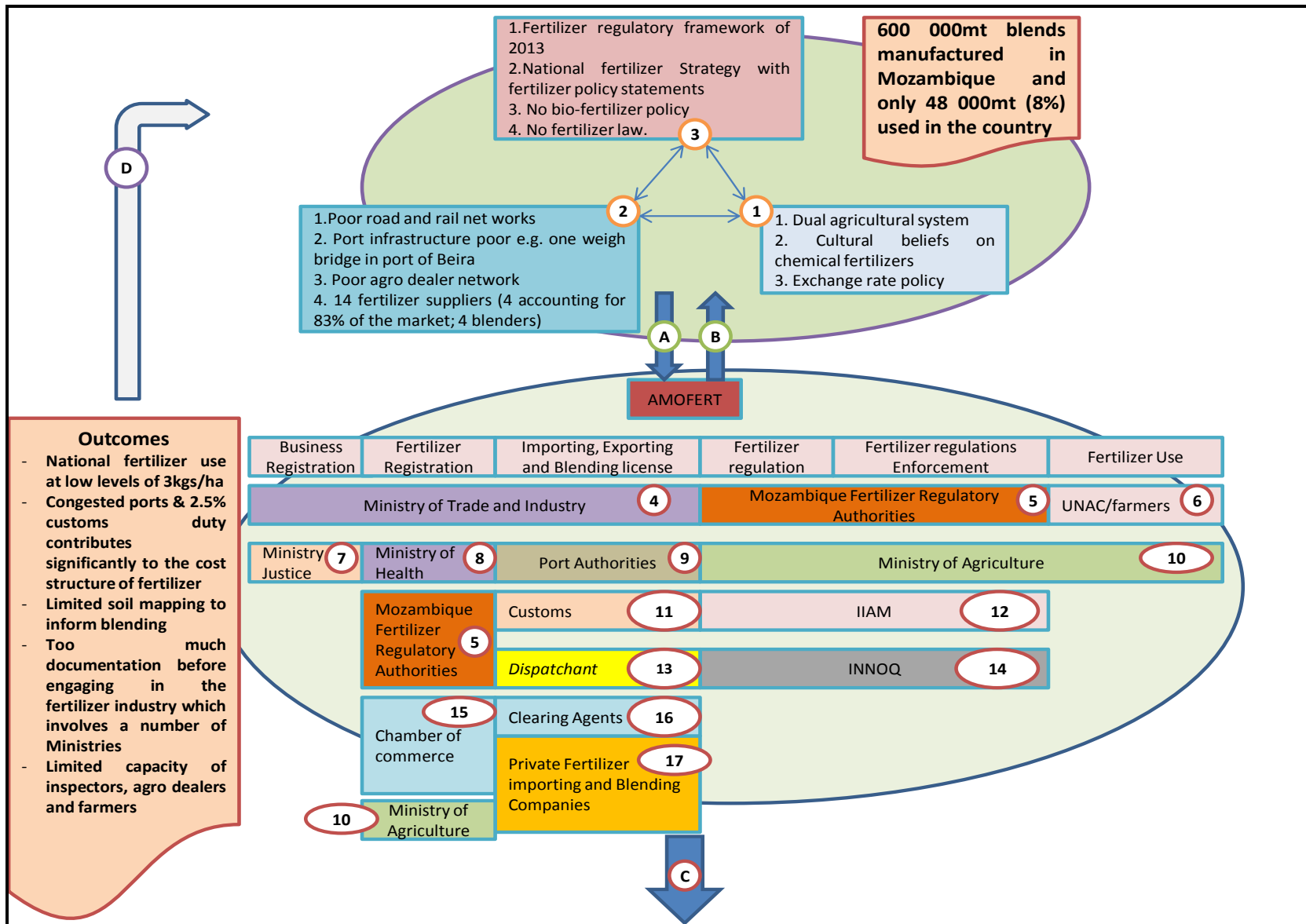
Although a large number of COMESA member states have regulations on fertiliser registration and inspection only about 50 per cent of these are carrying out inspections. This is due to inadequate manpower and financial resources to undertake this task. For example, Kenya has about 70 inspectors against 6200 agro-dealers, importers and wholesalers of fertilisers; Uganda has about 50 inspectors against over 1000 agro- dealers and importers; Burundi has about 4 inspectors; Zimbabwe has about 8 and, Egypt has slightly over 60 inspectors despite its large

consumption of fertilisers - over 10 million metric tonnes. In addition there is limited infrastructure to aid the inspection work. In particular most analytical laboratories are inadequately equipped to fully facilitate analytical work. (COMESA/ACTESA Proposal on fertilizer harmonization, 2014). The following section presents the institutions for fertilizer legislation and regulation in Mozambique.

SECTION 3: MOZAMBIQUE'S FERTILIZER INSTITUTIONAL FRAME WORK

The fertilizer policy environment in Mozambique remains non-conducive to business. The fertilizer market is regulated by the Fertilizer Regulations of 2013. In addition, the foreign currency policy remains restrictive to fertilizer exporters as 50% of foreign currency remittances have to be converted into local currency. Furthermore poor port, road and rail infrastructure increase the farm gate prices for fertilizers substantially. Like many COMESA member states, Mozambique does not have a national fertilizer specific regulatory authority which regulates the importation and distribution of fertilizer. Instead a number of government Ministries administer different aspects of fertilizer regulations/ legislation. These include: Ministry of Agriculture which plays the central role of national regulatory authority with responsibility for registration, production, importation, distribution and use of fertilizers (including inspection and testing of fertilizer imported for the government subsidy program), the Ministry of Commerce, Trade and Industry, which has an interest in aspects of importation and distribution including setting and enforcing standards, issuance of trade licences; and the Port authorities. In addition to the Ministry of Agriculture, other statutory bodies also handle different aspects of fertilizer regulation. These quasi-government institutions include: Agricultural Research institute of Mozambique (IIAM), Bureau of Standards (INNOQ) and Fertilizer Regulatory Authority (FRA) play critical roles in the regulation of fertilisers in Mozambique. The functions of these institutions are detailed in the following sections. (Figure 2)

Figure 2: Mozambique's fertilizer institutional framework



3.1 AMOFERT

The Mozambican Association for Fertilizers (AMOFERT) is a public, private and civic fertilizer dialogue platform where national fertilizer issues are discussed. The association was created by AFAP in partnership with USAID and IFDC. Registered in 2015 its membership consists of government departments, NGOs, fertilizer companies, and donors. It provides a mechanism through which the public sector, private sector, NGOs, development partners, producers and other stakeholders in the fertilizer value chain can discuss key issues of concern to the fertilizer sector at the national and international level. For example, AMOFERT is spearheading the development of the fertilizer bill and to date a number of successful consultative meetings have been held in Nacala, Chimoio and Maputo. It is expected that the resultant Fertilizer Act will be favourable to all parties and result in increased and sustainable fertilizer use in the country.

3.2 MINISTRY OF TRADE AND INDUSTRY

This Ministry Issues business trading licenses to private fertilizer companies and is also a signatory for the registration of fertilizers. All agro dealers interested in distributing fertilizers are subject to an inspection by an inter-sectorial team to the premises, looking especially at aspects such as hygiene, safety, aesthetics and equipment. If this assessment is satisfactory, a license is issued. The license is issued by the Provincial Directorate of Industry and Commerce in the respective province upon a payment of up USD 100 fee depending on the complexity of the business. Issuing of trading licenses have turnaround times of: 1 working day for micro-companies; 7 working days for medium size companies; and 17 working days for large companies. The Ministry is also mandated to carrying out Environmental Impact Assessments (EIA) for fertilizer blending plants.

3.3 FERTILIZER REGULATORY AUTHORITY

The Fertilizer Regulatory Authority (TFRA) is housed by the National Directorate for Agrarian Services in the Ministry of Agriculture. The main responsibilities include fertilizer registration, inspection and testing. The TFRA is based on the fertilizer regulations that were approved by government in 2013. Fertilizers registration requires the following set of documents to be complete: field form data sheet, label, certificate of origin and authorization of company at a

cost of Mt 2000 and it is valid for 5years. Each set of documents send to the Ministries of Agriculture, Trade and Health. This process alone takes four months to complete. Enforcement of fertilizer regulations is done through pre-shipment conformity certificates and TFRA just accepts these on trust from the importing company. Currently TFRA employs four technicians for the entire country which includes three ports (Maputo, Beira, Nacala).

3.4 UNAC

The National Farmers Union (UNAC) currently boasts a membership of 97,000 members and it mainly favors the promotion of organic fertilizers. Although it has been consulted on the new fertilizer law its participation needs to be increased.

3.5 MINISTRY OF JUSTICE

All existing or prospective businesses should first register with the Ministry. The ministry plays a bureaucratic role in issuing shareholding certificates for new business registrations.

3.6 MINISTRY OF HEALTH

The Ministry of Health is a signatory in fertilizer registration. It carries out tests to determine the suitability of fertilizers to human health.

3.7 MOZAMBIQUE PORT AUTHORITY

The Mozambique Port Authorities has limited capacity to handle large volumes. For instance the Beira port has one weighbridge which usually breaks down during the 7 day period given to private companies to unload and transport their products out of the port once the ship has docked. Furthermore the ports also handle imports for Malawi, Zambia and Zimbabwe. The result is high levels of congestion at the port.

3.8 MINISTRY OF AGRICULTURE AND FOOD SECURITY

The Ministry of Agriculture and Food Security (MoA) is the Registrar of fertilizers in Mozambique. Registration of fertilizer is for a five-year term which is renewable on an annual basis. Registration of new fertilizer takes up to 120 days. In addition fertilizer importers are required by law to acquire import permits at a cost of \$67 valid for 3 months renewable for the same number of months. The registrar governs the exportation of fertilizer through the

issuance of permits and compliance with fertilizer in transit laws. The MoA leads a number of fertilizer sub-committees in the country which includes among them the Technical Evaluation Committee for Registration of Fertilizer (CATERF). The objectives of this committee are: (i) Evaluate and propose the approval or disapproval of registration of fertilizers; (ii) Determine technical conditions to be followed in the import, export, production, donation, commercialization, handling and application of fertilizers; and (iii) Propose restrictions on the use of certain fertilizers. The ministry is keen to finalize the fertilizer law and currently working towards removing taxes on agricultural inputs and improving the fertilizer subsidy program by introducing the e-vouchers system.

3.9 MOZAMBIQUE REVENUE AUTHORITY/CUSTOMS

The Mozambique Revenue Authority levies a 2.5-7.5% customs tax on all fertilizer destined for Mozambique. Fertilizers for blending purposes and exports should be kept in bonded warehouses. However, complication arises from distinguishing between stock earmarked for value addition, re-export, and the domestic market, and as a result fertilizer for blending and/or re-export ends up taking on the tax burden. This bureaucratic inefficiency limits the country's ability to benefit from the blending plants which are currently operating in Mozambique.

3.10 AGRICULTURAL RESEARCH INSTITUTE OF MOZAMBIQUE

IIAM falls under the Ministry of Agriculture and has the objective of strengthen the National Research, Innovation and Technology transfer System in Mozambique through the joint efforts of various institutions with a common interest in agricultural research and in the transfer of appropriate and valuable results. On the fertilizer front The Agricultural Research institute of Mozambique (IIAM) is mandated to develop fertilizer recommendations for the country's 10 agro-ecological regions. It has four zonal centres namely Chokwe (southern Mozambique), Chimoio (central Mozambique), Nampula (North East Mozambique) and Lichinga (North west Mozambique) and 3 laboratories located in Maputo, Manica and Namupla with the latter fairly new and functional. Nonetheless the other two require rehabilitation. In order to satisfy the demand for its services some of the services are outsourced to countries within the region. For

instance, under its collaborative work with AGRA on soil mapping, most of the soil tests for Mozambique are done in Nairobi due to lack of local capacity. In addition IIAM is working closely with private companies in developing soil specific fertilizer blends. IIAM also sits on the multi-sectorial board led by the Ministry of Agriculture (which is the “Registrar” of fertilizers in Mozambique) which is responsible for approval and registration of fertilizers in Mozambique. To date, IIAM has trained 100 fertilizer inspectors.

3.11DISPATCHANT

This person plays the role of interlocutor between clearing agents and customs authorities. However, stakeholders were of the opinion that this role serves no purpose and provides an opportunity for rent-seeking. The role of *dispanchants* is unnecessary and increases the cost of doing business and hence inflates the farm gate price of fertilizer.

3.12NATIONAL INSTITUTE OF QUALITY AND NORMS

The Bureau of Standards (INNOQ) is mandated by law to develop National Standards. The institution is demand driven in developing standards. It regularly sends out a communique asking for key priority areas for standards development to line ministries. To date, Mozambique does not have fertilizer standards and so it relies on international standards. However INNOQ received a request from the Ministry of Agriculture to develop fertilizer standards. INNOQ also prescribes the labelling of fertilizers. The labels must also adhere to the correct description of fertilizer, composition and trade mark. However due to lack of capacity all work related to the regulation of fertilizers in the country has been outsourced to the company Intertek. The Intertek Conformity Assessment Program ensures that products are fully tested in a recognized laboratory against international standards and a certificate issued before they are shipped to the client country (in this case, Mozambique). Intertek also provides test services to exporters and issues certificates of conformity for products that pass the standard tests.

Pre-Shipment Inspection (PSI) takes place in the country of origin and a Certificate of Conformity (CoC) is the issued. Upon arrival of the fertilizer in the destination port (Beira), the fertilizer is only discharged if the CoC has been presented. To be able to clear the product, an

exporter submits to Intertek the following documents: (i) Request for certification (indicating the point of entry in Mozambique); (ii) Performa invoice; (iii) Quality Management System Certification; (iv) Conformity documents of the fertilizer manufacturer as supplier (test reports, quality certificates, analysis reports, etc.); and (v) The final invoice of the consignment. To obtain evidence that all requirements are met vis-à-vis meeting of the applicable standards and/or technical requirements, goods must undergo one or a combination of the following verification process: (i) Physical inspection; (ii) Laboratory testing; (iii) Conformity assessment at agent's laboratory; (iv) Fertilizer Manufacturers' laboratory witnessed by Intertek partners; (v) Factory audit; and (vi) Documentary verification. After the verification process is completed and results are satisfactory, an exporter of fertilizer will have to submit the final invoice for the issuance of the CoC. This certificate from Intertek is a mandatory document required by customs. A Conformity Assessment Program can operate independently but it works best when linked to a PSI program. After all documentation has been approved by Intertek, it will issue a Documento Único Certificado (Single Certified Document) to the importer. After the fertilizer has been released by customs, the importer is responsible for the proper storage and transportation.

In the case of fertilizer for re-export, the importing company needs to ensure that it adheres to the prescribed regulations in terms of the re-export of product. Importers need to get prior authorization from the Registrar to re-export fertilizer. In handling of export requests, the FRA complies with all conventions of which Mozambique is a signatory

3.13 CHAMBER OF COMMERCE

The CoC highlighted the restrictive tax regime as a key barrier to the fertilizer business in Mozambique. In particular, the fiscal tax, municipal tax, environmental tax and land lease taxes are expensive. Furthermore, the unstable foreign exchange policy and VAT system create additional difficulties. The CoC also indicated that there are too many institutions regulating the Mozambican fertilizer industry.

3.14 CLEARING AGENTS

They are responsible for clearing fertilizer imports and exports for fertilizer importers. They indicated that they use of *Dispanchants* is unnecessary for them to carry out their duties.

3.15 PRIVATE FERTILIZER IMPORTING AND BLENDING COMPANIES

Currently the country has 4 blending companies and 14 registered fertilizer suppliers, some of which also export fertilizer to neighbouring countries. The foreign exchange policy is a serious factor limiting their performance, particularly for fertilizer exporters. The requirement is that all foreign currency receipts should be converted into 50% local receipts upon receipt of payment. Given the instability of the meticalis most of the trade proceeds are eroded creating serious cash flow problems for the companies.

SECTION 4: FACTORS AFFECTING FERTILIZER LEGISLATION IN MOZAMBIQUE

4.1 FERTILIZER SPECIFIC POLICY

Mozambique does not have an overall fertilizer policy that addresses fertilizer demand and supply side constraints (**capacity building of extension workers, developing output markets, improving access to finance**) in a holistic manner. In addition there is no bio-fertilizer policy to facilitate regulation of bio-fertilizers in the country despite a surge in the use of inoculants in legumes production.

4.2 LACK OF FERTILIZER LAW

Mozambique does not have a Fertilizer law. Nonetheless there is a draft fertilizer law under review. Although there are no known cases of such malpractices as selling adulterated fertilizer, the presence of a fertilizer law will provide a basis for prosecuting those that sell low quality fertilizers on the market. It is important to have a clearly defined set of rules and regulations guiding the fertilizer value chain in Mozambique in order to avoid ad-hoc rules by policy makers that create uncertainty and risk for fertilizer value chain actors. This could make a big impact on the fertilizer industry and could contribute to improvements in the execution of a fertilizer subsidy program as well but more broadly improve the quality of fertilizer supplied to farmers

4.3 PROLIFERATION OF NATIONAL INSTITUTIONS REGULATING FERTILIZER

The absence of legal and regulatory framework for the fertilizer subsector in Mozambique leaves the fertilize sector under the regulation of several disconnected bodies as functions of different government agencies are not clearly and consistently spelled out. There are likely to be overlaps and duplication in the responsibilities of agencies leading to confusion. The introduction of a fertilizer law and regulations will provide for the creation of an umbrella body which will be responsible for the registrations, as well as enforcements of fertilizer law, regulations and standards

4.4 LIMITED CAPACITY TO ENFORCE REGULATIONS

Capacity to enforce fertilizer laws, regulations and standards including verifying truth in labelling is important in fertilizer markets serving small farmers. In Mozambique although there are no known cases of fertilizer adulteration, the fact that stockists frequently re-bag fertilizer into smaller packages to satisfy consumer demand, underscores a possibility for both intentional and unintentional adulteration during re-bagging for retail level sales. This is the case because most verification of fertilizer quality tends to be done much higher up the supply chain- usually at the point of importation. As in many countries most enforcement constraints in Mozambique typically relate to lack of capacities in two major areas as follows.

4.4.1 INADEQUATE FACILITIES FOR TESTING AND ANALYSIS OF FERTILIZERS

According to the article 23, the fertilizers production companies are obliged to have equipped laboratories with trained staff and technology to ensure the quality of the product. The laboratories are expected to be subjected to regular inspections of the Ministries of Agriculture, Health and Environment by trained inspectors. There is no reliable fertilizer testing services in Mozambique and for years local farmers and agricultural enterprises have had to obtain these services from neighbouring countries like the RSA, Zimbabwe and Malawi. However the Faculty of the Manica Higher Polytechnic Institute (ISPM), has in the last years invested a share of its efforts to establish a certified soil and fertilizer testing and advisory service in Manica. At the moment, the ISPM soil laboratory has the capacity to provide the following services: i) testing

services; ii) conducting pH, SOC, carbon (C), SOM, Total Dissolved Salts (TDS) and electric conductivity (EC); iii) intermediate services; and iv) research and extension support

Additionally, there are two “semi-operational” soil laboratories, one at IIAM (research) and another at UEM (academic) and both are located in Maputo. Adding to that, the primary purpose of these laboratories is to answer institutional demands leaving only a little room for external clientele (ISPM, 2013). When opened to outsiders, high sample turnaround time is a problem, mainly resulting from operational constraints like lower sample processing capacity. The existing “inability ” to generate income to cover operational costs and to modernize the existing set of equipment and infra-structure undermine not only the delivery capacity but also the credibility of the laboratories.

4.4.2. INADEQUATE NUMBER OF INSPECTORS

Fertilizer inspection is supposed to be done by inspectors from the Agricultural Research Institute of Mozambique (IIAM). Although IIAM has trained 100 inspectors to date, they remain under resourced to discharge their duties effectively.

SECTION 5: CONCLUSIONS AND RECOMMENDATIONS

An assessment of the national fertilizer regulatory authorities in Mozambique reveals that fertilizer production/importation, distribution, marketing and trade is regulated and controlled by multiple institutions. These institutions are established under different Acts of the Laws of Mozambique. In carrying out their mandates, these institutions also draw from their specific Acts, policies and regulations. This often leads to conflicts and/or overlaps and replication making it difficult to reach consensus on certain issues. Further, there is no national fertilizer-specific coordinating institution that guides and coordinates efforts of the various institutions to avoid overlaps and/or replication of efforts. The weak regulatory legal instruments and standards undermine comprehensive and effective coordination in fertilizer production, marking and distribution.

In order to address these challenges, improve agricultural production and food security and establish a mechanism through which both the government and the private sector can effectively oversee the functioning of the fertilizer sector, this report makes the following recommendations:

Establishment of a National Fertilizer-specific Authority - “One-Stop-Shop” Model: To effectively coordinate the efforts of the various institutions that regulate and control fertilizer production/importation and distribution, there is need for Mozambique. When established, this semi-autonomous authority would act as a One-stop shop facility for fertilizer compliance where fertilizer businesses would obtain all information pertaining to fertilizer regulation and legislation. Of particular importance the one stop shop model should have offices in all the port towns of Maputo, Beira and Nacala. Fertilizer suppliers should be able to register, acquire import permits, transit permits and trading licenses from such offices

Speeding up national consultations on fertilizer law: To date three consultations have been made in Nacala, Chimoio and Maputo spear headed by AMOFERT. Nonetheless the process needs to be accelerated and it should cover a large number of stakeholders in the fertilizer industry. With a law enacted, the enforcement of approved fertilizer regulations is enhanced.

Development of a Fertilizer Policy: In collaboration with stakeholders in the fertilizer sector (both private and public sector), develop a fertilizer-specific policy.

Training and gazettement of fertilizer analysts and inspectors: Like other COMESA member states, Mozambique does not have an adequate pool of qualified and gazetted fertilizer analysts and inspectors. To effectively enforce fertilizer rules and regulations, there is need for trained and gazetted fertilizer analysts and inspectors with knowledge and understanding of regulatory

Gazette trained Ministry of Agriculture Fertilizer Analysts: To give them the power to take to court all those who do not comply with laid down rules and procedures for fertilizer testing – litigation powers.

Refurbishing and equipping testing laboratories: Mozambique still needs support for rehabilitating its laboratories. With only one IIAM function laboratory inspection and enforcement of fertilizer regulations still remain weak. In addition on the demand side of fertilizer-With no functional soil laboratories it is difficult to quantify soil nutrients requirements. Funding is also required to purchase laboratory apparatus, chemicals etc. and replace obsolete equipment to ensure only quality fertilizers reach the farmer.

Creating awareness and linkages with national and regional fertilizer regulatory authorities: There is need for the government of Mozambique and AMOFERT to conduct campaigns to create awareness and educate agrodealers, farmers and the general public on different fertilizers in the market, benefits and safe use of fertilizers, etc. Priority should also be given to working with other private sector stakeholders in the fertilizer sector, building the capacity of fertilizer regulators and creating linkages with national and regional fertilizer associations. An annual meeting of national fertilizer regulators to share experiences and emerging issues and working with regional fertilizer associations, and private sector forums such as the East and Southern Africa Fertilizer Trade Platform (ESAF), is also recommended.

6 REFERENCES

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2. Wanzala, M. and Groot, R., 2013, Fertilizer Market Development in Sub-Saharan Africa. Paper presented to the International Fertiliser Society at a Conference in Windsor, UK, on 24th May 2013

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7 ANNEXURES

7.1 ANNEXURE 1: LIST OF INTERVIEWED KEY INFORMANTS

Table 2: List of interviewed key informants

Name	Institution	Date
Mr Vala	Ministry of Agriculture and Food Security (DINAS)	11.06.2016
Mr Louis Mlanga	National Farmers' Association (UNAC)	11.06.2016
Mrs Delphine Francis	Mozambique Fertilizer Regulatory Authority	11.06.2016
Mrs Suzie	Mozambique Institute of Agricultural Research (IIAM)	11.06.2016
Mr Ricardo Mario	Fertilizer Testing Laboratories(DARN)	11.06.2016
Mr Carlos Zandamela	Mozambique National Fertilizer Platform (AMOFERT)	11.06.2016
Mr Paulo Tarmamade	Mozambique Port Authority	11.06.2016
Mrs Albertina Manuel, Mr Maunel Gune, Mr Antonio Dambi, Mrs Maria Albertina &Mrs Esmezalda Patricio	Ministry of Industry and Trade	12.07.2016
Mrs Roas Abrial; Mr Maurice and Mr Raul	Mozambique Revenue Authority	12.07.2016
Mr Arlindo Jorge Mucone	Mozambique Bureau of Standards (INNOQ)	12.07.2016
Mr Barnabe Zandamela	Mozambique Chamber of Commerce (CTA)	12.07.2016
Mr Sergio Ussaca	AFAP Mozambique	12.07.2016