Policy Workshop on Strengthening Regional Trade in Agricultural Inputs in Africa: Issues and Options

and

Private Sector Roundtable Meeting on Expanding Fertilizer Markets in Africa: Issues and Options

Summary Reports

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Prepared by
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Organized by

Common Market for Eastern and Southern Africa

Lusaka, Zambia
www.comesa.int

and

Muscle Shoals, Alabama, U.S.A.
www.ifdc.org

Taj Pamodzi Hotel, Lusaka, Zambia
July 1-4, 2008

USAID FROM THE AMERICAN PEOPLE

THE WILLIAM AND FLORA HEWLETT FOUNDATION

Library of Congress Cataloging-in-Publication Data

Policy Workshop on Strengthening Regional Trade in Agricultural Inputs in Africa: Issues and Options ; and Private Sector Roundtable Meeting on Expanding Fertilizer Markets in Africa: Issues and Options : summary reports / prepared by B.L. Bumb ... [et al.].
p. cm.
Organized by the Common Market for Eastern and Southern Africa and an International Center for Soil Fertility and Agricultural Development and held at the Taj Pamodzi Hotel, Lusaka, Zambia, July 1-4, 2008.
ISBN 978-0-88090-166-6
1. Fertilizer industry--Africa--Congresses. 2. Agriculture--Economic aspects--Africa--Congresses. 3. Agriculture and state--Africa--Congresses. I. Bumb, Balu. II. Policy Workshop on Strengthening Regional Trade in Agricultural Inputs in Africa: Issues and Options (2008 : Lusaka, Zambia) III. Private Sector Roundtable Meeting on Expanding Fertilizer Markets in Africa: Issues and Options (2008 : Lusaka, Zambia) IV. Title: Private Sector Roundtable Meeting on Expanding Fertilizer Markets in Africa: Issues and Options.
HD9483.A352P65 2010
382'.4118096--dc22

2010025134

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IFDC publications are listed in *IFDC Publications*, General Publication IFDC–G-1; the publications catalog is free of charge.

Foreword

In 2008, fertilizer prices increased several-fold. Urea price increased from $277/ton in August 2007 to over $800/ton in August 2008 and di-ammonium phosphate price increased from $430/ton to over $1200/ton. Such unprecedented increase in fertilizer prices, along with fuel and food prices, was termed as "The Silent Tsunami" or the "Perfect Storm," making it impossible for smallholder farmers to afford fertilizer use.

Realizing that these changes may have significant ramifications for food security and agricultural growth and motivated by the requests received from national policymakers and development partners for help and guidance in designing policies and programs to weather this storm out without compromising long term goals of food security, agricultural transformation, and trade and market development, COMESA and IFDC organized two events:

- Private Sector Round Table Meeting on Expanding Fertilizer markets in Africa, June 30, 2009; and
- Policy Workshop on Strengthening Regional Trade in Agricultural Inputs in Africa, July 1 - 4, 2009.

Both events were attended by policymakers, development partners, and representative of the private sector and the farming community and discussed various issues and options to deal with the current crisis and long term development challenges. Key recommendations include:

- Establishment of the Fertilizer Association of Africa to pioneer policy reforms, and private sector development;
- Provision of market-friendly purchasing power support to smallholder farmers;
- Establishment of Regional Fertilizer Holding Warehouses at key ports to benefit from economies of scale in fertilizer procurement;
- Promotion of viable fertilizer production from existing and new fertilizer plants; and
- Development and adoption of nutrient-efficient technologies

Other details of workshop deliberations and proposed actions are elaborated in the summary reports included in this publication.

We hope that policymakers, development partners, and other stakeholders from private sector and farmer organizations will find these documents useful in designing and implementing actions for promoting sustainable food security, agricultural transformation, and market development.

A. H. Roy
President and CEO
IFDC

S. Ngwenya
Secretary General
COMESA Secretariat

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Acronyms and Abbreviations

AAMP	Africa Agricultural Market Program
ACTESA	Alliance for Commodity Trade in Eastern and Southern Africa
AFA	Arab Fertilizer Association
AfDB	African Development Bank
c.i.f.	Cost, insurance, and freight
CAADP	Comprehensive Africa Agriculture Development Program
CET	Common External Tariff
CILSS	Permanent Interstate Committee for Drought Control in the Sahel
COMESA	Common Market for Eastern and Southern Africa
CPPs	Crop protection products
DAIMINA	Developing Agri-Input Markets in Nigeria
DAP	diammonium phosphate
DRC	Democratic Republic of Congo
EAC	East African Community
ECOWAS	Economic Community of West African States
ESASA	Eastern and Southern Africa Seed Alliance
FAA	Fertilizer Association of Africa
FANRPAN	The Food, Agriculture and Natural Resources Policy Analysis Network
FHH	Female-headed household
f.o.b.	free on board
FSSA	Fertilizer Society of South Africa
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IFA	International Fertilizer Industry Association
IFDC	An International Center for Soil Fertility and Agricultural Development
IFPRI	International Food Policy Research Institute
IGAD	Intergovernmental Authority on Development
MDG	Millenium Development Goal
MHH	Male-headed household
MOP	muriate of potash
MPR	Minjingu Phosphate Rock
MSU	Michigan State University
NCZ	Nitrogen Chemicals of Zambia
NEPAD	New Partnership for Africa's Development
NGO	non-governmental organization
NPK	Nitrogen, phosphorous, and potassium
NTB	Non-tarriff barrier
PROFIT	Production, Finance and Technology
PTA	Preferential Trade Areas
RECs	Regional Economic Communities
SADC	Southern African Development Community
SPLIFA	Sustaining Productive Livelihoods Through Inputs for Assets
SSA	Sub-Saharan Africa
SSP	Single superphosphate
STAMICO	Tanzania State Mining Corporation
STAR	Strengthening Trade at the Regional Level in Agricultural Inputs in Africa
TBT	Technical Barriers to Trade
TFC	Tanzania Fertilizer Company
USAID	United States Agency for International Development
UEMOA	West African Economic and Monetary Union
SAID	United States Agency for International Development
WTO	World Trade Organization

Policy Workshop on

Strengthening Regional Trade in Agricultural Inputs in Africa: Issues and Options

Summary Report

Prepared by

B. L. Bumb and J. Nijhoff (IFDC)
and J. Mathende and G. Phiri (COMESA)

Preface

The countries of Africa face many challenges including poverty, food insecurity, slow growth of the agricultural economy and environmental degradation. Minimal use of modern agricultural inputs, such as improved seeds, mineral fertilizers and crop protection products, has contributed to low crop yields and soil nutrient depletion, which have accelerated poverty and hunger in many parts of Africa. In 2006, African countries used less than 10 kg/ha of fertilizer nutrients.

To reverse the downward spiral of poverty, hunger and environmental degradation, the African Union and NEPAD convened the Africa Fertilizer Summit in June 2006 and issued the *Abuja Declaration on Fertilizer for an African Green Revolution*. Under the *Abuja Declaration*, fertilizer was declared a "strategic commodity without borders" and measures were proposed to promote trade in inputs. The African Heads of States also set a target of increasing fertilizer use to 50 kg/ha by 2015. The *Abuja Declaration* was followed by the Arusha Workshop in 2006, which stressed the need to promote integration of regional markets for agricultural inputs. These recommendations led to the launching of the project entitled Strengthening Trade at the Regional Level in Agricultural Inputs in Africa (STAR), funded by the William and Flora Hewlett Foundation. The project aims to strengthen trade in agricultural inputs through policy reforms, human capital development, market transparency and business linkages.

In July 2008, COMESA and IFDC organized a policy workshop on Strengthening Trade in Agricultural Inputs in Africa. The workshop was attended by more than 70 stakeholders from public and private sectors, NGOs, and the farming community and made several recommendations for improving input supply and use in Africa. Among the key recommendations are the following:

- Improve the policy environment by strengthening the policymaking process.
- Remove barriers to trade and transportation.
- Increase African fertilizer production capacity.
- Promote market development and private sector business opportunities.
- Promote fertilizer technology development and transfer.

Funding support provided by the Hewlett Foundation and USAID is gratefully acknowledged. However, the views and opinions expressed in the reports are those of the authors of the report and should not be attributed to the funding partners.

Policy Workshop on

Strengthening Regional Trade in Agricultural Inputs in Africa: Issues and Options

Summary Report

Executive Summary

IFDC, in collaboration with the Common Market for Eastern and Southern Africa (COMESA), convened a policy workshop entitled "Strengthening Trade in Agricultural Inputs in Africa: Issues and Options," held July 1-4, 2008, in Lusaka, Zambia. The workshop was organized as part of the Hewlett Foundation-funded Strengthening Trade at the Regional Level in Agricultural Inputs in Africa (STAR) project.

The purpose of the workshop was to identify public policy and private market and trade action areas that will improve agricultural input market and trade development. The workshop was attended by more than 70 participants representing regional and national policymakers; private sector entities involved in fertilizer importation, wholesale and retail trade and logistics; farmer organizations; development partners; and non-governmental organizations (NGOs). The workshop program is attached in Annex II. A list of workshop participants is attached in Annex III.

Key Issues in Agricultural Input Market Development

Recent Initiatives and Progress

Enhancing international and regional trade has been recognized as a significant opportunity that will improve the performance of agricultural input markets. The *Abuja Declaration on Fertilizer for an African Green Revolution* calls for appropriate measures to reduce the cost of fertilizer procurement at national and regional levels.

The New Partnership for Africa's Development (NEPAD) reported progress on several initiatives that address key resolutions of the *Abuja Declaration*. The Regional Joint Fertilizer Procurement Initiative, led by the African Development Bank (AfDB), aims to address Resolution 8 of the *Abuja Declaration* by encouraging and facilitating governments and private firms to place large orders on the international market. A regional meeting was convened in August 2007, which resulted in the establishment of a Regional Joint Procurement Working Committee for Fertilizers to spearhead the initiative. The promotion of fertilizer production, as mandated in Resolution 9 of the *Abuja Declaration,* is being pursued by COMESA, the Southern African Development Community (SADC) and numerous development agencies, including IFDC. SADC will commission a series of studies to establish the current production status of fertilizer in the region and recommend ways to increase production.

The *Abuja Declaration* also calls for harmonization of policies to ensure duty- and tax-free movement of fertilizer across regions and the development of capacity for quality control. *When the respective COMESA and East African Community (EAC) customs unions are in place, the Common External Tariff (CET) for all imported fertilizers has been proposed at 0 percent.* This sets a good example for other Regional Economic Communities (RECs) to promote duty- and tax-free movement of fertilizer across borders. Six Economic Community of West African States (ECOWAS) member states are in the process of developing fertilizer legislation and supporting regulations.

A Private Sector Perspective

Prior to the workshop, a private sector roundtable meeting was convened to discuss issues and identify options for expanding fertilizer markets in Africa. The key issues facing the private sector are as follows:

Local fertilizer production: High international fertilizer prices suggest that local and regional fertilizer production may be financially and economically viable. However, for urea and ammonium nitrate, it takes four to

five years before a new plant is fully operational, so adding new nitrogen (N) manufacturing capacity is a long-term solution. For the short term, utilization of existing capacity should be improved and re-investment considered. Several fertilizer plants (e.g., in Malawi, Zambia and Zimbabwe) are either operating below capacity or have completely ceased production. While SADC and COMESA are committed to exploring the potential for rehabilitation of these facilities, the private sector encourages policymakers to create commercial investment opportunities.

Finance: Sufficient cash flow is a prerequisite for successful fertilizer trade and distribution. Yet, procurement and marketing of fertilizers are constrained by a lack of finance, limiting transaction sizes, inventories and final consumption levels. It stifles total volumes traded and marketed and inhibits the achievement of economies of scale. This reflects a generally risk-averse approach of commercial banks toward agricultural lending. Capacity building among commercial bank loan officers and the introduction of risk management instruments and other risk-reducing mechanisms may help in overcoming this key constraint.

Policy: First, regarding the role of government in input markets and its relationship with the private sector requires more realistic planning. When the private sector is invited to tender for supplying government programs, tender rules and procedures often require that physical stocks are already positioned in-country prior to tendering. This requirement poses too high a risk for firms and should be addressed.

Second, where government programs exist, subsidies were considered to distort markets and inhibit private sector participation in market development. Moreover, fertilizer sales through subsidy programs tend to discourage and displace commercial sales. There is a need to improve subsidy programs and to include clear modalities for phasing out government market interventions.

Third, COMESA's approach to regional procurement was met with skepticism because it appears to revolve around pooling public procurement among various countries. It was believed that true marketing efficiency gains can be made only by improving the private sector supply chain at various levels and on encouraging economies of scale, not on facilitating procurement for government programs or the placing of large orders by donors. Encouraging economies of scale can include facilitating private stockholding and wholesaling at strategic ports. Resolving finance and other marketing efficiency enhancing measures can then focus on downstream regional marketing and distribution. Partnerships are needed for this. The private sector should be more involved in COMESA's regional procurement planning process to ensure that workable solutions are developed. *While the regional procurement by COMESA or public sector agencies was discouraged, the establishment of a regional holding fertilizer warehouse in port cities like Beira, Dar es Salaam and Accra to benefit from economies of scale in procurement was endorsed.*

In support of the above, policy analysis and capacity building among policymakers are required to overcome the current policy constraints.

Shipping and handling: Investments in infrastructure are required to allow efficient shipping, handling and transport. Without such investments, capacity limitations and other inefficiencies will continue to prevent the fertilizer sector from developing.

Beira Port, which serves several countries in southern Africa, is limited to smaller vessels due to silt buildup at the port entrance. The meeting was advised that plans to dredge the port entrance are underway, and actual dredging is expected to take place within the next few years. There is also a lack of bulk storage capacity. Increased bulk storage capacity will allow more efficient discharge, thus reducing demurrage, and more efficient bagging and handling.

Port rehabilitation activities and resources should concentrate on Beira Port at this stage. Although Nacala Port can accommodate larger vessels (25,000 mt), the port's handling capacity is low and is in poor condition and will require substantial investment. In addition, the railway line and road access are in poor condition.

Establishing bulk-holding fertilizer warehouses will be beneficial. Beira was identified as a priority port for such a warehouse. IFDC's prefeasibility study on establishing a regional fertilizer-holding warehouse at the port of Beira was discussed and endorsed for further action.

Performance of Regional Input Markets

Policy: The Kenyan fertilizer market is one of the few African success stories that demonstrate how input markets can function under fully liberalized conditions. Competition, vertical integration within the fertilizer supply chain, economies of scale and overall growth in the sector have resulted in significant efficiency gains and cost reductions. During the period 1990–2006, marketing costs and margins have declined by about 40 percent. The success of the Kenyan fertilizer industry has been attributed primarily to a stable policy environment since 1990. For example, import licensing quotas were eliminated, and foreign exchange controls and retail price controls were removed during that time. Importantly, no large subsidy programs have been implemented, and market distortions caused by artificially low fertilizer prices offered by donors or government have been kept to a minimum. This has undoubtedly boosted the confidence in the market by the private sector. Regrettably, in 2008, the Kenyan government decided to engage directly in the market by importing fertilizers.

Reducing marketing costs: In addition to market-friendly policies and competition among market participants, other measures are required to reduce costs along the agricultural input supply chain. Marketing costs in Sub-Saharan Africa (SSA) are extremely high compared to countries in Asia. Ocean freight and land transport costs are two to three times higher than those incurred in Asia, caused by the use of smaller vessel sizes due to port capacity constraints and the poor quality of inland road and rail infrastructure. Tariff and non-tariff barriers for imports and goods in transit add to the marketing costs. In addition, the relatively small market and the use of many different specialized NPK compounds prevent economies of scale from being achieved through bulk procurement. The establishment of a bulk warehousing facility at Beira Port has the potential of reducing the cost of fertilizer imports by $30–$60/mt.

Stimulating local production of fertilizer is high on the regional and national policy agendas. The company Minjingu Mines and Fertilizer, based in Tanzania, represents a good example of how a former state-owned company was successfully privatized.

Regulatory issues: Regulatory frameworks governing intra-regional trade in fertilizer, seed and crop protection products (CPPs) are either absent or not implemented. In the case of seed and CPPs, regulatory frameworks have been developed at the regional level (SADC, ECOWAS), and the challenge now is to ensure implementation and enforcement.

The absence of a regulatory framework for fertilizer constitutes a significant non-tariff barrier that impedes trade and hinders investment and market development. In the context of international trade, non-tariff measures are dealt with under specific World Trade Organization (WTO) agreements, such as the Agreement on Agriculture and the Agreement on Technical Barriers to Trade (TBT). Technical barriers to trade are defined by WTO as regulations, standards, testing and certification procedures, which could obstruct trade. If regulations are set arbitrarily, they can be used as an excuse for protectionism or otherwise disadvantage market participants. The WTO's TBT Agreement seeks to minimize technical barriers to trade by encouraging members to adhere to a number of basic principles and recognizes that members have the obligation to take measures to ensure quality control; protect human, animal and plant life or health; protect the environment; and prevent malpractice. However, it also states that technical regulations should not create unnecessary obstacles to trade. Under this principle, fertilizer regulations should refrain from prescribing specific nutrient compositions or granule sizes.

Private Sector Development

Developing agricultural input markets cannot be achieved without stimulating private sector activity. In countries where government programs are responsible for distributing subsidized fertilizer and seed, the private sector cannot compete and remains underdeveloped. Therefore, market support mechanisms are required that add to, not displace, commercial activity.

Rather than reducing the price of the product, farmers' purchasing power can be boosted among targeted farmers, creating effective demand and generating market activity. However, long-term sustainability must be taken into account. Voucher programs have been developed as a mechanism to transfer the above-mentioned purchasing power support to targeted beneficiaries. To ensure that farmers will eventually be able to use fertilizer profitably under normal, non-subsidized market conditions, any subsidy or income transfer program should be complemented by programs that, among other things, aim to reduce marketing costs and enhance the availability of commercial credit.

An important dimension of increasing fertilizer use in SSA is the need for improving acidic soils that prevent efficient nutrient uptake. Improving acidic soils by adding lime or reactive phosphate rock can be seen as a public responsibility for which public investments must be made.

Identification of Actions on Key Themes

The outcomes of the presentations and subsequent discussions resulted in an action agenda that addresses short-term and longer term agricultural input development issues. The following eight action areas have been identified:

1. Improve the policy environment by strengthening the policy-making process.
2. Remove barriers to trade.
3. Improve access to finance.
4. Increase African fertilizer production capacity.
5. Enhance the performance of fertilizer procurement from international markets.
6. Facilitate identification of private sector business opportunities.
7. Promote market development.
8. Promote fertilizer technology development and transfer.

For each action area, one or more actions have been identified that will guide ongoing market development efforts at COMESA, EAC, SADC and other RECs, mostly requiring public-private partnerships.

I. Introduction

The ongoing food and fertilizer crises are receiving significant attention from the international donor community and other development partners. During the coming years, substantial financial resources will be made available to SSA for interventions that result in increased food production and access to agricultural inputs. It will be important for African policymakers and the private sector to identify priority areas for intervention. While suitable measures should be implemented to minimize the negative impact of the fertilizer price crisis on food security and agricultural productivity, *caution is needed to ensure that short-term measures do not compromise the medium- and long-term commitments needed for sustainable food security and agricultural growth.* Nor should these measures compromise the limited but promising progress made in promoting private sector participation in input supply systems in SSA.

IFDC, in collaboration with the Common Market for Eastern and Southern Africa (COMESA), convened a policy workshop entitled "Strengthening Trade in Agricultural Inputs in Africa: Issues and Options," held July 1-4, 2008, in Lusaka, Zambia. The workshop was organized as part of the Hewlett Foundation-funded STAR project.

The purpose of the workshop was to identify public policy and private market and trade action areas that will improve agricultural input market and trade development by:

- Sharing information on recent policy and trade developments and initiatives.
- Exposing participants to actual input market situation analyses.
- Facilitating public-private policy dialogue by exchanging ideas and experiences among participants.
- Identifying key policy issues for inclusion in regional and national action plans.
- Facilitating the development of new public-private partnership initiatives.

The workshop was attended by more than 70 participants representing regional and national policymakers; private sector entities involved in fertilizer importation, wholesale and retail trade and logistics; farmer organizations; development partners; and NGOs. The workshop program is attached in Annex II. A list of workshop participants is attached in Annex III.

The workshop included discussions on:

- African agricultural sector development.
- Trade development initiatives.
- Global and regional input markets.
- Capacity building and private sector development.
- Identification of actions.

Prior to the policy workshop, IFDC and COMESA convened a private sector roundtable meeting entitled "Expanding Fertilizer Markets in Africa: Issues and Options," held June 30, 2008. This meeting offered a unique private sector perspective on fertilizer market development. Specific issues and actions were identified and validated during the policy workshop.[1]

II. Key Issues in Agricultural Input Market Development

African Agricultural Sector Development

Rising food and fertilizer prices during recent years are having a profound impact on agricultural development and poverty reduction in SSA. According to the International Food Policy Research Institute (IFPRI), increases in global food prices are driven by increased household consumption in emerging economies, notably meat and dairy products, increased competition of food commodities for energy and speculative behavior in commodity markets. Supply cannot keep up with demand: agricultural productivity growth is impaired due to land

[1]See report (page 45) on "Expanding Fertilizer Markets in Africa, Private Sector Roundtable," Lusaka, Zambia, June 30, 2008, for detail.

and water constraints, the effects of climate change and underinvestment in agriculture. High energy prices contribute to increasing production and transport costs, and export bans hinder intra-regional trade.

Population growth and rapid urbanization in Africa are among the factors that are having an impact on food systems in SSA. And food prices are likely to continue to rise. IFPRI estimates that real prices for rice, wheat and maize will increase by 30 to 40 percent by 2050. On the positive side, economic growth and growth in the agricultural sector in SSA have increased during the last five years. Agricultural growth amounted to 2.7 percent in 2002 and 5.0 percent in 2004. However, this growth may not necessarily benefit food-insecure households. Higher food prices are likely to benefit surplus farmers (i.e., net sellers), but will disadvantage many net food buyers in both rural and urban areas, many of whom are smallholder farmers, and may thus exacerbate poverty and inequality. Negative impacts of rising food prices will also include a loss of available land for food production among land insecure households and a likely increase of land prices and rents. Also, the demand for fertilizer for high-value bio-fuel crops may cause further fertilizer price increases.

To expand and intensify agriculture in SSA, investment levels in the agricultural sector must be scaled up. NEPAD's Comprehensive Africa Agriculture Development Program (CAADP) has the mandate to achieve a minimum of 6.0 percent agricultural sector growth annually and to invest 10 percent of the annual government budget in the sector. In eastern and southern Africa, COMESA has taken a lead role in the process at the regional level, supporting country-level adoption and implementation of the plan. Rwanda has made particularly good progress and is currently the only country with a CAADP Compact in place, which means that the CAADP development framework has been integrated in that country's agricultural policy and national development strategy.

Enhancing international and regional trade has been recognized as a major opportunity that will improve the performance of agricultural input markets. The *Abuja Declaration* calls for appropriate measures to reduce the cost of fertilizer procurement at national and regional levels.

NEPAD reported progress on several initiatives that address key resolutions of the *Abuja Declaration*. The Regional Joint Fertilizer Procurement Initiative, led by the AfDB, aims to address Resolution 8 of the *Abuja Declaration* by encouraging and facilitating governments and private firms to place large orders on the international market. A regional meeting was convened in August 2007, which resulted in the establishment of a Regional Joint Procurement Working Committee for Fertilizers to spearhead the initiative. The promotion of fertilizer production, as mandated in Resolution 9 of the *Abuja Declaration*, is being pursued by COMESA and SADC and other development agencies, including IFDC. COMESA has met with Nitrogen Chemicals of Zambia (NCZ) to explore options to rehabilitate the plant and make it a commercially viable enterprise. SADC will commission a series of studies to establish the current production status of fertilizer in the region and recommend ways to increase production.

The *Abuja Declaration* also calls for harmonization of policies to ensure duty- and tax-free movement of fertilizer across regions and the development of capacity for quality control. *When the COMESA Customs Union is in place, the Common External Tariff (CET) for all imported fertilizers has been proposed at 0 percent.* At the EAC, a new Agricultural and Rural Development Policy and Strategy document has been adopted. *Also, the EAC CET for all imported fertilizers will be 0 percent. Trade within the EAC already attracts zero tariffs.* This sets a good example for other RECs to promote duty- and tax-free movement of fertilizer across borders. Six ECOWAS member states are in the process of developing fertilizer legislation and supporting regulations.

A Private Sector Perspective on Expanding Fertilizer Markets in Africa

Prior to the workshop, a private sector roundtable meeting was convened to discuss issues and identify options for expanding fertilizer markets in Africa. The key issues facing the private sector were identified as follows:

Increasing Fertilizer Production Capacity

High international fertilizer prices suggest that local and regional fertilizer production may be financially and economically viable. However, for urea and ammonium nitrate, it takes four to five years before a new plant is fully operational, so adding new nitrogen (N) manufacturing capacity is a long-term solution. For the short-term, utilization of existing capacity should be improved and re-investment considered. Several fertilizer plants (e.g., in

Malawi, Zambia and Zimbabwe) are either operating below capacity or have completely shut down. While SADC and COMESA are committed to exploring the potential for rehabilitation of these facilities, the private sector encourages policymakers to create commercial investment opportunities.

Procurement and Distribution of Fertilizer

Sufficient cash flow is a prerequisite for successful fertilizer trade and distribution. Yet, procurement and marketing of fertilizers are constrained by a lack of finance, limiting transaction sizes, inventories and final consumption levels. It stifles total volumes traded and marketed and inhibits the achievement of economies of scale. This reflects a generally risk-averse approach of commercial banks toward agricultural lending. Capacity building among commercial bank loan officers and the introduction of risk management instruments and other risk-reducing mechanisms may help in overcoming this key constraint.

The meeting also considered several policy issues. First, regarding the role of government in input markets and its relationship with the private sector requires more realistic planning. When the private sector is invited to tender for supplying government programs, tender rules and procedures require that physical stocks are already positioned in-country prior to tendering. This requirement poses too high a risk for firms and should be addressed. Rather, the requirement should focus on the capacity of a firm to import fertilizer within a reasonable timeframe after the tender has been awarded.

Second, where government programs exist, subsidies were considered to distort markets and inhibit private sector participation in market development. Moreover, fertilizer sales through subsidy programs tend to discourage and displace commercial sales. There is a need to improve subsidy programs and to include clear modalities for phasing out government market interventions. It was generally agreed that any short-term interventions by national governments and development partners must be market friendly.

Third, COMESA's approach to regional procurement was met with skepticism because it appears to revolve around pooling public procurement among various countries. It was believed that true marketing efficiency gains can be made only by improving the private sector supply chain at various levels and on encouraging economies of scale, not on facilitating procurement for government programs or the placing of large orders by donors. Encouraging economies of scale can include facilitating private stockholding and wholesaling at strategic ports. Resolving finance and other marketing efficiency enhancing measures can then focus on downstream regional marketing and distribution. Partnerships are needed for this. The private sector should be more involved in COMESA's regional procurement planning process to ensure that workable solutions are developed. *While the regional procurement by COMESA or public sector agencies was discouraged, the establishment of a regional holding fertilizer warehouse in port cities like Beira, Dar es Salaam, and Accra to benefit from economies of scale in procurement was endorsed.*

Fourth, to improve the policymaking process, it was suggested that an information network be established that shares real-time information on current agricultural and trade policy to the private sector, enabling timely policy dialogue and thus mitigating the possible negative impact of market distortions and other effects of government programs.

Fifth, regarding finance issues, it was recommended that the COMESA Business Council include the fertilizer sector and the agricultural sector as a whole in its discussions on government policy. The council should be requested to assist in preparing a proposal for enhancing import/trade finance, possibly accessing Preferential Trade Area (PTA) Bank resources. Given that PTA bank resources alone may not be sufficient, a recommendation was made that a basket of funds be established, pooling resources from donors, the AfDB and governments.

In support of the above, policy analysis and capacity building among policymakers are required to overcome the current policy constraints.

Shipping and Handling

Investments in infrastructure are required to allow efficient shipping, handling and transport. Without such investments, capacity limitations and other inefficiencies will continue to prevent the fertilizer sector from developing. A number of specific issues were raised.

Imports of ammonia are hampered by a lack of port-side handling facilities. On the southeastern coast of Africa, only Richards Bay has ammonia offloading and storage facilities. Nitrogen Chemicals of Zambia mentioned that there is a lack of rail tankers to transport ammonia.

Beira Port, which serves several countries in southern Africa, is limited to smaller vessels due to silt buildup at the port entrance. The meeting was advised that plans to dredge the port entrance are underway, and actual dredging is expected to take place within the next few years. There is also a lack of bulk storage capacity. Increased bulk storage capacity will allow more efficient discharge, thus reducing demurrage, and more efficient bagging and handling.

There was consensus among the private sector that port rehabilitation activities and resources should concentrate on Beira Port at this stage. Although Nacala Port can accommodate larger vessels (25,000 mt), the port's handling capacity is low and is in poor condition and will require substantial investment. In addition, the railway line and road access are in poor condition.

With regard to regional procurement, syndication of small importers to achieve economies of scale did not receive support from participants of the roundtable meeting, mostly because it was felt that it did not address the real problem and would be difficult to coordinate. However, it has to be mentioned that the private sector from countries with extremely low annual fertilizer consumption was not represented at the meeting. It is conceivable that importers from countries with extremely low fertilizer import requirements, such as Burundi and Rwanda, may well benefit from placing a pooled order for a large shipment of fertilizer rather than placing an order for a few thousand metric tons only. As illustrated in Table 1 below, 25 of the 44 countries in SSA used less than 25,000 mt of fertilizer annually during 2000–2002. Most of these market requirements are imported in small volumes at high prices by local importers.

Table 1. Distribution of Countries in Sub-Saharan Africa by Level of Fertilizer Use (2000–2002 Annual Average)

Fertilizer Use (product mt)	Number of Countries
Less than 25,000	25
25,000 – 75,000	6
75,000 – 125,000	6
125,000 – 250,000	3
250,000 – 375,000	3
Over 375,000	1
Total	44

Source: Derived from FAO data.

It was generally agreed that bulk-holding fertilizer warehouses would be beneficial. One or more large manufacturers or trading companies could place fertilizer in the warehouse from which parcels of fertilizer would be purchased by small importers, who would thus reduce credit days and draw the material when they need it at competitive global prices. Beira was identified as a priority port for such a warehouse. IFDC's prefeasibility study on establishing a regional fertilizer-holding warehouse at the Port of Beira was discussed and endorsed for further action.

On transport, border crossings are a significant source of inefficiency, causing extremely high turnaround time for trucks. In addition, the many road blocks and poor state of the roads cause significant time and fuel inefficiencies. It was recommended that transit rules and regulations be harmonized and that COMESA Free Trade

Area commitments are adhered to. This may require an inspectorate and the commitment to follow up on the enforcement of rules.

Regarding road infrastructure, investment is needed to improve rural roads. Improvements on the TAZARA railway line, especially additional covered railway wagons, were also suggested.

Lastly, it was concluded that the fertilizer sector needs to be represented at the Africa Infrastructure Facility, hosted by NEPAD.

Performance of Regional Input Markets

Policy is the Key to Success

The Kenyan fertilizer market is one of the few African success stories that demonstrate how input markets can function under fully liberalized conditions. Total fertilizer consumption in Kenya increased from approximately 230,000 mt in 1990 to more than 400,000 mt of fertilizer products in 2007, nearly all of which was imported by the private sector. Fertilizer use among smallholder farmers is high. Some 76 percent of all farming households used fertilizer in 2006/07, compared with 43 percent in 1995/96. There is a highly active private sector, comprising 11 importers, about 500 wholesalers and several thousand retailers. This dense distribution network has reduced the average distance that a farmer has to travel to the nearest retailer from 8.4 km in 1997 to 4.3 km in 2004. Competition, vertical integration within the fertilizer supply chain, economies of scale and overall growth in the sector have resulted in significant efficiency gains and cost reductions. During 1990–2006, marketing costs and margins[2] declined by about 40 percent.

The success of the Kenyan fertilizer industry has been attributed primarily to a stable policy environment since 1990. For example, import licensing quotas were eliminated, and foreign exchange controls and retail price controls were removed during that time. Importantly, no large subsidy programs have been implemented, and market distortions caused by artificially low fertilizer prices offered by donors or government have been kept to a minimum. This has undoubtedly boosted the confidence in the market by the private sector. Regrettably, in 2008, the Kenyan government decided to engage directly in the market by importing fertilizers.

The Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN) has identified a number of capacity building priorities that will enhance the policymaking process. This involves state and non-state entities. State entities include analysts and policymakers from key government institutions. Non-state entities include researchers, farmers, consumers and the private sector. One key factor in this process is to develop capacity to interpret and use empirical evidence for policymaking. For such a process to take place, good governance and policy transparency are important.

Identifying Ways to Reduce Marketing Costs

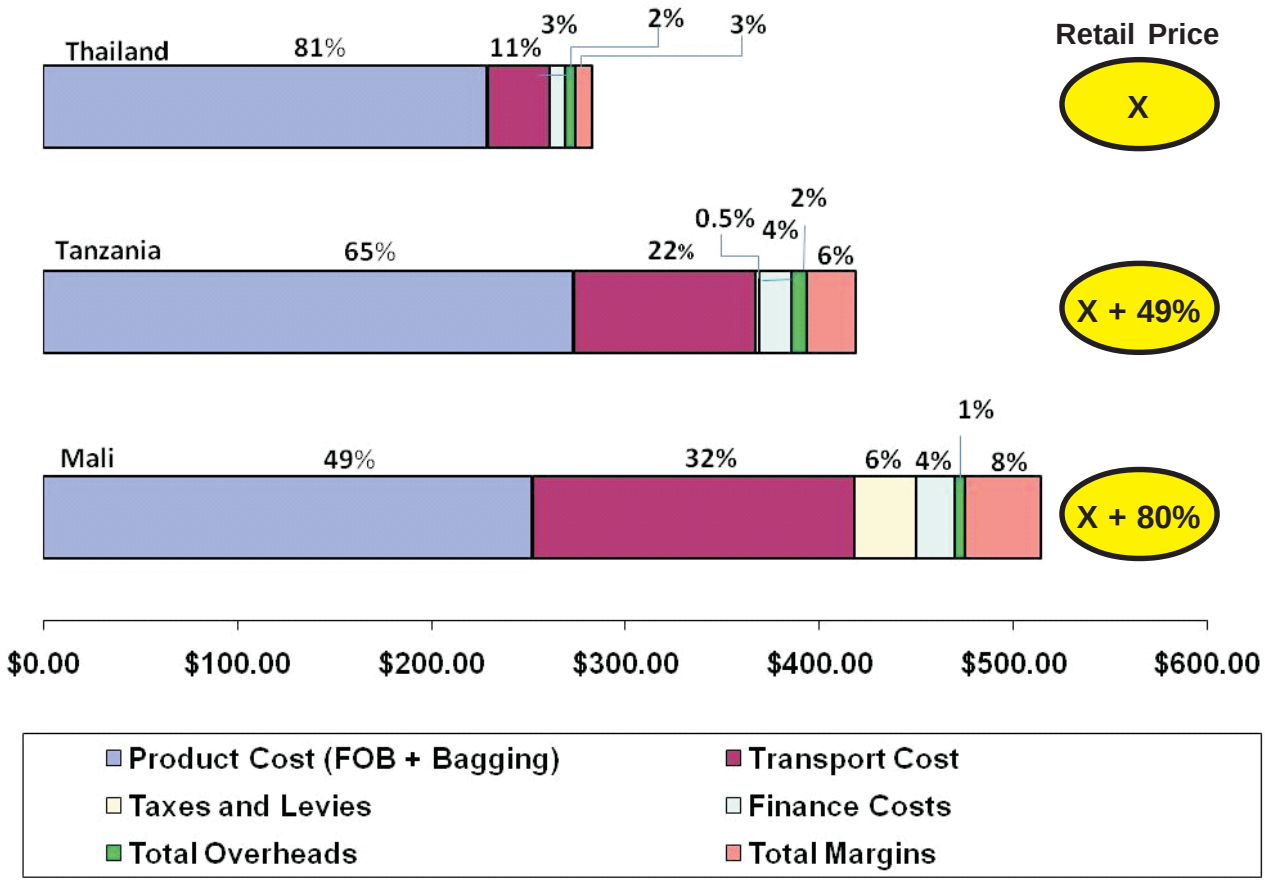
In addition to market-friendly policies and competition among market participants, other measures are required to reduce costs along the supply chain of agricultural inputs. A study conducted by IFDC and Chemonics in 2006, commissioned by the Bill and Melinda Gates Foundation, has provided important insights in the cost buildup of fertilizer in Africa. The findings suggest that marketing costs in SSA are extremely high compared with countries in Asia (Figure 1). Ocean freight and land transport costs are two to three times higher than those incurred in Asia because of the use of smaller vessel sizes. This is due to port capacity constraints and the poor quality of inland road and rail infrastructure. Tariff and non-tariff barriers for imports and goods in transit add further to the marketing costs.

In addition, the relatively small market and the use of many different specialized NPK compounds prevent economies of scale from being achieved through bulk procurement.

The regional bulk input procurement initiative at COMESA has been discussed in a previous section of this report. It was emphasized that the private sector should be the main driver of the process. In that context, the ongoing Beira bulk warehousing initiative was seen as an important project that offers real potential for significant cost reductions and trade opportunities.

[2]Marketing costs and margins in this case are measured as the difference between the c.i.f. Mombasa price and the wholesale price at major markets.

Fertilizer Price Formation: Thailand vs. Sub-Saharan Africa



The establishment of a bulk warehousing facility has the potential of reducing the cost of fertilizer imports by $30–$60/mt. It would enable a year-round availability of fertilizer (urea in the first instance) and in relatively small lots (e.g., 1,000 mt). This, in turn, would reduce inventory levels by importers, reducing the financial and logistical burden.

The project has generated considerable interest from the private sector. Cornelder, the firm that currently manages Beira Port, has expressed an interest in managing the warehouse operations. Commercial importers in Mozambique and Malawi as well as large multinationals have expressed an interest in using the facility. Different options for financing and ownership of the facility are currently being explored among private firms, commercial banks, the AfDB and various donors.

Stimulating local production of fertilizer is high on the regional and national policy agendas. The Minjingu Mines and Fertilizer Company, based in Tanzania, represents a good example of how a former state-owned company was successfully privatized. The company is expected to be capable of producing some 200,000 mt of phosphate rock per year. The phosphate is particularly suitable for acidic soils and the company expects to increase its exports to countries in eastern and southern Africa. NCZ, on the other hand, is still 100 percent owned by the Zambian Government. Efforts to privatize the company failed during the late 1990s. The plant will require significant rehabilitation, and successful commercial operation will require substantial financial liabilities to be settled. A prefeasibility study by SADC and IFDC is scheduled for late 2008 or early 2009.

Avoiding Unnecessary Obstacles to Trade in Fertilizer by Developing a Regulatory Framework

Regulatory frameworks governing intra-regional trade in fertilizer, seed and CPPs are either absent or not implemented. In the case of seed and CPPs, regulatory frameworks have been developed at the regional level (SADC, ECOWAS), and the challenge now is to ensure implementation and enforcement.

The absence of a regulatory framework for fertilizer constitutes a major non-tariff barrier that impedes trade and hinders investment and market development. In the context of international trade, non-tariff measures are dealt with under specific WTO agreements, such as the Agreement on Agriculture and the Agreement on TBT. Technical barriers to trade are defined by WTO as regulations, standards, testing and certification procedures that could obstruct trade. Among countries and continents, technical regulations, product standards and conformity assessment procedures vary a great deal and often pose substantial obstacles to international trade. If regulations are set arbitrarily, they can be used as an excuse for protectionism or otherwise disadvantage market participants. The WTO's TBT Agreement seeks to minimize technical barriers to trade by encouraging members to adhere to several basic principles and recognizes that members have the obligation to take measures to ensure quality control, protect the environment, prevent malpractice and protect human, animal and plant life or health. However, it also states that technical regulations should not create unnecessary obstacles to trade. Procedures used to decide whether a product conforms to relevant standards have to be fair and equitable and should not give domestically produced goods an unfair advantage. It also calls for mutual recognition of member states' procedures for assessing whether a product conforms to rules and regulations. Without such recognition, products are often required to undergo multiple conformity tests, causing significant delays and additional expenses.

In developing and maintaining meaningful technical regulations and standards for fertilizer products, the TBT Agreement encourages members to use the WTO Code of Good Practice for the Preparation, Adoption and Application of Standards and to apply existing international standards and regulations as appropriate.

Because the policy objectives that guide fertilizer regulations focus largely on health, national security and the environment, technical regulations should be limited to defining maximum and/or minimum levels of harmful chemical substances and other technical attributes that are relevant to these policy objectives. Under the principle of avoidance of unnecessary obstacles to trade, regulations should refrain from prescribing specific nutrient compositions or granule sizes.

Private Sector Development

Developing agricultural input markets cannot be achieved without stimulating private sector activity. In countries where government programs are responsible for distributing subsidized fertilizer and seed, the private sector cannot compete and remains underdeveloped. For example, in Malawi, input distribution at subsidized prices by government has displaced commercial market transactions to some extent (Figure 2).

Survey evidence suggests that commercial fertilizer purchases have been crowded out somewhat by subsidized fertilizer between 2003 and 2007. Farm households that acquired both government and commercial fertilizer were surveyed by the National Statistical Office in both 2003 and 2007. The change in households' commercial fertilizer purchases compared with fertilizer acquired from the government was

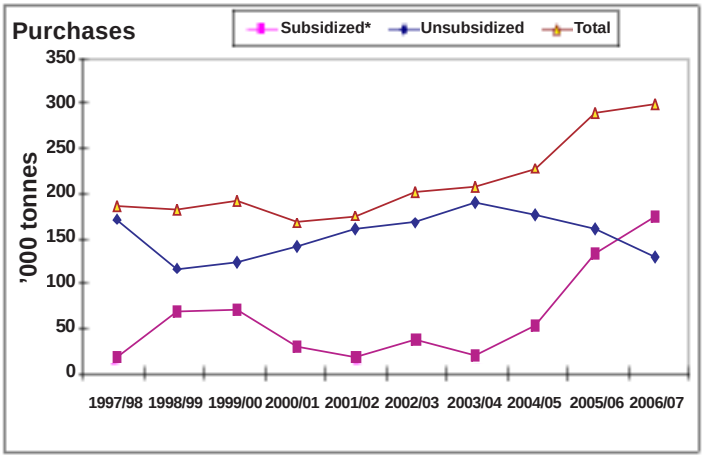


Figure 2. Fertilizer Purchases by Farmers in Malawi

Source: Dorward et al., 2008, presented by Michigan State University.

measured. Each additional ton of government-subsidized fertilizer distributed to smallholder farmers contributed 0.52 mt of additional fertilizer use on their fields. However, even though overall commercial sales decline as government-subsidized fertilizer is made available, the displacement occurs primarily among wealthier farmers. Each additional ton of subsidized fertilizer distributed to wealthier farmers added only 0.15 mt of additional fertilizer used on their fields, while the additional use among poor farmers was 0.72 mt (Minde et al., 2008). Thus, subsidized fertilizer, if well targeted among poorer households, tends to add rather than displace.

Therefore, market support mechanisms are required that are designed to add to, not displace, commercial activity. Rather than reducing the price of the product, farmers' purchasing power can be boosted among targeted farmers, creating effective demand and generating market activity. However, long-term sustainability needs to be taken into account. Voucher programs have been developed as a mechanism to transfer the above-mentioned purchasing power support to targeted beneficiaries. To ensure that farmers will eventually be able to use fertilizer profitably under normal, non-subsidized market conditions, any subsidy or income transfer program should be complemented by programs that, among other things, aim to reduce marketing costs and enhance the availability of commercial credit.

In Malawi, the Sustaining Productive Livelihoods Through Inputs for Assets (SPLIFA) project aimed at providing a market-friendly support mechanism to enable smalholder farmers gain access to markets and services through the improvement of rural feeder roads. The program explored new methods of welfare transfers and targeting beneficiaries, and developed the private sector input market network. The program was based on promoting community work in exchange for input vouchers that farmers used to acquire inputs from private retailers. Yields increased significantly in the first year, but there was a slight decline in the second year because of drought. Some 200 agro-dealers were trained and 70 percent reinvested their commission from the voucher system in their businesses. A significant number of agro-dealers provided backup services to their clients. The voucher system as implemented under the SPLIFA program provided a flexible intervention that developed input markets for the food-insecure households. It provided a means for targeting recipients, which stimulated demand for inputs, and thus provided a mechanism for channeling "smart subsidies."

An important dimension of increasing fertilizer use in SSA is the need for improving acidic soils that prevent efficient nutrient uptake. Improving acidic soils by adding lime or reactive phosphate rock is a public responsibility for which public investments need to be made.

III. Identification of Actions on Key Themes

For group discussions, participants were divided into three groups:

- Policy and regulation.
- Capacity building.
- Regional integration.

The outcomes of the presentations and subsequent discussions resulted in an action agenda that addresses short-term and longer-term agricultural input development issues. The following eight action areas have been identified.

1. Improve the policy environment by strengthening the policymaking process.
2. Remove barriers to trade.
3. Improve access to finance.
4. Increase African fertilizer production capacity.
5. Enhance the performance of fertilizer procurement from international markets.
6. Facilitate identification of private sector business opportunities.
7. Promote market development.
8. Promote fertilizer technology development and transfer.

For each action area, one or more actions have been identified. Action areas and proposed actions are outlined below and will guide ongoing market development efforts at COMESA, EAC, SADC and other RECs. The

issue of coordination of development efforts is briefly discussed, highlighting the importance of alliance structures that are needed to form public-private partnerships to implement specific projects.

Action Area 1. Improve the Policy Environment by Strengthening the Policymaking Process

Policy is a key cross-cutting issue. Policy inconsistency, lack of transparency and policies that are not conducive to private sector development affect all levels of the agricultural input supply chain. Participants called for the development of sound policies, which can only be achieved by building policymakers' capacity and by designing policies in a collaborative manner, involving the private sector and other relevant stakeholders in the agricultural sector. To improve the policymaking process, the following specific actions should be considered.

Action 1.1: Facilitate the establishment of the proposed Fertilizer Association of Africa (FAA), an association of private sector players involved in fertilizer manufacturing, trading, transportation and distribution in SSA. The formation of the FAA was proposed by the private sector during its roundtable meeting and welcomed by workshop participants.

The FAA will enable the fertilizer sector to speak with one voice, develop standards, share information and achieve economies of scale in capacity building. The FAA will be formed from existing regional associations and grow as other regional associations join. The FAA will form partnerships with the public sector, development partners and other private sector associations. Key partners will include the International Fertilizer Industry Association (IFA), the Arab Fertilizer Association (AFA), the Fertilizer Society of South Africa (FSSA) and African RECs.

Action 1.2: Facilitate policy analysis and dialogue and build policymaking capacity. Making the policy environment consistent and conducive for agricultural input market development remains a challenge. There is an immediate need to sponsor and participate in assessments of country-level marketing and trade policies and conduct policy dialogue to promote policy consistency and harmonization at the national and regional levels. Policy analysis and capacity-building efforts should support and complement CAADP development framework and the 2006 *Abuja Declaration*. COMESA has begun implementation of the STAR project and the Africa Agricultural Market Program (AAMP), which are designed to accomplish this.

Action 1.3: Convene annual roundtable meetings among policymakers and other sector stakeholders. Conveners can be the FAA and RECs in collaboration with IFDC and other organizations.

Action 1.4: Develop a fertilizer supply chain mapping system that monitors trade flows, cost buildups within the chain and trade performance along key development corridors. The aim will be to identify issues and constraints and inform the policy development agenda.

Action 1.5: Develop and operate a fertilizer policy, market and trade information network that supports all of the above action areas. Important partners will be the FAA and the RECs that have a mandate to develop agriculture and trade in the various regions and whose regional policymaking processes will require coordination and support.

Action Area 2. Remove Barriers to Trade

Workshop participants identified tariff and non-tariff trade barriers as key constraints that add cost and other inefficiencies to the input supply chain. While progress is being made on seed regulatory frameworks in the SADC, ECOWAS and West African Economic and Monetary Union (UEMOA) regions, an absence of, or inconsistency among, fertilizer regulatory frameworks is one area that needs assistance. Contrary to the *Abuja Declaration*, a number of countries impose import duties on fertilizer or ad hoc export restrictions. In addition, various fees and other trade barriers related to transport, transit and border procedures are restricting free movement of agricultural inputs.

Action 2.1: Remove duties and taxes on fertilizer imports and exports, allowing free movement of fertilizer across borders, thus promoting the implementation of *Abuja Declaration* Resolution 2. This includes the removal of non-tariff barriers that can be classified as *unnecessary obstacles to trade*, according to WTO Market Access provisions. RECs are well positioned for implementation. The EAC has made considerable progress, and other RECs can learn from the EAC's achievements in this area.

Action 2.2: Develop a harmonized regulatory framework for fertilizer and national-level implementation modalities in line with *Abuja Declaration* Resolution 2. RECs are well positioned to implement this.

Action 2.3: Promote further development of seed trade protocols and ensure that the protocols are implemented consistently. Progress has been made at ECOWAS, UEMOA and SADC, but more needs to be done, especially at the implementation and enforcement levels.

Action Area 3. Improve Access to Finance

Given the current global credit crisis, a lack of access to finance was identified as a critical constraint. It is negatively affecting the supply and use of fertilizers. An expansion of seasonal credit and trade finance is required to eliminate cash flow constraints among producers, retailers, wholesalers and importers.

Action 3.1: Enhance access to finance for importers, wholesalers, retailers and farmers. The objective is not to create another financing facility, but to encourage commercial and development banks to engage in commercial lending for fertilizer imports, marketing, and farm-level consumption. Currently, banks have sufficient liquidity but are risk-averse toward agriculture and agribusiness. Technical support and risk management tools can be developed and provided, nurturing the commercial interest in agribusiness among banks. Technical support to commercial banks can include linkages with providers and facilitators of commercial risk management instruments and providers of loan guarantee programs.

Action Area 4. Increase African Fertilizer Production Capacity

As identified during the Africa Fertilizer Summit and mandated by the SADC Council of Ministers, assessing the feasibility of increasing African fertilizer production capacity has become a priority area for SADC. This was discussed extensively during the workshop.

Action 4.1: Conduct feasibility studies for improving capacity utilization of existing plants and for building new plants in Africa. Recent increases in fertilizer prices have changed the economics of fertilizer production. Several existing plants in Africa are operating at suboptimal capacity. Techno-economic assessments of these plants should be conducted to improve capacity utilization. Because many African countries are endowed with raw materials (natural gas, phosphate rock and others), the viability of fertilizer production for national and regional markets should be explored. Coordinated efforts are needed to build on ongoing efforts involving SADC, IFDC, the World Bank and country-level partners. These efforts should increase the geographical coverage and ensure follow-up action where investments are considered feasible.

Action Area 5. Enhance the Performance of Fertilizer Procurement from International Markets

As identified during the Africa Fertilizer Summit and mandated by ministers of agriculture in the COMESA region, there is a need to improve the efficiency of international fertilizer imports. The assumption has been that larger bulk orders would reduce unit costs, and the term “regional procurement” has been used in recent discussions. Regional procurement can be done by governments or by private firms, depending on the structure of the market and the roles of government and the private sector in a particular country.

COMESA’s approach to regional procurement was met with skepticism by the private sector because it appeared to focus on pooling public procurement among various countries. It was believed that true marketing efficiency gains can be made only by improving the private sector supply chain at various levels (for example, at a strategically located seaport by facilitating private stockholding and wholesaling). Hence, developing port-level supplies of fertilizer by larger firms should be explored further. Partnerships are needed to achieve this.

Action 5.1: Involve the private sector in COMESA’s regional procurement planning process to ensure that workable solutions are developed. While the regional procurement by COMESA or public sector agencies was discouraged, the establishment of a regional holding fertilizer warehouse in port cities like Beira, Dar es Salaam and Accra to benefit from economies of scale in procurement was endorsed.

Action 5.2: Continue exploring the feasibility of establishing regional fertilizer holding warehouses at key ports. A prefeasibility study by IFDC has indicated that the establishment of a large warehouse at the Port of Beira will allow small importers from Malawi, Mozambique and Zambia to access fertilizers at cost-effective

prices and in a timely manner. Feasibility studies for establishing such warehouses at other ports such as Dar es Salaam, Accra and Dakar should be considered.

Action Area 6. Facilitate Identification of Private Sector Business Opportunities

Linkages among players within the fertilizer supply chain are generally weak. Facilitating the development of commercial business linkages will increase the number of transactions and improve the overall performance of the sector.

Action 6.1: Develop a marketing and trade information network. Information on agricultural input prices, trading opportunities, market outlook and issues relevant to the private sector is currently not readily available. Improving market transparency will enhance the overall performance of the agricultural input sector.

Action 6.2: Identify private sector investment opportunities. A dedicated effort is required to support private sector investment initiatives, especially those investments that involve the public sector. As the viability of existing fertilizer production facilities is assessed (Action Area 3), issues of privatization of state enterprises in support of private investment may arise. Likewise, in assessing the feasibility of private investment in warehouses, rolling stock and other infrastructure, dialogue with policymakers and state enterprises will be required to ensure that the investment and trading climate is favorable.

Action Area 7. Promote Market Development

In many countries in SSA, less than 30 percent of smallholder farmers use fertilizer and improved seed. Promoting modern fertilizer and seed technology among non-users will require a substantial market development effort and sound government policies to ensure that this process results in commercially viable, private sector-based input marketing systems.

Action 7.1: Develop agro-dealer networks. An important element of market development is increasing the technical and managerial capacity of agro-dealers, their linkages to farmers and suppliers and their ability to create demand for their products. Improving the agri-input distribution network at the rural level is the main vehicle for effectively increasing agricultural input use among smallholders.

At the country level, public-private partnerships are required to ensure that market development efforts by agro-dealers are complemented by sound policies and market-friendly public support mechanisms.

Action 7.2: Introduce market-friendly safety nets. Given the high price of fertilizer combined with the urgent need to increase fertilizer use in the short-term, market-friendly support mechanisms aimed at farmers are required. For example, an ongoing planning effort in Mozambique requires funding to administer a multi-year program that promotes fertilizer and seed among some 200,000 farmers who are currently not using improved inputs.

Given the contrasting objectives of protecting consumers, farmers and the private sector, sound design of such support programs requires careful planning and should involve public and private stakeholders at the national level. In a number of countries, there is interest in input voucher programs. These existing opportunities can be developed into programs for implementation in the short-term.

Action Area 8. Fertilizer Technology Development and Transfer

In addition to supply chain issues, constraints and opportunities on the demand side were discussed. Reducing costs and making fertilizer more accessible among smallholder farmers can partly be achieved by enhancing the efficiency of fertilizer products and seed.

Action 8.1: Review fertilizer recommendations in SSA to ensure that fertilizer products suit plant requirements and soil conditions, maximizing the efficiency and profitability of fertilizer use. This includes the restoration of acidic soils to increase mineral fertilizer uptake by plants. At the same time, final fertilizer product and nutrient specifications should be standardized to the extent possible to encourage bulk procurement, rather than the procurement of small, expensive, made-to-order consignments. In areas where specialized fertilizers are required, local blending can be encouraged, allowing bulk procurement of the raw materials.

Action 8.2: Promote innovative, viable, and sound fertilizer and seed technologies by encouraging research that focuses on improved nutrient efficiency. The urea deep placement technology in wetland rice production, which has the potential of doubling N-use efficiency, is one example of an existing technology that can be replicated in SSA. Crop variety development may also have the potential to improve the efficiency of nutrient use by plants.

The Need for Coordination Through Stakeholder Alliances

Coordination is required to implement the above action items. The STAR project has the capacity to play a facilitating role, because it currently provides support to COMESA, EAC and SADC and will be able to help develop activities for several of the above action areas. However, additional coordination efforts are needed for the three main agricultural input categories: seed, fertilizer and CPPs. Existing structures exist for the seed and CPP sectors through seed alliances and CPP industry associations.

Nevertheless, there is currently no regional or SSA body that represents the fertilizer industry or its stakeholders. The desire expressed by the private sector to form the FAA confirms that there is a need for industry coordination and that this is an initiative that deserves support. Initiatives that aim to develop the fertilizer industry need support from national governments, RECs, donors and the private sector. To coordinate these multi-stakeholder efforts, an alliance structure is recommended, starting with an Africa-wide alliance for fertilizer development. A suggested name is the Alliance for Fertilizer Development in Africa (AFDA).[3] Such an alliance would have the potential to develop an African fertilizer development agenda, form public-private partnerships for specific activities and attract public and private investment to implement activities. For now, coordination of activities identified during the workshop will be facilitated by COMESA, EAC and SADC and supported by IFDC under the STAR project.

[3]Although alliance structures for fertilizer were briefly discussed during the workshop, this name is merely a suggestion from the editors of this report.

Annex I. Proceedings

1. Opening Session

Official Opening by Deputy Minister of Agriculture and Cooperatives Honorable Daniel Kalenga (MP)

The meeting was officially opened by the Deputy Minister of Agriculture and Cooperatives, Honorable Daniel Kalenga. In his opening remarks, he welcomed the participants to the first regional workshop on Strengthening Trade in Agricultural Inputs at the Regional Level in Africa. Kalenga said the meeting was timely and well received by the Zambian government. He said the current increases in fertilizer prices called for attention from African governments, the international donor community and other development partners. He said it is important for the participants to identify priority areas and programs for intervention that would spur growth in agricultural input markets. He further highlighted that increasing efficiencies have the potential to reduce retail input prices for the farmers. The interventions must also help create more demand for fertilizer as well as increase agricultural production.

In addition, he indicated that the participants had a dual challenge of protecting smallholder farmers, while promoting competitive markets. He also indicated identifying such interventions and implementation mechanisms was the main task for the meeting. He advised that another area for consideration is the regional bulk-procurement initiative. He said it is crucial for participants to consider the modalities of the joint procurement initiative because it has great potential for reducing costs to the smallholder farmers.

Statement by COMESA Secretary General, Mr. Sindiso Ngwenya

On behalf of Mr. Sindiso Ngwenya, COMESA Secretary General, Dr. Chungu Mwila, Director of Investment Promotion and Private Sector Development, delivered a statement to the meeting participants. Mwila said that the workshop on Strengthening Trade in Agricultural Inputs in Africa came at an opportune time to address the agricultural productivity and food insecurity challenges facing the region. This is particularly true as the region and the world are facing food crises and rising oil prices. He further highlighted that the optimum and sustainable use of fertilizer and improved seed are some of the best strategies for addressing these challenges. Mwila stated that COMESA was addressing the issue on agricultural inputs holistically. Further, COMESA was implementing the inputs program in the context of the *Abuja Declaration*, which called for the elimination of taxes and duties on fertilizers and fertilizer raw materials. COMESA is involved in the establishment of regional procurement and distribution systems, the promotion of national and/or regional fertilizer production and intra-regional trade and enhanced access by farmers to complementary inputs and services, such as improved seed, infrastructure, research and extension.

2. African Agricultural Sector Development

CAADP Overview by Dr. A.E. Daka, COMESA

Dr. A.E. Daka of COMESA made a brief presentation on the CAADP process. Established by NEPAD, CAADP's overall goal is to help African countries reach a higher path of economic growth through agriculture-led development, reducing poverty and hunger according to Millennium Development Goal (MDG) 1.

Daka said that CAADP focuses its interventions through four program pillars. He said that COMESA is supporting the CAADP process by ensuring that its member states purposefully move toward the attainment of MDG 1. COMESA has developed the approach that will be followed at the national and regional levels for CAADP implementation to ensure that agricultural development programs are CAADP-compliant and regional agricultural development programs target the achievement of the MDGs. At the national level, member states follow a nine-step process. So far, only Rwanda had completed the process and most member states were advancing toward the completion of the process. He further reported that a regional partner had been co-opted to assist in the design of the regional CAADP compact.

Implementation of the Abuja Declaration, Dr. Balu Bumb, IFDC

IFDC's Dr. Balu Bumb made a presentation on the implementation of the *Abuja Declaration* on behalf of Dr. Maria Wanzala of NEPAD. The presentation covered progress with respect to all 12 resolutions.

The report highlighted that COMESA had made some progress in implementing the bulk fertilizer procurement initiative, harmonizing fertilizer import regulations and/or procedures, and resuscitating fertilizer production

at NCZ. It was also highlighted that SADC would commission studies to assess the viability and potential for enhancing production capacity within the existing fertilizer plants. Likewise, the EAC had made great inroads in harmonizing import regulations and export procedures. The community has developed and adopted an Agricultural and Rural Development Strategy. The Economic Community for Central African States had gone as far as developing a framework for harmonization of input regulations. Six members of ECOWAS embarked on the process of promulgating legislation and regulations for fertilizer and bulk procurement. The Intergovernmental Authority on Development (IGAD) in Eastern Africa was in the process of initiating fertilizer policy studies.

The report raised concern that there appears to be increasing control and charges on the movement of fertilizer, contrary to the objectives of the *Abuja Declaration*. This was affirmed by the workshop.

Most countries surveyed provide input subsidies although very few provide "smart subsidies." Similarly, a few countries had established vibrant agro-dealer networks and credit guarantee schemes.

Rising Food and Fertilizer Prices on Food Security by Dr. K. Asenso-Okyere, IFPRI

Rising population and urbanization in some Asian countries have led to a change in consumption patterns. These, among other factors, have triggered high food prices. Three quarters of the world's poorest population lives in SSA and spends 50 percent–80 percent of their income on food. SSA is a net food importer. Soils are heavily mined, fertilizer use is below 9 kg/ha and agricultural productivity is very low. Seventeen out of 20 worst performers on the global hunger index are from Africa. And SSA attracts much lower investment in agricultural research and development compared to Asia and Latin America.

World fertilizer prices rose steadily from 2004 to 2006 then skyrocketed in 2007. This was caused by: high fertilizer demand, tight supplies of LPG, higher transport costs, speculative transactions, changing consumption patterns, high food demand due to high incomes and channeling of food into biofuel production, impaired productivity growth, high fuel prices and export bans.

Food prices will remain high with real prices for wheat, maize, rice and meat increasing even more in the foreseeable future. Consequently, food bills for those who depend on staples will increase, exporters will be better off while importers pay more, nutrition for pregnant women will worsen, poverty will worsen, assets will be disposed of, and social unrest will probably increase. This may also prompt a loss of land among the land-insecure due to the possibility of increasing land prices. Agricultural wages may increase and fertilizer may be used on more lucrative biofuel production at the expense of food.

Possible remedies to these challenges include social safety nets, agricultural expansion programs, innovations on agriculture and food systems to increase productivity, design and implementation of "smart subsidy" programs, scaling up investments for agricultural production, curtailment of conflicts and war and control of malaria and HIV/AIDS.

3. Trade Development Initiatives

Challenges in Developing Agricultural Input Markets, Dr. Balu Bumb, IFDC

The socioeconomic challenges facing SSA are food insecurity, low agricultural productivity, low agricultural growth and serious environmental degradation. Agricultural yields have remained stagnant since 1962 and the area under cultivation has increased. Use of fertilizer per hectare remains low. In contrast, yields have risen significantly in Asia with total area under cultivation remaining unchanged.

Agricultural inputs play a significant role in replenishing nutrients, increasing productivity and accelerating agricultural growth. However, agricultural input markets are underdeveloped and fragmented, thereby compromising farmers' access to inputs. Performance of input markets is constrained by factors related to macro policy, finance, human capital, regulatory framework and market information systems.

These constraints can best be addressed within the context of the five pillars of market development (conducive macro policy, finance, human capital, regulatory framework and market information systems) and appropriate institutional framework and ancillary support measures. The ancillary support measures include multi-country market integration, infrastructure development, output market development, technology transfer and poverty alleviation and safety nets. The ideal institutional framework is one that embraces a holistic approach in tackling the challenges, smart partnerships on capital investments and political commitment.

Strengthening Trade at the Regional Level in Agricultural Inputs in Africa (STAR) by J.J. Nijhoff, IFDC, and J. Mathende, COMESA

Mr. Nijhoff highlighted that the project's thrust is to improve market access for African agricultural input traders and farmers by developing national and regional agricultural input markets and improving the availability, quality and affordability of inputs. The project has three main components: building capacity for agricultural input trade policy, regulatory and institutional reforms; expanding market linkages for agricultural input traders, farmers and their associations; and disseminating market information to promote trade.

The project collaborates with COMESA, EAC and SADC, and focuses on regional trade in fertilizer, seed and CPPs. The expected outcomes include an enabling policy environment for trade and market development; enforcement of laws and regulations for quality and standards; reduction in input transaction costs; increased use of agricultural inputs; increased agricultural productivity; and, ultimately, reduced hunger and food insecurity.

Considerable progress has been made in harmonizing import/export procedures for fertilizers. Zero rates of duties on fertilizers have been recommended to the COMESA Trade and Customs Division. Transit charges are harmonized at US $5, $6 and $10 per 100 km for buses, rigid trucks and articulated trucks, respectively. Standard axle weights are 10 mt for drive axle and 8 mt for all the others, and a maximum gross vehicle mass of 53 mt for articulated trucks.

COMESA is working with CropLife and the Eastern and Southern Africa Seed Alliance (ESASA) on harmonization of policies and/or regulations for CPPs and seed, respectively.

The African Agricultural Markets Program, Dr. C. Muyunda, COMESA

The core objectives of the AAMP are to strengthen regional capacity, deepen the policy dialogue, and improve coordination around agricultural input and output markets in eastern and southern Africa. It is being implemented in five countries in COMESA and two countries in SADC and will focus on food staples and agricultural inputs.

The project aims to strengthen the institutional capacity of COMESA; enhance the capacity of decision-makers in policy formulation and analysis through the provision of empirical evidence on input and output markets; and strengthen networks among public and private sectors. Its main activities are policy seminars and outreach, training of relevant stakeholders and country-specific analytical work.

The program will be implemented through COMESA and will build synergies with other projects being implemented by COMESA.

Agricultural Development Initiatives in the East African Community, Mr. T. Wesonga, EAC

Mr. Timothy Wesonga's presentation outlined the stages for economic integration, starting with a customs union through to a common market, monetary union and then federation. He highlighted that agricultural development is framed under CAADP and, in this regard, the community has developed the EAC Development Strategy 2006–2010 and the Agricultural and Rural Policy and Strategy.

Progress with respect to facilitating trade for agricultural inputs includes zero rating of tariffs for fertilizer imports and agro-chemicals earmarked for agriculture, harmonization of policies, standards and regulations (a draft SPS protocol has already been developed) and simplification and harmonization of trade documentation. He indicated that non-tariff barriers (NTBs) are still a major challenge. These include immigration procedures, customs documentation and procedures, police road blocks, duplication of functions and business regulations and licensing.

Measures put in place to address these challenges include reviews of NTBs followed by appropriate recommendations to the Council of Ministers, implementation of the STAR project (which provides a platform for policy advocacy and analysis) and the full implementation of the customs union in 2010.

Agricultural Inputs Production and Market Development Initiatives at SADC, Dr. S. Mwale

Dr. Mwale provided an overview of global fertilizer consumption trends, which show that fertilizer consumption in SSA is the lowest in the world. This is despite the fact that there are abundant fertilizer resources in the region. The importance of fertilizer to plant health and yields was underscored. It was also emphasised that the region generally realizes poor yields owing to low fertilizer usage.

He explained that the Dar es Salaam Declaration put emphasis on the need to exploit the abundant fertilizer resources within the region and full utilization of existing manufacturing capacities. SADC has developed a concept note covering engineering, geological, and economic aspects related to these issues. The next phase will involve the execution of feasibility studies for establishing new factories. SADC is collaborating with IFDC in this area as part of the STAR project.

The catalyzing factors for these initiatives are convergence and harmonization of policies and regulations, a strong private sector, appropriate agricultural policies, infrastructure development and rural input delivery networks.

4. Global and Regional Input Markets

Alternative Approaches to Promoting Sustainable Fertilizer Use in Africa: Analysis of Experience from Kenya, Malawi and Zambia, Dr. J. Govereh, Michigan State University

The presentation made by Dr. Jones Govereh highlighted the success story of Kenya, whose fertilizer market has developed into a highly competitive sector, servicing many smallholder farmers. The Kenyan Government has not participated in that market and has focused on providing the enabling environment. Referring to Malawi and Zambia, Govereh concluded that fertilizer subsidies can help raise production, but there is little sustained benefit after subsidies are withdrawn if public interventions are not carefully planned. The benefits of such programs tend to be disproportionately captured by medium- and larger scale farmers, while they also tend to displace commercial sales. The net increase in fertilizer adoption is minimal.

Fertilizer Supply and Costs in Africa, J.J. Nijhoff, IFDC

Mr. Jan Nijhoff of IFDC made a presentation on a 2006 study on fertilizer supply and demand that was conducted jointly by IFDC and Chemonics International and commissioned by the Gates Foundation. Six significant issues were studied: policy and regulatory environment; human capacity development; supply-side and demand-side issues; research and technology transfer; and transport and logistics. Product sourcing and ocean transportation costs are highly dependent on volumes shipped. Several countries were studied including Ghana, Tanzania, Mozambique, Mali, Uganda, Malawi and Thailand.

The results of the study indicated that ocean freights, in general, are likely to remain high and to SSA, particularly, due to lack of return cargoes. The costs and margins on specialized NPK compounds are also significantly higher than on bulk commodity fertilizers. The presentation also highlighted that local blending can provide products at lower prices. Finance costs are not an important cost component but access to finance is and the development of service industries and competition reduces costs. Infrastructure improvement in ports, rail and roads will lower transportation costs in the long run.

Bulk Warehousing at Beira Port, M. Feisal Beig, IFDC

Mr. Beig gave a presentation on the port of Beira and its current physical and operational status. He highlighted the capacity of the port and its current limitations to fully function and service the region. Nevertheless, he pointed out that the port had the potential to be established as a regional center of procurement because of its good transport support system, which runs through the Beira transport corridor. In addition, the port has good bagging facilities with a capacity to discharge a daily average of 1,200 to 1,500 mt. The port is also serviced by numerous internationally reputable clearing and forwarding agents, such as SDV AMI, Manica, Mocargo and Cotam.

The proposal to establish the port of Beira as a holding warehouse is feasible and the holding warehouse has the potential to develop into a regional procurement center for fertilizers. The port offers the distinct advantages of potentially reducing fertilizer import costs by between $30 and $60/mt. This will have the effect of reducing inventory carrying costs of traders and will help in developing small dealers, thereby ensuring a widespread distribution and availability of fertilizers. Most importantly, regional consumption of urea could increase to a level of 500,000 mt or more per annum.

The proposal offered two options for implementation and follow-up actions for the establishment of the port.

Option 1

A private sector company invests in constructing the warehouse by raising the required equity and arranging a loan. The warehouse can be leased to an international fertilizer supply company to import product and then store

in Beira. The product would then be sold on behalf of international suppliers to local traders against payment, and the investment company would in turn charge international suppliers rent.

Option 2

This option proposes the creation of a public/private sector partnership through a joint venture with investments in equity by the Governments of Mozambique, Zambia and Malawi. The warehouse space can then be leased to international fertilizer suppliers on an annual basis.

5. Capacity Building and Private Sector Development

Outcome of the Private Sector Roundtable Meeting on "Expanding Fertilizer Markets in Africa: Issues and Options," held June 30, 2008, Lusaka, Zambia

Mr. Eben Makonese, facilitator of the private sector roundtable meeting, briefed the workshop on the outcome of the meeting, which was attended by about 30 representatives from the private sector. Makonese discussed the role of the private sector in the expansion of fertilizer markets, the facilitative role of governments, and coordination and support mechanisms required to make fertilizer markets work more effectively.

The key constraints that were most frequently mentioned transcending both demand-side and supply-side were policy inconsistency, limited access to finance for imports and marketing and infrastructure bottlenecks (physical and policy related).

In addition, the meeting suggested that regional procurement must focus on improving the private sector supply chain at different points and on encouraging economies of scale, not on facilitating procurement for government programs or the placing of large orders by donors. Details of the discussions are contained in the attached report.

The Use of Indigenous Resources for Agricultural Development: The Case of Minjingu Mines, A. Modha

The Minjingu phosphate deposit is located 106 km southwest of Arusha, Tanzania, along the Arusha-Dodoma highway. It is of guano-sedimentary origin, hence biogenic in nature. The mine was established under the auspices of the Tanzania State Mining Corporation (STAMICO) but has since been privatized. It was established with the main purpose of mining and processing the Minjingu Phosphate Rock (MPR) for supply to the Tanzania Fertilizer Company (TFC) factory. The company plans to augment its capacities further through expansion and modernization to increase its production by 100,000 mt. It also plans to install a blending and granulation plant with a 200,000 mt capacity. The total estimated cost of the project is between 40 and 50 million US dollars. Minjingu has the potential to supply the region with the much-needed phosphates, and after its expansion, the company hopes to position the company as such.

COMESA Bulk Input Procurement Initiative, J. Mathende, COMESA

The main objective of the COMESA regional bulk-procurement mechanism is to enhance productivity and competitiveness in the regional fertilizer markets through reducing input costs and enhancing access to inputs and developing regional input markets. Mr. Mathende highlighted the challenges that COMESA has experienced in implementing the bulk-procurement initiative:

- Lack of a common understanding on the concept of the program.
- Lack of funding for the program.
- Differences of opinion between private and public sectors on operational modalities.

Mathende further elaborated on the activities that COMESA had undertaken in implementing this program and its successes and setbacks. He concluded that the most promising approach to bulk procurement is to establish holding warehouses at strategic locations such as ports.

Fertilizer Regulatory Mechanisms – Market Access, J.J. Nijhoff, IFDC

A presentation on the regulatory framework for fertilizer market development was made by Mr. Nijhoff of IFDC. He explained the need for fertilizer regulations that would encourage technological innovations and adoption. He also highlighted the WTO market access provisions for trade in agricultural inputs. He said that the WTO

provisions recognize policies of national importance and also use the principle of avoidance of unnecessary obstacles to trade. Reference was made to a code of good practice for the preparation, adoption, and application of standards, supporting policy objectives that guide fertilizer regulations with a focus on health, national security, and the environment. Restrictive regulations are found to limit trade because they may favor individual market participants and disadvantage others, or set unnecessarily high standards. Hence, product innovation and investment may be stifled, making international trade cumbersome and inefficient. The presentation observed that only a few countries have full regulatory fertilizer frameworks in place and among those that do, many countries do not fully implement the system or have no enforcement capacity.

In West Africa, regulatory harmonization of the seed market has made progress. To date, a consensus on a common framework for ECOWAS, UEMOA, and Permanent Interstate Committee for Drought Control in the Sahel (CILSS) has been achieved. Five instruments have been validated with harmonized criteria and norms for field inspection and laboratory analysis. A draft needs assessment report on the regional pesticide regulatory framework has also been prepared. At the national level a framework is being adopted by the ministry in Burkina Faso and Nigeria, although this is a slow process. The presentation also highlighted several lessons that have been learned in the harmonization process. Regional market development is not a short-term endeavor and more will be required to develop growth in the sector.

Harmonization of Seed Regulations in the SADC Region, Dr. S. Mwale

Seed trade is governed by varietal release, certification and quality assurance and phytosanitary legislation. Although this legislation is meant to protect the farmer and agriculture, it may constrain trade and hinder farmers' access to improved seeds.

The requirement that a variety should undergo a rigorous test for 2–4 years before release delays return to investment, limits the seed market, curtails investment in seed and limits the movement of varieties and seed between countries. The challenges associated with the certification system are that it requires seed to move on an orange certificate, and different countries have different seed standards and certification classes. Regarding phytosanitary measures, very large pest lists are involved making the process laborious. There are even checks for pests of less importance or that are common in a particular country and they do not distinguish between seed-borne diseases and others.

Measures meant to address these challenges include establishing and maintaining a common variety catalogue, establishing a seed variety database, and allowing seed that has been successfully tested to be traded in other countries with similar agroecological conditions. The use of common terminologies, certification schemes, standards, procedures and labels and seals will ease some of the challenges experienced in seed trade with respect to certification and standards. With respect to phytosanitary aspects, the use of two common lists, one for the region and the other for non-members, will minimize the need to retest when seed is brought to the region. The benefits to be derived from these measures include increased investment in seed, a larger seed market, a wider choice of varieties, faster movement of seed and lower costs in dealing with regulatory authorities.

The USAID Production, Finance and Technology (PROFIT) Project, Mr. R. Banda,

Mr. R. Banda of the USAID-funded PROFIT project gave a brief presentation on their agricultural inputs service delivery approach. The project aims to create a systemic shift in the input industry to a more appropriate distribution structure for smallholders, namely a solutions-based retail business model. It is envisaged that the project will facilitate the development of more than 700 localized agricultural service-provider businesses, generating new income worth more than $50,000 in 18 months, enroll more than 11,000 farm families participating in education-based promotional events and integrate third-party service providers in the top five cotton outgrower schemes.

Seed Industry Alliances in West and Eastern Africa, Dr. Marcel van den Berg, ICRISAT

A weak seed industry in Africa was preventing smallholder farmers from gaining the inputs and technologies needed to increase productivity and income. About 60 percent to 70 percent of smallholder farmers sow low-yielding local varieties saved from their harvest. Poorly developed input distribution systems further constrained

access to improved seed varieties. The objective of the seed alliance was to establish a sustainable commercial seed industry, capable of ensuring that small-scale farmers have affordable, timely and reliable access to adapted genetics and traits in high quality seeds and planting materials. This meant bringing new ideas and expertise to a problem that neither the public nor the private sector have been able to resolve alone. The primary objectives were to develop capacity of existing and potential seed companies, improve the policy environment for seed trade and strengthen commercial distribution networks for seeds, complementary inputs and crop outputs. An alliance would take a holistic approach at existing activities and programs, filling in the gaps. The alliance has strategic partnerships with COMESA through the Alliance for Commodity Trade in Eastern and Southern Africa (ACTESA), ECOWAS and USAID. So far, the West African Seed Alliance (WASA), has been formed and the East and Southern Africa seed alliance is in its design stage.

Regional Market Integration for Crop Protection Products (CPPs), Les Hillowitz, CropLife

Mr. Les Hillowitz made a presentation on CropLife, a global federation that represents the plant science industry, including biotechnology. Regarding regional market integration, CropLife is working on the establishment of acceptable standards for the registration of CPPs and harmonization of standards within the region. A harmonized application form, dossier and guidelines have been approved and accepted by 14 countries. Nine countries, including Ethiopia, Kenya, Madagascar, Malawi, Namibia, South Africa, Mauritius, Uganda and Botswana have implemented the decisions. Trial protocols for maize, cotton and sugarcane have been drafted as well as a residue trail protocol. A guideline for generic product registration was also approved.

Country Presentation on Agricultural Inputs Markets: Burundi, A. Ntamavukiro, CATALIST Project

Burundi's inputs use is minimal with less than 5 percent and 1 percent of the farmers applying and using fertilizer and improved seed, respectively. This is attributed to high input costs, an uncertain political environment, inadequate conditions for private sector investment, underdeveloped inputs markets, weak legal and regulatory systems, limited access to funding and lack of market information. Additional constraints include weak agro-input dealer networks, lack of technical knowledge by farmers, dearth of research infrastructure and inadequate quality control mechanisms.

Strategies for enhancing fertilizer and improved seed usage would require restarting the CAADP process, providing training to agro-dealers, promoting marketing of small packs of fertilizers, promoting soil analysis to revise fertilizer recommendations, field demonstrations, and regional collaboration. Further, the possibility of exploiting local phosphate deposits can also be explored.

Country Presentation on Agricultural Inputs Markets: Democratic Republic of Congo (DRC), A.B. Dikalayame, CATALIST

The presenter gave a brief history on fertilizer use development in DRC and went on to highlight the objectives of the National Program for Fertilizer and Other Inputs. The goal is to increase farmers' productivity through applied research, field trials/demonstrations, farmer training and provision of input credit. The program applies pan-territorial pricing and benefits from tax exemptions from government and support from the Agricultural Bank. It is funded by Belgium, Japan, the AfDB and the DRC Government.

Prior to the inception of the CATALIST project, fertilizer imports were the preserve of large agricultural companies. There were no fertilizer distributors, and fertilizers were not available to smallholder farmers.

The DRC Government plans to restructure the Ministry of Agriculture with specific emphasis on providing training to farmers, reviving research, enforcing regulations, improving access to credit and promoting private sector participation in inputs importation. These and other measures will incite producers to use fertilizers, private sector to import and distribute inputs and catalyze the development of agro-dealers.

Country Presentation on Agricultural Inputs Markets, Kenya, E.M. Muriuki, MEA Fertilizers

The presenter highlighted that Kenya has a population of about 35 million, 80 percent of whom derive their livelihood from agriculture. A third of the total land area is arable. The main crops grown are maize (staples), coffee, tea, sugar and horticulture. The fertilizer market is liberalized and on the onset of market deregulation in

1990/91 the national consumption was 250,000 mt per annum. It has since grown to 450,000 mt inclusive of re-exports to Rwanda, Burundi and Uganda. With the exception of coffee and tea, all fertilizers consumed nationally are marketed through the private sector.

The country imports all of its fertilizers through Mombasa Port, whose bagging capacity is 3,000 mt per day. There is one small (5,000 mt/annum) single superphosphate (SSP) manufacturer that uses raw materials from Tanzania and one local blending company in Nakuru with a capacity of 240,000 mt per annum. Albeit inefficient, the rail system is still the cheapest (30 percent-40 percent less than road) transport system. Road infrastructure is fragmented.

Services provided by fertilizer suppliers include soil analysis, agro-dealer/farmer training, trade credit and repackaging fertilizers into small units (25 kg, 10 kg, 5 kg, 2 kg, and 1 kg). The Kenyan Government has not been heavily involved in input subsidization, although indications are that with recent large international fertilizer price increments, the government is contemplating intervening. This action may impact negatively on the well-established private sector distribution system.

Country Presentation on Agricultural Inputs Markets, Nigeria, Mr. Zakari, Golden Fertilizer

Nigeria has a land area of 924,000 km^2 and a population of 140 million people, of which 70 percent depend on agriculture for their livelihoods. Three-quarters of land is arable and the main crops are yams, cassava, maize, sorghum and rice. The agricultural system is rainfed with the south having a rainy season of 9 months and 3 months for the north.

The inputs market was liberalized in 1997, and currently there are two major manufacturers and 30 importers. The private sector has actively promoted the use of fertilizer with fertilizer imports having risen from 56,700 in 1997 to 797,000 mt in 2006. The main fertilizers used include NPKs, urea, muriate of potash (MOP), and diammonium phosphate (DAP). The seed sector is still under-developed. The government and private sector are collaborating in producing and distributing improved seed. The agro-chemicals industry is fairly well developed with the private sector taking the lead. The major constraints to agricultural inputs supply and marketing include inconsistent policies, lack of capacity, information flows, high rate of illiteracy, absence of an adequate regulatory framework, poor infrastructural development and poor subsidy administration. Some of these constraints were addressed through the Developing Agri-Input Markets in Nigeria (DAIMINA) project, a collaborative effort between IFDC and the Government of Nigeria in promoting access to inputs by farmers. It trained 350 agro-dealers, organized stakeholder policy advocacy and formulation workshops, drafted fertilizer regulations for Nigeria, reviewed the seed law, trained 60 extension workers, actively participated in demonstration plots, established the national Agri-Input Dealers' Association, and promoted the establishment of the Fertilizer Producers and Suppliers Association of Nigeria.

Other measures that would be required to further improve the input distribution system include institutional development, conducive policy environments, access to finance by producers and trade, adequate market information to producers and trade, appropriate regulations for all relevant sectors, proper enforcement of regulations, infrastructural development (ports, rail, road, gas pipelines), and improvements on subsidy administration.

Country Presentation on Agricultural Inputs Markets: Rwanda, Mr. Innocent Ntabana, CATALIST Project

The total land area for Rwanda is 26,333 square kilometers of which 140,000 hectares are under cultivation; the average land size per household is 0.6 hectares. The main agricultural commodities are maize, cassava, bananas, coffee, pyrethrum, rice, potato and beans. The national agricultural policy is framed under the MDGs, Vision 2020, CAADP and National Agricultural Policy. It puts emphasis on agricultural intensification.

Fertilizer consumption has risen from as low as 4 kg/ha/year in the 1980s to current levels of about 20 kg/ha. This has been facilitated by the provision of free fertilizers to farmers, provision of credit at low interest rates, removal of taxes on all inputs, and other policies geared toward the adoption of fertilizers, such as the fertilizer subsidy. Support programs include erosion control, a livestock project, the IFDC CATALIST project, and a liming project.

Challenges include high transport cost, weak extension services, low rate of fertilizer use, low purchasing power, increasing fertilizer prices, soil acidity (40 percent of total land) and a weak input supply network.

Country Presentation on Agricultural Inputs Markets: Zimbabwe, Mr. O. Machiridza, Windmill

The Zimbabwe farming sector comprises communal, smallholder and commercial farms. Farmers access fertilizers through direct purchases from manufacturers, agro-dealers (manufacturers' stockists), retailers, contract farming, and the Grain Marketing Board.

Agro-dealer development is mainly driven by the private sector and NGOs, which provide management and input use training, soil analysis, product knowledge and finance field days/demonstrations/workshops. Credit is mainly provided by Commercial Banks and the Grain Marketing Board. Most of the product research and development is funded by the government.

The main challenges experienced by the industry include high inflation, high interest rates and shortage of foreign currency, unstable foreign currency exchange rates, unrealistic fertilizer-pricing policy and importation of finished products, which compromises local production. The local industry's production capacity is heavily under-utilized. Other challenges include dwindling government support for research and extension, which compromise fertilizer-market development.

Policy Innovations in Subsidy Management, Dr. B. Bumb, IFDC

The presentation covered the rationale for fertilizer use, including factors affecting fertilizer use, the role of subsidies in promoting fertilizer use, models for managing fertilizer subsidies, market-friendly alternatives to subsidies and a way forward.

Fertilizer application plays an important role in sustaining production through replenishing nutrients taken up by plants and eroded away. It enables agriculture to step up yields and production to be able to meet increasing food demands and enhance food security. Fertilizer use is influenced by technology (products), agronomy (practices) and policy (enabling environment).

Fertilizer subsidies improve incentives for fertilizer use thereby promoting food production and agricultural growth and reducing risk in adoption of a new product that facilitates the learning process. Limitations of subsidies are that they are distortionery, create fiscal burdens and promote rent-seeking and political interference.

The best approach for implementing subsidy schemes involves the use of smart subsidies, market-friendly safety nets, recapitalization of soils and infrastructure development. The adoption of fertilizer can be sustained through strengthening the development of input markets, empowerment of the people to participate in the market process (support the people, not the product), promote public/private partnership, make public investments in acidic soils and improve infrastructure.

Policy Innovations in Subsidy Management, a Case Study From Malawi, Dr. D.B. Kamchacha

The SPLIFA project was implemented in collaboration with various stakeholders and aimed at providing a market-friendly support mechanism to smallholder farmers. The broad objectives were to improve the food security situation among 100,000 smallholder households, improve access to markets and services through the improvement of rural feeder roads, explore new methods of welfare transfers and targeting beneficiaries and develop the private sector inputs market network.

The program was based on promoting community work in exchange for inputs vouchers. Yields increased significantly in the first year although there was a slight decline in the second year because of drought. About 196 agro-dealers were trained and 70 percent re-invested their commission from the voucher system in the business. No cases of fraud were recorded. A significant number of agro-dealers provided back-up service to their clients.

The voucher system, as implemented under the SPLIFA program, provided a flexible intervention to reduce risk in developing markets for the most food insecure. It provided a means for targeting recipients, stimulating demand for inputs and providing a mechanism for channeling "smart subsidies."

6. Group Discussions and Recommendations

The meeting broke out into three groups to discuss the roles of regional blocs, the donor community and the private sector in strengthening agricultural input markets in the COMESA region. Below is a summary of the group presentations.

Priorities related to capacity building that were identified include:

- Training for agro-input dealers and public sector actors.
- Improving the availability of market information.
- Improving the functioning of research and development services.
- Support to associations.
- Formation of public-private alliances.
- Capacity building to identify financing opportunities (grants, loans, loan guarantees).

The role of regional organizations includes strengthening agricultural markets by implementing existing procedures and resolutions, removal of arbitrary tariff and NTBs, and the harmonization of tariffs as short-term action areas. It was recommended that expediting the implementation of already existing initiatives such as the one-stop border post and the joint procurement initiative would be beneficial to trade. In the medium term, participants felt that implementing the yellow card insurance scheme, improving market information, and enhancing cross-border trade in food staple trades would benefit the region. They also recommended that RECs should support associations, especially the formation of the proposed FAA.

For the long term, participants suggested that joint infrastructure development projects across all sectors should be undertaken by the region.

On agricultural trade policies and regulations, a key recommendation was made that governments should announce the modalities of any agricultural input programs, stating clearly the intended quantities to be imported and the sales modalities. Further, the implementation of subsidy programs should not compromise private sector performance.

The possibility of increasing local fertilizer production should be explored. Furthermore, policies, taxes and regulations should be refined and harmonized. In addition, participants recommended that governments formulate budgets that support agriculture development in a holistic manner.

Finance was identified as a key component of input supply chain development, and it was recommended that financing mechanisms should be established to support manufacturers, importers and dealers. The purchasing power of small farmers does not support commercial market development, and there is need to develop programs that encourage farmers to participate in the market.

7. Study Tour to Nitrogen Chemicals of Zambia Ltd.

The last of the workshop was dedicated to a visit to NCZ in Kafue. The group was met by the Managing Director of NCZ, Mr. Richard Soko. The NCZ management made a presentation, followed by a guided tour of the plant. The presentation highlighted the company background, problems the company is experiencing and the genesis of these problems.

Following the presentation and subsequent discussions, the meeting observed that the plant is still in good condition and can successfully be turned around. It was further observed that in view of the fact that fertilizer prices are at an all-time high, the payback period for the rejuvenation would be much shorter than it would be otherwise. Furthermore, it was observed that delays in the rehabilitation of the plant may lead to further corrosion of some of the components, which would lead to higher costs of rehabilitation. There was also a general consensus and emphasis that the company would increase its performance if it were privatized.

The meeting also recommended that NCZ's shareholders (i.e., the Government of Zambia) should be clear about whether they wish to privatize the company, whether they wish to rejuvenate it solely (i.e., without other partners), or whether they wish to invite strategic partners. The meeting also observed that some of the units (sub-plants) of the complex are viable while others may not be viably resuscitated. Those that offer the highest potential are the NPK blending plant, the gasification (hydrogen) unit, the ammonia plant, the nitric acid plant and the ammonium nitrate plant. The rehabilitation of the KOBE plant, which is less problematic in terms of maintenance, and other plants that require minor rehabilitation should be given priority.

IFDC and SADC offered to undertake a short-term study that will identify the priority areas of investment in the rehabilitation process, reassess the viability of various elements of the plant and recommend a rehabilitation strategy.

The board and management will table the findings and recommendations of this study to the shareholder and seek their decision on the way forward. It was also proposed that IFDC, COMESA and SADC could assist in identifying sources of finance for the rehabilitation process.

Annex II. Lusaka Policy Workshop Agenda

Policy Workshop on
Strengthening Trade in Agricultural Inputs in Africa: Issues and Options
Taj Pamodzi Hotel, Lusaka, Zambia, July 1-4, 2008

Organized by COMESA and IFDC
Sponsored by the Hewlett Foundation and USAID

Workshop Agenda
Tuesday, July 1

OPENING SESSION

08:30	Registration
09:00	Welcoming remarks and introductions
09:20	Overview of the workshop
09:30	Official welcome by the COMESA Secretary General's office
09:45	Key Note Address by the Minister of Agriculture and Cooperatives of Zambia
10:30	Coffee break

SESSION II
AFRICAN AGRICULTURAL SECTOR DEVELOPMENT

11:00	The CAADP process: an overview (Dr. Angel Daka, Dr. Cris Muyunda, COMESA)
11:30	Implementation of the *Abuja Declaration* (NEPAD/IFDC)
12:00	Impact of rising food and fertilizer prices on food security and agricultural growth in developing countries, with a special emphasis on Africa (Dr. Kwadwo Asenso-Okyere, IFPRI)
12:30	Lunch

SESSION III
TRADE DEVELOPMENT INITIATIVES

14:00	Challenges in developing agricultural input markets (Dr. Balu Bumb, IFDC)
14:30	The STAR Project: Strengthening Trade in Agricultural Inputs in Africa (Jan Nijhoff, IFDC and Julius Mathende, COMESA)
15:00	The African Agricultural Markets Program (Dr. Cris Muyunda, COMESA/World Bank)
15:30	Tea break
16:00	Developments in WTO negotiations (Cleopatra McDonald, COMESA)
16:30	Agricultural development initiatives in the East African Community (Marwa Moses, EAC)
17:00	Agricultural input production and market development initiatives in the Southern Africa Development Community (Dr. Simon Mwale, SADC)
17:30	Close
18:00-20:00	Welcome Reception

Wednesday, July 2

SESSION IV
GLOBAL AND REGIONAL INPUT MARKETS

09:00	Global fertilizer situation and outlook with special reference to current fertilizer price developments (IFA)
09:30	Alternative approaches to promoting sustainable fertilizer use in Africa: Analysis of experience from Kenya, Malawi, and Zambia (Dr. Jones Govereh, Food Security Research Project, Michigan State University)
10:00	Fertilizer supply chain cost components (Jan Nijhoff, IFDC)
10:30	Coffee break
11:00	Promoting regional integration of fertilizer markets: Bulk warehousing at Beira Port (IFDC)
11:30	Promoting regional integration of fertilizer markets: The regional procurement initiative (COMESA)
12:00	Regulatory harmonization in the fertilizer and seed markets (ECOWAS, SADC)
12:30	Lunch
14:00	Seed industry alliances in West and Eastern Africa (Dr. Marcel van den Berg, ICRISAT)
14:30	Regional market integration for Crop Protection Products (Les Hillowitz, CropLife, South Africa)

SESSION V
CAPACITY BUILDING AND PRIVATE SECTOR DEVELOPMENT

15:00	The use of indigenous resources for agricultural development: The case of Tanzania (Mr. A. Modha, Minjingu Mines and Fertilizer, Tanzania)
15:30	Tea break
16:00	Development issues in private sector-based agricultural input markets in Africa - perspectives from the private sector (Eben Makonese, reporting on the Private Sector Round-Table Meeting on June 30, 2008)
16:30	Private sector-lead distribution of inputs in rural communities using information flows and incentives to improve on-farm practices (PROFIT Program, Zambia)
17:00	Human capital development among policy makers (Dr. Lindiwe Sibanda, FANRPAN)
17:30	Close

Thursday, July 3

09:00	Country presentations on agricultural input market developments (Zambia, Nigeria, Kenya, Zimbabwe)
10:00	Policy innovations in subsidy management (Dr. Balu Bumb, IFDC)
10:30	Coffee break
11:00	Policy innovations in subsidy management: a case study (Dr. David Kamchacha, Malawi)

SESSION VI
GROUP DISCUSSIONS AND IDENTIFICATION OF ACTIONS ON KEY THEMES

11:30 Group discussion on the following themes:

1. Agricultural and trade policy, and regulations
2. Capacity building
3. Regional integration

Discussions will focus on sector performance in the immediate and the long term, and identify key roles for, and actions by, the public and private sectors.

Using the above outline, develop a set of concrete recommendations.

12:30 Lunch

14:00 Group discussion

15:30 Tea break

16:00 Group presentations and agreement on key resolutions

17:00 Closing of the Workshop

Friday, July 4

08:00-13:00 Field trip to Nitrogen Chemicals of Zambia Ltd. (NCZ)

Policy Workshop on Strengthening Trade in Agricultural Inputs in Africa: Issues and Options
July 1-4, 2008 – Private Sector Round-Table June 30
Lusaka, Zambia

List of Participants

Policy Workshop	Round-Table	No.	Country	Name	Title	Organization/ Institution	Address	Telefax/Telephone/E-Mail
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X		9.	Kenya	Hall, Dr. Michael	Regional Agriculture Advisor	USAID	Unit 64102 APO AE 09831 Nairobi KENYA	Tel: 254-20-862-2000 Fax: 254-20-862-2680/1/2 E-Mail: mhall@usaid.gov
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Private Sector Roundtable Meeting

on

Expanding Fertilizer Markets in Africa: Issues and Options

Summary Report

Prepared by

E. M. Makonese and Jan Nijhoff (IFDC)
and
J. Mathende (COMESA)

Preface

Realizing that the 2008 global fertilizer crisis may have significant ramifications for agricultural development and national governments may introduce drastic short-term measures which could compromise long-term agricultural and private sector development efforts, COMESA and IFDC organized a Private Sector Roundtable on Expanding Fertilizer Markets in Africa to discuss the implications of high fertilizer prices and propose suitable measures to confront the challenge.

Since there were suggestions in many quarters to introduce interventionist measures in the fertilizer market to protect smallholders, IFDC took a lead in getting the voice of the private sector heard. Therefore, more than 35 stakeholders from the African and the international fertilizer market were invited to the Roundtable to discuss the fertilizer crisis and to provide a private sector perspective on addressing this challenge.

The Roundtable was held in Lusaka, Zambia, in June 2008. Private sector participants identified three key constraints—policy, finance and infrastructure—and made several recommendations, including the establishment of FAA, to improve fertilizer supply and use in Africa. This report includes a summary of discussion, key action recommendations and modalities for their implementation.

Funding support provided by the Hewlett Foundation and USAID is gratefully acknowledged. However, the views and opinions expressed in the reports are those of the authors of the report and should not be attributed to the funding partners.

Report on the Private Sector Roundtable Meeting Expanding Fertilizer Markets in Africa: Issues and Options

Background

Introduction

Recent increases in fertilizer prices are unprecedented in the history of the fertilizer industry; prices increased slowly during 2000–2006 but accelerated in 2007 and then soared in 2008 (Figure 1). Indications are that global fertilizer supply will remain tight during the next two to three years, and that prices may not return to 2005 levels in the near-term.

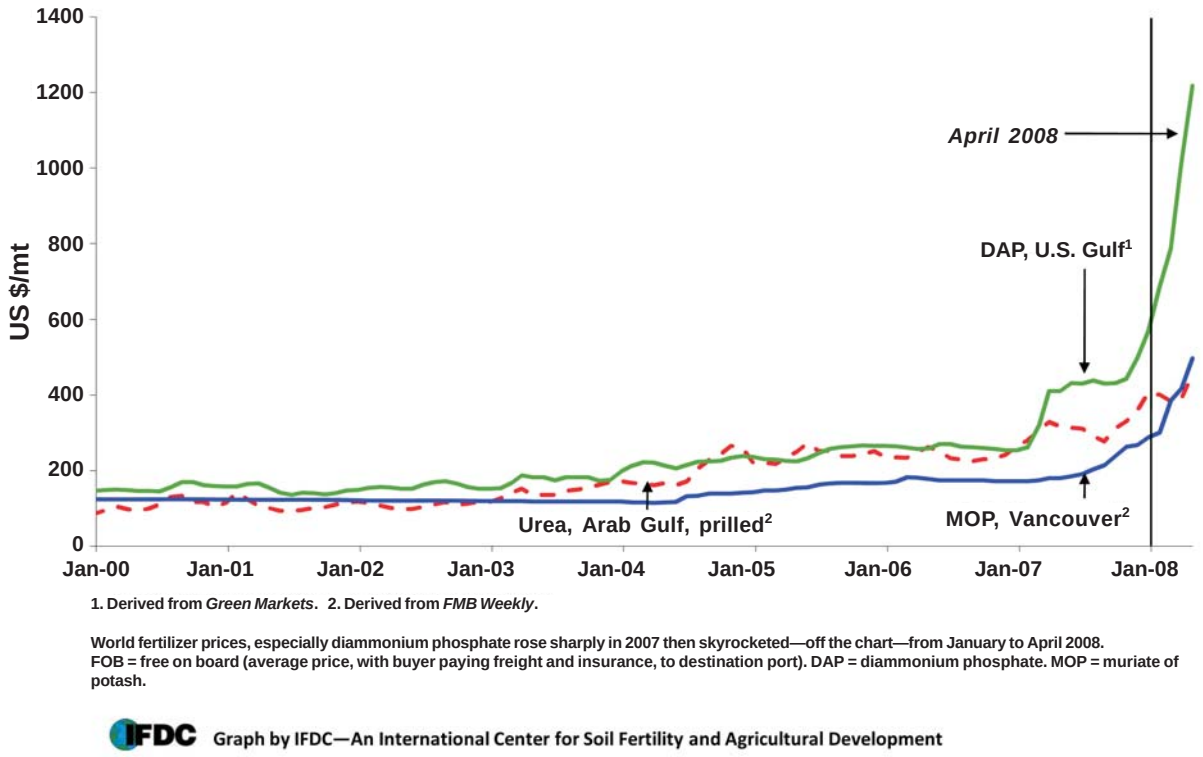

Figure 1. Fertilizer Prices (f.o.b., Bulk), Monthly Averages January 2000 – April 2008

Smallholder farmers in Africa and elsewhere will be adversely affected by this increase in fertilizer prices. Those who already use fertilizer are paying significantly more than before, negatively affecting their cash flow, and most likely their profitability. For the many smallholder farmers who do not use fertilizer (many of whom are subsistence farmers), it will now become even more challenging to adopt modern input technology and yield a positive return.

The food and fertilizer crises are receiving significant attention from the international donor community and other development partners. During the coming years, this will translate into additional financial resources being

made available to Africa for interventions that aim to result in increased food production and access to agricultural inputs. It will be important for African policymakers and the private sector to identify priority areas for intervention. Identified priorities will help in developing an action plan for expanding fertilizer markets in Africa.

The Challenge

While suitable measures should be implemented to minimize the negative impact of the fertilizer price crisis on food security and agricultural productivity, caution is needed to ensure that short-term measures do not compromise the medium- and long-term measures needed for sustainable food security and agricultural growth. Nor should these measures compromise the limited but promising progress made in promoting private sector participation in input supply systems in Africa.

Achieving efficiency gains in input supply chains will reduce retail prices to farmers and increase the potential viability of input technology adoption in the longer-term. For example, marketing costs and margins of the fertilizer commodity chain in Africa are substantial (Figure 2). Strategic interventions by the public and private sectors may have the potential to reduce those costs and margins, eliminate other bottlenecks and make fertilizer trade and marketing in Africa more effective and efficient. On the demand side, strategic interventions by the public and private sectors may help create the demand for fertilizer in a way that is commercially sustainable.

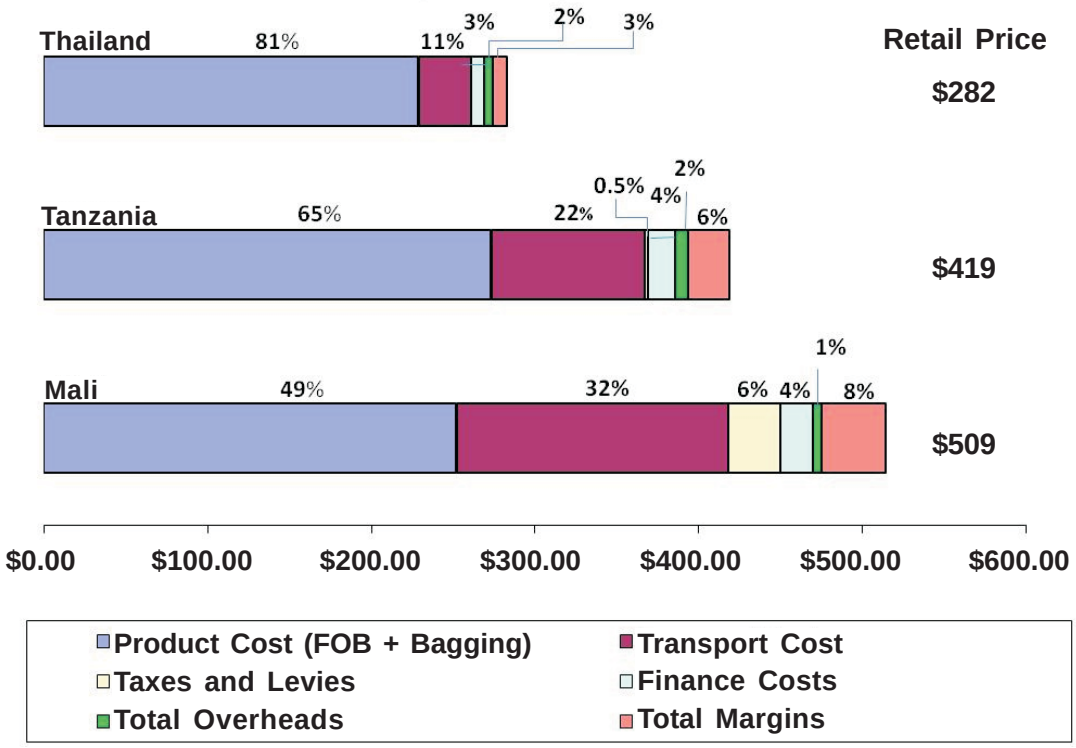

Figure 2. Fertilizer Cost Chain: Mali, Tanzania and Thailand (2006)

Identifying strategic interventions and implementation mechanisms was the goal of the private sector roundtable meeting.

The Private Sector Roundtable

The dual challenge of protecting smallholder farmers and promoting competitive markets requires involvement of public and private sector participants as well as other stakeholders in designing strategies that are both farmer-friendly and market-friendly. Therefore, IFDC and COMESA, with funding support from USAID and the William and Flora Hewlett Foundation, organized this meeting with a focus on the following discussion agenda:

1. Private sector perspective on the ramifications of the present crisis.
2. Identification of constraints that prevent the African fertilizer market from developing.
3. Action planning: identifying measures needed to confront the crisis (fertilizer production, the supply chain, fertilizer demand, fertilizer specifications, marketing and policy) considering the following:
   - Role of the public sector.
   - Role of the private sector.
   - Role of the international donor community.
   - Scope for public-private sector alliances or other coordination and support mechanism.
   - Analytical work on mapping the key transport/trade corridors to identify bottlenecks.
4. Implementation modalities and monitoring of future developments.

The meeting was encouraged to focus on:

1. The immediate term: how to stimulate demand, increase fertilizer use, boost the input supply and ensure that fertilizer use does not decline in the short term.
2. The medium-/long-term: private and public investments needed to sustain long-term input sector growth, the required policy environment and coordination and facilitation of private and public actions.

The agenda for the meeting is included in Annex I. The meeting was attended by more than 35 stakeholders from the private sector, donor community, international organizations and RECs. Stakeholders came from Kenya, Malawi, Mozambique, Nigeria, Norway, South Africa, Tanzania, USA, Zambia and Zimbabwe (Annex II).

The meeting and its agenda were action-orientated. The goal was to develop market-based solutions to the current fertilizer crisis, and private sector participation in this meeting was therefore imperative. In the end, the private sector acquired the ownership of the meeting and the resulting action program and recommendations.

Opening Remarks

Dr. Cris Muyunda, Senior Agriculture Advisor, COMESA

Dr. Muyunda opened the roundtable discussion by thanking the participants for attending the meeting in Lusaka. He thanked the sponsors of the roundtable (USAID and the Hewlett Foundation).

In his opening remarks, Dr. Muyunda stressed the need for agricultural productivity. He outlined some of COMESA's achievements, including the establishment of free tariffs in 14 of the 19 member countries and the establishment of the COMESA Customs Union. These achievements will create increased business opportunities for the private sector.

COMESA is focusing on agriculture, especially staple food crops. There is a program to address the supply and demand issues of agricultural inputs. In this regard, COMESA is working on transport corridors. The corridors are expected to raise agricultural productivity by facilitating fertilizer trade and consumption. However, COMESA is also working in other areas such as forestry and irrigation. In conclusion, Dr. Muyunda hoped that participants will generate action-oriented suggestions.

Dr. Balu Bumb, Policy, Trade and Markets Program Leader, IFDC

Dr. Bumb, while briefing the participants about the recent AU/NEPAD Food Security Workshop, stressed the need to find practical ways to improve the fertilizer supply in Africa, with special reference to the increase in fertilizer prices. There has been a huge increase in the price of fertilizer products (urea, DAP and MOP) over the past 12 months, driven by increases in the prices of energy, grain and fertilizer raw materials. Increase in the production of bio-fuels and various psychological factors have also contributed to the increase in fertilizer prices.

Freight and transport costs contribute significantly to the cost of fertilizer in Africa. He showed that the cost of transport in the fertilizer-cost chain is generally higher in Africa than elsewhere; for example, it is 22 percent higher in Tanzania and 32 percent higher in Mali than in Thailand. Another constraint is the fertilizer application rate. The application rate in Africa averages about 7.0 kg/ha, whereas the world average is 109 kg/ha. Recent price increases have had a negative impact on fertilizer importers, input suppliers and smallholder farmers.

Dr. Bumb suggested that the following short-term measures are needed to confront the challenge:

- Removal of taxes and tariffs on fertilizer.
- Improvement in the availability of foreign currency for fertilizer importers.
- Improvement in availability of finance for input dealers.

In conclusion, Dr. Bumb suggested two themes for discussion: the *Abuja Declaration* to achieve the fertilizer application rate of 50 kg/ha by 2015, and measures the private sector should take and what they need from the public sector and the donor community.

Mr. Tom Hobgood, USAID

Mr. Hobgood discussed transforming African agriculture in response to rising food prices. Achieving rapid productivity growth would substantially reduce Africa's dependence on food imports. Productivity growth would be enhanced by market integration and development.

The increasing dependence on cereal imports means that rising international prices will be directly transmitted into Africa. A typical African family spends 50 to 70 percent of its budget on staple food. Food inflation can, therefore, lead to reduced food intake and malnutrition, as well as lower expenditure on education and health.

Mr. Hobgood discussed a strategy for transforming African agriculture. The strategy should consist of market access, opening regional markets, and increased fertilizer usage; the strategy should target the production and marketing systems of African staples, because 70 percent of African farmers produce staple food crops and productivity growth in staples can catalyze transformation of the economy. IFPRI has an economy-wide multimarket model for assessing the expected impacts of a strategy on supply, demand, and prices of food. Africa urgently requires a new vision addressing the short-run price crisis and the underlying causes by catalyzing sustainable agricultural growth and broader economic transformation.

Mr. Hobgood said that the good news is that African agriculture has considerable potential. He concluded his address by saying that USAID's attention is back to agriculture, and that USAID is supporting efforts that have the potential to increase productivity and develop markets for staple foods, including livestock.

Dr. Ann Tutwiler, William and Flora Hewlett Foundation

Dr. Tutwiler said that the Hewlett Foundation is glad to co-sponsor the policy workshop and the Private Sector Roundtable through its STAR project and also collaborate with COMESA on the development corridors project. The Foundation is working in the following areas:

- Business services and inputs trade and market development.
- Governance issues.
- Bringing together organizations that work on similar areas.

Presentation of Issues to Consider During Discussions and Action Planning

Mr. Makonese, the coordinator of the roundtable meeting, began his presentation by referring to Dr. Muyunda, who said, "Agriculture should be the tool that the COMESA region should use to ensure attainment of the First Millennium Development Goal of cutting hunger and poverty by half by 2015." One of the priority areas for increasing agricultural productivity is increasing the use of fertilizer. Increasing fertilizer use in Africa can be achieved by ensuring that both the supply-side and demand-side issues are addressed.

Demand-Side Issues

- Increasing fertilizer demand.
- Knowledge transfer.
- Fertilizer products and recommendations.

Supply-Side Issues

- Production.
- Procurement and distribution.
- Demand estimation.
- Shipping and port handling.
- Transport and handling.
- Financing.

Participants were requested to consider the impact of the crisis on the private sector and identify the constraints that prevent the African fertilizer market from developing. The roles of the private and public sectors should be identified by asking the following questions:

- What can the private sector do to expand fertilizer markets?
- What do governments and RECs need to do to facilitate this?
- What can development partners do to support this process?
- What coordination, collaboration and support mechanisms are needed?

Identification of Constraints: Summary of the Discussion

The supply and demand sides of expanding fertilizer markets in Africa were discussed. The key constraints that were most frequently mentioned transcending both demand-side and supply-side were policy inconsistency, limited access to finance for imports and marketing, and infrastructure bottlenecks (physical and policy-related).

In addition, the meeting suggested that regional procurement must focus on improving the private sector supply chain at different points and on encouraging economies of scale, not on facilitating procurement for government programs or the placing of large orders by donors. Details of the discussion are reported below.

Production

Several fertilizer plants in Africa are either operating below capacity or have completely shut down. Examples of plants in Zambia, Malawi and Zimbabwe were given. The main reasons for low capacity utilization are the policy environment and technical constraints. For example, governments import fertilizer while the local plants run below capacity.

There was considerable discussion on policy issues, and it was observed that the private sector needed to engage the public sector and produce policies conducive to doing business.

The high international price of fertilizer suggests an urgent need for local and regional fertilizer production. However, for urea and ammonium nitrate, it takes four to five years to get a new plant running, so adding new capacity is a long-term solution. For the short term, utilization of existing capacity should be improved.

Procurement and Distribution

Cash flow is a big issue, and procurement and marketing of fertilizers is constrained by the lack of finance. Also, a common problem that occurs when the private sector supplies governments is that government tenders are not realistic, mostly because they require physical stocks positioned in-country prior to tendering. This poses too high a risk for firms, and it was recommended that this policy issue be addressed.

The COMESA Business Council should include the fertilizer sector and the agricultural sector as a whole in its discussions of government policy. It should also assist in preparing a proposal for enhancing import/trade finance, possibly accessing Preferential Trade Area (PTA) Bank resources. Given that PTA Bank resources alone may not be sufficient, a recommendation was made that a basket of funds be established, pooling resources from donors, AfDB and governments.

Policy analysis and capacity building are required to overcome the current policy constraints.

COMESA's approach to regional procurement was met with some skepticism because it appears to center around pooling public procurement among various countries. It was felt that true marketing efficiency gains can

be made only by improving the private sector supply chain at various levels (for example, at the port level by facilitating private stockholding and wholesaling). Hence, port-level supplies by larger firms should be explored further. Resolving finance and other marketing efficiency issues can then focus on downstream regional marketing and distribution. Partnerships are needed for this. The private sector should be more involved in COMESA's regional procurement planning process to ensure that workable solutions are developed. While the regional procurement by COMESA or public sector agencies was discouraged, the establishment of a regional holding fertilizer warehouse in port cities like Beira, Dar es Salaam and Accra to benefit from economies of scale in procurement was endorsed.

Government subsidies were considered to distort markets and are not actually adding any new users. Hence, subsidy programs mostly displace commercial sales. There is a need to improve subsidy programs and to include phasing out modalities.

It was suggested that there be an early warning system for government market interventions, providing up-to-date information to the private sector, thus mitigating the possible negative impact of market distortions and other effects of government programs. This would also allow more time for discussion and collaboration among and between the private and the public sector.

Demand Stimulation

In estimating demand for fertilizer, governments often base their estimates on the desired crop production, which sometimes leads to excessively high quantities. Scientific methods must be used to estimate demand. But these depend on farming statistics. Improving agricultural statistics may require technical assistance, while the supply and demand forecasting process may require facilitation.

There are some farmers who will not use fertilizers because they believe that fertilizers damage the soil. They are right in that continuous fertilization may enhance soil acidity if they are not managed properly. Many crops perform poorly in acidic soils, but this can be corrected by liming. The participant from Minjingu Phosphates said that the phosphate from his mine is very reactive, has high calcium content and is suitable for acidic soils. It was also noted that some farmers use fertilizer grades that are not suitable for their soils and crops.

The issue of high fertilizer prices and its non-affordability for many small-scale farmers was debated extensively. Safety nets and subsidies were discussed. But it was noted that subsidies also have counterproductive results such as creating a dependence syndrome, ending up with the unintended beneficiaries, and distorting the market and thereby discouraging the private sector. The Malawian members of the discussion group related a success story of a voucher system that operated through private sector structures. It was generally agreed that any short-term interventions by the public and private sectors must be market-friendly.

Shipping and Handling

Imports of ammonia are hampered by lack of port-side handling facilities. On the southeastern coast of Africa, only Richards Bay has ammonia offloading and storage facilities. NCZ mentioned the lack of rail tankers to transport ammonia.

Beira Port, which serves several countries, is limited to small ships due to silt buildup. The meeting was advised that dredging arrangements were being made. There is also a lack of bulk storage capacity. Increased bulk storage capacity will allow more efficient discharge and bagging.

Nacala Port was discussed, and the meeting was advised that although the port can accommodate large ships (carrying 25,000 ton cargo), the port capacity is low and is in poor condition. Lobito and Benguela ports need to improve their efficiency.

Overall, investments in infrastructure are required to allow efficient shipping, handling and transport.

Syndication of small importers to achieve economies of scale did not receive support. However, it was generally agreed that a bulk holding fertilizer warehouse would be beneficial. A large manufacturer or trading company could place fertilizer in the warehouse from which parcels of fertilizer would be purchased by small importers. The small importers would thus reduce credit days and draw the material when they need it at competitive global prices. Beira was identified as a priority port for such a warehouse. IFDC's prefeasibility study on

establishing a regional fertilizer holding warehouse at the port of Beira was discussed and endorsed for further action.

On transport, border crossings are a major source of inefficiency, causing high turnaround time for trucks. In addition, the many road blocks and poor state of the roads cause significant fuel inefficiencies. It was recommended that transit rules and regulations are harmonized and that COMESA Free Trade Area commitments are adhered to. This may require an inspectorate and the commitment to follow up on the enforcement of rules.

Regarding road infrastructure, investment is needed to improve rural roads. Improvements on the TAZARA railway line were also suggested.

The fertilizer sector needs to be represented at the Africa Infrastructure Facility, hosted by NEPAD.

Financing and Demand

These issues were covered in the above discussions.

Recommendations

After the discussions, the following recommendations were made:

Key: D=Donors; PS=Private Sector; G=Government/Public Sector

	Responsible Party	Priority
1. Production		
• Take stock of existing fertilizer capacity (study).	IFDC, D, PS	NOW
• Establish the viability of fully utilizing existing capacity and putting up new plants.	IFDC, D PS	NOW
• Lobby for conducive policy environment for fertilizer production and marketing.	PS, G	NOW
• Prioritize usage of local fertilizer plants.	PS, G	NOW
2. Procurement And Distribution		
• Continental financial institutions, e.g., AfDB and PTA banks should put a facility in place for input procurement and distribution.	PS	NOW
• The fertilizer industry should be represented in the COMESA Business Council. Mr. David Kamchacha was elected to represent the industry in the COMESA Business Council.	PS	DONE
• Governments should release their input requirements on time to avoid speculative purchases and allow enough lead time for the private sector to plan procurement.	G, PS, D	Medium term
• Input subsidies should be market-friendly.	PS, D, G, IFDC	NOW
• Large fertilizer suppliers could partner with small companies downstream to optimize shipping vessel utilization.	CNFA and others	
• Build capacity of agro-dealer networks.	PS, G, D	NOW
• Develop market-friendly safety nets.	PS, G, D	NOW
3. Demand Estimation		
• A common and scientific formula for demand estimation should be adopted.	G, PS, D	NOW
• Update information on soil nutrient balance (soil analysis) and develop better fertilizer recommendations	G, PS, D	NOW
• Build capacity for data collection and analysis at the national level.	G, PS, D,	Medium to long term
4. Shipping and Port Handling		
• The private sector should invest in rolling stock for moving ammonia or consider hiring from other companies.	PS	Medium to long term
• Procure dredging equipment for Beira.	PS	In progress
• Syndication on ship hiring.	PS	NOW
• Harmonization of transit charges and procedures.	Regional Groups	NOW
• Enhance port operating efficiency.	(COMESA)	
• Develop Lobito Port and Benguela and Nacala railways.	Port Authority	NOW
• Increase load axle weight on roads.	PS, G	Long term
• Utilize COMESA, other regional bodies, and Courts of Justice for disputes arising from customs duties and other non-tariff barriers (NTBs).	PS	NOW
• COMESA to adopt proactive inspectorate.	COMESA	NOW
• Establish a bulk warehouse at Beira Port.	COMESA, PS, D G	NOW
• Develop/improve roads and railway operations.	G	NOW
5. Financing and Demand Issues		
• These were covered in the above recommendations.		

Strategy for Addressing the Recommendations

Roundtable participants wanted to ensure that the recommendations would be acted upon as soon as possible. It was, therefore, agreed to form FAA, which would implement the recommendations in partnership with COMESA, the public sector and others in the private sector. It was also agreed to identify immediate opportunities for action by public-private partnerships.

Fertilizer Association of Africa

FAA will enable the fertilizer sector to speak with a united voice, develop standards, share information and achieve economies of scale in capacity building. This will also enable fertilizer suppliers to offer a wide range of products to farmers. The FAA will be formed from existing regional associations and grow as other regional associations join. Thus, the process of forming national and regional associations and forming the FAA can proceed simultaneously.

The FAA would form partnerships with the public sector, development partners and other private sectors to form associations (like the Seed Association).

The association will champion the implementation of the recommendations raised during the roundtable. It was agreed to form an FAA Steering Committee, whose membership is shown in Annex III. The FAA Steering Committee held its first meeting on July 1, 2008. At this meeting, a subcommittee of the FAA was formed (Annex IV).

The subcommittee is to develop a constitution for submission to the Steering Committee. It will produce terms of reference of a Secretariat, its manpower requirements and a budget. With this information, the subcommittee will approach COMESA and USAID for assistance in soliciting for seed money. Mr. Richard Soko of NCZ agreed to be the Interim General Secretary of the subcommittee. Through him, the subcommittee will correspond with all concerned. The Secretariat, as soon as it is set up, will do all the work necessary to form the FAA.

Immediate Opportunities for Public-Private Partnerships at Regional, National and Local Levels

Based on the above discussion, the following key priority areas were selected for short-term and long-term action.

Supporting the Establishment of FAA

The FAA would serve the following purposes:

- To speak with one *voice* when interacting with the public sector regarding constraints faced by the industry.
- To promote communication among its members and stakeholders to be able to ensure quality and *choice* of products to the farmers.

Development partners should fund the Secretariat required to facilitate the formation of the FAA. The private sector will join in the membership and promote fertilizer development in Africa.

Assessing Feasibility and Support for Establishment of Regional Fertilizer Holding Warehouses

A regional warehouse makes it possible to import from global markets and thereby reduce prices. The warehouse will also give security of supply because an importer can access fertilizer when needed.

A prefeasibility study conducted by IFDC showed that it would be viable to establish a warehouse at Beira. Both COMESA and SADC have requested that the development partners support a feasibility study, which would attract private sector investment.

Feasibility Studies on Utilizing Existing Production Facilities

The fertilizer factories in several COMESA countries are operating at low capacity. The high international price of fertilizer suggests an urgent need for increasing capacity utilization of these facilities. It would be desirable to conduct a technical and economic viability assessment of these plants. Assistance from development partners is needed to carry out such an assessment.

Scale-Up Establishment of Agro-Dealer Network

African farmers in the hinterland face challenges accessing fertilizer. A network of agro-dealers would improve accessibility. Immediate support for training agro-dealers and developing business linkages is needed from the development partners.

Establishment of Alliance to Assess and Begin Working on Development Corridors

Movement of fertilizer from ports into the COMESA region is constrained by the poor state of roads and railways and inadequate rolling stock.

An immediate and positive impact can be made if the public sector places an additional 100 covered wagons on the TAZARA railway. Improving port facilities will also need development partners' support.

Develop Market-Friendly Safety Nets

There is a crisis in accessing fertilizer due to an unprecedented rise in international fertilizer prices. Small-holder farmers need purchasing power support. The voucher system can help farmers acquire fertilizer and adjust to the new cost structure. The voucher system is considered to be a short-term intervention, which will not distort the market and compromise long-term efforts for market development.

Build Capacity for Data Collection and Analysis at Regional, National and Local Levels

Recommendations are based on the soil analysis work of the 1970s. Assistance from the public sector is needed to generate new data for developing better fertilizer recommendations. Additionally, there is a need to strengthen statistical data base for policy analysis, investment planning and market development.

Annex I. Meeting Agenda

08:30 Registration

09:00 Welcoming Remarks and Introduction

09:30 Background to the Private Sector Roundtable Meeting (Tom Hobgood, USAID)

10:00 Overview of the World Fertilizer Situation (Dr. Balu Bumb, IFDC)

10:30 Coffee Break

11:00 Commence Roundtable Discussion—Identification of the Private Sector's Role in Minimizing These Constraints

12:00 Identification of Constraints That Prevent the African Fertilizer Market From Developing

12:30 Lunch Break

14:00 Identification of Constraints That Prevent the African Fertilizer Market From Developing, and Recommendations to Minimize These Constraints (continued)

15:00 Preparation of Key Recommendations and an Actionable Agenda (continued)

15:30 Tea Break

16:00 Preparation of Key Recommendations and an Actionable Agenda (continued)

17:30 Close

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Special Publications IFDC—SP-40
June 2010
1M

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P.O. Box 2040
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ISBN: 978-0-88090-166-6