Seventh Progress Report

January-December 2010

Implementation of the *Abuja Declaration on Fertilizer for an African Green Revolution*

Prepared

by

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Abbreviations and Acronyms

AfDB	African Development Bank
AFFM	Africa Fertilizer Financing Mechanism
AGRA	Alliance for a Green Revolution in Africa
AU	African Union
AUC	African Union Commission
c.i.f.	cost, insurance and freight
CAADP	Comprehensive Africa Agriculture Development Program
CET	Common External Tariff
CNFA	Citizens Network for Foreign Affairs
COMESA	Common Market for Eastern and Southern Africa
CPPs	crop protection products
CSOs	civil society organizations
DREA	Department of Rural Economy and Agriculture
EAC	East African Community
EABC	East African Business Council
EAGC	East African Grain Council
ECA	Economic Commission for Africa
ECOWAS	Economic Community of West African States
ECOWADF	Regional Development Framework for West Africa
ECOWAP	Regional Agricultural Policy for West Africa
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GC	governing council
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IFDC	International Fertilizer Development Center
ILRI	International Livestock Research Institute
M&E	monitoring and evaluation
MIR	Marketing Inputs Regionally
MoU	Memorandum of Understanding
mt	metric tons
NAIP	National Agricultural Investment Plans
NEPAD	New Partnership for Africa's Development

NGOs	non-governmental organizations
NPK	nitrogen, phosphate and potassium
RECs	Regional Economic Communities
SADC	Southern African Development Community
STAR	Strengthening Trade at the Regional Level in Agricultural Inputs in Africa
UEMOA	West African Economic and Monetary Union
USAID	United States Agency for International Development
USAID/COMPETE	USAID Competitiveness and Trade Expansion Program
UNIDO	United Nations Industrial Development Organization
WFP	World Food Program

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Executive Summary

This report analyzes the progress of countries and Regional Economic Communities (RECs) in implementing the *Abuja Declaration on Fertilizer for an African Green Revolution*. The New Partnership for Africa's Development (NEPAD) Planning and Coordinating Agency (NEPAD Agency) gathered the information from countries through questionnaires and from RECs through written progress reports. Both instruments covered January to December 2010. The two purposes were to: (1) collect and analyze data and information on implementation of the *Abuja Declaration* from January to December 2010 and (2) assess progress in implementation by analyzing the results for the six reporting periods since June 2006-June 2007 (baseline period).

Conclusions and Recommendations

Based on the analysis of the results for the six reporting periods, the report makes the following conclusions and recommendations.

Conclusions

There has been substantive improvement in the implementation of the *Abuja Declaration on Fertilizer* by the countries and RECs over the six reporting periods between June 2006-June 2007 (baseline period) and January-December 2010 (current reporting period).

Regional Level

Data were obtained for three of the eight RECs: EAC, SADC, and ECOWAS. All of the RECs that submitted progress reports have well-structured, concrete programs in the pipeline or under implementation with a very high potential of bringing about substantive changes on the ground in terms of policy and regulatory reforms, lower prices for fertilizers and ultimately, increased consumption of fertilizers.

Country Level

Data were obtained for sixteen of the countries: Burundi, Cameroon, Chad, Djibouti, Egypt, Ethiopia, Kenya, Lesotho, Malawi, Mozambique, Namibia, Senegal, Seychelles, Sudan, Tanzania, and Uganda.

a. Progress on the establishment of a formal policy and regulatory framework by African countries is ***unsatisfactory***. The data fluctuate considerably over the six reporting periods, but the overall trend is downward.
b. Progress on the development of capacity for quality control is ***satisfactory***. Sixty-one percent of the respondents in the current reporting period carry out inspections for quality control at the point of sale and the general trend over the six reporting periods is upward.
c. Progress on the elimination of tariffs and taxes over the six reporting periods is uneven and generally ***unsatisfactory.*** Although there are fluctuations in the data, there is a general upward trend in the percentage of respondents with taxes and tariffs on fertilizers. These data imply that African governments are trying to comply with the *Abuja Declaration* resolution, which calls for the elimination of all taxes and tariffs on fertilizers, but in the absence of alternative sources of revenue they find themselves compelled to reintroduce or maintain these measures.
d. Progress on the development of agro-dealer networks is ***satisfactory***. The percentage of respondents with less than 10 agro-dealers over the six reporting periods has decreased while the percentage of respondents with 100-500 agro-dealers has increased. In general, the data exhibit an upward trend over the six reporting periods.
e. Progress on reducing distance traveled to purchase fertilizers is ***good.*** There is an upward trend in the percentage of respondents whose farmers travel less than 10 km to purchase fertilizers, and the figure is 50 percent for the current period. Nevertheless, the percentage of respondents whose farmers travel long distances to purchase fertilizers (over 1,000 km) has not declined and the percentage of respondents whose farmers travel 20-100 km is still at 25 percent for the current reporting period. Therefore, although the situation has improved substantively reflecting the increase in the number of agro-dealer development projects underway on the continent, there is still an urgent need to deepen agro-dealer networks to more fully penetrate the rural interior in Africa.

f. Progress on increasing the proportion of farmers using chemical fertilizers is ***good***. There is an upward trend in the percentage of respondents whose farmers use chemical fertilizers and 35 percent of the respondents in the current period reported that 50-100 percent of their farmers use fertilizers. The results indicate a reasonably high and increasing proportion of farmers that are using chemical fertilizers in Africa.

g. Progress on increasing market size is ***partially satisfactory***. There is an increase in the percentage of respondents in a higher market size category (100,000-500,000 metric tons [mt]) and concomitant decrease in the percentage of respondents in a lower market size category (less than 100,000 mt). This indicates a trend towards a larger market size. However, in the current reporting period, only 15 percent of the respondents have a market size of 500,000-1 million mt and only 1 percent of the respondents have a market size of over 1 million mt. The results indicate that there is a trend towards a larger market size category, but it has a ceiling (100,000-500,000 mt). Much work remains to break though this ceiling and substantially increase the size of fertilizer markets in African countries.

h. Progress on offering a wider variety of bag sizes is ***unsatisfactory.*** Only 28 percent of the respondents for the current period reported bag sizes of 10 kilograms (kg) and this figure has declined since the baseline period (48 percent). The results reveal an inadequate number of respondents making fertilizers available in smaller bag sizes.

i. Progress on reducing retail prices to improve affordability is ***poor.*** For each of the 17 respondents for whom data is available, there has been an increase in fertilizer prices since June 2006, even in cases where the price is subsidized. So, generally speaking, financial access to fertilizers for small-scale farmers in Africa has not improved, and in some cases has worsened.

j. Progress on introducing targeted subsidies is ***satisfactory.*** Seventy-two percent of the respondents in the current period have fertilizer subsidies, compared with 53 percent in the baseline period. However, although there is an upward trend in the percentage of respondents using input voucher schemes and fertilizer-for-work programs to target these subsidies, in the current period only 33 percent of the respondents use input vouchers and 17 percent of the respondents use fertilizer-for-work programs. Therefore, although the results reveal a strong upward trend in the incidence of fertilizer subsidy programs, less than one-third of these programs are targeted subsidies.

k. Progress on introducing national financial facilities to reduce the risk of lending to importers and agro-dealers is ***good***. These results indicate that a substantive proportion of respondents in the current period (89 percent) have financial initiatives to reduce the risk of lending to importers/agro-dealers. Moreover, there is a clear upward trend for financial initiatives in general and credit guarantee schemes in particular.

l. Progress on regional fertilizer procurement initiatives is ***satisfactory***. The announcement by Yara International of plans to invest US $20 million to build a fertilizer terminal in the Tanzanian port of Dar es Salaam that will supply both Tanzania and neighboring countries is the first concrete step in this direction.

m. Progress on improving access to complementary inputs is ***satisfactory***. The data indicate a steady increase in the proportion of farmers in Africa that are using hybrid seeds, a high percentage (over 60 percent) of respondents report that their Ministries of Agriculture engage in extension and market information activities and all the respondents report investment in irrigation development. However, the results for crop protection products (CPPs) are inconclusive.

n. Progress on the establishment of an Africa Fertilizer Financing Mechanism (AFFM) is *un**satisfactory.*** Approximately US$ 5,455,892 has been contributed so far to the AFFM account (mostly from Nigeria), leaving a shortfall of US$ 4,544,107 that is required for the Fund to be legally operational.

Overall, progress in the implementation of the *Abuja Declaration on Fertilizer* is satisfactory to good, but there is still much room for improvement.

Recommendations

Based on the results of the analysis of data submitted by the countries for the five reporting periods, the report makes the following conclusions and recommendations.

RECs

Each of the RECs should develop and implement an M&E framework to monitor and evaluate progress in implementation of the *Abuja Declaration on Fertilizer*. This will improve implementation and facilitate future reporting of this activity.

Countries

a. Countries must develop and implement policy and regulatory frameworks for the fertilizer industry, which includes building capacity for quality control.
b. Countries must explore alternative sources of revenue to facilitate the elimination of taxes and tariffs on fertilizer and on fertilizer raw materials.
c. Countries should increase and expand programs to develop agro-dealer networks. This will assist in the reduction of distance traveled by farmers to purchase fertilizers and increase the availability of fertilizers in smaller bag sizes. This will ultimately reduce retail prices, increase the percentage of farmers that are using chemical fertilizers and increase total market size.
d. Countries should commit to implementing targeted, smart subsidies by using input vouchers (or a similarly effective targeting mechanism) to target poor farmers and using the private sector to import and distribute fertilizers for government fertilizer subsidy programs.
e. Countries should collaborate with national and regional financial institutions, development partners and foundations to increase the availability of risk-sharing financial facilities targeting importers and agro-dealers. Government should also introduce legislation that will improve access to foreign exchange for importers and provide credit guarantees to commercial banks that finance agro-dealers.
f. The African Development Bank (AfDB) should partner with AUC/NEPAD and embark on an aggressive fund-raising drive to encourage countries and external donors to commit funds to make the AFFM operational.

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Introduction

In recognition of the extremely high rates of soil nutrient depletion and stagnant agricultural productivity prevailing in Africa, the African Union (AU) Heads of State and Government convened the Africa Fertilizer Summit in Abuja, Nigeria, in June 2006 under the auspices of the AU and NEPAD. The key outcome of the Summit was the *Abuja Declaration on Fertilizer for an African Green Revolution*, which African leaders unanimously endorsed. It calls for a substantial increase in average fertilizer use in Africa from 8 to 50 kg of nutrients per hectare (ha) by 2015.[1] It delineates concrete actions and key initiatives which, if implemented at the national and regional levels, will improve the accessibility, affordability and availability of quality fertilizers and other modern inputs and usher a Green Revolution onto the African continent. All of these measures are to be supported by the AfDB, the Economic Commission for Africa (ECA), the Regional Development Banks, the Regional Economic Communities (RECs), other development partners and the private sector.

In accordance with Resolution 12 of the *Abuja Declaration*, the African Union Commission (AUC) and the NEPAD Planning and Coordinating Agency (NEPAD Agency) have monitored progress in implementation by the countries and RECs and prepared progress reports for the African Heads of State. The NEPAD Agency prepared and submitted the first progress report, which covered July to December 2006, to the AUC on December 2006. The second progress report, which covered June 2006 to June 2007, was submitted in October, 2007. The third progress report, which covered July to December 2007, was submitted in May 2008. The fourth progress report, which covered January to June 2008, was submitted in April 2009. The fifth progress report, which covered June to December 2008, was submitted in August 2009. The

[1] See Annex 1 for details.

sixth progress report, which covered January to December 2009, was submitted in July 2010. This is the seventh progress report. It is based on responses received from the countries and RECs between February and May 2011 to questionnaires sent by the NEPAD Agency in January 2011. It covers developments during January-December 2010.

Objectives

The main objective of this seventh progress report is to examine progress in implementation of the *Abuja Declaration on Fertilizer for an African Green Revolution* at the regional and country levels for the six reporting periods between June 2006-June 2007 (baseline period) and January-December 2010 (current reporting period). Specific objectives are:

1. Analyze the results to assess the degree of alignment with the *Abuja Declaration* at the regional and country levels.
2. Identify which resolutions have experienced the most progress in implementation during the six reporting periods between June 2006-June 2007 (baseline period) and January-December 2010 (current reporting period).
3. Draw some conclusions and make recommendations for the way forward.

The remainder of this report is organized as follows: Section 2 explores methodological issues and describes the approach used for data collection and analysis; Section 3 reports on progress at the regional level; Section 4 reports on progress at the country level; Section 5 provides some analysis of the major findings; and Section 6 draws some conclusions and makes recommendations for the way forward.

Methodology

The following methodology was adopted in preparing the seventh progress report:

1. A comprehensive country-level questionnaire and written requests for regional-level write-ups were sent to the countries and RECs in January 2011.
2. Between February and May 2011, the technical personnel in each regional economic community (REC) and Ministry of Agriculture responsible for the fertilizer/agricultural inputs subsector responded to the instruments. They reported on developments between January and December 2010.
3. The completed reports from the RECs and questionnaires from the countries were sent to the NEPAD Agency and analyzed using simple quantitative and qualitative methods complemented by private consultations with stakeholders.
4. A report was prepared by the NEPAD Agency and submitted to the Department of Rural Economy and Agriculture of the AUC in June 2011. It was also distributed to the countries and RECs and other interested stakeholders on request.

Data Collection

The primary purpose of the M&E instrument was to examine progress in the implementation of the *Abuja Declaration on Fertilizer* between the baseline period (June 2006-June 2007) and the current review period (January-December 2010), assess trends, draw conclusions about progress and make recommendations for the way forward.

- Three of the 12 resolutions pertained to regional-level activities. Accordingly, the RECs were requested to provide updates on progress in implementing initiatives related to each of these resolutions. Requests were sent to the eight RECs recognized by AU and three responded (Table 1).
- Eleven of the 12 resolutions pertained to activity at the country level. The questionnaire requested progress updates on nine of the key resolutions. The country questionnaires were composed of five pages of topics related to these nine resolutions. The questionnaires were sent to the 53 AU Member States and 17 countries responded (Table 1).

Table 1. Respondents to the Questionnaires: Regional Economic Communities and Countries by Region, January-December 2010

Respondents					
	Countries by Region				
RECs	Southern Africa	East Africa	Central Africa	West Africa	North Africa
EAC ECOWAS SADC	Lesotho Malawi Mozambique Namibia Seychelles	Burundi Djibouti Ethiopia Kenya Sudan Tanzania Uganda	Cameroon Chad	Senegal	Egypt

Analytical Approach

It was challenging to select the appropriate analytical approach for this study. One possibility is panel-data analysis whereby data for the same group of observations (in this case, countries) are collected and analyzed over a period of time (in this case, over six reporting periods) to draw conclusions about progress made. However, the following issues with the data made it impossible to do cross-sectional analysis:

1. Many of the countries as well as the number of countries are different for each reporting period: reporting period 1 (20); reporting period 2 (23); reporting period 3 (18); reporting period 4 (14); reporting period 5 (10); and reporting period 6 (17). Therefore, the number and combination of respondents varied for each reporting period.
2. Only five countries submitted progress reports for each of the reporting periods. Therefore, the study only has cross-sectional data on all the variables for the six reporting periods for five countries.

Therefore, the study uses time-series analysis where the unit of analysis is the indicator (number of agro-dealers, number of countries with fertilizer subsidies, etc.) rather than the country. The data for each indicator are collected for each reporting period and the trends analyzed to draw conclusions about performance. Given that five years have elapsed since the Africa Fertilizer Summit and seven progress reports have been produced, there is a need to analyze trends over time in order to properly assess progress in implementation, draw some conclusions about whether any progress is being made and derive some useful insights and

recommendations. Therefore, this analytical approach is appropriate and timely. The analytical approach consisted of the following steps:

1. Select the key indicators that will provide the most reliable information with regard to the level of fertilizer market development at the regional and country levels.
2. Use simple quantitative and qualitative analytical procedures to establish where the RECs and countries are on each indicator.
3. Assess to what extent countries and RECs are aligned with the *Abuja Declaration on Fertilizer* in terms of policies and/or initiatives in the current reporting period (January-December 2010).
4. Analyze the weighted data for the six reporting periods between the baseline period (June 2006-June 2007) and the current reporting period (January-December 2010) to assess progress made in implementation of the *Abuja Declaration of Fertilizer* since 2006.

We use weighted data to get more representative results regarding progress over the six reporting periods. Weighted data analyses adjust the survey data to represent the population from which the sample is drawn. When the data collected from survey respondents are adjusted to represent the population from which the sample was drawn, the resulting data are called weighted data. The weighting process involves computing and assigning a weight to each survey respondent. The weight does not change the answer for a reporting period; rather, it gives appropriate relative importance to the answer for that reporting period. The study adopts this approach because each indicator has a different number of respondents (or observations) in each reporting period. Therefore, if we use unweighted data, the reporting periods with the higher number of respondents will be assigned a higher contribution and the contribution of the reporting periods with the lower number of respondents will be underestimated. Therefore, we weight the result for each reporting period to give it the appropriate relative importance (relative to the other reporting periods). We took the population to be the highest number of respondents we received for a particular indicator over the six reporting periods. We then took the proportion of the number of respondents in each reporting period to the total number of respondents over the six reporting periods (the population) to represent the weight for each reporting period.

Table 2 presents the resolutions and the relevant indicators used to compile this report. Each resolution was taken in turn, and outcomes and indicators were developed against which to assess progress. The results were then analyzed and conclusions and recommendations made.

Table 2. Resolutions and Indicators for the Seventh Progress Report, January-December 2010

No.	Resolutions	Successful Outcomes	Indicators
2	Harmonization of policies and regulations.	• National and regional consensus on fertilizer legislation, regulatory system implementation strategies and trade policies, which facilitate the free movement of fertilizers. • Improved ability to conduct quality control. • Reduced/eliminated tariffs and taxes.	• Number of countries that have implemented the following policies and regulations: • Formal regulatory framework. • Fertilizer inspections at point of sale. • No tariffs on fertilizers. • No taxes on fertilizers.
3	Develop and scale-up dealer network.	• A cadre of skilled and knowledgeable agro-dealers located close to the farm gates who deliver fertilizers to farmers in a variety of bag sizes, at affordable prices, in a timely manner.	• Number of agro-dealers. • Average retail price. • Ratio average retail price/c.i.f. price. • Distance traveled to purchase fertilizer (km). • Farmers using chemical fertilizers (%). • Market size. • Bag size.
4	Capacity building to address fertilizer needs of youth, farmers' associations, civil society organizations and the private sector.	• Enhanced fertilizer market-related capacities of the private sector.	• Respondents engaged in capacity-building activities for the private sector (%). • Type of activity by category of recipient (%).
5	Granting of targeted fertilizer subsidies, with special attention to poor farmers.	• Increased provision of targeted subsidies to small-scale farmers.	• Respondents with fertilizer subsidy (%). • Respondents with targeted subsidies (%). • Respondents with importation by governments/donors/NGOs (%). • Respondents with distribution by governments/donors/NGOs (%).

No.	Resolutions	Successful Outcomes	Indicators
7	Establish national financing facilities for input suppliers.	• Increase in national financing facilities for importers/agro-dealers.	• Respondents with initiatives (public, private, public-private) to lower risks of lending for financial institutions to importers/agro-dealers (%). • Type of initiatives by category of respondent. • Volume of loans.
8	Promote regional fertilizer procurement through public-private partnerships.	• Increase in regional procurement of fertilizers.	• Number of regional procurement initiatives. • Volume and value of regional fertilizer imports by these initiatives.
9	Promote national/regional fertilizer production and intra-regional trade.	• Increased fertilizer production in Africa. • Increase in intra-Africa fertilizer trade.	• Production: • Number of countries with operational fertilizer production plants. • Intra-regional trade: • Number of countries that import fertilizers from other African countries. • Number of countries that export fertilizers from other African countries.
10	Improve farmer access to complementary inputs (quality seeds, irrigation facilities, extension services, market information).	• Increased farmer access to complementary inputs.	• Seeds: • Farmers using hybrid seeds (%). • Crop protection products (CPPs): • Farmers using CPPs (%). • Market Information and Extension Services. • Number of countries providing market information services to farmers. • Number of countries providing extension services to farmers (in total and by type of extension activity).
11	Establish AFFM.	• AFFM established and monies being disbursed.	• NEPAD input into legal and framework documents for establishment of the AFFM. • NEPAD provision of documents to AUC for distribution to the countries and RECs.
12	Establish an M&E tool and provide two six-month reports to the AU.	• M&E tool finalized and distributed to countries and RECs. • Progress reports prepared and submitted to AUC.	• M&E tool established. • M&E tool distributed to countries and RECs. • One annual progress report prepared and submitted to the AUC.

Progress in the Implementation of the *Abuja Declaration on Fertilizer* by Regional Economic Communities

Three RECs responded to the request from the NEPAD Agency for a progress update: the East African Community (EAC), Economic Community of West African States (ECOWAS) and the Southern African Development Community (SADC).

East African Community (EAC)

Development of an EAC Action Plan

The 11th Summit Meeting of Heads of State of the EAC Partner States was held in Tanzania in November 2009. It directed the urgent development of a climate change policy and strategies to address the adverse impact of climate change, including determining how surplus food in one country can be shared in countries that are less fortunate. Therefore, an EAC Action Plan to address food insecurity in the region was developed and finalized in 2010 by EAC in collaboration with key stakeholders from the all EAC Partner States. The plan covers five main priority areas: (1) provision of an enabling policy, legal and institutional framework; (2) increased food availability in sufficient quantity and quality; (3) improved access to food; (4) improved stability of food supply and access in the EAC region; and (5) enhanced efficiency of food utilization, nutrition and food safety. The plan identifies numerous constraints in achieving food security in the EAC region including low usage of productivity-enhancing inputs such as fertilizer, improved seeds and CPPs. To address the above constraints, the following activities are planned for implementation:

1. Establish mechanisms that ensure agricultural inputs are available at affordable prices.
2. Promote integrated nutrient management systems.
3. Promote targeted small, medium and large investment financing.
4. Promote and support the development and availability/use of appropriate technologies that address climate change impacts.
5. Promote soil conservation measures.
6. Support construction of a regional fertilizer processing plant to lower costs.
7. Provide and support the effective and efficient provision of training and extension services on food production, processing, post-harvest handling and marketing.

8. Develop a regional agricultural research and extension framework based on agro-ecological conditions and gender concerns.
9. Encourage the adequate allocation of suitable land to food production.
10. Promote sustainable utilization and management of land, livestock and fisheries resources including aquaculture promotion.

The EAC is at different stages in the development of responsive projects and programs in collaboration with key development partners from within and outside the region including Food and Agriculture Organization of the United Nations (FAO), European Union (EU), Kilimo Trust, United States Agency for International Development/Competitiveness and Trade Expansion Program (USAID/COMPETE), International Fertilizer Development Center (IFDC), Alliance for a Green Revolution in Africa (AGRA), International Livestock Research Institute (ILRI), East African Grain Council (EAGC), East African Business Council (EABC), United Nations Industrial Development Organization (UNIDO), World Food Program (WFP), etc.

Economic Community of West African States (ECOWAS)

Establishment of a Regional Market Information System

The ECOWAS Agriculture Regional Information System (AGRIS) is being developed to capture national level information and data on the agriculture sector, including fertilizer use.

Development of a Regional Fertilizer Regulatory Framework

In 2010 the ECOWAS and UEMOA Commissions embarked on the development of a regional legal framework that harmonizes national regulatory schemes governing fertilizer quality control. As part of this process, under the joint ECOWAS-UEMOA "Marketing Inputs Regionally" (MIR) Plus project, two studies have been commissioned:

1. A study with the overall objective of assessing the physical and chemical quality of fertilizer products traded in West Africa.
2. A study on the development and adoption of a regional legal framework for fertilizer quality control. The study has the following objectives:
    a. Evaluate the existing analytical capacities and the inspection capacities of nine of the 15 member countries (Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali, Senegal, Niger, Nigeria and Togo).

b. Assess and evaluate the legal framework governing the import/production and distribution of fertilizers in member countries, wherever it exists.
c. Propose a regional legal framework instituting and organizing the quality control of marketed fertilizers within the region.

The study was submitted to stakeholders for technical validation at a regional workshop in Togo in December 2010. Participants examined and technically validated three draft instruments. These documents are now ready to be submitted to the appropriate statutory bodies (ECOWAS Commission Legal Services; Meeting of the Ministers in charge of agriculture; and the Council of Ministers) for adoption by the end of 2011. The next steps are as follows: (1) a second set of legal instruments focusing on fertilizer inspection and analysis developed by the consultants for the study will be submitted for technical validation at another regional stakeholder workshop in 2011; (2) a strategy for capacity building at the national level to ensure effective implementation will be developed and validated by stakeholders. With these legal instruments in place, the region will be equipped with the necessary legal arsenal for fertilizer quality control and the process of setting up a regional regulatory body will commence.

Implementation of the CAADP Process in ECOWAS

As part of the CAADP implementation process in ECOWAS, all the 15 ECOWAS Member States had adopted a "National Agricultural Investment Program" (NAIP) by 2010. Most of NAIP includes programs for fertilizer improvement to increase agricultural production and productivity. The process aims to provide a coherent framework for the alignment of donor interventions and support, thereby strengthening the efficiency of implementation.

Participation of Member States in a Regional Workshop on Fertilizer Subsidies

IFDC organized an international training program, "*Developing Private Sector Agro-Input Markets: Designing and Implementing Targeted Subsidy Programs,"* in Nigeria in October 2010. The ECOWAS Commission facilitated the participation of representatives from seven of its Member States: Burkina, Côte d'Ivoire, Ghana, Niger, Nigeria, Senegal and Togo. The goals of the program were to: (1) understand and identify the importance of key variables within each market and the impact they may have on design; (2) understand the role of "smart subsidies" and the need for their consideration; (3) share experiences from a number of countries that have

implemented input subsidy programs, each with unique market environments; and (4) work in groups to understand the development of such programs based on real market situations.

A total of 48 participants from 15 countries in Sub-Saharan Africa attended, and eight country subsidy programs were presented and discussed in detail.

Commissioning of a Study to Assess the Challenges and Opportunity for Domestic Fertilizer Production in West Africa

The ECOWAS Commission has commissioned a study aimed at assessing the challenges and opportunity for domestic fertilizer production in West Africa. The consultants have already undertaken field visits in Benin, Ghana, Nigeria, Senegal and Togo. These included visits with policymakers as well as fertilizer plants. The output of this consultancy will constitute the working documents of a regional workshop to be held in 2011 to identify priority areas of intervention for ECOWAS with regards to the promotion of domestic fertilizer production and trade.

Regional Seeds Project

The Citizens Network for Foreign Affairs (CNFA) is implementing a regional seeds project, which is part of the West Africa Seed Alliance (WASA) in Burkina Faso, Ghana, Mali, Niger, Nigeria and Senegal. This five-year project, funded primarily by USAID and the Alliance for a Green Revolution in Africa (AGRA) and implemented with partners International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and Iowa State University, is designed to modernize seed distribution systems, facilitate smallholder farmer access to improved seed varieties and complementary inputs, improve seed production technologies and strengthen links to credit and markets.

Establishment of the ECOWAS Agricultural Development Fund (ECOWADF)

A financial mechanism (ECOWADF) has been established under the authority of the ECOWAS Commission. It is funded by resources from the ECOWAS region (the budget of the ECOWAS Commission with co-financing from Member States) and external financial partners. Stakeholders from the fertilizer sub-sector will be able to access funds for their various activities through a window to be developed under the ECOWADF.

Southern African Development Community (SADC)

A Study to Assess the Feasibility of Fertilizer Production in the Region

In March 2009 the SADC Secretariat commissioned a two-phased study in collaboration with IFDC:

1. Assessing the existing fertilizer production factories in the region with a view to providing recommendations on how these factories can increase production to meet the regional demand.
2. Providing a critical analysis of the economic potential of establishing new fertilizer production factories that can make use of the available raw materials in the SADC region.

Phase 1 of the study was completed in 2009 and the resulting report underwent a series of reviews by Member States before it was presented to ministers responsible for Agriculture and Food Security in November 2010. The study made several important recommendations for regional implementation and others to be considered by individual fertilizer production plants in Malawi, Mauritius, Mozambique, South Africa, Tanzania, Zambia and Zimbabwe. One of the recommendations of the report was for the region to consider harmonizing some basic labeling approaches in order to contribute to easier trade between countries and make it easy for farmers to interpret the technical information posted on the bags. In this regard, the Secretariat is in the process of developing a simple harmonized system of labeling fertilizer in the region. It is envisaged that the draft labeling system will be available for consideration by Member States before the end of 2011. Phase 2 of the study was originally planned to take place between April and August 2010. However, this phase of the study has not occurred due to lack of funds.

Progress in the Implementation of the *Abuja Declaration on Fertilizer* at the Country Level

Resolution 1

Increase fertilizer use from the current average of 8 kg of nutrients per hectare to 50 kg of nutrients per hectare by 2015.[2]

Table 3 shows the average intensity of fertilizer use (nutrients of NPK) per hectare of cultivated land in Africa for 2008. The source of data is IFDC and these calculations represent the most recent and comprehensive data on fertilizer use per hectare available from IFDC.

Analysis of Table 3 reveals that nutrient consumption per hectare in Africa is still quite low. The majority of countries consume less than 20 kg of nutrients per hectare (25 out of 35 countries that reported in 2008). Only five countries of the 35 countries for which data is available came close to or exceeded the Abuja target of 50 kg/ha.

Table 3. Distribution of Countries by the Level of Fertilizer Use (Nutrients of NPK) per Hectare of Cultivated Land in Africa, 2008

Fertilizer Use	Number of Countries (2008)
(kg nutrients per hectare)	
< 20	25
>20-40	5
>40-100	3
>100	2

Figure 1 shows total fertilizer use per hectare of arable land for Africa and Sub-Saharan Africa. The results for Africa as a whole show a higher average of between 25 kg/ha and 35 kg/ha due to the inclusion of North African countries and South Africa where average levels of fertilizer use are substantively higher. Average fertilizer use per hectare in Libya ranged between 27 and 67 kg/ha for the period 1990-2008 and in Morocco fertilizer use per hectare

[2] It is recognized that the target of 50 kg of nutrients per hectare is arbitrary for two reasons. First, it is not a scientific recommendation that takes into account suitability of use based on crop mix and land quality; it is a political statement. Second, the averages represent the minimum amounts applied by African farmers; the actual doses typically exceed the 50 kg target particularly for cash crops. Nevertheless, considering the low levels of average fertilizer use on food crops in Africa and current fertilizer recommendations, it provides a much needed and realistic minimum target for African farmers.

ranged from 31 kg/ha to 54 kg/ha during this period. In Egypt average fertilizer use has ranged from 400 to 724 kg/ha and in average fertilizer use per hectare in South Africa has remained above 40 kg/ha since 1990. However, the results for SSA support the conclusion of the analysis above, namely that in general, average fertilizer use per hectare in Africa is still low. Since 1990, average fertilizer use per hectare in SSA has remained between 5 kg/ha and 10 kg/ha. Nevertheless, some countries have made substantive improvements in fertilizer consumption during this period. Fertilizer consumption per hectare in Kenya increased from 21 to 33 kg/ha; Angola increased consumption from 3.3 to 8.3 kg/ha; Cameroon increased consumption from 3.7 to 8.6 kg/ha; Tanzania increased consumption from 3 to 5.9 kg/ha; and Zambia experienced a substantive increase from 11 to 50 kg/ha. However, the largest increase in consumption was by Egypt from 420 kg/ha in 1990 to 724 kg/ha in 2008. Notwithstanding these commendable gains by some countries, fertilizer consumption levels, particularly for Sub-Saharan Africa are still extremely low – less than 10 percent of the world average and far below the 50 kg/ha minimum target set by the *Abuja Declaration on Fertilizer*.

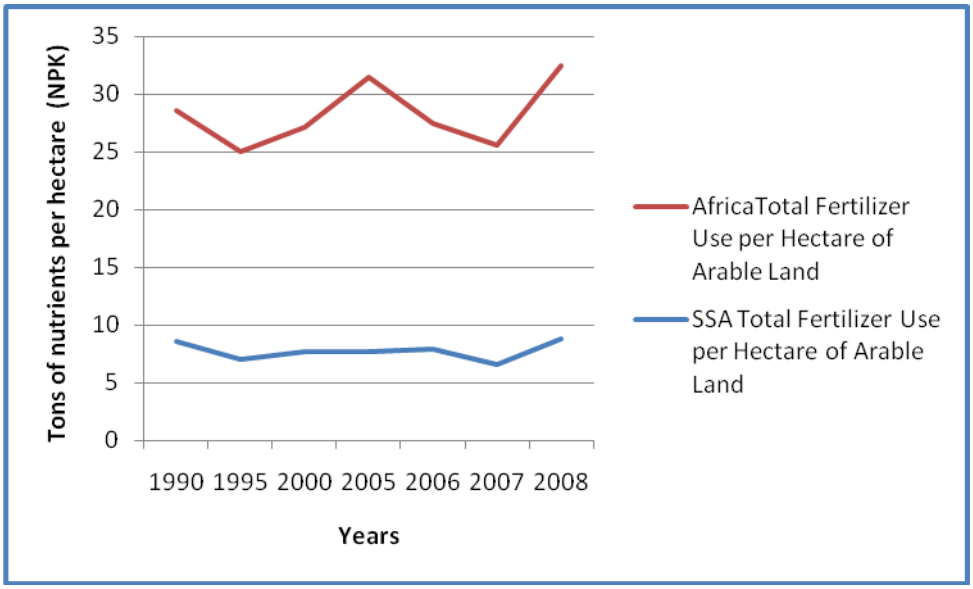

Figure 1. Average Intensity of Fertilizer Use (Nutrients NPK) per Hectare of Cultivated Land in SSA and Africa, Selected Years (1990-2008)

In terms of total fertilizer use, the data reveal a similar story (Figure 2). Once again, levels of total fertilizer consumption are higher for Africa than for SSA because of inclusion of the two giants from North Africa (Morocco and Egypt) and South Africa. Between 1998-99 and 2007-08, average total fertilizer consumption for Africa ranges between 5 million and

7 million mt of nutrients. During this same period, total fertilizer consumption levels in Morocco range from 325,000 to 550,787 nutrient mt; from between 1,171,000 and 2 million mt in Egypt; and between 623,586 and 838,507 in South Africa. However, the average annual total fertilizer consumption for SSA is much lower and at just over 1 million mt of nutrients during the same period. Therefore, as is the case with average fertilizer use per hectare, total fertilizer consumption in SSA has remained static since 1990. There are exceptions: between 1998-99 and 2007-08, total fertilizer consumption in Malawi increased from 50,200 to 125,153; Nigeria, 163,200 to 497,697; Uganda from 3,535 to 18,976 and Zambia from 36,700 to 117,978.

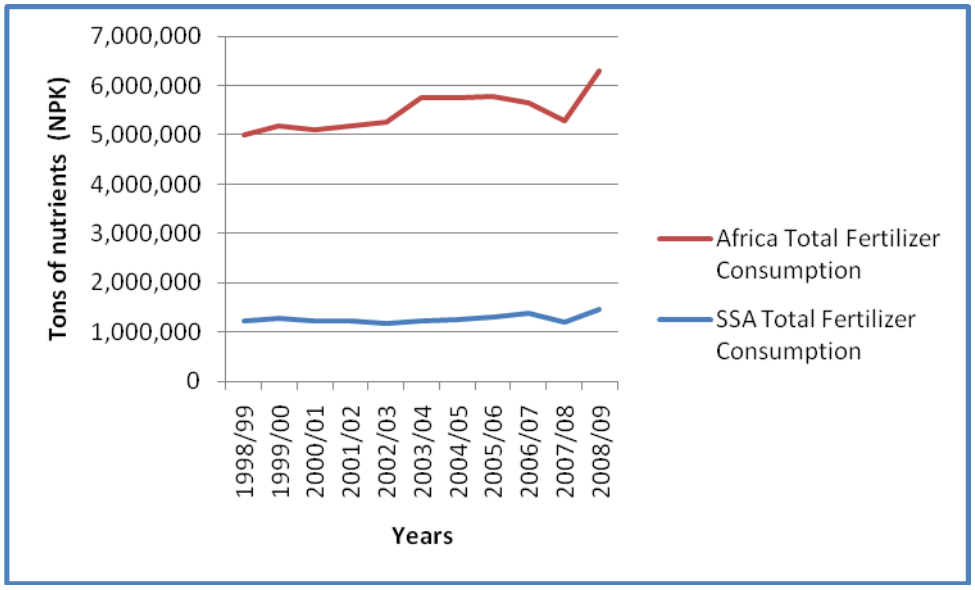

Figure 2. Total Fertilizer Consumption in Africa and SSA, 1998-99 to 2007-08

The above data were for the 35 countries in the IFDC dataset. The remainder of the report focuses on the 17 countries that completed and returned the fertilizer questionnaires to NEPAD by May 31, 2011 (see Table 1).

Resolution 2

The *Abuja Declaration* calls for countries and RECs to take appropriate measures to reduce the cost of fertilizer procurement at national and regional levels, especially through the harmonization of policies and regulations to ensure duty- and tax-free movement across regions, and the development of capacity for quality control. The declaration also calls for the immediate elimination of taxes and tariffs on fertilizers and on fertilizer raw materials.

Table 4 illustrates the status of fertilizer legislation and trade policies in Africa for the reporting period 6 (January-December 2010). In terms of alignment with the *Abuja Declaration*: 47 percent (8) of the respondents have a formal legal and regulatory framework in place to govern their fertilizer subsector; 65 percent (11) carried out fertilizer inspections at the point of sale during the current period; 42 percent (7) have tariffs on fertilizers; and 59 percent (10) have taxes on fertilizers.

The data were then analyzed to assess the extent to which countries have become more or less aligned with the *Abuja Declaration* since reporting period 1 (June 2006-June 2007). Figure 3 illustrates the trend in the status of fertilizer legislation and trade policies in Africa for each reporting period between June 2006-June 2007 (reporting period 1 or the baseline period) and January-December 2010 (reporting period 6 or the current period). Sixty-three percent of the respondents have a formal legal and regulatory framework during reporting period 1; 40 percent during reporting period 2; 37 percent during reporting period 3; 56 percent during reporting period 4; 52 percent during reporting period 5; and 45 percent during reporting period 6. The data reveal that progress in the establishment of a formal policy and regulatory framework by African countries has fluctuated considerably between reporting period 1 and the current reporting period, and the overall trend is downward. Therefore, progress on this indicator is unsatisfactory.

Table 4. Summary of the Status of Fertilizer Regulations in Africa: January-December 2010 (Current Period)

Country	Formal Regulatory Framework	Administrative Decisions	Fertilizer Inspections at the Point of Sale	Tariffs on Fertilizers	Taxes on Fertilizers
Burundi		√	√ (4 fertilizer inspectors)		√ (VAT)
Cameroon	√			√ (CET)	
Chad		√			
Djibouti		√			
Egypt	√		√ (70 fertilizer inspectors)	√	
Ethiopia	√		√ (no data)		
Kenya	√		√ (80 fertilizer inspectors)		√ (IDF charge)
Lesotho		√	√ ((2 fertilizer inspectors)		√ (VAT)
Malawi		(−) i.e. bill drafted not yet passed by parliament	√ (12 fertilizer inspectors)	√	√ (Withholding tax)
Mali	√		√ (no data)	√ (CET)	√
Mozambique		√			
Namibia	√		√ (no data)	√	√ (VAT 15%)
Senegal		√		√ (CET 7%)	√
Seychelles		√	√ (no data)	√	
Sudan	√		√ (7 fertilizer inspectors)		√ (Withholding tax)
Tanzania	√		(−) (43 inspectors being trained, 1 per district)		√ (VAT))
Uganda		√	√ (35 fertilizer inspectors)		√ (Withholding tax)

Key: CET= Common External Tariff; IDF = Import Declaration Form; VAT = Value added tax

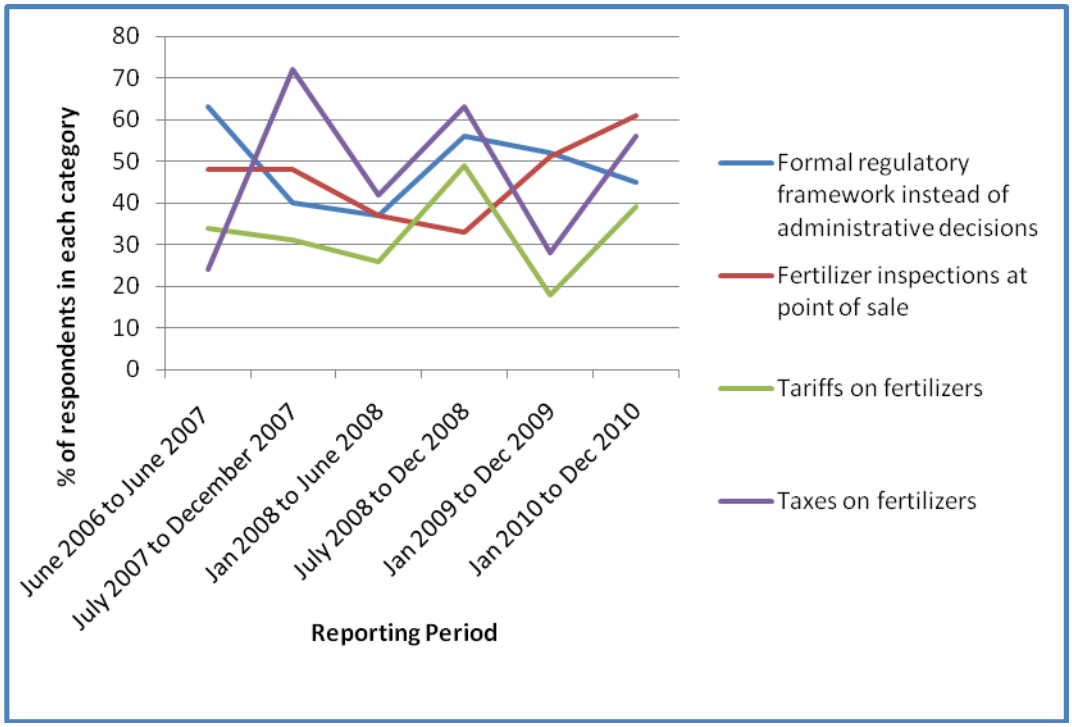

Figure 3. Status of Fertilizer Regulations and Trade Policy in Africa: June 2006-June 2007 (Reporting Period 1) to January-December 2010 (Reporting Period 6)

Regarding progress made by countries on the development of capacity for quality control, the trend over the six reporting periods is as follows: initially there was a decrease from 48 percent of the respondents in reporting period 1 to 33 percent of the respondents in reporting period 4. Thereafter, the trend is upward culminating in 61 percent of the respondents having the capacity for quality control in reporting period 6. Therefore, the degree of alignment with the *Abuja Declaration* with regard to quality control has increased since reporting period 1 and is reasonable (61 percent) in the current reporting period. The progress made on this indicator is satisfactory.

Figure 3 illustrates that progress with respect to the elimination of tariffs and taxes over the six reporting periods is uneven and generally unsatisfactory. In general, a higher percentage of the respondents for each reporting period have taxes rather than tariffs on fertilizers. Less than 40 percent of the respondents for each reporting period have tariffs on fertilizers with the exception of reporting period 4 (49 percent). The general trend is upward with the percentage of respondents with tariffs on fertilizers increasing from 34 percent in reporting period 1 to 39 percent in reporting period 6. The fertilizer tariffs in the West African countries of Cameroon,

Mali and Senegal are common external tariffs applied by all ECCAS and ECOWAS member states. The percentage of respondents with taxes on fertilizers increases over the six reporting periods as exhibited by the upward trend for this indicator in Figure 3; from 24 percent in reporting period 1 to 56 percent in reporting period 6, with a peak of 72 percent in reporting period 2. These data imply that African governments are trying to comply with the *Abuja Declaration* resolution, which calls for the elimination of all taxes and tariffs on fertilizers, but in the absence of alternative sources of revenue, they find themselves compelled to reintroduce or maintain these measures.

Resolution 3

Improve farmers' access to fertilizers by developing and scaling-up input dealers' and community-based networks across rural areas.

Agro-dealer development is key to increasing farmer use of fertilizers and other agri-inputs through improved access to and availability of these inputs. It is characterized by a large number of skilled and knowledgeable private agro-dealers whose networks extend into the rural interior near the farm gate. These agro-dealers will make fertilizers available to numerous farm households at affordable prices, in suitable bag sizes and at sales points that are no more than 2-5 km from the farm gate. The outcome should be increased fertilizer use by farmers (and therefore increased market size) due to improved availability (volume, bag size, range and quality of inputs); access (shorter distances); and affordability (lower prices).

Development of Dealer Networks

Figure 4 illustrates the results for the development of agro-dealer networks between reporting period 1 (or the baseline period) and reporting period 6 (the current reporting period). There has been a decrease in the percentage of respondents with less than 10 agro-dealers over the six reporting periods, from 47 percent of the respondents in reporting period 1 to 25 percent of the respondents in reporting period 6. In contrast, the percent of respondents with 100-500 agro-dealers increased from 6 percent in reporting period 1 to 25 percent in reporting period 6 with a peak of 34 percent of respondents in reporting period 2. The percentage of respondents with 10-100 agro-dealers was 10 percent to 20 percent for four of the six reporting periods, and 19 percent of the respondents in reporting period 6 had 10-100 agro-dealers. The percentage of respondents with over 1,000 agro-dealers has also been consistent, remaining between 20 percent

and 30 percent of respondents for the six reporting periods, and 25 percent of the respondents had over 1,000 agro-dealers in reporting period six. Therefore, the majority of the respondents in each reporting period have more than 10 agro-dealers. These results indicate a definite improvement in the development of agro-dealer networks since the baseline period.

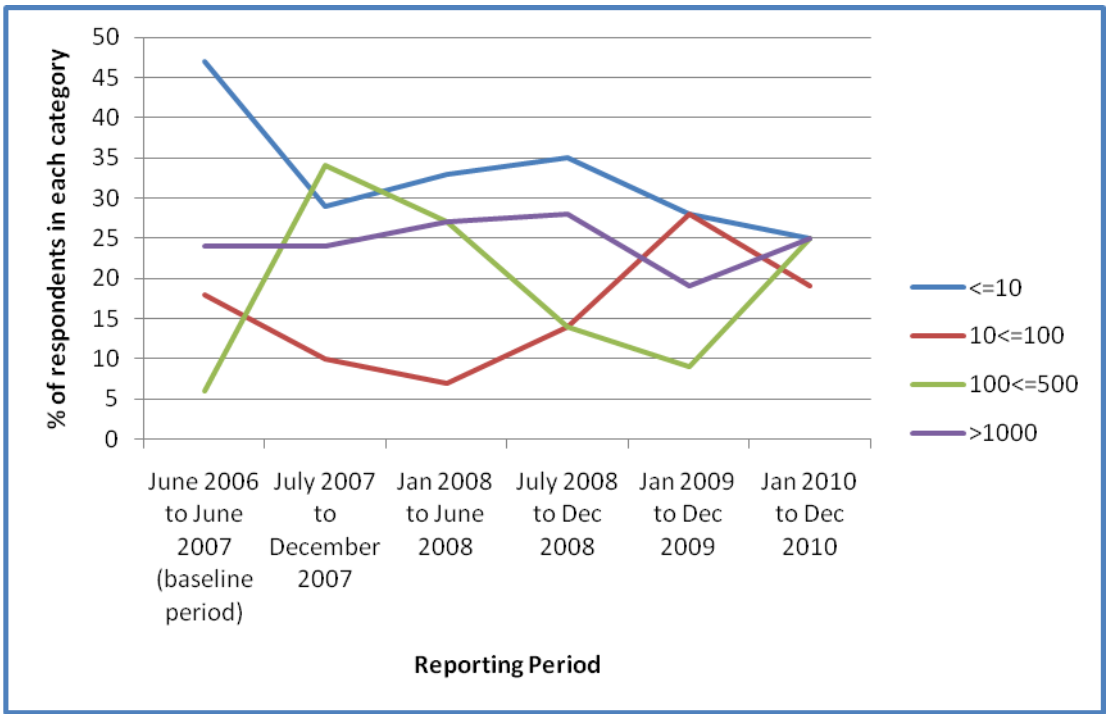

Figure 4. Number of Agro-Dealers, Percent of Respondents for Each Category for the Six Reporting Periods Between June 2006-June 2007 (Reporting Period 1) and January-December 2010 (Reporting Period 6)

Distance Traveled

Distance traveled to access fertilizers was used to determine the extent to which fertilizer is physically available to farmers. As input market performance improves, the distance traveled to purchase a 50-kg bag of fertilizer is expected to decrease. The ideal distance is less than 10 km and preferably no more than 2-5 km. Figure 5 illustrates the results for the distance traveled to purchase fertilizers between reporting period 1 (or the baseline period) and reporting period 6 (the current reporting period). The percentage of respondents whose farmers travel less than 10 km to purchase fertilizers increased from 25 percent of the respondents in reporting period 1 to 50 percent of the respondents in reporting period 6. The percentage of respondents whose farmers travel 10-20 km to purchase fertilizers increased between reporting period 1 (30 percent) and reporting period 4 (45 percent), but then declines sharply to 9 percent of respondents in

reporting period 5 and 12 percent of respondents in reporting period 6. The percentage of respondents whose farmers travel 20-100 km to purchase fertilizers is 31 percent to 43 percent for four of the six reporting periods, and is 25 percent of the respondents in reporting period 6. The percentage of respondents whose farmers travel over 1,000 km to purchase fertilizers has not decreased over the six reporting periods; it has been 5 to 10 percent for each of the six reporting periods.

These results show there has been good progress in reducing distance traveled to purchase fertilizers. The percentage of respondents whose farmers travel less than 10 km to purchase fertilizers has increased substantively to 50 percent in the current period. Nevertheless, there is still room for improvement as the percentage of respondents whose farmers travel long distances to purchase fertilizers (over 1,000 km) has not declined and the percentage of respondents whose farmers travel 20-100 km is still at 25 percent for the current reporting period. Therefore, although the situation has improved substantively reflecting the increase in the number of agro-dealer development projects underway on the continent, there is still an urgent need to deepen agro-dealer networks to more fully penetrate the rural interior in Africa.

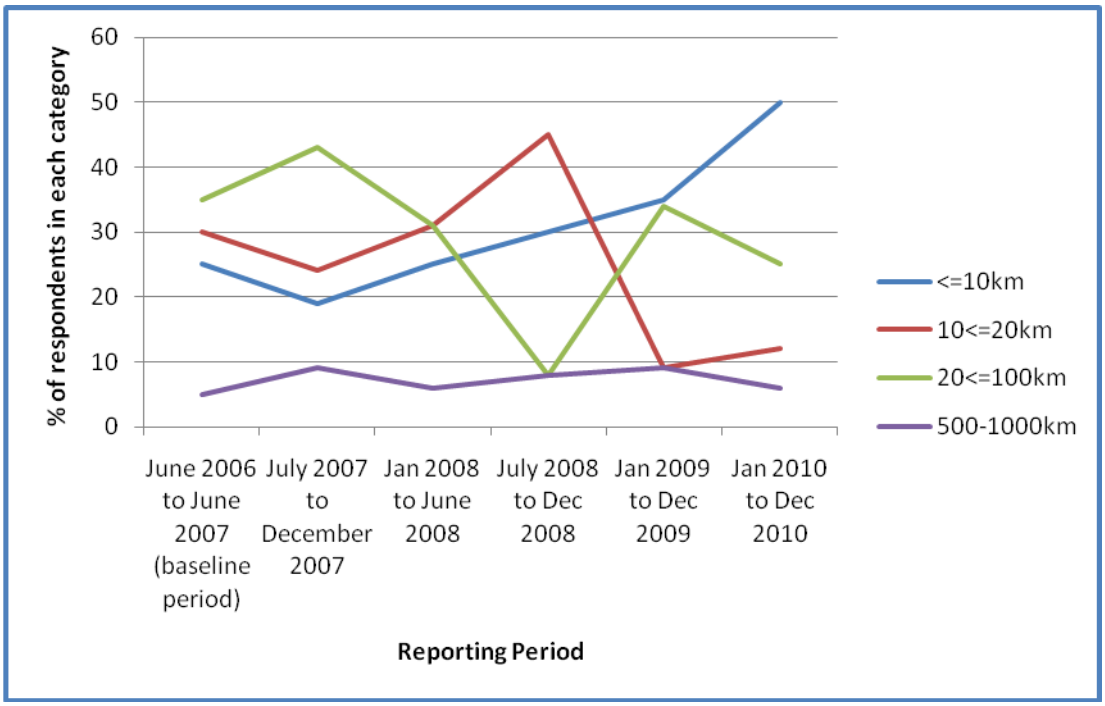

Figure 5. Distance Traveled by Farmers to Purchase Fertilizers, Percent of Respondents for Each Category for the Six Reporting Periods Between June 2006-June 2007 (Reporting Period 1) and January-December 2010 (Reporting Period 6)

Fertilizer Use

The level of chemical fertilizer use is another indicator for assessing progress with respect to access to inputs. All of the respondents (100 percent) for reporting period 6 indicate that their small-scale farmers use chemical fertilizers. Nevertheless, the percentage of the farmers that are using fertilizers varies considerably for the respondents; 18 percent of the respondents for reporting period 6 said less than 10 percent of their farmers use fertilizers; 41 percent of the respondents reported that 10-50 percent of their farmers use fertilizers; and 35 percent reported that 50-100 percent of their farmers use fertilizers. Although the results fluctuate considerably, a similar pattern emerges over the six reporting periods of a consistently higher percentage of respondents in the 10-50 percent and 50-100 percent categories (Figure 6). The percentage of respondents with less than 10 percent of their farmers using fertilizers does not exceed 30 percent for each of the six reporting periods and drops to 14 percent in reporting period 2. In contrast, the percentage of respondents with 10-50 percent of their farmers using chemical fertilizers is over 40 percent for four of the six reporting periods. Similarly, the percentage of respondents with 50-100 percent of their farmers using chemical fertilizers is over 30 percent for four of the six reporting periods. Therefore, although the results fluctuate considerably, there is a consistently higher percentage of the respondents in the 10-50 percent and 50-100 percent categories for each of the reporting periods. These results imply a reasonably high and increasing proportion of farmers that are using chemical fertilizers in Africa.

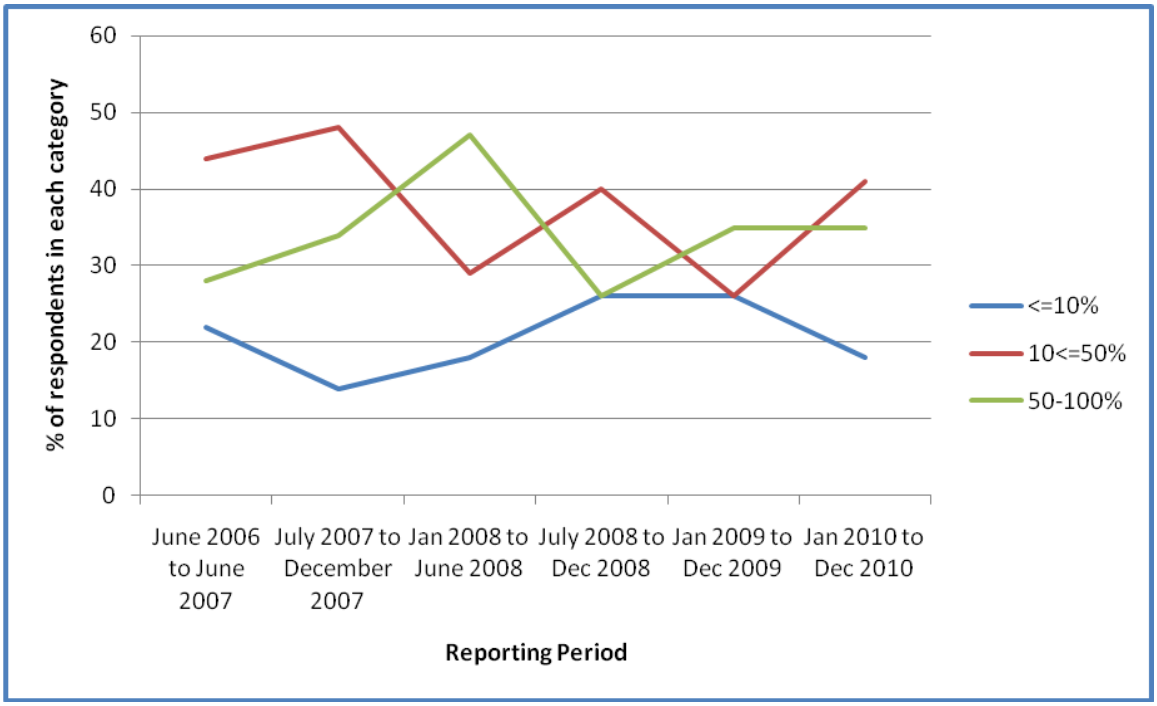

Figure 6. Chemical Fertilizer Use by Small-Scale Farmers, Percent of Respondents for Each Category for the Six Reporting Periods Between June 2006-June 2007 (Reporting Period 1) and January-December 2010 (Reporting Period 6)

Market Size

Market size is a good indicator of the level of market development. An increase in market size indicates that farmers have improved access to affordable fertilizers in a timely manner and in a variety of bag sizes that meet their needs. The proxy used for this indicator is quantity of fertilizer imports. The analysis of the data for reporting period 6 (January-December 2010) reveals that countries fall within a wide range of market sizes; 38 percent of the respondents have a market of less than 10,000 mt; 38 percent have a market between 10,000 and 100,000 mt; only 15 percent have a market of between 100,000 and 500,000 mt; and 1 percent have a market of more than 500,000 mt. Therefore, in general, fertilizer markets in Africa remain small. However, the data reveal that there may be a small but positive trend in market size. Figure 7 illustrates the results for market size of the respondents between reporting period 1 (or the baseline period) and reporting period 6 (the current reporting period). Although there are considerable fluctuations, the percentage of respondents with a market size of less than 100,000 mt of nutrients decreased from 48 percent of the respondents in reporting period 1 to 38 percent of the respondents in reporting period 6. In contrast, the percentage of respondents with a market size of 100,000-500,000 mt increased between reporting period 1 (29 percent) and reporting period 6

(38 percent). This increase in the percentage of respondents in a higher market size category (100,000-500,000 mt) and the concomitant decrease in the percentage of respondents in a lower category (less than 100,000 mt) indicates a trend towards a larger market size. However, the percentage of respondents with a market size of 500,000-1 million mt is generally below 20 percent for all six reporting periods and is as low as 2 percent in reporting period 2. Similarly, the percentage of respondents with a market size of over 1 million mt is below 10 percent for all six periods and is 1 percent in reporting period 5 and reporting period 6. The results indicate that there is a trend towards a larger market size category, but it has a ceiling (100,000-500,000 mt). Much work remains to break though this ceiling and substantially increase the size of fertilizer markets in African countries.

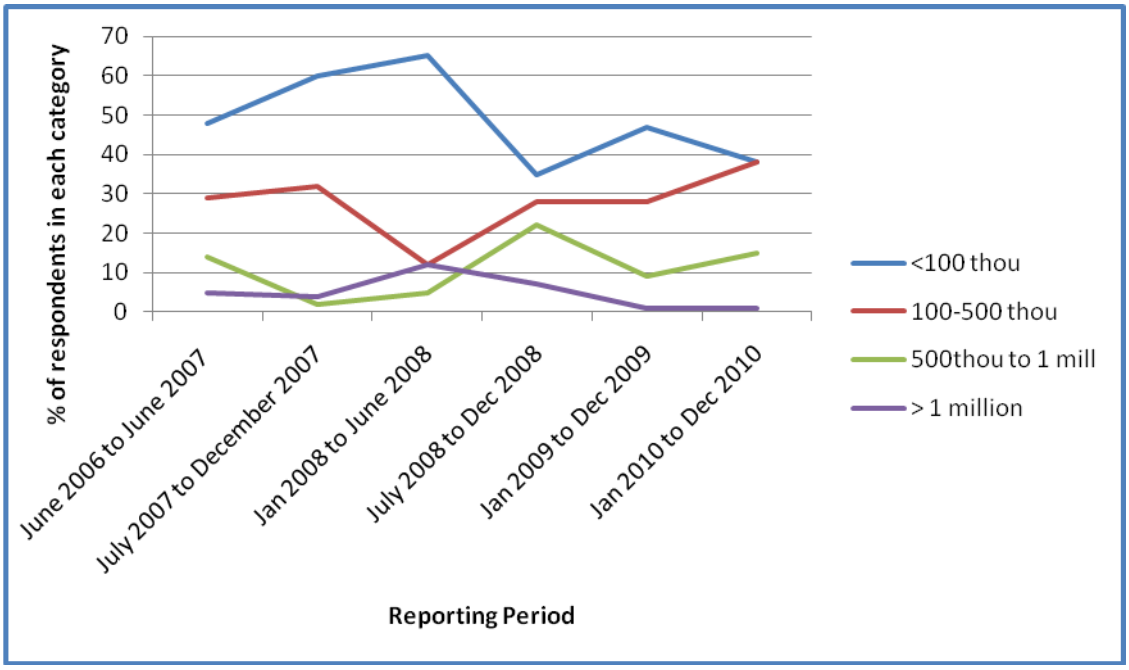

Figure 7. Market Size (Product mt), Percent of Respondents for Each Category for the Six Reporting Periods Between June 2006-June 2007 (Reporting Period 1) and January-December 2010 (Reporting Period 6)

Bag Size

Bag size is an indicator of service delivery. As the fertilizer market develops, agro-dealers improve their services to attract and retain customers by offering a wider variety of fertilizer types and bag sizes. The standard bag size for retail fertilizer is 50 kg. However, many small-scale farmers prefer to buy fertilizers in 25-kg or 10-kg bags because they are more affordable. Some even prefer 2-kg or 5-kg bags. For example, vegetable farmers who have small

plots do not require 50-kg bags of fertilizer. The data indicate that availability of fertilizer in smaller bags has declined in recent years (Figure 8). All of the respondents (100 percent) for reporting period 6 indicate that fertilizer is available for retail to small-scale farmers in 50-kg bags. However, only 33 percent of the respondents for reporting period 6 said fertilizers are available in 25-kg bags and 28 percent said it is available in bag sizes of 10 kg and less (5 kg, 2 kg and 1 kg). A similar pattern emerges over the six reporting periods; all of the respondents report that fertilizer is available to small-scale farmers in 50-kg bags. However, the percentage of respondents who report bag sizes for fertilizers of 25 kg is much lower; less than 40 percent of respondents for all the reporting periods except reporting period 1 (43 percent) and the figure is 21 percent in reporting period 3. The percentage of respondents who reported bag sizes of 10 kg and less over the six reporting periods is also relatively low. It is less than 20 percent of respondents for reporting period 2, reporting period 3 and reporting period 4, and is 28 percent for reporting period 6. The results reveal an insufficient number of respondents making fertilizers available in smaller bags, and this figure has declined since the baseline period (48 percent) (Figure 8).

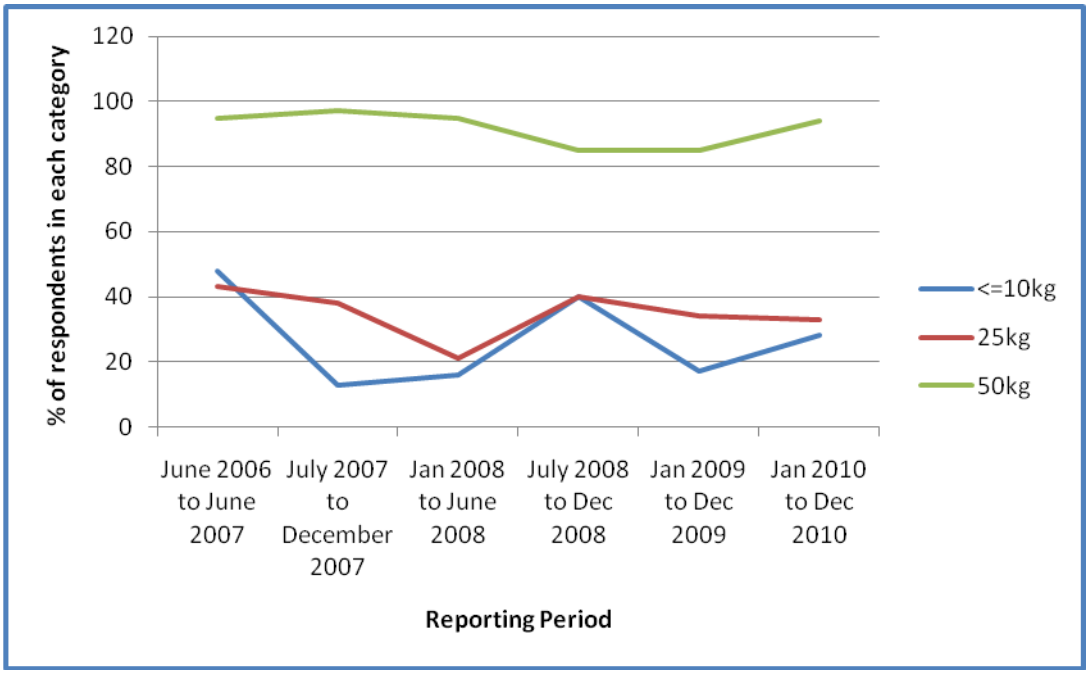

Figure 8. Availability of Fertilizers in Different Bag Sizes, Percent of Respondents for Each Category for the Six Reporting Periods Between June 2006-June 2007 (Reporting Period 1) and January-December 2010 (Reporting Period 6)

Average Retail Price

Table 5 shows the average retail price per 50-kg bag (US $) for each reporting period, and the price ratios for the current reporting period. For each reporting period, the price is the average for the four top-selling fertilizers in the respective countries. In general, a lower retail price from one period to the next indicates an improvement in financial access to fertilizers for small-scale farmers. However, for each of the 17 respondents for whom data is available, there has been an increase in fertilizer prices since June 2006, even in cases where the price is subsidized. So, generally speaking, financial access to fertilizers for small-scale farmers in Africa has not improved, and in some cases has worsened considerably.

Table 5. Fertilizer Market Performance in Africa: Average Retail Price (US $) per 50 kg Bag, Between June 2006-June 2007 (Reporting Period 1) and January-December 2010 (Reporting Period 6)

Respondent	June 2006-June 2007)	July-December 2007	January-June 2008	July-December 2008	January-December 2009	January-December 2010	Price Ratio
Burundi	No data	40	63.75	No data	42	43.65	1.08
Cameroon	23.58	35*	45*	31		34	1.40
Chad					36*		
Djibouti			85*				
Egypt	6.71*	9*	11.25*	9*	11.3	11	
Ethiopia	20.95	22		16*		25	
Kenya	24.64	32	52.5*	42		33.5	1.21
Lesotho	16.36	34*	53*		27*	50	
Malawi		31*	No data	No data	27*	34.5	1.20
Mali		No data	40*	No data	55	15	
Mozambique	27.5	26	65	39		46	1.28
Namibia	34.87	40*	48*	80*	64*	No data	
Senegal						30	
Seychelles	30.00*	30*	29.75*	31*	37*	42*	*0.94
Sudan						No data	
Tanzania	23.00	29	47*	53	26*	26*	1.25
Uganda	24.55	26	67	50	49	35	

*Subsidized price

However, in this study, the average retail price cannot be used as an indicator to reach firm conclusions about the performance of the fertilizer market in each respondent country. First, fertilizer prices are subsidized for the majority of respondents. Second, comparing fertilizer prices for a country from one period to the next is also a poor indicator of market performance,

because the retail price is a function of the world market price, exchange rate and domestic market conditions. Therefore, domestic marketing costs may decrease due to improved market performance, but the retail price may still increase due to an increase in the exchange rate and/or the world market price. A more appropriate measure of market performance for a country is the ratio of the retail price to the cost, insurance and freight (c.i.f.) price. This ratio demonstrates the internal transaction costs of supplying fertilizer in a country. For example, a ratio of 1.54 means the retail price is 1.54 times more expensive than the c.i.f. price. A reduction from one period to the next, for example, from 1.54 to 1.3, is an indication of lower importer and retail margins and improved efficiency in procurement, distribution and retailing.

Table 5 also presents price ratios for seven of the 17 countries in reporting period 6. The lowest result is for Burundi (1.08) indicating that the retail price is only 8 times more expensive than the c.i.f. price. Cameroon is at the other extreme with a price ratio of 1.40 indicating that the retail price is 40 times more expensive that the c.i.f. price. The explanation for this difference in marketing margins is not apparent and requires further investigation. However, initial analysis as follows yields one possible explanation. Neither Burundi nor Cameroon has a fertilizer subsidy and Burundi is landlocked whereas Cameroon is a coastal country. Therefore, one explanation could be that Burundi is a much smaller country; hence, once fertilizer crosses the border, transport costs to the retail points (which typically comprise 40-50 percent of the marketing margin for fertilizer in Africa) are much lower. The other price ratios for Kenya, Malawi, Mozambique and Tanzania are all within the same range (1.20 for Malawi to 1.28 for Mozambique). Therefore, for these countries retail prices are on average 25 percent higher than c.i.f. prices, which are not unreasonable. However, one should keep in mind that these are subsidized prices. The result for the Seychelles is an outlier; the price ratio is below 1 (0.94) because the subsidized average retail price is lower than the c.i.f. price. This is because the government is the sole importer and distributor of fertilizers in the Seychelles, and it retails fertilizers at the c.i.f. price. However, the government has started to encourage private sector participation in the fertilizer industry, and in 2011 a branch of the Seychelles National Farmers' Cooperative will import fertilizers for the first time. Unfortunately the lack of data does not allow for analysis of price ratios over the six reporting periods. Consequently, no conclusions can be drawn about whether there has been an improvement in market performance as measured by this indicator.

Resolution 5

Improve farmers' access to fertilizer by granting targeted fertilizer subsidies, with special attention to poor farmers.

Table 6 presents the status of fertilizer subsidies among the 17 respondents to this study for the reporting period 6 (January-December 2010). In terms of alignment with the *Abuja Declaration*: 76 percent (13) of the respondents have fertilizer subsidies. Thirty-five percent (6) of the respondents use input vouchers to administrate their subsidies and 18 percent (3) have fertilizer-for-work programs. The number of methods used to import and distribute fertilizers for the subsidy programs are quite evenly distributed between the respondents: 18 percent (3) of the respondents use a system of importation and distribution by government for free or at subsidized prices; 24 percent (four) of the respondents use a system of importation by private sector and distribution by government for free or at subsidized prices. One country, Tanzania, has importation and distribution of fertilizers for the subsidy program by the private sector only. The most popular method of importing and distributing fertilizers for government subsidy programs is importation by government and distribution by government and private sector at subsidized prices; 35 percent or six of the respondents use this system.

Figure 9 illustrates the incidence of fertilizer subsidy programs between reporting period 1 (or the baseline period) and reporting period 6 (the current reporting period). The percentage of respondents with a fertilizer subsidy program is over 50 percent for all of the reporting periods except reporting period 5 (43 percent). However, the data indicates that there was a decline in subsidy programs between reporting period 2, and reporting period 5; after reaching a peak of 76 percent in reporting period 2 the percentage of respondents with subsidy programs decreased steadily to 43 percent. However, there has been an upturn in the current reporting period; 72 percent of respondents have a fertilizer subsidy program. The percentage of respondents with input voucher schemes decreased sharply from 24 percent in reporting period 1 to 4 percent in reporting period 2, but this indicator has revealed a steady upward trend since then reaching a peak of 33 percent of respondents in reporting period 6. Similarly, the percentage of respondents with fertilizer-for-work programs exhibited a distinct downward trend from 14 percent in reporting period 1 to 1 percent in reporting period 5; however, there has also been an upturn in reporting period 6 to 17 percent of respondents with fertilizer-for-work programs. In general, the results reveal a recent upswing in the incidence of fertilizer subsidy programs, and in the use of input voucher schemes and fertilizer-for-work programs to administer these subsidies.

Table 6. Summary of the Status of Fertilizer Subsidies in Africa: January-December 2010 (Current Period)

	Characteristics of Fertilizer Subsidy Programs						
Country	Price	Transport Costs	Input Vouchers	Fertilizer-for-work	Importation and Distribution by Government for Free or at Subsidized Prices	Importation by Private Sector and Distribution by Government for Free or at Subsidized Prices	Importation by Government and Distribution by Government and Private Sector at Subsidized Prices
Burundi	√			√	√		
Cameroon	No subsidy						
Chad	√	√					√
Djibouti					√		
Egypt	No subsidy						
Ethiopia							√
Kenya	√		√				√
Lesotho	√		√				√
Malawi	√		√			√	
Mali	√					√	
Mozambique	√		√				√
Namibia	√		√			√	
Senegal	√			√		√	
Seychelles	√	√			√		
Sudan	√			√			√
Tanzania	√	√	√			√ (Importation and distribution of subsidized fertilizer by private sector)	
Uganda	No subsidy						

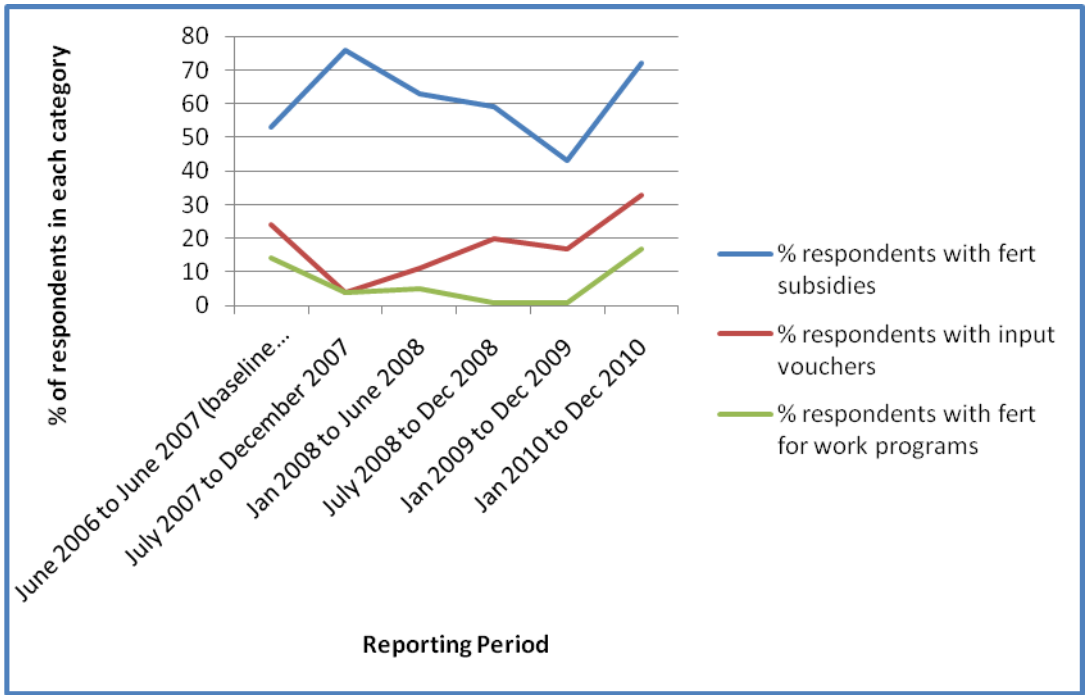

Figure 9. Percentage of Respondents With Fertilizer Subsidies, for the Six Reporting Periods Between June 2006-June 2007 (Reporting Period 1) and January-December 2010 (Reporting Period 6)

Resolution 7

Establish national financing facilities for input suppliers to accelerate access to credit at the local and national levels, with specific attention to women.

Table 7 presents the public, public-private and private initiatives that have been introduced by respondents during reporting period 6 to lower the risks to financial institutions of lending to importers and agro-dealers during the reporting period. Eighty-nine percent (16) of the respondents reported having these types of initiatives during the current period. The most popular type are credit guarantee funds (10 or 56 percent of the respondents) followed by government-sponsored programs (5 or 28 percent of the respondents).

Table 7. Summary of Initiatives to Lower the Risks to Financial Institutions of Lending to Importers/Agro-Dealers: January to December 2010

	January-December 2010
Percentage of respondents	89
Type of Risk-Sharing Initiative	
Credit guarantee funds	Cameroon, Egypt, Kenya, Malawi, Mali, Mozambique, Namibia, Senegal, Tanzania, Uganda
Government-sponsored programs	Egypt, Chad, Mozambique, Senegal, Seychelles
Donor-sponsored programs	Lesotho, Sudan

Multiple responses per respondent allowed.

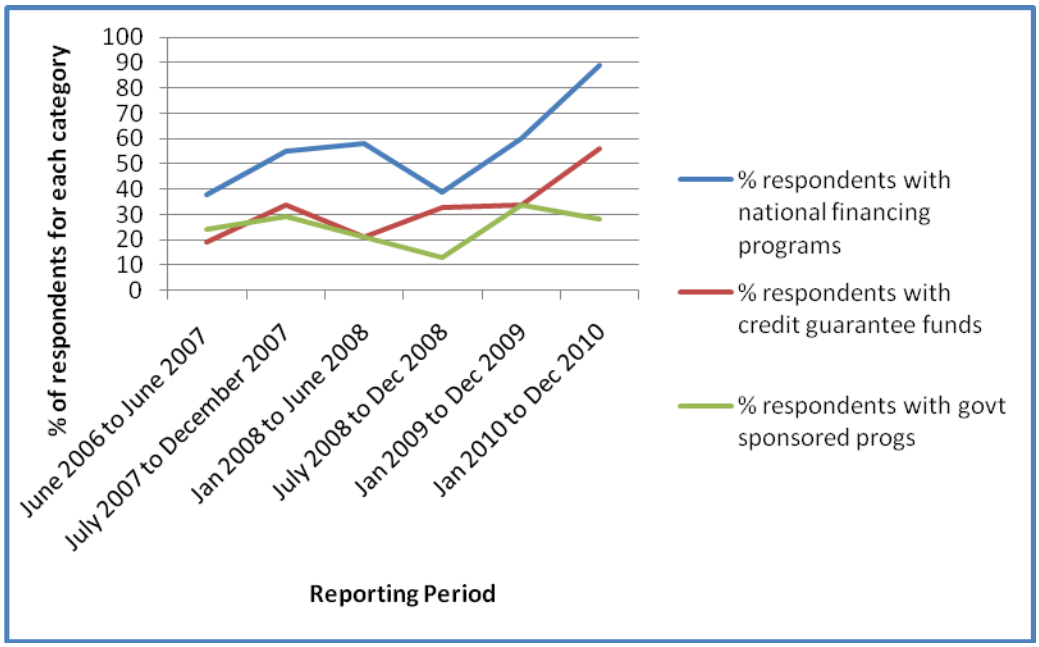

Figure 10. Percentage of Respondents With Initiatives to Lower the Risks to Financial Institutions of Lending to Importers/Agro-Dealers by Type of Initiative: June 2006-June 2007 (Reporting Period 1) and January-December 2010 (Reporting Period 6)

Figure 10 illustrates the incidence of financial initiatives (percentage of respondents) to reduce the risk of lending to importers/agro-dealers between reporting period 1 (or the baseline period) and reporting period 6 (the current reporting period). There is a clear upward trend in the percentage of respondents with these risk-reducing financial initiatives; 38 percent of the respondents for reporting period 1 have these financial initiatives and this figure increased to 58 percent in reporting period 3 and 89 percent in reporting period 6. Similarly, the percentage of respondents who report having credit guarantee schemes increased from 19 percent in reporting

period 1 to 56 percent in reporting period 6. However, there is little variation in the percentage of respondents with government-sponsored financial programs over the six reporting periods; the percentage is 20-30 percent for four of the six reporting periods, with a peak of 34 percent in reporting period 5 and a low of 14 percent in reporting period 4. These results indicate that a substantive proportion of respondents in the current period have financial initiatives to reduce the risk of lending to importers/agro-dealers. Moreover, there is a clear upward trend for financial initiatives in general and credit guarantee schemes in particular.

Resolution 8

Promote regional fertilizer procurement through public-private partnerships.

All of the respondents in each of the six reporting periods recognize the benefits of regional fertilizer procurement; nevertheless, no concrete action has been taken on this initiative until now. In March 2009 a workshop on regional procurement for East and Southern Africa was convened by the AUC Department of Rural Economy and Agriculture (DREA), AfDB and the Alliance for a Green Revolution in Africa (AGRA) in Nairobi. The workshop was attended by Ministers of Agriculture and Finance from Ethiopia, Kenya, Rwanda, Tanzania, Uganda and Zambia and a representative from Mozambique. The Ministers reached a consensus that regional procurement is a short-term solution to the problem of fertilizer supply in Africa; the long-term solution is regional fertilizer production. The meeting agreed that the AfDB would launch a pilot project on regional procurement for Rwanda, Tanzania and Uganda for the 2009 planting season with technical and financial facilitation from AfDB. However, no concrete follow-up actions have been reported. In June 2009 COMESA convened a Fertilizer Policy Seminar, which was attended by high-level policymakers. Participants expressed very strong reservations about the feasibility of regional procurement and instead endorsed the establishment of regional bulk fertilizer holding warehouses in port cities like Beira, Dar es Salaam and Accra to benefit from economies of scale in procurement. In January 2011 Yara International announced plans to invest $20 million to build a fertilizer terminal in the Tanzanian port of Dar es Salaam, which will be able to handle both bulk and bagged products. The terminal will have storage capacity of 45,000 mt. Tanzania imports just over 250,000 mt of fertilizers annually and re-exports on average 70,000 mt. Product imported through the terminal will supply both Tanzania and neighboring countries, including Rwanda and Burundi. The start date for commencement of construction is August 2011.

Resolution 9

Promote national/regional fertilizer production and intra-regional trade.

Africa has raw materials for fertilizer production. Significant quantities of natural gas are found in Algeria, Angola, Democratic Republic of Congo, Egypt, Equatorial Guinea, Ethiopia, Madagascar, Mozambique, Namibia, Nigeria, Tanzania and Tunisia. There are numerous phosphate rock and potash deposits throughout Africa. However, the deposits of these raw materials in many countries are too small to be commercially viable. For example, only Algeria, Egypt, Togo, Tunisia and Senegal have deposits that are substantial enough to be of economic significance. This is due to unsuitable quantity and/or quality of the raw material, resources that are poorly located in relation to domestic and export markets and/or markets that are too small to realize economies of scale in production.

Consequently, production is concentrated in North Africa and South Africa. Three countries in North Africa, including Egypt and Tunisia, account for 92 percent of production. South Africa is the fourth-largest fertilizer producer in Africa. The main fertilizer producers in Sub-Saharan Africa are Mauritius, Senegal and Zimbabwe. Nigeria has also recently resumed production. Total continental production is 5,791,436 mt of nutrients, which is equivalent to 4 percent of world production. South Africa produces phosphate fertilizers, while countries in North Africa, including Algeria, Egypt, Libya and Tunisia, produce both phosphate and nitrogen fertilizers. Tanzania, Zambia and Zimbabwe have produced nitrogen and phosphate fertilizers in the past, but production has declined substantially in recent years and current production levels are unknown. However, pre-feasibility studies indicate that production may be economically viable in Angola, Mozambique and Tanzania. Production of phosphate rock for direct application takes place in Burkina Faso, Madagascar, Mali, Senegal and Zimbabwe. Bulk blending plants have been established in Côte d'Ivoire, Malawi, Nigeria, Zambia and Zimbabwe.

Recent Developments

South Africa

SASOL NITRO, a division of South Africa's Sasol Chemical Industries Limited, reached an agreement with the Competition Commission in July 2010 to divest five of its regional fertilizer blending plants before August 2011 as part of the required restructuring of its fertilizer

business. The company will continue to produce a range of liquid and granular NPK fertilizer blends. Construction commenced in May 2010 on a new unit at its Secunda plant for the production of calcium ammonium nitrate (CAN) with the capacity for 400,000 mt/year of granular CAN.

Morocco

Morocco's Office Chérifien des Phosphates (OCP) is planning to build four new DAP and MAP plants, each with a capacity of 1 million mt/year between July 2013 and July 2015. The plans will increase OCP's DAP/MAP production capacity from the current 3 million mt/year to more than 9 million mt/year. It will make Morocco the largest supplier globally of phosphate rock, phosphoric acid and DAP/MAP.

Gabon

On March 28, 2010, Singapore-based Olam International Limited, a global supplier of agricultural products and food ingredients, announced that it has signed a contract for a joint venture with the Government of Gabon for gas supply to its greenfield ammonia and urea production complex in Gabon. The ammonia unit will have capacity for the production of 2,200 mt, while the urea unit will have a daily production capacity of 3,850 mt. The gas pipeline network for the delivery of the gas is already in place and gas will be ready to be supplied to the project as of July 2014, which is the expected date of commissioning of this plant.

Nigeria

Notore Chemicals Industries Limited is the only urea fertilizer plant in Sub-Saharan Africa. It was acquired from the Nigerian Government in 2005 and underwent extensive rehabilitation. The Notore plant now has a capacity of 350,000 mt of ammonia per annum; 500,000 mt of urea per annum; and 650,000 mt of blended NPK. It plans to increase capacity to over 2 million mt of fertilizer by 2013. Notore commenced production of ammonia and urea in January and July 2009, respectively. There are plans for the company to go public in 2012 to fund a second ammonia/urea plant at Onne, River State, Nigeria. Notore has just signed a technical advisory services agreement with Tata Chemicals Ltd (TCL) to provide technical advisory services to improve the efficiency of the Notore fertilizer plant at Onne. Tata Chemicals is an integrated chemical company, a part of the Tata Group of Companies, which operates one

of the most efficient and successful urea fertilizer plants in India. TCL will send its experts to Notore to help them to improve the systems and processes in operations and maintenance. There is no investment involved at present and TCL's fees are linked to improvement in the output from the plant performance.

Intra-Regional Trade

In addition to the call for increased fertilizer production, Resolution 9 of the *Abuja Declaration* calls for African countries to increase intra-regional trade of fertilizers. At present, the trade that takes place between African countries is very small compared with the amount of fertilizer trade between Africa and the rest of the world. Most fertilizer consumed in Sub-Saharan Africa is imported from outside the continent, and almost all of the phosphate rock and fertilizers produced in Africa are exported outside the continent. Nevertheless, there is some degree of both inter-regional and intra-regional trade of fertilizers in Africa. Although data on import and export volumes and values were not provided, 95 percent of the respondents reported trade with other African countries during the current reporting period. Moreover, over 70 percent of respondents in each reporting period reported trade with other African countries, with the exception of reporting period 5 (60 percent of respondents) (Figure 11).

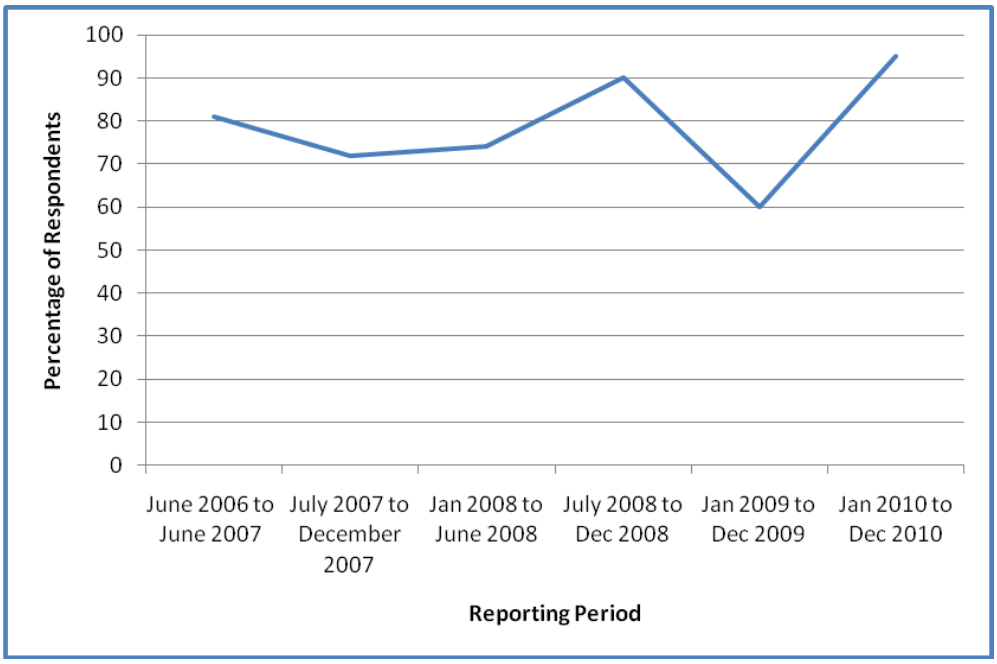

Figure 11. Intra-Africa Fertilizer Trade (Intra- and Inter-REC), for the Six Reporting Periods Between June 2006-June 2007 (Reporting Period 1) and January-December 2010 (Reporting Period 6)

Much of this trade involves landlocked countries importing from coastal neighbors, but it is also importation from manufacturers in other African countries. For example, with regard to inter-regional trade, countries like Sudan import fertilizers from Egypt, Libya and Tunisia; Mali imports fertilizers from Morocco; Kenya and Uganda import from Egypt and South Africa; and Tanzania imports fertilizers from Egypt, Morocco, South Africa and Tunisia. However, countries like Uganda import fertilizers from manufacturers overseas via Kenya (coastal neighbor). Regarding intra-regional trade, countries in southern Africa, such as Malawi, Lesotho and Namibia, import fertilizers from manufacturers in South Africa; Mali imports fertilizers from manufacturers in Côte d'Ivoire and Senegal; Seychelles imports from manufacturers in Mauritius and South Africa; and Egypt imports fertilizers from Libya and Morocco. In many cases, intra-regional imports are from countries outside the continent en route to a landlocked country, e.g., Burundi and Uganda import their fertilizers from overseas via the ports of Mombasa in Kenya and Dar es Salaam in Tanzania (Table 8).

Table 8. Intra-Africa Fertilizer Trade, January-December 2010 (Reporting Period 6)

Country	Imported From	Exported To
Burundi	South Africa, Morocco, Egypt	Not applicable
Cameroon	Morocco, Libya, Nigeria, Tunisia, Côte d'Ivoire, South Africa	Not applicable
Chad	Cameroon, Nigeria	Not applicable
Djibouti	No data	No data
Egypt	Libya, Morocco	Sudan, Ghana
Ethiopia	No data	Not applicable
Kenya	South Africa, Tanzania, Egypt	Uganda, Burundi, Rwanda, Southern Sudan
Lesotho	South Africa	Not applicable
Malawi	Egypt, South Africa	Not applicable
Mali	Senegal, Morocco, Côte d'Ivoire	Burkina Faso, Guinea
Mozambique	South Africa	Not applicable
Namibia	Angola, South Africa	Not applicable
Senegal	No data	Benin, Mali, Côte d'Ivoire, Burkina Faso
Seychelles	Mauritius, South Africa	Not applicable
Sudan	Egypt, Libya, Tunisia,	Not applicable
Tanzania	Tunisia, Egypt, Morocco, South Africa	Kenya, Rwanda
Uganda	Kenya, Egypt, South Africa	Not applicable

Resolution 10

Improve farmer access to quality seeds, irrigation facilities, extension services, market information and soil nutrient testing and mapping to facilitate effective and efficient use of inorganic and organic fertilizers, while paying attention to the environment.

This resolution captures progress with respect to farmers' access to complementary inputs during five reporting periods.

Access to Quality Seeds and CPPs

Figure 12 shows incidence of farmer use (percentage of respondents) of hybrid seeds for the six reporting periods. Twenty-one percent of the respondents for reporting period 6 said less than 10 percent of their farmers use hybrid seeds; 28 percent of the respondents reported that 10-50 percent of their farmers use hybrid seeds; and 43 percent of the respondents for reporting period 6 reported that 50-100 percent of their farmers use hybrid seeds. Moreover, there is a definite upward trend of the percentage of respondents in the 50-100 percent category; the percentage of respondents who report that 50-10 percent of their farmers use hybrid seeds increases from 25 percent in reporting period 1 to 43 percent in reporting period 6. There is a corresponding decline in the percentage of respondents who report that less than 10 percent of their farmers use hybrid seeds and in the percentage of respondents who report that 10-50 percent of their farmers use hybrid seeds. These results imply a steady increase in the proportion of farmers in Africa that are using hybrid seeds.

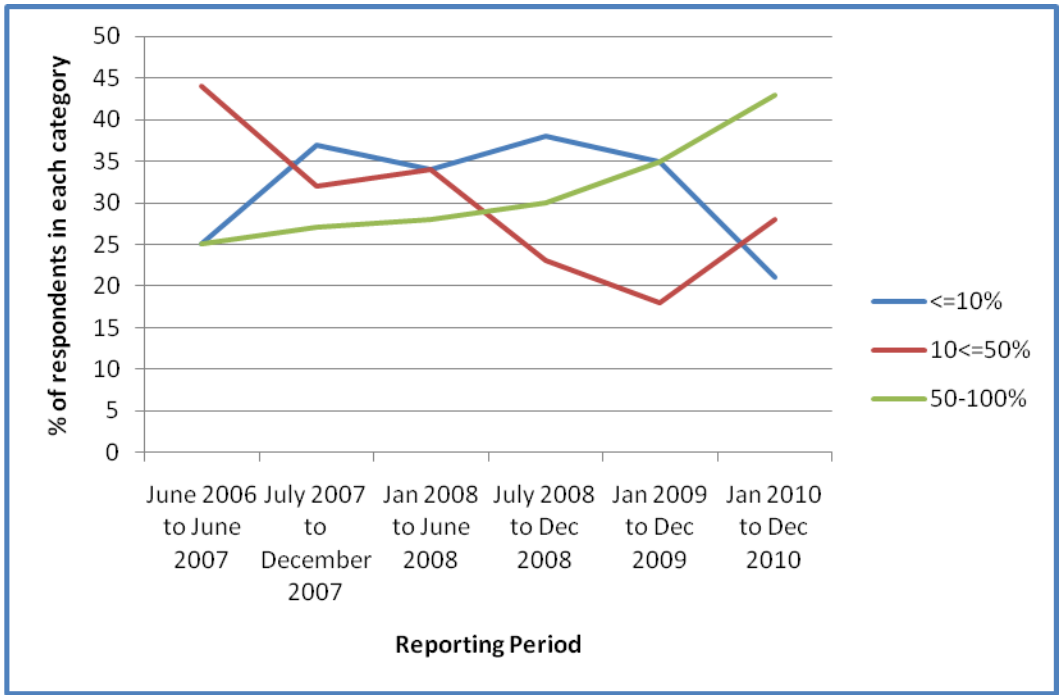

Figure 12. Use of Hybrid Seeds, Percent of Respondents for Each Category for the Six Reporting Periods Between June 2006-June 2007 (Reporting Period 1) and January-December 2010 (Reporting Period 6)

The results for CPPs are very uneven to the point of being inconclusive. Figure 13 shows incidence of farmer use (percent of respondents) of CPPs for the six reporting periods. Fifteen percent of the respondents for reporting period 6 said less than 10 percent of their farmers use CPPs; 38 percent of the respondents reported that 10-50 percent of their farmers use CPPs; and 38 percent of the respondents for reporting period 6 reported that 50-100 percent of their farmers use CPPs. It is desirable that the percentage of respondents who report that less than 10 percent of their farmers use CPPs decreases over time. However, the percentage of respondents who report that less than 10 percent of their farmers use CPPs increases from 6 percent in reporting period 1 to 32 percent in reporting period 2 and 27 percent in reporting period 3 before beginning a downward trend and then leveling off in subsequent periods but ending at a higher level in reporting period 6 (15 percent) than in reporting period 1 (6 percent). Conversely, it is desirable that the percentage of respondents who report that less than 50-100 percent of their farmers use CPPs increases over time. However, the percentage of respondents who report that 50-100 percent of their farmers use CPPs decreases from 51 percent in reporting period 1 to 24 percent in reporting period 4 before beginning an upward trend to 38 percent in reporting period 6, which is at a lower level than in reporting period 1 (51 percent). The percentage of

respondents who report that 10-50 percent of their farmers use CPPs remains quite consistent at an average of 40 percent for each reporting period except reporting period 5 (19 percent). These results imply a downward trend in the percentage of respondents in the lower category (less than 10 percent of farmers using hybrid seeds) and an upward trend in the percentage of respondents in the higher category (50-100 percent of farmers use CPPs), but the results are not conclusive.

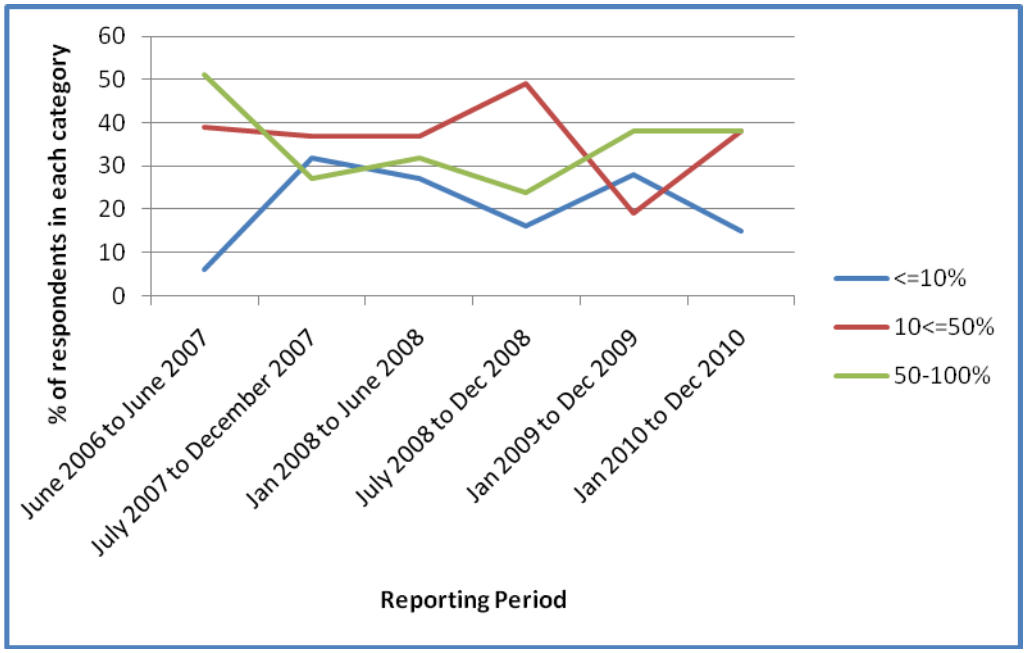

Figure 13. Use of Crop Protection Products, Percent of Respondents for each Category for the Six Reporting Periods Between June 2006-June 2007 (Reporting Period 1) and January-December 2010 (Reporting Period 6)

Investments to Improve Farmer Access to Irrigation in 2010

Irrigation was defined as referring to the following situations: (1) farmers rely on rainfall rather than stable supplies of water and practice water-harvesting; (2) farmers rely on surface water supplies (rivers); (3) farmers rely on groundwater supplies; and (4) irrigation infrastructure includes dams and reservoirs and stabilizes water supplies. Table 9 shows the respondents' investments in irrigation for reporting period 6. All (100 percent) of the respondents for reporting period 6 indicated that they invested in irrigation during 2010. Fifty-nine percent had invested in treadle pumps; 53 percent in drip irrigation; 53 percent in canals; 24 percent in bunds and 24 percent in terraces; 35 percent in farm ponds; 65 percent in rehabilitation of large irrigation schemes; and 35 percent in development of large schemes. Therefore, the most popular type of

irrigation investments are treadle pumps, drip irrigation, canals and rehabilitation of large irrigation schemes. The least popular types of irrigation investments are bunds and terraces.

Table 9. Percentage of Respondents with Arable Land Irrigated in Total and by Type of Irrigation: January 2010-December 2010

Type of Irrigation	Respondents
Treadle Pumps	Cameroon, Egypt, Ethiopia, Lesotho, Malawi, Mali, Mozambique, Senegal, Sudan, Tanzania
Drip Irrigation	Chad, Egypt, Ethiopia, Lesotho, Namibia, Senegal, Seychelles, Sudan, Tanzania
Canals	Chad, Egypt, Ethiopia, Malawi, Mali, Mozambique Namibia, Sudan, Tanzania
Bunds	Ethiopia, Malawi, Sudan, Tanzania
Terraces	Ethiopia, Malawi, Mali, Seychelles,
Farm Ponds	Ethiopia, Lesotho, Malawi, Mali, Sudan, Tanzania
Rehabilitation of large irrigation schemes	Egypt, Ethiopia, Lesotho, Malawi, Mali, Mozambique, Senegal, Seychelles, Sudan, Tanzania, Uganda,
Development of large irrigation schemes	Egypt, Ethiopia, Lesotho, Malawi, Mali, Senegal, Sudan, Tanzania

Multiple responses allowed.

Farmer Access to Information and Extension Services

Respondents were asked which extension and market information activities the Ministry of Agriculture had engaged in during reporting period 6. Figure 14 shows the results of the analysis of that data. In general, the respondents reported a high level of engagement by the Ministries of Agriculture in these activities for reporting period 6 as follows: field demonstrations and fertilizer trials (78 percent); radio programs (67 percent); TV programs (8 percent); newsletters and brochures (67 percent); and data collection (89 percent).

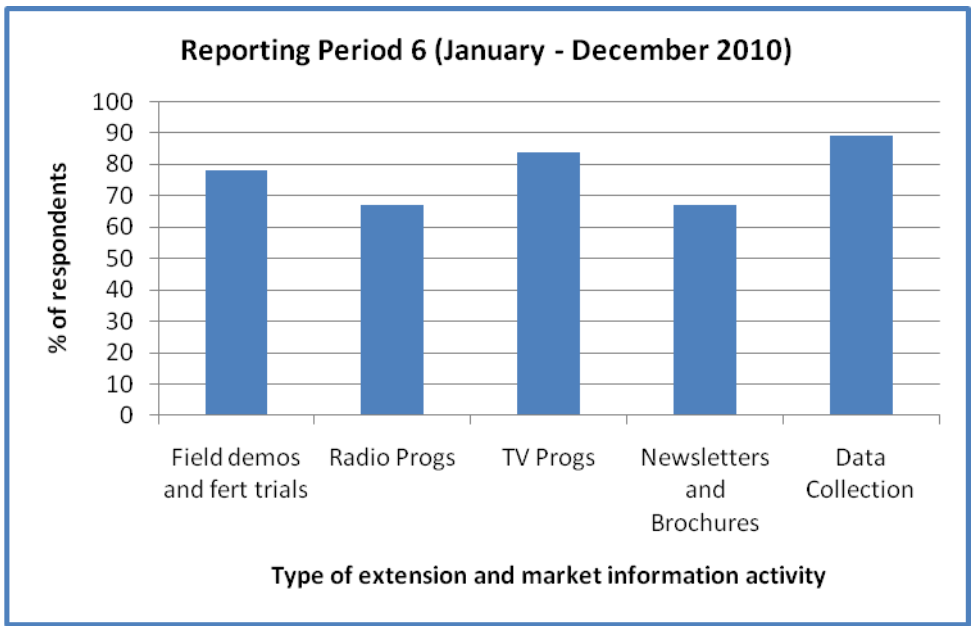

Figure 14. Level of Engagement in Market Information and Extension Services by Ministries of Agriculture, Percent of Respondents for Each Category of Activity, January-December 2010 (Reporting Period 6)

However, the degree of implementation is low. For example, although the percentage of respondents for each type of market info and extension activity is over 65 percent for reporting period six, the level of activity as revealed by the actual numbers is low. For example, the majority of respondents report very few fertilizer trials and demonstrations (typically, only two to three fertilizer trials and one to two fertilizer demonstrations). There is a need to increase resource allocation toward extension activities to improve farmer knowledge of correct fertilizer use, to expand awareness-raising activities regarding the benefits of fertilizer use and to increase market information and intelligence around input markets in general, and fertilizer markets in particular.

Resolution 11

The African Development Bank (AfDB), with the support of the Economic Commission for Africa and the African Union Commission, is called to establish, by 2007, an Africa Fertilizer Financing Mechanism (AFFM) that will meet the financing requirements of the various actions agreed upon by the Summit.

In March 2007, the AFFM Secretariat was operational in Tunis, hosted and supported by the

ADB. On 4 Dec 2007, the ADB Boards of Directors endorsed the AFFM Framework Paper and Legal Instruments. On 15 March 2008, the ADB Board of Governors approved the AFFM Framework Paper and Legal Instruments.

The AFFM Governing Council was established with 14 members and the inaugural AFFM Governing Council meeting held in Tunis on November 3, 2009. The main objective of the meeting was to review and endorse the AFFM implementation documents to guide the operation of the Fund and the management of the projects that it will support. These documents included the operational strategy, work program and budget, and operational manual on rules of procedure. The meeting was also used to brief Council members on the steps taken so far to support AFFM and to discuss the funding and resource mobilization issues. The meeting was attended by 12 out of the 14 designated members of the Governing Council. The representatives of Ethiopia and Nigeria who earlier confirmed their participation did not attend the meeting. H.E. Mrs. Rhoda Peace Tumusiime, Commissioner, Rural Economy and Agriculture, African Union Commission (AUC), was elected Chairperson of the AFFM Governing Council with immediate effect for a period of one year ending December 31, 2010.

The Council endorsed a number of operational AFFM reports including the Operational Manual of the Rules and Procedure, the Operational Strategy, and the 2010-2012 Operational Program. Finally, the Council noted that the main problem affecting the AFFM remains financial resource mobilization and ownership of the initiative by African countries. The other important challenge for the AFFM was said to be the Fund capitalization. Council observed that because of the importance of these two issues discussed, the decisions which had been made should be conveyed to all African countries and their development partners to invite them to make their contribution to the Fund to enable it to achieve effectiveness. In this context, Council resolved to constitute two high level committees to undertake AFFM advocacy and financial resource mobilization with immediate effect:

(i) The first high level Committee for resource mobilization is composed of the Vice President, Sector Operations (OSVP) and the Chairperson of the AFFM GC; and

(ii) The second high level committee for AFFM advocacy is composed of the representatives from Mali, AFREXIMBANK, AGRA and the African Development Bank.

The third Annual Session of African Ministers of Finance, Planning and Economic Development, which is jointly convened by the AU and ECA, was held in Lilongwe, Malawi, on March 31, 2010. Following an appeal by the Commissioner of Agriculture, African Union Commission, Resolution 11 was adopted, which calls on African countries and their development partners to deposit the necessary instruments of commitment with the African Development Bank for a speedy operationalization of the AFFM.

In October 2010, the President and CEO, IFDC, visited the Bank and discussed AFFM related studies, exchanged ideas for stimulating private sector interest in the AFFM, and reviewed proposals received by the Bank for possible AFFM assistance. IFDC also delivered a seminar entitled "Research on the Next Generation of Fertilizers". Following this visit, it was decided that the Bank would:

- Liaise with IFDC to prioritize "quick win" measures to assist AFFM achieve its objective;
- Further engage with IFDC to evaluate the technical feasibility of requests in the AFFM pipeline; and
- Further discuss with IFDC ways of attracting the regional and international private sector to invest in Africa's fertilizer industry.

Resource Mobilization to Operationalize the AFFM

The pre-requisite for the AFFM Instrument to become legally operational is that funds and/or equivalent instruments of commitment must be made available to the AFFM from African Governments and/or their donors in an aggregate amount equivalent to at least US$ 10 million. The AfDB has mobilized so far $7.250 million for the AFFM raised as follows:

- The AfDB has contributed a grant equivalent to US$ 7,650,000 to the AFFM in January 2009;

- IFAD has provided US$ 150,000 to the Fund as part of its pledge of US$ 200,000 in June 2009.
- On June 9, 2010, the AfDB received payment of EUR 4,184,450.58 from Nigeria, which constitutes 50% of the pledged US$ 10.00 million.

Excluding the above ADB contribution, approximately US$ 5,455,892 has been contributed so far to the AFFM account, leaving a shortfall of US$ 4,544,107 that is required for the Fund to be legally operational. It should be noted that ADB's contributions to the AFFM fund do not legally count towards the operationalization of the Mechanism.

Analysis of Survey Results and Conclusions

Regional Level

Analysis

Three of the eight RECs responded to NEPAD's request for a progress update. The responses indicate that the RECs have embarked on a number of concrete initiatives to implement the *Abuja Declaration* as follows:

EAC

An EAC Action Plan to address food insecurity in the region was developed and finalized in 2010 by EAC in collaboration with key stakeholders from the all EAC Partner States. The plan identifies numerous constraints in achieving food security in the EAC region including low usage of productivity-enhancing inputs such as fertilizer, improved seeds and CPPs. Several projects and programs to address the constraints have been developed with key development partners from within and outside the region and are at various stages of implementation.

ECOWAS

Several concrete initiatives are being implemented by the ECOWAS Commission to implement the *Abuja Declaration on Fertilizer*: (1) establishment of a regional market information system (AGRIS), which will also capture data on fertilizer use; (2) development of a regional

fertilizer regulatory framework; (3) technical and financial support to facilitate the implementation of the CAADP process in ECOWAS; (4) the ECOWAS Commission facilitated the participation of representatives from seven of its member states in a regional workshop on fertilizer subsidies; (5) commissioning of a study to assess the challenges and opportunity for domestic fertilizer production in West Africa; (6) a regional seeds project is being implemented as part of the West Africa Seed Alliance; (7) establishment of the ECOWAS Agricultural Development Fund (ECOWADF). Stakeholders from the fertilizer sub-sector will be able to access funds for their various activities through a window to be developed under the ECOWADF.

SADC

In March 2009 the SADC Secretariat commissioned a two-phased study in collaboration with IFDC to assess the feasibility of fertilizer production in the region. Phase 1 of the study was completed in 2009 and the resulting report was presented to Ministers responsible for Agriculture and Food Security in November 2010. As a follow-up to one of the recommendations of the report, the Secretariat is drafting a harmonized labeling system for the region, which will be submitted for consideration by Member States before the end of 2011. Phase 2 of the study has not commenced due to lack of funds.

Country Level

Analysis

1. Progress on the establishment of a formal policy and regulatory framework by African countries is **unsatisfactory**. The data fluctuates considerably over the six reporting periods but the overall trend is downward.
2. Progress on the development of capacity for quality control is **satisfactory**. Sixty-one percent of the respondents in the current reporting period conduct inspections for quality control at the point of sale and the general trend over the six reporting periods is upward.
3. Progress on the elimination of tariffs and taxes over the six reporting periods is uneven and generally **unsatisfactory**. Although there are fluctuations in the data, there is a general upward trend in the percentage of respondents with taxes and tariffs on fertilizers. These data imply that African governments are trying to comply with the *Abuja Declaration* resolution, which calls for the elimination of all taxes and tariffs on fertilizers, but in the absence of alternative sources of revenue, they find themselves compelled to reintroduce or maintain these measures.

4. Progress on the development of agro-dealer networks is **satisfactory**. The percentage of respondents with less than 10 agro-dealers over the six reporting periods has decreased while the percentage of respondents with between 100-500 agro-dealers has increased. In general, the data exhibit an upward trend over the six reporting periods.
5. Progress on reducing distance traveled to purchase fertilizers is **good**. There is an upward trend in the percentage of respondents whose farmers travel less than 10 km to purchase fertilizers, and the figure is 50 percent for the current period. Nevertheless, the percentage of respondents whose farmers travel long distances to purchase fertilizers (over 1,000 km) has not declined and the percentage of respondents whose farmers travel 20-100 km is still at 25 percent for the current reporting period. Therefore, although the situation has improved substantively reflecting the increase in the number of agro-dealer development projects underway on the continent, there is still an urgent need to deepen agro-dealer networks to more fully penetrate the rural interior in Africa.
6. Progress on increasing the proportion of farmers using chemical fertilizers is **good**. There is an upward trend in the percentage of respondents whose farmers use chemical fertilizers and 35 percent of the respondents in the current period reported that 50-100 percent of their farmers use fertilizers. The results indicate a reasonably high and increasing proportion of farmers that are using chemical fertilizers in Africa.
7. Progress on increasing market size is partially **satisfactory**. There is an increase in the percentage of respondents in a higher market size category (100,000-500,000 mt) and concomitant decrease in the percentage of respondents in a lower market size category (less than 100,000 mt). This indicates a trend towards a larger market size. However, in the current reporting period, only 15 percent of the respondents have a market size of 500,000-1 million mt and only 1 percent of the respondents have a market size of over 1 million mt. The results indicate that there is a trend towards a larger market size category, but it has a ceiling (100,000-500,000 mt). Much work remains to break though this ceiling and substantially increase the size of fertilizer markets in African countries.
8. Progress on offering a wider variety of bag sizes is **unsatisfactory**. Only 28 percent of the respondents for the current period reported bag sizes of 10 kg and this figure has declined since the baseline period (48 percent). The results reveal an inadequate number of respondents making fertilizers available in smaller bag sizes.

9. Progress on reducing retail prices to increase financial access for farmers is **poor**. For each of the 17 respondents for whom data is available, there has been an increase in fertilizer prices since June 2006, even in cases where the price is subsidized. So, generally speaking, financial access to fertilizers for small-scale farmers in Africa has not improved, and in some cases has worsened.
10. Progress on introducing targeted subsidies is **satisfactory**. Seventy-two percent of the respondents in the current period have fertilizer subsidies, compared with 53 percent in the baseline period. However, although there an upward trend in the percentage of respondents using input voucher schemes and fertilizer-for-work programs to target these subsidies, in the current period, only 33 percent of the respondents use input vouchers and 17 percent of the respondents use fertilizer-for-work programs. Therefore, although the results reveal a strong upward trend in the incidence of fertilizer subsidy programs, less than one-third of these programs are targeted subsidies.
11. Progress on introducing national financial facilities to reduce the risk of lending to importers and agro-dealers is **good**. These results indicate that a substantive proportion of respondents in the current period (89 percent) have financial initiatives to reduce the risk of lending to importers/agro-dealers. Moreover, there is a clear upward trend for financial initiatives in general and credit guarantee schemes in particular.
12. Progress on regional fertilizer procurement initiatives is **satisfactory**. The announcement by Yara International of plans to invest $20 million to build a fertilizer terminal in the Tanzanian port of Dar es Salaam, which will supply both Tanzania and neighboring countries is the first concrete step in this direction.
13. Progress on improving access to complementary inputs is **satisfactory**. The data indicate a steady increase in the proportion of farmers in Africa that are using hybrid seeds, a high percentage (over 60 percent) of respondents report that their Ministries of Agriculture engage in extension and market information activities and all the respondents report investment in irrigation development. However, the results for CPPs are inconclusive.
14. With the receipt of approximately $5 million from Nigeria, the AfDB has received the funds it requires to close the $2.5 million gap required to make the AFFM operational.

Progress in the implementation of the *Abuja Declaration on Fertilizer* is satisfactory but there is still much room for improvement.

Recommendations

Based on the results of the analysis of data submitted by the countries for the six reporting periods, the report makes the following conclusions and recommendations.

RECs

Previously, initiatives undertaken at the regional level had been somewhat haphazard with little structure and planning. However, now all of the RECs that submitted progress reports have programs with a very high potential of bringing about substantive changes on the ground in terms of policy and regulatory reforms, lower prices for fertilizers and, ultimately, increased consumption of fertilizers.

Countries

1. Countries need to develop and implement policy and regulatory frameworks for the fertilizer industry, which include building capacity for quality control.
2. Countries need to explore alternative sources of revenue to facilitate the elimination of taxes and tariffs on fertilizer and on fertilizer raw materials.
3. Countries should increase and expand programs to develop agro-dealer networks. This will assist in the reduction of distance traveled by farmers to purchase fertilizers and increase the availability of fertilizers in smaller bag sizes. This will ultimately reduce retail prices, increase the percentage of farmers that are using chemical fertilizers and increase total market size.
4. Countries should commit to implementing targeted, smart subsidies by using input vouchers (or a similarly effective targeting mechanism) to target poor farmers and using the private sector to import and distribute fertilizers for government fertilizer subsidy programs.
5. Countries should collaborate with national and regional financial institutions, development partners and foundations to increase the availability of risk-sharing financial facilities targeting importers and agro-dealers. Governments should also introduce legislation that will improve access to foreign exchange for importers and provide credit guarantees to commercial banks that finance agro-dealers.

6. Now that the AFFM is operational, the AfDB should partner with AUC/NEPAD and embark on an aggressive fund-raising drive to encourage countries and external donors to commit funds for full-scale implementation of activities.

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Annex 1

Africa Fertilizer Summit

African Union Special Summit
of the Heads of State and Government

Abuja, Nigeria, 13 June 2006

Abuja Declaration on Fertilizer
for an African Green Revolution

The New Partnership for Africa's Development has declared that the vision of economic development in Africa must be based on raising and sustaining higher rates of economic growth (7 percent per year). To realize this vision, the African Heads of State and Government adopted the Comprehensive Africa Agricultural Development Programme, which calls for a 6 percent annual growth in agricultural production, as a framework for the restoration of agricultural growth, food security and rural development in Africa.

Africa's farmers face a variety of constraints including low productivity, limited access to new agricultural technologies and weak markets. Without adequate inputs, farmers often cannot meet the food needs of their own families, much less those of a rapidly growing population. To feed themselves and their countries, farmers will need to shift from low-yielding, extensive land practices to more intensive, higher-yielding practices, with increased use of improved seeds, fertilizers and irrigation.

A move toward reducing hunger on the continent must begin by addressing its severely depleted soils. Due to decades of soil nutrient mining, Africa's soils have become the poorest in the world. It is estimated that the continent loses the equivalent of over $4 billion worth of soil nutrients per year, severely eroding its ability to feed itself. Yet farmers have neither access to nor can they afford the fertilizers needed to add life to their soils. And no region of the world has been able to expand agricultural growth rates, and thus tackle hunger, without increasing fertilizer use.

In Africa, use of fertilizer averages only eight kilograms per hectare; this is only 10 percent of the world average. In short, Africa is trapped in a fertilizer crisis. Addressing

Africa's fertilizer crisis therefore requires urgent and bold actions. Africa is ready for the Green Revolution. Today, African leaders have convened to show their strong and unanimous commitment to achieving the African Green Revolution by taking immediate actions to solve Africa's fertilizer crisis.

The African Union Ministers of Agriculture convened in Abuja on 12 June 2006 for the Africa Fertilizer Summit:

Recognizing that Africa needs a Green Revolution which is long overdue and yet constitutes the way of getting African farmers out of the poverty trap by achieving food security and other relevant the Millennium Development Goals;

Recognizing that fertilizer is crucial for achieving an African Green Revolution in the face of rapidly rising population and declining soil fertility;

Realizing that most farmers in Africa are poor, have virtually no access to fertilizer and that the poorest of them urgently need special attention;

Recognizing the urgent need for a strategic investment programme to increase the availability and use of fertilizer alongside with other inputs to usher in the Green Revolution on the African continent;

Declare fertilizer, from both inorganic and organic sources, a strategic commodity without borders; and

Resolve that the African Union Member States will accelerate the timely access of farmers to fertilizers:

1. Given the strategic importance of fertilizer in achieving the African Green Revolution to end hunger, the African Union Member States resolve to increase the level of use of fertilizer from the current average of 8 kilograms per hectare to an average of at least 50 kilograms per hectare by 2015.

2. By mid-2007, the African Union Member States and the Regional Economic Communities should take appropriate measures to reduce the cost of fertilizer procurement at national and regional levels especially through the harmonization of policies and regulations to ensure duty- and tax-free movement across regions, and the development of capacity for

quality control. As an immediate measure, we recommend the elimination of taxes and tariffs on fertilizer and on fertilizer raw materials.

3. By mid-2007, the African Governments must take concrete measures to improve farmers' access to fertilizers, by developing and scaling up input dealers' and community-based networks across rural areas. The Private Sector and Development Partners are hereby requested to support such actions.

4. By 2007, the African Union Member States must take concrete measures to specially address the fertilizer needs of farmers, especially women, and to develop and strengthen the capacity of youth, farmers' associations, civil society organizations and the private sector.

5. With immediate effect, the African Union Member States must improve farmers' access to fertilizer, by granting, with the support of Africa's Development Partners, targeted subsidies in favor of the fertilizer sector, with special attention to poor farmers.

6. The African Union Member States should take immediate steps to accelerate investment in infrastructure, particularly transport, fiscal incentives, strengthening farmers' organizations and other measures to improve output market incentives.

7. The African Union Member States should establish national financing facilities for input suppliers to accelerate access to credit at the local and national levels, with specific attention to women.

8. The African Union Member States, hereby request the establishment of Regional Fertilizer Procurement and Distribution Facilities with the support of the African Development Bank, the Economic Commission for Africa, the Regional Economic Communities and the Regional Development Banks, through strategic public-private partnerships by the end of 2007.

9. Given the extensive fertilizer raw material resources in Africa and the fact that they are underutilized in many parts of the continent, the African Union Member States undertake to promote national/regional fertilizer production and intra-regional fertilizer trade to capture a bigger market and take advantage of economies of scale through appropriate measures such as tax incentives and infrastructure development. This should be supported

by the African Development Bank, the Economic Commission for Africa, the Regional Development Banks, the Regional Economic Communities, other Development Partners and the Private Sector.

10. The African Union Member States should take specific action to improve farmer access to quality seeds, irrigation facilities, extension services, market information and soil nutrient testing and mapping to facilitate effective and efficient use of inorganic and organic fertilizers, while paying attention to the environment.

11. The African Development Bank, with the support of the Economic Commission for Africa and the African Union Commission, is called to establish, by 2007, an Africa Fertilizer Development Financing Mechanism that will meet the financing requirements of the various actions agreed upon by the Summit. We, the African Union Member States, undertake to support the establishment of this facility and will pledge resources for its immediate operation.

12. The African Union Member States request the African Union Commission and the New Partnership for Africa's Development to set up a mechanism to monitor and evaluate the implementation of this resolution. This should be done in collaboration with the Economic Commission for Africa and the African Development Bank. The African Union Commission should give progress report to the African Heads of State at every sixth-monthly African Union Summit, starting in January 2007.