



**An
International
Center for
Soil Fertility
and
Agricultural
Development**

Proceedings of a National Workshop Agricultural Inputs Policies and Nigerian Development



AGRICULTURAL INPUTS POLICIES AND NIGERIAN DEVELOPMENT

Proceedings of a National Workshop

held during

August 26-27, 2003

Abuja, Nigeria

Organized by

Federal Ministry of Agriculture and Rural Development (FMARD)

Government of Nigeria

In Collaboration With

**Developing Agri-Input Markets in Nigeria (DAIMINA) Project
IFDC—An International Center for Soil Fertility and Agricultural Development**

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The Federal Ministry of Agriculture and Rural Development (FMARD) and IFDC's DAIMINA project organized a national workshop on agri-inputs policies and Nigerian development in August 2003. The workshop was attended by 156 delegates from throughout Nigeria. After active deliberations, the participants made valuable recommendations for consideration by the Federal Government of Nigeria.

The Honorable Minister Mallam Adamu Bello had earlier asked IFDC/DAIMINA to assist the Ministry in upgrading the Fertilizer and Seed Laws to be in conformity with the current policy focus of the government and to create a conducive policy environment for private sector participation and investment in agriculture. We express our gratitude to the Honorable Minister of Agriculture for his sustained confidence in IFDC and support to the DAIMINA project.

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Our sincere thanks are expressed to Professor Ango Abdullahi, Vice Admiral Nyako, and the late Dr. A. Joshua, who presented very thought-provoking papers and served as chairpersons in their respective subcommittees. We also are grateful for the excellent work done by the reporters, whose hard work resulted in the preparation of this valuable document.

It is our fervent hope that the Federal Government of Nigeria and the general public at large will find the recommendations emanating from this workshop useful and practical to move the Nigerian fertilizer sector forward.

Amit H. Roy
President and Chief Executive Officer
IFDC

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ACRONYMS AND ABBREVIATIONS

AAN	Agrochemical Association of Nigeria
ADB	African Development Bank
ADPs	Agricultural Development Projects
AFADA	Albanian Fertilizer and Agricultural Inputs Dealers' Association
AFAMIN	African Agricultural Market Information Network
ALFAAN	All Farmers Apex Association of Nigeria
CBOs	community-based organizations
CPPs	crop protection products
DAIMINA	Developing Agri-Input Markets in Nigeria
DFID	Department for International Development
FAO	Food and Agriculture Organization of the United Nations
FEAP	Family Economic Advancement Program
FFD	Federal Fertilizer Department (Nigeria)
FGN	Federal Government of Nigeria
FMARD	Federal Ministry of Agriculture and Rural Development
FPDD	Fertilizer Procurement and Distribution Division
FSFC	Superphosphate Fertilizer Company
GCON	Grand Commander of the Order of the Niger
GDP	gross domestic product
IBRD	International Bank for Reconstruction and Development (World Bank)
IFAD	International Fund for Agricultural Development
IFDC	An International Center for Soil Fertility and Agricultural Development
IITA	International Institute for Tropical Agriculture
KADP	Kosovo Agribusiness Development Project
MIS	market information system
NACB	Nigerian Agricultural and Cooperative Bank
NACRDB	Nigerian Agricultural Cooperative and Rural Development Bank
NADF	National Agricultural Development Fund
NAFCON	National Fertilizer Company of Nigeria
NARTO	National Association of Road Transport Owners
NGOs	non-governmental organizations
NRC	Nigerian Railway Corporation
PDP	Peoples' Democratic Party
RUSEP	Rural Sector Enhancement Program
SEEDAN	Seed Association of Nigeria
SG 2000	Sasakawa-Global 2000
SMEs	small- and medium-scale enterprises
SPFS	Special Program for Food Security (Nigeria)
UDP	urea deep placement
URAA	Uruguay Round Agreement on Agriculture
USAID	United States Agency for International Development
USG	urea supergranules
VAT	value-added tax

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I. INAUGURAL SESSION
Speeches and Addresses

WELCOME ADDRESS

O. A. Edache
Permanent Secretary
Federal Ministry of Agriculture and Rural Development

I am delighted to welcome you all to this important national workshop on agricultural input policy, organized by the Federal Ministry of Agriculture and Rural Development (FMARD) in collaboration with the IFDC-DAIMINA project. The presence of all of you here this morning confirms the importance of the topic to be discussed—**agricultural inputs.**

As we all know, agriculture is a very vital sector in Nigeria's economic development because it contributes 40% of the national gross domestic product (GDP), provides the staple foods of Nigerians, and employs about 70% of the populace. In the "golden period" of agriculture in the 1960s, the sector achieved much more. However, the story is a different one today. The government is trying to bring agriculture back to its old position of glory. The task of turning agriculture around requires the collaborative effort of all stakeholders, and this is why this workshop is very important and critical. Of particular relevance in this task is the dependable and timely supply of purchased inputs. I am convinced, based on my long experience, that the potential of Nigerian agriculture will not be realized without solving the nation's input supply problem. This is because improved agricultural input supplies such as fertilizers, seeds, and crop protection products (CPPs) are very important for increased production. You will agree with me that the private sector must be encouraged and supported if our goal of sustainable input supply is to

be met. The role and responsibility of the government in the sector is primarily policy formulation/implementation and provision of an environment conducive for private investment. This is why the discussion at this workshop must be objective and resourceful.

The Objectives of the National Agricultural Input Policy Workshop

This workshop was developed to achieve the following objectives:

- Review the effectiveness of the existing agricultural policies in attracting the private sector participation and investment in the production, importation, and marketing of fertilizers and other inputs.
- Review the merits and demerits of direct government intervention in the procurement and sale of fertilizers and its impact on the development of competitive agricultural markets and promotion of agri-input use in Nigeria.
- Review the operational system of fertilizer subsidy in Nigeria and identify some market-friendly alternatives.
- Make recommendations, if necessary, for amendments in agri-input policies and administration of fertilizer subsidies for the consideration of the Federal Government of Nigeria (FGN).

So once again, I want to welcome you all and wish you a very fruitful deliberation.

INTRODUCTION TO THE IFDC-DAIMINA PROJECT AND WORKSHOP OBJECTIVES

H. B. Singh
Chief of Party
DAIMINA Project

What Is DAIMINA?

IFDC joined the Federal Government of Nigeria (FGN) and the United States Agency for International Development (USAID) in an initiative to improve farmers' access to quality inputs through active participation of the private sector in rural agricultural markets in Nigeria.

Primary project activities include:

- Policy dialogue.
- Private sector capacity building.
- Market information system.

Project Objectives

- Facilitate the creation of a policy environment conducive for private sector participation and investment in agricultural inputs marketing in Nigeria.
- Enhance the knowledge and skills of business entrepreneurs on the safe use of agri-inputs, business management, and networking with key players of the input supply chain.
- Strengthen the market information services, particularly on availability, demand, and prices of agri-inputs and crop produce in the domestic, regional, and international markets.

Project Area

The geographical scope of activities at present is as follows:

- *National level*—Policy dialogue; market information systems (MIS).
- *State level*—Private sector development (selected states of Kano, Oyo, and Bauchi).

DAIMINA Activities (November 1, 2001-July 3, 2003)

The main activities are elaborated as follows:

Policy Dialogues

- Four stakeholder workshops organized to review the agri-input policies.
- A fertilizer quality control infrastructure inventorial study conducted jointly with the Federal Fertilizer Department (FFD).
- The Fertilizer Board Act (1977) reviewed jointly with FFD and revised documents submitted to FMARD.
- Five manuals for the implementation of fertilizer quality control system prepared and submitted to FMARD.
- Sixteen agro-dealer associations formed as policy advocacy groups.
- A study on the impact of direct government intervention in fertilizer distribution and of subsidy on the development of free competitive marketing systems in Nigeria conducted and submitted to FMARD.

Private Sector Capacity Building in Agricultural Marketing

- Three hundred agro-dealers trained in agribusiness.
- Twenty-six agro-dealer associations formed and trained in business development and customer care.
- Ninety agro-dealers assisted in the preparation of business plans and securing micro finance from the Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB) and other banks.

- Two hundred and twenty-five agro-dealers linked with input producers, importers, commercial banks, agricultural development projects (ADPs), extension workers, and others for business developments.
- Technical evaluation of nine blending plants conducted.
- Employees of 16 blending plants trained on the production and marketing of quality fertilizers.
- Technical evaluation of Zamfara and Sokoto rock phosphate conducted to assess the scope of commercialization.

Strengthening of the Market Information Systems

- Publication of the agribusiness newsletter to provide information on agri-input availability and prices in domestic, regional, and international markets.
- The African Agricultural Market Information Network (AFAMIN) established jointly with IFDC's regional office in Lomé, Togo.
- Agro-dealers and farmers provided with information on the right agri-inputs and the right time and methods of use.
- The findings of market studies and surveys, etc., communicated to stakeholders.
- Marketing manuals, product brochures, posters, handbills, etc., provided to agro-dealers and farmers.

Partnership With Related Agencies (on Cost Sharing)

- Partnership with National Special Food Security (FAO: FGN) to establish agro-dealers.
- Joint publication of an agribusiness newsletter by DAIMINA and the Special Program for Food Security (SPFS).
- Collaboration with the Seed Resource Project (IITA: USAID) to assist in marketing of improved seeds.
- Collaboration with the Seed Association of Nigeria (SEEDAN) and Premier Seeds to promote use of improved seeds.
- Collaboration with Agrochemical Association of Nigeria (AAN) to promote safe use of pesticides.
- Collaboration with NACRDB in the provision and repayment of micro finance.

- Collaboration with All Farmers Apex Association of Nigeria (ALFAAN) to improve farmers' knowledge on economic/safe use of inputs.

Some Key Observations

- The use level of agri-inputs has declined drastically, and *supply* rather than *demand* is the main constraint.
- The government and all other stakeholders are fully convinced of the need for active private sector participation and investment in agriculture.
- The business practices of rural entrepreneurs are still primitive and need training and networking.
- Development of competitive agricultural markets needs a well-planned effort, political will, and support of donor agencies.
- Finance is a key requirement of business and needs to be facilitated.
- The shortage of critical inputs is leading to a shift to a low-input, low-return cropping system.

Impact of DAIMINA Activities

- Private enterprise has shown an overwhelming response to training and networking; 225 agro-dealers graduated in Kano and Oyo States and 75 others will graduate in mid-2004.
- Twenty-six agro-dealer associations have initiated collective business activities, effecting a 15%–20% reduction in marketing costs.
- Ninety agro-dealers have started receiving micro credit from banks.
- Thirty wholesale agro-dealers offered inputs on credit to farmers.
- Wholesale dealers in Kano and Oyo States made advance stocking a priority, improving the input availability in Kano State even in difficult supply positions.
- Trained agro-dealers have opened 50 new sales outlets in weekly markets, improving small-holder farmers' access to inputs near the farm gate.
- Trained agro-dealers sold 4,000 kg of improved cowpea seeds and increased the sales turnover to 200%.
- Fertilizer sales.

Objectives of the National Agri-Inputs Policy Workshop

- Analyze the suitability of the prevailing policy environment to attract private investment in agribusiness.
 - Review the merits and demerits of direct government intervention in the distribution of fertilizers and its impact on the development of competitive markets.
-
- Review the operational system of fertilizer subsidy, its benefits to the target beneficiaries, and some market-friendly alternatives as suggested by market studies conducted by DAIMINA and other agencies.
 - Make recommendations to policymakers on required policy amendments and their implementation.

KEYNOTE ADDRESS

Audu Ogbeh
National Chairman
Peoples' Democratic Party

It gives me great pleasure today to attend and present a keynote address at this important national workshop aimed at addressing a very important subject that touches on the livelihood of most Nigerians and the national economy. In order to meet the mandate of the ruling party, the Peoples' Democratic Party (PDP), and the federal and state governments (in terms of national food security)—supplying raw materials to our growing agro-dealers and providing surplus for exports—we must promote science-based commercial agriculture among our millions of small-, medium-, and large-scale farmers.

To achieve this target, we must ensure the supply of modern inputs—seeds, fertilizers, CPPs, veterinary drugs, farm mechanization equipment, and other associated inputs. Farmers must have easy access to quality inputs at competitive prices and at the right time near their farm gates. Nigeria has embarked on participatory democracy and market-based economic growth. If properly implemented, these instruments of social change can empower formal organizations, the private sector, and individuals to transform the agricultural and social landscape of Nigeria. The successful pursuit of these goals requires well-focused attention to food security, poverty alleviation, and economic protection. Peace, stability, unity, and prosperity cannot be built on empty stomachs. Over 70% of Nigerians are estimated to be living below the poverty line, earning less than US \$1 per day, and a significant proportion of the population is food insecure. The current 4.5% level of agricultural growth has to be increased to about 7% to address the poverty problem adequately.

Nigeria, therefore, has to redirect, re-engineer, and accelerate its agricultural growth and devel-

opment strategies to reduce the huge deficit in its food balance sheet. Accelerated agricultural growth and development remain the essential prerequisite for economic growth and stability. Without substantial increases in agricultural productivity, Nigeria cannot increase food security and reduce poverty in a sustainable manner. Increased agricultural productivity is possible only through the judicious application of science and technology in agri-inputs (seeds, fertilizers, and CPPs).

The history of economic development in other parts of the world indicates that agricultural productivity has been the main source of sustained growth in rural welfare and national economic recovery efforts. Nigeria cannot be an exception. It is for this reason that the PDP Government under President Olusegun Obasanjo is giving special attention to agriculture. You may have heard in the news recently that the National Economic Council has identified agriculture and solid minerals as priority sectors for development. Increased funding will be provided to these sectors. The macro-economic base has to be diversified.

Since the inception of democratic governance in 1999, the PDP Government under President Obasanjo has accorded the following areas special attention:

1. **Increase in Agricultural Productivity**

- Revitalization of agricultural research, extension, and education.
- The National Special Food Security Program.
- The National Fadama Development Program.
- Special programs on increased production of cassava, rice, vegetable oils, cereals, cotton, tree crops, and livestock.
- The Root and Tuber Development Program.

- The community-based agricultural and rural development program.

2. Provision of Inputs and Credit

- Establishment of the DAIMINA project with the funding support of USAID.
- Harmonization of the micro credit institutions; i.e., former Nigerian Agricultural and Cooperative Bank (NACB), Family Economic Advancement Program (FEAP), and the Peoples' Bank of Nigeria into the newly formed Nigerian Agricultural Cooperatives and Rural Development Bank (NACRDB).
- Revitalization of the Agricultural Credit Guarantee Scheme to make more opportunities available for farmers to access agricultural credit.
- Establishment of the National Agricultural Development Fund (NADF).
- Waiver or substantial reduction in duties and value-added tax (VAT) for import of fertilizers.
- Privatization of government-owned, fertilizer manufacturing companies (the National Fertilizer Company of Nigeria [NAFCON] has been privatized and the Superphosphate Fertilizer Company [FSFC] is in the process).
- Liberalization of fertilizer supply and distribution system.

3. Processing (Value Addition), Storage, and Marketing

- Establishment of three multi-commodity development and marketing companies.
- Implementation of Rural Sector Enhancement Program (RUSEP) with the support of USAID.
- Revitalizing the small- and medium-scale enterprises (SMEs) scheme to assist processing and marketing activities.

4. Improving the Policy Environment

- The agricultural policy was reviewed and a new policy thrust was issued in March 2002.

The strategy for implementation is being reoriented.

- Fertilizer and other inputs supply and distribution have been liberalized. The government will focus on providing the enabling environment for the active participation and investment by the private sector.
- A rural development policy and implementation strategy has been implemented.
- A National Cooperative Policy has been adopted.

At this juncture I would like to express the appreciation and gratitude of the government to our development partners whose understanding, cooperation, and support have proved very valuable in our quest for agricultural and rural development. I wish to particularly acknowledge the support of USAID, which has assisted in the identification and funding of a number of the programs. Our thanks also go to the World Bank (IBRD), African Development Bank (ADB), International Fund for Agricultural Development (IFAD), the Department for International Development (DFID), the International Center for Soil Fertility and Agricultural Development (IFDC), the Food and Agriculture Organization (FAO) of the United Nations, and numerous other bilateral and multilateral organizations, NGOs, CBOs, etc., who have gladly answered our call for partnership.

The Role of the Private Sector

Let me now turn to the second important part of my address—the role of the private sector in national development, particularly agriculture and specifically, the agricultural marketing business where the private sector has a great role to play. This sector is expected to take the leadership in turning around our ailing agricultural economy. The current agricultural policy of Nigeria clearly spells out the role of the private sector. The thrusts of the new agricultural policy direction provides for “crafting the conducive macro environment to stimulate greater private investment in agriculture

so that the private sector can assume its appropriate role as the leader and main actor in agriculture.”

The private sector is expected to play a leading role in the following areas:

- Investment in all aspects of agriculture.
- Agricultural products processing, storage, and marketing.
- Agricultural input supply and distribution.
- Production of commercial seeds, seedlings, brood stock, and fingerlings.
- Agricultural mechanization services.
- Provision of enterprise-specific rural infrastructure.
- Support for research and development in all aspects of agriculture.

I would like to implore the private sector to meet our expectations in turning agriculture around toward sustainable development. We need to pay particular attention to areas that have hitherto not received the needed attention. These are the areas of input supply and marketing. We expect the private sector to invest heavily in the production/importation and marketing of agricultural inputs, particularly fertilizers, improved seeds, CPPs, and farm mechanization. Supply of inputs at the right time and at reasonable prices has been the weakest link in the agricultural production chain in Nigeria.

We are aware of some of the critical/sensitive issues of fertilizer subsidy and government intervention in the supply of fertilizers. Since these issues are on the agenda of this national workshop, I prefer to wait for your deliberations and recommendations. The federal government and PDP are open to practical solutions, and I can assure you that we will welcome all proposals that can improve our agriculture.

This workshop has been very timely since it is occurring at the start of the second term of President Obasanjo’s administration and addressing a very critical aspect of our agricultural development. I implore all participants in this workshop to examine critically the input supply policies and strategies and to develop sound recommendations that will ensure availability and access to agricultural inputs and any associated subsidies to the farmers. I want to thank the FMARD, USAID, and IFDC for extending this invitation to me to present this keynote address. I wish you successful deliberations.

Thank you and God bless!

FARMERS' VIEWPOINT ON AVAILABILITY AND PRICES OF AGRICULTURAL INPUTS

V/ADM. M. A. H. Nyako (retired) GCON,
President – All Farmers Apex Association of Nigeria

I would like, on behalf of our country's teeming farming populace, to express gratitude to all those who are involved in bringing about this event, this national workshop on agricultural inputs policies. I am particularly thankful to the Honorable Minister of Agriculture and Rural Development and the staff of his Ministry, to USAID for its support to IFDC, and to the coordinators of the DAIMINA project. I have no doubt that without this type of workshop, where all issues pertaining to agricultural inputs are discussed and a viable approach to ensure adequate and timely inputs for farming is mapped out, farmers' productivity would always remain a yo-yo affair in our beloved country.

Those of us who are seriously and professionally engaged in the production of agricultural products know that without timely availability of agricultural inputs of the right quality, quantity, and nutrient value, it is impossible to make our agricultural undertakings profitable. Therefore, this workshop offers a great opportunity to all of us.

Let me state that, as far as I know, this is the first time all relevant agricultural stakeholders have gathered to seriously and professionally tackle all aspects of Nigerian agricultural inputs policies. It is my hope that the positive effects from this workshop shall be felt from our next cropping season and will last forever in the implementation practices of Nigeria's agricultural policies. Honorable Minister, I am optimistic that the outcome of this workshop will lead to having your name and those of other co-organizers written in gold in the annals of Nigeria's agricultural productivity, food security, and the economic empowerment of our country.

It is a fact that in a military/dictatorial regime where rights including human rights are denied, one could do little to assert one's rights; but in the democratic era, it is expected that all rights be recognized. Farmers should demand the *right to availability of agricultural inputs at reasonable prices, on time, and at the right time for effective use.*

Agricultural inputs required by each farmer vary in accordance with the commodity the farmer produces. One may require continually improved seeds, seedlings, or stock in addition to fertilizer of single or multiple nutrients with or without trace elements such as zinc and magnesium. Farmers might also require permissible chemicals (herbicides, insecticides, etc.) at the right time for pest/bacteria/germ free and better quality products. All these should be available when required. Therefore, the farmer should be able to buy his/her requirements in good time, and the supplier must do likewise from the manufacturers. It is a pity, but the reality of our situation shows that almost all our agricultural inputs have to be imported since our local industrial capacity is not operational, is inadequate, and diminishing by the year.

Let me, therefore, look at the challenges facing all of us in the agricultural inputs sector in two broad areas, namely:

- Timely availability of inputs to farmers.
- Affordable prices of inputs at doorstep.

One of the targets to be identified by the project is the quality and quantity of fertilizers and other inputs required by Nigeria and, more importantly, developing a marketing system in rural markets to make the inputs available. We should be in a hurry to do this. The situation in Nigeria this year in

regard to this issue is unacceptable and dangerous. Today, a bag of fertilizer would cost three times what it cost last year, but very little is even available to buy. The total fertilizer available for this ongoing season is estimated as 300,000 tons. Compare this with Bangladesh (with a total arable land only 25% that of Nigeria), which has 3 million tons and at a price much lower than the government-subsidized price in this country. Simply put, this is scandalous and unacceptable to the farming community of Nigeria.

Let me, therefore, appeal to the Nigerian Government at the three tiers to understand that farmers have the right to adequate availability of agricultural inputs and the government has the sacred responsibility to ensure this availability. It should liaise with the suppliers and, if necessary, with the manufacturers of these inputs to ensure that all policy obstacles are removed and encouragement is given to the producers, importers, and distributors to make inputs available to Nigerian farmers. I should caution that without these inputs, it is impossible for Nigerian farmers to produce enough products to achieve national food security, let alone supply commodity surpluses for export.

So, we must work out the agricultural input requirements, the policies and strategy for making them available to the farmers, and ensuring that they are available on time. We must also work hard to ensure that these agricultural inputs are reasonably priced and affordable to the farmer, and that the nation and the individual farmer gain from his/her farming activities. I would like to make the following suggestions:

1. The government and the nation must make sure that the inputs are not over-invoiced whether they are produced within our shores or offshore.
2. The government should work to ease the supply line from the manufacturer(s) to the supplier(s). We should make sure in this context that there are no unnecessary tariffs and illegal tollgate charges freighting and at the point of disembarkation. Parts of our sea and airports should be designated and geared up for speedy

processing and handling of agricultural inputs and exports.

3. The nation must also urgently begin to build the infrastructure necessary for substantial reduction of goods' transportation charges in the country. It is a fact that the cheapest means of transportation is by sea/river. Nigeria must speed up the reactivation of her inland water transportation network. We must, as a matter of urgency, begin the revitalization of our railway network. It should be fully understood that the present means of transportation of agricultural inputs and the foods produced by the farmers to the consumer are too costly and unacceptable. We have a ludicrous situation today because the cost of transportation of agricultural inputs from the port of disembarkation to the hinterland is more than the actual landing costs of the inputs in the country. Nigeria must therefore modernize its inland water and railway systems immediately.
4. The government should appreciate that agricultural production is a profit-making business and it could only survive if it, at least, breaks even and all stakeholders derive some benefits from it. It should therefore understand the implications and be honest about price subsidy on agricultural inputs. Surely subsidy is meant to ameliorate the poverty of the farmer or to improve national food security or both. It is certainly not meant for public officials at various levels of government bureaucracy to illegally enrich themselves from public coffers. Thus, we must clearly identify the beneficiaries of government subsidies on agricultural inputs ranging from the poor to the poorest in the farming populace. Farmers should of course be supported with adequate extension delivery and research findings. The Sasakawa-Global 2000 (SG 2000) support to farmers has clearly shown what could be achieved through extension delivery *and without subsidy* on agricultural inputs.
5. Nigeria must expand its network of agricultural input agencies (producers, importers, distributors) at all levels. The DAIMINA project has

already started doing this in three states, and the results are very encouraging. This must be extended to all other states and Abuja.

6. The transformation of our weak farmers' associations and commodity associations/ groupings into viable and strong organizations and their networking with agricultural marketing is also in the best interest of Nigerian agricultural development and the government because it will improve rural economy and political stability.

It is a platitude to state that farmers' organizations, commodity groups/enterprises/associations

and associations of input suppliers must be fully involved in programming and implementation of the foregoing in order to maximize returns from policies and our efforts. ALFAAN has already started discussions with the fertilizer importers and distributors on how to ensure timely and adequate availability of fertilizers at reasonable prices to all Nigerian farmers. It intends to ensure that this cropping season is the last of the terrible seasons of Nigeria's agricultural input unavailability.

AN OVERVIEW OF FERTILIZER IMPORTATION AND DISTRIBUTION IN NIGERIA

**Sani Dangote, Chairman
Dan Hydro Company Limited**

Introduction

With the largest population in Africa, Nigeria has an estimated 120 million people and a population growth rate of 3% per annum. Over 75% of the population is engaged in full-time agricultural production and approximately 56,261 km² (5,626,100 ha) of the land is cultivated. Because of these facts, Nigeria has the potential for tremendous fertilizer use and consumption. The country has an estimated annual consumption of 7 million tons of fertilizers per annum. There is abundant raw material input in the form of natural gas for the local production of nitrogenous fertilizers such as urea and ammonium sulfate. The National Fertilizer Company of Nigeria (NAFCON) at Port Harcourt is the only plant that could produce and supply enough urea for local consumption and export to countries within the West African sub-region and it has been closed since 1996. The closure of NAFCON, the supplier of urea raw material input, has affected the production output of the local blending plants that rely on the company for their urea input for blending of compound fertilizers. Additionally, the available rock phosphate deposits that exist around the Sokoto-Zamfara axis are not mined and processed for the production of single superphosphate (SSP), diammonium phosphate (DAP), and other vital fertilizer-blending input materials. These factors have brought about an increase importation of raw fertilizer materials and finished fertilizer products. Compounding the situation is the lack of potash deposit within the Nigerian geological formation. Land is no longer an abundant resource because of the rapid population growth. Intensive and expensive crop produc-

tion practices justify the increased need for mineral and/or inorganic fertilizer use to meet plant/crop nutrient needs. In the meantime and pending the resuscitation of the NAFCON plant, the importation and distribution of fertilizer products remain the only option in meeting a very significant demand of the Nigerian farmers for fertilizer.

Private Sector Fertilizer Importation and Distribution Trends

During the last 10 years, January 1994–August 2003, a total of 3,047,953 tons of fertilizers was imported into the country. The figure represents both finished fertilizer products and raw materials for local blending plants. With a cultivated area of 5,626,100 ha and fertilizer use potential of 7 million tons per annum, the 3 million tons of fertilizer import and consumption in 10 years is quite below the annual potential fertilizer use. This low fertilizer use index constitutes serious impediment to the growth of agricultural development, food production, and attainment of food security especially in view of our population growth rate.

The following factors constitute the rationale behind fertilizer importation in Nigeria:

- The close of NAFCON, the main source of urea and raw materials.
- Rock phosphate is not mined in the country for production of SSP, TSP, DAP, and MAP.
- Unavailability of potash for processing MOP.
- Inadequate production by local blending plants.
- Increased demand for fertilizer as a result of greater awareness and increased land area.

Annual Fertilizer Imports To Nigeria (1994–August 2003)¹

Number	Year	Total Imports (tons)
1	1994	690,436
2	1995	102,851
3	1996	43,314
4	1997	56,708
5	1998	239,916
6	1999	252,861
7	2000	437,320
8	2001	615,000
9	2002	340,746
10	2003	268,801 (as of August 18, 2003)
Total		3,047,953

Importation figures for the last decade indicate drops and rises in the annual importation, both during government-controlled import and distribution, and a deregulated market era. Annual importation was highest in 1994 with 690,436 tons. The figure represents both finished fertilizers and raw materials for local blending plants. The plants had a total production of over 100,000 tons of compound fertilizers in the same year. The importation and distribution of fertilizer-finished products were the exclusive responsibilities of the federal government then. The total import figure, however, dropped to a meager 102,851 tons in 1995. This drastic drop in the total importation was due to two significant reasons. First, the Federal Ministry of Agriculture wanted to change the procurement method from selective tender to open competitive bidding. This was not successful. Second, there were the growing feelings that the entire national fertilizer needs could be met from within

¹The summary of fertilizer import operations in 2003 is as follows: Total number of vessels as of August 18, 2003 is 25; Number of companies involved is 7; Total cargo is 268,801 tons, comprising —urea (152,751 tons); DAP (10,619 tons); MAP (28,660 tons); NPK (66,256 tons). The delivery period is as follows: January/February/March (68,287 tons, 21.59%); April/May/June (282,593 tons, 44.17%); July/August (92,028 tons, 32.24%).

through NAFCON and the local blending plants. Unfortunately, this period coincided with the low production output from NAFCON. There were serious abuses in the fertilizer distribution system.

In the following year (1996), there was no import of finished products. The 43,314 tons imported were mainly fertilizer raw materials for blending plants.

The year 1997 was a transition period in the fertilizer subsector. It was the era of fertilizer market deregulation. The drop in annual imports continued, though at a decreasing rate. The total import of 56,708 tons was mainly fertilizer raw materials for local blending plants. There was no significant increase in the total imports due to:

- A big vacuum for imports and distribution created by the government in a sudden policy change.
- Deregulation carried out in the last quarter of 1997 and little or insufficient time for private sector participants to process fertilizer importation.

However, in 1998 the total annual import jumped to 239,916 tons; this represented a four-fold increase. This could be attributed to the large number of private sector participants engaged in

the importation and marketing of fertilizers in the country. Over 20 companies were registered in the importation and distribution of fertilizers throughout the country. Within this period, over 40 fertilizer depots were established by these companies nationwide.

There was no significant increase in annual imports in 1999. Total imports were 252,861 tons. This could be attributed to the stock carryover from the preceding year. Unsold stock in fertilizer companies' depots and dealers' shops was due to the demand. In addition, the new deregulated prices had an impact on consumption. This notwithstanding, more entrants into the fertilizer market were recorded.

The years 2000 and 2001 were marked with the rapid increase in annual imports with 437,320 tons and 615,000 tons, respectively. The sudden surge in the annual imports within this period was due to an increase in the number of companies involved in the importation and distribution of fertilizers; this led to an increase in demand and consumption. However, due to lack of quality control and monitoring mechanisms, the abolished 10% duty was abused. Other trade malpractices were perpetuated by some of the fertilizer companies.

Imports declined to 340,746 tons in 2002, perhaps due to the identification and consequent penalty meted out to companies involved in malpractices. In addition, the government intervention policy, which came into effect in 1999, was beginning to take a toll on the companies involved in importation and distribution of fertilizers. The policy, which allows for the simultaneous sale of subsidized fertilizers with unsubsidized ones, has affected sales of most fertilizer companies.

In 2003 these effects continue to manifest and total fertilizers imported and distributed declined to 268,801 tons as of August 18, 2003. In addition, only seven fertilizer companies were involved in the importation and distribution of fertilizers. About 200,000 tons or 70% of the total imports arrived at the ports during the critical fertilizer

application periods of June-July-August. Haulage difficulties and high charges aggravated the supply timing to the farming areas. In fact, there was serious scarcity and the retail price of fertilizer was one of the highest this year.

Fertilizer Importation and Distribution Constraints

This country has abundant potential for improved fertilizer production and consumption. The basic fertilizer raw materials are obtained from natural sources. There is abundant natural gas for urea production. Potash deposits, available from ancient lakes or water bodies, are a significant source of potassium; otherwise, there is no known source in Nigeria. Rock phosphate, a significant source of phosphorous, is available in commercial quantities around the Sokoto and Zamfara geological formation. However, these rock phosphate deposits have not been explored or mined under commercial ventures.

For now, about 98% of fertilizer raw materials, namely urea, DAP, MAP, and MOP, required by local blending plants are imported. In addition, finished imported fertilizers constitute a substantial proportion of fertilizer used in this country. The situation will remain so, pending the resumption of production at NAFCON. In the meantime, importation of fertilizers will continue to play a key role in providing farmers with fertilizers. Nevertheless, there are several factors that constitute serious constraints in the efficient importation and distribution of fertilizers.

These constraints are as follows:

- Capital-intensive nature of fertilizer importation and distribution business. Fertilizer importation and distribution requires a high level of financial involvement covering the product, freight, port handling, insurance, clearance, haulage, and warehousing.
- High inland transportation costs. Hinterland areas are the main consumers of fertilizers; transportation costs to retail areas account for 10%—

30% of the product cost. Total distribution costs represent 15%–35% of product cost price.

- High finance cost. This country has one of the highest finance cost with commercial bank lending rates of 30%–35% per annum.
- Policy inconsistencies and government interventions at federal and state levels. This results in a scenario where subsidized fertilizers from federal and state governments at subsidized rates and open market fertilizers at private investors' rates are sold at the same time in the market, thus leading to the eventual crippling of private sector investors.
- High landing costs such as ship and cargo dues, 5% duty, 1% maritime levy, clearing charges, local transportation, etc. These account for about 30% of the total product cost; e.g., Lagos ports.
- High and prohibitive port charges. Our ports have one of the most expensive service charges.
- Foreign exchange fluctuations, which can result in substantial financial losses.
- Lack of quality control and monitoring mechanism measures, the absence of which has resulted in trade and marketing malpractices.
- Port logistics constraints such as lack of warehousing facilities that assist in timely cargo discharge and interim storage pending dispatches to the hinterland.
- Late payment for fertilizers supplied to federal and state governments by the suppliers.
- Discouraging price offers for fertilizer supplies by the federal and state governments. This allows for manipulation by some unscrupulous suppliers.

Suggested Solutions in Fertilizer Importation and Distribution

Pending the privatization and reactivation of NAFCON, there are very limited options to fertilizer importation in meeting local needs. The constraints of the fertilizer importer and that of the farmers are inseparable. Solutions aimed at improving the importation and distribution of fertilizers must address the constraints of the im-

porter as well as the problems of the farmers. The importer should be able to bring in good quality fertilizers at affordable costs to the farmers. Likewise, the local blender should be able to procure fertilizer blending raw materials at competitive rates to turn out affordable finished products to the farmers, which are of good quality. On the other hand, the farmer should have the financial capability to purchase the right types and quantities of fertilizers needed at the appropriate time and at affordable rates. The following suggestions will, under the given fertilizer market situation, bring about rapid and positive changes toward making fertilizers available to the farmers in the interest of the overall agricultural and economic development of the country.

- Establishment of a favorable policy framework that is investor friendly, which will include withdrawal of government intervention in the production, importation and distribution of fertilizers at federal and state levels.
- Provision of indirect subsidy aimed at reducing the current fertilizer retail prices; for example, the Federal Government can abolish and take responsibility for port charges, and duty and maritime levies for fertilizer conveying vessels. Port charges, duty and maritime levies form the bulk of the landing costs, which constitute 25%–30% of imported fertilizer raw material or finished product cost; e.g., Lagos ports.
- Application of low interest regimes for funds, under special arrangements by the Central Bank, specifically allocated for fertilizer importation and distribution. This will apply to both finished products and raw materials for local production. Beneficiaries should be made to submit counter guarantees.
- Establishment of quality control and monitoring mechanisms with legislative backing that will effectively regulate the fertilizer subsector, protect the interests of the importers, local producers of fertilizers, and the consumers.
- Ready and available market outlets for farm produce that will ensure high profitability for agricultural production business.

- Establishment by the Federal Government of a grain price stabilization program for grain purchase, from the farmers at guaranteed minimum prices.
- Arrangement for micro-economic finance program allowing farmers easy access to credit facilities without collateral requirement.

Since agriculture has the highest labor employment opportunities, the current poverty alle-

viation program of the federal government should be targeted toward the agricultural sector of the economy. The result of doing so will have positive multiplier effects on the economy for the attainment of the much desired food security of our great country.

IFDC PROGRAMS WITH SPECIAL REFERENCE TO POLICY ADVOCACY

Amit Roy
President and Chief Executive Officer, IFDC

It is with considerable pleasure that I am here today to give you an overview of IFDC's policy reform projects in the context of this workshop. However, before elaborating on these projects, please permit me to say a few words about IFDC and its expanding role in the global agricultural scene.

The International Fertilizer Development Center (IFDC) was created in October 1974 as a center of excellence with expertise in fertilizers to meet the needs of the developing countries. The Center can be considered as an outgrowth of the National Fertilizer Development Center (NFDC) of the Tennessee Valley Authority (TVA). In the early 1960s, it became evident that TVA-NFDC's fertilizer knowledge and facilities were resources that should be contributing to foreign assistance efforts in the developing countries. TVA-NFDC became increasingly involved in agricultural development in the developing countries. Initially, this involvement was in the form of furnishing information on fertilizers to the U.S. Agency for International Development (USAID) and its missions, but soon became more direct by sending technical assistance missions to the developing countries.

In spite of these developments, it became increasingly clear that TVA, with its objective of developing technologies for the U.S. fertilizer industry, in particular, and the agriculture sector, in general, was very restricted in what it could or would do for developing countries. Thus, a definite need arose for an international center that would freely address the fertilizer technology needs of the developing countries in the tropics and subtropics.

IFDC was created during a period of crisis—food shortages of the early 1970s were occurring on a worldwide basis. Energy shortages were be-

coming commonplace, and prices of agricultural inputs were rapidly increasing. Inadequate supplies of fertilizers were available to produce food; prices of fertilizer and food skyrocketed. All of these factors caused the developing countries to be at a distinct disadvantage.

In an address to the United Nations General Assembly in April 1974, Dr. Henry Kissinger (then U.S. Secretary of State) pledged the contribution of U.S. fertilizer technology and strong material support toward “*the establishment of an international action on two specific areas of research: improving the effectiveness of chemical fertilizers, especially in tropical agriculture, and new methods to produce fertilizers from non-petroleum resources.*” To address the crisis situation, the Food and Agriculture Organization (FAO) of the United Nations (UN) organized a World Food Conference in November 1974.

At that Conference, the United States drew the international community's attention to the importance of fertilizer research and development in solving the food security challenges of the developing world by announcing sponsorship of the establishment of IFDC.

USAID and the International Development Research Centre (IDRC) of Canada were chief sponsors of the establishment of IFDC. Since that time, IFDC's revenue sources have expanded to include a variety of multilateral and bilateral donor agencies, host countries, private sector companies, associations, and national organizations.

The initial purpose of IFDC was to assist the developing countries in solving their food-deficit problems by focusing on the development of fertilizers and fertilizer practices to meet the special needs of their tropical and subtropical climates and

soils. IFDC has always emphasized the need for efficiency in the production, marketing, and use of fertilizer to protect the environment, reduce energy consumption, and ensure its cost-effectiveness. Since its programs were first organized in 1975, IFDC has contributed to increasing food production in many developing countries through improved management of plant nutrients and the enhancement of soil fertility. Since 1975, IFDC's scientists have been striving to create a more sustainable agriculture in the developing countries by helping them to use their own raw materials to produce the necessary fertilizers needed to build soil fertility and produce more food.

More recently, IFDC has evolved into a multifaceted center with a broadened focus. IFDC's mission today focuses on increasing and sustaining food and agricultural productivity in the developing countries through the development and transfer of effective and environmentally sound plant nutrient technology and agribusiness expertise. During the past quarter century, the Center has conducted technology transfer initiatives in more than 150 countries. More than 9,000 participants from 150 countries have enhanced their skills through more than 600 global training programs. In addition, an estimated 100,000 people have attended IFDC's training courses where there are significant development projects.

To more closely reflect the new thrust, the IFDC Board of Directors in 2001 approved a change in the operational name of the institute to IFDC—An International Center for Soil Fertility and Agricultural Development. In this expanded role IFDC uses innovative approaches to:

- Introduce and promote integrated soil fertility management strategies so that agricultural systems become productive and sustainable.
- Assist countries in their efforts to develop market economies by providing them sound economic policy analyses that will unleash the entrepreneurial creativity necessary for economic development.

- Develop and introduce decision-support systems that integrate socioeconomic and biophysical models.
- Promote development of technologies and institutions and facilitate dialogue among stakeholders for sustainable agriculture.
- Improve smallholder farmers' access to agricultural inputs through harmonization of regional trade, particularly in sub-Saharan Africa.

Mr. Chairman, IFDC continues to forge ahead into new areas of opportunity for the development of competitive agricultural sectors in such places as Kosovo, Malawi, Nigeria, Kyrgyzstan, Azerbaijan, Afghanistan, and others. The Center has chalked up a number of notable successes in a long list of countries, including Albania, Bangladesh, Colombia, Kenya, and Venezuela, to name a few. In tackling some of the most important challenges facing humanity, IFDC is having an impact around the globe—in the developing countries and the transitional economies. These challenges relate to meeting the food and fiber needs of the burgeoning world population through better management of nutrients to improve soil fertility, policy reform to establish open and competitive markets and efficient economic systems, and technology transfer to improve smallholder farmer access to (and judicious use of) fertilizers.

By applying innovative agricultural technologies in an agribusiness setting, IFDC is laying the groundwork for improved global food security and the alleviation of poverty. In Albania, Bangladesh, and Kosovo, IFDC has effectively linked agricultural production with economic development through the design and implementation of economic policies that promote the free market system and lead to economic efficiency, increased employment, and overall economic growth. IFDC's work in Asia, Africa, Latin America, and Eastern Europe promotes efficient management of nutrients and the implementation of market principles that result in increases in both agricultural production and economic development.

Mr. Chairman, one of IFDC's most outstanding success stories occurred in Bangladesh, where a 15-year project completely restructured the fertilizer sector and instituted a freely competitive marketing system, which created a network of 170,000 private entrepreneurs. By eliminating fertilizer subsidies and other support costs and allowing the private sector to assume responsibility for all fertilizer-marketing activities from importation to retail sales, the Government of Bangladesh saved more than US \$100 million during 1988-94. As a result of improved effectiveness in the market and intense competition, the retail price of fertilizers was reduced and fertilizer sales increased on an average by 8% per year during 1987-94. A prime result of this project was Bangladesh's achievement of self-sufficiency in rice in the early 1990s. IFDC worked with local non-governmental organizations such as the Grameen Bank to introduce high-yielding varieties of maize on a large scale in Bangladesh. The impact on Bangladesh's human resources is also outstanding; more than 11,000 participants were trained in 238 domestic courses and workshops. In addition, 193 dealers, government officials, and bankers were trained in 33 programs in the United States and Europe. In an evaluation of the Bangladesh project, USAID stated that the *"program succeeded beyond expectations.....Privatization of fertilizer marketing and distribution significantly improved both employment and agricultural production. The improved fertilizer distribution system was an economic boon because it was part of a full, economically viable technical package that also included high-yielding rice varieties and improved irrigation.... As a result of the program, income increased US \$600 million per year for paddy production and US \$750 million per year for all crops."*

Mr. Chairman, as a result of the success achieved in the fertilizer subsector and in improving agricultural productivity, during the mid-1990s IFDC launched the Agro-Based Industry and Technology Development Project (ATDP). The ATDP goal was to increase productive employment in ag-

riculture and related enterprises in Bangladesh. The IFDC project created competitive markets for agriculture and agribusiness inputs, outputs, and technologies. Moreover, it stimulated a massive investment in value-added business activities. The project promoted reforms in trade policy, industrial and agricultural policy, fiscal and commercial policy, foreign investment policy, and legal and regulatory practices in Bangladesh. Agribusiness ventures were initiated and existing ones expanded with financing from a US \$26 million plus agribusiness credit fund. The amount of investments/loans made in agribusiness totaled 12,700; 70,000 new agribusiness employees were added in the private sector. During the project 700,000 farmers increased their incomes by using more productive, environmentally sound technologies such as urea deep placement (UDP) for rice production. Technological advancement in agri-industry was spurred through technical assistance, human resource development, and business contracts. Advice on policy formulation and implementation created a friendlier environment for the country's agribusiness.

More recently, IFDC has concentrated on increasing paddy yields through improved efficiency of nitrogen fertilizers. The beneficiaries are resource-poor farmers in selected areas of Bangladesh, Nepal, and Vietnam. For paddy cultivation, losses of nitrogen are great. Typically, about 30% plant recovery is obtained from the broadcast applications of urea, but research has proven that placement into submerged soils eliminates much of the nitrogen losses. UDP, using urea briquettes or urea supergranules (USG), although labor intensive, provides high yields from more efficient fertilizer, is environmentally friendly, and appears to be feasible for use by small-scale, resource-poor farmers. Bangladesh's Department of Agricultural Extension reported that UDP was performed on 379,000 ha of paddy during 2000/01. In general, during dry seasons farmers obtain 1,000 kg/ha more paddy (an average 20% increase) from UDP than from their broadcast urea applications and use 20%-30% less urea.

Mr. Chairman, another IFDC success story is our project in Albania. In the early 1990s, IFDC began assisting the Government of Albania in establishing a working and vibrant market economy in that country's agricultural sector. The IFDC project created a fully privatized market for agricultural inputs, assisted Albania in developing an efficient national agricultural statistical system, developed a supporting institutional capability, and nurtured the development of the highly successful Albanian Fertilizer and Agricultural Inputs Dealers' Association (AFADA). Private enterprises are now supplying 100% of Albania's fertilizer requirements, 95% of crop protection products, and 80% of certified imported and domestic seed. Four-fifths of all farmers are using fertilizers, and nearly one-half are using improved seed. Yields of wheat and maize have increased 22%, and many farmers have shifted to more high-value horticultural crops. Better fertilizer and seed laws, reductions in tariffs, and the establishment of viable seed and soil institutes capable of serving farmers and agribusinesses enhanced these improvements. During the past 3 years, IFDC has assisted Albania in nurturing private sector-led growth in agriculture and business by successfully establishing eight democratic and functioning agricultural trade associations, a federation of 18 trade associations as an effective voice for advocating policy reform, and the partnership of eight of them in an Association Business and Management Center that aims to be effective and self-sufficient. Since 1998, farm income in Albania has increased by 64%; exports of fresh vegetables have increased by 247%. The project clients have invested millions of dollars of their own money in agribusiness and increased their production and revenues by more than 60% and employment by 25%.

Mr. Chairman, because of resounding success in Albania, IFDC was asked to help with the revitalization of the agricultural sector following the cessation of hostilities in Kosovo. IFDC has established a trade association support network for agricultural input and agribusiness development similar to the model in Albania. The Kosovo Agribusiness Development Project (KADP) is:

- Promoting market-oriented reforms.
- Assisting the development of financially sustainable trade associations.
- Establishing linkages in the agribusiness sector, such as the private sector extension system pioneered in Albania.
- Helping nascent agricultural enterprises through targeted business and marketing support.
- Facilitating access to credit.

Since 1999 KADP's clients have realized a 37% increase in agricultural production, and salaries in private enterprises rose by 27% in 2001. The project has:

- Implemented policy reforms on import tariffs.
- Organized several successful trade missions and staff training programs.
- Introduced and tested new high-yielding crop varieties.
- Conducted numerous field days in conjunction with the private sector.

Of all Kosovar enterprises recently surveyed, 77% have made investments in private enterprises; the employment generated by these investments increased by 32% compared with 1999 figures. The technical assistance to Kosovo's entrepreneurs has resulted in increased agricultural input availability as follows:

- Fertilizer—from 40,000 tons of imports in 1999 to 72,000 tons in 2001.
- Improved seeds—from 16,000 tons imports in 1999 to 30,000 tons in 2001.
- Crop protection products (CPPs)—from 2,500 tons imports in 1999 to 7,800 tons in 2001.

As a result of better quality agricultural input availability, better access by farmers, better prices, and a sound private extension program, the yields of the main crops have increased significantly in the past 3 years. In 2001 the yield of wheat was 3.6 tons/ha, compared with 1.8 tons/ha in 1999. The yield of maize in 2001 was 4.2 tons/ha, compared with 2 tons/ha in 1999. The yield of potatoes was 11 tons/ha in 2001, compared with

7.4 tons/ha in 1999. As for the poultry industry, the total number of domestically produced eggs increased by about 17% in 2001, compared with 7% in the year 2000.

Mr. Chairman, in 2002, after the establishment of the Afghanistan Interim Administration, IFDC was asked to help with the distribution of emergency supplies of fertilizers to needy farmers and also to develop the inputs sector. This was extremely challenging. Decades of conflict, a severe drought since 1998, and the Taliban regime devastated both subsistence and commercial agriculture. The market was decapitalized and sector performance slumped. New agricultural technology was not adopted because of lack of incentives. Extension systems became nonfunctional, which constrained technology transfer. Lack of investment in infrastructure resulted in its progressive deterioration. Banks ceased to operate. However, in spite of this difficult environment, the traders imported fertilizer from neighboring countries and sold it to farmers on a cash basis.

After the Taliban regime was deposed in late 2001, the smallholder farmers and returning refugees did not have any money to purchase inputs. To provide this segment of the population with emergency supplies of fertilizers without disrupting the existing fertilizer trader network, IFDC designed and introduced an income transfer program using the voucher scheme.

The voucher, printed in the local languages of Dari and Pashtu, authorized a selected farmer to receive his/her predetermined fertilizer quantity from the local dealer without payment at that time. A schematic of the voucher system is shown in Figure 1. Vouchers were designed and printed with special markings to ensure that they could not be duplicated easily (Figure 2). The vouchers were distributed to the farmers through four NGOs that were operating in the selected provinces. The farmers were selected on the basis of recommendations from the local community organization (Shura), the staff of the extension department of the Ministry of Agriculture and Livestock (MOAL), and the

NGOs. Along with the vouchers, the farmers received written instructions in the local language on the proper use of fertilizer received through the vouchers. The dealer submitted the vouchers to IFDC and was paid promptly through a designated moneychanger in the area. This scheme required training the NGO staff, the Shura representatives, and the participating dealers in the basics of the program. The NGOs and Shura representatives were encouraged to hold meetings with the local farmers to explain the workings of the program and its benefits.

More than 16,000 tons of fertilizer was distributed to the needy farmers in the agriculturally important provinces of Kabul, Parwan, Kapisa, Laghman, Nangarhar, Wardak, Badakshan, Baghlan, Kunduz, Takhar, Ghazni, and Helmand. Through a post-operation monitoring and evaluation survey, it was determined that in the distribution of fertilizer for fall wheat, 98% of the intended farmers received the urea and DAP. Yield estimates of more than 4 tons/ha were obtained in many fields although the variability was high among fields and provinces due to various crop production factors. The repayment after harvest to the Shura has been very good and averaged more than 84%. The farmers in the 42 districts in these 12 provinces were pleased with the program because it helped them to overcome their initial difficulties in reentering the farming cycle with very limited resources of their own. Many farmers felt that they could not have managed without this program. The many independent small fertilizer dealers who willingly participated were also very pleased with the program since it improved their sales efforts by creating a good demand through the vouchers. They were also pleased with the prompt reimbursements. Overall the program did provide a stimulus to the local fertilizer market and cemented the relationship between the farmers and the dealers.

Mr. Chairman, as a part of the DAIMINA project, IFDC undertook a study of the fertilizer market in Nigeria, including the subsidy given by the federal and state governments. Important findings include:

- Fertilizer use is profitable on the main crops.
- Fertilizer price is not the only significant constraint; poor quality and non-availability of fertilizer products are substantial constraints; inadequate access to credit is also a constraint, especially for smallholders.
- More often, subsidized fertilizers were not reaching the intended beneficiaries.
- Dual pricing system is inefficient and leads to distortion of the marketing system.
- Against an agronomic potential of 3.8 million nutrient tons and economic potential of 1.5 million nutrient tons, Nigeria is using only 100,000-150,000 nutrient tons (less than 10% of economic potential and less than 4% of the agronomic potential).
- By not realizing its economic potential for nutrient use, Nigeria incurred a foregone loss of 3 million tons of maize in 2000. Similar losses were incurred for other crops. Total economic loss could be staggering.

The study recommended the following actions:

- Fertilizer subsidies and government distribution should be reassessed.
- Fertilizer prices should be reduced by lowering transaction costs through improvements in procurement, transportation, port handling, dealer networks, and regulation.
- For resource-poor farmers, targeted subsidies should be introduced through the voucher system, as IFDC did in Afghanistan.

In conclusion, Mr. Chairman, I hope that the experiences that I have shared this morning will be useful in the deliberations of this workshop.

Thank you.

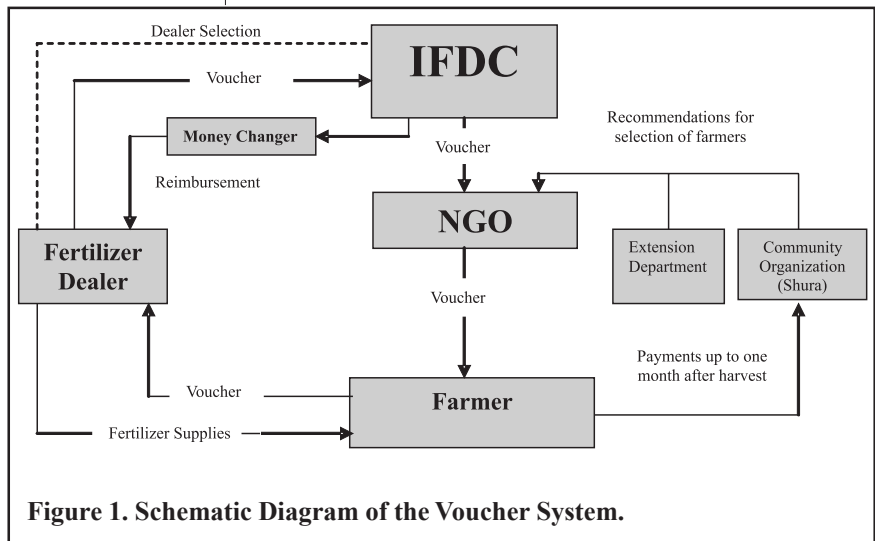


Figure 1. Schematic Diagram of the Voucher System.



Figure 2. Voucher for Urea Fertilizer.



REMARKS ON THE AGRI-INPUT WORKSHOP

Dawn Liberi
USAID Mission Director, Nigeria

Introduction

It gives me great pleasure to address this distinguished assembly of participants on the national agri-inputs policy workshop. Permit me to take this opportunity to publicly congratulate His Excellency Mallam Adamu Bello on his reappointment to the Federal Executive Council as the Minister for Agriculture and Rural Development. USAID/Nigeria has enjoyed working with the Ministry during his first term, and we look forward to continuing our strong working relationship. We are confident that farmers and entrepreneurs in the agricultural sector have a great partner in the person of Honorable Minister Bello.

Role of the Private Sector

It gives me great pleasure to participate in this workshop on the USAID-funded Developing Agricultural Input Markets in Nigeria (DAIMINA) project, which is implemented through IFDC. We are pleased that the Government of Nigeria is counting on the private sector to procure and market agricultural inputs. This is consistent with the objectives of the new agricultural policy thrust in order to improve input availability and supply. It also makes good sense because agriculture is most productive when it is driven by markets operating freely. The public sector has the very crucial role of providing and maintaining the necessary infrastructure and for putting in place a supportive policy environment.

The Need for Competitive Markets

Since 1999 USAID has funded about \$27 million in assistance to the agriculture sector in Nigeria. Over the past years, USAID has undertaken a rigorous exercise to develop a new 5-year strategic plan for assisting Nigeria in its economic, po-

litical, and social development. Through a process of stakeholder consultations, analyses, discussions, and internal debates, we have concluded that agricultural development is the key to the economic growth of the nation. However, developing Nigeria's agriculture presents some very great challenges.

We believe that an effective approach to developing Nigeria's agriculture sector is by improving the competitiveness of key commodity sectors. This requires an integrated approach that recognizes the complex linkage between farms and markets. The most important outcome is the development of an efficient marketing system, which will provide accurate market information to all participants. This will improve decision-making and reduce transaction costs resulting in net gain for suppliers and farmers.

We have seen improvement in the linkage between producers and buyers through the Rural Sector Enhancement Program (RUSEP) project, which is being implemented by the International Institute of Tropical Agriculture (IITA) in Katsina, Adamawa, Oyo, and Abia States. Participating farmers in some of these states have signed a memorandum of understanding with certain companies for the purchase of their farm output, including maize and cassava. In Katsina, the participating farmers were able to secure loans from Union Bank, which facilitated their access to production credit.

The Supporting Policy Environment

This workshop has been convened to obtain your input into developing an efficient agricultural input marketing system. To successfully promote competitive input supply systems, policy stability, and provide regulatory framework for quality

standards, the government needs to rely on the private sector for procurement and marketing of agricultural inputs.

While the policy assessment will be reviewed in more detail later, a number of the recommendations from the IFDC policy report are worth noting:

- The Federal Government of Nigeria (FGN) must continue to develop the private sector fertilizer market and delivery system and support activities that decrease the transaction costs of the fertilizer delivery systems.
- The Nigeria fertilizer subsidy policies should be critically examined in the context of Nigeria's World Trade Organization agreements.
- The FGN should consider replacing the current subsidy policy and experiment with a voucher system.

- Policy dialogue needs to be continued with both the federal and state governments with all the stakeholders in the agricultural sector.
- Fertilizer and related data collection and analysis need to be strengthened.

Conclusion

USAID supports an active dialogue on options to improve the provision of fertilizer supply and access through the private sector. This is critical to the development of Nigeria's agriculture sector and to improving the health and welfare of its people. I look forward to the continued support and interest of the Ministry of Agriculture and Rural Development to accomplish this task. USAID is pleased to be a partner in this endeavor, and I look forward to the outcome of this workshop.

OPENING ADDRESS

**Adamu Bello (FCIB), Honorable Minister
Federal Ministry of Agriculture and Rural Development**

It is indeed my honor and privilege to be here with you at this national workshop on agricultural input policies. I consider the timing of this workshop appropriate because it is coming at a time when the government is articulating implementation strategies for the new agricultural policy that will impact immediately and positively in enhancing the quality of life of the ordinary Nigerian. Let me congratulate the IFDC-DAIMINA project for working closely with the Federal Ministry of Agriculture and Rural Development (FMARD) to organize this important workshop.

An Overview of the Agricultural Sector and Government Policy

Since the inauguration of President Olusegun Obasanjo in May 1999 as the democratically elected President of the Federal Republic of Nigeria, there has been a deliberate drive toward a complete diversification of the Nigerian economy and an active promotion of a pre-eminent role for the private sector in the development process. Timely access to affordable and good quality agricultural inputs is one of the objectives of the new agricultural policy of the Obasanjo administration.

Agriculture, as we are all aware, is the engine of growth of the Nigerian economy and a significant pillar of Nigeria's national security. The sector holds the key to rapid economic growth, poverty alleviation, and stable democracy. It contributes about 40% of the gross domestic product (GDP), 88% of the non-oil foreign exchange earnings, employs nearly 70% of the active labor force, and provides raw materials for the agro-allied industrial sector. The sector also provides almost all of the staple food consumed by the national population and exports grains and other foodstuff informally to the Economic Community of West Africa States (ECOWAS) sub-region. The

sector recorded an overall growth rate of about 4.1% in 2001. The same margin of growth was recorded in 2002, compared with population growth of 2.8%.

In order to achieve sustained growth and structural transformation of the economy, the agriculture sector requires well designed, articulated, and sustainable policies. The newly approved Nigerian Agricultural Policy is a framework of carefully chosen action plans designed to achieve overall agricultural growth and development. The policy, which has been approved by both the Federal Executive Council and the Council of State, is a product of a review of the 1988 agricultural policy, considering the current national and global economic situation with an active participation of the main stakeholders, including farmers' organizations. The strategies for implementing the new agricultural policy, including the Presidential Initiatives, are in the early stages of implementation, and I am happy to announce some are already yielding positive results.

The new agricultural policy is aimed at achieving the following broad objectives:

- Attainment of food security in basic food commodities.
- Increase in production of agricultural raw materials to meet the growth of an expanding industrial sector; increase in production and processing of exportable commodities to increase their foreign exchange earnings capacity and further diversify the country's export base and sources of foreign exchange.
- Modernization of agricultural production, processing, storage, and distribution through the infusion of improved technologies and management so that agriculture can be more responsive to the demands of other sectors of the Nigerian economy.

- Creation of more agricultural and rural employment opportunities to increase the income of farmers and rural dwellers and to absorb productively an increasing labor force in the nation.
- Protection and improvement of agricultural land resources and preservation of the environment for sustainable agricultural production.

The Policy Thrust of this Administration aims to:

- Create the macro-environment that will stimulate greater private sector investment in agriculture so that the private sector can assume its appropriate role as the main actor in agriculture.
- Rationalize the roles of the tiers of government in their promotional and supportive activities to stimulate growth.
- Reorganize the institutional framework for government intervention in the sector to facilitate smooth and integrated development of agricultural potentials.
- Articulate and implement integrated rural development as a priority national program to raise the quality of life of the rural people.
- Promote the necessary developmental, supportive, and service-oriented activities to enhance production, productivity, and marketing opportunities.
- Increase fiscal incentives to agriculture, among other sectors, and review import waiver anomalies with appropriate tariffs of agricultural imports.
- Promote increased use of agricultural machinery and inputs through favorable tariff policy.

Since the implementation of the policy objectives is the collective responsibility of all, the policy has clearly defined complementary and synergic roles to all the stakeholders comprising the three tiers of government—federal, state, and local—and the private sector. More importantly, the constitution of the Federal Republic of Nigeria assigns facilitatory and promontory roles in both the exclusive and concurrent legislative lists to all the tiers of government.

The Role of the Private Sector in Agricultural Development

The expected roles of the private sector in the development of agriculture are clearly elaborated in the new agricultural policy as follows:

- Investment in all aspects of agricultural production.
- Agricultural produce storage, processing, and marketing.
- Agricultural input supply and distribution.
- Production of commercial seeds, seedlings, brood stock, and fingerlings under government certification and quality control.
- Agricultural mechanization.
- Provision of enterprise-specific rural infrastructure.
- Support for research in all aspects of agriculture.

Therefore, in essence, the roles of the private sector focus on production, processing, storage distribution, and marketing. The private sector has a significant role to play for our country to experience substantial growth and development in the sector, which is critical to a successful transformation of the economy. In order to feed the country's teeming population, which numbers over 120 million and is growing at an average rate of 2.8%, and supply adequately to the manufacturing and exporting industry, the abundant scope of productivity improvement in the sector must be exploited.

Investment opportunities abound in all the various areas of the sector. I will concentrate on just a few as follows:

- **Input Supply and Distribution**—Serious impediments to agricultural production and productivity in Nigeria are inadequate production, importation, and distribution of inputs. Agricultural inputs in the form of improved seeds, seedlings, brood stock, feed, vaccines, fertilizers, agrochemicals, machineries, implements, etc., are essential ingredients for high productivity. The reality, however, is that the delivery system is

still faced with many problems. Therefore, there is a need for an effective and sustainable private sector-led input delivery system. The organized private sector is expected to take over the production, importation, distribution, and marketing of fertilizer and other inputs. The private sector should prepare for this challenge.

- **Presidential Initiatives**—As part of the efforts to restore Nigeria’s agriculture to its past eminent position in the economy, Mr. President had at various times organized Saturday forums where he met with relevant stakeholders in the rice, vegetable oil, sugar, cassava, livestock, and tree crops industries, respectively. The purpose of the forums was to identify the problems that are unique to each industry and to chart the way forward. Subsequent to the forums, various presidential committees met to design a blueprint for achieving increased production of each crop and livestock with the aim of achieving self-sufficiency and for export within 5 years. The various committees submitted their recommendations to the Federal Executive Council for consideration and approval. It is important to note that five out of the seven reports have been accepted and approved by the Federal Executive Council: rice production, vegetable oil, sugar development, cassava production, and establishment of the national agricultural development fund. Reports on livestock development and funding of tree crops of long gestation are soon to be considered. The objective of these programs is for the country to be self-sufficient in the production of these agricultural products in the short term (2005) and to produce for export in the medium term (2007). The private sector has a very important role to play and needs to make investments in almost all of the above activities.

Other Areas of Private Sector Investment

Several opportunities exist for private sector participation in the following areas:

- Storage and processing.
- Fisheries.
- Support for agricultural research.
- Provision of rural infrastructure.

The Issue of Fertilizer Subsidy and its Implementation

The federal, state, and local governments have all been involved in fertilizer procurement and distribution and subsidy administration. Agriculture is, of course, on the concurrent list so it is the responsibility of the three tiers of government. The new agricultural policy has assigned each tier of government some common and some overlapping responsibilities. Fertilizer subsidy administration in Nigeria started in the early 1970s when government was promoting the use of chemical fertilizers to Nigerian farmers. In 1976 the Fertilizer Procurement and Distribution Division (FPDD) was created and the Single Superphosphate Fertilizer Company (FSFC) began operation in Kaduna. Also, the federal government assumed full and overall responsibility of procurement and distribution of fertilizers throughout the country that year. By 1992 the federal government was spending up to N30.00 billion Naira (equal to US \$222,929,367.70)² annually in fertilizer subsidy. The situation was clearly not sustainable, and at the beginning of the 1990s, the federal government initiated a policy of gradual withdrawal of fertilizer subsidy and began to promote the establishment of private- and state government-owned fertilizer-blending plants. From two privately owned fertilizer-blending plants in 1990, Nigeria has more than 27 plants operated mainly by the private sector today. Since the early days of the Obasanjo administration, the government has liberalized and even waived value-added tax (VAT) and duty to facilitate the rapid inflow of imported fertilizer products by the private sector. The government is continuing its efforts to nurture, encourage, and build the capacity of the private sector to assume full control of fertilizer production, marketing, and distribution.

The two fertilizer manufacturing plants at Port Harcourt and Kaduna are already under the Bureau of Public Enterprises for sale to the private sector.

²US \$1.00 = 138.310 Nigerian Nairas (NGN).

Distinguished ladies and gentlemen, this Administration, concerned as it is with easy accessibility of fertilizers to Nigerian farmers, has initiated serious dialogue with all significant stakeholders in the fertilizer industry to chart and develop farmer-friendly policies that will make fertilizer easily accessible to Nigerians. Among the policy options proposed in early 2001 were:

- The need for the subsidy to provide farmers fertilizer at an affordable price.
- The resolve to arrive at a subsidy policy that is sustainable, effective, and feasible.
- Regular meetings to be held with National Association of Road Transport Owners (NARTO) and the Nigerian Railway Corporation (NRC) to discuss problems of fertilizer transportation.
- To convene a conference of all states, the private sector, and other important stakeholders to consult on implementation modalities of the fertilizer subsidy policy.

I am happy to note that this recommendation to hold a policy workshop is being implemented today and look forward to the recommendations and resolutions derived from your deliberations.

Conclusion

Distinguished ladies and gentlemen, there is no doubt that there is ample opportunity and potential not just in input distribution but also in the entire agricultural sector for private sector investment. I expect all stakeholders, especially in the private sector, to join hands with government as partners in progress to achieve and even surpass the targets of the presidential initiatives and other policy initiatives of President Obasanjo.

I hereby declare the National Workshop on Agricultural Input Policy open.

I thank you all very much for your attention.

II. TECHNICAL SESSION
Agri-Input Policies and Their Impact on the
Development of a Free and Competitive Market

SOME THOUGHTS ON POLICY REFORMS IN AGRI-INPUT MARKETING IN NIGERIA

**Prof. Ango Abdullahi,
Special Adviser to the President on Food Security**

Introduction

The contemporary Nigerian economy presents a perplexing paradox of both “hope” and “hopelessness” at the same time. The “hope” is predicated on what is commonly understood to be vast and near inexhaustible potential, which exists in the country. The “hopelessness,” on the other hand, is the recurring inability to harness these vast resources for the general good of Nigeria’s citizens to the extent that today Nigeria belongs to the unenviable group of 15 of the poorest nations of the world. Recent surveys by many independent international groups and agencies have shown that up to 70% of Nigerians are classified as poor with a daily per capita income of less than US \$1.

For a long time and up until the end of the 1960s, Nigeria’s economic growth and development received its impetus and driving force mainly from agricultural production—both for domestic needs and for exports. Since over 60% of the country’s labor force is employed in the agricultural sector, no economic discourse can ignore the central and multidimensional importance of the agricultural sector to the social and economic life of the Nigerian nation, notwithstanding the fact that its share in the gross domestic product (GDP) has been declining from as high as 65% in the 1960s to about 40% in recent years.

Nigeria’s agricultural resource strength and potentialities are defined and assessed in terms of the vastness of land, geographical location, topography, climate and soils, and vegetation types. The extensive latitudinal expanse from 4° to 14° north of the Equator permits the existence of many distinct and diverse ecological zones from the southern mangrove swamps through high rainforests to

the Guinea and Sahel savannas of the far north. These diverse ecological settings make possible the production of a variety of agricultural commodities for both domestic consumption and exports.

Some General Observations on the Current State of Nigeria’s Economy and its Agriculture

Despite the significant role of oil from the mid-1970s, agriculture continues to date to be the mainstay of Nigeria’s economy. Apart from providing the food security of the nation, agriculture employs the bulk (estimated at 60%) of the country’s labor force. Its contribution to the GDP is about 40% compared with 12% contributed by oil. It also contributes 90% of the country’s non-oil exports. Furthermore, it is expected to be the country’s source of cheap raw materials for competitive agro-industrial development.

Through various acts of omission and commission, the agricultural sector, unfortunately, suffered serious neglect (from the mid-1970s) from both the private and public sectors, to the extent that it failed to keep pace with the country’s basic needs for ample food and raw materials for industry. The traditional agricultural exports, such as cotton, groundnuts, cocoa, palm products, rubber, etc., virtually disappeared and, ironically, the country is now a net importer of these commodities, including some basic staples. Today, Nigeria’s import bills for assorted agricultural products stand at a staggering N250 billion per annum.

General Remarks on Impediments to Agricultural Growth In Nigeria

The numerous constraints to satisfactory growth of Nigeria’s agriculture are very well

known and well documented in a large number of reports coming out of research institutes, conferences, seminars, and workshops over the past three to four decades. Most of the commonly mentioned ones revolve around or within the following broad categories:

- Inappropriate public policies and programs, both fiscal and monetary, which are not conducive to rapid agricultural growth, or which are, in fact, directly or indirectly biased against the agricultural sector, in general.
- As a consequence of the above, investments critical for agricultural growth from both the public and private sectors remain too low and, in most cases, have shown a decline in the last two decades. The common adage that “no growth without investment” aptly applies here.

Low or badly managed investment in any business endeavor, not the least in agriculture, could lead to low productivity or even out-right failure. It is this scenario that today gives Nigeria’s agriculture its characteristic feature of *low productivity*. Instead of scarce public resources being invested in vital institutional support services such as agricultural research, agricultural extension, essential rural infrastructures, private sector development, etc., they are usually diverted to direct production operations and/or importation of food products, which have turned out to be largely inefficient and wasteful ventures with very little value added for agricultural growth.

Because of these policies, Nigerian farmers, 95% of whom are peasant small operators, have been unable to apply and exploit even the most elementary of the many modern methods of farming. We are not talking about the high-technology agriculture or developed agricultural systems. We are talking about our apparent inability to deal with the basics of modern agriculture that requires farmers to improve production by using the full incorporation of modern agricultural inputs in their farming system like seeds, fertilizers, pesticides, and farm implements.

Agricultural Inputs in Nigerian Agriculture

In this presentation we shall concentrate on three main inputs—i.e., seeds, fertilizers, and CPPs. It is important to remember that virtually all the successful agricultural revolutions achieved around the globe, especially from the middle of the 19th century, were made possible through new technologies which incorporated improved seeds/seedlings, enhanced/ complementary soil fertility, and control of injurious crop pests. Farmers through effective advisory/extension services and commercialization brought about these new technologies only through sustained scientific research before their adoption. Today, differences in the state of agricultural development between countries and regions of the world can be explained or illustrated by the intensity/quantum of consumption/usage of agricultural inputs per unit area of land. Table 1 shows the levels of fertilizer use in some countries.

Table 1. Selected Examples of Fertilizer Application Rates Around the World

Country	Fertilizer (kg/ha)
Sub-Saharan Africa	9.1
Africa	21.4
North America	100.8
Western Europe	235.8
Asia	159.6
Nigeria	?
World	100.9

Fertilizer consumption trends (tons/000 ha) in Nigeria relative to other parts of Africa are illustrated in the following periods: 1961-64, 1965-69, 1970-74, 1975-79, 1980-84, 1985-89, 1990-94, 1995-99: SSA (1.70, 2.87, 4.73, 5.93, 8.00, 9.34, 9.49, 9.00); South Africa (23.06, 37.19, 52.75, 69.07, 85.15, 63.61, 54.97, 52.69); Zimbabwe (25.20, 37.74, 56.21, 47.92, 61.90, 56.44, 52.29, 53.31); and Nigeria (0.08, 0.29, 0.58, 2.80, 8.06, 10.61, 13.56, 6.09).

The very low consumption (almost nonuse) of fertilizers in Africa compared with other regions largely explains the wide gap between the highly productive agriculture elsewhere and the prevailing low productivity of African agriculture. The situation is even worse when other inputs like improved seeds and pesticides are included in the data. Needless to say, there is a strong relationship between fertilizer, improved seeds, and pest control. In most cases the full genetic potentials of improved crop species cannot be realized under the low soil fertility conditions and injurious crop pests.

Even though Nigeria is considered the largest user of chemical fertilizers in sub-Saharan Africa, its per unit land fertilizer rates are too far below what should be obtained in developed agricultural systems. Table 2 shows total quantities of chemical fertilizer supply to Nigerian farmers between 1989 and 2000.

Figures in Tables 2 and 3 show a very wide gap between actual fertilizer available to Nigerian farmers and potential consumption based on researched recommended rates and estimated hectareage of the major arable crops in the country. If hectareage of other smaller crops and tree crops are included in estimates, the current overall po-

tential consumption in Nigeria should be close to 10 million mt of NPK (20-10-10) equivalent. The 500,000 tons available on average over the past 10 years represents just about 5% of the current recommended fertilizer consumption for the country. Such a situation not only represents subsistence farming and sluggish rural economic growth, it can lead to serious depletion of already low fertility of the Nigerian soils.

Possible Explanations for Low Consumption of Fertilizers in Nigeria

The persistent unacceptable low rate of fertilizer use in Nigeria has a number of antecedents and possible explanations, which include the following:

Ignorance of Farmers—This was particularly the case at the beginning of its introduction by our former colonial masters who wanted to boost the production of export crops for the recovery of their industries after the First and Second World Wars. This constraint was partly overcome through education and economic inducements including giving the fertilizers “free” and later at “subsidized” prices. In later years, it was realized that the farmers actually paid the full price in the old Marketing Board Systems through direct and indirect taxation of their produce.

Table 2. Showing Available Fertilizer Product (10-Year Period)

Year	Total Production	Total Import	Total Supply	Total Export	Net Available
1989-1990	324,400	219,400	543,800	121,500	380,900
1990-1991	340,400	249,700	589,700	122,100	400,340
1991-1992	318,600	207,100	525,700	113,200	429,200
1992-1993	371,200	240,000	611,200	94,600	440,000
1993-1994	330,000	281,000	611,000	92,000	461,000
1994-1995	157,700	290,300	448,000	79,300	296,000
1995-1996	138,900	23,700	162,600	44,400	183,000
1996-1997	123,800	77,200	201,000	26,700	173,500
1997-1998	46,200	91,560	137,700	-	137,000
1998-1999	81,500	152,000	233,500	-	233,500
1999-2000	85,500	117,600	203,100	-	203,100

Table 3. Showing Potential Fertilizer Consumption Based on Recommended Rates of Application to Some Major Crops

Crop	Area in '000 ha (approximately)	Recommended Rates of Application			Potential Consumption ('000 kg)			Total NPK (20-10-10) (million tons)
		N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O	
Maize	5,000	100	50	30	500	250	150	2.50
Millet	5,500	50	25	25	275	138	138	1.38
Sorghum	6,000	40	20	20	240	120	120	1.20
Rice	2,000	65	30	20	130	60	40	0.65
Root Crops Yams/Cassava	5,000	50		30	250	100	150	1.25
Pulses Groundnuts, Cowpea, soybeans	5,000	10	40	30	50	200	150	0.25
Fibers (Cotton)	500	25	20	10	14	10	5	0.70
Total	30,000	340	205	165	1,454	553	554	7.93

Scarcity or Insufficient Supply—Scarcity or insufficient supply, against effective demand at appropriate time and place, has remained a significant cause of low consumption of fertilizers over the years. For example, fertilizers needed in the south of Nigeria in February/ March do not make sense to farmers when brought in during May/June. Similarly, most arable crops in the northern savannas would need fertilizers around May/June/July. Yet we have situations where government-procured fertilizers arrive in August/September. Experience in Nigeria has shown that scarcity is both from inadequate sources of local supply complicated by an inefficient and faulty distribution network.

High Pricing and Marketing Costs—Each time demand exceeds supply, whether real or artificial, the consequence is high price. The decision of the consumer to pay for an artificial rise in the price of fertilizer depends on whether he has the resources in the first place, and the costs available to him. But it is obvious that insufficient availability, high marketing costs, and lack of competition have led to unfair price hikes and to low consumption of fertilizers in Nigeria in the last 10 years.

Public Sector Monopoly/Involvement in Fertilizer Business—The lack of growth in agri-input business, particularly fertilizers, has been blamed on past government's over-involvement in the production importation and distribution. On the other hand, the government has justified its continued involvement on the grounds of the *subsidy* it has built into the prices paid by farmers, which in some past years was up to 85% of the cost of the fertilizers. While the principle of subsidy (some prefer to call it "farm-support") is noble and very much consistent with current trends all over the world, it is becoming increasingly apparent that the price subsidy is not reaching the intended beneficiaries because of increasing corruption and inefficiency in the entire chain from procurement to logistics management and delivery.

Latest Situation/Trends on Ground

The government has "liberalized" the fertilizer business; i.e., it has opened up the fertilizer business to the following extent:

- Private entrepreneurs are free to set up manufacturing and blending plants, and can sell directly to consumers or indirectly through retailers and government. Private entrepreneurs can

import and sell without need to apply for import licenses.

- Federal and state governments still own and operate fertilizer manufacturing and/or blending plants with varying sizes and capacities. Indications are that the federal government (at least) is about to sell its plants to the private sector.
- Governments—federal, state, and local—still procure and distribute fertilizer to farmers. The main issue/problem here is that they operate individually and independently without any coordination at all. The result is utter confusion not only for inter-state prices but also in pricing among private sector sources.
- Subsidy on fertilizers still continues at the federal level as well as in some of the states. The high degree of variability in the level of subsidy and the mode of its administration and implementation are causing confusion and distortions in the entire fertilizer marketing system.
- Quantities of fertilizers available to farmers in the country remain abysmally low and on the downward trend. The government blames the private sector for failure to capitalize on its liberalization policy. On the other hand, the private sector remains apprehensive in its commitment of more resources to the business because of the uncertainties in the present dual system in which a sudden shift in government policy could cause financial disaster to private investors.

Developing Agri-Inputs Market in Nigeria—The Way Forward

Despite some of the changes that have taken (and are still taking) place in agricultural input development in Nigeria, we cannot at this point say we are about to “come out of the woods.” In fact, some even argue that things, rather than improving, are getting worse. The latter view is based on the current low availability of fertilizers in the market, which have been declining in the past 10 years. The optimistic reformists, however, maintain that good policy announcements in themselves alone do not automatically lead to success. Changes will be gradual, especially in the beginning, but when they occur they should become

permanent and consistent. For us to move forward, both the public and private sectors need a sober reflection on the very serious crises on our hands. The agricultural sector is the mainstay of the country’s socioeconomic life and should provide the basis for the country’s economic recovery and reconstruction. It will remain in crisis unless some drastic measures are taken to reduce or eliminate the constraints in the present agricultural input supply system. Furthermore, it should be appreciated that all activities within the agricultural subsector must be in the context and seen as an integral part of the national economy. In most cases, unfavorable conditions in the economy, generally, could have adverse effects on agricultural production and, without removing the causes, we can only continue to treat symptoms without achieving permanent solutions.

To sustain the growth and development of agri-input markets in Nigeria, we must examine the *immediate* and *remote* causes of its slow growth. It is the responsibility and duty of all the stakeholders to come together and find lasting solutions to this national problem. The principal stakeholders in the fertilizer business today are:

- Government (public sector).
- Non-governmental organizations (NGOs).
- Private manufacturers and blenders.
- Private importers, wholesale and retail dealers.
- Donor agencies.
- Farmers and farmer organizations.

All the stakeholders listed above have roles and responsibilities if agri-input market development is to succeed now or in the future. The critical issue at any time is that these roles and responsibilities *must always harmonize*, and must not in any way be in *conflict*. The ultimate objective of our combined effort is to serve the interest of agriculture and its development. In so doing, the socioeconomic development of the nation is served. It must be emphasized that the most important link in the chain of activities is *the farmer* and through the farmer the economic development.

Understanding the Micro-Economic Situation of Nigerian Peasant Farmers

The Nigerian peasant farmer may be small, poor, and uneducated, but he is a very shrewd businessman. At every stage he constantly analyzes his operational decisions within his limited resources. He invests his resources (land, labor, and capital) to ensure maximum returns for the food and other security needs of his family. He is extremely efficient and resourceful. However, the variable factors affecting his economic decisions are too many and, in most cases, unpredictable and outside his influence, let alone his control. For example, at present he does not in any way influence events that determine the prices he has to pay for critical inputs. Worse still, he does not influence the forces that determine what price he receives for his products at any point in time. In other words, the farmer operates in the dark and for most of the time, it is a case of shooting in the dark—sometimes you “hit” the target, but in most other attempts you “miss” the target. That is why the Nigerian rural environment remains at a disadvantage, and this may explain the pervasive poverty in that social setting today.

Let me illustrate this point by what has happened in the last 6 months (i.e., 2003 cropping sea-

son) when most Nigerian farmers were making decisions on how to allocate their farming resources. Fertilizers were generally scarce and prices became exorbitant. The price of urea and NPK in most grain-producing areas fluctuated between N2000 and N3500 depending on the source and location of purchase. This is in sharp contrast with the 2002 growing season when prices of different types of fertilizers fluctuated between N1200 and N1600 per 50-kg bag. Let us look at the estimated production cost of maize in 1 ha of land shown in Table 4.

Assuming an output of 3.5 tons/ha (against the national average of 1.2 tons) the break-even price for the farmer cannot be less than N1,830 per 100-kg bag of maize. If we make a reasonable provision of 25% profit margin, the farmers selling price becomes N2,290 per 100-kg bag of maize. Current market surveys show that maize is being sold for between N1,400 and N1,700 per 100-kg bag. This is certainly a bad signal for the farmer and would negatively affect his investment attitude to fertilizers and improved seeds. The point being made by this illustration is the direct relationship between production costs and crop produce pricing. At the same time manufacturers and dealers of fertilizers are expected to make a profit to remain in business and the same consideration must

Table 4. Estimated Production Cost/Hectare Maize

S/N	Item	Estimated Cost (N)
1	Land	Freehold or Rented
2	Water	Rainfall (Free)
3	Seedbed preparation (plow, harrow, ridge)	15,000
4	Seed (20 kg)	1,000
5	Planting	2,000
6	Fertilizer (medium level, approximate to bags)	25,000
7	Weeding (at least twice)	10,000
8	Harvesting (cutting and stoking)	4,000
9	Labor for threshing and winnowing @ N150/100 kg of grain	5,200
10	Empty sacks (35 No.)	1,100
11	Transport to store/market	700
Total		64,000

be extended to farmers if they are to remain in the farming business.

In order to have a balance in this presentation we should also take a closer look at the costs involved in procuring a metric ton of fertilizer through importation using current costs as illustrated in Table 5.

Estimated break-even price for one bag of fertilizer at farm gate is about N1,970 per 50-kg bag. If we allow a profit margin of 20%, the commercial price should be N2,068 per 50-kg bag. Given the prevailing exorbitant prices of up to N3,500 per 50-kg bag, the private sector distribution network could be accused of profiteering at the expense of a desperate farming population.

What Is the Solution?

In a free market economy, official price controls are not usually the best answer to problems of scarcity and profiteering. The better way is the competition, by way of increasing the supply of the commodity and increases in the options of sourcing it. In the current Nigerian situation, the sources of fertilizers are many, but the quantum still remains grossly inadequate. The current inadequacy is also closely linked to the inadequacy of the national capacity to produce fertilizers.

The two fertilizer plants belonging to the federal government—NAFCON, which is now closed down, and FSFC with a combined installed capac-

ity of nearly 1 million tons per annum—are facing varying degrees of problems. The installed capacity of the private and public blending plants—roughly about 1 million tons—has been adversely affected by the closure of NAFCON because it sources virtually all its raw material from NAFCON. The blenders have resorted to importation of their raw materials with attendant bottlenecks of foreign exchange sourcing and complex handling costs. In the case of importers—both private and government—the problem also remains of adequate financing and logistics of handling at the point of sale. In the case of the government, there is the compounding factor of *subsidy*.

Implications of Input (Fertilizer) Shortages

There are several consequences arising from shortages of fertilizers in the agricultural system in Nigeria and elsewhere. Some of these are listed below:

- The overall application rate per hectare of cultivated land drops, usually by the same proportion the supply is reduced.
- Farmers avoid the cultivation of fertilizer “sensitive” crops in favor of those less demanding of it. In Nigeria farmers tend to avoid maize and rice in favor of sorghum, millet, soybeans, and cowpeas if they cannot find fertilizers. It is also known that improved varieties/hybrids of cereals perform optimally only if soil fertility is adequate.

Table 5. Estimated Current Cost of 1 Ton of Fertilizer

S/N	Item	Cost (US \$)	(N) Equivalent (N140 - US \$1)
1	Fertilizer material (f.o.b., Lagos)	150	21,000
2	Custom duty (5%)	-	1,050
3	Port charges (10%)	-	2,100
4	Average transportation (major urban markets)	-	6,000
5	Miscellaneous handling	-	1,000
6	Cost of capital (25% - 6 months)	-	7,000
Total			38,150

- Farmers try to compensate for shortages of chemical fertilizers by turning to organic manure. The problem again is that it is in short supply.
- Where there is abundance of land as in the central parts of Nigeria, farmers resort to the old practice of “*shifting cultivation*” with all the attendant long-term consequences and its disadvantages for the environment.
- In the heavily populated areas with acute shortage of agricultural land, inadequate crop husbandry practices lead to accelerated degradation of soils, which regressively fail to support the basic needs of those who subsist on it

Fertilizer Subsidy—Its Prospects And Problems

Agricultural subsidy has a long and checkered history around the world. In general terms, it is predicated around the following broad objectives:

- Encourage and stimulate the adoption of new beneficial farm technology or practice.
- Encourage long-term capital investment and improvement on farm and environment generally.
- Promote institutional development in support of agriculture.
- Stability and confidence in the agricultural industry and agribusiness.
- Ameliorate the adverse effects of local and imported inflationary pressures on farmers and farm business.
- Serve as a tool for transfer of incomes from non-farm to the farm sector.
- Compensate farmers for unfavorable terms of trade and macro-economic distortions.

In Nigeria the history of subsidy goes back to the colonial interest of Britain trying to recover from both the First and Second World Wars. In those years, fertilizers for cotton, groundnuts, cocoa, and palm were initially given “*free*” and later token charges were introduced. Obviously, the motive was to boost the production of the abovementioned export crops. In later years it was understood that the fertilizers given to the farmers

were neither “free” nor “subsidized.” The Marketing Board pricing policies, at the time, had taken care of all costs of inputs in deciding the prices of exports to Britain.

Be that as it may, the policy of subsidizing agricultural inputs has remained to this day, and the justification for its retention is predicated on one or a combination of the objectives stated above. While subsidy per se has no serious opposition, its problem over the years is its *administration* to achieve maximum results. Most of the opposition against it is based on the widespread abuses in the subsidy administration, which some say make the exercise worthless. It may therefore be useful to look in some detail at the cost implications of the subsidy based on the overall national interest.

Annual Financial Implications of Fertilizer Subsidy

It is difficult under frequently changing policies and conditions to accurately determine the level of subsidy to agricultural inputs generally and fertilizers in particular. This is because the data for the exercise are not easily available. Nonetheless, it is possible to have a fair picture based on easily available current statistics and some sensible assumptions and generalizations. For the purpose of this exercise, I wish to use 1 million tons as the minimum quantity of fertilizers to be subsidized in a year all over the country. Average price is N2,300/50-kg bag.

From Table 6 it is shown that for 1 million tons of fertilizers at current costs, the level of total subsidy is N4.6 billion (@ 10%), N9.2 billion (@ 20%), and N13.8 billion (@ 30%).

Let us now examine the budgets of the governments of the Federation. Here again the figures cannot be precise, but I hope they still make illustrative sense for our purpose. The existing revenue sharing formula for the three tiers of government is approximately 45% federal, 35% state, and 20% local governments. It is estimated the size of the

Table 6. Cost Implications of Subsidizing 1 Million Tons of Fertilizer

Fertilizer	Tons ('000)	Price/Ton (CW)	Total Cost (CW, 000)	Subsidy (CW, 000)		
				10%	20%	30%
Urea	250	46,000	11,500,000	1,150,000	2,300,000	3,450,000
NPK	500	46,000	23,000,000	2,300,000	4,600,000	6,900,000
Others	250	46,000	11,500,000	1,150,000	2,300,000	3,450,000
Total	1,000		46,000,000	4,600,000	9,200,000	13,800,000

Federation account is about N1,900 billion per annum based on the existing sources of revenue. Thus, the annual budgets for the three tiers are as follows:

Government	Revenue (%)	Revenue (CW, billion)
Federal	45	855
States	35	655
Local	20	380
Total	100	1,890

Assuming an average allocation of just 5% for agriculture by the three tiers of government, total funds for agriculture should be about N95 billion per annum. If we isolate the Federal Government, which controls 45% of the national budget, and apply the 5% allocation to agriculture, the minimum federal allocation should not be less than N42.75 billion. If we go further to recommend a minimum allocation of 10% to agriculture (much less than the 20%-25% recommended by the FAO for developing countries), then the federal budget for agriculture should not be less than N85.5 billion.

On the basis of all known criteria that justify support for agriculture, the levels of subsidy (that have been complained about) can be easily accommodated.

This workshop should offer participants the opportunity to concentrate on how best to administer subsidy for the benefit of the agricultural industry.

General Conclusions

Nigeria's economy is in crisis. Most serious analysts would agree that economic recovery in Nigeria would only be possible and rapid if its most productive sector—agriculture—is seriously addressed, especially at the policy level. Agriculture is facing numerous constraints, most of which are manmade. Presently, one of the main constraints is an inadequate agricultural inputs supply that has grossly failed to satisfy the demand. The non-growth of the agri-input sector had been blamed on excessive control and direct involvement of government. However, the government has liberalized the agri-input business hoping that the private sector will lead the way to the much-needed growth. Progress to date has been rather slow and, in some cases, negative. But all the stakeholders who need to cooperate with each other in all the facets and dimensions of this endeavor must sustain the struggle.

Global Review of Subsidies³

World population is projected to reach over 8 billion in 2025 and over 9 billion in 2050. Over 90% of the projected increase will occur in the developing and transitional economies where food insecurity and environmental degradation are serious challenges. In confronting these challenges, the use of mineral fertilizer and associated inputs will continue to play a critical role, as it has done in the past.

³A summary of IFDC's position paper on Input Subsidies and Agricultural Development, *Issues and Options for Developing and Transitional Economies* (IFDC P-25).

Environmentally sound use of modern inputs depends on technology, agronomy, and policy-related factors. Once the agronomic practices are known and suitably engineered products are available in the market, it is the policy-related factors that carry the burden of moving the cart forward. Through a conducive and stable policy environment, many countries, especially in Asia, have recorded high growth in fertilizer use and other inputs, and input subsidies played a central role in such policy environments. Nevertheless, driven by policy and market reforms, many countries have phased out input subsidies during the 1990s.

In the context of market reforms and the Uruguay Round Agreement on Agriculture (URAA), this paper provides an assessment of arguments for and against input subsidies, especially fertilizer subsidies, and discusses various alternatives to subsidies and IFDC's experiences in dealing with fertilizer subsidies. The assessment of various arguments and experiences indicates that arguments in favor of fertilizer subsidy are no longer as strong as those that are against it. The sustainable alternatives to subsidy are even stronger, given the universal moves towards market-based developments. The alternatives include efforts to reduce the cost of fertilizers through a number of strategies that will shift the supply curve to the right and promote public investment in marketing infrastructures, improve profitability of fertilizer use through investment in soil fertility restoration, and provide support under the Green Box measures of the URAA. Situations are also identified in which direct subsidies could be considered, but even in those cases, accompanying measures should be taken to avoid misuse of resources and the distortionary impact on the market. However, national governments should continue to take the lead in investing in public goods through public-private partnerships, in internalizing the externality (leading to market failure), and in providing necessary support for soil fertility and natural resource management in a market-friendly way. Where the concern is poverty alleviation, a voucher system of support is preferred because it addresses the twin

objectives of poverty alleviation and market development.

The direct subsidy scenario is usually based on the assumption that agri-input markets remain under-developed and fragmented in the developing and transitional economies, and that the under-developed nature of these markets keep input prices high resulting in policymakers arguing for subsidies. It has now been established that transaction costs could be reduced by 20%-30% when various distortions are removed. This reduction of cost can be achieved in the following ways:

- Ensure that conducive and stable policy environment is maintained to promote the development of private sector-based input markets. This will entail the removal of all price and non-price distortions introduced by the government, donors, NGOs, or other stakeholders.
- Development of human capital to sharpen business, marketing, and technical skills to operate a successful input business.
- Improved access to finance to give life to business development. Issues relating to high interest rates, under-developed financial infrastructures, stringent collateral requirements, and risk need to be addressed. The attitude of the banks toward agriculture also needs to be addressed to allow easy flow of funds for business development.
- Market information should be provided in a timely manner and the information should flow smoothly. All stakeholders should have access to information on prices, stocks, deliveries, etc., to engender transparency.
- The enactment and enforcement of regulation dealing with quality, quantity, nutrient content, etc., are critical for a private sector-based free market system. The responsibility of protecting consumers' (farmers) interest is that of the public sector and, therefore, government needs to build the necessary capacity for the assignment.
- Development of infrastructures such as roads, ports, and communication networks will significantly reduce transaction costs. The government

is best suited to invest in these public infrastructures and institutions to ensure that the benefits arising from there translate to reduction in transaction costs.

Highlights of the Nigerian Fertilizer Policy Study and Some Suggested Alternatives⁴

The study focused on the policy and other distortions in the input supply chain. The objectives of the study are as follows:

- Review the structure and function of the agri-input markets.
- Assess the potential of the private sector to supply agri-inputs efficiently and in a sustainable manner.
- Identify constraints to the private sector participation in input markets.
- Develop programs and policies for strengthening the functioning of agri-input markets.
- Prepare an action plan for implementing the proposed policies and programs.

The study reiterated the need for government to provide more investment in the agricultural sector and to ensure consistency in policy formulation and the political will/commitment to implement the policies.

The study revealed that inconsistent policies have discouraged the private sector operators in investing in the agri-input subsector. Also, the subsidy on fertilizer does not reach the targeted farm-

⁴An intervention based on the study “The Assessment of Nigerian Government Fertilizer Policy and Suggested Alternative Market-Friendly Policies.” See Annex 1 for the Executive Summary of the study.

ers. A dysfunctional market is thus established through the recycling of subsidized fertilizer into the parallel markets. This development has indeed restricted the use of fertilizer. Fertilizer use has therefore remained at 12% of its agronomic potential and only 12% of its economic potential.

The study also indicated that price was not a major constraint to fertilizer use, but the timely availability as well as the quality of the product were factors. It emphasized that there is enormous potential for the private sector in the input market and recommended a holistic approach to strengthen the liberalization process and develop efficient and sustainable agricultural input markets (AIMs) in Nigeria. The measures proposed in the paper include:

- Creation of a macro policy environment conducive and adhering to consistent input market policy.
- Building of human capital for market development.
- Improved access to finance.
- Develop and implement regulatory framework.
- Promote market transparency through a market information system (MIS).
- Promote technology transfer activities.
- Strengthen research capacity for promoting private seed industry.

The study concluded that the above measures would only be achievable if there is constructive partnership between the private and public sectors in the country, and made a case for the voucher system as an alternative mode of subsidy provision in justifiable circumstances.

III. WORKING GROUP SESSION

REPORT OF GROUP 1

Need Assessment of Commercialization of Agriculture

(Chairman: Vice Admiral M. Nyako)

A. Agriculture in Nigeria is mainly subsistence farming. Identify five major constraints that hinder its transformation to commercial agriculture.

- Lack of access to affordable and timely credit.
- Lack of timely supply of inputs at affordable prices.
- Poor crop marketing system, including processing transformation and information services.
- Inadequate research and extension services.
- Poor physical, social, and institutional infrastructures.

B. Work out the practical solutions to the constraints, as identified in A above.

SN	Constraints in the Commercialization of Agriculture	Proposed Solutions
1	Credit constraints	<ul style="list-style-type: none"> a) Invigoration of Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB). b) Proper and honest implementation of existing policies for providing financial services to agriculture such as Agricultural Credit Guaranteed Fund (ACGF), Agricultural Development Fund (ADF), Nigerian Agricultural Insurance Company (NAIC), etc. c) Simplification of the bureaucratic procedures to access these facilities, such as requirements for collateral and problems of offshore credit, etc.
2	Input supply constraints	<ul style="list-style-type: none"> a) Phased withdrawal of government from input procurement and distribution in a period of 3 years. b) Creating an enabling environment for private sector involvement and investment in agri-input marketing. c) Enforcement of quality control regulations to protect farmers.
3	Marketing constraints	<ul style="list-style-type: none"> a) Provision of market information/intelligence. b) Improving the system of processing for value addition and establishment of grades and standard regulations. c) Skillful application of the four P's of marketing—right product, right place, right price, and right promotion. d) Effective buyer of last resort services.
4	Research and extension constraints	<ul style="list-style-type: none"> a) Adequate and sustained funding of research and extension to improve agricultural productivity. b) Fast track application of proven technologies. c) Strengthen Research-Extension-Farmer-Input Linkage System (REFIL). d) Encourage involvement of private sector in research and extension activities, including service providers and NGOs. e) Promotion of demand-driven extension services to improve farmer's know-how of commercial agriculture. f) Encourage youth to go into agri-extension services to acquire sound skills. g) Increased extension/farmer ratio. h) Improved and sound agricultural education in universities and colleges of agriculture. i) Strengthening of farmers' groups and associations.
5	Infrastructure constraints	<ul style="list-style-type: none"> a) Development of all types of infrastructures, including roads, railways, marketing, storage, and agroprocessing facilities. b) Rural institutions development. c) Provision of adequate commercial infrastructure, especially electricity and telephone services.

C. Suggest the role of public and private sector agencies in improving the agriculture production scenario in Nigeria

Proposed Solutions (as in Q B above)	Role Allocation	
	Public Sector	Private Sector
Credit.....	Yes	Yes
Input supply.....	Yes	Yes
Marketing:		
a)	No	Yes
b)	No	Yes
c)	Yes	Yes
Research and extension:		
a)	Yes	No
b)	Yes	Yes
c)	Yes	Yes
d)	Yes	Yes
e)	Yes	Yes
f)	Yes	Yes
g)	Yes	Yes
h)	Yes	Yes
i)	Yes	Yes
Infrastructure:		
a)	Yes	Yes
b).....	Yes	Yes
c)	Yes	Yes

D. Do you consider that government policies are affecting the development of agriculture in Nigeria? If yes, what policy changes will you propose?

- Political will and consistency of policies.
- Harmonization, coordination, and proper implementation of government policies among the three tiers of government and public and private sector agencies.
- Effective management of macro and micro economic policies affecting agricultural development, especially with respect to import substitution.
- Deliberate encouragement of private sector participation in agricultural development.

E. Do you think the current budgetary allocations to agriculture (more specifically funds allocated to agricultural development) are sufficient? If not, what level of budget do you recommend to be provided in the national budget? No.

Proper implementation of the United Nations' (UN) recommendations that 25% of development budget on a sustained basis be legalized and passed into law at the federal and state levels.

F. Group 1—Recommendations

- Timely release of budgetary allocations.
- Mobilization of all stakeholders for immediate increase of productivity of the agricultural sector.
- Respect and protection of the rights of farmers and other stakeholders.
- Legalization of 25% budgetary provision and other policies.

REPORT OF GROUP 2

Review of the Agri-Input Marketing System in Nigeria

(Chairman: Dr. A. Joshua)

A. Describe the existing agri-input marketing system and specify the role of government and private sectors in providing the goods and services to farmers.

Performance Review: 1995-2003		
Production and Marketing Functions	Public Sector	Private Sector
1. Production <ul style="list-style-type: none"> • Seeds • Fertilizer • Agro Chemicals 	Poor Poor No production in Nigeria	Marginal Fair No production in Nigeria
2. Importation <ul style="list-style-type: none"> • Seeds • Fertilizer • Agro Chemicals 	Unsatisfactory Fair Good	Fair Good Good
3. Selling and Marketing Business ethics, number of sale and delivery points, pricing, sales promotion, management of subsidy, etc.	Fair	Good
4. Research and Development Including extension services	Fair	Fair

B. Based on the past performance, the world scenario of free trade and global competition, what role will you prescribe for public and private agri-inputs production and marketing agencies in Nigeria?

Functions	Suggest Role and Responsibilities		Any Other Agency
	Public Sector Agencies	Private Sector	
1. Production of inputs	Yes	Yes	NGOs
2. Importation of inputs	Yes	Yes	NGOs
3. Marketing of inputs	Limited role not for commercial purposes	Yes	Farmer groups
4. Marketing of crop produce	Limited role not for commercial purposes	Yes	NGO optional
5. Marketing infrastructures: (warehouses, rural markets, communication, transportation, etc.)	Limited role not for commercial purposes	Yes	-
6. Quality control regulations			

C. If you have decided to allocate greater responsibilities to the private sector, what should be the role of government and NGOs in the promotion of private sector participation in agri-marketing?

- Creation of enabling environment, i.e.,
 - Right policies.
 - Provision of infrastructure.
 - Constitutional support.
- Favorable exchange rates and low interest rates for agricultural loans.
- Enforcement of quality control and regulations, and monitoring and evaluation.
- Human resource development.
- Industry development.
- Research and development support.
- Market information system (MIS) development.
- Improvement of communication.
- Forum for government/private sector/farmer/stakeholder interaction.
- Intellectual property rights.

Recommendations of Group 2:

- Government should minimize holding/hosting of symposia, workshops, and seminars and pay more attention to effective and timely implementation of policies and recommendations.
- Need for an aggressive campaign for use/promotion of improved seeds and seedlings.
- Encourage agro-industries to produce part of their raw material requirement.
- Minimization of the multiple port tariffs, levies, and taxes on agricultural input and raw materials.
- Development and maintenance of rural agri-input and output marketing systems.
- Improvement of rail, road, and water transportation systems to reduce high transport costs.
- Effective utilization of local consultants and experts.
- Harmonization of marketing policies of agri-inputs so that no sector is at a disadvantage.
- Implement a credible and carefully phased subsidy removal program.
- Design and enforce realistic, attainable, effective fertilizer, seed, and agro-chemical legislation, regulations, and quality control schedules/mechanisms.
- Create institutions to facilitate public/private sector interaction.
- Support human resource development both in the public and private sector.
- Need for a national seminar on seed subsector policy.

REPORT OF GROUP 3

Policy Reforms

(Chairman: Professor Ango Abdullahi)

1. Are the current agri-input policies conducive to attract private sector participation and investment in agri-inputs production, importation, and marketing?

No—The public needs to divest interest in direct production, importation, and marketing of agri-inputs. If no, what are the major repellent factors (mention five key factors)?

- Low producer price.
- Inconsistent policy.
- Lack of laws/regulations governing the sector.
- Exchange rate fluctuation.
- High-transport cost as well as energy.

2. If current policies are not private sector friendly, what should be done to improve the policy environment? Key points listed:

- Policy stabilization.
- Expunge laws that discourage or hinder private sector participation.
- Stabilize exchange rate.
- Strengthen the capital market.
- Apply rule of law strictly.
- Stabilize/reduce cost of transport and energy.
- Facilitate good producer price(s).
- Improve market information.

3. Knowing that no single sector can meet the requirements of agriculture, suggest three options to promote public and private sector participation in agricultural development:

A. Public

- Agricultural research.
- Advisory/extension services including soil-testing service.
- Range of infrastructure.

B. Private

- Development/Provision of cottage industry.
- Provision of efficient storage facilities.
- Develop effective distribution channels/markets.
- Provide quality service to customers.
- Patriotism.

4. If direct/indirect subsidy on fertilizers and other inputs is essential, how can it be ensured that subsidies reach the target beneficiaries?

- More efficient administration of the subsidy program where it is maintained.
- Consideration of other more effective options.

- The options should be at the output end rather than the input end. The options are:
 - Stable fair prices; i.e., guaranteed minimum producer price.
 - Food for work.
 - School lunch program.
 - Free food.
 - Voucher system.
- Indirect subsidy:
 - Concessions on taxes, duties, and tariffs.

Group 3. Recommendations

- Create conducive policy environment and adhere to consistent input market policy.
- Stabilization of the exchange rate. This will in effect stabilize agri-input prices.
- Strict application of the rule of law to ensure security of life and property.
- Expunge laws that hinder private sector participation in agribusiness.
- Strengthen the capable market with a view to making credit available at a moderate interest rate.
- Stabilize/reduce the cost of transport and energy to reduce cost of input.
- Ensure stable/fair producer prices for farmers to sustain production.
- Improve market information system to promote market transparency.
- Need to harmonize government policy on subsidy administration at the three levels of government considering that agriculture is on the concurrent list. This will ensure avoidance of confusion created by different subsidy regimes operated by the three levels of government.

IV. COMMUNIQUE SESSION

REPORT OF GROUP 1

Communiqué of the National Workshop on Agri-Input Policy

Introduction

The Federal Ministry of Agriculture and Rural Development organized a national agri-input policy workshop in collaboration with the IFDC/USAID DAIMINA project at the Nicon-Hilton Hotel, Abuja, August 26-27, 2003. One hundred and fifty two participants attended the workshop, including key players and stakeholders involved in production, importation, and distribution of fertilizer, seeds, and crop protection products. The Honorable Commissioners of Agriculture and Program Managers/Managing Directors of ADPS and fertilizer-blending plants represented state governments. The Minister of State for Agriculture and Rural Development, Chief Bamidele Dada, declared the workshop open. The National Chairman of the Ruling Peoples' Democratic Party and Honorary Adviser on Agriculture to Mr. President, Chief Audu Ogbeh, delivered the keynote address. The other important dignitaries were composed of representatives of the Senate and House Committees on Agriculture, the Mission Director of USAID, the President and Chief Executive Officer of IFDC, a representative of FAO in Nigeria, Permanent Secretary and Directors of FMARD, President of ALFAAN, Chairman of the Project Advisory Committee on DAIMINA, Agri-Input Dealers Associations, and senior staff of IFDC. The workshop focused on three sub-themes, namely:

- Commercialization of Nigerian agriculture.
- Agri-input marketing systems.
- Policy reforms.

Workshop Methodology

The workshop started with an inaugural session during which the welcome address, inaugural speech, and the keynote address were presented. This was followed by two technical sessions where senior executives of IFDC, USAID, IITA, agri-input companies, and farmer organizations presented the technical papers. After the technical sessions, the participants were divided into three groups to identify the constraints and suggest the way forward in the commercialization of agriculture, input marketing, and policy environment. The working groups presented the identified constraints and suggested solutions to the plenary session. Far-reaching resolutions were reached during the plenary session, and at the end of the deliberations the workshop came up with a summary of recommendations.

Constraints Identified by the Working Groups

The major constraints identified by the working groups included the following:

- Lack of consistent policies.
- Inadequate budgetary provisions and late releases.
- Government intervention in input supply and distribution.
- Inadequate and untimely supply of quality agri-inputs at affordable prices.
- Lack of access to affordable and timely credit.
- Poor marketing infrastructure.
- Lack of appropriate post-harvest technologies (agro processing).
- Lack of reliable and timely market information.

- Inadequate research and extension delivery.
- Poor state of rural infrastructure, including physical, social, and institutional infrastructures.

Solutions Identified by the Working Groups

The practical solutions to remedy the constraints identified by the working groups were as follows:

- **Policies and Budget**—Enactment and adherence to consistent policies, timely policy pronouncement to assist decision by private sector, adequate budgetary provision (of about 25% of capital budget recommended by FAO) to agriculture, timely cash backing, and release of budgetary allocations.
- **Input Supply**—Phased withdrawal of government within 3 years from input supply and distribution, creating an enabling environment to encourage private sector involvement and investment in agriculture, and enforcement of quality regulations to protect farmers against the supply of substandard products.
- **Credit**—Invigoration of NACRDB, proper implementation of existing policies for providing financial services to agriculture such as Agricultural Credit Guarantee Fund (ACGF), Agricultural Development Fund (ADF), Nigerian Agricultural Insurance Company (NAIC), etc., and simplifying the bureaucracies and procedures to access these facilities, such as requirement for collateral and problems in securing offshore credit.
- **Marketing and Processing**—Provision of reliable market information/intelligence, improving the procurement/importation strategies, promotion of food processing and value addition including enforcement of grades and standards, and skillful application of the four P's of marketing—right product, right place, right price, and right promotion.
- **Research and Extension**—Adequate and sustained funding of research and extension to improve productivity, fast track application of proven technologies, effective Research-Extension-Farmer-Input Dealers-Linkage (REFIL), encourage involvement of private sectors in research and extension activities (including service providers and NGOs), promotion of demand-driven extension delivery services, encourage youth to go into agricultural extension services, improve extension worker/farmer ratio, provision of improved and sound agricultural education in universities and colleges of agriculture, and strengthening of farmers' groups/associations.
- **Rural Infrastructure**—Development of physical and marketing infrastructures, including rural roads, marketing structures to include produce and input markets, storage and agro-processing facilities, rural institutions development, and provision of adequate commercial infrastructure, especially electricity, water, and telephone services.

Discussions at the Plenary Session

The above constraints and solutions were presented by the working groups and further discussed by the workshop participants during the plenary session, and the following resolutions were reached:

1. The role of public and private sectors in agri-input production and marketing in Nigeria needs to be improved tremendously. Hence, the need for appropriate policy changes in a number of aspects such as:
 - Political will to bring about policy reforms and to ensure consistency of policies.
 - Harmonization, coordination, and proper implementation of policies among the three tiers of government and the private sector.
 - Effective management of macro and micro economic policies affecting agricultural development.
 - Deliberate encouragement of private sector participation and investment in agricultural development.

2. The current budgetary allocations to agriculture (more specifically, funds allocated to agricultural development) are grossly inadequate. Therefore, a substantial increase to about 25% (recommended by FAO) of development budget on a sustained basis should be legalized and passed into law by the federal and state governments.
3. The performance of the agri-input marketing system in Nigeria is unsatisfactory. The performance of the public and private sectors was assessed in various aspects and judged as follows:
 - **Production of Agri-Inputs**—The performance of both public and private sectors in production of seeds and fertilizers is generally unsatisfactory. It was noted that there is no production of CPPs in the country.
 - **Importation of Agri-Inputs**—The performance of the public sector is unsatisfactory for seed, fair for fertilizer, and good for CPPs; the performance of the private sector is fair for seed and good for fertilizer and CPPs.
 - **Selling and Marketing of Agri-Inputs**—The performance of the public sector is fair; the performance of the private sector is good.
 - **Research and Development**—The performance of both public and private sectors is unsatisfactory in each case.
4. The public and private sectors, farmer organizations, and NGOs have important roles to play in the production, importation and marketing of agri-inputs and crop produce, provision of market information, and quality control regulations. The role of the public sector in the marketing of agricultural commodities should be limited to non-commercial purposes, specifically as buyers of last resort and sellers for price stabilization, for international trade promotion, and creation of an enabling environment for private sector participation through the right policies, provision of infrastructure, and constitutional support. In addition, public sector support is required in the areas of favorable exchange rates, low interest rates for agricultural loans, quality control regulations, monitoring and evaluation, human resource development, agro-industry development, research and market information services (MIS), communication improvement, forum for government/private sector/farmer/stakeholder interaction, intellectual property rights, etc.
5. The current agri-input policies are not conducive to attract private sector participation and investment in the production, importation, and marketing of agri-inputs, particularly fertilizers. *There is therefore an urgent need for the public sector to divest interest in the production and marketing of agri-inputs.* The key constraining factors here are inconsistent policies, lack of laws/regulations governing the sector, exchange rate fluctuation, low producer price, and high transport costs. The following steps are necessary to make the policies more private sector friendly: (a) policy stabilization, (b) expunge laws that discourage or hinder private sector participation, (c) stabilize exchange rate, (d) strengthen the capital market, (e) apply rule of law strictly, (f) stabilize/reduce cost of transportation and energy, (g) facilitate good producer price(s), and (h) improve market information services.
6. Participants recognized that no single sector could meet the requirements of agricultural development. The options to promote public/private sector partnership for the benefit of agricultural development are: (a) strengthening agricultural research and extension services including soil testing, (b) improving the rural infrastructure and development of cottage industry, (c) provision of efficient storage facilities, (d) development of effective private sector-led distribution and marketing channels, (e) provision of quality services to farmers, and (f) patriotism.
7. Participants recognized that subsidy on fertilizers and other inputs is necessary and the options to ensure that the target beneficiaries are reached effectively are: (a) efficient administration of the subsidy program and (b) consideration of other subsidies that are more effective and private sector friendly like voucher system, subsidy at the output end (guaranteed minimum producer price), food

for work, school lunch program, free food, and indirect subsidy (concession on taxes, duties, and tariffs).

Summary of Recommendations

The following specific recommendations emerged from the workshop:

1. Need Assessment of Commercialization of Agriculture.
 - Timely release of budgetary allocations.
 - Mobilization of all stakeholders for immediate increase of productivity of the agricultural sector.
 - Respect and protection of the rights of farmers and all other stakeholders.
 - Substantial increase and legalization of a budgetary provision to agriculture.
2. Agri-Input Marketing System.
 - Implementation of a credible and carefully phased program of government withdrawal from procurement and distribution of fertilizers and subsidy on agri-inputs in a 3-year period.
 - Design and enforce realistic, attainable, effective fertilizer, seed, and agro-chemical legislation, regulations, and quality control systems.
 - Curtail expenditure of public funds and minimize participation in symposia, workshops, seminars, and study tours and ensure effective and timely implementation of the New Agricultural Policy Thrust.
 - Promote use of improved seed and seedlings.
 - Encourage agro-industries to produce part or their entire raw material requirement.
 - Minimization and rationalization of the multiple port tariffs, levies, and taxes on agricultural inputs and raw materials.
 - Development and maintenance (including business training) of a rural agri-input and output marketing system.
 - Improvement of the rail, road, and water transportation systems to reduce the high transport costs.
 - Effective utilization of local consultants and experts.
 - Harmonization of agribusiness policies (particularly agri-input policies) so that no sector is at a disadvantage.
 - Facilitate government and private sector interaction.
 - Support human resource development both in the public and private sectors.
3. Policy Reform.
 - Create a conducive policy environment and adhere to consistent input-market policies.
 - Stabilization of the exchange rate. This will in effect stabilize agri-input prices.
 - Strict application of the rule of law to ensure security of life and property.
 - Expunge laws that hinder private sector participation in agribusiness.
 - Make credit available at an affordable interest rate.
 - Stabilize/reduce the cost of transport and energy to reduce cost of input marketing.
 - Ensure stable/fair producer prices for farmers to sustain production.
 - Improve market information to promote market transparency.
 - Harmonize government policy on subsidy administration at the three levels of government in collaboration with private sector. This will ensure avoidance of confusion created by different subsidy regimes operated by the three tiers of government. The harmonization will also ensure

price consistency across the country and encourage private sector participation and investment in agriculture.

4. The workshop recommended a targeted supply of fertilizers in the next 4 years as follows:

2004	1,000,000 tons
2005	1,500,000 tons
2006	1,750,000 tons
2007	2,000,000 tons

5. The workshop recommended setting up a committee comprised of both government and private sector representatives to follow up on the recommendations after consideration by the government for logical implementation.

Done at Abuja.
September 19, 2003

ANNEXES

ANNEX 1
Assessment of Nigerian Government Fertilizer Policy and
Suggested Alternative Market-Friendly Policies

Executive Summary⁵

Joseph Nagy and Wole Edun

The focus of this report is twofold. The report first examines the impact of past Nigerian fertilizer policies on economic efficiency, equity, and food security. Issues such as the cost to the treasury and transparency of policies and programs are also examined. An attempt is made to identify some of the costs to the Nigerian economy from past fertilizer policies. Second, the report outlines the main policy options that the Nigerian government can take and again examines the policies in terms of economic efficiency, equity and food security, budget aspects and transparency. It is hoped that the report can be a basis for dialogue to identify market-friendly policies for the Nigerian fertilizer sector. Information was gathered by interviewing stakeholder representatives from the fertilizer sector including farmers. Previous studies were also consulted and available fertilizer and related data were analyzed. Agriculture is and will remain an important and vital sector of the economy in Nigeria. The agriculture sector in the future will be called upon to supply more food to a growing and more prosperous population and to be a foreign exchange earner. At current growth rates, the population will double from 120 million to 240 million by 2030, thereby at least doubling food demand. Currently, Nigeria imports food. In 2000, N164 billion was spent on food imports, which accounts for about 13% of the total value of imports. Food imports since 1990 increased at an average rate of 13% per annum. On the supply side, Nigerian agriculture has experienced growth in the production of primary cereal and tuber crops. However, the growth in yield since 1990 has been either very low or negative. This means that most of the increase in production is coming from increases in land area sown to crops and not from yield increases. Nigeria has not embraced science-based agriculture and the use of fertilizer, improved seeds, and crop protection products (CPPs). Land expansion is limited and without science-based agricultural inputs, agricultural production will decline. Nigeria, therefore, needs policies that encourage an agriculture sector that has a high investment/high growth rate. A key element of this strategy is an efficient and well functioning agricultural inputs market making use of the complementarities among fertilizer, improved seeds, and crop protection products.

A conceptual framework for assessing alternative fertilizer policies and how effectively they deliver fertilizer to the farmer is presented in this report. Two fertilizer delivery systems are identified. The first is a high-cost inefficient delivery system characterized by government intervention and subsidy. The second is a low-cost efficient system based on private sector participation and the market economy. The conceptual framework shows how a subsidy can be used to increase fertilizer use versus the strategy of increasing fertilizer use by lowering the cost structure of the fertilizer sector. It is hypothesized that Nigeria would more effectively deliver fertilizer to the farmer at a lower cost by transforming from a high cost structure industry with government intervention to a market-driven, low cost structure fertilizer industry. A historical review of Nigerian fertilizer policies indicates an inconsistency

⁵The Executive Summary of the policy study that served as the main workshop document.

of government fertilizer policy over the years. Policies kept changing almost year by year to try to answer problems of availability, leakage, and arbitrage. None of the policy changes succeeded.

The FGN monopoly on pre-1996 fertilizer procurement and the subsidy policy stymied the private sector. The FGN did not properly follow through on the liberalization process started in 1997 by ensuring that the preconditions for a transition to a privatized fertilizer sector were implemented. The FGN opted for a full withdrawal from fertilizer procurement and subsidy, leaving the industry stranded. The private sector did respond, but the ad hoc procurement/ subsidy policies of the FGN in 1999, 2001, and 2002 were damaging to the growth of the private sector. Annual fertilizer use fell by about 50% in the post-1996 period compared with the pre-1996 period.

The main constraints to fertilizer use are seen as high prices, low fertilizer quality, and non-availability of fertilizer at the time required. The government's stated reason for fertilizer subsidies is that farmers cannot afford a free market fertilizer price. However, most stakeholders and farm-level surveys indicated that quality and availability are the main constraints. Farmers will use more fertilizer if prices are lowered, but they would use much more fertilizer at prevailing market prices if the quality was good and if fertilizer was available when needed.

Empirical evidence from farm budgets and fertilizer response studies indicate that fertilizer application does have a payoff at unsubsidized fertilizer price levels for most crops. It is true that for a certain number of small resource-poor farmers, affordability is a significant problem. However, most stakeholders indicated that little of the subsidized fertilizer was reaching the resource-poor farmers under the post-1997 subsidy programs. The critical question is thus one of how to transform the fertilizer system to deliver improved quality fertilizer at the amounts demanded at the time demanded and not one of price subsidy.

It can be argued that the amount of fertilizer procurement under the government monopoly era was based on the port, transport, warehousing, and blending capacity along with budgetary considerations and not on a free market demand. The dysfunctional dual private/public market system after the government monopoly era also shorted the market. If the total amount of fertilizer had been based on the economic optimum amount that the market demanded, farmers in the country would have used much more fertilizer. This was the consensus of most stakeholders. A calculation of the economic optimum amount of fertilizer that would have been used was made. The economic optimum fertilizer amount was four times the actual amount used in 1989/90 and about nine times the actual amount in 1999/2000. An increase in fertilizer use of this magnitude would have had an enormous impact on economic efficiency, equity and food security. A calculation was made of the loss to Nigeria of not using an economic optimum amount of fertilizer on maize in the year 2000. The calculation indicated that the loss in net revenue to the nation was in the order of N15.5 to N31.0 billion and a loss in maize production of between 1.5 and 3.0 million tons. This calculation is only for one year and for one crop. The magnitude of the production increases would have significantly altered imports and exports of agricultural products and foreign exchange earnings and costs.

Government fertilizer policies also had an effect on national, state, and local government budgets. From 1990 to 1996 the fertilizer subsidy costs (as a percentage of the national budget) ranged from 16.8% in 1991 to a high of 42.7% in 1992. Money spent on subsidy programs is money that cannot be spent on more worthwhile programs or on programs that support the farmer through decreasing the transaction costs of the fertilizer delivery system.

Government fertilizer policy also failed to capture the benefits of using the considerable resources available in Nigeria to produce fertilizer for in-country use and for export to the rest of Africa. Nigeria, like many developing countries, established fertilizer plants. Today, Indonesia has the capacity to produce 9,229,000 tons of urea. The National Fertilizer Company of Nigeria (NAFCON) had the capacity to produce 1,488,000 tons of urea, but after 1992 never reached its capacity and ceased to function in 1999. The lost revenues from not producing fertilizer for in-country use and the lost revenues from foreign exchange earnings, when calculated, would be immense.

The main policy options for the fertilizer sector include: (1) the market economy approach that allows the private sector to operate in a competitive environment, (2) the market economy approach with a government-supported voucher scheme to help resource-poor farmers, and (3) variations of a government fertilizer procurement and subsidy approach. Each of these policy alternatives has a different effect on economic efficiency, equity, food security, and the cost to the treasury. Each policy also has unique transparency issues. The preconditions for the market economy approach are a strong competitive private sector and strong government enforcement of regulations. The approach is likely to use resources in the most efficient manner and does not compromise economic efficiency, equity, and food security goals. Once in place, the cost to the treasury is not an issue. In the case of Nigeria, moving from a high-cost fertilizer delivery system with government intervention to a market economy approach requires a strategy with a new set of preconditions. These preconditions include: (1) creation of a conducive macro policy environment, (2) declaration and adherence to a consistent input marketing policy, (3) increasing human capital for market development, (4) improving access to finance, (5) developing and implementing regulatory frameworks, (6) promotion of market transparency through market information systems, (7) promotion of technology transfer activities, and (8) strengthening research capacity for promoting the private seed industry. Nigeria failed to take the preconditions into consideration when the liberalization of the fertilizer sector occurred in 1997. Some steps have recently been taken to address some of the preconditions. The IFDC Developing Agri-Input Markets in Nigeria (DAIMINA) project addresses building human capital and agribusiness training of the fertilizer, seed, and crop protection wholesalers and retailers. However, the other preconditions have not been met, especially the declaration and adherence to a consistent fertilizer policy. A liberalized Nigerian fertilizer sector that follows a market economy approach will bring down fertilizer prices over time and improve fertilizer quality and availability. There may be a role for government support to very resource-poor farmers. A fertilizer and seed voucher scheme along the lines of the Food Stamp program in the U.S.A. could be instituted. The targeted farmer would purchase seed and fertilizer in the market, but pay the difference between the price and the amount shown on the voucher (equivalent to subsidy), and the dealer will redeem the face value of the voucher by a FGN authorized bank. In extreme cases of natural disaster or other catastrophes, the Government of Nigeria may use vouchers to pay the full price of the product (as a safety net). Thus, the voucher system is flexible enough to accommodate various conditions ranging from free distribution of inputs to a partially subsidized one. In addition, the Government of Nigeria can target the neediest recipients for vouchers.

The scheme would be market friendly; there would be little distortion of the fertilizer sector or of crop production and prices. Both the equity and food security goals would be satisfied. The main preconditions are the proper identification of the targeted farmers and strict monitoring and information gathering for administrative purposes. Nigeria has an opportunity to experiment and transform the current subsidy program into a voucher scheme that would be more market friendly. Much of the work of identifying target farmers has already been done by the states and local governments under the

current subsidy program. If the same amount of fertilizer was targeted to poor farmers under the voucher scheme as the current subsidy program (165,000 tons) and the targeted farmers paid 75% of the fertilizer cost, the total voucher scheme cost would be about N1.25 billion. This is equivalent to what the cost would be under the original 25% subsidy scheme. However, the preconditions for a successful transition to a market economy fertilizer distribution system must still be adhered to. Government intervention can include: (1) government monopoly procurement and subsidy on the final product, (2) government partial procurement and subsidy on the government-procured final product only, (3) subsidy at source, and (4) subsidy at source including transportation subsidy to delivery points. The first two have been past policies of the FGN and the subject of the impact study in this report. The FGN has indicated that it plans to introduce and implement a subsidy-at-source policy. A subsidy is given to fertilizer importers and in-country fertilizer producers, and they sell the fertilizer to wholesalers and retailers at the subsidized price. The wholesalers and retailers operate in a competitive market economy. The preconditions are strong competition, government consistency with the policy, strong regulatory adherence, and not compromising transparency when setting the source fertilizer prices. The total amount of fertilizer use must be subsidized, or the problems of a dual public-private market will persist. If all the preconditions are met, there will still be distortions to the market. If the scheme was working properly, more fertilizer would be used than would be at the economic optimum at non-subsidized prices. Equity considerations would be compromised if the full subsidy were not transmitted to the farmers, which would likely be the case. The costs to the treasury could be very high depending on the level of subsidy and the success of the transition. Policymakers must ask if a subsidy is really required in the face of information that indicates that there are returns to fertilizer use at market-price levels. If employed, the subsidy-at-source policy should only be used as a tool for the transition of the fertilizer system from where it is now to a market-economy approach. The blueprints are available for a transition from a high-cost fertilizer delivery system with government intervention to that of a low-cost fertilizer delivery system predicated on the workings of the market economy. Market-friendly options are available from within this framework for poverty alleviation of the extreme poor. What is required is a strong commitment by FGN, consistent policies, and a willingness to pursue transparency throughout the fertilizer delivery system.

ANNEX 2

Workshop Program

Time	Activity	Action By
Day 1: August 26, 2003		
9:30–10:30 am	Registration of participants	DAIMINA and FFD
PLENARY SESSION: Chairman: Mallam Adamu Bello, Hon. Minister of Agriculture & Rural Development (Reporters: Dr. G. B. Ayoola and Mr. E. H. Ekpiken)		
10:00–10:05 am	Opening prayers/National Anthem	
10:05–10:10 am	Introduction of dignitaries	Dr. U. A. Alkaleri, Project Manager IFDC-DAIMINA
10:10–10:20 am	Welcome address and objectives of the National Agri-Input Policy Workshop	Mr. O. A. Edache, Permanent Secretary, FMARD
10:20–10:50 am	DAIMINA experiences of private sector development in Nigeria	Dr. H. B. Singh, IFDC-DAIMINA
10:50–11:10 am	Keynote address–Government priorities for development of agriculture and projected role of private sector	Dr. Audu Ogbah, National Chairman PDP/Honorary Advisor to President on Agriculture
11:10–11:30 am	Farmers' viewpoint on availability and prices for development of agriculture and projected role of private sector	Vice Admiral Murtala Nyako (Retired President, Apex Farmers Organization)
11:30–11:50 a	An overview of Fertilizer Importation and Distribution in Nigeria	Alh. Sani Dangote, Vice President–Dangote Group
11:50–12:10 pm	IFDC programs with special reference to policy advocacy	Dr. Amit Roy, President/CEO, IFDC, Muscle Shoals, Alabama, U.S.A.
12:10–12:30 pm	An overview of USAID assistance to agriculture and private sector development in Nigeria	Ms. Dawn Liberi, Mission Director, USAID Nigeria
12:30–12:50 pm	Highlights of the New Agricultural Policy Thrust of the Federal Government of Nigeria	Mallam Adamu Bello, Hon. Minister of Agriculture & Rural Development
12:50–1:10 pm	Questions and Answers	All
1:10–1:20 pm	Vote of Thanks	Dr. S. A. Ingawa, Director, PCU
1:20–2:30 pm	Lunch Break	All
TECHNICAL SESSION I: Chairman: V/A Murtala Nyako (Retired.), President, ALFAAN (Reporters: Mr. Osho and Mr. O. A. Edun)		
2:20–3:10 pm	Policy Reforms in Agri-Input Marketing in Nigeria	Prof. Ango Abdullahi
3:10–3:50 pm	A global review of fertilizer subsidies	Ian Gregory, IFDC
3:50–4:30 am	Highlights of the Nigeria Fertilizer Policy study and some suggested alternatives	Dr. Balu Bumb, IFDC
4:30–5:30 pm	Questions and Answers	All
Day 2: August 27, 2003		
TECHNICAL SESSION II: Chairman: Prof. Ango Abdullahi (Reporters: Prof. V. Chude and Alh. Abba Auchan)		
9:30–10:10 am	Highlights of the Assessment of Nigeria's Agricultural Policy (ANAP)	Prof. Anthony Ikpi, University of Ibadan
10:10–10:20 am	Formation of working groups	Dr. U. A. Alkaleri and Alh. Bello Sule
10:20–12:00 pm	Deliberations by working group	Group members
12:00–1:00 pm	Presentations by groups	Group team leaders
1:00–2:30 pm	Discussions and recommendations	All
2:30–2:40 pm	Vote of Thanks	Ahl. Saidu G. B. Zakari, National Sales Manager, Golden Fertilizers
2:40 pm	Lunch Break and Close of Workshop	

ANNEX 3

List of Participants

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