

NSSP Report 8

Perspectives of Selected Stakeholder Groups in Nigeria on the Federal and State Fertilizer Subsidy Programs

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THE NIGERIA STRATEGY SUPPORT PROGRAM (NSSP)

ABOUT NSSP

The Nigeria Strategy Support Program (NSSP) of the International Food Policy Research Institute (IFPRI) aims to strengthen evidence-based policymaking in Nigeria in the areas of rural and agricultural development. In collaboration with the Federal Ministry of Agriculture and Rural Development, NSSP supports the implementation of Nigeria's national development plans by strengthening agricultural-sector policies and strategies through:

- Enhanced knowledge, information, data, and tools for the analysis, design, and implementation of pro-poor, gender-sensitive, and environmentally sustainable agricultural and rural development polices and strategies in Nigeria;
- Strengthened capacity for government agencies, research institutions, and other stakeholders
 to carry out and use applied research that directly informs agricultural and rural polices and
 strategies; and
- Improved communication linkages and consultations between policymakers, policy analysts, and policy beneficiaries on agricultural and rural development policy issues.

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ABOUT THESE REPORTS

The Nigeria Strategy Support Program (NSSP) reports either contain preliminary results or support ongoing research. They are circulated in order to stimulate discussion and critical comment.

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Abstract

This paper presents the results of interviews with 44 stakeholders in the Nigerian fertilizer sector eliciting their perspective on various aspects of the federal and state government fertilizer subsidy programs. The stakeholders interviewed include persons employed at state-level ministries of agriculture and the agricultural development programs (ADPs), agricultural input dealers, members of small farmers associations, and farmers not aligned with a farmers association. A key finding is that fertilizer is in high demand by farmers, many of whom would be willing to pay market price as long as the product is available. The stakeholders reported that there is a persistent shortage in the supply of fertilizer held by public and private sellers and that the subsidy programs have been plagued by late delivery. Some stakeholders also report that rent-seeking activities and political manipulation have resulted in subsidized fertilizer being diverted to beneficiaries that do not meet the criteria to receive the subsidy.

Introduction

The federal government of Nigeria has been prominently engaged in procuring and distributing fertilizer since the early 1970s. Nigeria's federal and state governments provide subsidies for fertilizer at rates as high as 95 percent (Nagy and Edun 2002). Nevertheless, fertilizer consumption rates in Nigeria remain among the lowest in the world; in 2005, only 7 kilograms of fertilizer were used per hectare (kg/ha) of arable land, while the developing country average was 102 kg/ha (World Resources Institute 2010; Morris et al. 2007).

Government interventions to promote fertilizer use in Nigeria have not led to sustained increase in fertilizer use and, as in much of Sub-Saharan Africa, the prevailing empirical conclusion is that the "considerable costs . . . outweigh the questionable benefits" (Morris et al. 2007). This paper presents the results of interviews with selected stakeholders in the Nigerian fertilizer sector eliciting their perspective on aspects of the federal and state government fertilizer subsidy programs. Stakeholders were selected from a non-random sample of four states that represent the heterogeneity in Nigerian. Among the 44 stakeholders interviewed were persons employed at state ministries of agriculture and the agricultural development programs (ADPs), agricultural input dealers, members of small farmers associations and farmers not aligned with a farmers association. These interviews provide an opportunity to identify the successes and shortfalls of the fertilizer subsidy policies as perceived by officials at the forefront of its implementation and by fertilizer consumers. The in-depth knowledge of fertilizer supply and demand in Nigeria derived from the interviews also provides insight into how to address the challenge that is limited fertilizer use.

The paper is divided into three parts. The first section provides a background of the Federal Market Stabilization Program (FMSP), which provides the bulk of fertilizer used in Nigeria. The following section is a discussion on the process by which stakeholders were selected for the interviews. It also describes the criteria for selecting the states in which the interviews were conducted because the goal was to provide perspectives from states with different fertilizer subsidy policies. Finally, stakeholders opinions and the conclusion on the research are presented.

Background

The amount of fertilizer used in Nigeria has mirrored the ebb and flow of federal and state government subsidies. Fertilizer consumption rose steadily in the 1970s and the 1980s due in part to the very generous universal subsidies provided by the federal government. By the early 1990s, fertilizer and other agricultural subsidy programs were an overwhelming proportion of the national budget, were highly inefficient, and were riddled with corrupt

practices. The high costs of these programs were fiscally unsustainable for Nigeria and the federal government was forced to limit its spending on agricultural subsidies (Chude 2006). At the time, the government chose to liberalize the fertilizer sector and halted its decadeslong involvement in fertilizer procurement, distribution, and subsidization in 1997 (Nagy and Odun 2002). After decades of government monopoly, the private fertilizer retail sector was inexperienced, undeveloped, and was unable to compensate for the federal government's sudden exit from the sector (Nagy and Edun 2002). Without a viable private sector to take over, government exit from the agricultural inputs market resulted in a precipitous fall in fertilizer consumption from about 460,000 metric tons (MT) in 1994 to less than 100,000 MT in 1999 (Chude 2006). To address this decline, the federal government chose to resume subsidizing fertilizer in 1999 (Nagy and Odun 2002).

Since 1999, with a hiatus in 2000, the federal government of Nigeria procures fertilizer and sells them to state governments at a subsidy of 25 percent under the FMSP. The amount of fertilizer each state procures for its farmers varies. In 2008, the amount ranged from 600 MT in the state of Lagos to 44,200 MT in the state of Bauchi (Federal Fertilizer Department 2009). State governments usually further subsidize fertilizer purchased through the FMSP and the additional subsidy rates vary significantly; for example, in 2008 the state subsidy ranged from zero to 50 percent (Federal Fertilizer Department 2009). Some states also procure fertilizer outside of the FMSP, which, when sold to farmers, is typically subsidized (Banful et al. 2010).

The procurement and distribution rules in the FMSP change almost annually. Based on interviews with some state ministries of agriculture officials, the typical procedure is as follows. The federal government accepts bids from fertilizer importers and some local producers to provide fertilizer for the FMSP program. Concurrently, state governments indicate to the federal government how much fertilizer they wish to purchase for the year. The price of fertilizer is negotiated between the federal government and the fertilizer importers. This price is then discounted by 25 percent and presented to state governments as the sale price of fertilizer. States typically own fertilizer warehouses and the federal government (sometimes through contracted private haulers) delivers fertilizer to these locations. The transportation cost to warehouses is added to the state's bill. State governments are unable to negotiate the price of fertilizer and the price of transportation offered by the federal government. Oftentimes, what the state owes the federal government is deducted from federal transfers that would have been made to the state.

After it is delivered to its warehouses, state governments distribute the subsidized fertilizer. There is some variation in how states undertake this distribution but typically subsidized fertilizer is sold through ADPs, State Input Supply Companies (SISCs) and Farm Service Centers (FSCs). The cost of transportation from the state warehouses to the state managed fertilizer retail locations is typically borne by the state and in some cases by the Local Government Area (LGA) governments. In some states only certain farmers, selected by local committees, are permitted to buy subsidized fertilizer. Sometimes, there is also a limit on the number of bags of subsidized fertilizer that a single farmer can purchase. The availability of fertilizer is seasonal and somewhat unpredictable. Farmers are informed of when the fertilizer arrives through radio and television announcements, extension agent interactions, or through frequent inquiries at the government managed sales centers. Once the fertilizer arrives, farmers usually must complete some allocation procedure to get the fertilizer because demand outstrips the supply. Some states, and even some LGA governments, contract private importers to directly supply fertilizer to complement the amounts purchased through the FMSP. The government fertilizer procurement and distribution system, thus, exists in parallel with a private fertilizer sector. As of 2006, there were 25 registered private fertilizer manufacturers or blenders in Nigeria (National Fertilizer Technical Committee

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¹ The most common types of fertilizers purchased by states are nitrogen, phosphorus, and potassium (NPK) 20-10-10 and NPK solutions, urea, single super phosphate (SSP), and calcium ammonium nitrate (CAN).

2006). While the exact number of private fertilizer retailers is not known, the private fertilizer retail network is small and is concentrated in state capitals.

Cases of abuses and inefficiencies in the federal fertilizer subsidy programs range from delays in the delivery of fertilizer to politicians and officials diverting fertilizer from the legitimate beneficiaries. The following are a few of these abuses summarized by Akinyoseye (2005) and Idachaba (1993, 2006). Regularly, only part of the fertilizer purchased by the state is delivered to state warehouses, the rest is diverted to unknown locations. It is not uncommon for tens of thousands of tons of fertilizer (and the trucks on which they were being carried) to go "missing" and never be accounted for. There are consistent delays in fertilizer delivery because of bottlenecks in government procedures and from a lack of capacity of contracted transportation companies to deliver the product as scheduled. As a result every year, much of the fertilizer arrives after the ideal treatment period.

Fertilizer is regularly stolen from the state government fertilizer depots and thousands of bags of subsidized fertilizer have been discovered in unauthorized depots around the country. The regulatory mechanism in place to curtail such malfeasance appears to be insufficient and security officials have been found conspiring with smugglers to transport fertilizer subsidized by the Nigerian government into neighboring countries. Officials in charge of monitoring the distribution of subsidized fertilizer have also been caught in scandals to divert fertilizer to their private warehouses and retail outlets. While poor smallholder farmers are the rightful beneficiaries of fertilizer subsidy programs, there is widespread evidence that subsidized fertilizer is often captured by wealthy local elites and politicians (Nagy and Odun 2002). It is an open secret that subsidized fertilizer is used to reward officials for providing political support, or to garner new support. Conferring with stakeholders on these identified challenges of the fertilizer supply system is an important step in unearthing practical solutions to the problem of low fertilizer use in Nigeria.

Methodology

The goal of this study was to capture a snapshot of the perceptions of the actors in the fertilizer subsidy programs in Nigeria on some of the main aspects of the programs. The strategy adopted was to conduct in-depth interviews with a small number of relevant stakeholders in a representative sample of states. The individuals consulted fall into four broad categories: decision makers in the state agricultural bureaucracy; individuals who physically manage the distribution and sales of the fertilizer at the state level; farmers, the intended beneficiaries of fertilizer subsidies; and individuals in the private fertilizer retail sector.

Nigerian states are heterogeneous in the dimensions that can affect the challenges related to government delivery of subsidized fertilizer. There are different burdens on subsidized fertilizer retail outlets because states procure different amounts of fertilizer through the FMSP, have different state subsidy rates, and have private retail sectors at different stages of development. There are different agro-ecological zones (USDAFAS 2002) in Nigeria indicating that fertilizer needs will vary from state to state. In recognition of the heterogeneity among Nigerian states, those states selected for field visits were chosen to provide information from a variety of types of states. The 36 Nigerian states and the Federal Capital Territory (FCT) were categorized based on five criteria that are expected to directly impact the subsidized fertilizer delivery system and the level of private sector involvement in fertilizer retail. These criteria were:

- 1. state fertilizer subsidy rate;
- 2. amount of fertilizer procured through the FMSP per agricultural household in 2008;
- 3. state poverty head count:
- 4. agroecological zone/geographic location of the state; and
- 5. whether there was a state fertilizer blending plant.

A dimension that could not be considered was the amount of fertilizer that the state procured outside of the FMSP. This could be an important dimension along which Nigerian states vary, but while there is information available on whether the state procured fertilizer outside the FMSP, the data does not include the amount procured.

The data on state subsidy rates in 2008 were assembled from records of the Federal Fertilizer Department (FFD) in Abuja, Nigeria. The average and the median state fertilizer subsidy rate was 16.5 and 16.8 percent respectively. States with subsidy rates below 15 percent were categorized at "low" subsidy states, those with rates between 15 and 25 percent were categorized as "medium" subsidy states, and those with subsidy rates above 25 percent were categorized as "high" subsidy rates. An estimate of the amount of subsidized fertilizer that each household employed in agriculture would receive if the fertilizer procured through the FMSP were shared equally, was calculated as a measure of the availability of fertilizer in the state, the result was 55 Kg or just over one standard bag of fertilizer per agricultural household. States which procured less than the median amount of 32 Kg per agricultural household were categorized as having "low" FMSP procurement, states at between 32 and 60 Kg per agricultural household were categorized as having "high" FMSP procurement.

Poverty rates and regions were also used as criteria for selecting the sample of states. The average and median state poverty head count ratio in Nigeria in 2005 were 55 percent and 52 percent respectively and ranged from 21 percent in Oyo state in southwest Nigeria to 91 percent in Jigawa in the northeast (Ojowu et al. 2007). States with poverty rates below 50 percent were categorized as "low" poverty states, those with rates between 51 and 65 percent were categorized as "medium" poverty states, and those with rates above 65 percent were categorized as "high" poverty states. States in the arid savanna were described as being located in the "north" and all other states grouped as being in the "south".

Based on this categorization of Nigerian states, four states, each of which captured a certain typology of states, were selected for field visits (Table 1). The state of Edo in the south was selected to represent states with low state subsidy because it receives a low amount of fertilizer procured through the FMSP and does not procure fertilizer to subsidize for sale outside of the FMSP. This typology is typical of southern Nigerian states. The state of Plateau was chosen to represent the states in the middle of the agricultural belt of the country. It presents an interesting case study because of the unique agro-ecology of the Jos Plateau highlands and also the relatively high amount of fertilizer that is procured for a state outside of the dry savanna ecological zone in northern Nigeria. Jigawa and Zamfara were chosen as contrasting states in the dry savanna region of northern Nigeria. Poverty rates are highest in this part of the country, but the state of Jigawa has a subsidy rate of 48 percent, while the state of Zamfara's subsidy rate is only 11 percent and Zamfara procures more than four times the fertilizer per agricultural household through the FMSP than Jigawa.

² We do not have data on state subsidy rates in previous years. Based on the interviews with employees in the state agricultural ministries, states do not often change their fertilizer subsidy rates, therefore we expect that the rates observed in 2008 are similar to those in place in the previous 5 years.
³ The calculated amount does not take into account fertilizer procured from outside the FSMP for state

The calculated amount does not take into account fertilizer procured from outside the FSMP for state governments that procure fertilizer outside the FMSP. Records of these amounts could not be obtained.

States in northern Nigeria typically use the highest amounts of fertilizer (National Fertilizer Technical Committee 2006).

Table 1. Characteristics of states surveyed within the classification framework

State	State fertilizer subsidy (%) ^a	Fertilizer procured per agricultural household (Kg) ^b	Agroecological zone ^c	Poverty head count ratio in 2004 (%) ^d	Location	Fertilizer blending facility ^a
Edo	14 (low)	12 (low)	Rain forest	47 (low)	South	No
Jigawa*	48 (high)	27 (medium)	West sudanian savanna	91 (high)	North	No
Plateau*	17 (medium)	58 (medium)	Cameroonian highland forest/ Guinean forest- savanna mosaic	55 (medium)	South	No
Zamfara*	11 (low)	114 (high)	West sudanian savanna	76 (high)	North	Yes

^a Federal Fertilizer Department (2009).

Notes: In states marked with an asterisk, the state procures fertilizer from other sources in addition to the amount procured from the federal government.

The officials that provided the state agricultural bureaucracy's point of view were state-level agricultural ministry officials. These were all in management positions and are likely to be knowledgeable of the bureaucratic procedures through which the state procures fertilizer from the federal government. They also presented the non-official prevailing opinion on the challenges in the fertilizer delivery system. State ADP officials were interviewed to provide the viewpoint of those on the frontline of the fertilizer subsidy system. Stakeholders in this category included extension officers as well as ADP officials who manage the ADP fertilizer stores. Interviewed farmers were divided into two groups, those members of a small farmers association were distinguished from those who were not. We maintain this distinction because membership in a small farmers association typically confers more opportunity to access subsidized agricultural inputs and there may be differences in the experience of the average farmers in each category. Private fertilizer retailers, also referred to as agro dealers, were consulted to provide the perspectives of those who have to contend with the effects of the federal and state programs on the private sector.

In each state, the goal was to interview at least two persons in each of the categories. The small number of persons interviewed in each category makes it unlikely that the opinions of the interviewees are statistically representative of their respective categories. However, their perspectives provide some qualitative case evidence of the opinions of individuals in similar positions. Table 2 shows how many stakeholders were interviewed in each state. In total, eleven stakeholders were interviewed in each of the four states; by role these were seven officials from the state ministry of agriculture, nine officials employed by the state ADP, nine private agricultural input retailers, eight farmers who were members of small farmers associations, and eleven farmers who were not members of any small farmers association.

^b Authors' calculations based on Nigeria, NBS (2008).

c USDAFAS (2002)

d Ojowu et al. (2007)

Table 2: Interviewed stakeholders

State	Ministry of Agriculture management	ADP employee	Private agricultural input dealers	Farmer: member of small farmers association	Farmer: not member of any small farmers association
Edo	2	2	2	2	3
Jigawa	2	2	2	2	3
Plateau	1	3	3	2	2
Zamfara	2	2	2	2	3

Findings

Is there a demand for fertilizer?

All of the 44 interviewed stakeholders indicated that there is a high demand for fertilizer. In the state of Plateau, an employee of the ADP described fertilizer as "a golden commodity". All of the interviewed stakeholders also expressed that each year the demand for fertilizer far outstrips the supply. Their comments covered supply of fertilizer from government as well as private sources.

All the farmers interviewed, whether they were members of small farmers association or not, indicated that they were willing to pay for fertilizer, even at market price, as long as it was available. When these farmers were asked what they thought prevented farmers from using fertilizer, they invariably gave one or both of the following reasons: fertilizer was not available or fertilizer was expensive. The farmers placed as much emphasis on the unavailability of fertilizer as they did on the high cost as a constraint to fertilizer use. Indeed, most of the farmers in Jigawa believed the sole reason for low fertilizer use was its unavailability. In Plateau, lack of availability of fertilizer was a principal constraint as well.

Does subsidized fertilizer reach poor farmers?

Nigerian federal and state governments justify the high expense of fertilizer subsidies stating that subsidies and government procurement increases the affordability and availability of fertilizer for poor farmers in the country. Yet, it is not evident that subsidized fertilizer reaches the intended beneficiaries. Stakeholders were asked whether they thought that subsidized fertilizer reached the intended beneficiaries or that it was partially diverted. In Edo, state ministry of agriculture officials disagreed that subsidized fertilizer was diverted to fulfill other interests and that the bulk did not reach the poor rural farmers. All the other stakeholders interviewed in Edo—ADP officials and farmers, however, strongly believed that subsidized fertilizer is diverted. It is interesting to note this disagreement between the individuals within the state bureaucracy who institute the subsidy programs, and the rest of the stakeholders in the state - the ADP employees who manage subsidized fertilizer sales and the farmers, both those in small farmers associations and those not affiliated with any farmers association.

In the state of Plateau, members of the government bureaucracy also stated that subsidized fertilizer went to poor rural farmers. Farmers, on the other hand, emphatically stated that the subsidized fertilizer did not reach the rural poor farmers. In Jigawa and Zamfara, even the members of the state ministry of agriculture agreed that subsidized fertilizer did not reach poor rural farmer; they were in complete agreement with the rest of the stakeholders interviewed in the states.

In all states, political manipulation is cited as the reason why fertilizer does not reach the rural poor. A farmer not affiliated with a farmer's association in Zamfara indicated that the

subsidy program was counterproductive "because politicians and royal fathers get more than the farmers". He advocated for the end of the subsidy program. In the state of Edo, an agrodealer said that "the subsidy does not reach rural poor farmers. The government should remove it." An agricultural input dealer in Jigawa held a similar view saying that the subsidy "does not change the rural farmers' situation because only people in government get the fertilizer. Poor rural farmers buy at market price. Government should remove (the) subsidy." An Agro-dealer in Zamfara stated that in order to reduce the diversion of fertilizer "politicians and royal fathers should not be involved in the distribution of fertilizer". The stakeholders also stated that persons who are caught engaging in abuses of the subsidy system should be punished and not left impune as was sometimes the case.

Is the subsidized fertilizer available on time?

All the interviewed stakeholders stated that subsidized fertilizer is not available in time. Officials working in the state agricultural ministries unanimously agreed that fertilizer under the FMSP constantly arrived late. An employee of the Ministry of Agriculture of the state of Plateau noted that even though the fertilizer application period of the state started in March, only 50 percent of the fertilizer procured by the state from the federal government had been delivered as of late August 2009. Farmers, both those in small farmers associations and those who are not, also unanimously agreed that subsidized fertilizer arrives late. ADP officials and private agricultural input dealers also share the view that subsidized fertilizer was typically available well past the ideal fertilizer application time.

State agricultural ministries officials stated that the delays were caused by bureaucratic processes of the federal government. This sentiment was held by virtually all the interviewed stakeholders although some members of the ministry also indicated that some delays were caused by states' inability to pay the federal government for the fertilizer in a timely fashion. An extension officer in the state of Edo stated that federally subsidized fertilizer was always late for farmers in the state because the procurement of the FMSP followed the agricultural calendar of the northern states. States in southern Nigeria have different agro-ecology from the northern states and typically require fertilizer at a different time. Since the bulk of fertilizer use is in the northern states, it seems that the timing of fertilizer demand in that area is what is considered when the federal government procures fertilizer to sell to the states. Still, even in the northern states, the ever-present complaint was that fertilizer arrived too late. Stakeholders unanimously agreed that late fertilizer delivery would be helped if federal and state governments procured fertilizer earlier before the start of the rainy season (fertilizer application time). The president of a farmer's association in Plateau indicated that there were also delays in awarding fertilizer delivery contracts or those contracts were awarded to ineffectual companies, which compounded the lateness in subsidized fertilizer availability.

Is it easy for farmers to gain access to any fertilizer?

In each state, the majority of the interviewed stakeholders thought it difficult for farmers to get access to fertilizer, subsidized or otherwise. The interviewed stakeholders also indicated that there was a persistent shortage of fertilizer and few locations where fertilizer could be purchased, requiring that farmers travel long distances to reach a fertilizer retail point.

In two of the four states in the sample, state ministries of agriculture officials stated that fertilizer was readily available, in contrast to all the other stakeholders in their state. In the states of Edo and Jigawa, state ministry officials said that it was 'easy' for farmers to get fertilizer in their state. On the other hand, ADP officials who are engaged daily in the public fertilizer delivery system, farmers (both those in small farm groups and those who are not) and agricultural input dealers, all expressed that it was difficult for farmers to get fertilizer in these states. This situation suggests that those in the bureaucracy of the program in these states think that it is working well to improve farmers' access to fertilizer when those who are most impacted by the program say that it is not. In the states of Plateau and Zamfara, all

stakeholders interviewed, including those in the state bureaucracy say that it is difficult for farmers to find fertilizer in their states.

To have an idea of how accessible subsidized fertilizer might be, we asked officials in the state agricultural ministries to provide an estimate of the number of subsidized fertilizer retail outlets in the state. In Plateau and Edo states, officials in the state ministry of agriculture were unable to provide an estimate of the number of private fertilizer retailers in the state. In Edo, they estimated that there are 18 ADP depots which sell fertilizer. In Plateau, they estimated that there are 17 ADP depots from which fertilizer may be available for sale. In Jigawa, the estimated number of outlets was 90, comprised of 50 ADP stores and 40 private retail outlets. In Zamfara, officials from the state agricultural ministry estimated that there were 30 ADP stores, and about 20 other stores from which fertilizer could be purchased in the state.

To put this retail density into perspective, consider the sizes of these states and the number of farmers in each. Based on the number of households in the state in 2005 and the percentage of the population engaged in agriculture that year, IFPRI estimates that the number of households engaged in agriculture in Edo, Jigawa, Plateau, and Zamfara as 420,000, 420,000, 310,000 and 280,000 respectively (Nigeria National Bureau of Statistics 2008). The total area of Edo, Jigawa, Plateau, and Zamfara is about 18,000, 23,000, 58,000, and 40,000, squared kilometers respectively. Therefore, roughly, in Jigawa for instance, there is one fertilizer retail outlet for every 4,600 agricultural households, each of which likely contains multiple farmers.

Aside from the dearth of locations from which fertilizer can be purchased, it appears that getting subsidized fertilizer is typically a cumbersome process. An employee of an ADP in the state of Plateau explained that to purchase subsidized fertilizer, a farmer or a farmers association has to obtain a bank draft, submit the bank draft to a "fertilizer committee" and then wait for the committee to issue "allocation papers". The allocation papers indicate how much fertilizer can be purchased and the specific store from which it must be purchased. Since fertilizer is a highly desirable but scarce good, all the states have similarly cumbersome procedures to decide which farmers are eligible to purchase subsidized fertilizer and to allocate the stock of fertilizer available.

Why do some states procure fertilizer outside of the FSMP?

Of states from which stakeholders were interviewed, Jigawa, Plateau and Zamfara procure fertilizer outside of the FMSP. State ministry officials of these states reported that there were two major benefits of the state procuring fertilizer outside the FMSP. First, it tends to cost less than the fertilizer purchased through the FMSP. Second, states report that the amount of fertilizer they could expect to be delivered under the FMSP was significantly less than the amount they had purchased, which requires that they purchase fertilizer from other sources as a contingency. Edo, the only sampled state government that did not procure fertilizer outside the FMSP is also the state that procures the lowest amount of fertilizer from the FMSP among the sample states. This suggests that states procure outside the FMSP because the demand for fertilizer in their state is higher than they can expect to receive under the FMSP. State ministry of agriculture officials of these states felt that they could more readily influence the timeliness and cost of the delivery of fertilizer purchased from private sources.

The fertilizer procured directly by the state from private sources is presumably bought at the true 'market' price of fertilizer. Yet prices of fertilizer sold to states under the FMSP, even after the federal government has applied a 25 percent subsidy, can be higher than these

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⁵ In the state of Plateau, the fertilizer procured by the state was re-bagged into the same sized bags but with new packaging showing "Platfert".

'market' prices. It could be that the prices negotiated between the federal government and the fertilizer importers are higher because the importers face higher risks in dealing with the federal government or that the federal government is not able to negotiate as good a price as an individual states are able. Nevertheless, this evidence reveals some inconsistencies in the pricing of fertilizer or in the reported prices of fertilizer.

Discrepancies were found in the records of the state fertilizer subsidy rates in 2008 that were obtained from the records of the Federal Fertilizer Department and were reported by the stakeholders within the state. In Edo state ministry of agriculture officials reported that the state subsidized fertilizer was obtained through the FMSP with a 40 percent discount. However, records obtained from the FFD in Abuja (Federal Fertilizer Department 2009) indicated that the state subsidy rate in Edo was only 14 percent. In Jigawa, the state subsidy rate quoted by state ministry officials was 65 percent as opposed to 48 percent quoted in the FFD records. Similarly in Plateau, the information obtained from the state was that the subsidy rate was "about 80 percent" when the records of the FFD showed the rate to be 17 percent. In Zamfara, the ministry of agriculture stakeholder stated that the state subsidy rate was 75 percent; yet the records of the FFD showed this rate at 11 percent. It is unclear why the state subsidy rates on record at the federal level are different from what is reported by officials within the state ministries of agriculture. The conflicting data suggests a broader lack of transparency in the pricing of fertilizer and costs of subsidy programs to the state.

How have fertilizer subsidy programs affected the private fertilizer sector?

There is a private fertilizer retail sector in Nigeria that coexists with the government-owned subsidized fertilizer distribution system. We sought stakeholder's views on how the fertilizer subsidy programs affect the private sector and most indicated that the subsidy program adversely affected the private fertilizer retailers. In Edo, agro-dealers indicated that government subsidy program adversely affected their business because there was a "lack of patronage when government fertilizer is available." An Agro-dealer in Jigawa also expressed frustration with the presence of the subsidy program and stated that "it spoils our market as it undercuts the market price." In Zamfara, an agro-dealer stated that people in his profession were "not happy" about the subsidy. In Plateau, Jigawa, and Zamfara states, stakeholders indicated that there was competition among private agro-dealers; in Edo state, stakeholders did not share this view. This suggests a more developed private fertilizer retail network in the northern part of Nigeria. Yet, there is evidence that there is not actually a "private" fertilizer retail network developed in any of the sampled states.

When asked about the fertilizer supply chain, the answers from agro-dealers and other stakeholders suggest that a significant proportion of fertilizer sold by private agro-dealers is actually subsidized fertilizer that never reached intended recipients. In Edo state, an ADP official stated that one source of fertilizer supply for private agro-dealers was to "procure directly from the state MANR (Ministry of Agricultural and Natural Resources)". An agrodealer in the state however said that he "procure(s) directly from Golden Fertilizer in Lagos and he is not allowed to buy from government's subsidized fertilizer". It is telling that the private agro-dealer would even find it necessary to mention that he does not obtain his supply from the stock of subsidized fertilizer in the state. This suggests that some "private" agro-dealers purchase fertilizer for the stores from the government. A private agro-dealer in the state of Plateau described the following process by which agro-dealers obtain fertilizer to sell: Agro-dealers give money to farmers to buy government fertilizer at the subsidized rate of 1700 Niara (N), and the agro-dealer buys back the fertilizer at the rate of N2000 - N2500 per bag from the farmer. They then stock this fertilizer in their store and resell to farmers at rates between N2500 - N6000 per bag. In Zamfara, a private agro-dealer indicated that his and other agro dealers' supply of fertilizer is sourced from the government subsidized stock. He stated that he "procure(s) over 70 percent (of his fertilizer) from politicians within the state".

It appears that private fertilizer retailers exploit the arbitrage opportunities presented by the subsidy programs. This activity is not only costly to the state, but also prevents the development of a private fertilizer retail distribution system. If private retailers can obtain fertilizer cheap from politicians, private importers do not have incentives to create private fertilizer distribution hubs in several locations in the country. It is noteworthy that agrodealers in all the sample states, described having to go to Lagos in order to procure fertilizer through legitimately private sources. As is shown in Table 3, Zamfara, Jigawa, and Plateau states are a considerable distance from Lagos city in Lagos state. If Lagos is the main source of private fertilizer in Nigeria, one can conclude that the majority of private fertilizer retailers in the country face significant hurdles in obtaining genuinely private fertilizer to stock.

Table 3: Distance from Lagos

State Capital, State	Straight line distance to city of Lagos	Road distance to city of Lagos		
Benin city, Edo	248km (154 miles)	285km – 310km		
Dutse, Jigawa	880km (547 miles)	1013km – 1100km		
Jos, Plateau	718km (446 miles)	826km – 897km		
Gusau, Zamfara	730km (453 miles)	840km -912km		

Source: Globefeed.com 2009

Conclusion

This report presented the perspective of various stakeholders in Nigeria on fertilizer supply in four Nigerian states. It is by no means a nationally representative sample, rather it provides suggestive evidence of the perceptions of the selected set of stakeholders implementing or being affected by the federal and state fertilizer subsidy programs.

Despite the variety of stakeholders, there is a general perception that the programs are plagued with pervasive problems of late delivery, making the fertilizer possibly much less useful. The respondents think the programs are rife with corruption and political interference and that the environment has promoted rent seeking opportunities which are exploited to a significant extent by various players. Furthermore, the respondents think that the limited availability of fertilizer; subsidized or otherwise, is a significant constraint to farmers using fertilizer. The subsidy program may be exacerbating the problem of fertilizer unavailability by reducing incentives for the establishment of private fertilizer retail outlets. Many stakeholders expressed the view that the subsidy does not reach the rural poor farmers who are the proclaimed beneficiaries of the programs.

References

- Akinyosoye, V.O. 2005. Government and agriculture in Nigeria: analysis of policies, programmes and administration. Macmillan Nigeria Publishers, Lagos, Nigeria
- Banful, A. B., E. Nkonya and V. Oboh. 2010. Constraints to fertilizer use in Nigeria: insights from agricultural extension service. IFPRI Discussion Paper 1010 Washington, D.C.: International Food Policy Research Institute (IFPRI). (2009)
- Chude, V. 2006. Fertilizer situation in Nigeria. Paper presented by Alhaji Bello Sule, Director Fertilizer Department, to the Program Advisory Committee on Agriculture and Food Security on 6 September, 2006. Abuja, Nigeria
- Federal Fertilizer Department. 2009. Subsidy on fertilizer granted by the federal government and additional subsidies by states. Abuja, Nigeria. Photocopy.
- GlobeFeed.com 2009. Nigeria Distance Calculator. http://distancecalculator.globefeed.com/Nigeria_Distance_Calculator.asp. Accessed July 2010
- Idachaba, F.S. 1993. Food and agricultural policies and policy implementation in the 1994 Federal Budget. Lead Paper delivered at Agricultural Summit, of the Federal Ministry of Agriculture and Rural Development. Abuja, Nigeria.
- _____, F.S., 2006. Good intentions are not enough. Collected essays on Government and Nigerian Agriculture. The Agricultural Policy Process. University Press PLC., Vol. 1.
- Morris, M. L., V. A. Kelly, R. J. Kopicki, and D. Byerlee. 2007. *Fertilizer use in African agriculture: lessons learned and good practice guidelines*. Directions in Development Series, Agriculture and Rural Development. Washington, D.C.: World Bank.
- Nagy, J. G. and O. Edun. 2002. Assessment of Nigerian government of policy and suggested
- Alternative market friendly policies. Confidential draft, September 26, 2002. International Fertilizer Development Center. http://www.usaid.gov/ng/downloads/reforms/ assessmentoffertilizerpolicy.pdf. Accessed May 10, 2010
- National Fertilizer Technical Committee. 2006. Nigeria fertilizer strategy report. Background paper for the Africa fertilizer summit: 9-13 June, 2006, Abuja, Nigeria.
- Nigeria, NBS (National Bureau of Statistics). 2008. Social statistics in Nigeria, 2005. Abuja, Nigeria.
- Ojowu, O., H. Hashimu, and B. Omonona. 2007. Nigeria poverty assessment (harmonised). Abuja, Nigeria. Photocopy.
- USAID Nigeria Mission. 2009. Nigeria administrative divisions. http://www.usaid.gov/ng/admin_divisions.htm. Accessed July 20 2010
- USDAFAS (United States Department of Agriculture Foreign Agricultural Service). 2002. Croplands and ecoregions in Nigeria. http://www.fas.usda.gov/pecad2/highlights/2002/03/nigeria/pictures/ crop_ecoregions.pdf. Accessed on May 10, 2010.
- World Resources Institute. 2010. Agriculture and food searchable database. http://earthtrends.wri.org/searchable_db/results.php?theme=8&years=&variable_ID=872 &cID=&ccID=&years_rev=1. Accessed May 10, 2010.