Fertiliser Subsidy Administration in Nigeria: Challenges and Prospects

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Abstract

Fertiliser subsidy is one of the policy instruments that the Nigerian government is using to make fertiliser available and affordable to farmers. However, in spite of the huge resources committed to the programme over the years, the desired results have not been achieved. This paper examines the efforts of the stakeholders and the challenges encountered. The review established that policy inconsistency, lack of political will on the part of implementers of the programme and restricted role of the private sector are the major factors responsible for the near-failure of the programme. The on-going Growth Enhancement Support Scheme (GESS) of the Agricultural Transformation Agenda (ATA) presents some hope in the light of the pilot scheme outcomes. It is thus recommended that government should adopt hands-off approach and allow the private sector to take over the procurement and distribution of fertilisers so that government can face its facilitating roles of infrastructural development, programme supervision and quality control. It should also create the right policy environment for sustainable private sector participation.

Keywords: Fertiliser subsidy, Input voucher, Private sector

INTRODUCTION

Fertilisers are important inputs in agricultural development due to their crucial role in maintaining soil productivity for the attainment of food security. They supply nutrients needed by crops thereby helping to produce more crops with better quality and improve the low fertility of soils which have been over-exploited (FAO, 2000). According to Federal Ministry of Agriculture and Rural Development FMARD (undated), fertiliser generally means any substance containing one or more recognised plant nutrients and is designed for use or claimed to have value in promoting plant growth. Specifically, mineral fertiliser means fertiliser produced by mineral processes or mined and derived from an organic substance or synthetic organic substance. Organic fertiliser means fertiliser derived from non-synthetic organic material, including sewage sludge, animal manures, and plant residues produced through the process of drying, cooking, composting, chopping, grinding, fermenting or other methods and makes a declaration of nutrient value on the label. Organic fertilisers create conducive conditions for the successful use of mineral fertilisers since they improve soil conditions, making it possible to obtain maximum results from the latter, which only provide plant nutrients (Akinyosoye, 2005). This paper however focuses on mineral fertiliser.

Although, fertiliser consumption in Nigeria falls below the recommended quantity by the Food and Agricultural Organization (FAO), Nigeria alone accounted for 23 percent of the entire fertiliser consumption in sub-Saharan Africa in 2008/2009. This compares to 23 percent of total demand from the rest of West Africa, 40 percent attributed to Kenya, Ethiopia, Tanzania, Zambia, and Malawi and 14 percent attributed to all the other countries in the region (Liverpool-Tasie, 2012a). The consequences of population growth: more people to be housed, dressed, and above all, fed; has made it imperative to manage the land available for agricultural production since up to 90 percent of the necessary increase in food production will have to come from fields already under cultivation (FAO, 2000). Land management practices like shifting cultivation, crop rotation and bush-fallowing are gradually fading away (Salimonu, 2008) because of pressure on land for alternative uses. The fragile

nature of tropical environment (IITA, 1993) also calls for improvement so that optimal result can be obtained from continuous cultivation of arable lands. This underscores the essence of fertiliser in Nigerian agriculture.

About 70% of the country's population resides in the rural areas with small-scale farming as their major livelihood enterprise. They represent 95 percent of the total food crop farming units in the country and produce about 90 percent of the total food output (Okuneye and Okuneye, 1988; as cited in Salman, 2012). The small scale farmer bears the burden of feeding the Nigerian population, providing foreign exchange earnings and providing raw materials for agro-industrialisation in textiles, food and beverages (Idachaba, 2000); yet, he has to make do with the barely adequate inputs. Agricultural productivity is often held back by inadequate use of modern inputs with insufficient plant nutrient in the farming system being a particularly constraining factor. Though, inorganic fertiliser is a technology that can be used at all scales of agricultural production to enhance productivity, poor farmers face high prices for fertiliser as well as important financial constraints in purchasing those fertilisers (Benson, Cunguara and Mogues 2012). Procurement of fertiliser has consistently been a bane of production to the farmers owing to non-availability and poor economic access. Governments have always tried to make it available and affordable to farmers through different intervention strategies. Fertiliser subsidies have been one of the major policy instruments used to increase agricultural productivity in Nigeria. Although fertiliser subsidies represent a significant part of the allocations to agriculture, this is still meager when the amount allocated to agriculture relative to other sectors is considered (Mogues *etal*, 2008; as cited in Hiroyuki, Nkonya and Deb 2012).

Thus, the fact that fertiliser subsidy accounts for a chunk of allocations to agriculture and its potential in lifting small scale farmers from doldrums of poverty which will make them have economic access to fertiliser for improved productivity, calls for this review. This paper sets out to examine how far the subsidy programme has served its purpose, the challenges encountered and the way those challenges could be tackled.

Theoretical basis for input subsidies

Farm input subsidies are policy instruments used to achieve specific policy objectives (Idachaba, 2006b) and are based on some theoretical considerations. It is a known fact that innovations provide a platform for increasing agricultural production (Akinyosoye, 2005) and this could be stimulated by putting reasonable price subsidies in place, especially at the farm gate (Idachaba, 2006b). To this, the underlying assumption is that there is an established demand for all the components of the innovations. However, observations in the Nigerian case show that there are some problems in bringing innovations to small-scale farmers. These include the inputs supply chain, which is dominated by government and heavily distorted to the extent that inputs are not easily accessible. Similarly, farmers are usually dissuaded from adopting innovation because of the 'learning process' that they undergo and the cost associated with adjustment to the new situation. These reasons are actually responsible for the perceived conservatism of the farmers; their caution in adopting innovation. Subsidies on the farm inputs, which are forms of innovation, are therefore seen as a way of minimizing these learning and adjustment costs in order to encourage the farmers (Idachaba, 2006b).

Some proponents like Sachs have actually supported call or rationale for government subsidies on fertiliser because low fertiliser use has been seen to be one of the factors explaining lagging agricultural growth in Africa (Morris, Kelly, Kopicki and Byerlee 2007). Subsidies are thus viewed as a way of encouraging fertiliser use for increased agricultural/food production and diversification of income earnings opportunities (Idachaba, 2006b). Furthermore, since traditional farmers do not spend money on the conventional inputs they use, subsidies are needed to encourage them to shift from traditional manual technology to the various forms of improved technologies that rely on modern inputs (Akinyosoye, 2005). Also, input subsidies are considered ways of compensating distortions by transferring some incomes to the rural population in most developing countries since they do not benefit from the regular upward review of minimum wages for workers (Akinyosoye, 2005 and Idachaba, 2006) but rather are victims of inflationary effect of such increments which have negative consequences on farm input cost.

Another argument for input subsidy is that agriculture should be considered as an 'infant industry' especially in developing countries where it employs a vast number of people (60-70%). It should therefore be given all incentives necessary to promote general economic development. Input subsidies also encourage entry of prospective farmers and massive

participation of current farmers in government programmes and projects (Idachaba, 2006b). Moreso, gains from agriculture in a labour surplus economy is more than from urban-based business organisations which enjoy several fiscal relieves. Input subsidies is also seen as a way of restoring equilibrium since farmers face exploitative market structures for their farm outputs as a result of defective rural markets, poor rural infrastructure, poorly developed and unfriendly rural financial markets, direct and indirect taxes which siphon resources out of agriculture (Akinyosoye, 2005).

Although the positive relationship between chemical fertiliser use and agricultural productivity has led to the promotion of fertiliser subsidies, it has been subjected to strong criticisms over the years (Liverpool-Tasie, 2012a). Opinions against subsidy are that the cost implication can be colossal and it creates a class of unintended beneficiaries who will want the subsidy scheme to continue in the face of a glaring irrelevance and waste. The inability of the government to properly monitor the subsidy programme makes the unintended beneficiaries divert the fertilisers meant for farmers (Idachaba, 2006a) thereby creating artificial scarcity. Thus, the real farmers are at the mercy of the unintended beneficiaries since they sell at their own prices which are usually higher than the normal market price. The increase in market prices for successive subsidy programmes is shown in figure 1 below.

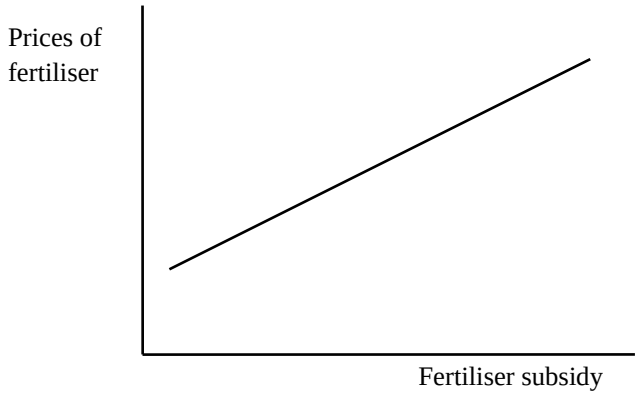

Figure 1: Graphical representation of the effect of subsidies on fertiliser prices

Subsidy programme is also accompanied by the appointment of the select few to import fertilisers thereby creating room for rent-seeking and corruption. Furthermore, fertiliser subsidies tend to limit private sector investment in fertiliser procurement and distribution, create distortions in the budget by crowding out the other more significant/structural needs of agriculture and other developmental projects with the real cost usually exceeding the nominal official subsidy because of the divergence between International Foreign Exchange Market (IFEM) and parallel foreign exchange rates (Idachaba, 2000; 2006a & b). Input subsidies makes the recipient farmers develop a dependency mentality where they come to see subsidies as a right (Akinyosoye, 2005; Idachaba, 2006b). It protects inefficient farmers and encourages resource misallocation and distortion in production patterns (Idachaba, 2006b). It cushions farmers and other beneficiaries from the reality of the market and divert the attention of policy makers from other areas which are likely to have more impact on farming households (Akinyosoye, 2005).

Efforts of government's participation in fertiliser subsidy

Akinyosoye (2005) and Idachaba (2006b) noted that before 1976, the various state governments in the country were responsible for the procurement and distribution of fertilisers. By the end of that year, the federal government had put in place, within the Federal Ministry of Agriculture and Water Resources, a Fertiliser Procurement and Distribution Unit to serve as a central organ for the procurement and distribution of the item in the country. Obasanjo administration initially introduced the fertiliser subsidy in 1976 (Idachaba 2000). Since then, governments at the federal and state levels have had a strong hold on the production, procurement and distribution of fertilisers. As fertiliser use increased, however, inadequacies of the public sector-controlled procurement and distribution system began to manifest in leakages and transit losses, late and non-deliveries of the products to designated depots, artificial scarcity and an unsustainable fertiliser subsidy burden.

Manyong *etal* (2005) and Idachaba (2006b) reported that the federal government subsidised total cost of fertilisers from importation up to when it reaches state warehouses to the tune of 75% while farmers paid the remaining 25% during 1976/77 – 1978/79. But in 1980, the federal government's share was reduced to 50 percent while the states were required to absorb the remaining 25 percent. However, the total percentage subsidy was subsequently reduced to 50 percent. The variation in subsidy rates is presented graphically in Figure 2. Both state and federal governments have also subsidised fertiliser, sometimes at rates as high as 95 percent (Nagy and Edun, 2002; as cited in Banful *etal*, 2010).

According to Akinyosoye (2005), since 1990, over two billion naira is being spent on fertiliser subsidy every year. The value of subsidy at its peak in 1992 was estimated at N6.8 billion (FMARD, 2012). Akinyosoye (2005) further submitted that the overbearing influence of government in the fertiliser supply system, coupled with the overwhelming negative impact of government control on the expected beneficiaries of fertiliser, made it to change its mind about its roles in fertiliser procurement and distribution in late 1993. This led to a declaration that fertiliser procurement and distribution were to be privatised, which was never implemented. However, government started reforming fertiliser market the following year. By 1996, a fertiliser liberalisation policy was in place to improve on the production, procurement and distribution of fertiliser as well as ensure efficiency in the fertiliser market and allowed the private sector operators to handle procurement and distribution. The fertiliser subsidy policy however died in 1997 when it was denied political support by government (Idachaba, 2006a). Government, in addition, reduced import tariff on fertiliser from 10 percent to 5 percent in 1997 and zero percent in 2000. Value Added Tax (VAT) and excise duty payments were also abolished. Private sector and a number of states assumed greater responsibilities for production, procurement and other marketing activities as a result of the liberalisation. Manyong *etal* (2005) also observed that during deregulation, government disengaged itself from procurement and distribution of fertiliser (and other inputs) while market forces largely determined their market prices. Most input price subsidies were also withdrawn.

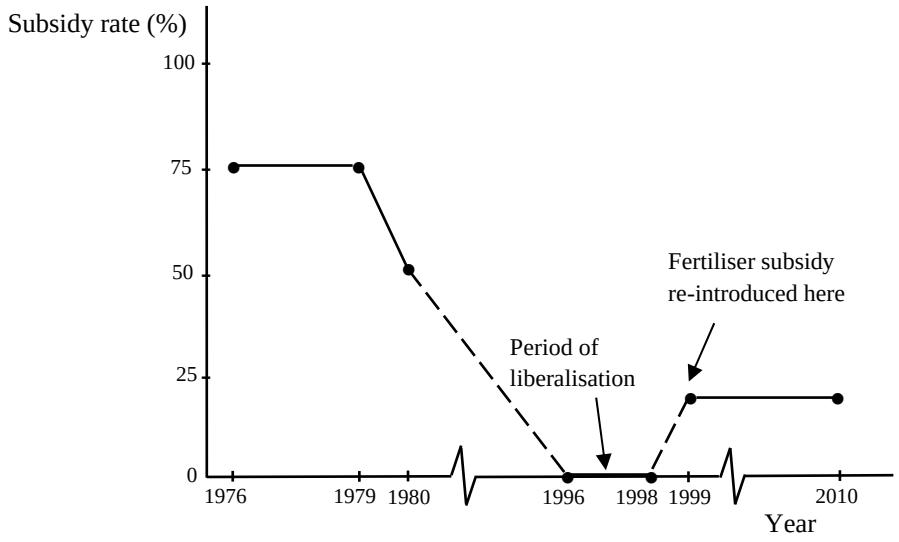

Figure 2: Graph showing successive variations in the subsidy level

NB: The dotted lines indicate (mathematical) discontinuity

Contrary to the intent of the government, liberalisation policy did not yield the expected results in terms of adequate and timely supply of fertiliser to farmers chiefly because of policy inconsistency. During the liberalisation, fertiliser subsidy was removed and private investors entered the market. By 1999, the federal government re-introduced the fertiliser subsidy and forced private suppliers to sell at a loss. By 2000, the federal government withdrew the subsidy again but at the same time, some state governments introduced the subsidy. The ill-prepared actions of government as to whether it would liberalise or not and whether it would remove subsidy or not generated instability in the policy environment, leading to inadequate investments in the establishment of appropriate distribution channels, capacity building and

promotional activities to handle the liberalisation. There was also a weak legal and regulatory framework to support the liberalisation and this caused a large flow of poor quality fertilisers into the market. Poor economic and institutional infrastructure also contributed immensely (Akinyosoye, 2005). Another cause of failure of the liberalisation, as noted by Nagy and Edun (2002) in Banful *etal* (2010), is that after the government's decades-long monopoly, the private fertiliser sector was inexperienced and undeveloped and therefore could not compensate for the federal government's sudden exit from the sector. This confirms the fear expressed by Idachaba (2006a) whether the transition vacuum created with exit of government will be filled appropriately by the private sector firms.

Idachaba (2000) observed that frequent changes were made in the modalities for operating the fertiliser subsidy scheme in the 1980s and 1990s, opining as follows on the changes, especially the re-introduction of the 25 percent fertiliser subsidy (Figure 2) by the Obasanjo administration: it creates harmful agricultural policy instability that sends confusing policy signals to key actors in the agricultural sector; it does not take into account the fact that farmers are more concerned about fertiliser availability at the time and place they need it most than they are about fertiliser subsidy; and gives impression that politics has had an upper hand over sound economic reasoning.

It is noteworthy also that huge amounts are still being allocated for fertiliser subsidy. In 2010, the federal government provided the sum of N22.30 billion as its 25 percent subsidy contribution to the procurement and distribution of 900,000 tonnes of fertiliser to the states and the Federal Capital Territory, valued at N89.31 billion. This represented the highest provision in any single year since the inception of the fertiliser subsidy programme i.e Fertiliser Market Stabilisation Policy (FMSP) in 1999 (CBN, 2010).

Problems encountered and the effects

In spite of the continued application of subsidy, total fertiliser use is far below the potential and economic demand. Presently, fertiliser use in Nigeria estimated at 13 kg/ha in 2009 by the Federal Ministry of Agriculture and Rural Development (just above the average for the African region estimated at 9kg/ha) is far lower than the 200kg/ha recommended by the United Nations Food and Agricultural Organization (FAO) (Jeminiwa, 2011). The subsidy programme has not been able to achieve the level of fertiliser usage that will stimulate the level of productivity required to catapult Nigeria to its own green revolution as witnessed in Latin America and Asia. Banful and Olayide (2010) noted that the subsidy programmes had absorbed large proportions of the national budget, but the impact of the programmes on agricultural productivity has been mixed at best.

The subsidy programme has not been able to achieve the objectives for which it was instituted because of a myriad of problems. Massive abuse in terms of diversion of benefits to unintended beneficiaries, fiscal burden on the government, rent-seeking activities, wrong estimation of input demand, late arrivals of fertilisers months after due application dates, distribution inefficiencies and political interference are some of the identified problems (Idachaba, 2006a & b). It is quite unfortunate that small scale farmers that are responsible for the food production in the country have to compete with non-farmers before they could have access to fertilisers (Salimonu, 2008). Idachaba (2000) observed that while the small scale farmers were the intended beneficiaries of the fertiliser subsidy programme of the first regime of Obasanjo in 1976, the unintended beneficiaries (the real beneficiaries) turned out to be rent-seeking ministers, commissioners and public bureaucrats, fertiliser merchants and importers, fertiliser transporters, fertiliser middlemen and commission agents, and foreign fertiliser suppliers. In fact, there had been many probes into fertiliser distribution scandals over the years. Also, unrealistic levels of subsidies are usually announced as a statement of good intentions or means of gaining political leverage (Akinyosoye, 2005). In his study on the political economy of agricultural policy implementation in Nigeria, Yekinni (2007) noted that being members of ruling political party, being close relatives of political office holders, being close to influential politicians and being rich and influential makes an individual favoured to benefit from agricultural policies. Government tenders for the targeted subsidised fertilisers were usually late, so were the federal government's payments to fertiliser distributors and the states remittances to the federal government. Another problem concerns over invoicing by fertilisers importers profiting from the arbitrage situation that existed between the official and parallel exchange rate markets (Nagy and Edun, 2002; as cited in Jeminiwa, 2011).

As a result of the problems highlighted above, the subsidy programme was bedeviled with

scarcity and untimely distribution of fertilisers to the farmers. Most of the times, the farmers do not get it when it is needed; and whenever they get it, it is in inappropriate quantities and types (Banful *etal*, 2010; Idachaba, 2006b). Jeminiwa (2011), citing Nagy and Edun (2002), observed that problems with quality, arbitrage, and timeliness of fertiliser distribution have persisted throughout most of the period. In fact, farmers have learnt to buy fertilisers at extra cost in the absence of the subsidised fertilisers (Yekinni, 2007) and emphasis is shifting from need for fertiliser subsidies to timely availability. Some states are even prepared to trade off subsidies with adequate quantity and timely supply of fertilisers to farmers (Idachaba, 2006b).

Voucher-based approach to subsidy programme

In view of the problems encountered in administering fertiliser subsidy through the conventional government-dominated delivery system, the federal and state governments in conjunction with International Centre for Soil Fertility and Agricultural Development (IFDC) instituted a private sector-driven voucher-based approach to making fertiliser available to farmers. Input vouchers represent a flexible market development policy that gives holders the opportunity of purchasing pre-determined quantities and types of inputs from trained dealers who accept the voucher as payments; dealers can then redeem vouchers with the programme organisers (in this case government) with an agreed margin to cover their expenses and agreed level of profit (Gregory, 2006). The voucher programmes enable smallholder farmers to obtain quality agro-inputs in a timely manner using vouchers in lieu of cash. At the same time, the projects focused on building the professionalism of rural agro-dealers and strengthening a country's private sector fertiliser supply and distribution channels (IFDC, 2012).

Liverpool-Tasie (2012a) noted that agricultural input vouchers are increasingly being employed across developing countries to address problems of low agricultural productivity and food security by increasing the timely access to inputs. Minot and Benson (2009) observed that Malawi's voucher programme is the largest and the one most often cited as a smart subsidy success story. Vouchers have been used in Malawi fertiliser programme since 2000. Based on Malawi's success in stimulating maize output, a number of countries, including Kenya (2006), Ghana (2008), and Tanzania (2008) have launched voucher-based fertiliser subsidies. The voucher-based subsidy programme was introduced in some states in Nigeria in 2008 on pilot scale following government's announcement of its gradual withdrawal from direct fertiliser procurement and distribution to allow private sector take over the role (Jeminiwa, 2011). Liverpool-Tasie (2012a) submitted that the use of vouchers to provide federal and state government-subsidised fertiliser was piloted in few sites in two states (Kano and Bauchi) in 2004 and again between 2008 and 2010. However, 2009 was the first time that a voucher program was administered across all states in Nigeria.

A review of the 2009 programme in Kano and Taraba states presented some success stories. In Kano state, it appeared that one benefit of the voucher programme was that it developed links between rural farmers and input suppliers. Furthermore, where private fertiliser markets are weak, results indicated that there could be significant gains from the temporary use of voucher programmes to create links between input suppliers and farmers (Liverpool-Tasie, 2012a). Programme participants in both states received more bags of subsidised fertilisers than non-participants. They also paid significantly lower prices compared to those who purchased directly from the market (Liverpool-Tasie, 2012b). It is worthy of note that the voucher-based programme also presented some challenges. The study in the two states revealed that participating in the voucher programme did not improve the timeliness of fertiliser receipt and did not provide farmers with better quality fertiliser (Liverpool-Tasie *etal*, 2010; Liverpool-Tasie, 2012b)

Growth Enhancement Support Scheme (GESS)

Growth Enhancement Support Scheme is a new policy embarked upon by the government and represents a pragmatic shift within the existing Fertiliser Market Stabilization Programme (FMSP). It puts the resource-constrained farmers at its center through the provision of series of incentives to encourage the critical actors in the fertiliser value chain to work together to improve productivity, household food security and farmers' income. The goals of the scheme include targeting 5 million farmers in each year for 4 years who will receive GESS in their mobile phone directly, totaling 20 million at the end of 4 years; providing support directly to farmers to enable them procure agricultural inputs at affordable prices, at the right time and place; increasing productivity of farmers across the

length and breadth of the country through increased use of fertiliser; and changing the role of government from direct procurement and distribution of fertiliser to a facilitator of procurement, regulator of fertiliser quality and catalyst of active private sector participation in the fertiliser value chain (FMARD, 2012). The target of the federal government for the period between 2011 and 2015 is to expand the number of farmers getting fertilisers from 550,000 farmers to 20 million farmers by 2015 and move away from flat price subsidy to targeted support – Growth Enhancement Support – directly to reach 20 million farmers through private agro-dealers. This is to be achieved by providing incentives to encourage local manufacturing of fertilisers, drawing on the gas industrialisation policy and encourage private sector participation in the distribution system (NPC, 2011).

A pilot of the electronic voucher system based on mobile phone technology (e-wallet) was conducted in Taraba state. The private sector voucher programme reached 94 percent of the farmers (as against 11 percent of farmers under government distribution) and cost 50 percent less to administer. It also encouraged development of a strong private sector network (FMARD, 2012).

CONCLUSION

Many issues have emerged from the paper so far. It is the inability of the government to manage the resources meant for subsidy and untimely release of funds allocated to support the otherwise unrealistic level of subsidy that creates input shortages, the emergence of middlemen and benefits to unintended beneficiaries. Government is still involved in the supply and to worsen the situation, the middlemen and their cohorts are generally the implementers of the programme. Although the government has been giving private sector some opportunities for participation in the fertiliser supply system, this has not been effective because government still maintain tight grip. There had been policy inconsistencies and existence of dual market which has had 'crowding-out' effect on the private sector. Voucher-based subsidy programme has been relatively successful. Timeliness of delivery and quality of fertiliser still left much to be desired since these were still within the prerogative of the government. The pilot programme conducted in Taraba state under the recently-instituted Growth Enhancement Support Scheme (GESS) of the Federal government's Agricultural Transformation Agenda (ATA) presents some improvements but it is too early to comment on the success or otherwise of the scheme.

From the foregoing, it is apparent that there is need to create right policy environment and maintain efficient, transparent and accountable bureaucratic setting for proper supervision and control. Government should follow up its word with action by implementing declarations on private sector involvement. It should adopt hands-off approach to procurement and distribution and face its facilitating roles of infrastructural development, programme supervision and quality control. There is need for greater involvement of the private sector in the procurement, supply and distribution of fertiliser. Fertiliser prices should be allowed to be determined by the market forces and if there is need for targeted price subsidies especially for those that cannot afford the market prices or those in remote areas where access is difficult, it should be done in a way that it does not hamper the functioning of competitive fertiliser markets. This is a clear exposition from the fertiliser policy document. The position is also supported by the result of the 1976 study conducted for federal government on cocoa pesticides (Idachaba, 2006a). The level of the subsidy should also be cut down in order to accommodate other agricultural programmes, especially those that will impact more positively on rural populace.

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