

Review

The role of Agricultural market reform in enhancing farmers' income in Nigeria

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Agricultural market reforms are imperative, given the yearly experiences of small scale farmers in marketing their produce. The outcome of farmers' efforts has not translated into commensurate income overtime. However, reformative efforts at improving value chain, productivity and market access have culminated into a wide range of technological solutions in the recent times. Efforts should therefore be concentrated on reforms aimed at not only adding value to agricultural products but to the development of market infrastructure and adoption of information and communication technology (ICT) information solutions. These are keys to resolving the chain problems and ensuring enhanced welfare of farmers. The paper recommends that promoting smallholder production of export crops should have beneficial impacts on agricultural production in general and on the food security and income of smallholder farmers in particular.

Key words: Agricultural marketing systems, market reforms, farmers and Nigeria.

INTRODUCTION

During the past two decades, Nigeria undertook extensive economic reforms to reduce the role of government and increase the role of the market in their economies. Because of the importance of agricultural sector in the country, agricultural market reforms occupied a central place in these liberalization efforts. Agriculture is the mainstay of African economies. In Sub-Saharan Africa, it represents between 27 and 42% of gross domestic product, employs between 65 and 80% of the labor force, and in more than half of the countries accounts for as much as 60% of export revenue (Abdulai and Delgado, 1995).

Agricultural reforms included the removal of price controls, deregulation of agricultural marketing, closure of state-owned enterprises that monopolized agricultural trade, and changes in the foreign exchange market to

provide greater incentives for exports. The expectation was that improving price incentives for farmers and reducing government intervention in the agricultural sector would be enough to generate a supply response and allow well-functioning markets to emerge quickly (Mylène et al., 2000). Almost two decades later, the general consensus is that the reform programs in Nigeria have not met the expectations. Average annual growth rates of per capita gross domestic product (GDP) and agricultural value-added have been negative throughout the 1980s and 1990s. Economic performance has trailed that of other developing regions. At the beginning of the 21st century, Nigeria confronts a number of daunting problems: extensive hunger, malnutrition, poverty resource degradation, and the spread of HIV/AIDS. Because the majority of the country's population remains

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dependent on agriculture for its livelihood, well-functioning and efficient agricultural markets continue to have key role for improving the nation's economic health.

It is important to review some major problems/constraints to agriculture in Nigeria that necessitated the reform policies. Increasing agricultural production however, does not automatically translate to improving living standard of farm family or even the dependant populace. Once production increases, marketing is the next major hurdle. Farmers face lots of challenges moving their produce to the market (Okunmadewa, 2007). They often experience a high transport cost which impacts on their margin. Access to the market and poor organisation of African farmers often leave them prey to the middlemen who purchase their produce and make huge mark-ups before selling them in the cities. Hence, rural farmers remain trapped at the bottom end of the food chain. Farmers' share of retail prices is as low 40% for most food crops. Also a major constraint to marketing is the boom- and burst- price fluctuations resulting from glut during harvest and scarcity at off-seasons. This glut usually results from the lack of storage, processing and preservation techniques and facilities, which ordinarily should assist farmers in helping to add value to their produce to earn good price and manage price fluctuations. Infrastructure is a key to ensure remunerative prices for agricultural produce.

Farmers who are near market and roads have access to inexpensive transport and also can store their produce for a prolonged period, and are therefore in a better position to obtain higher prices. The higher the prices are expected to translate to higher margin and improved household welfare in the form of increased rural income. It is also established that the negotiating power of the farmers in determining prices for their produce could be improved through prompt dissemination of price information or agricultural market information. An informed farmer is in vantage position to ask for a better farm gate price. The rural access and mobility, as well as information dispersion remains poor in African countries constitute a major challenge in the marketing of agricultural products and particularly in the widening gap between farm gate price and retail prices.

According to Okunmadewa (2007), the widening disparity between farm gate price and retail price calls for a serious attention. This disparity has continually diminished the percentage of the retail price that farmers receive and this has effect on the future viability of thousands of rural African farm families. This is the main concern. The reality is that farmers cannot be expected to produce and receive relatively low returns, year in year out, and still remain viable. That defies basic logic of sustainability. In addition, it is more welfare depressing that the same farmer and farm family face increased and increasing retail prices of food and non-food consumption items.

Finally, the National Agricultural Marketing Research System in Nigeria is bedevilled by a number of constraints. Idachaba (1998) and Okunmadewa and Olayemi (2002) provide an excellent discourse of these constraints. In particular, Idachaba (1998) categorises the constraints into two viz: system wide and institute specific. Further, he identifies the constraints in terms of hierarchy to include primary, secondary and tertiary constraints which include: lack of adequate funding, shortage and instability of qualified researchers and weak linkage of research institute and other stake holders. Thus, this paper reviews the extensive evidence on agricultural market reforms in Nigeria and summarizes the impact reforms have had on market performance, agricultural production, use of modern inputs and poverty. The paper offers recommendations for completing the reform process and developing a new agenda for agricultural markets in Nigeria.

Need for Agricultural market reform

Why was agricultural market reforms needed? Answering this question calls for a look at the agricultural policies of the 1960s and 1970s and the problems that resulted.

Agricultural policies before reforms

Independence through the 1970s, Nigerian government played a relatively large role in national economies, and the agricultural sector was no exception. Policymakers held the common view that private traders were exploitative and that markets could not be trusted with the critical task of feeding the nation. Furthermore, they equated economic development with industrialization, relegating agriculture to the role of supplier of labor, raw material, and cheap food to industry. Small-scale agriculture was seen as inherently inefficient because uneducated farmers were unable or unwilling to apply modern techniques such as mechanization. Because of these views, state enterprises (often inherited from colonial powers) were given the responsibility of organizing food markets and fixing nationwide prices for farmers and consumers. Their success in doing so varied. State enterprises also managed export crop production by farmers by providing inputs on credit, fixing crop prices, and monopolizing the processing and export of the crop. The prices farmers received were generally low because of taxation or high costs incurred by state enterprises, or both. In many countries, export crop prices averaged less than half the world market rate (World Bank (1981). Lele (1990) and Jaeger (1992)). State enterprises also monopolized the import and distribution of fertilizer and other inputs, which were often supplied to farmers at subsidized prices and on credit.

Pressure for reform

Pressure for economic reforms came from several sources. In the 1970s, commodity prices boomed, allowing governments to expand their operations and greatly increase the size of the civil service. When commodity prices declined in the late 1970s, governments found it difficult to cut expenditures, resulting in large fiscal deficits. Significant losses incurred by state-owned enterprises exacerbated these deficits. Governments generally used monetary expansion to cover the deficits, thus causing inflation. Because exchange rates were fixed, inflation made export commodities less competitive on the international market, simultaneously increasing incentives to import goods that could be produced locally. Import tariffs and other barriers, already kept high to protect domestic industry, were increased further to stem the growing flow of imports.

These policies often had adverse effects on farmers and on the agricultural sector generally. Explicit taxation, the high marketing costs of state enterprises and the overvaluation of the currency hurt export crop production in particular. In countries with repressive food marketing policies, farmers switched into unregulated crops such as roots and tubers. The emergence of parallel or black markets and cross-border smuggling provided additional evidence of the failure of Interventionist policies. Although inputs were subsidized, budget constraints and bureaucratic problems often led to shortages and delays in delivery of these goods.

Inflation, stagnant economic growth, and shortages of consumer goods created doubts about the existing economic strategy. For many countries, however, significant reforms were postponed until trade deficits began depleting foreign reserves and could no longer be covered by foreign borrowing. At this point, political leaders were forced to seek funding from the World Bank and the International Monetary Fund (IMF), accepting the policy conditions that were attached. Although the process was not uniform across the region, almost all countries adopted a series of economic reforms, including agricultural market liberalization, during the 1980s and early 1990s.

The nature of the reforms

The agricultural reforms introduced by the World Bank and IMF were designed to reduce or eliminate the bias against agriculture and open the sector to market forces (World Bank, 1981). The reforms were based on two beliefs: that reducing or eliminating state control over marketing would promote private-sector activity and that fostering competitive markets would lead to increased agricultural production. To these ends the reforms included four types of measures:

1. Liberalizing input and output prices by eliminating subsidies on agricultural inputs such as fertilizer and credit, by bringing domestic crop prices in line with world prices, and by ending the practice of imposing a single price for all regions and seasons
2. Reducing overvalued exchange rates by partially liberalizing the market for foreign exchange
3. Encouraging private-sector activity by removing regulatory controls in input and output markets, lifting restrictions on the internal movement of food crops, and relaxing delivery quotas, licensing arrangements, and similar regulations
4. Restructuring public enterprises and restricting marketing boards to activities such as providing market information and maintaining security stocks.

Nigeria's market reform in the export crop sector compared with other African countries.

The pace and extent of reforms have varied widely across countries and crop subsectors (Table 1). For the most part, reforms were not fully implemented. For example, many governments liberalized internal trade but maintained a state monopoly over external trade. In other instances, although fixed prices were eliminated, price bands for food crops were imposed to limit market price fluctuations and protect consumers and producers from the allegedly "exploitative" behaviour of private traders. State-owned enterprises remain active in several commodity subsectors, notably cotton in West Africa and maize in Kenya, Malawi and Zimbabwe. (Washington, D.C.: World Bank, 1999). Information on cashews for Tanzania comes from C. L. Delgado and N. W. Minot, *Agriculture in Tanzania since 1986: Follower or Leader of Growth?* World Bank Country Study (Dar es Salaam and Washington, D.C.: Government of the United Republic of Tanzania, World Bank, and IFPRI, 2000).

Many countries reversed reforms as a result of external shocks or changing economic conditions. Malawi, for instance, reinstated fertilizer subsidies that were to be phased out in the mid-1980s because currency devaluation and the severance of transport routes through Mozambique significantly raised fertilizer prices. Zambia reversed maize market liberalization under pressure from urban consumers who faced higher prices. In general, countries did not follow a linear path toward liberalization, and reforms often were not seriously implemented until the early to mid-1990s. In Nigeria, the reform process was quick and short owing to the fact that farmers benefited immensely from sharp and increased market margins resulting from direct export and the policy also exposed the corrupt and inefficient activities of the Marketing Boards. A slow and incomplete reform process resulted from several factors, including weak commitment on the part of African policymakers to reforms imposed

Table 1. Extent of market reform in the export crop sector in some African Countries

Country	Commodity	Marketing channel after reforms
Benin	Cotton	Full parastatal control of prices, marketing, and inputs.
Cameroon	Cocoa, coffee	Liberalized marketing and export starting in 1994 for both crops.
Côte d'Ivoire	Cocoa	Stabilization system until 1998/99; liberalized thereafter.
Ghana	Cocoa	Full parastatal control of prices and marketing.
Malawi	Tobacco	All marketing through private auctions with low competition.
Mali	Cotton	Full parastatal control of prices, marketing, and inputs.
Nigeria	Cocoa	Complete liberalization in a short period.
Senegal	Groundnuts	Most groundnuts exported as oil. Marketing and processing only partially
Tanzania	Coffee, cotton, cashew Coffee	Largely liberalized starting in 1990/1991. Cotton partially liberalized at first, now fully, as is cashew. State-run cooperative unions continue to compete with the private sector but only handle a small share of crop output.
Uganda	Coffee	Full liberalization, with parastatal primarily playing a regulatory function.

Sources. R. F. Townsend, *Agricultural Incentives in Sub-Saharan Africa: Policy Challenges*, Technical Paper No. 444

by donors, fear of disturbing existing patron-client relationships, and concern over losing important sources of public revenue.

Reforms designed to eliminate the rents and privileges enjoyed by public enterprise employees met with strong resistance. And because governments negotiated and implemented the structural adjustment programs, they often continued the old ways of doing business (Bates 1989). For the most part, governments did not encourage the participation of important constituents such as private businesses and nongovernmental organizations, choosing instead a top-down approach. At the same time, governments themselves rarely felt the sense of ownership necessary to sustain the reform effort (Helleiner, 1994; and Meerman, 1997). The resulting climate of uncertainty and mistrust affected private investment, because private businesses were generally reluctant to invest in countries where governments lacked credibility.

The impact of the reform

How successful has agricultural market reform been in Sub-Saharan Africa? How has it affected market performance, agricultural production, input use, farm productivity and poverty? The available evidence shows clear progress in some areas and mixed results in others.

Market performance

Assessments of market performance since the reforms have focused on the expansion of private trading, reductions in marketing margins, and increases in market efficiency measured by the degree of market integration). In general, all three areas have seen improvements since the 1980s. However, further expansion of private trade

faces many constraints and marketing boards are still active in some countries.

Private trade has expanded

Market liberalization has encouraged private trade, even in cases where parastatals are still active. Small private traders have emerged in response to increased market opportunities (Badiane, et al, 1997, Barrett, 1997 and Minten, 1998). In certain export markets, the presence of multinationals has fostered a well-coordinated domestic private-trading sector. In Tanzania, multinationals contract with private, domestic traders to buy tobacco and cashew nuts from small farmers, and these traders have little difficulty accessing credit or finding buyers. In Malawi and Nigeria small farmers sell their tobacco, cocoa and palm oil on auction floors to international buyers, something only large estate farms could do before the reforms.

Markets have become increasingly integrated

In general, market integration is measured by how well price signals are transmitted among markets. Integrated markets allow the efficient flow of commodities from surplus to deficit regions. While the level of market integration in Africa remain slower than in other developing countries, it has improved since the reforms were instituted, Goletti and Babu (1994). In part, this improvement has depended on the pre-reform situation.

For example, countries such as Benin and Ghana, where the private sector controlled food marketing before liberalization, have developed better-integrated grain markets than countries such as Malawi and Madagascar, where parastatals dominated food marketing. Most of the improvement is the result of increased private-sector

participation in trading activities—participation that has fostered the efficient transmission of information and prices among markets.

Agricultural production

The basic premise of agricultural market reform is that improving the incentive structure for small farmers (in the form of higher prices and well-functioning markets) will generate a positive supply response, increasing both agricultural output and income levels. But the average growth of agricultural production per capita has been negative in Sub-Saharan Africa since the 1970s. For small farmers in some countries, reform has meant the elimination of government input and credit subsidies—a loss that has kept yields stagnant or reduced them. Where production growth has occurred, it is the result of increases in the amount of land under cultivation rather than of yield increases. And where producers have benefited, the bulk of the gains have gone to export and cash-crop farmers with access to credit and modern inputs (such as fertilizer).

Export crop production has increased

Export crops have responded more strongly to liberalization than food grains. Most price changes have favoured tradables, making export crops more attractive than domestic staples. Export crops were also taxed more heavily before the reforms, making their post-reform response particularly vigorous. In addition, price control was far less effective for food than for export crops, so that farmers growing food crops were less affected by official prices (and more responsive to unofficial prices) than farmers growing export crops. Cash-crop sectors such as cotton in Benin and Mali, cashew nuts in Mozambique and Tanzania, and coffee in Uganda have been among the most responsive to reforms, largely because of higher producer prices, exchange rate liberalization, privatization, infrastructure investment, and improved input supply.

Fertilizer prices have risen

A number of reforms have affected fertilizer prices, including the elimination of fertilizer subsidies, the depreciation of the real exchange rate, and liberalization of fertilizer imports and distribution. The fertilizer-crop price ratio has more than doubled in four out of ten countries examined (Benin, Ghana, Nigeria and Tanzania) and increased at least 50% in three more (Malawi, Senegal and Zambia). On the other hand, the fertilizer-crop price ratio fell in Ethiopia.

Poverty

Production constitutes the most important source of income and employment for the majority of households in Nigeria. By stimulating agricultural production, market reforms were expected to improve rural incomes and alleviate poverty. In many Sub-Saharan African countries, rural poverty rates have declined since the 1980s. Although not all of the decline can be attributed to agricultural reforms, this trend challenges the view that the rural poor have been adversely affected by agricultural market liberalization.

Higher export crop prices have benefited export crop farmers

Devaluation and export market liberalization increased the income of small export growers by about 20% on average between 1990 and 1997, although, this varied greatly across crops. The income of poor and non-poor rural households has increased in several African countries. Small-scale cocoa and palm oil growers in Nigeria and producers of cashew nuts and tobacco have benefited from higher producer prices thanks to declining marketing margins and the depreciation of the real exchange rate.

CONCLUSION AND RECOMMENDATIONS

The reform efforts of the 1980s and late 1990s have generated a positive response in the agricultural sector of Nigeria in particular and Sub-Saharan Africa in general. Despite the progress that has been made, however, the results of market reform have generally not met expectations and much remains to be done. The reforms focused on eliminating government control and increasing the producer price of tradable agricultural commodities but placed little emphasis on developing the institutions needed to support private sector activity. Improving price incentives and liberalizing markets were expected to be enough to generate a supply response and create well functioning markets. The private sector was expected to take over the institutional functions the state had been providing. The reality has been quite different. While private trade has increased in virtually all agricultural markets, the private sector has been unable or unwilling to supply credit and marketing services in remote areas. And although the elimination of policies enforcing a uniform, nationwide price has been a boom for many producers and consumers close to markets, it has often left farmers in remote areas worse off than they were before liberalization.

Further progress in developing well-functioning markets will require not only further liberalization but also a more

concerted effort to go beyond the withdrawal of the public sector from agricultural marketing. The state must assume a new, supportive role as market facilitator. One aspect of this role is to strengthen investment in public goods such as infrastructure, research and extension, and public market information. The second is to foster institutions required for the development of competitive and efficient markets. The new agenda for market development in Sub-Saharan Africa includes the following four priorities:

1. Find institutional solutions to provide input credit to farmers: Credit for input use can be provided through a number of institutional innovations, including contract farming, credit associations, group lending and farmers' organizations.

2. Develop a legal infrastructure for market transactions: This long-term step will reduce the risk of investment and decrease transaction costs for both farmers and traders by clarifying property rights, enforcing contracts, ensuring quality control, and establishing rules of market conduct, among other legal concerns.

3. Increase investment in infrastructure and institutions: Higher productivity and effective markets require investment in research and extension, access to market information, and efficient transportation and communication networks.

4. Encourage smallholder production of export crops: In many areas, food and export crop production are highly complementary and export crop production has positive spill-over effects on input use and food crop productivity. Therefore, promoting smallholder production of export crops should have beneficial impacts on agricultural production in general and on the food security and income of smallholder farmers in particular.

Conflict of Interests

The authors have not declared any conflict of interests

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