

Agricultural Globalization in Reverse: The Impact of the Food Crisis in West Africa

by

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Background and objectives

Trade bans and high international food prices are pushing many West African countries away from their historical reliance on regional and international trade as a key component of their food security strategies. No longer confident that international and regional markets are reliable sources of basic staples, many countries are pushing for greater food self sufficiency—a sort of agricultural globalization in reverse. This paper examines West Africa's globalization in reverse and raises a number of questions about what role regional and international trade should play in the region's future quest for food security. The objective is to stimulate discussion about the different strategies available to West African governments for ensuring food security in the current environment of high world market prices for staple foods. These strategies need to take into account not only the need to provide safety nets for vulnerable groups who cannot afford the higher food costs but also the need to stimulate production in response to growing regional and world demand.

Evolution of food security policies in West Africa

West Africa has historically relied on international and regional trade to help assure its food security. Although some governments in the sub-region promoted national food self-sufficiency in the 1980s, by the early 1990s, most West African countries had adopted a broader notion of food security that built upon historical regional and international trade patterns based on comparative advantage. Countries in the sub-region fall into four categories regarding the role of trade in their food-security strategies:

- Countries such as Mauritania, Senegal and Sierra Leone that have historically based their food strategies on large imports of Asian rice combined with imports of coarse grains (millet, maize and sorghum) from neighboring countries, while exporting cash crops and mineral resources;
- Those that were food exporters in the 1960s (most notably Nigeria), but have become major importers of rice, wheat, and some coarse grains, as their economies and population have grown faster than domestic agricultural output;
- Those that have historically been largely self-sufficient or exporters of staples in normal years (e.g., Mali, Burkina Faso, and Chad) and
- Those (e.g. Côte d'Ivoire, Ghana and Guinea) that import significant quantities of rice from overseas and millet from northern neighbors, but that seasonally export significant quantities of maize (and in Guinea's case, fonio) to their northern neighbors.¹

In reality, most countries, even significant exporters and importers, are involved in some two-way regional trade in staples. For example, Nigeria exports significant quantities of

¹ Just because a country exports staples to its neighbors does not imply that it is food secure in the sense of guaranteeing everyone in the country access to a reliable source of food. Indeed, as discussed below, it is the desire to protect the poor's access to food that has led some governments in the region to restrict exports.

coarse grains to Niger in exchange for cowpeas, while Mali and Burkina Faso import some rice from Asia while exporting coarse grains to their neighbors.

Since the mid-1970s, the countries of West Africa have been linked through a number of trade and monetary organizations, the most important being:

- The Economic Community of West African States (ECOWAS), formed in 1975 and comprising 15 countries,² with a mission to promote economic integration in all fields of economic activity, particularly industry, transport, telecommunications, energy, agriculture, natural resources, commerce, monetary and financial questions, and social and cultural matters. The ECOWAS treaty authorizes free movement of goods and people among the member states.
- The West African Economic and Monetary Union (UEMOA), which includes 8 countries (Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal and Togo) that share a common currency, the CFA franc. UEMOA, formed in 1994 by enlarging the scope of activities of the previous West African Monetary Union (UMOA), has as its mission to strengthen the competitiveness of economic and financial activities of member states within the framework of open and competitive markets and to create a common market based on the free circulation of people, goods, services, and capital, as well as on common exterior tariffs and commercial policies.

In addition, two regional organizations play a particularly important role in the coordination of agricultural policies and trade in West Africa. The Council of Ministers of Agriculture of West and Central Africa (CMA/WCA), created in 1991 and including 20 countries,³ has as its objectives the promotion of regional agricultural trade, the improvement of West and Central Africa's competitiveness in international agricultural markets, and the promotion of sustainable agricultural development through the harmonization of agricultural policies in the region. The Permanent Interstate Committee to Combat Drought in the Sahel (CILSS), which includes 9 countries⁴, was created in 1973 as a regional effort to promote food security and combat drought and desertification through promoting regional scientific cooperation, policy coordination, and capacity building. Since the 1970s, CILSS has provided both empirical research and forums for policy discussion to promote regional agricultural trade throughout West Africa and has recently been mandated by ECOWAS to help lead the effort for the entire ECOWAS community.

Thus, over 35 years, West Africa has built up an institutional framework that promotes regional agricultural trade and cooperation as central components of national food security strategies. This long history of institutional cooperation makes the current shift

² Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo.

³ Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Mali, Mauritania, Niger, Nigeria, Senegal, and Togo in West Africa and Cameroon, the Central African Republic, Chad, Congo, Equatorial Guinea, and Gabon in Central Africa.

⁴ Burkina Faso, Cape Verde, Chad, Gambia, Guinea-Bissau, Mali, Mauritania, Niger, and Senegal

away from trade in response to the current food crisis –“agricultural globalization in reverse”— all the more striking.

The current food crisis has shifted the West African trade-based food-security strategy into reverse for several reasons. Soaring prices (e.g., rice selling for over US\$1000/ton) and export bans from some Asian countries such as India not only threatened the availability of rice imports, but led many West African governments to conclude that the risks were very high in depending on the international market for staples. At the same time, some West African exporters of coarse grains (millet, sorghum, and maize)—most notably Burkina Faso, Mali, Niger and Nigeria— restricted exports in an attempt to protect domestic consumers from the soaring prices. This in turn has driven up costs in neighboring countries, while depressing prices paid to their own farmers, and having only mixed effects on reducing consumer prices (for details, see Kelly et al. 2008; and Diarra and Dembélé, 2008).

The recent staple food price situation in West Africa

Cereal supply in West Africa for 2007/08 was about 5% below the excellent 2006/07 harvest.⁵ Sahelian countries did better than coastal ones, with aggregate 2007/08 production in the Sahelian countries 1% below the previous year but 17% above average levels for 2002-2006. Nevertheless, there were important pockets of poor production in a number of Sahelian countries (e.g., in Senegal, Mauritania, Burkina Faso, and Niger). Among coastal countries, four experienced production declines from the previous year (Ghana, Benin, Côte d'Ivoire and Nigeria) ranging from 7% in Nigeria—by far the largest grain producer in West Africa— to 13% in Ghana, while production in Togo and Sierra Leone increased by 3% and 21%, respectively. Various reconnaissance missions and market information reports confirm that initial responses to these various production shortfalls by the private sector were positive, with new trade routes being developed and the relative importance of existing routes changing in response to the emerging demand.⁶ Most analysts agree that this relatively small decline in aggregate regional production and the demonstrated ability of the private sector to respond would not, under historical circumstances, have resulted in the cereal price hikes that have been experienced during 2007 and 2008. Thus, it was the combination of slightly lower production in West Africa, higher regional demand, and much higher world prices that resulted in the current high-price situation in West Africa.⁷

Demand for cereals is growing in the region not only as a result of population growth and urbanization but also because as incomes rise, consumers demand more products

⁵ All production data come from presentations made by CILSS at the CILSS Market and Trade Opportunity Conference, Cotonou, April 2008. More details are available in Kelly et al. 2008.

⁶ See, for example, the discussion in SIMA (2008) and Diarra and Dembélé (2008) about the emergence since 1999 of the new “Kantchari (Burkina Faso) trade corridor” linking producers in Mali and Burkina Faso with growing markets in Niger, northern Nigeria and northern Benin.

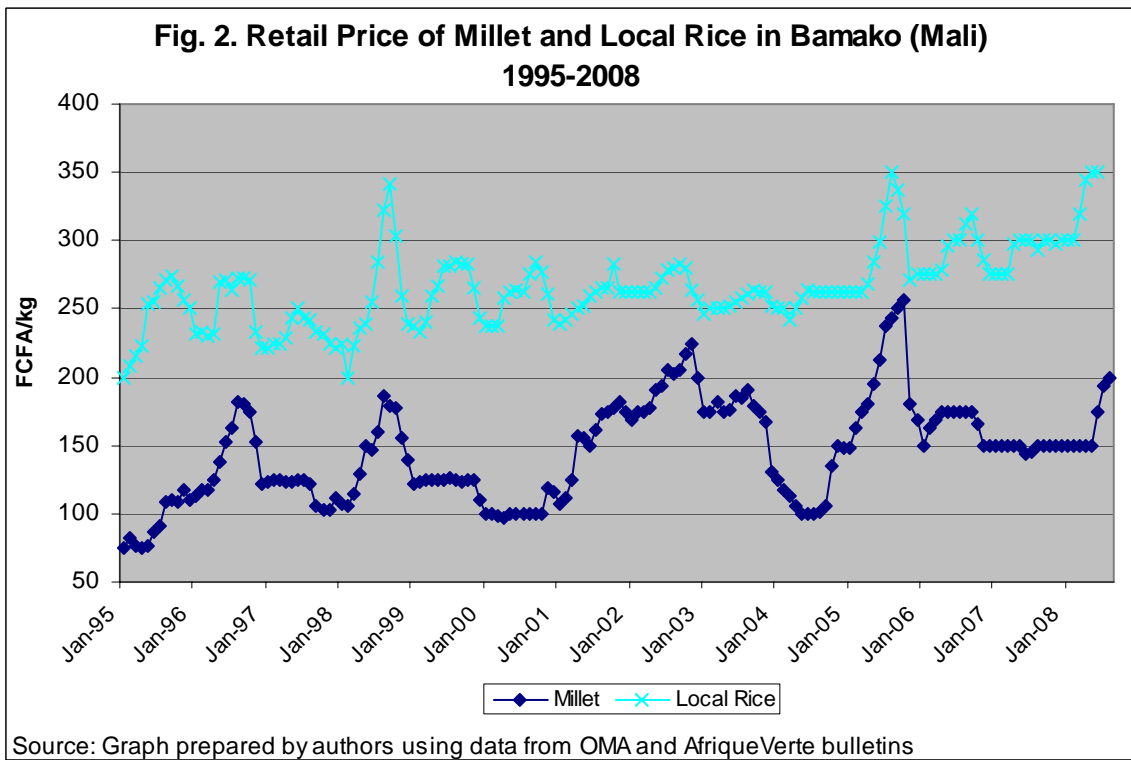
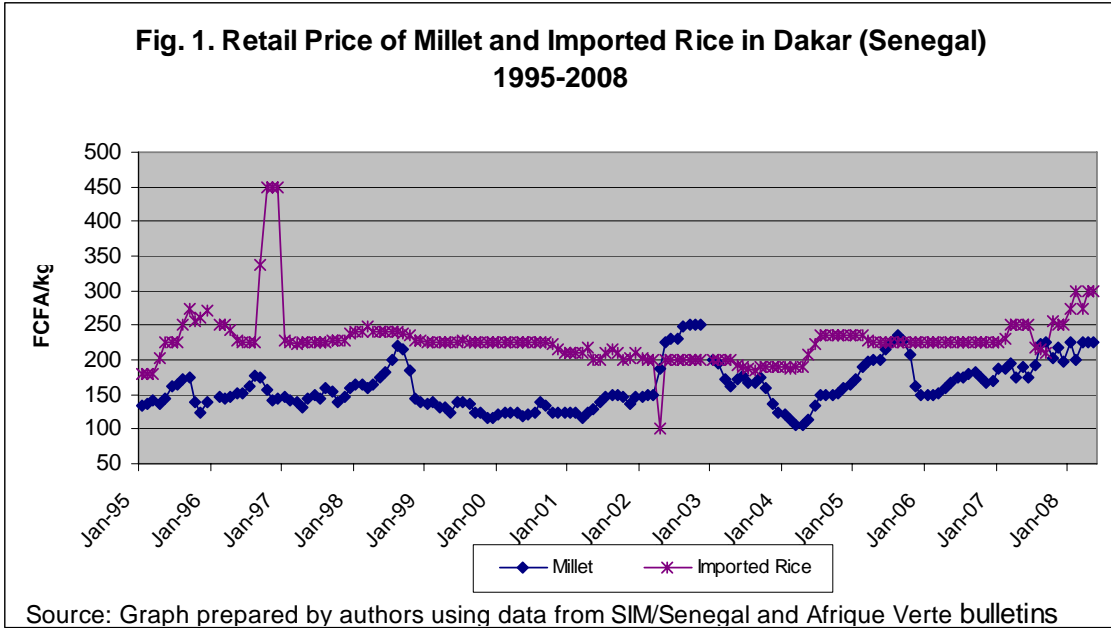
⁷ For a discussion of the many factors contributing to the high world prices, see the websites on this topic developed by the World Bank (<http://www.worldbank.org/html/extdr/foodprices/>), the IMF (<https://www.imf.org/external/pubs/ft/survey/so/2008/NEW042808A.htm#top>), the International Food Policy Research Institute (<http://www.ifpri.org/themes/foodprices/foodprices.asp>) and Michigan State University (<http://www.aec.msu.edu/fs2/responses/index.htm>).

that require cereals as intermediate inputs (e.g., dairy products, meat, poultry, and alcoholic beverages). Nigeria, for example, had a significant increase in demand for maize in 2007/08 as its poultry industry recovered from a downturn associated with avian flu. There is evidence that demand for poultry and livestock feed is also growing in Mali, although at a slower rate than in Nigeria. It is not clear that government estimates of cereal needs using traditional “cereals balance” methods are fully accounting for the growth in such intermediate demand.

Generalized inflation is an additional factor contributing to political unrest surrounding rising food prices and concerns about food security. For UEMOA countries, overall prices were 7% higher in May 2008 than a year earlier. This is in contrast to historical patterns of moderate inflation (less than 4%/year) since the late 1990s. Outside the CFA franc zone, inflation in Nigeria and Ghana was higher (5% and 11%, respectively) in 2007, but lower than 1999-2006 rates, which went as high as 19% (Nigeria) and 33% (Ghana) during peak years. The range of products whose price increases have raised consumer concerns is very broad. For example, higher energy prices translate into higher transport costs for food and costs of getting to and from work, school, and markets; transport price hikes can also cut into profit margins, reducing the net incomes of artisans, traders, and transporters. Lodging costs and prices of basic household goods are also rising, leaving less money for food.

Food price inflation, of course, is an important component of generalized inflation; for UEMOA countries, food prices increased 14.2% from May 2007 to May 2008. Products such as milk, meat, fish, and cooking oil are frequently cited as major culprits. The degree to which staple food prices are rising varies by country, by product, and by source (regional or world markets). Yet it is important to note that for most countries, cereal prices, even in nominal terms are not at historical highs (particularly for coarse grains). Prices for coarse grains were higher during the crisis year of 2004/05, when droughts and locust attacks created a supply shortfall, although rice prices are now at or above the 2004/05 levels. Figures 1 and 2 illustrate the long-term price patterns for Dakar and Bamako. As recently as July 2008, FEWSNET reported that millet and sorghum prices in northern Nigeria were still slightly below their 2004/05 levels, although they were substantially above prices following the good 2006/07 harvest.⁸ Thus, it is not high food prices alone, but rather the combination of higher food prices in conjunction with broader generalized inflation, that is leading to consumer unrest.

⁸ For more details on coarse grain prices see Kelly et al., 2008 and (http://www.fews.net/docs/Publications/nigeria_2008_07_final.pdf)



Figures 1 and 2 also illustrate that while rice prices have climbed significantly, locally produced coarse grain prices have not, until very recently, shown a similar price increases. In West Africa, it is important to distinguish between staples such as rice and wheat, which are internationally traded, and those that are not as widely traded internationally but are important in regional markets (often referred to as “semi-

tradables”).⁹ The latter include millet, sorghum, fonio, cassava and yams. Maize is an intermediate case. Historically, relatively little maize has been traded in or out of West Africa, although this situation is beginning to change, particularly with the increasing demand for feedgrains for the growing poultry industry. Over the past 40 years, West African consumers, particularly in urban areas, have shifted their consumption increasingly towards rice and wheat products, in part because they are easier to prepare and consume in time-constrained urban settings. The current high international prices of rice and wheat have been quickly transmitted to West African consumers as illustrated by Figure 3, which shows how prices of domestically produced rice closely track those of imported rice in Mali. A key empirical question is the degree to which the higher prices of wheat and rice will spill over onto the semi-tradables, driving up their prices as consumers shift consumption to these cheaper locally produced staples. Beginning in April-June, coarse grain prices in Mali, Senegal, Burkina Faso, and Niger, which had been relatively stable earlier in the year, began to rise, suggesting that consumers had begun to overcome their historical reluctance to substitute coarse grains for the easier-to-prepare rice and wheat products (Figures 1 and 2).¹⁰

Imported rice, and to a lesser extent wheat used in bread, are the biggest problems for import-dependent countries such as Senegal; but imported rice prices are also rising in countries such as Burkina Faso and Mali, which are less reliant on imports. Maize is a problem for countries with production shortfalls (e.g., Nigeria and Ghana) and their neighbors (Niger, Burkina Faso, and Mali), whose markets are being used to help fill the shortfalls (Figure 4).

Fig. 3: Imported and domestic rice price trends: Mali

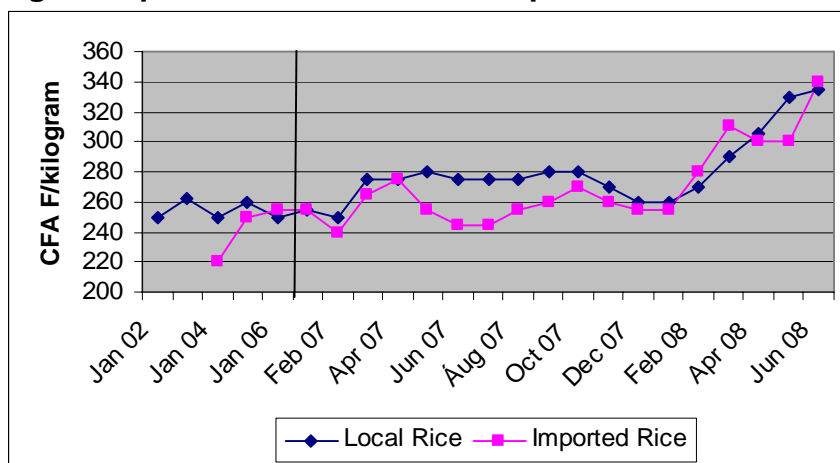
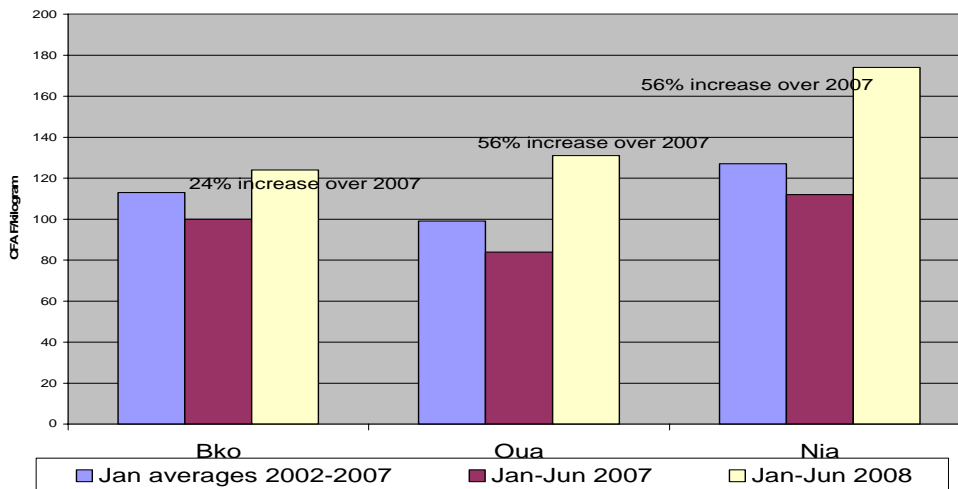


Fig. 4: Maize Price Trends in Bamako, Ouagadougou, and Niamey



Source: Graph compiled by authors from data in Afrique Verte Bulletins.

Short-run policy responses and emerging picture of impacts

Table 1, adapted from a recent paper by the World Bank (April 2008), presents a set of policy options for dealing with rising food prices. Four options fall into the category of safety-net programs, and six can reduce food prices in general. The table evaluates each policy option in terms of how well it targets vulnerable groups and preserves incentives for beneficiaries to work or produce more staples as well as in terms of costs and ease of implementation and management. As the focus of this paper is the relationship between trade policies and rising prices, the policy tools of most interest are those in the “price reducing” column, such as tariff adjustments and export bans, although subsidies and stock releases implemented at the national level will also influence both domestic and regional trade decisions made by private-sector actors. The World Bank judged that reducing tariffs and taxes can be more effective (four of five effectiveness criteria are applicable) than export restrictions (only one applicable effectiveness criterion), with subsidies and stock releases falling in the middle (2-3 relevant criteria).

Table 1. Effectiveness of Policies for Mitigating High Food Prices	
Price Reducing Tools*	Safety-net Tools*
<ul style="list-style-type: none"> • Reducing Tariffs/VAT (2, 3, 4, 5) • Subsidies/rations <ul style="list-style-type: none"> – Generalized (3, 4) – Targeted (1, 2, 3) • Release stocks (2, 4) • Export restrictions (4) • Producer price controls (0) 	<ul style="list-style-type: none"> • Targeted cash transfers (1, 2, 3, 5) • Food for work (1, 2, 3) • Food aid (1, 3, 4) • Feeding/nutrition program (2, 3)
<p>* Numbers following each tool refer to the following “effectiveness criteria”:</p> <ol style="list-style-type: none"> 1. Targets vulnerable 2. Preserves incentives 3. Costs contained 4. Easy to implement 5. Limited management and governance concerns 	

Policy instruments used by West African countries to deal with the high food prices fall primarily in the category of those that are “easy to implement,” although perhaps difficult to enforce (a criterion not listed in the table). Those relating to regional trade include tariff relief policies implemented by Niger, Burkina Faso, Mali, Senegal, Cameroon, and Nigeria and export restrictions imposed by Mali, Burkina Faso, and Niger—all countries whose production this year has matched historical norms.

Tariff relief. A disadvantage of reducing tariffs on imported staples is that unless the reduction is implemented well in advance of a crisis situation, it is unlikely to have the desired impact because traders are usually unwilling to reduce prices of currently held stocks for which the taxes have already been paid. Response also tends to be slow when import markets are dominated by a few large players who face few competitive pressures to pass on cost savings to consumers—a situation that is common in the region. Furthermore, when implemented in the context of rapidly rising prices, even if wholesalers do pass on the cost savings, consumers may not perceive lower prices because the importers’ purchase price may have risen by more than the tax reduction. Or if the importers agree to a fixed selling price in exchange for a tax holiday, they may not be able to honor the agreement if the world prices (and hence the prices they pay) rise rapidly after the agreement with the government is signed. A recent news item (IRIN 29 April) reported that prices of rice, flour, and fish were still at their previous levels or higher almost two months after the government of Cameroon lifted import taxes. The government received agreement from wholesalers that they would pass on the 5 percent reduction in price to buyers, but the impact had not yet filtered down through retailers. A second drawback of the tax holiday on imports is that it reduces government revenues that could be used to support measures

to expand domestic production.¹¹ For example, Cameroon is currently considering reinstating its import tax on staples and using the revenues to subsidize local production. In Mali, where the government has just announced a major new rice production program, funding is constrained by limited resources because of the reduced cereal and fuel import tax revenues.

Export restrictions. While there is some evidence that immediately following the introduction of export restrictions, regional trade was reduced, recent reconnaissance missions in Mali and Niger (Diarra and Dembélé 2008; SIMA 2008) suggest that trade picked up again and that the main impact of the export bans has been increased transactions costs associated with moving supplies from surplus to deficit zones—costs that are ultimately borne by the consumers in the importing countries and by farmers in the exporting countries, reducing the latter’s incentives to invest in agriculture and expand production.

In essence, export bans in West Africa act like very badly designed and poorly implemented export taxes. Like export taxes, they depress producer incentives in low-cost, more efficient producing countries (e.g., Mali and Burkina Faso) and raise producer prices in higher-cost importing countries. They therefore encourage staple food production in areas where such production is more costly while discouraging it in areas that currently have a comparative advantage. This shift in incentives leads to resource misallocation within the region, raising the costs of achieving regional food security. Unlike a fixed export tax, however, the level of illicit payments needed to evade an export ban can vary widely, increasing the risk that traders face and reducing their ability to plan. Furthermore, the revenues generated by these illicit taxes flow into the pockets of private individuals who control access to the border crossings (customs and police officers, etc.), rather than into government coffers, where they could be used to invest in increasing agricultural productivity.

The reconnaissance missions confirmed that cereal flows from Mali to Mauritania continued briefly after Mali’s export ban was announced (local authorities permitted traders to export existing stocks) but then stopped due both to stricter enforcement and the implementation of import subsidies in Mauritania that made imported wheat products and rice less expensive than Malian coarse grains. The Niono/Nara to Mauritania trading axis had an overall decline in millet exports of 38% from 2007 to 2008. A similar decline in millet exports was observed between Sikasso (Mali) and Côte d’Ivoire (27%). The situation was reversed, however, for millet moving from Sikasso to Niger (174% increase) and for maize along several other market axes, in spite of the export ban. The volume of maize shipped from the Sikasso region to Senegal increased from 1880 tons (January to July 2007)

¹¹ Loans available to government through the IMF’s “Exogenous Shock Facility” may help them to continue to make these key investments in spite of the budgetary shortfalls brought about by the tax reductions.

to 6047 tons during the same period in 2008.¹² Along the Kantchari-Niamey axis between Burkina Faso¹³ and Niger, maize exports grew from 8384 tons in 2007 (January – July) to 10,870 tons in 2008, in spite of Burkina’s and Mali’s export bans. Much of this increased trade seems to have been destined ultimately for northern Nigeria and Northern Benin, which in normal years export coarse grains to Niger. This year, because of poor harvests, they are importing, drawing grain from as far away as Mali.

For maize, the Malian trade restrictions, officially introduced in February 2008, were followed by rising, rather than falling, wholesale and retail prices in Koutiala, the heart of Mali’s maize production zone, in response to the increased export demand (Table 2).

Table 2. Evolution of wholesale and retail prices of maize in Koutiala, Mali: 2007 and 2008						
Month	2006/07		2007/08		% Variation 2007 to 2008	
	Wholesale	Retail	Wholesale	Retail	Wholesale	Retail
January	70	75	98	103	40	37
February	75	80	97	105	29	31
March	75	80	101	106	35	33
April	75	80	106	112	41	40
May	76	81	118	124	55	55
June	78	83	137	143	76	72

Source: Diarra and Dembélé 2008.

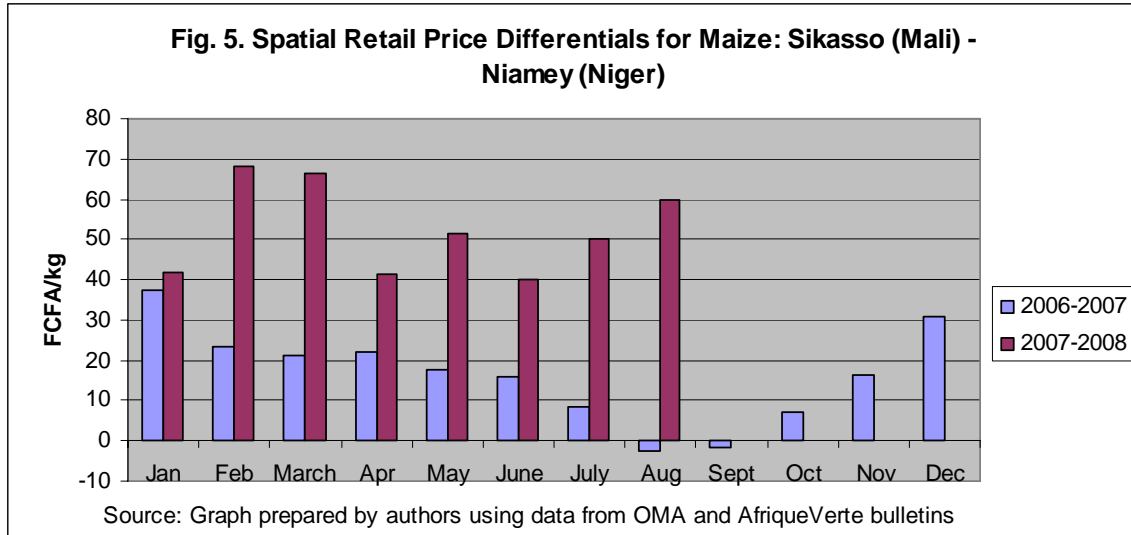
Interviews with traders also revealed a significant increase in transaction costs for exports from Mali to Senegal and Niger (estimates ranging from 250,000 to 440,000 CFA francs per truck load of 60 to 80 tons of cereal—an eight-fold increase in illicit payments relative to the period prior to the export bans). An analysis of the differences between wholesale maize prices in Koutiala and destination markets in Senegal and Niger in late August, 2008, however, revealed a large increase in the price differential between these markets, suggesting that the trade restrictions, while not stopping trade, had reduced the degree of market integration in the region (see figure 5).¹⁴ Dakar prices were 95 CFA francs higher per kilogram and Niamey prices 86 CFA francs higher than in Koutiala. Estimated transport and transaction costs (excluding those associated

¹² Improvements in the road infrastructure between Mali and Senegal in 2007/08 undoubtedly accounted for some of the increase, but it is striking to see such a rise in exports at a time when the Malian government was trying to restrict them.

¹³ The Burkina market is fed by supplies from Mali, Côte d’Ivoire, Ghana and Togo, depending on production patterns in a given year.

¹⁴ The price differentials shown in figure 5 are smaller than the differentials mentioned in the text. The figures cited in the text refer to a slightly later period (late August 2008) and to differences in wholesale rather than retail prices. Nonetheless, the story from figure 5 is clear: spatial price differentials have widened sharply since the imposition of the trade restrictions.

with circumventing the export restrictions) range from 26 to 28 CFA francs/kg, leaving about 60 CFA francs/kg in Niger and 67 in Senegal to cover importer and retailer margins plus “circumvention” costs. So long as the price differences between markets are high, trade restrictions are unlikely to stop cereal flows from surplus to deficit markets. In this example, it is Malian producers and Senegalese and Nigerien consumers who are being penalized by the trade bans while those collecting the illicit taxes are benefiting. The result is lower incentives in the system for stimulating production to reduce ongoing food insecurity.



Four emerging strategies

Four major strategies have emerged or have been advocated as means of dealing with the food crisis in the short run while stimulating agricultural growth in the long run. Below, we briefly discuss the main advantages and disadvantages of each approach.

1. An emphasis on national self-sufficiency

During the mid to late 1980s, most West African countries, especially the francophone countries, shifted from a policy advocating national food self sufficiency to one of food security, based on a combination of national production and trade, particularly regional trade that takes account of the complementarity of resources within the subregion. This move away from an autarkic approach to food security was initially strongly pushed by external donors as part of structural adjustment packages, but later was adopted as a central element of the strategies advocated by regional organizations such as ECOWAS, UEMOA, CMA/WCA and CILSS.

The current crisis, with its trade bans both in West Africa and from Asian rice exporters, has raised the risks of such a trade-based approach and led some countries to aim for greater national self-sufficiency in basic staples. The most striking example is Senegal’s “Grand Agricultural Offensive for Food and

Abundance” (GOANA—*Grande offensive agricole pour la nourriture et l'abondance*), that seeks to move Senegal from 20% rice self-sufficiency to 100% by 2015.

A key advantage of a national self-sufficiency strategy, if it succeeds, is that it makes the country less dependent on the vagaries of other countries' export policies for politically important basic staples. Such a strategy also focuses attention on the agricultural sector and may reverse the historical underinvestment in agricultural production in most African countries. In addition, if agriculture is the main provider of employment and source of income for the majority of people, then such policies can promote overall development if they spur increased productive investment in agriculture that allows the country to achieve lower unit costs of production. This is more likely to be achieved if the country focuses on long-term investment in the key drivers of agricultural development rather than just short-term production subsidies.

The costs of such a strategy depend critically upon:

- The degree to which domestic production can be increased through increased *productivity* (driving down the unit cost of production) vs. expanding production through the increasingly costly application of more inputs using the same low-productivity technologies. For example, if production is expanded through the use of subsidized inputs, will those subsidies lead to adoption of new technologies (e.g., more fertilizer-responsive varieties) that eventually drive down unit costs of production? Or will the subsidies have to continue (and be financed) indefinitely as farmers apply the subsidized inputs in their current production systems?
- How stable domestic production will be relative to world market supplies. A traditional justification for trade is that it acts to stabilize domestic supplies, as global or regional production is likely to be more stable than the production in a single country.

The traditional arguments against an autarkic staple food policy are twofold. First, if the country's unit cost of production is significantly higher than the price at which staples can be imported, then either consumers (through higher prices) or taxpayers (through taxes that pay for production subsidies) will bear the higher-cost local production. Those resources, the argument goes, could yield higher returns to the country if they were invested in other sectors of the economy and the revenues thus generated were used to import food. If the production is expanded by subsidies (e.g., for fertilizer), the critical issue is the opportunity cost of the resources going into the subsidy. They likely could have created greater wealth for the economy in other uses; otherwise, they would have flowed into staple food production without government action. Second, as mentioned above, trade can be used as a stabilizer of domestic markets because global production is generally more stable than production in an individual country. But to use trade in this way, there must be some trade infrastructure in place and links with reliable trading partners, neither of which are likely to emerge if a country

pursues an autarkic food policy. Furthermore, if the country has a surplus, without ongoing trade relations with its neighbors, it may find it harder to find customers for its surplus, leading to more volatile domestic prices.

Yet the recent export bans by countries such as India, Vietnam, Mali, and Burkina Faso bring both of these arguments against autarky into question. Even though the import bans have not really completely cut any country off from foreign supplies, the importing countries have reason to question whether a trade-based food security policy is too risky. If export bans result in staples not being available at any price, then the advantages of a trade-based policy disappear.

2. Regional trade zone with protection against outside imports

ECOWAS is premised on the notion of the free movement of goods and people within member states, while offering some degree of protection from outside imports. In this sense, it has followed, in principle, the model of most free-trade areas, with the well-known effects of trade creation (expanding trade within the community) and trade diversion (reducing trade from lower-cost exporters that are not part of the community). As noted above, in practice the ECOWAS zone suffers from numerous internal trade barriers, ranging from officially imposed trade bans to bribes extracted along major trade routes. While both ECOWAS and UEMOA practice some degree of taxation of agricultural exports from outside the zone, the levels have historically been modest. For example, the ECOWAS's *prelevement communautaire* (ad valorem tax) on rice imports from outside the zone stood at 0.5% in 2007, while the equivalent UEMOA tax stood at 1%.

More recently, there have been calls for greater regional protection within the community to stimulate West African staple food production. These calls have often framed in terms of promoting “food sovereignty” (Berthelot, 2006; Blein, 2006) and are reminiscent of the calls in the 1980s for a “regional protected zone” for staples in West Africa. The basic argument is that some period of protection from outside competition is needed to spur investment in West African agriculture, presumably leading to cost-reducing technical change that will ultimately drive down food prices. The “regional protected zone” proposal was widely debated in regional forums in the 1980s, led by CILSS and the Club du Sahel, and was ultimately abandoned for three reasons: (a) concern about how higher staple food prices, at least in the short-run, would affect the large number of low-income consumers in the region; (b) lack of convincing evidence that higher prices in short run would lead to rapid adoption of cost-reducing technical change in agriculture given all the other constraints facing the agricultural sector (weak infrastructure, macro-economic constraints such as highly overvalued exchange rates, and weak agricultural research and extension systems), and (c) a lack of common interests from potential food exporting countries, such as Mali and Burkina Faso (which had interest in high food prices), and major food importers, such as Senegal (which had interest in low food prices).

Many of these same constraints still exist. Furthermore, the democratization and increased urbanization that have occurred in most West African countries over the past 20 years have given poor urban consumers even greater voice in policy debates, making a heavily protected regional production zone less likely. However, with high transportation costs and rising world food prices, the region may become competitive vis-à-vis imports from the world market even without a high protective tariff. Thus, the scope may be much greater now for creating a regional agricultural market that links production basins (some of which may span more than one country) to the region's growing consumption centers. Examining the potential for such a market and the investments and policies needed to bring it about is an area that merits further research.

3.. A WTO-style approach, based on open trade

This approach, while often advocated as an ideal that allows countries to achieve food security at least cost by exploiting comparative advantage, has never been fully embraced by West African policy makers. Now with the collapse of the Doha round, a purely liberal approach to food security seems less likely than ever. The main complaint against this approach is well-known: a belief that the OECD countries stacked the rules of trade in their favor, with the result that the high-income countries flooded West Africa with cheap agricultural goods (subsidized rice, powdered milk, etc.) and subsidized OECD producers (e.g., of cotton) that competed with African producers in third countries. While the current high world prices of agricultural commodities have reduced agricultural subsidies for the time being, policy makers remain wary of a completely open policy, especially in light of the recent restrictions on grain exports from major grain exporters such as India and Vietnam.

Nonetheless, if physical availability of basic staples on international markets and reductions in OECD agricultural subsidies could be guaranteed, the advantages of a trade-based food security strategy remain attractive. By focusing its resources in activities where they are most productive, a country and a region can obtain their basic food needs at lowest cost, rather than forcing poor consumers to pay high prices to support inefficient local production. Yet given all the constraints of moving to an equitable and reliable open international trading system, the immediate challenge is to discover paths that allow the West African countries to develop reliable food security strategies that don't require a strong shift back towards autarky. As the example of North Korea shows, autarky is a very costly and seldom effective way to achieve food security.

4.. Bilateral trade agreements within the context of regional economic communities

Export bans, both by countries within ECOWAS and from Asian exporters, have undermined confidence in regional and international trade agreements. Within ECOWAS, it is apparent that the need for national political leaders to protect consumers (many of them poor) trumps regional obligations to "free movement of

goods and people”, particularly in a low-income country such as Mali that fears that its neighbors can outbid it for its staple food supplies. Thus, in the context of the trade bans, countries are increasingly looking to bilateral agreements to assure access to at least some food from the exporting countries. These bilateral agreements often involve a quid pro quo on the part of the importer. For example, Mali is offering its neighbors the opportunity to invest in its major irrigated rice area, the Office du Niger, which would presumably permit the investor countries (such as Senegal) the right to export the resulting production. The political advantage of such bilateral agreements is that they provide some “political recompense” to the exporting country in terms of being able to argue to its own consumers that food is not being exported without a compensating increase in national production.

In addition, some West African countries are exploring bilateral trade agreements with food exporters from outside of West Africa. For example, Senegal recently signed a 5-year agreement with India guaranteeing access to Indian rice exports. It is not apparent how such agreements will interact with regional agreements, such as the common agricultural policies of UEMOA and ECOWAS, which call for common external tariffs for imports from outside the communities. Will the rice imported from India be subject to these tariffs? Once in Senegal, in principle, there would be no restrictions to its re-exportation to any country within the community. Thus, has India really just signed an agreement with all of ECOWAS rather than with just Senegal?

Which path(s) forward, and why?

In the current high-price, post-Doha environment, what are the food-security options for West Africa? One approach that may hold promise is that of a regional trade zone, with modest protection against import surges due to major exchange-rate fluctuations or export subsidies. Such an approach would have the following advantages:

- Wider regional markets will eliminate the small size of national markets (“thin markets”) that make them so volatile. Regional integration will provide more price stability to both producers and consumers, and thus increase incentives for private investment in agriculture. It will also allow scale economies in marketing and processing.
- A regional trade zone will permit the exploitation of ecological complementarities and comparative advantages among countries--e.g., between the Sahel and coastal countries (Badiane and Resnick 2005)
- The region provides the opportunity to pull research resources together and achieve scale economies in technology generation around different production basins, which often span national borders.

- The region can also allow the creation or strengthening of existing regional agricultural training centers.

In principle, the regional approach described above sounds very much like the vision embraced by ECOWAS under NEPAD's Comprehensive African Agricultural Development Program (CAADP). But the history of regional trade agreements in West Africa has shown that moving from vision to reality is not easy. In particular, overcoming the political pressures that restrict trade (both through trade bans and the persistence of non-tariff barriers) will require addressing the following questions:

- Can trade policy alone protect the poor's access to food without undermining incentives and resources to invest in agricultural productivity growth? If so, how?
- What mix of national and regional trade, investment, and subsidy policies are politically feasible, financially sustainable, and most likely to lead to more food security in the West African context of porous borders and diverse national production, resource, consumption, and income patterns?
- What policy changes are needed to transform the current high price environment into an opportunity to attract private investment including foreign direct investment (FDI) into agriculture? Should West Africa adopt national or regional approaches to attract FDI into agricultural production (e.g., regional production basins)?
- Is it possible to move to more predictable, rule-based food policy decision making at the national and regional levels? If so, how? Does West African experience (particularly with UEMOA) in making central bank actions politically independent, transparent, and rule-based provide a relevant model for food security decision making?
- What are the appropriate domestic, regional, and international policy responses to the risks and uncertainty created in the global food markets by export bans?

What we don't know: implications for further research

Responding to the above questions will depend not only on good political judgment but also on answers to key empirical questions that will help determine what is feasible and what would be the tradeoffs involved in different policy options. The following empirical issues need to be addressed both at the regional level and in terms of variations by country and production basin:

- What is the degree of substitution between imported and regionally produced food products (wheat and rice versus local "semi-tradables" like millet, sorghum and cassava)?

- To what degree have the higher prices been transmitted back to farmers as opposed to being captured by other actors in the value chains? Can we do better?
- If world prices stay higher for the coming 10 years as projected by FAO, how is comparative advantage in producing different commodities going to be distributed among countries in West Africa? How competitive will be the regionally produced commodities vis-à-vis imported food items?
- What are the major producing basins for staple crops in the region and what are the likely supply responses in those basins given the enduring high price environment? What are likely to be the major constraints to supply response?
- Which among the technologies now available on the shelf are most likely to increase regional food supplies quickly?
- What are the food assistance programs to the poor that are most compatible with improved production incentives?

References Cited

Badiane, O. and D. Resnick. 2005. Regional trade liberalization and domestic food market stabilization in African countries. Paper presented at World Bank/DFID Workshop on Managing Food Price Risks and Instability in Low Income Countries, Washington, D.C., February 28-March 1. World Bank.

Berthelot, Jacques. 2006. Food sovereignty, agricultural prices, and world markets. Paper presented at the ROPPA forum on Food Sovereignty, Niamey, 7-10 November. Ouagadougou: Réseau des Organisations Paysannes et de Producteurs Agricoles de l'Afrique de l'Ouest (ROPPA).

Blein, Roger. 2006. La négociation de l'accord de partenariat économique entre l'Afrique de l'Ouest et l'Union européenne: Processus et enjeux pour l'agriculture régionale. Paper presented at the ROPPA forum on Food Sovereignty, Niamey, 7-10 November. Ouagadougou: Réseau des Organisations Paysannes et de Producteurs Agricoles de l'Afrique de l'Ouest (ROPPA).

Camara, O. 2004. The impact of seasonal changes in real incomes and relative prices on households' consumption patterns in Bamako, Mali. Department of Agricultural Economics, Michigan State University, E. Lansing, MI. Ph.D. dissertation.

Delgado, C., P. Hazel, J. Hopkins and V. Kelly. "Promoting Intersectoral Growth Linkages in Rural Africa through Agricultural Technology and Policy Reform." *American Journal of Agricultural Economics* 76, no. 5(1994): 1166-71.

Diarra, Salifou B. and Niama Nango Dembélé. 2008. Reconnaissance rapide sur l'impact des restrictions à l'exportation des céréales en 2008 au Mali. Bamako: PROMISAM, August.

IRIN. 2008. Cameroon: Lifting of import taxes fails to reduce food prices. IRIN on-line news story. 29 April, 2008.

Kelly, V., N. Dembele, J. Staatz. 2008. Potential Food Security Impacts of Rising Commodity Prices in the Sahel: 2008-2009: A special report by the Famine Early Warning Systems Network. Washington, D.C.: FEWS NET

Reardon, T., B. Diagana, F. Akindès, K. Savadogo, J. Staatz, Y. Camara. 1998. Sécurité alimentaire et filières agricoles en Afrique de l'ouest en jeux et perspectives quatre ans après la dévaluation du franc CFA: Consommation. Bamako: Institut du Sahel.

SIMA (République du Niger, Ministère du Commerce et de l'Industrie, Système d'Information sur le Marché Agricole). 2008. Impact de la hausse des prix sur les échanges de la sous-région. Niamey: SIMA. August.