

EXECUTIVE SUMMARY

This publication presents key results from the Strengthening Regional Agricultural Integration (SRAI) program. SRAI was a major agricultural policy analysis and outreach initiative in West Africa between 2009 and 2017, supported by the Syngenta Foundation for Sustainable Agriculture (SFSA) and implemented by Michigan State University (MSU) and its West African partners. The program began in the aftermath of the 2007-2008 world food crisis. World rice prices had nearly tripled, the prices of other basic staples had spiked sharply, and several Asian grain exporters had imposed export restrictions in an attempt to hold down domestic prices. West African governments implemented policy measures that limited the full transmission of these international price spikes to their markets. Nonetheless, food prices in the region still shot up sharply and food riots broke out in many cities. The experience severely shook the confidence of many West African leaders in the reliability of international and regional markets as sources of food for their growing populations.

In the wake of the 2007-2008 crisis, a process of *globalization in reverse* began to unfold in the region, with governments increasingly calling for greater national food self-sufficiency and moving away from efforts to expand regional agricultural integration that had been underway since the 1990s. In the traditional grain-exporting countries of West Africa, these calls led to periodic export bans, aimed at tempering upsurges in domestic food prices. The message that seemed to be sent to farmers in these countries was that they were free to sell into regional food markets, but only so long as prices were low. Such a message, and the resulting market risks that it implied, depressed farmers' and traders' incentives to invest in new technologies, equipment, and practices that could boost productivity.

It was in this context that SFSA approached MSU about jointly designing a research and outreach program to provide West African policy makers with empirical information concerning the costs of moving away from regional agricultural integration and about the alternatives available for dealing with food crises like those of 2007-2008. An equally important goal was to carry out such work collaboratively with West African partners, thereby strengthening local capacity to carry out such analyses in the future.

The resulting SRAI program developed a research and outreach program that evolved over its seven-and-a-half year life. It initially focused primarily on the impact of the 2007-2008 crisis on West African grain markets and the policy responses to it, but the focus gradually broadened to cover several topics that are central to policies affecting regional agricultural integration. Major research themes included:

- The degree to which international price spikes for food were transmitted to West African markets;
- How production and trade flows responded to those shocks;
- The evolution of food consumption patterns in West Africa and its implications for the focus of future food policies, the strategies of agribusinesses, and the design of social safety-net programs;
- The competitiveness of West African cereal value chains (particularly rice) vis à vis imports; and

- The design of alternative models of value-chain organization to link smallholders more effectively to the rapidly expanding markets for value-added agricultural products.

The resulting analyses fed into national and regional policy discussions that gained strong momentum following the crisis. Chief among these was the African Union's Comprehensive Africa Agriculture Development Programme (CAADP), which in West Africa was integrally linked to the ECOWAS Regional Agricultural Policy (ECOWAP). In part because of such outreach, many of the shortcomings of national and regional policies noted in the findings below are beginning to be addressed in the new 2016-2025 phase of the ECOWAP/CAADP program.

Key findings from the study and their policy implications included the following:

West African governments were able to reduce the transmission of global price shocks to their markets, but at high cost. Among the countries analyzed (all in the CFA franc zone), about one-third of the percentage changes in world rice prices (denominated in US\$) was transmitted to domestic markets over the period 2000-2008. A somewhat higher share (averaging around 40%) of global maize price changes was transmitted to those markets. Part of this muting of international price shocks was an artifact of the declining value of the US dollar relative to the CFA franc over this period (a situation that has reversed since 2010), but much of it was due to policies implemented by West African governments to protect consumers. These policies included, among others, cuts in import taxes, export restrictions from traditionally grain-surplus countries, and subsidized sales to consumers. While partially successful in reducing pressure on consumers, the policies had high opportunity costs in terms of foregone government revenues that could have supported programs to expand domestic production and in terms of reduced price incentives to domestic farmers.

West African agrifood system actors are responding to new opportunities, but face high transaction costs. West African farmers, input providers, merchants, agroprocessors, exporters, and retailers have responded innovatively to the many of the changes in domestic and international demand, availability of new technologies and physical environment that they face. Evidence includes rapid expansion in the production of rice, maize, and cassava in recent years; growth of peri-urban horticultural and dairy production; expansion of regional trade; and the emergence of new trade corridors in response to regional patterns of demand, such as the growing demand for feedgrains in Nigeria. As economic policies and agricultural prices in the region have become more favorable, domestic and international firms have expanded their investments in agricultural production and agroprocessing and are experimenting with new models of contracting with small farmers. In undertaking all these actions, however, private-sector actors have faced substantial transaction costs. Some of these stem from increased physical insecurity in West Africa in recent years, but many result from policies that change frequently, are sometimes inconsistent across countries and are often opaque in their application. This is particularly the case with rules governing trade in both agricultural products and inputs among different countries within the region. Regional integration policies, such as those of ECOWAS and the West African Economic and Monetary Union (WAEMU), are attempting to reduce these transaction costs, but as noted below, policy implementation remains a major challenge.

Food consumption patterns in West Africa are changing profoundly, affecting where future food policies should focus their attention. Among the chief driving forces changing the environment facing West Africa's agrifood system is the changing pattern of food consumption in the region. Between 1980 and 2009, per capita availability of calories, protein, and fat increased, in some cases dramatically, in almost all of the 15 member states of ECOWAS. Diets diversified, both among the starchy staples consumed and because of greater per capita availability of fruits, vegetables, and animal products. The largest changes occurred in countries experiencing the most robust economic growth, such as Cape Verde and Ghana. Budget-consumption studies reveal that urbanization and per capita income growth are pushing demand strongly towards perishables and products that are more convenient to prepare and consume. The projected percentage rate of growth of demand through 2040 for animal-based products, fruits and vegetables and vegetable oil all exceed that for cereals, with the bulk of the increase in demand coming from urban areas. Improvements in grain processing have increased the willingness of consumers to substitute milled coarse grains, such as maize, millet, and sorghum, for rice during periods of sharp price increases for rice. The evolving pattern of food consumption implies that a firm understanding of the nature and dynamics of consumption is critical to designing demand-driven policies. In particular, SRAI's findings imply that while the production and competitiveness of basic staples will remain important, the focus of food policy needs to broaden to give greater attention to perishables such as animal-based products, fruits and vegetables, for which demand is growing exponentially. It is also necessary to focus more on the post-harvest segments of the agrifood system that are critical in the marketing and processing of the more perishable and convenient types of foods that West African consumers increasingly demand. These post-harvest segments tend to be labor-intensive, offering the potential for substantial job creation for the burgeoning labor force.

West African agriculture can be competitive, but only if the entire value chain is addressed. Analyses of the financial and economic profitability of value chains for key products such as rice and maize indicate that selected West African production systems can be competitive with imports from overseas. That competitiveness, however, will increasingly depend on the efficiency of post-harvest operations, such as milling, marketing, and quality control. Unfortunately, until recently, most agricultural policies and investment plans, such as those developed under the first phase of ECOWAP/CAADP, concentrated most of their attention at the farm level. Future programs will need to give more attention to improving the post-harvest segments of the value chain—segments that will increasingly determine the competitiveness of West African agriculture in the future. A key element of such a focus will be on improving vertical coordination, including the design of contracting models to link smallholders more effectively to the growing markets. SRAI case studies of such models demonstrate that there is no one-size-fits-all approach, but provide insights into design elements that need to be taken into account for different types of products in various environments.

Greater regional integration is crucial to addressing many of the challenges facing West African agriculture. Greater regional agricultural integration has the potential to spur growth and food security through at least three major pathways:

- Broadening markets for farmers, traders, and agroprocessors through establishment of transparent rules for regional trade and mutually recognized grades and standards across countries. Such broadening would not only offer farmers more outlets for their fresh

products but also increase the scope for processors to source raw products regionally rather than just nationally. Regional sourcing would reduce processors' incentives to turn towards imports, which they now frequently view as a more reliable and less costly source of raw materials.

- Capturing economies of scale in production and marketing of fertilizers, improved seeds and crop protectants; agricultural research, extension, and higher education; and output processing. Without greater regional integration, there is no way for West Africa to capture such scale economies, which fuel the competitiveness of global agricultural powerhouses such as China, India, Brazil, and Indonesia.
- Promoting consumers' ability to substitute across commodities. West African agroprocessors have developed more convenient forms of traditional staples, such as processed sorghum and maize products, and consumers increasingly appear willing to substitute them for imported rice when rice prices spike. Yet simulation analysis demonstrates that without more fluid regional trade of the traditional staples during periods of drought or world price spikes, the ability of consumers, particularly the poor, to afford such substitutes quickly evaporates.

One concrete and immediate action that could help to foster such integration would be to revitalize and extend the border conferences that took place in 2009 between Mali and Guinea and in 2011 between Mali and Senegal. These conferences brought together traders, farmer groups, truckers, border control agents, and other public officials to discuss the rights and responsibilities of those involved in regional trade and to develop concrete steps to improve it.

The regional trade policy agenda needs to go hand-in-hand with a social-protection and risk-mitigation policy agenda. In West Africa, the political motivation to impose food export bans during periods of high prices is to protect domestic consumers, including the poor and politically vocal urban groups. Most policy makers understand that imposing export bans hurts long-term agricultural growth by depressing the incentives of farmers and traders to invest in boosting production. However, policy makers and politicians live in the short term and need to have reliable tools to protect vulnerable populations from spiking prices. As a result, the regional trade agenda needs to go hand-in-hand with the social protection and risk-mitigation agenda. Instead of relying on general trade policy to try to protect vulnerable groups from spiking prices, there is a need to develop targeted and economically sustainable social safety nets and risk-mitigation programs to protect the most vulnerable from the higher food prices that result during crises. Without such programs, the dream of more open trade is likely to remain unattainable. Many of the ECOWAP national investment plans and the regional plan have recognized this need to link the regional integration and social-protection agendas by including components aimed at experimenting with more cost-effective and targeted social safety-net and risk-mitigation programs.

Policy implementation is a greater challenge than policy design. While tough policy design challenges remain, bigger challenges lie in implementation. Improving implementation will require much better and more detailed data, particularly on the post-harvest segments of the food system, and on reinforced human capacity for policy design, implementation, and monitoring and evaluation. Such strengthening needs to include not only governmental and intergovernmental organizations at all levels, from supranational (e.g., ECOWAS) to local

(e.g., *commune* or township), but also private-sector stakeholders, including farmer groups, who are increasingly called upon to implement and monitor policies and programs jointly with government. Such capacity strengthening needs to draw more on the under-used policy analysis capacity of West Africa's universities and policy research institutes. Drawing personnel from these organizations to help with the on-the-ground challenges faced in policy design and implementation could be one component of a much larger effort to transform West Africa's educational system to produce the skills needed for a 21st Century agrifood system.

In addition to these findings, the SRAI program also revealed some broader lessons about the agricultural policy process itself. Chief among these were the following:

- Restricting regional trade generates economic rents that can be captured by those who are in a position to limit such trade. Good governance efforts therefore need to aim at reducing those rents and the capacity and incentives of those in a position to restrict trade from capturing them.
- Strengthening local policy analysis capacity is critical to sustained policy improvement. Local capacity strengthens local ownership and buy-in of policy recommendations and follow-up regarding policy implementation.
- Policy outreach activities need to be an on-going activity rather than a one-shot affair. The policy environment is constantly evolving, and key policy makers frequently change jobs. As a result, there is a need to revisit previous policy recommendations periodically to reassess their relevance and to communicate key messages to new policy makers.
- It is unrealistic to expect economic policies to be devoid of political considerations. Rather than decry such political motivations, a more realistic approach may be to try to design policies so that short-term programs, motivated in part by political considerations, help address long-term structural constraints to growth.