SRAI
Strengthening Regional Agricultural Integration in West Africa

http://aec.msu.edu/fs2/srai/

Annual Report:
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PROJECT SUMMARY AND 2011 HIGHLIGHTS

SRAI began on January 1, 2009, and was funded for an initial period of three years, through December 31, 2011. In December, 2011, the project was granted a two-month no-cost extension (through February 2012), and discussions are currently under way with the Foundation about an extension of the project (with additional funding) through the end of 2012. This report covers the final year of the first phase of the project and also presents some overall reflections on achievements during the first 3 years of SRAI.

SRAI grew out of concerns that arose during the 2007-08 world food crisis, when most West African countries took short-term measures to deal with the crisis at the national level without considering how such measures (such as trade bans) affect: (a) food security and marketing systems in neighboring countries in the short and medium term, (b) long-term incentives to farmers and marketing agents throughout West Africa to invest in productivity-enhancing technologies and institutional innovations; and (c) incentives for consumers to shift their consumption patterns more towards agricultural staples produced in the sub-region. As food prices have remained high during the 2008-11 period (and are projected to continue to be high in West Africa in 2012 given the mediocre state of the 2011/12 harvest in many Sahelian countries), the concerns that gave rise to SRAI remain at the center of food policy debates in West Africa.

In order to address these concerns, Michigan State University and the Syngenta Foundation for Sustainable Agriculture designed a project with the goal of increasing the capacity of stakeholders in the Sahelian countries of West Africa to implement more effective policies for increasing productivity of staple crop production and marketing. In order to achieve this goal, the project originally had two overarching objectives:

- Increasing the availability of information on the effectiveness of different policies to achieve the project goal, through a series of applied research activities; and
- Improving stakeholders’ understanding of the impacts of different policies on productivity, market access, income growth and poverty reduction, through a series of outreach activities aimed at making the results of applied research broadly available to stakeholders in easily understandable form.

In late 2010, in response to a request from the Malian Ministry of Agriculture, a third objective was added to the project: contributing to a study that would diagnose opportunities and constraints in the current cereals marketing system in Mali and propose needed investments and policy reforms.

In implementing SRAI, Michigan State University (MSU) has worked closely with West African NARS and national agricultural market information systems (MIS) and regional research and policy organizations, such as AfricaRice; the Regional Strategic Analysis
Knowledge Support System (ReSAKSS) for West Africa, based in Ibadan; the West African Network of Market Information systems (RESIMAO), the Laboratoire d'Analyse Regionale et d'Expertise Sociale—LARES--based in Cotonou, Benin; CILSS; and ECOWAS. SRAI has also collaborated with international organizations, such as the Farm Foundation (in France), the OECD’s Sahel and West Africa Club, and the UN’s High-Level Panel of Experts on Food Security and Nutrition. This collaboration has leveraged SRAI’s research resources and provided avenues for policy outreach to high-level policy makers at the national, regional, and international levels. SRAI represents part of a larger portfolio of applied research, outreach and capacity-strengthening activities on agricultural market integration in the ECOWAS zone implemented by MSU with funding from an array of sources, including USAID/Mali, USAID/West Africa Regional Office, the William and Flora Hewlett Foundation, and the Bill and Melinda Gates foundation. The SRAI program thus also builds on and leverages this other funding.

During 2011, almost all the research activities laid out in the projects revised work plan were completed. Key research achievements during the year included:

- Completion in December of the comparative advantage studies on rice and maize competitiveness, implemented in partnership with Africa Rice, for most countries in West Africa.
- The completion of a series of studies with ReSAKSS/West Africa, NARS and national statistical offices, of trends in food consumption across 7 countries in West Africa over the past 20 years.¹
- Co-sponsoring and participating in a regional workshop to review the results of a test of methods to monitor cross-border flows of agricultural products in West Africa. This testing was conducted by MSU’s policy partner, CILSS, and the workshop was held in Niamey on May 16-18. This activity was not included in the initial proposal or in the revised work plan, but was undertaken in response to a special request from SRAI’s policy outreach partner CILSS as part of its efforts to monitor cross-border trade more effectively.
- The writing of three Research Syntheses documents (in July-September) that summarize key findings from the studies on the price transmission and the food consumptions studies. These syntheses are available on the SRAI project web site.

Highlights of SRAI’s outreach activities included:

- The launching of the SRAI list-serve initiative at the end of January 2011, which provides key outreach messages to top policy makers and advisors in African governments and regional organizations.
- A high-level Conference on the Transmission of High World Food Prices in West Africa, held in Ouagadougou in April, 2011, which involved advisors to Prime Ministers, Ministers of Agriculture and Ministers of Trade from throughout West Africa.
- A TV debate, broadcast throughout Francophone West Africa on the regional network Africable, on the transmission of high world food prices in West Africa (April).
- Nango Dembélé’s contribution to the UN’s High Level Panel of Experts (HLPE) report on the Impact of Food Price Volatility on Food Security in Developing Countries. Dr. Dembélé was one of 4 international experts (and the only one from Africa) named to the HLPE panel that developed a report, completed in July, on this

¹ Benin, Burkina Faso, Côte d’Ivoire, Mali, Niger, Senegal and Togo.
topic for the Committee on World Food Security. The HPLE report included many of the findings from the SRAI-supported work on price transmission.

- Participation by Nango Dembélé and Boubacar Diallo in the OECD/Sahel and West Africa Club (SWAC) meetings on “Agricultural and Food Price Volatility” held in Paris in June 2011.
- Boubacar Diallo’s participation in and presentation to the OECD/ SWAC meeting in Paris in October on “The Impact of Settlement and Market Trends on Food Security.”
- Participation of the entire SRAI team in the Bamako Conference celebrating 30 years of partnership between the Syngenta Foundation and Mali (October)
The Group photo and opening ceremony at the April, 2011 SRAI Regional Conference on “Transmission of Cereals Price Increases in West Africa”, co-sponsored by MSU/SRAI and CILSS
Participants at OECD/SWAC Conference on “Agricultural and Food Price Volatility” (Paris, 14-15 June 2011)

The following sections describe SRAI’s major activities and accomplishments from January 1, 2011 through December 31, 2011. The activities and achievements are listed for each of the two original project objectives as well as the additional objective (added in late 2010) of contributing to a study that would recommend reforms in cereals marketing investments and policies for Mali. These achievements are compared with the targets set out in project’s revised work plan (shown in detail in Figure 1 and Tables 1 and 2). The report then presents a few reflections on the project’s achievements over the past three years. The final section of the report presents the project’s financial status, including presentation of the budget and expenditures as of December 31, 2011 (Table 3).

1. Activities in Support of SRAI’s Research and Outreach Objectives

The overall project goal is to increase the capacity of stakeholders in the Sahelian countries of West Africa to implement more effective policies for increasing productivity of staple crop production and marketing. In support of this goal, the project originally had two objectives, one focusing on research and the second focusing on policy outreach, both of which also result in capacity building in food policy and food security analysis among analysts in national partner organizations. In 2010, in response to a request from Mali’s Ministry of Agriculture, a third objective was added to the project: contributing to a study that would diagnose opportunities and constraints in the current cereals marketing system in Mali and propose needed investments and policy reforms.

1.1 Objective 1 (Research): Increasing the availability of information on the effectiveness of different policies to achieve SRAI’s overall goal, through a series of applied research activities

The main achievements under objective 1 during 2011 included the following:

1.1.1 Target 1: Analysis of price transmission

This research, carried out in collaboration with national agricultural Market Information Systems (MIS) and statistical agencies, was completed in 2010. The outputs regarding this target included 6 countries reports, 6 summaries on transmission, and one regional synthesis. This research and capacity-building effort included a regional workshop that strengthened the capacity of 22 regional experts (including 4 women) from 6 countries in West Africa. While the research was completed in 2010, during 2011, many of the MIS that were the partners in this work continued to use the methodological tools on price transmission they learned through their involvement with SRAI in their market price monitoring bulletins.

1.1.2 Target 2: Analysis of supply response, including evolution of trade flows

Activities 2.1 through 2.6 in Figure 1. Development of maps of production basins and trade flows. The main part of this research was also completed in 2010, with the final report delivered in May 2010. However, at the request of CILSS in 2011, SRAI undertook a new activity in 2011 on trade flows monitoring. The project provided financial support to

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2 Copies of all the project’s written outputs are available on the project website, http://aec.msu.edu/fs2/srai.
CILSS’s efforts to test methods with national market information systems to gather improved information on cross-border flows of agricultural goods in West Africa. As part of this effort, Boubacar Diallo and Sonja Perakis participated in a Regional Workshop to Review the Results of the Test of Monitoring Cross-border Flows of Agricultural Products in West Africa, which was co-sponsored by CILSS and SRAI and held in Niamey on May 16-18. The report of the meeting is available at: http://www.aec.msu.edu/fs2/srai/Rapport_Général_Atelier_sur_les_flux_Niamey_Mai_2011_14_06_2011_VERII.pdf.

In addition, MSU doctoral student Sonja Perakis began analysis of the impact of improvements in road infrastructure, telecommunications, market information services, and of policy investments on market integration. Her analysis, drawing on information generated during SRAI, will feed into her dissertation, which will be completed in 2012.

**Activity 2.7 in Figure 1. Parity price analysis.** This research, also carried out in collaboration with national agricultural Market Information Systems (MIS) and statistical agencies, was completed in January 2010. The outputs from this activity include 6 full country reports and 6 country research summaries, plus one regional synthesis. This research also involved one regional workshop which contributed to strengthening the capacity of 29 regional price and market experts (including 7 women) from 6 countries in West Africa. As was the case with the price transmission work, although the research was completed in 2010, during 2011 the impact of the work and capacity building continued to be felt. Parity price analysis is now often included in the price monitoring bulletins produced by the national agricultural market information systems that were the partners in this activity.

**Activities 2.8 through 2.12 in Figure 1. Development of Domestic Resource Cost (DRC) analyses of rice and maize productions systems in West Africa.** These models are used to evaluate the competitiveness of different domestic grain production systems in the region compared with imports from outside of Africa. During 2011, 6 of the 7 countries involved in this study via the joint effort of SRAI, AfricaRice and NARS (Benin, Burkina, Ivory Coast, Guinea, Mali and Senegal) delivered their final reports, which are posted on the SRAI website. The sole exception was Niger, for which the report is still pending. Unlike the other countries, Niger was not included in work conducted by AfricaRice in previous years to build up national databases on rice and maize production, so the lack of such a database slowed completion of the Niger study. The Niger team is expected to finish its country study in early 2012.

The research carried out under this part of the SRAI program assesses the financial profitability and economic competitiveness of rice and maize-based systems of production, processing and marketing. In some of the national studies, the impact of national rice and maize policies are analyzed and recommendations made regarding investment strategies. For most countries, the results show that rice and maize sectors are economically competitive in terms of meeting domestic consumption needs. The DRC coefficients estimated for most of the production systems for rice and maize are less than 1, indicating that the value of the domestic resources used in production are lower than the value added (see figure 2).
Figure 1. Implementation Calendar

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**I. Analysis of Price Transmission**

1.1 Compilation of existing price series from market info. Services
1.2 Graphical and statistical analysis
1.3 Rapid reconnaissance to identify transmission barriers
1.4 Preparing of reports and outreach materials

**2. Analysis of Supply Response, including Evolution of Trade Flows**

2.1 Synthesis of previous regional trade studies
2.2 Synthesis of key results of devaluation studies on supply response
2.3 Updating of qualitative information on trade corridors through rapid market reconnaissance studies
2.4 Collection of secondary data on production of key staples and confirmation of major production basins
2.5 Development of maps of production basins and trade flows
2.6 Development of maps showing price surfaces over time
2.7 Updating and implementation of parity price forecasting model
   - Model completion/validation
   - Training of MIS in its use
   - Writing of parity price country studies
   - Writing of synthesis parity price report
2.8 Review of previous DRC models for the region
2.9 Confirmation of key staples & production basins for DRC modeling, in conjunction with NARS scientists
2.10 Model development, in conjunction with NARS scientists
2.11 Analysis of comparative advantage using DRC model
2.12 Preparation of reports and outreach materials

**3. Analyzing the Evolution of Consumption & its Implications for Safety Nets**

3.1 Synthesis of existing consumption studies
3.2 Study of demand for cereals for livestock feed and by institutional buyers
3.3 Rapid reconnaissance with traders on changing consumer patterns
3.4 Analysis of results, including implications for design of safety nets
3.5 Preparation of reports and outreach materials
### Figure 1 (continued)

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### 4. Outreach Activities

4.1 Web forum on Agricultural Globalisation in Reverse

4.2 List-serve for policy makers

4.3 Project website

4.4 Outlook summaries to other electronic newsletters

4.5 Development of working papers series

4.6 Development of policy syntheses and other publications

4.7 Geneva Trade and Development Forum

4.8 West African Market Outlook Conference

4.9 Other outreach

### 5. Development of Proposals to Improve Cereals Marketing in Mali

5.1 Diagnostic study of cereals marketing system

5.2 Report proposing improvements in the marketing system (Schéma de commercialisation)

- Draft report
- Revised report based on stakeholder feedback

5.3 Stakeholder workshop to review proposals for improving Malian cereals marketing system (Schéma de commercialisation)
Although the current research phase of SRAI is ending, there is a need to convert these research results, which became available at the end of 2011, into policy outreach messages for key decision makers in the individual countries involved as well as for ECOWAS, as they are likely to be very useful in guiding investment choices in different rice and maize production systems envisaged under the national and regional CAADP plans as well as policies that can facilitate regional cereals trade.

**Figure 2. Estimated DRCs for Local Rice Systems in West Africa**

![Competitiveness of local rice production systems as measured by Domestic Resource Cost (DRC) ratios in the major consumption markets of the country - 2011](image)

Note: These DRC ratios do not take account of fixed costs of irrigation infrastructure. They therefore indicate competitiveness in existing systems but are not a guide of whether building new irrigation systems would be profitable.

1.1.3 Target 3: Analysis of the evolution of consumption and its implications for safety nets.

**Activities 3.1 through 3.4 in Figure 1. Study of the evolving demand for staple crops in West Africa.** This research, undertaken in collaboration with ReSAKSS/West Africa and national statistical agencies and MIS, was completed in August 2011. The research outputs include 7 full country reports and 7 country syntheses plus one regional synthesis. This research also involved two regional workshops, one focused on methodological issues and the second on validation of the results of the country studies. These workshops helped to strengthen the capacity of the 27 regional analysts and statistical experts (including 3 women) from 7 countries in West Africa who participated in the study. Like the DRC results that became available just at the end of 2011, these results need to feed into outreach messages for policy makers designing social safety nets in West Africa, which will likely be a very high policy priority given the likelihood of continued high staple food prices in 2012.

1.2 Objective 2 (Outreach): Improving stakeholders’ understanding of the impacts of different policies on productivity, market access, income growth and poverty reduction, through a series of outreach activities (Activities 4.1-4.9 in Figure 1)

During 2011, SRAI team members Niama Nango Dembélé, Boubacar Diallo and John Staatz continued to work closely with the ECOWAS Commission for Agriculture, Water, and the Environment on the design of the ECOWAS regional CAADP investment program; with the OECD’s Sahel and West Africa Club (OECD/SWAC) on the impact of settlement patterns and market trends on food security in West Africa; and with the Interstate Committee for Drought
Control in the Sahel (CILSS) on the themes of transmission of high world food prices in West Africa and on testing methods for monitoring cross-border flows in West Africa.

The major outreach activities that were carried out during 2011 in the ECOWAS countries included the following:

- The development of three key research syntheses in August 2011 drawn from the price-transmission and consumption studies. They are available at the SRAI web-site and have been widely distributed to decision makers in Ministries of Trade and Agriculture in the sub-region (http://www.aec.msu.edu/fs2/srai/Update_2011_09_v4_Juillet-Septembre.pdf).

- The Ouagadougou Conference on price transmission and the subsequent TV-debate on Africable. On April 4-6, 2011, MSU, CILSS and ReSAKSS organized a regional conference in Ouagadougou on transmission of high world food prices in West Africa. The conference brought together senior policy advisors to Prime Ministers, Ministers of Agriculture and Ministers of Trade from throughout Francophone West Africa, who discussed the work that SRAI has carried out on the topic and drew lessons for the current situation from the 2007-08 crisis and developed recommendations for ways of addressing such crises in the future. The main outcomes of the Conference are summarized in the conference report, available on the SRAI web-site (http://www.aec.msu.edu/fs2/srai/SRAI_MSU_RAPPORT_GENERAL_CONFERENCE_OUAGA_AVRIL_2011_final-1.pdf). Linked to this event, SRAI organized a TV debate on the regional West African television network Africable, which brought together representatives of traders, producers, consumers, researchers and policymakers to discuss the recent threats to food security in West Africa and the effectiveness of policies undertaken to manage the risk linked to the 2007-08 crisis. The TV debate was broadcast three times across West Africa on Africable.

- Involvement in the UN High Level Panel of Experts on Food Security and Nutrition. Following the 36th meeting of the UN Committee on World Food Security, the High Level Panel of Experts on Food Security and Nutrition (HPLE) was given the mandate to undertake a study and present policy recommendations to the UN Committee on World Food Security on the impact of food price volatility on food security in developing countries. The HPLE named four international experts to undertake the study, including Nango Dembélé of MSU/SRAI, who was the only African on the team. His contributions to the report drew heavily on the work of SRAI, including analysis of key policy instruments to reduce the magnitude of price shocks in West Africa. The HPLE’s report is available on the SRAI website (http://aec.msu.edu/fs2/srai/HLPE_price_volatility_and_food_security_report_July_2011.pdf).

- Participation in the work of the OECD/Sahel West Africa Club on price volatility and food security. At the request of OECD/SWAC members, the SWAC secretariat organized a conference in Paris in June, 2011 to discuss policy options to deal with price volatility in

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3 Traders were represented by Maliki Barhoumi (ROESAO), producers by Mamadou Goïta (ROPPA), consumers by Pierre Nacoulma (Consumers’ League of Burkina Faso), policymakers by Moussa Cissé (CILSS) and researchers by Boubacar Diallo (MSU/SRAI).
West Africa. Boubacar Diallo and Nango Dembélé were invited to attend and present key results from the SRAI research and conclusions from the Ouagadougou conference.

- The SWAC meeting in Paris in October on shifting settlement patterns in West Africa and their implications for food security. SRAI has been involved in the work undertaken OECD/SWAC to analyze the impact of settlement and market trends on food security. Through the analysis of key variables such as urbanization, settlement, agricultural transformation, regional trade and their links to food security, the SWAC working group, is developing its view of how agricultural growth and food security will evolve in the subregion over the next 25 years. Boubacar Diallo attended the second working group meeting in Paris on 27-28 October, 2011 and made a presentation on the dynamics of cereals trade in West Africa (http://www.oecd.org/dataoecd/15/32/49008965.pdf). Based on the materials discussed at the meeting, the working group defined the next steps of its work in coordination with the agenda and strategies of the West African regional organizations involved in promoting agricultural integration in the subregion (ECOWAS, UEMOA, and CILSS).

- The entire SRAI team participated in the October 5-7, 2011 Syngenta Foundation Conference in Bamako entitled “Le partenariat dans la durée, quels impacts pour l’agriculture malienne?” Boubacar Diallo and Nango Dembélé made presentations on the results of the SRAI research program on regional trade and price transmission, and Aliou Diagne of AfricaRice presented preliminary results from the joint SRAI-AfricaRice research on the competitiveness of different West African rice production systems. The meeting also provided the opportunity for the SRAI team to meet with the Foundation leadership to discuss possible future work, particularly outreach, on agricultural integration in West Africa.

- The SRAI list-serve initiative was launched on the end of January 2011. The list serve provides key outreach messages to top policy makers and advisors in African governments and regional organizations from CILSS and ECOWAS.

- At the end of 2011, the team developed a summary article on West African staple food dynamics for the French-based international journal Grain de sel. The article was published in January 2012 and is available electronically on the journal’s website (http://www.inter-reseaux.org/revue-grain-de-sel/54-56-les-cereales-au-coeur-de-la/article/impact-des-cours-mondiaux-sur-les).

- Throughout the year, the SRAI team continued to have input into the evolving ECOWAS CAADP regional investment and policy plan known as ECOWAP. For example, in July 2011, Nango Dembele participated in an ECOWAS workshop in Lomé to review plans for implementing the ECOWAP monitoring and evaluation program, for which he, John Staatz, and Mywish Maredia had developed the concept paper.

- Throughout the year, SRAI continued to expand its website, where all project reports and presentations are posted.
1.3 Objective 3: Contribute to a study that diagnoses opportunities and constraints in the current cereals marketing system in Mali and proposes needed investments and policy reforms (activities 5.1 and 5.2 in figure 1).

In 2010, at the request of the Malian Ministry of Agriculture, the Syngenta Foundation, via SRAI, and the Alliance for the Green Revolution in Africa (AGRA) supported a diagnostic study of the current grain marketing system in Mali and the development of a set of recommendations for improvements in the system, aimed at improving the policy environment for more effective private-sector investment in the system combined with more effective policies to ensure the poor’s access to basic staples. The diagnostic study was carried out by a team of national consultants, identified by the Ministry of Agriculture and working closely with the SRAI team. The report that presented recommendations for changes in the system (Le schéma de commercialisation des céréales au Mali) was prepared by an expert from Benin, Dr. Soulé Bio Goura, hired by SRAI and by John Staatz of MSU/SRAI.

The report provided specific recommendations for improving market efficiency by increasing the availability and quality of public information on agricultural production and market conditions, respecting Mali’s commitments to more open regional trade, developing improved storage facilities and practices (such as tradable warehouse receipts), improving grades and standards, creating platforms for different actors in the value chain (including government) to mutually diagnose problems in the system and define solutions, and creating a regulatory environment that creates greater incentives for private investment in the cereal trade.

The diagnostic study, which served as input into the Schéma, was completed in September, 2011, while the draft Schéma report was delivered to the Ministry of Agriculture in early October. This was followed by a workshop in October with stakeholders to get their feedback on the report and a subsequent revision of the report in November that incorporated the stakeholders’ feedback. On January 5, 2012, following a further workshop with stakeholders, the Government of Mali officially adopted the Schéma and is now developing the official texts and establishing the oversight committee for its implementation.

2. Development of Concept Notes for a Subsequent Phase of SRAI

Another important activity of the team during the period September-December 2011 was the development of a series of concept notes, in consultation with the Foundation staff, outlining possible future work on regional agricultural integration. These eventually resulted in a proposal for a one-year extension of SRAI through the end of 2012, with an emphasis on an expanded outreach program aimed at ensuring that the findings from the SRAI research program are fully incorporated in policy debates and policy design in the subregion during 2012.

3. Constraints Faced

During 2011, several opportunities arose for the SRAI team to work with major institutions such as ECOWAS, OECD/SWAC and UN/HLPE. In terms of geographical scale, SRAI’s impact went beyond West Africa through Nango Dembélé’s contributions of SRAI findings to the HPLE analysis of the impact of price instability on food insecurity in developing countries across the globe. The year 2011 also included important outreach activities in West Africa, involving a broad and diverse set of policy makers. As discussed in section 4 below, this outreach (e.g., via the
Ouagadougou conference) has created new informal channels of communication among policy makers working in different countries that may, over time, have important payoffs in terms of improved policy analysis and cross-country consultations.

During the year 2011 the SRAI project also encountered some difficulties, linked primarily to the project’s approach of implementing its research and outreach program in close collaboration with national and regional research and policy organizations rather than independently or through international consultants. While the collaborative approach has strong payoffs in terms of strengthening local capacity and ownership of the policy analysis results, it does make the program implementation subject to the capacity of the local partners to deliver their outputs in a timely way. Their calendars are often outside the control of SRAI, as the national and regional partners often face unanticipated urgent demands on their time to deal with pressing policy issues. In addition, developing contractual links between MSU and a number of different partners is a time-consuming process. Consequently, the establishment of a subcontract between MSU and AfricaRice for the study on competitiveness of rice and maize production took more time than expected and the implementation by the national partners of this study was also delayed for reasons outside of SRAI’s and AfricaRice’s control. As a consequence, little outreach on the results took place, as the last reports were only received in December, 2011, and one of the national teams (from Niger) has yet to deliver its report. While preliminary results were presented at the October 2011 Syngenta Foundation Bamako conference, more outreach would be useful for national and regional officials who in 2012 will be planning major investments in these value chains.

A second constraint concerned the planned web forum among national policy advisors and researchers. This forum did not work because of the continued limited access to the Internet by many West African researchers, decision makers and market actors. A third shortcoming regarded the mix of publications. While a large number of national publications and reports were produced, due to the heavy obligations of the SRAI team to work with numerous partners and provide them with feedback on their draft reports, the team had less time than originally anticipated to produce articles for international journals.

4. **A Self-Evaluation of the Three Years of SRAI’s Work**

Looking back over the 3 years of SRAI’s work, one sees an impressive amount of research carried out with national and regional partners. Almost all the research activities in the original work plan have been achieved (with the exception of a follow-up rapid reconnaissance study of trade barriers in 2011—a study that is now proposed to be implemented during a one-year extension of the program). Because of the collaborative approach adopted by SRAI of working with local partners, the program has also significantly strengthened analytic capacity among many national policy analysis and monitoring units and strengthened the linkages among the national units within the subregion. This networking will foster greater collaboration and learning from each other in the future. The project has also been effective in incorporating findings from its research into a number of important national, regional, and international programs, such as the CAADP investment and policy plans developed by national governments and ECOWAS and the UN/HLPE report on the impact of price instability and food insecurity. Nonetheless, on balance, there still remains more policy outreach to do, particularly in the context of what will likely be a year of food crises in much of West Africa in 2012. MSU has prepared a proposal to the Foundation to extend SRAI for one additional year to focus on such outreach.

Key achievements of SRAI over the period 2009-11 include the following:
1. SRAI’s research and outreach activities have strengthened channels of communication across countries in West Africa among policy makers, research institutes, agricultural market information systems, statistical departments and individuals who have participated in the SRAI research and outreach programs. SRAI has worked with these partners to produce top-quality analytical work while building local capacity in the sub-region. Through the efforts of SRAI, decision makers working on agricultural policy and trade in the Prime Ministries and in sectoral ministries (e.g., agriculture and trade) across the subregion now know each other better and can consult each other collaborate directly on specific topics regarding trade and the impact of their respective national policies. Nine SRAI-sponsored methodological and validation workshops and two major conferences contributed to this effort. SRAI has continued throughout the three years to strengthening these cross-country lines of communication.

2. As top-quality human resources in the subregion, the SRAI team was invited to participate in many meetings of the Specialized Technical Committee on Agriculture, Environment and Water Resources of the ECOWAS Commission. This group comprises ministers responsible for agriculture, producer organizations, the private sector, civil society, and NGOs. The input from the SRAI team (methodological tools and policy analyses) is contributing to the implementation of the CAADP National and Regional Agricultural Investment Programs in West Africa.

3. Several of the methodological and analytical instruments developed by or diffused by SRAI to national teams (e.g., calculation of import parity prices; DRC analysis) are now being used by national analytic units such as market information systems and NARS in the analyses they provide for their own stakeholders (e.g., government policy makers and the private sector). For example, in 2011, Niger’s High Authority on Food Security, with strong support from the Niger Market Information System (which participated in the SRAI price transmission and DRC studies), organized its own conference on soaring food prices and built the analysis on tools and models the Nigerien analysts had learned through their participation in SRAI.

4. Although there is no easy way to know exactly the contribution of SRAI’s past three years’ effort to regional market integration, the constant requests received from countries like Mali (e.g., for the development of the Schéma de commercialisation) and regional and international organizations like CILSS, ECOWAS, OECD/SWAC and the UN are strong indicators of the perceived value by these stakeholders of SRAI’s analysis of issues regarding regional agricultural integration.

5. Finally, through the three years of work, SRAI has compiled a rich database on agricultural prices; production statistics; production, processing and marketing costs; household budget consumption studies; and maps of production and consumption basins that remains available to policymakers, researchers, students and private-sector actors throughout the region. Encouraging continued use of these data should improve the empirical basis for policy decisions in the future.

5. Financial Report

Table 3 summarizes the SRAI’s budget expenditures as of December 31, 2011. The total budgeted amount ($1,132,627) includes $1,070,617 provided in the original grant plus supplementary funding of $62,010 for the additional work on the Schéma de commercialisatoin des céréales au Mali. As of December 31, 2011, the estimated remaining unspent balance totaled $33,519 (3% of the total budget).
The main divergences between spending and budgeted amount by line item include international consultants (underspent relative to the original budget by $49,070), travel and allowances (underspent by $79,604), other direct costs (overspent relative to the original budget by $54,380), and subordinate agreements (overspent by $49,375). As explained in the 2010 annual report, these shifts in spending by line item resulted from a change in strategy agreed to with the Foundation to put greater reliance on collaborative work with regional organizations (hence, the subordinate agreement with AfricaRice) and with local/national consultants (expenditures for which show up under the “other direct cost” line item) rather than relying on international consultants in carrying out the work. This decision was made to help strengthen local analytic capacity and ownership of the research results and policy outreach messages.

In its proposal for a one-year extension of SRAI, MSU proposes that the remaining $33,519 be carried over into the new phase and be devoted to carrying out additional outreach activities.
Table 1. Expected Research Outputs, Timelines, and Milestones

<table>
<thead>
<tr>
<th>Topic</th>
<th>Deliverables</th>
<th>Countries</th>
<th>Crops</th>
<th>Timeline/Milestones</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research on Price Transmission</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price transmission study</td>
<td></td>
<td>Initial countries: Mali, Senegal, Burkina Faso</td>
<td>Maize, rice, millet, sorghum, banana, plantain including analysis of inter-commodity price transmission between internationally traded commodities (such as wheat) and these commodities.</td>
<td>January 2009-December 2009</td>
</tr>
<tr>
<td>a. International prices to national and retail to farm level</td>
<td>• 1 working paper on international to national price transmission</td>
<td></td>
<td>• Policy synthesis on price transmission</td>
<td>• Working Paper: Nov. 2009</td>
</tr>
<tr>
<td></td>
<td>• Policy synthesis on price transmission</td>
<td></td>
<td>• Presentations in national and regional policy forums</td>
<td>• Policy Synthesis: April-June 10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Professional Journal publication (CIRAD) March-June 2010</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Countries added: Niger, Côte d’Ivoire, Guinea</td>
<td></td>
<td>• Presentations in various forums: Sept. 2009-March 2010</td>
</tr>
<tr>
<td><strong>Research on Supply Response and Trade Flows</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mapping the evolution of production and trade flows</td>
<td>1 synthesis report</td>
<td>West Africa</td>
<td>Millet, Sorghum, maize, rice, cowpeas</td>
<td>• Synthesis report to be completed by February, 2012</td>
</tr>
<tr>
<td>Study/synthesis of cereals production and imports trends</td>
<td>• Synthesis report summarizing findings on patterns and trends in regional agricultural trade since 1990.</td>
<td>West Africa</td>
<td>Millet, Sorghum, maize, rice, cowpeas</td>
<td>January 2010 – May 2010</td>
</tr>
<tr>
<td></td>
<td>• Maps of trade flows</td>
<td></td>
<td></td>
<td>• Synthesis of prior regional trade studies: June 2010</td>
</tr>
<tr>
<td>Update of trade flow studies</td>
<td>• Final summary report</td>
<td></td>
<td></td>
<td>• Maps of evolution of trade flows: December 2010</td>
</tr>
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<td></td>
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<td></td>
<td></td>
<td>• conferences)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Synthesis report: June 2010</td>
</tr>
<tr>
<td>Topic</td>
<td>Deliverables</td>
<td>Countries</td>
<td>Crops</td>
<td>Timeline/Milestones</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
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<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>National import-parity price studies</strong>&lt;br&gt;(carried out in conjunction with national market information systems)</td>
<td>• 6 country studies estimating the import parity price of rice and maize under different assumptions regarding world prices, exchange rates, and local transport costs&lt;br&gt;&lt;br&gt;Initial countries: Mali, Niger, Sénégal, Burkina Faso&lt;br&gt;Countries added: Côte d’Ivoire, Guinea</td>
<td>Rice, Maize</td>
<td>January 2009 – June 2010&lt;br&gt;• Training of MIS in use of model: June-August 2009&lt;br&gt;• Country reports, June 2010</td>
<td></td>
</tr>
<tr>
<td><strong>Regional synthesis of parity price studies</strong></td>
<td>• Report synthesizing the 4 country studies and drawing implications for regional and international trade policy for the 4 countries&lt;br&gt;&lt;br&gt;West Africa</td>
<td>Rice, Maize</td>
<td>July 2010 – December 2010&lt;br&gt;• Synthesis report: Dec. 2010</td>
<td></td>
</tr>
<tr>
<td><strong>Comparative advantage studies using Domestic Resource Cost approach</strong></td>
<td>• DRC studies, carried out in conjunction with Africa Rice Center and NARS, on the factors affecting the competitiveness of locally produced rice, maize in different markets in West Africa.&lt;br&gt;&lt;br&gt;Mali (irrigated and NERICA rice)&lt;br&gt;Mali, Burkina Faso, Côte d’Ivoire (maize)&lt;br&gt;Countries added: Guinea, Benin, Niger, Senegal</td>
<td>Rice, Maize</td>
<td>January 2010 – August 2011&lt;br&gt;Timeline to be discuss with Africa Rice Center&lt;br&gt;• Methodological workshop: July 2010&lt;br&gt;• Countries DRC reports: Feb 2011&lt;br&gt;• Synthesis report: Feb 2011</td>
<td></td>
</tr>
</tbody>
</table>
Table 1. Expected Research Outputs, Timelines, and Milestones (continued)

Analysis of the Evolution of Consumption & its Implications for Safety Nets

<table>
<thead>
<tr>
<th>Topic</th>
<th>Deliverables</th>
<th>Countries</th>
<th>Crops</th>
<th>Timeline/Milestones</th>
</tr>
</thead>
</table>
| Review of budget consumption studies to assess scope for intra-commodity substitution | • 9 country studies assessing the extent of consumption changes over the last ten years with an emphasis on intra-commodity substitution and growing demand for animal feed and from institutional buyers  
  • Synthesis report summarizing findings on consumers’ adaptation to higher staple food prices | West Africa (Benin, Burkina, Cote d’Ivoire, Ghana, Guinea, Mali, Niger, Nigeria, Senegal) | Cereals and other food items | February 2010 – December 2010  
  • Countries consumption reports: July 2010  
  • Synthesis report: Aug. 2010 |

Development of a Proposal for Improved Cereal Marketing Policies for Mali

<table>
<thead>
<tr>
<th>Topic</th>
<th>Deliverables</th>
<th>Countries</th>
<th>Crops</th>
<th>Timeline/Milestones</th>
</tr>
</thead>
</table>
| Improving Cereal Marketing in Mali | • Diagnostic study of opportunities and constraints facing the Malian cereals marketing system  
  • Report synthesizing the diagnostic report and proposing reforms in cereals marketing policies and investments in Mali (Schéma de commercialisation des céréales au Mali) | Mali | Millet, sorghum, rice, wheat | September 2011: Report completed in and transmitted to the Malian Ministry of Agriculture  
  • October 2011: Draft report completed and submitted to Ministry of Agriculture  
  • November, 2011: Final, revised report submitted to Ministry of Agriculture, incorporating comments received at stakeholder workshop. |
### Table 2. Expected Outreach Outputs, Timelines, and Milestones

<table>
<thead>
<tr>
<th>Outreach</th>
<th>Description</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Web forum</strong></td>
<td>Web forum to allow ongoing discussion of the impact of trade policy on national and regional food security. Forum to be linked to project website</td>
<td>The Web Forum was started in February, 2010, but proved less successful than planned because of poor internet connectivity of some of the intended participants and their lack of familiarity with such tools.</td>
</tr>
<tr>
<td><strong>List-serve for policy makers</strong></td>
<td>List Serve linking key policy makers in West African ministries of agriculture, trade, and other agencies, as well as private-sector actors. Main purpose is to make available to them key policy-relevant research results and induce them to participate in the web forum</td>
<td>March 2009-Dec. 2011 - Identify initial list of participants: March-April 2010 - Launch list serve: May 2010</td>
</tr>
<tr>
<td><strong>Project Website</strong></td>
<td>Web site to include all project research and outreach documents and progress reports</td>
<td>January 2009-December 2011 - Website set up in January 2009 and regularly updated</td>
</tr>
<tr>
<td><strong>National and regional meetings</strong></td>
<td>Presentations to key national and regional meetings of stakeholders. List of these venues to be developed in consultation with West African partners, including NARS researchers, national market information systems, CILSS, ECOWAS, and private-sector organizations, such as the West African Agricultural Traders Association (ROESAO). Support of CILSS workshop on monitoring cross-border trade flows (Niamey, May 16-18). Presentation of research results to policy makers to accompany the CAADP/ECOWAP process throughout the year.</td>
<td>March 2009 – December 2011 - First presentation to be at the annual West African Regional Agricultural Outlook Conference (jointly sponsored by ECOWAS and CILSS) in 2010. - Subsequent presentations to be scheduled in consultation with ECOWAS, ReSAKSS and Africa Rice October 2011 - Presentation of report on proposed improvements in Malian cereals marketing policies and investments to national stakeholder workshop - Bamako</td>
</tr>
<tr>
<td><strong>National and regional publications</strong></td>
<td>Articles in national publications (such as NARS working paper and research review series) and regional publications, such as African Development Review. Work with African partners in NARS to post their working papers to the INSAH website and to RePEc to broaden the visibility of the national work</td>
<td>June 2010– December 2011</td>
</tr>
<tr>
<td><strong>International meetings</strong></td>
<td>Policy outreach/presentations at key international meetings, identified in conjunction with the Foundation and other partners.</td>
<td>Presentations made to international meetings in Bamako and Paris. Further international presentations proposed for 2012.</td>
</tr>
<tr>
<td>Professional publications</td>
<td>Journal articles aimed at the research and policy analyst community, in journals such as <em>Food Policy</em> and <em>World Development</em>.</td>
<td>Work with national teams on country reports and syntheses took more time than expected. One international article prepared for <em>Grain de sel</em> (published in January 2012); further journal article preparation proposed for 2012.</td>
</tr>
</tbody>
</table>
### Table 3 – SRAI Budget and Expenditures as of December 31, 2011.

**STRENGTHENING REGIONAL AGRICULTURAL INTEGRATION IN WEST AFRICA (SRAI Programme)**  
**GRANT PERIOD: 01/01/2009 - 12/31/2011**  
**FUNDING SOURCE: THE SYNGENTA FOUNDATION FOR SUSTAINABLE AGRICULTURE (SFSA)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Budgeted Amount</th>
<th>Total Est. Expenditures as of 31 Dec. 2011</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>SALARIES</td>
<td>$381,344</td>
<td>$385,297</td>
<td>($3,953)</td>
</tr>
<tr>
<td>FRINGE BENEFITS</td>
<td>$119,968</td>
<td>$112,767</td>
<td>$7,201</td>
</tr>
<tr>
<td>INTERNATIONAL RESEARCH CONSULTANTS</td>
<td>$61,000</td>
<td>$11,930</td>
<td>$49,070</td>
</tr>
<tr>
<td>TRAVEL/TRANSPORTATION/ALLOWANCES</td>
<td>$237,622</td>
<td>$158,018</td>
<td>$79,604</td>
</tr>
<tr>
<td>OTHER DIRECT COSTS</td>
<td>$229,664</td>
<td>$284,044</td>
<td>($54,380)</td>
</tr>
<tr>
<td>RESEARCH EQUIPMENT</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>SUBORDINATE AGREEMENT</td>
<td>$0</td>
<td>$49,375</td>
<td>($49,375)</td>
</tr>
<tr>
<td>INDIRECT COST (OVERHEAD)</td>
<td>$103,029</td>
<td>$97,678</td>
<td>$5,351</td>
</tr>
<tr>
<td>TOTAL EXPENDITURES</td>
<td>$1,132,627</td>
<td>$1,099,108</td>
<td>$33,519</td>
</tr>
</tbody>
</table>