The Michigan State University West Africa Market Information Projects:

*The William and Flora Hewlett Foundation supports an Incubator of Innovations to expand Agricultural Trade in West Africa*
BACKGROUND

Agricultural trade among the countries of West Africa plays a vital role in stimulating economic growth and food security in this region of over 290 million people. The wide variation in agro-ecological conditions across the 15 countries of the region and relatively small size of the individual national economies opens the scope for substantial gains through specialization and trade. Recognizing this potential, during the 1990s, national governments across West Africa moved away from policies that promoted national food self-sufficiency towards policies aimed at ensuring economic growth and food-security through a combination of national production and trade. The region as a whole, through the 15-country Economic Community of West African States (ECOWAS), has also made regional agricultural integration a cornerstone of the Community’s agricultural policy and regional investment program.¹

Although national governments, donors, and the private sector recognize the importance of regional trade in accelerating agricultural growth and improving food security in West Africa, this trade has been severely constrained by poor infrastructure, an uncertain regulatory environment, a weakly developed banking system combined with exchange-rate instability among many of the countries within the region, lack of information among actors about the specific market opportunities in adjoining countries, and rent-seeking by some government agents in charge of enforcing trade and transport regulations. These constraints have acted as non-tariff trade barriers, reducing intra-regional trade and inducing importers to look to overseas suppliers rather than suppliers in the neighboring countries.

Many of these constraints have, as their cause, poor information. This can include lack of information on prices or commercial opportunities in neighboring countries, lack of information by traders and/or customs and police officials about the full range of official rules governing trade and transport (which creates opportunities for corruption), and lack of information by high government officials about the impact of policy uncertainty on regional trade and economic growth.

¹ As part of the African Union’s New Partnership for African Development (NEPAD), ECOWAS and each of its member states adopted, over the period 2009-11, Comprehensive Africa Agriculture Development Programme (CAADP) investment programs. Regional trade is at the heart of the ECOWAS plan, known as ECOWAP—ECOWAS Agricultural Program.
WEST AFRICA MARKET INFORMATION PROJECT (WAMIP)

In order to design and test institutional and technical innovations to reduce these information barriers and expand regional trade, the William and Flora Hewlett Foundation has, since 2007, supported work by Michigan State University (MSU) and its West African partners through the West Africa Market Information Project (phases I and II). The project, implemented by MSU’s Food Security Group in the Department of Agricultural, Food and Resource Economics, built upon MSU’s previous successes in helping to design and strengthen Mali’s agricultural market information system, known as the Observatoire du Marché Agricole (OMA) [Agricultural Market Watch]. The OMA is an administratively autonomous unit of Mali’s farmer-led Chambers of Agriculture. The OMA’s success in bringing timely market information to Malian farmers, consumers, traders, and policy makers was featured in 2002 in Forbes magazine and on American Public Radio. In 2004, MSU’s work with OMA was selected as one of 10 world-wide finalists (and only one from Africa) for the Gateway Development Foundation’s Petersberg Prize (funded by Microsoft and Deutsche Telekom) for the most exemplary use of information-communication technology in developing countries over the past decade.

WAMIP OBJECTIVES

Based on the success of the OMA/MSU partnership in improving agricultural market information in Mali, the Hewlett Foundation agreed, in 2007, to support work by MSU to extend this success to the broader West Africa subregion, through the West Africa Market Information Project. This project, funded through three grants totaling $1.4 million between 2007 and 2011, has the following objectives:

- **Strengthen the capacity of agricultural market information systems (MIS) in 3 countries in West Africa (Mali, Niger, and Guinea) to identify, gather, and exchange among themselves in a sustainable manner commercial information that is critical to expanding regional trade.** Achieving this objective involved research with stakeholders (e.g., private traders, consumers, farmers, and processors) to identify critical “missing information” that market actors needed and working with them to design arrangements that national MIS could use to exchange and diffuse such information regularly. This work was to build upon the capacity of the OMA to offer technical assistance to other MIS in the subregion.

- **Develop techniques to take advantage of cell-phone technology to improve the efficiency and accuracy of MIS operations in West Africa.**

- **Provide support to both the MIS and trader organizations to develop and test consultative processes aimed at reducing non-tariff barriers that restrict agricultural trade in West Africa.**

- **Work with stakeholders (private sector actors, MIS, and national grades and standards agencies) to improve/develop grades and standards for cereals that are traded regionally in West Africa.** Current official grades and standards are often “imported” from outside the region and do not always reflect the characteristics of the cereals actually valued by cereal buyers (individual consumers, processors, livestock feed manufacturers, restaurants, and institutional buyers such as the World Food Program). Because the grades and standards do not reflect what buyers want, the trade tends to ignore them. In earlier work, traders
indicated that the lack of economically relevant grades and standards was an important impediment to regional trade.

- **Carry out an analysis of the strengths and weaknesses of different ways of organizing agricultural market information systems (e.g., through the public-sector, private sector, or cooperative structures; role of new forms of information technology on the organizational structures) in order to provide guidance to funders about the effectiveness and sustainability of different approaches.** With the spread of cell phone and other information technology, a plethora of different models of MIS have emerged, each touting its own benefits but with little comparative analysis of the strengths and weaknesses of the different models. As part of this analytic objective of WAMIP, a second aim was to help create a “community of practice” of MIS users and analysts to provide ongoing analysis and discussion about how agricultural information services need to evolve as markets and information technology evolve rapidly in Sub-Saharan Africa.

**PROJECT APPROACH AND ACHIEVEMENTS**

MSU implements WAMIP through its West Africa office, based in Bamako, Mali, in partnership with a wide range of local partners, including government, private-sector, and civil-society organizations. WAMIP is part of a larger set of applied research, capacity-building, and outreach that MSU’s Food Security Group carries out in partnership with these partners and with financial support from donors such as USAID, the Syngenta Foundation for Sustainable Agriculture, the Bill and Melinda Gates foundation, and ECOWAS. This program of work covers issues ranging from links between local governance (at the township and county levels) and food security to helping the Malian government design its long-term agricultural investment plan (see [http://aec.msu.edu/fs2/presao.htm](http://aec.msu.edu/fs2/presao.htm)).

One of the key partners in WAMIP is the West Africa Network of Market Information Systems (known by its French acronym, RESIMAO), of which the OMA serves as the technical secretariat. RESIMAO, in turn, works closely with private traders and trader organizations throughout West Africa. The project’s approach is to (a) carry out research with stakeholders to identify the major information-related constraints to expanding trade and (b) partner with them to design and test technical and institutional innovations to improve regional integration. The strategy is to demonstrate the innovations’ usefulness and viability and then to encourage others to take the innovations to scale and sustain them. While the initial project documents called for a focus primarily on Guinea, Mali, and Niger as pilot cases, during the implementation, local partners made convincing arguments to expand some of the activities to other countries that are also key actors in regional trade.

Following are some of the key achievements of WAMIP to date. In each case, the innovations developed with WAMIP support have been (or are in the process of being) adopted and scaled up by other organizations, helping ensure their sustainability.

- **Regular exchange of market information across countries**
  Working through RESIMAO, WAMIP facilitated the regular electronic exchange of market information among the market information systems of Guinea, Mali, Senegal, Niger and Senegal and the diffusion of that information over the radio and TV and through the written press, providing actors in each country with information on market conditions and trade opportunities in the neighboring countries.
Building on this success, since 2009, the regional organization CILSS has partnered with RESIMAO to publish a regional market information bulletin (for example, see [http://www.cilss.bf/IMG/pdf/bulletin_conjointTRIM_4_2010.pdf](http://www.cilss.bf/IMG/pdf/bulletin_conjointTRIM_4_2010.pdf)) analyzing the evolution of market conditions across the subregion—analysis feeds into government market policy decisions at both the national and regional levels. CILSS and RESIMAO are now supporting this activity through their own resources. This information also feeds into the annual West Africa Agricultural Outlook Conference, which is jointly supported by ECOWAS, CILSS, and the European Union. Today, ECOWAS has taken up the idea and is funding and working with RESIMAO to create a web-based platform for market information exchange across its 15 member states.

- **Use of cell phones for the collection and diffusion of market information**
  With WAMIP support, the Malian OMA’s computer programming specialist, Pierre Traoré, developed a coding system that allows its market enumerators to use smart phones to enter and transmit market information to the OMA’s data processing centers directly from the 72 agricultural markets it monitors on a daily or weekly basis across the country. This use of cell phones to transmit information to the processing and analysis center has greatly increased the timeliness and accuracy of the information the OMA communicates to its users.

- The WAMIP-supported innovation has been picked up and extended by others. In 2009, researchers affiliated with the USAID-supported Global Livestock CRSP contacted MSU about that project’s desire to improve the availability of livestock market information to herders and farmers in Mali. MSU put them in touch with the OMA, and the CRSP provided support to the OMA to adapt its cell-phone coding system for the collection of livestock market information (prices by type of animals, numbers of different types of animals available on the market, etc.). The information entered in the smart phones by livestock market monitors is now directly transmitted into a server at the OMA, where it is automatically processed and reports generated for diffusion country-wide by radio, television, and the written press.

- The OMA demonstrated its system to other market-information systems in the subregion, and the system in Niger has adopted it. The MIS in Niger has taken the next step, partnering with a local cell phone service provider and data management firm to launch a system that provides subscription market information messages to users by SMS. So not only is the Niger MIS transmitting data to its processing office from the field by cell phone, it is now also diffusing the information by SMS to its clients. The Malian OMA is studying the Nigerien system with the plan to replicate the system in Mali. Thus, the dynamics that WAMIP helped launch through the RESIMAO (the regional MIS network) is leading to new, autonomous innovations throughout West Africa. (For a recent interview in ICT Update with the OMA’s computer specialist, Pierre Traoré, explaining how RESIMAO is constantly promoting new MIS innovations to keep up with evolving markets and technology, see [http://ictupdate.cta.int/en/Regulars/Perspectives/A-system-for-food-security](http://ictupdate.cta.int/en/Regulars/Perspectives/A-system-for-food-security)).

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2 Comité Inter-états de lutte contre le sécheresse dans le Sahel, or Permanent Inter-state Committee to Combat Drought in the Sahel, an inter-governmental organization that includes 9 member states (Burkina Faso, Chad, Cape Verde, the Gambia, Guinea-Bissau, Mali, Mauritania, Niger, and Senegal).
**Border conferences to facilitate regional trade**

WAMIP initially hypothesized that many of the constraints to regional trade were information-related. Yet traders responding to one of the project's early surveys stressed that while having appropriate market information is critical, often there are other constraints, such as complicated administrative procedures and demands for bribes at the border, that prevent them from acting on such information. Traders suggested the need to create a dialogue among all actors involved in regional trade to address these issues. In response, WAMIP developed the notion of holding border conferences that would bring together traders and national and local officials involved in governing trade to identify the real administrative barriers to trade and develop a collaborative action agenda to reduce them. The logic behind the border conferences was that a lack of knowledge and transparency at the local (border-crossing) level on the part of both private traders and government officials (e.g., customs and police officers) regarding the frequently arcane and sometimes contradictory rules governing regional trade increased transaction costs and opened the door to rent-seeking.

Initially, WAMIP had envisioned focusing the conferences on constraints to cereals trade in the subregion. Unofficial bans on cereals exports from Mali and Burkina Faso during 2007-09 (due to high domestic prices), however, precluded holding such conferences focused on cereals, so the project decided instead to focus on the livestock trade between Mali and Guinea. Prior to the conference, the Guinean market for livestock was essentially closed to Malian exports due to a number of phytosanitary and other barriers. WAMIP, working with the Chambers of Agriculture and Industry of Mali and Guinea, organized the first-ever Mali-Guinea border conference in May, 2009, following extensive preliminary discussions held at both the local level and in the capitals of Mali and Guinea to make all the arrangements and to obtain approvals from the appropriate ministries, traders' organizations, and private trucking associations. A key partner in organizing the conference was the West African Network of Agricultural Traders (known by its French acronym ROESAO), which has affiliates in both Mali and Ghana. The conference brought together 64 participants (31 business people involved in regional trade; 26 police, customs, phytosanitary, veterinary, and grades and standards officials from the two countries; and 7 political and administrative officials). The debate, which lasted 9 hours, ended up covering a much broader range of products than just livestock. The discussion highlighted a general misunderstanding of the regulations governing regional agricultural trade, both among the traders and the local border officials in charge of enforcing them. The conference made a series of recommendations aimed at improving the actors' access to the regulatory texts and called for the creation of a monitoring group that will meet twice a year to measure progress in implementing the recommendations.

In order to ground the recommendations in reality and demonstrate the two countries' commitment to more open trade, the participants reassembled two days later (on May 25—Africa Unity Day) in the Malian border town of Kourémalé, just across the border from Siguiri. There, they inaugurated a new border livestock market to open the trade in cattle, sheep, and goats between Guinea and Mali. The new market not only opened the Guinean market to Mali's livestock exports but also led to Malian exports via Guinea to Sierra Leone and Liberia. Malian television coverage of the border conference and opening of the livestock market are available on the WAMIP website ([http://aec.msu.edu/fs2/wa_mkt/index.htm](http://aec.msu.edu/fs2/wa_mkt/index.htm)).

A follow-up evaluation 9 months after the conference found that traders and border officials both reported much smoother border-crossing procedures and a new spirit of partnership between
the public and private sector at the border. Traders were now consistently arriving with the required documents, which greatly reduced the time for customs clearance. Traders reported that before the conference, they would have to pay 100,000-150,000 FCFA (US $ 230-$345) in questionable charges per 40-ton truck to cross the border, these charges now never exceeded 15,000-20,000 FCFA ($35-$46). In a November, 2009, letter of thanks to the MSU team, the Guinean Association of Traders and Transporters described how the contacts they made with the team and with ROESAO helped them resolve a dispute with the Malian Customs service that had blocked their merchandise at the border and threatened them with a fine of over $7,700. In the two months immediately following the conference, the livestock market at Kourémalé also flourished; however, by late 2009, a 40% depreciation in the Guinean currency relative to Mali’s CFA franc (linked to political instability in Guinea) sharply cut demand for Malian animals, although some continued to be exported to Guinea through the Kourémale market. But the contacts developed at the conference continued to bear fruit through other channels. For example, Mr. N’faly Konaté, a major Malian livestock trader who began to ship animals to Guinea via the Kourémale market after the conference, now reports that Guinean importers come regularly to his operation in Bamako to buy directly from him.

- The idea of border conferences is now being picked up by other organizations. Based on the success of the Guinea-Mali conference, USAID/Senegal and USAID/Mali asked MSU to help organize a similar conference between Mali and Senegal, whose cross-border trade dwarfs that between Mali and Guinea, yet faces some of the same constraints. Working through two USAID projects, the same team that organized the WAMIP-sponsored Guinea-Mali conference worked for over a year with Malian and Senegalese partners to organize a Mali-Senegal conference. Held on May 21, 2010 in Kayes, Mali, the Mali-Senegal Border Conference was chaired by the Prime Ministers of the two countries and attended by numerous traders and transporters and their respective business organizations; several ministers from each country and their advisors, the national directors of police, customs, gendarmerie, trade and regulation; regional directors from Tambacounda (Sénégal) and Kayes (Mali) of the police, gendarmerie, customs and trade; the directors of USAID/Mali and USAID/Senegal, accompanied by the directors of their economic growth programs;, political and administrative authorities of the regions of Kayes and Tambacounda; and the Malian and Senegalese organization committees for the conference. The meeting on the 21st was preceded on May 20th by an expert-group meeting that included strong private-sector participation and was co-chaired by the Malian Minister of Industry, Investment, and Trade and the Senegalese Minister of Trade in order to prepare the final technical documents of the meeting.

The conference identified the full range of barriers to trade between the two countries and formulated concrete proposals to reduce them (for example, reducing the number of control point/roadblocks between Bamako and Dakar from over 20 to 3). The participation of the two prime ministers will help with the implementation of the conference recommendations. Shortly after the conference, the two countries signed an agreement allowing truckers traveling between the two countries to pay all duties at their departure point and be exempt from other fees along their entire route. USAID is providing support for the follow-up work by the monitoring committees created at the conference, and USAID/Mali has raised with MSU the possibility of funding a second Mali-Guinea conference to build upon the success of the initial conference.
The idea of promoting such conferences has also been incorporated into the 5-year ECOWAS Comprehensive Africa Agriculture Development Program action plan that is being launched in 2011. The border conferences are increasingly recognized as a key tool in building effective trade corridors in West Africa.

Developing market-relevant grades and standards
WAMIP has worked in partnership with the agricultural market information systems, the private sector, and the national grades and standards (G&S) agencies of Mali, Guinea, Senegal, Côte d’Ivoire, and Niger to develop the information base necessary to design more economically meaningful grades and standards for several staple foods that are important in regional trade in West Africa. Analyses by the World Bank, the International Food Policy Research Institute, and others have all shown that by far the largest export market for agricultural products from West African countries are the other countries within the region. Thus, developing grades and standards that facilitate regional trade while still being compatible with international standards (so that these countries can also eventually sell more overseas) is critical. The WAMIP G&S effort is also implemented in partnership with CILSS (an intergovernmental organization in West Africa charged with promoting food security and regional agricultural trade), UEMOA (the West African Economic and Monetary Union, which is coordinating a major grades and standards effort in the region), and ECOWAS (the Economic Community of West African States). Operationally, UEMOA has organized national grades and standards agencies into a regional network, the Senegalese agency (the Association Sénégalaise de Normalisation, or ASN) coordinating efforts related to agricultural grades and standards.

MSU is working closely with ASN and others in the network, in partnership with national market information systems. To date, studies have been carried out in each of the 5 countries on the product characteristics that different market participants want reflected in new grades and standards, and work is ongoing to establish desired quantitative limits for such characteristics (such as impurities in grain). These will be synthesized into a set of proposals for more economically meaningful grades and standards, which ASN will submit to UEMOA. Once validated by the UEMOA process, the recommendations will be translated into revised G&S for all eight UEMOA member countries. The advantage of this approach is that, building on the research carried out under the project, the revised G&S will be based on real market demands emanating from the private sector rather than just technical recommendations from G&S specialists. Much of the information needed to reformulate the grades and standards will have come from the traders and farmers themselves, as they have been involved, through their associations, with the process from the beginning. This close involvement should lead to their greater acceptance and ownership of the new standards.

Analyzing the strengths and weaknesses of alternative ways of organizing agricultural market information systems
One objective of WAMIP is to carry out an analysis of the implications of the rapidly evolving structure of agricultural markets and information and communication technology (ICT) for the most effective design of agricultural market information systems (MIS) in Africa. A second objective is to help create a community of practice of MIS researchers and practitioners who can continue to counsel policy makers and funding agencies on these issues as markets and ICT evolution continues.
continue to change rapidly. In carrying out this work, WAMIP has partnered closely with a group of researchers at CIRAD (a French research center that works with developing countries to tackle international agricultural and development issues) and CTA (an EU-supported technical support agency that works extensively on ICT issues) to carry out joint surveys and case studies of over 30 MIS in Africa and Asia. CTA has created a web-based discussion group on these issues, and the projects have held joint conferences. The WAMIP-supported work was led in part by Andrew Kizito, a Ugandan MIS “veteran” who recently completed his PhD dissertation on this topic at MSU and has returned to a faculty position at Makerere University in Uganda, where he is planning to extend the work. Reports summarizing the key findings are currently being written, and a joint conference with the CIRAD group in Mali is planned for early December 2011.

➤ Based on its appreciation of the work carried out by this group of partners, in May, 2011, the United Nations Economic Commission for Africa (UNECA) asked members of the WAMIP, CIRAD, and CTA partnership to attend an Expert Group Meeting in Addis Ababa (at which John Staatz of MSU presented the keynote address) to advise UNECA on the design of a project to support the sharing of information among MIS across Africa to help promote regional trade. What emerged from the meeting is the proposal for the creation of an African Agricultural Market Information Forum (AAMIForum) to build south-south capacity-strengthening and information exchange across the continent. UNECA is currently developing a full-fledged concept paper on the Forum, which will build upon many of the ideas developed in the context of WAMIP’s work.

SUMMARY

The William and Flora Hewlett Foundation’s support of the West Africa Market Information Project implemented by Michigan State University has created an incubator of innovations that are being adopted and scaled up across West Africa to expand agricultural trade and food security in this region. Among the key innovations has been the development of platforms for information exchange across national MIS, cell-phone based innovations for information collection and transmission, the development of economically relevant grades and standards, border conferences to reduce non-tariff barriers to trade, and analyses and an ongoing community of practice that will contribute to improving the design of agricultural market information systems in the future. These innovations have been designed and tested in partnership with West African farmers’ and traders’ organizations, a wide-range of public-sector actors, and regional and international organizations. All these innovations are contributing to more vibrant agricultural trade and strengthened food security in West Africa.
FOR MORE INFORMATION:

West Africa Market Information Project websites:

- Phase I: http://aec.msu.edu/fs2/wa_mkt/index.htm
- Phase II: http://aec.msu.edu/fs2/wamip_II/index.htm

Malian Television Coverage of Mali-Guinea Border Conference and Opening of the Kourémalé Livestock Market (in French, with English Subtitles):

- Border Conference:
  http://streaming.msu.edu/storemedia/download/staatz/Mali_Guinea_Border_conference/mali-guinea-border-conference.wmv

- Opening of the Kourémalé Market:
  http://streaming.msu.edu/storemedia/download/staatz/Mali_Guinea_Border_conference/mali-guinea-livestock-market.wmv

Interview with WAMIP Collaborator Pierre Traoré on Improving Regional Market Information in West Africa: http://ictupdate.cta.int/en/Regulars/Perspectives/A-system-for-food-security

MSU Food Security Group: http://aec.msu.edu/fs2/

MSU’s West Africa Food Security Capacity Strengthening and Research Program: http://aec.msu.edu/fs2/presao.htm