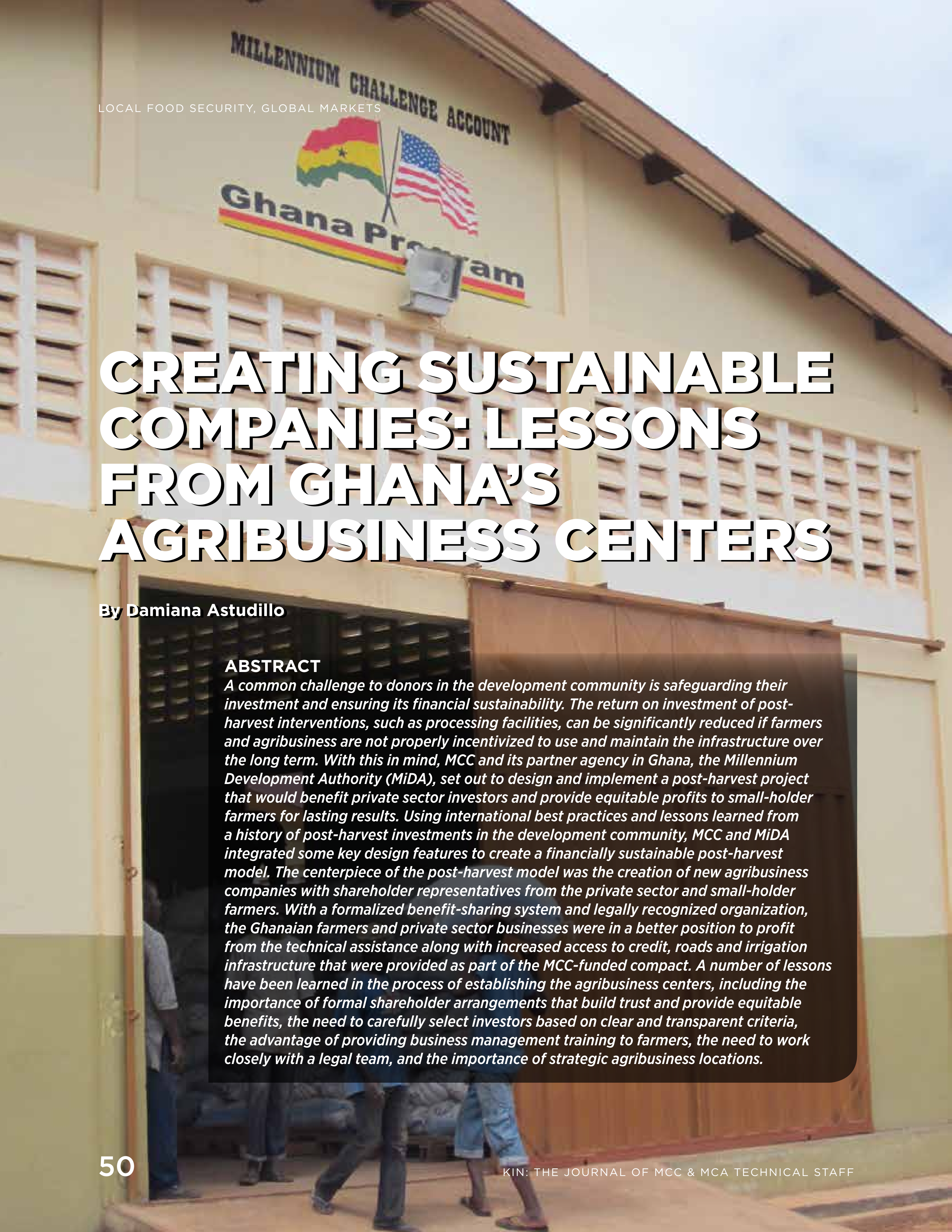
KIN knowledge&innovation network

THE JOURNAL OF MCC & MCA TECHNICAL STAFF
VOLUME 2, ISSUE 1 | WINTER/SPRING 2012-13

LOCAL FOOD SECURITY, GLOBAL MARKETS

MILLENNIUM CHALLENGE CORPORATION
UNITED STATES OF AMERICA

www.mcc.gov



CREATING SUSTAINABLE COMPANIES: LESSONS FROM GHANA'S AGRIBUSINESS CENTERS

By Damiana Astudillo

ABSTRACT

A common challenge to donors in the development community is safeguarding their investment and ensuring its financial sustainability. The return on investment of post-harvest interventions, such as processing facilities, can be significantly reduced if farmers and agribusiness are not properly incentivized to use and maintain the infrastructure over the long term. With this in mind, MCC and its partner agency in Ghana, the Millennium Development Authority (MiDA), set out to design and implement a post-harvest project that would benefit private sector investors and provide equitable profits to small-holder farmers for lasting results. Using international best practices and lessons learned from a history of post-harvest investments in the development community, MCC and MiDA integrated some key design features to create a financially sustainable post-harvest model. The centerpiece of the post-harvest model was the creation of new agribusiness companies with shareholder representatives from the private sector and small-holder farmers. With a formalized benefit-sharing system and legally recognized organization, the Ghanaian farmers and private sector businesses were in a better position to profit from the technical assistance along with increased access to credit, roads and irrigation infrastructure that were provided as part of the MCC-funded compact. A number of lessons have been learned in the process of establishing the agribusiness centers, including the importance of formal shareholder arrangements that build trust and provide equitable benefits, the need to carefully select investors based on clear and transparent criteria, the advantage of providing business management training to farmers, the need to work closely with a legal team, and the importance of strategic agribusiness locations.

Background and Context

Ghana is considered an emerging African economic success story with growth rates consistently topping 6 percent over the past six years. Since 1990, the Ghanaian government has been working closely with the donor community, private sector and civil society to reduce poverty and has nearly halved the number of people living in extreme poverty. Still, about 30 percent of Ghanaians live on less than US$1.25/day (UNICEF 2003). Some two million people in Ghana have limited availability and access to food, with food shortages recurring in the three northern regions of the country. Children are especially vulnerable, with approximately 14 percent of Ghana's children under the age of five currently underweight (World Bank 2003). Food insecurity and malnutrition represent serious impediments to sustainable development and poverty reduction. For the Government of Ghana, national food security remains a top concern, particularly given the global price volatility of food prices over the past six years.

Post-harvest losses exacerbate food insecurity, yet sustainable solutions to this problem remain rather elusive. In Ghana, the average post-harvest losses for rice and corn, two of the main staple crops, range from 30 to 50 percent (USAID 2011). These losses occur throughout the value chain as a result of a variety of factors, including handling procedures, drying techniques, lack of proper storage, poor business management, inadequate access to market information, and unreliable market linkages. For many small-holder farmers, the quality and quantity of the stored grain deteriorates even before they are able to bring their grains to market. These conditions often leave small-holder farmers in a weak bargaining position and lead them to engage in sub-optimal business transactions.

Success stories in post-harvest investments in sub-Saharan Africa, in general, and in Ghana, in particular, remain rare. Until the early 1990s, Ghana's government ran the Ghana Food Distribution Company that provided mechanical drying services and silo storage facilities to farmers in order to stabilize grain and pulse prices. Farmers had the option to sell their grain at a minimum guaranteed price (to absorb excess production) as well as a maximum price (to avoid price hikes). These government-run facilities closed for a number of reasons, including lack of funding, suggesting that they were not financially sustainable. At the farmer-level, these types of investments are not feasible because the costs of reducing post-harvest losses (i.e., investing in and managing post-harvest infrastructure) often exceed short-term benefits (World Bank 2011).

Innovative Post-Harvest Investments: Structure, Incentives and Stakeholders

In 2007, MCC signed a $547 million compact with the Government of Ghana to reduce poverty and increase food security by assisting farmers in the transition from subsistence to commercial agriculture. The program included a number of agricultural interventions, including technical assistance to farmers, training, increased access to credit, roads, and irrigation infrastructure. In addition to making investments to increase agricultural productivity, MCC and its partner agency in Ghana, the Millennium Development Authority (MiDA), also made post-harvest infrastructure a critical pillar to ensure sustainable agricultural systems. As part of the project design, MCC and MiDA wanted to mitigate the risk that any gains in productivity resulting from the project could be offset by post-harvest losses. Using international best practices and lessons from a history of post-harvest investments in the development community, MCC and MiDA integrated some key design features to create a financially sustainable post-harvest model. The centerpiece of the post-harvest model was the development of new companies with a structure of equity shares, rights, responsibilities, and a pathway to ownership that provide proper incentives for both small-holder farmers and private sector investors to jointly work to establish a profitable, sustainable business venture.

As a result of the Post-Harvest Activity, ten new post-harvest centers were established. Each center is jointly owned by a private sector investor and a cooperative of about 20 farmer-based organizations (FBOs) representing about 1,000 farmers. These companies were designed to:

- Actively engage experienced private sector partners with the necessary management experience, established value chain expertise and business contacts to render the facilities profitable and sustainable;
- Facilitate the marketing of staple crops and allow farmers to produce for reliable and consistent market opportunities;
- Introduce weighing and standardization in the marketing of grains and pulses (i.e., dry beans and lentils) to create transparency in transactions, build confidence among small-holder farmers and increase profitability of grain marketing; and
- Provide integrated services to farmers on a fee-per-service basis that allows centers to generate revenue and promote close business relationships with farmers.

  The services to both shareholders and non-shareholders farmers include:

  - Shelling, cleaning, drying, grading, and storing of staple food crops for small-holder farmers and FBOs;
  - Sale of farm inputs through cash or credit to farmers and FBOs; and
  - Extension services and technical assistance, land preparation services, soil analysis, and recommendations on fertilization programs.

Building Trust and Equity through the Shareholder Structure

In order for the agribusiness companies to sustain operations over the long term, they needed to be created in a way that both private sector actors and farmers had a true sense of ownership and were incentivized to be actively engaged in their success. Discussions about the division of shares, board composition and many other details were facilitated and guided by MiDA with the participation of farmer cooperatives and private investors. MiDA spent about 18 months in discussions alone with the private investors and farmer cooperatives that resulted in the final design of a legal and business structure that provided appropriate transparency and checks and balances. There was skepticism from both parties. The private investors wanted to make sure that the farmer cooperatives did not see the company as some sort of social assistance instrument, but rather as a profitable business. The farmer cooperatives wanted safeguards that would protect their interests and not force individual farmers to accept prices, fees and conditions that were not better than what they had with itinerant buyers.

The shares of the newly-created companies therefore were divided among the shareholders according to the following proportions:

- The private investor was given 70 percent of the shares in the new company, and the equity interest (proportion of ownership) was based on the following:

    a. A contribution of one (1) acre of land upon which the post-harvest facility is to be built served as payment for part of its shares in kind. The land needed to be located near a main road and have available power and water sources. The private investor donated this land to MiDA with the understanding that MiDA will grant it back to the new company along with the built facility and equipment.

    b. A contribution of approximately US$26,000 in minimum working capital for the facility was also expected.

    c. The value of both a and b above accounted for 50 percent of the equity of the private investor in the new company.

    d. As an incentive to the investor, MiDA provided a grant to account for the remaining 20 percent equity in the new company; the grant was equal to 50 percent of the total cost of the facility.

Understanding producer concerns is essential for ensuring they receive equitable benefits from agribusiness agreements.

- The farmer cooperative became the holder of 30 percent of the shares in the new company, and this equity interest (proportion of ownership) was based on the following:

    a. Each member of the farmer cooperative contributed one 100 pound bag of grain valued at market price. The value of the total amount of grain donated by all members accounted for 10 percent of the equity of the cooperative.

    b. As an incentive to the farmer cooperative, MiDA provided a grant to account for the remaining 20 percent equity in the new company; the grant was equal to 50 percent of the total cost of the facility.

Both parties are entitled to appoint qualified directors to the board composed of six members at all times, including three representatives for the private investor, two representatives for the cooperative and one ex officio member from the Ministry of Agriculture. The chairperson of the board is to be selected annually from among the five non-ex officio directors, but rotated between the representatives of the shareholders.

At the end of the compact, MiDA legally transferred the assets (the facility and equipment) to all 10 new companies. The shareholder agreements spelled out in great detail the obligations of each party with respect to supporting the sustainability and profitability of the new companies.

The farmer cooperative members understood that their main responsibility toward the company was to satisfy annual throughput targets set by the management plan approved by the board of directors. The private investor needed to ensure appropriate oversight and management of the company, or nominate a general manager for the board's approval to fulfill these responsibilities.

Identifying the Right Private Sector Partners

The success of the newly-established agribusiness centers required that the private sector actors not only be able to run a successful post-harvest business but also be viable and trusted partners to the small-holder farmers. Prior to designing or building the agribusiness centers, MiDA used a competitive and transparent process to select the investors that would later partner with the farmer cooperatives to form new companies. Because the private sector investors needed to provide land as part of their shareholder contribution to the new company, the selection process required the private sector actor to propose a physical location for these new facilities. The criteria for selection included the following:

- Previous business experience in the targeted districts and/or communities;

- Evidence of past experience dealing in the selected value chain (such as past volumes traded for each crop and years of experience);

- Demonstrated financial capacity to operate the center;

- Credible access to credit documented through letters from the banks with which investors do businesses;

- A management and operational plan for the new company to be established;

- Demonstrated experience working with FBOs and small-holder farmers and a plan to successfully incorporate them into the business;
- Identification of potential problems with the structure of the company and relations with farmers and cooperatives along with potential solutions;
- Provision of land (with appropriate legal title or long-term lease) that could be easily accessed by a road where the center could be built; and
- Provision of working capital to start operations.

This type of approach to developing post-harvest infrastructure by bringing the private sector on board, and developing formalized business agreements with farmer cooperatives, is new to Ghana and new to MCC, and it is just starting to be explored within the donor community. Both the private investor and the farmer cooperative benefit from the arrangement and each has a stake in the long-term success of the shared infrastructure. For example, the private investors active in the grains value chain see the value of a reliable and good quality supply of raw materials for processing and marketing. Often, grain wholesalers and processors have difficulty securing raw material to fill their orders, risking the loss of important clients. Farmers and their FBOs see the value of having reliable buyers as well as a place to store their grains safely and avoid costly losses. Beyond processing and marketing support, farmers were

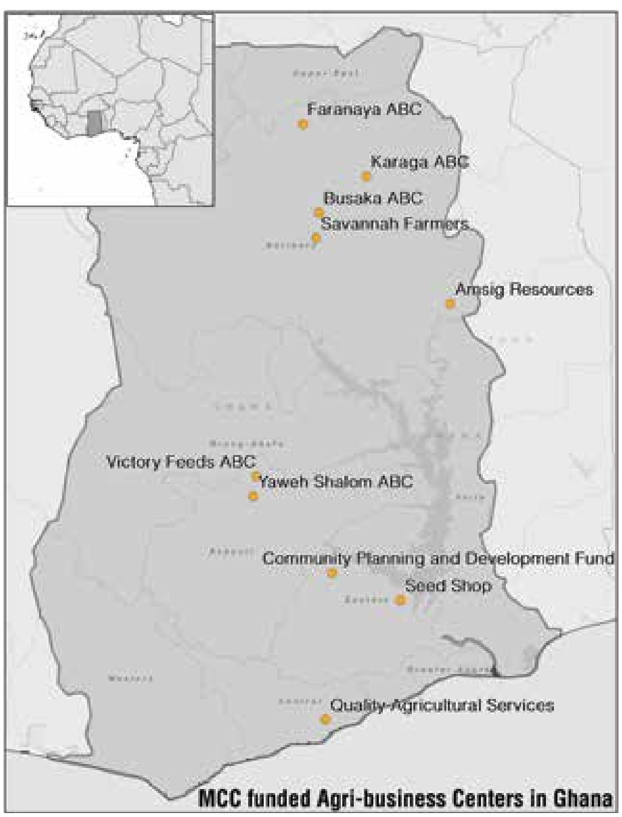
Corn is stored for processing in Tamale.

enthusiastic about having the support needed during production (inputs, extension services, financing), ownership rights and a voice in the company.

Helping Farmers Become Better Business Partners

While the selection of private sector partners was underway, MiDA was simultaneously investing in building the capacity of farmers through business skills and agronomic training. In fact, MiDA required FBOs that wanted to take part in this partnership to complete training. Local technical service providers that provided the training recommended FBOs that were deemed "business ready," and the private investors had the opportunity to interview and select their prospective FBO partners from all eligible FBOs.

The first selection hurdle for FBOs to become shareholders was that they were within a 20-kilometer radius of where the post-harvest center was to be built. Through ongoing discussions over two years, FBO leaders became sensitized to the potential benefits of becoming partners and co-owners of a post-harvest company. Although most FBOs were excited and eager to become partners in the new companies, some FBOs decided not to participate in the venture; and in some instances, FBOs with poor credit repayment records were rejected. Additional meetings and follow-up resulted in the final creation of 10 farmer cooperatives, each composed of 20 FBOs with approximately 1,000 farmers. MiDA facilitated the legal constitution of these umbrella cooperatives, assisted them with drafting their bylaws and with their institutional arrangements, including coordinating initial assemblies and selecting leadership.



Results to Date

To date, 10 new companies have been formed and registered under the co-ownership of private investors and farmer cooperatives and opened their doors for operations early in 2012. In all, 10,000 farmers from 200 FBOs under the 10 cooperatives will have access to and benefit from the operation of the facilities.

With a new organizational structure and increased capacity, the farmers and private sector actors are able to take advantage of important and lucrative new opportunities. For example, some of the new companies are taking advantage of the Purchase for Progress (P4P) program of the United Nations World Food Programme (WFP). This initiative aims to reorient WFP's procurement process toward local and regional sourcing. In this regard, P4P encourages local farmer groups and agro-industries to supply grains and other agricultural products according to WFP specifications. There are many technical, logistical and business challenges for farmer groups to meet WFP standards. Through the agribusiness centers, small-holder farmers are well-positioned to participate in P4P. Amsig Resources, one of the newly established companies, is embracing this new opportunity and has already sold about 3,600 metric tons of grain to the WFP between 2011 and May 2012. The chief executive officer of Amsig is excited about doing business with the WFP not only because it is a reliable and consistent customer but also because the prices the company gets are higher than they would receive in the local markets since the WFP pays a premium for higher-quality products. The new facility will allow the business to thrive even further.

To further enhance the sustainability of the post-harvest agribusiness centers, MCC reached out to USAID for additional support post-compact. Through its Advance Project, USAID is currently providing technical assistance to three of the new companies located in regions where projects are implemented. The goal is to help the three new companies establish a warehouse receipt system as part of their operations and services.[1] Additionally, USAID is supporting these three new companies in gaining membership on the Ghana Grains Council, a private sector-led initiative that advocates for and facilitates sustainable improvements and increased efficiency in the grain industry.

Conclusion and Recommendations

The new companies formed with support from MCC's Post-Harvest Activity have the right incentives and the appropriate structure to ensure long-lasting business relations between the FBOs and the private sector. These investments incorporated lessons from the past by taking into account local knowledge of the grain market and value chain that was brought by the private investors, the technical service providers and the FBOs. The new companies address the challenges of financial and management capacity and a fair distribution of benefits

Proper storage reduces post-harverst losses and protects the gains made in agricultural productivity.

1 Warehouse receipts can offer the following benefits: (1) they allow companies to use inventory as collateral, which in turn can lower financing costs; (2) the application of standardized grades reduces transaction costs and safeguards against cheating in quality and weight; and (3) they shorten the marketing chain and can potentially increase producer margins.

among private sector actors and small-holder farmers. This model of partnership has a real potential to increase food availability and food security in Ghana if applied more widely as these companies are expected to reduce post-harvest loses between 20 to 30 percent. This reduction in post-harvest losses could translate into greater food availability and an increase in the stability and safety of the food supply.

MCC is planning to conduct an evaluation of this activity in 2014 to assess the impact of the new companies on beneficiaries. The key indicators that will be used to measure the impact of the new companies on the well-being and productivity of FBO members and other farmers with access to post-harvest facilities include crop yield, post-harvest losses, annual sales volumes, farmer revenue, and household income. In addition to the impact evaluation, data on the performance of each new company and post-harvest storage and marketing operation will be collected, including the volume of produce passing through the company (for storage and processing per crop); services the company is offering to famers (inputs, credit, extension services); and payout of dividends. MCC expects to have more information in 2014 on performance and impact of the Post-Harvest Activity.

Key Lessons Learned for Designing a Post-Harvest Intervention

Addressing post-harvest losses is a critical element in any food-security intervention. The key lessons learned for other donors and private sector players interested in investing in post-harvest infrastructure interventions include:

- **Start early:** Any donor or private sector actor that wants to replicate this model needs to start the legal and investor partner identification process early in the life of the project. The process of selecting private investors, sensitizing and selecting FBOs, creating a co-operative of FBOs (that amalgamates all FBOs so they can enter into a legal agreement as one entity), training, consultation and agreement on structures and incentives, procurement, construction and equipment, valuation of assets, and legalization of the business entities took approximately three years.

- **Create trust and ownership through transparency and communication:** The clear selection criteria, the transparency of the process and the constant consultations and meetings with the stakeholders were fundamental to create a sense of trust and ownership. Separate meetings for FBO leaders and the private sector were held first to listen to concerns and clarify requirements and processes and then joint meetings were scheduled to accommodate the demands and come to agreements.

- **Include adequate scope for the legal team:** There was a substantial amount of legal work related to the creation of the new companies, including drafting bylaws, compiling shareholder and grant agreements, registering the companies, issuing shares, as well as creating the new cooperatives. The extensive assistance of a legal team was required and the time and budget to support this work.

- **Take advantage of competitive selection:** The competitive nature of the selection allowed MCC and MiDA to select the type of private investor who could not only potentially run a post-harvest business successfully but also be a viable and trusted partner for small-holder farmers and their FBOs. MiDA had 64 tenders and reviewed 30 proposals before identifying the final 10 locations and partners.

- **Location is critical:** If this approach is to be replicated, it is important to keep in mind that the location of the post-harvest centers was not random and a critical first step in the process. Private investors needed to provide land located in targeted districts by the project that was accessible to main roads (markets) and had a reliable source of power and water to operate machines and office equipment. Thus, applying this approach can only take place where certain pro-business conditions already exist. **KIN**

Damiana Astudillo *has worked in MCC's agriculture unit since 2007. Prior to joining MCC, she worked in Bolivia in a quinoa promotion project and at FINCA Peru improving women's access to credit. She has also worked as a consultant for the Ministry of Housing in Uruguay.*

References

African Post Harvest Losses Information System. 2013. Estimated Post-Harvest Losses 2003-2011 Tables. http://www.aphlis.net/index.php?form=losses_estimates Accessed on February 28, 2013.

Millennium Challenge Account- (MCA) Ghana. 2009. Request for Proposals For the Selection of Beneficiaries for the Proposed Agribusiness Centres. RFP: 1401107/RFP/QBS/08/09. August 17, 2009.

Millennium Challenge Corporation (MCC). 2011. MCC CC Success Stories: Women Rice Farmers partner to Capitalize on New Opportunities. October 17, 2011. http://www.mcc.gov/documents/press/action-2011002067701-ghana-rice.pdf.

The Ministry of Food and Agriculture (MoFA) http://mofafoodsecurity.wordpress.com/.

UNICEF. 2003. Ghana At Glance Statistics. http://www.unicef.org/infobycountry/ghana_statistics.html. Updated Accessed on February 28, 2003.

U.S. Agency for International Development (USAID) Feed the Future. 2011. Ghana Multi-Year Strategy: 2011-2015. Published by U.S. Government. February 22.

World Bank. 2003. Nutrition at Glance, Ghana, World Bank. http://siteresources.worldbank.org/NUTRITION/Resources/281846-1271963823772/ghana.pdf . Accessed on February 28, 2013.

World Bank. 2011. Missing Food: The Case of Post -Harvest Grain Losses in Sub-Sahara Africa. The World Bank. FAO. Report No. 60371-AFR. April. 2011.