



USAID
FROM THE AMERICAN PEOPLE

RWANDA

USAID POST-HARVEST HANDLING AND STORAGE PROJECT (PHHS)

ANNUAL PROGRESS REPORT FOR FY 2010

RWANDA POST-HARVEST HANDLING AND STORAGE ANNUAL PROGRESS REPORT

PROJECT # EEM-I-00-07-00006-00
Task Order 09

September 2010

This publication was produced for review by the United States Agency for International Development and prepared by CARANA Corporation

DISCLAIMER

The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

CONTENTS

I. EXECUTIVE SUMMARY	6
II. BACKGROUND	8
III. ACTIVITIES	11
A. Market Linkages.....	11
B. Investment Finance.....	11
C. Post-Harvest Management	12
D. Post Harvest Policy.....	13
IV. PLANNED ACTIVITIES AND UPCOMING EVENTS.....	15
A. Market Linkages	15
B. Investment Finance.....	15
C. Post-Harvest Management	15
D. Post Harvest Policy.....	16
V. SELECTED RESULTS FROM 2010	17
VI. FINANCIAL INFORMATION	20
ANNEX 1 – Indicator Results	21

ACRONYMS & ABBREVIATIONS

AMIR	Association of Microfinance Institutions in Rwanda
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
BPR	Banque Populaire du Rwanda
CAF	Caisse des Affaires Financières
COACLMA	Coopérative des Agriculteurs des Céréales et Légumineuses de Mahama
COAMV	Coopérative des Agriculteurs des Maïs dans la Zone des Volcans
COODAF	Coopérative de Development Agricole, Elevage et Forestier
COMPETE	USAID Competitiveness and Trade Expansion Program
COPRORIZ	Coopérative de Producteurs de Riz
DfID	Department for International Development
EAGC	East African Grain Council
ENAS	Entreprise Nkubili Alfred and Sons
GoR	Government of Rwanda
Ha	Hectare
IBYZA BIRI	
IMBERE	Maize cooperative in Kirehe
IFDC CATALIST	International Center for Soil Fertility and Agricultural Development Catalyze Accelerated Agricultural Intensification for Social and Environmental Stability
IMF	Institution de Microfinance
MAPROCUGA	Maize Producers Cooperatives Union of Gatsibo
MFI	Microfinance Institution
MINAGRI	Ministry of Agriculture and Animal Resources
MINICOM	Ministry of Commerce
MLI	USAID Market Linkage Initiative
MT	Metric Ton
NGO	Non-Governmental Organization
P4P	Purchase for Progress (World Food Programme)
PHHS	USAID Post-Harvest Handling and Storage project
PMP	Performance Monitoring Plan

POST-HARVEST HANDLING AND STORAGE PROJECT
Annual Progress Report 2010

RDO	Rwanda Development Organization
RGCC	Rwanda Grain and Cereal Corporation
RIF II	Rural Investment Facility
RWF	Rwandan Franc
ToT	Training of Trainers
UCORIBU	Union des Cooperatives Rizicoles de Butare
UOB	Urwego Opportunity Bank
USAID	United States Agency for International Development
WFP	World Food Program

I. EXECUTIVE SUMMARY

The objective of the Rwanda PHHS project is to **mobilize private sector resources to address post harvest inefficiencies upstream in the supply chain for targeted staple crops**. Specifically, the PHHS project is working from the demand side, or market backward to act as a facilitator to stimulate investment, construction and management of post-harvest equipment or warehousing through targeted alliances with the private sector.

The overall results of the Post Harvest Storage activity outlined in Task Order include:

1. Reduction in post harvest losses of selected staple crops in targeted areas;
2. Increase in the number of storage facilities constructed/purchased in the country;
3. Increase in the number of Rwandan farmers using storage facilities;
4. More private sector funds flowing into post-harvest infrastructure projects; and
5. Higher percentage of staple commodities stored in improved storage facilities.

The Post-Harvest Handling & Storage Project (PHHS) falls under the USAID Mission's Program Objective, *Economic Growth*, Program Area, *Agriculture*, Assistance Objective 7, *Expanded economic opportunities in rural areas*. Specifically, PHHS activities will lead to key outcomes including:

- **Market linkages** with firms resulting in strategic partnerships developing business ventures to invest in post harvest handling and storage.
- **Investment finance** that will result in strengthening the supply chains through storage, capacity expansion, productivity upgrades or product improvements.
- **Post harvest management** that will lead to better handling practices for farmers seeking higher prices for better quality commodities.
- **Post harvest policy strategy** that will be recommended to the Government of Rwanda (GoR) with evidence-based examples from the PHHS project that will serve to guide policy decisions.

Following is an Annual Report that also covers the activities of the fourth quarter of the project (July – September 2010) as well as a description of project plans for the first quarter of FY 2011. A summary of selected FY 2010 results are in this report, including PMP indicator data, which are also tracked in the MEMS system by the PHHS project.

Market Linkages: In FY 2010, the PHHS team developed and continued to follow a business model concept for its market linkages activities. This market-driven model emphasizes creating or strengthening the collection/bulking center level of the value chain, which is typically the missing piece in the supply chain for many staple crops. During FY 2010, the Market Linkages Advisor identified a pipeline of opportunities that will be executed in FY 2011. The fourth quarter's market linkages activities focused on testing the model on the PHHS project's main partners and beneficiaries: buyers, traders, unions and cooperatives.

Investment Finance: The FY 2010 activities in investment finance focused on targeting partner banks interested in both investment in post harvest facilities, and those banks that have an interest in warrantage lending. The PHHS project held several meetings with representatives from Rwandan banks

POST-HARVEST HANDLING AND STORAGE PROJECT

Annual Progress Report 2010

in the fourth quarter, in order to discuss potential bankable deals that will be ready for financing in FY 2011. Banks met with in the final quarter of the year included: Banque Populaire, Urwego Opportunity Bank, AMIR and the BRD. In the fourth quarter, the Investment Finance Advisor also **achieved the first MLI grant alliance with ENAS, which represents \$387,000 in leveraged finance** for a grain bulking center and village aggregation centers to be located in Kirehe. The facilities will be constructed in the first quarter of 2011. The project also met with the World Food Program to discuss potential inventory financing activities for FY 2011.

Post-Harvest Management: The FY 2010 strategy for the post harvest management activities included building in technical assistance in the form of Training of Trainer (ToT) models for PHHS private sector alliances. In the third quarter of FY 2010, the PHHS team developed training modules for the post-harvest management training-of-trainers in maize, beans, rice and potatoes, which took place in July 2010. The training was conducted by Wakala East Africa Consulting Services and included two major components: 1) training on post harvest handling and storage techniques; and 2) assessing the effectiveness of the training. The PHHS team planned additional trainings for implementation for FY 2011 based upon this successful model.

Post-Harvest Policy: In the final quarter of 2010, Charity Hanif visited Rwanda to begin work on the requested post harvest policy strategy work which will be submitted to MINAGRI in December 2010. Charity had initial visits with government, the private sector and producer organizations to determine areas where policies can be improved to facilitate further post harvest investment. The recommendations from Ms. Hanif's work will be supported by evidence based policy engagement from the PHHS team in FY 2011.

Grants: Part of the FY 2010 strategy for post harvest infrastructure was partnering with the Market Linkages Initiative grants program based in Nairobi, Kenya. The PHHS project launched its Market Linkages Initiative (MLI) Grants Mechanism in April, 2010 receiving numerous preliminary applications. Field visits to various potential fast-track grantees were conducted in May and June. The PHHS team held its grant workshop on July 7th and finalized a pipeline of MLI grant alliance. The first successful signed MLI grant alliances is ENAS, which leveraged \$387,000 in finance and will impact more than 10,000 farmers once the facility is constructed in the Eastern Kirehe District. The PHHS project expects all MLI grant alliances submitted to MLI by mid-November 2010.

II. BACKGROUND

Agriculture drives the Rwandan economy and accounts for 80 percent of employment, 39 percent of GDP, and 63 percent of foreign exchange earnings¹. The agricultural sector has seen rapid growth in the past few years with large increases in production achieved by small-holder farmers, 95 percent of whom have farms that are less than 2ha in size². The Ministry of Agriculture and Animal Resources (MINAGRI) estimates 20 percent post-harvest losses in cereals and as a result, in a season where food production of 1.162 million Metric Tons (MT) outstripped the domestic food requirements of 1.121 million MT, there was a deficit³. These losses impact both producers and consumers, reducing farmer incomes as a result of lower effective yields, and raising consumer prices as a result of diminished supply.

Smallholder farmer income in Rwanda is further impacted by market timing issues. Due to lack of access to storage and immediate cash needs, smallholder farmers typically sell approximately 50 – 70 percent of their surplus at harvest time. Since most smallholder farmers sell the same crop at the same time, supply exceeds immediate consumption demand, resulting in lower prices and therefore lower income for producers.

This fragmented structure at the production level can result in constraints including low yields from an inability to take advantage of economies of scale, and high transaction costs for marketing and distribution of inputs. To address this issue, the Crop Intensification Program (CIP), Rural Sector Support Project (RSSP), USAID Title II Development Activity Program (DAP) and others are working to strengthen producer cooperatives and boost yields. These programs have been successful and between the 2008 and 2009 growing seasons wheat yields increased by 260 percent while the area under wheat cultivation increased by only 69 percent, while maize production increased by 80 percent in the same period with no increase in area under production. Much of this surplus was exported to neighboring countries in the region due to drought and civil unrest.

This increased productivity is impressive and has the potential to have a significant positive impact on both farmer income and broader food security, but there is currently a gap in the value chain for these staple crops: post-harvest handling, storage, and management. As part of the U.S. Global Food Security Response Initiative, the Post Harvest Handling and Storage Activity (PHHS) focuses its efforts to improve post harvest handling and storage capacity for staple crops to including maize, rice, cassava, wheat and beans/soybeans.

¹ World Bank. *Project Appraisal Document on a Proposed Grant to the Republic of Rwanda for a Rwanda Second Rural Sector Support Project in the Second Phase of the Rural Sector Support Program*. SWorld Bank. Jun 2008.

² Morel-Seytoux, Sylvie, H. Lalonde. *Gender Assessment and Action Plan for USAID/Rwanda*. WIDTech. Washington, DC. March 2002.

³ Ragama, Philip, J.M. Vianney Nyabyenda, J.M. Vianney Gakwandi, D. Chizelema. *Crop Assessment Report – 2008A Season*. Ministry of Agriculture and Animal Resources, Republic of Rwanda. Jan 2008.

POST-HARVEST HANDLING AND STORAGE PROJECT Annual Progress Report 2010

The PHHS activities in each project component will help to lead to a reduction in post-harvest losses, additional storage facilitated, additional farmers using storage facilities, private sector funds flowing into post-harvest projects, and most importantly, an **increase the weight and value of commodities entering USAID-supported storage.**

In 2010, the PHHS team used a collaborative market approach to catalyze a higher volume of stored staple crops in post-harvest facilities throughout Rwanda. In FY 2010, the PHHS team worked to link quality surplus production to higher-value domestic markets through developing the “missing middle” of the staples value chain. The PHHS market approach is based upon alliances with key buyers, banks, and anchor firms operating in targeted staple value chains. Post-harvest management is strengthened via a results-based training strategy incorporating targeted training and capacity building within alliances to improve the quality and volume of targeted crops to end users. This approach links producers with buyers through storage facilities, catalyzes investment finance, and builds in technical assistance through post-harvest management training to improve the quality of each staple crop value chain.

In FY 2010, the PHHS team operated under 2 Phases. Phase I occurred from October – March 2010, and included mapping and identifying opportunities through the Inception Assessment Study. Phase 2 began in April 2010, where the PHHS staff began to facilitate alliances in order to mobilize investment in post harvest storage facilities, with the objective **to facilitate increased volume of storage throughput in targeted storage facilities.** The ENAS alliance was a major success for the PHHS team in FY 2010, and is one of 7 targeted alliances currently being packaged for MLI.

ENAS: An Example of a Results-Based PHHS Alliance

Farmers in the Kirehe District in Rwanda’s Eastern Province have historically faced maize surpluses, a lack of drying cleaning and storage facilities to improve their grain quality, an inadequate market, and a general lack of agricultural equipment. In September 2010, PHHS identified an alliance opportunity to link producers with additional storage, quality control, and a guaranteed market for maize and beans. The ENAS alliance will result in the creation of the Kirehe District Grain Bulking Center that will link village aggregation centers to large scale warehouses and regional markets.

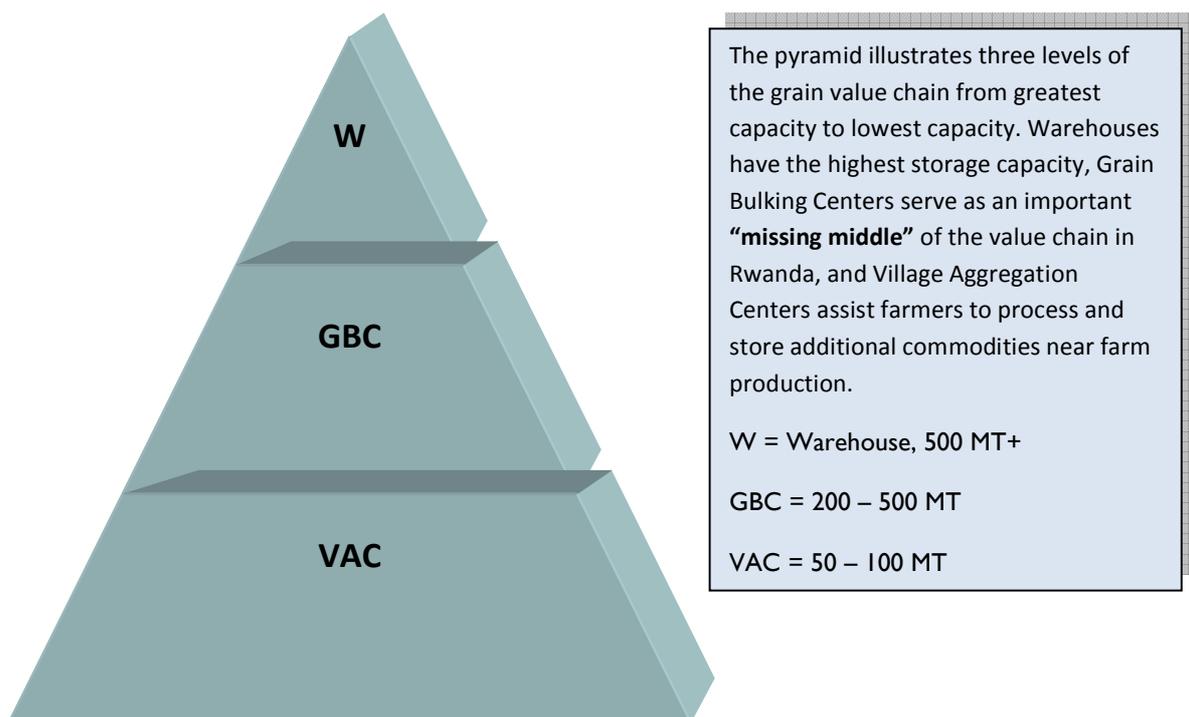
These storage facilities benefit smallholders, because farmers will now be able to sell crops after the harvest period when prices are typically higher. The center will provide critical services such as drying, cleaning, and storage to improve the quality of grain, which will result in farmers receiving a higher price for their crop. The USAID PHHS Project in collaboration with the Market Linkages Initiative (MLI), a USAID regional program based in Nairobi, facilitated the ENAS alliance through a grant and a bank loan. The grant helped facilitate investment for the storage facilities and equipment. ENAS will contribute 80 percent of its own costs, including a bank loan, for storage and equipment. PHHS is providing post-harvest management training to ENAS extension agents, who will then train farmers through ENAS funds. The ENAS alliance will result in 39 new storage facilities, 10,000 MT of maize in 2011 passing through storage facilities, and will reach an estimated 16,000 farmers, creating a new market for maize and beans.

The ENAS alliance example illustrates how PHHS is using an integrated approach to encourage a new investment model, where traders locate storage close to production, which provides additional market opportunity for farmers. PHHS ensures built-in technical assistance through training so farmers can increase the quality of their crops and utilize storage facilities.

POST-HARVEST HANDLING AND STORAGE PROJECT Annual Progress Report 2010

In FY 2010, PHHS developed other alliance opportunities to package to MLI and banks in Rwanda. Key alliances include processors, as well as traders that purchase surpluses and are intimately familiar with domestic and regional market requirements. In addition, PHHS developed relationships with key banks seeking investment opportunities in the post harvest management. PHHS will assist partners to package investment opportunities to these banks in 2011.

During FY 2010, PHHS decided to prioritize maize, rice and beans of the seven staple crops, due to market potential in these value chains. When possible, the PHHS project targets the Grain Bulking Center (GBC) level of the staples value chain, working from the market backward, to provide significant supply opportunities for Village Aggregation Centers (VACs). Targeting the GBC or Warehouse (W) level for investment and storage creates the maximum impact, because creating of additional storage at this level has a greater impact on procurement at the VAC level.



The PHHS strategy focusing on the grain bulking center or “top” end of the value chain improves efficiency by consolidating production and reducing transaction costs; increasing the quality of the end product; and strengthening linkages between producers and end markets. Increased farmer incomes will

result from improved quality and efficiency in the chain, and will allow traders and producers to take advantage of market timing.

III. ACTIVITIES

A. Market Linkages

The PHHS team continued to build on the market-led business model concept that was developed in FY 2010 for its market linkages activities in the final quarter of the year. This model emphasizes setting or strengthening the collection/bulking center level of the value chain, which is typically the missing piece in the supply chain for many staple crops. Market linkages activities focused on testing the model on the PHHS project's main partners and beneficiaries: Buyers, Traders, Unions and Cooperatives. Linkages with dealers in post-harvest equipment were also developed.

The Market Linkages Advisor led the strategy and packaging of the UCORIBU and RDO MLI alliances in the final weeks of FY 2010. It is expected that these grant proposals will be approved by the MLI team and USAID in the first quarter of FY 2011.

The PHHS project retained three agronomists during FY 2010 for the PHHS on a part-time basis, to monitor production of staple crops and assist the Market Linkages Advisor with market intelligence. In terms of market linkages, these agronomists are collecting data on the location, size and status of warehouses, villages aggregation centers and bulking centers, in addition to data on channels used in each region to market staple crops, including market places, transporters, and dealers.

The Market Linkages Advisor is also following up some particular initiatives developed during FY 2010:

- Rwanda Grain and Cereal Corporation (RGCC), initiated by MINICOM and the Private Sector Federation with assistance from EAGC : still in early design stages
- Rwanda Strategic Stores for staple crops:
 - Pilot phase ongoing, mainly through some large traders
 - National Strategy to be drawn with USAID/PHHS support
- Rwanda Agriculture mechanization:
 - So far designed for the **production** level;
 - Need to advocate for PH mechanization: we have established contacts with equipment providers such as BrazAfric and Balton CP, and have identified cooperatives or traders' needs in this domain, in order to ease PH management and improve relationships all along the value chains

B. Investment Finance

Underinvestment in storage infrastructure has been identified by PHHS as one of the most acute constraints to a more efficient and competitive agricultural sector in Rwanda. Lack of investment in new infrastructure has resulted in persistently high post-harvest loss rates and increasing consumer prices for staples foods. Access to finance is a critical component for stakeholders in post harvest management to access new technologies, construct storage, and improve overall growth in this sector.

POST-HARVEST HANDLING AND STORAGE PROJECT

Annual Progress Report 2010

During the fourth quarter of FY 2010, the Investment Finance Advisor also **achieved the first MLI grant alliance with ENAS, which represents \$387,000 in leveraged finance** for a grain bulking center and village aggregation centers to be located in Kirehe.

The Investment Finance Advisor developed other alliance opportunities in FY 2010 to package to MLI and banks in Rwanda. Key alliances include processors, as well as traders that purchase surpluses and are intimately familiar with domestic and regional market requirements.

The PHHS project held several meetings in FY 2010 with representatives from Urwego Opportunity Bank (UOB), which is interested in providing micro-finance to support staple crop post-harvest activities in Rwanda. The PHHS Investment Finance Specialist traveled with a representative of UOB to the Southern Province of Rwanda to visit several of the potential MLI grant beneficiaries, and to coordinate a pilot project for the UOB lending program. The PHHS project will continue to work closely with UOB, along with other financial institutions to ensure that producer cooperatives are provided not only financing for MLI grants, but for other activities essential to their operating at a profitable level (such as access to credit for inputs and inventory credit schemes).

The PHHS Investment Finance Specialist also met with other local financial institutions engaged in agricultural financing, including Banque Populaire and AMIR. Banque Populaire (BPR) discussed the possibility of financing WFP cooperatives' post-harvest activities in the Eastern Province. A joint trip with the Association of Microfinance Institutions in Rwanda (AMIR) and PHHS has been planned to visit MFIs in the Northern Province.

The Investment Finance Advisor continued origination of MLI grant alliances in the final quarter of FY 2010. This included conducting various field visits to potential grantees, which resulted in the PHHS ENAS alliance.

C. Post-Harvest Management

As the PHHS team has identified viable market opportunities in FY 2010 for farmer groups and cooperatives to access, the team also identified a list of trainee groups needing assistance to access critical distribution channels in targeted commodities. These high-value channels are where actors on the supply side have an incentive to capitalize on higher prices, but did not have the knowledge available to meet quality standards to capitalize on market demands.

The PHHS team developed training modules for the post-harvest management training-of-trainers in maize, beans, rice and potatoes. The ToT program, which was executed on the 19th, 21st and 23rd of July was successful and assisted farmers to understand new post harvest technologies such as drying, cleaning and storing methods. The training reached 91 agronomists from PHHS's key partners in the Eastern, Southern and Northern provinces. These agronomists then conducted a second round of trainings to reach lead farmers within their extension networks.

The training methodology included custom designed modules in rice, maize, beans and irish potatoes. Each ToT event was held for three days, where each training session lasted 1 day each. The training covered four provinces of the country with a total of 91 trainees, a majority of whom were agronomists working with cooperatives involved in market-led initiatives. During the trainings, an inventory of

solutions to address post harvest constraints was produced. After the training was conducted, an assessment of the effectiveness of the ToT was conducted.

The PHHS will build upon this ToT methodology to incorporate into the project's MLI grant alliances for FY 2011.

D. Post Harvest Policy

During FY 2010, USAID requested the PHHS team to assist MINAGRI to develop a strategy to address issues related to excess production, including post-harvest losses due to poor handling, and lack of storage and processing infrastructure. Charity Hanif, Agribusiness Consultant, was selected to draft a report to provide policy guidelines and suggestions for interventions for MINAGRI with the aim of reducing post harvest losses, and encouraging further private sector driven development of staple crop value chains. The strategy and recommendations will be based upon:

1. An overview of the current staples value chain, including the regional market as relevant to post harvest handling, storage and marketing;
2. A review of existing relevant policies, legislation, regulations and by-laws affecting post harvest handling, storage and marketing; and
3. Information collected from key stakeholders including GoR, industry and producers/producer organizations, financial institutions and donors.
4. Recommendations for a policy framework and national strategy, interventions and public private partnership models.

The report is expected to guide PHHS engagement with MINAGRI for the duration of the project. The PHHS project will continue to engage with MINAGRI and provide evidence based examples to assist MINAGRI with policy decisions over the life of the project.

In August 2010, Charity Hanif visited Rwanda to meet with stakeholders to conduct an initial assessment of relevant policies, legislation, regulations and by-laws affecting post harvest handling storage and marketing. In addition she met with key stakeholders including MINAGRI, the private sector and producer organizations during this visit. Charity is conducting a desk audit of policies and documentation during the latter half of the last quarter, and will return to Rwanda to complete research during the first quarter of 2011.

Partner Collaboration

The PHHS team worked on FY 2010 to **improve coordination with other donors and stakeholders**. Without collaboration, scarce donor resources are wasted and opportunities are lost through duplication. The PHHS project is working closely with the Market Linkages Initiative (MLI) project on grant assistance, the World Food Program (WFP), MINAGRI, and on several task forces and working groups to coordinate closely with the broader stakeholder community in the area of post harvest handling.

POST-HARVEST HANDLING AND STORAGE PROJECT

Annual Progress Report 2010

An important component of the PHHS project in FY 2010 was leveraging resources with partners and ensuring a cost-share in selected activities with project beneficiaries. Cost-sharing is a critical element to increase the likelihood of sustainability, as partners that invest in their businesses have ownership in the process. In the ENAS alliance model, PHHS facilitated a cost share model with MLI, where ENAS contributed 80% of their own funding, including a bank loan, and MLI contributed 20% in the form of a grant. Ensuring that alliance partners invest in themselves yields a greater return on PHHS interventions.

Following is a brief summary of selected partner collaboration in the final quarter of the fiscal year:

- Rabobank/BPR, ICM and PHHS have put in place a Capacity Building project for Rice Cooperatives in Rwanda, the first Steering Committee Meeting was organized in Gikonko on Friday 9th July 2010.
- PHHS and the World Food Program's Purchase for Progress (WFP/ P4P) are collaborating on a capacity building program for cooperatives working with P4P.
- The Market Linkages Advisor participated in different seminars and meetings related to marketing of staple crops, especially the meeting between USAID and the Office of the President (and the Tony Blair Advisory Bureau) on post harvest management and infrastructure.
- The PHHS team also continued the discussions on areas of collaboration with various partners, including the MINICOM Post-Harvest Department, MINAGRI Planning and newly created Post-Harvest Task Force, BRD, and IFDC.
- Some new potential partners were visited or received in our offices: CSS ZIGAMA, CARITAS RWANDA/ PASAB, and One Acre Fund.

IV. PLANNED ACTIVITIES AND UPCOMING EVENTS

In the next quarter (October - December), the PHHS project will:

A. Market Linkages

- Facilitate KARISIMBI activities: RDO, MINIMEX, Maizerie de Mukamira
- Organize the second and third rounds of trainings (lead farmers and extensionists, then farmers); this will be done in collaboration with other partners
- Follow up on the baseline survey on PH infrastructure by MINAGRI and add updates from PHHS activities
- Prepare one Business-to-Business event for the stakeholders in the targeted value chains
- Follow up on contacts made during the Kampala International Agribusiness Forum of October 3-6
- Formalize MOU between PHHS and Partners: BAIR (draft exists), IFDC, IMBARAGA
- Activate partnerships in the targeted crops : maize, beans, rice, cassava, seeds Irish potatoes
- Identify new partners in PH equipment sector, including U.S. firm GrainPro

B. Investment Finance

- Strengthen collaboration with PHHS financial and other partners by developing MOU's for the following financial partners: Banque Populaire du Rwanda, UOB, and BRD
- Work to identify opportunities for USAID's recently launched DCA
- Conduct a joint visit with Banque Populaire to PHHS coops in the Eastern Province to leverage financing sources for PHHS coops post-harvest projects based in the region
- Conceptualize and package the COAMV Project, MLI grant proposal and budget development for the MLI grant mechanism
- Assist the Akanyaru maize cooperatives to package their loan applications to Banque Populaire
- Assist the WFP maize cooperatives to package their loans applications to Banque Populaire
- Assist the COAMV to package their loan application to BRD
- Follow up with MLI grantees

C. Post-Harvest Management

- Design and begin to execute training support for the MLI grant alliances, including ENAS, UCORIBU, SOSOMA, and RDO
- Survey, design and begin to implement the WFP trainings
- Assess post harvest losses in selected project sites and suggest remedies
- Coordinate with MINAGRI on training activities
- Prepare client training materials with relevant partners

POST-HARVEST HANDLING AND STORAGE PROJECT
Annual Progress Report 2010

- Develop new technology partners, including U.S. based GrainPro
- Coordinate with MINAGRI/WFP on trainings on warehouse management

D. Post Harvest Policy

- Host the second visit of Ms. Charity Hanif, scheduled for October 20 – November 13
- Draft and present the five year strategy recommendations to MINAGRI
- Develop a costing model for current GoR policies
- Meet with PHHS Task Force to illustrate PHHS evidence-based policies

V. SELECTED RESULTS FROM 2010

Market Linkages

Market intelligence information. The Inception Assessment Report was developed the first six months of the PHHS project by the PHHS staff technical experts. This study was the first of its kind in Rwanda and identified market opportunities across seven staple crop value chains. The report identified market opportunities for the PHHS project to focus upon over the life of the project. The PHHS project is currently executing the opportunities identified in the Inception Assessment Report. This report was circulated widely to regional and international stakeholders interested in the market conditions of staple crops in Rwanda. The report was launched in FY 2010 on March 19th to cooperatives, banks, and private sector partners.

Identification of market opportunities. The Market Linkages component, through the Inception Assessment report, developed a target list of executable opportunities through alliances with the private sector. These opportunities include linking excess production to major traders and buyers in Rwanda. The Market Linkages Advisor, during the first year of the project, used a method of interviews and meetings to determine specifications and requirements for producers to meet. During this process, the Market Linkage Advisor identified producers ready to meet those market specifications, or producers who needed technical assistance in the form of training to meet market specifications.

Structured buyer-seller agreements. The Market Linkages Advisor achieved success in linking producers to buyers, and developed a methodology for structuring buyer-seller agreements to be executed in FY 2011. The buyer-seller alliances include alliances with the Market Linkages Initiative (MLI) project based in Nairobi, Kenya, matchmaking alliances between producers and buyers of staple crops, and WFP P4P alliances. The Market Linkages Advisor expects to capitalize on the relationships built in the first year of the project to execute and facilitate contracts between buyers and sellers in FY 2011.

Identifying new technologies for post harvest management. The Market Linkage Advisor met with partner companies selling and distributing innovative storage and equipment in the post harvest sector. GrainPro, an American company is currently working with the Market Linkages Advisor to partner on technology to be incorporated into MLI grant alliances. Types of new post harvest technologies include moisture meters, drying equipment, shelling equipment, winnowers, cocoons, village aggregation center storage, and packaging. The PHHS project expects to capitalize on these technologies in targeted alliances for FY 2011.

Investment Finance

Identifying and packaging the ENAS alliance. In September 2010, PHHS identified an alliance opportunity to link producers with additional storage, quality control, and a guaranteed market for maize and beans. The ENAS alliance will result in the creation of the Kirehe District Grain Bulking Center that will link village aggregation centers to large scale warehouses and regional markets. ENAS will contribute 80 percent of its own costs, including a bank loan, for storage and equipment. PHHS is providing post-harvest management training to ENAS extension agents, who will then train farmers through ENAS funds. **The ENAS alliance will result in 39 new storage facilities, 10,000 MT of maize in 2011 passing through storage facilities, and will reach an estimated 16,000 farmers, creating a new market for maize and beans.** The ENAS alliance example illustrates how PHHS is using an integrated approach to encourage a new investment model, where traders locate storage close to production, which provides additional market opportunity for farmers. PHHS ensures built-in technical assistance through training so farmers can increase the quality of their crops and utilize storage facilities.

PHHS pipeline of bankable deals. During the first year of the project, the Investment Finance Advisor developed a pipeline of bankable projects to present to the MLI project and partner banks. The first packaged deal – the ENAS alliance – yielded \$387,000 in finance for the PHHS project. The Investment Finance Advisor packaged 3 alliances with Akanyaru cooperatives in the final quarter of FY 2010, and 4 additional alliances will be packaged for MLI by mid-November 2010.

PHHS financial institution partner network. During the first year of the project, the Investment Finance Advisor met with and targeted banks in Rwanda interested in the staples value chain and agricultural lending. The first round of meetings in FY 2010 included interviews and gauging the interest of each bank for lending in the post harvest storage area, or in warrantage schemes (inventory finance). From this set of meetings, banks were placed on a partner list for further meetings, training, and most importantly, to let them know that the PHHS project would be bringing potential bankable projects to lending officers. The PHHS project is currently in the process of developing MOUs with targeted banks in the financial institution partner network.

Initial groundwork for inventory finance work. While a warehouse receipts system in Rwanda for staple crops is still years away, inventory finance, commonly known as warrantage, is a new product among banks that is used to finance trading commodities. Credit is obtained against the value of stocks in a warehouse or store, which are stored for a period of time with the expectation that the price will rise, thus paying for the storage in addition to making a profit when the stocks are sold. The Investment Finance Advisor and Sophie Walker developed a target list of banks in FY 2010 to roll out potential warrantage projects with cooperatives. PHHS is currently in discussions with other donors and partners, including the IFDC, about this program.

Post Harvest Management

Training of Trainers model. In order to address the problem of post harvest losses and handling problems identified in the Inception Assessment report, during FYI 2010, the PHHS project developed a Training of Trainers (ToT) model to assist producers and store keepers. The PHHS project subcontracted Wakala East Africa Consulting Services Limited (WEACS) to provide technical assistance to targeted networks. These trainings reached 91 trainers including 18 females and 73 males. PHHS is currently verifying how many trainees adopted new practices through this training. WAKALA is estimating the trainings reached nearly 16,000 individuals.

Using training to provide incentives to the private sector. During FY 2010, the PHHS project held meetings with targeted alliances and banks to illustrate how the PHHS market-led model for post harvest handling and storage builds in technical assistance and training programs into targeted projects. For example, for the ENAS alliance, the PHHS project provided training to agronomists in the maize sector in order to assist producers with proper handling techniques and technologies. Once the ENAS stores are in place in FY 2011, the PHHS project will train stakeholders in the ENAS market channel on proper store techniques, weighing and drying. Banks and firms are more likely to spend resources on post harvest infrastructure and equipment when technical assistance can be provided.

Post Harvest Policy

Evidence based policy recommendations for MINAGRI. In FY 2010, USAID requested the PHHS team to assist MINAGRI to develop a strategy to address issues related to excess production, including post-harvest losses due to poor handling, and lack of storage and processing infrastructure. Charity Hanif, Agribusiness Consultant, was selected to draft a report to provide policy guidelines and suggestions for interventions for MINAGRI with the aim of reducing post harvest losses, and encouraging further private sector driven development of staple crop value chains. The strategy and recommendations will be based upon:

1. An overview of the current staples value chain, including the regional market as relevant to post harvest handling, storage and marketing;
2. A review of existing relevant policies, legislation, regulations and by-laws affecting post harvest handling, storage and marketing; and
3. Information collected from key stakeholders including GoR, industry and producers/producer organizations, financial institutions and donors.
4. Recommendations for a policy framework and national strategy, interventions and public private partnership models.

Engaging stakeholders through partnership on the Post Harvest and Handling Task Force. The Post Harvest and Handling Task Force is a group of stakeholders facilitated by MINAGRI, to discuss strategies and recommendations among partners in the post harvest and handling sector for commodities in Rwanda. Both Viateur Bicali, Market Linkages Advisor, and Alice Kwizera, Investment

POST-HARVEST HANDLING AND STORAGE PROJECT
Annual Progress Report 2010

Finance Specialist, sit on this Task Force, and provide evidence-based illustrations of the PHHS alliance model. This work will continue in FY 2011.

VI. FINANCIAL INFORMATION

a.	Overall contract budget	\$4,474,990
b.	Expenditures during Quarter 4 of 2010*	\$467,000
c.	Cumulative expenditures through Quarter 4 of 2010*	\$1,366,355
d.	Remaining budget (a-c)	\$3,108,635
e.	Obligated amount	\$2,500,000
f.	Remaining obligated amount (e-c)	\$1,133,645

**includes estimate for September 2010.*

POST-HARVEST HANDLING AND STORAGE PROJECT
Annual Progress Report 2010

ANNEX I – Indicator Results*

PHHS INDICATOR TABLE	Baseline	Year I	Results
Key Result Indicator for all components: Weight and value of commodities entering USAID-supported storage.	0	5,000 MT	0 MT
1.1. No. of farmers using storage/conditioning/processing centers with project assistance	0	18,000	0
1.1.a. Number of producer unions, trade + business associations, and community-based organizations receiving direct assistance	0	50	59
2.1. Amount of private sector funds leveraged to support post-harvest storage/ conditioning/ processing centers	0	\$50,000	\$387,000
2.2. No. of storage/conditioning/processing centers constructed/purchased with project assistance	0	100	0
2.2.a. Number of agriculture-related firms benefiting directly from USG supported interventions	0	2	3
2.2.b. Number of SMEs receiving USG supported assistance to access bank loans or private equity	0	6	6
2.2.c. Number of firms receiving USG assistance to invest in improved technologies	0	1	2
3.1. Percent decrease in post-harvest food losses in project sites	30%	5%	0
3.1.a. Number of individuals who have received USG supported short-term agricultural productivity training	0	11,000	91
3.1.b. Number of farmers, processors, and others who have adopted new technologies or management practices as a result of USG assistance	0	11,000	TBD
3.1.c. Number of rural households benefiting directly from USG interventions	0	18,000	0
4.1. Number of policy reforms/regulations/administrative procedures drafted and presented for public stakeholder consultation as a result of USAID assistance	0	0	0
4.2. Number of public-private sector dialogues utilized as a result of USG assistance	0	4	13

* Data collection records and lists available with requests to PHHS, and results are tracked via the MEMS system.