



USAID
FROM THE AMERICAN PEOPLE

QUARTERLY REPORT DECEMBER 2008 – FEBRUARY 2009

**INTEGRATED INITIATIVES FOR ECONOMIC GROWTH IN MALI
(IICEM)**

Contract: EDH-I-00-05-00005-00, Order No. 05

April 12, 2009

This publication was produced for review by the United States Agency for International Development. It was prepared by Abt Associates, Inc.

QUARTERLY REPORT

DECEMBER 2008 – FEBRUARY 2009

**INTEGRATED INITIATIVES FOR ECONOMIC GROWTH IN MALI (IICEM)
CONTRACT: EDH-I-00-05-00005-00, NO. 05**



Figure 1: IICEM Advisor teaches women techniques to estimate potato yields

DISCLAIMER

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

TABLE OF CONTENTS

- ACRONYMS 1**
- INTRODUCTION 2**
- EXECUTIVE SUMMARY 4**
- CHALLENGES 6**
- RICE VALUE CHAIN 7**
- POTATO VALUE CHAIN 11**
- MANGO VALUE CHAIN 15**
- SHALLOT VALUE CHAIN 18**
- TOMATO VALUE CHAIN 22**
- CROSS CUTTING ACTIVITIES AND NEW VALUE CHAINS FOR YEAR 2 25**
- NATURAL RESOURCE MANAGEMENT AND BIODIVERSITY 27**

ACRONYMS

AVRDC	The World Vegetable Center
BNDA	Banque Nationale de Développement Agricole
CRRA	Centre Regional de Recherche Agronomique
CSV	Crédit Stockage Vivrier
CVPA	Coopératives de Détaillants d'Abidjan
DRA	Direction Régionale d'Agriculture
GFSR	Global Food Security Response
HFP	Host Free Period
IER	Institut d'Economie Rurale
IICEM	Initiatives Intégrées pour la Croissance Économique au Mali
INTSORMIL	International Sorghum and Millet Collaborative Research Support Program
ISFM / IPM	Integrated Soil Fertility Management / Integrated Pest Management
LOA	Loi d'Orientation Agricole
NGO	Non-governmental organization
NRM	Natural resource management
ODRS	Office de Développement Rural de Sélingué
OPIB	Office du Périmètre Irrigué de Baguinéda
ORTM	Office de Radiodiffusion -Télévision du Mali
PCDA	Programme Compétitivité et Diversification Agricoles
PIV	Périmètre Irrigué Villageois
SAF	Strategic Activities Fund
SICA	Société d'Intérêt Collectif Agricole
SRI	System of Rice Intensification
URCEP	Union Régionale des Commerçants Exportateurs de Pommes de Terre

INTRODUCTION

Initiatives Intégrées pour la Croissance Économique au Mali (IICEM), is a three year project implemented by Abt Associates, Inc. and its partners ACDI/VOCA, IBEX, and Sheladia Associates, Inc. IICEM's core mandate is to promote economic growth by increasing efficiency in five value chains: Rice, potatoes, mangoes, shallots and tomatoes. USAID expanded IICEM's mandate to include wider activities related to ensuring food security as part of the Global Food Security Response (GFSR) in January 2009.

This report highlights the achievements over the second quarter of the project's second year, from December 2008 – February 2009.

PROJECT OBJECTIVES

IICEM strategic objectives focus on improving efficiency at key stages of the value chain, improving key services such as finance, and other related areas. The full objectives are as follows:

- Expansion/ Rehabilitation of irrigated agriculture and intensification of agricultural production in target areas
- Enhancing access to finance
- Enhancing access to markets and trade
- Introducing, transferring, and applying improved technologies
- Increasing control of village associations over natural resources and the environment
- Enhancing the enabling environment for agriculture, trade, and investment
- Ensuring better coordination among programs

Cutting across these strategic objectives is a special focus on promoting equality between men and women in project activities and building capacity in local institutions to ensure sustainability.

STRUCTURING THE REPORT BY VALUE CHAIN AND INTERMEDIATE RESULT

The IICEM value chain approach starts with analyzing end markets for each target commodity, mapping the value chain from input suppliers through producers, marketers, processors and retailers and identifying constraints within the chain to meeting the identified market needs. The workplan lays out the activities IICEM will implement to address these constraints. This quarterly report presents IICEM progress in the second quarter of year 2 against those activities, first organized by value chain, and within each value chain, by IICEM's five applicable intermediate results:

- Intermediate Result 1: Increased Agricultural Productivity
- Intermediate Result 2: Improved Access to Markets and Trade
- Intermediate Result 3: Enhanced Access to Finance
- Intermediate Result 4: Improved Agricultural Environment
- Intermediate Result 5: Improved Trade and Investment Environment

The report's final section presents progress against IICEM's Intermediate Result 6, Improved Natural Resource Management. The section on Natural Resource Management also includes activities on conservation of biodiversity.

IICEM MODIFICATION FOR THE GLOBAL FOOD SECURITY RESPONSE

On 9 January, 2009, USAID awarded Abt Associates a substantial increase in funding as part of the Global Food Security Response (GFSR). The modification will have significant implications for accelerating and deepening IICEM's impact. As part of the amendment, IICEM will dramatically increase investment in irrigation infrastructure to increase rice production, disseminate System of Rice Intensification (SRI) technology for rice cultivation to increase productivity, add activities in value chains not yet covered that have significant implications for food security such as millet/sorghum, reduce post harvest losses by improving warehousing and facilitate potentially transformative investments in agricultural value chains through a Strategic Activities Fund.

ALIGNING IICEM QUARTERLY REPORTS TO THE US FISCAL YEAR

In order to line up with the standard US government fiscal year calendar, IICEM will issue an update to this report for March activities before the end of April and then issue the third quarter report for the period April – June 2009.

ADMINISTRATIVE NOTES

USAID approved the Year 2 workplan, including activities related to the GFSR in February 2009. Marketing Advisor Ursula Kohnen joined the project in December 2008 and Communications Advisor Maimounatou Touré joined IICEM in January, 2009.

EXECUTIVE SUMMARY

In quarter two, IICEM moved many critical processes forward in the five core value chains:

- In **rice** the team went through the process of final identification of sites for rehabilitation of irrigation works and received the detailed specifications from design firms to enable the team-after USAID approval-to begin construction in quarter three. They also pushed forward a wide range of tests for new seeds and broad capacity build activities with producer organizations in advance of the coming season.
- As the quarter ended, the **potato** harvest was still ongoing. Initial data indicates excellent progress with much higher than expected gross margins and strong advances on building institutional strength in umbrella organization the *Société d'Intérêt Collectif Agricole* (SICA) disseminating new potato varieties and obtaining financing. In the quarter IICEM continued building capacity of producer and trader organizations, facilitated financing and began collecting results of promising tests of new varieties and fertilizers.
- For **mango**, IICEM focused on disengaging from fresh mangos training 800+ producers and pisteurs in partnership with 3 exporters, and prospecting markets for non-exportable mangos. IICEM also developed the dried mango value chain by identifying buyers and soliciting interest, facilitating organic certification and other areas. IICEM also facilitated FCFA 100m in financing.
- IICEM staff achieved a breakthrough this quarter in **shallots**, gaining widespread commitment from value chain actors to undertake critical institutional changes. IICEM staff also reconditioned warehouses, built business linkages with buyers, promoted grouped sales and continued facilitating market information. Fertilizer tests with Yara also produced excellent early results in the quarter.
- In the **tomato** value chain, IICEM extended the host free period (HFP) technique to Selingue, disseminated lessons learned on virus control, monitored the impact of the HFP and followed up on virus resistant and tolerant tomato varieties disseminated last quarter. IICEM staff also began reinforcing marketing capacity of Malian government partners *Office de Développement Rural de Sélingué* (ODRS) and *Office du Périmètre Irrigué de Baguinéda* (OPIB) and prospecting for export markets for dried tomato.

Quarter two also represented the launch for critical cross cutting activities and new value chains added as part of the Global Food Security Response (GFSR). IICEM staff launched collaboration with the International Sorghum and Millet Collaborative Research Support Program (INTSORMIL) on millet/sorghum production that will be implemented in quarter three, and began prospecting in Kayes for sites and partners to place a Department of Defense funded warehouse. Finally, IICEM disbursed the second tranche of the existing guarantee fund and facilitated financing in shallots and potatoes.

In implementing quarter two activities, IICEM faced a number of challenges. This report contains a new section describing those challenges. For instance, IICEM will have to re-program funds originally destined to help build working capital for private input dealers in Northern Mali due to distortions in input markets brought on by government subsidies. IICEM staff have also had to overcome resistance to change in the shallot and potato value chains with very promising results that will be confirmed in coming quarters. Though dried mangos exports have strong potential, a setback with a major buyer in Burkina during last season has increased the urgency to diversify markets as part of the process of developing that market. Finally, IICEM has faced the need to reinforce monitoring of activities in the North to plan for the upcoming rice season and irrigation activities.

In quarter three, the team will be able to provide much of the critical data necessary to fully analyze results in many of these areas. Rehabilitation of irrigation works will be well underway. Staff will also have collected fully data on shallot and potato harvest and marketing. Finally, IICEM will also launch, with USAID approval, the medium term guarantee fund to improve availability of investment financing.

CHALLENGES

In quarter two, IICEM staff encountered a number of challenges across the value chains that caused project advisors to adjust approach. The points below present some of the most important challenges, their implications and solutions project staff have put into place:

- **Distortions in private input markets due to the *Initiative Riz*:** In the amendment signed in January, IICEM proposed adding a guarantee fund that would help build the working capital of private input dealers in Northern Mali, increasing the availability of critical inputs to producers in the North. Since that was designed, however, it has become clear that government guarantees to provide inputs for all farmers as part of the *Initiative Riz* has reduced or even eliminated the need for private input financing-taking away the incentive of the dealers to work with IICEM. Given staff believe this distortion will continue through at least the next few years, this activity is no longer possible. We will work with USAID in quarter three to re-program these funds to other activities.
- **Institutional challenges and resistance to change in the Pays Dogon shallot sector.** IICEM's institutional analysis of the shallot sector in the Dogon country revealed profound institutional problems in the Union that made many of the necessary changes-such as group sales-impossible. IICEM staff also saw resistance to change among actors in the sector, including critical NGOs, and the prospect of mixed messages coming from multiple donors. In quarter two, IICEM staff conducted a workshop with shallot value chain partners to present the reports and to gauge commitment of the actors involved to real fundamental change. The workshop generated real commitment among producers to change and among donor partners to coordinate. In quarter three, coming out of the workshop, they decided to call an extraordinary assembly of the different union/organizations, to restructure the shallot value chain. IICEM will follow on based on the output of this assembly.
- **Reluctance of potato value chain actors to work together in marketing.** Virtually all of the advances that IICEM is seeking to make in the potato sector depend on producers organizing and working together from disseminating better practices to selling higher volumes, managing quality and seeking new markets. Last year, IICEM staff began the process of working with producer groups to revive two groups-SICA and URCEP-and make them operational. In 2009, they faced the test of having to actually commit to joint commercialization for the value chain to take the next step. In quarter two, IICEM helped producers organize committees for group sales. Preliminary indications are that
- **Glut of dried mangos in Mali due to problems with a buyer in 2008.** In 2008, Malian dried mango producers signed a contract with a buyer in Burkina, Gebana Afrique, to buy virtually all their supply. For various reasons, the buyer could not honor the contract causing the Malian exporters to build stocks and lose money presenting a significant challenge to developing the sector. To counter this and try to reduce the risk a recurrence, IICEM has worked with the drying units to diversify their markets and to undertake organic certification to improve accessibility to European buyers. To complement their Burkina buyer, IICEM has helped exporters identify buyers in Morocco and will prepare and send samples to a number of interested buyers in Europe as the season begins.
- **Need to plan for supervision of accelerated IICEM activities in the North.** In quarter two, IICEM realized the structure for supervision in place for year one will need to be reinforced for quarter three. As irrigation work accelerates in April and May and the rice season begins in June including extensive new activities disseminating the System of Rice Intensification (SRI), the staff and systems in place in IICEM Mopti are being radically stretched. In quarter three, IICEM management will greatly reinforce the processes and team responsible for oversight of partner NGOs and supervision and mentoring for beneficiary producers in the North. The quarter three report will provide details of these changes under the Administrative Notes section.

RICE VALUE CHAIN

December represents the end of the rice harvest and the beginning of preparation for the counter season. In quarter two, IICEM focused on finalizing site selection, designing and verifying construction specifications and planning construction for rehabilitation and extension of irrigation infrastructure to prepare for the 2009 campaign from June to December. IICEM staff accelerated planning and contracting in order to ensure construction occurs before rains begin. In addition, IICEM with partners such as IER and CRRA, continued to collect results from seed demonstrations, support seed multiplication and build capacity of client producer groups in financial management, and production planning according to the agricultural calendar among a number of other areas.

IR R.1 INCREASED AGRICULTURAL PRODUCTIVITY

Activities RI.1 and RI.2 Rehabilitation and expansion of irrigation infrastructure

IICEM has planned to open up over 1,000 ha of land to rice cultivation through extension and rehabilitation of irrigation infrastructure in year 2. In the first quarter, the team worked with partners to identify irrigation needs, identify possible sites, build an overall strategy and retain consulting firms to do detailed design studies and produce Requests for Proposal (RFPs) with specifications for bidding.

In quarter two the IICEM irrigation specialist received and reviewed the detailed design studies and convened a workshop to conduct final site selection. Based on the outcome of the workshop, the team prepared and issued final RFPs to pre-qualified bidders. IICEM selected the following sites by region:

- **Mopti:** Kouin, Touara, Kamaka, Baramadougou, Sah, Korientze, Diogui-Sare and Diogui-Ouro for a total estimated area of 251ha; 30 for extension and 221 for rehabilitation. Total cost is estimated at FCFA 316m
- **Gao:** Djefilani, Adourourou and Tonditihio for a total estimated area of 31 ha; 10 ha for extension and 21 ha for rehabilitation. Total cost is estimated to be FCFA 68m.
- **Timbuktu:** Kabara riz, Kondi, Niafouké/ Goubo, Siboney et M'Betou covering 527 ha of which 19 ha are extension and 508 ha for rehabilitation. Total cost is estimated to be FCFA 390m.
- **Sikasso:** Niéna, Gladié Barrage N02, Finkolo et Kouroumasso covering 450 ha total of which 320 ha are for extension and 130 ha for rehabilitation. Total cost is estimated to be FCFA 143m.



Figure 2: IICEM has worked with women seed producers in Loutana to improve productivity through the use of new varieties.

In preparation for the bidding process, IICEM also pre-qualified potential construction companies and conducted site visits in February 6 to 15 with the pre-qualified firms to prepare them to prepare bids quickly in response to the RFPs when issued.

IICEM staff members anticipate firms will be selected and construction will begin in April, starting with sites in Sikasso that must be completed before the rainy season starts in June with activities in other regions starting slightly.

As this report is being written IICEM is reviewing the site selection and process with USAID to determine how to effectively manage risks. Staff are also considering where a more community-level approach may be more appropriate. IICEM staff will also be bringing consultants to review and reinforce the strategy during quarter 3.

Activities RI.3 and RI.4 Strengthen water management capacity and access to water-pumps

In quarter two, IICEM did not work in strengthening water management capacity or water-pump access. Irrigation and rice value chain leads will roll out training in both areas early in quarter three in advance of the beginning of the main rice season.

Activities RI.5 and RI.6 Increase access to improved seeds

IICEM continued testing new varieties and supporting seed multiplication. In most cases, harvesting occurred during the second quarter, in December or January, of test and seed multiplication plots planted earlier in the year. The following bullets describe specific activities and related results:

- Testing of new rice varieties, Nerica1, Nerica2, Watt 310 and Adny 11 in four sites in Mopti: Diogui, Korientzé, Kamaka and Sahouna producing an average yield of 6.9T/ha. IICEM staff worked with IER and CRRRA Mopti on this activity.
- Demonstration tests of rice varieties DKA 3, 4, 5, 8, 9,10 and 12 in low, medium and high land areas in Klela and Niena, Sikasso, versus local varieties. Detailed information showing DKA varieties outperformed local varieties and should be disseminated. Test at medium elevation, however, failed and IICEM and extension staff will study the results further. IICEM conducted this test with IER and the Sikasso DRA.
- Seed multiplication in Sikasso research stations with IER: IICEM funded tests by CRRRA produced 7T of Sik350-A150 and Nerica4 in Sikasso stations. Overall, yields were in line with expectations. In cases where yields were not as expected, staff will be conducting research to further understand the causes, but these likely resulted from late planting due to late rains.
- Seed multiplication in 7 villages in Mopti resulting in production of 17 tons of six different rice varieties including substantial involvement of women producers (with IER and CRRRA Mopti).
- Seed multiplication and the community level in four Sikasso villages with the DRA focusing on *bas-fond* rice varieties in Klela and rain-fed varieties in Loutana, Niena and Namtoumana. As a result, IICEM partners produced 9T of rice seed well adapted to conditions in both areas.

These tests mark the beginning of the process that will lead to adoption of these improved seeds. Where the tests have been successful, the various extension services and the IICEM supported producer organizations will use these varieties for seed multiplication in the third quarter which will lead to much higher yields which will eventually be harvested and measured in year 3.

Activity RI.7 Build capacity of producers and disseminate production practices including SRI

In quarter two, IICEM continued a series of activities as part of our coordinated plan to increase capacity of our partners broadly in cooperative management, production and other areas including:

- Awareness building and training for producers in Touara, Kouin Baramadougou, Kamaka, Diogui, Sah, Korientzé et Kouhana on the rehabilitation and clearing of areas in advance of irrigation rehabilitation and extension and training in rapid composting and Integrated Soil Fertility Management (ISFM).
- Training and mentoring for leaders of cooperative unions on grouped input purchases in Korientzé, Kamaka, Bara Issa and Boucle du Niger. IICEM also worked with leaders in four cooperatives in Timbuktu to develop detailed planning estimates of input needs in advance of purchase.
- Training in planning and management in line with the agricultural calendar in Touara, Kamaka,

IICEM Rice Group Receives Award

Thanks to the support of IICEM, Doundoubangou producers (Timbuktu) achieved exceptional yields of 6.3t/ha in the season and 7t/ha in the counter season. As a result, the President of the group was chosen for an award by the Ministry of Agriculture to celebrate high productivity as part of the Initiative Riz.

Diogui, Sah and Sah resulting in five coherent agricultural « campaign plans ».

- Collecting and analyzing key management data with leaders in Touara, Kamaka, Diogui, Sah, Korientze, Kouakourou and Sahouna including calculating the internal rate for in-kind contributions of cooperative members (*redevances*), quantifying the marketable surplus and determining the gross margin for each producer.
- Measuring yields with management of nine producer groups in Timbuktu that had delayed providing information for 2008 / 2009 season. For these groups the average yield was 4.02 T/ha with yields of up to 7T/ha in Bourem Inaly.
- Financial management training and support for more than 250 producer group leaders in areas including preparing financial statements, marketing plans, and the COMPTEx accounting package. As a result of the training, IICEM installed COMPTEx in seven more cooperatives in Mopti and updated another four for producer groups in Timbuktu.

In quarter three, IICEM begins roll out of dissemination programs in the System of Rice Intensification (SRI) method for cultivating rice both in IICEM core sites and through IER with seed producers. The roll out began with an extensive mission in March to identify sites and build commitment among partners and will continue with a train the trainers event in May with all of the agencies involved including led by the IER.

IR R.2 IMPROVED ACCESS TO MARKETS AND TRADE

Activity R2.1 Promoting grouped sales and warehousing

IICEM staff and partner NGOs provide ongoing support to client producer groups in good practices in warehousing and in using warehousing to time rice markets to achieve higher margins. Based on project advice, a number of partners have undertaken warehousing operations with significant financial return. For instance, the Lafia women's group purchased rice during quarter two and will hold it for sale in June 2009 when prices are expected to be at least 20% higher than during the season. Partner PIV de Kessoubibi sold stocks worth more than FCFA 9.4m and four partner cooperatives in Timbuktu, marketed stocks worth FCFA 2.7m

IICEM also rehabilitated rice warehouses used by women's groups in Sikasso to reduce post harvest losses and increase the value of stocks held by these groups. IICEM selected groups in Loutana, M'Pégnesso, Nantoumana, et Bamadougou. Local masons conducted the work using bricks made from local materials. Interestingly, due to higher prices in the market during quarter two, reaching over CFA 300 / kg in some cases, stocks for IICEM partner organizations actually went down 31% compared to last year, totaling just over 35t for IICEM five main women's group partners.

Finally, IICEM staff provided extensive training to women's groups in Sikasso on the local small scale warehouse receipts product called *crédit stockage vivrier* (CSV). Staff trained 300 women on the definition, process, advantages and disadvantages and management of warehouses under CSV. As production increases in these zones, CSV, along with rehabilitated warehouses, will be a critical tool for these groups to increase incomes.

Activity R2.2 Parboiled rice test for sub-regional markets

In the second quarter, IICEM staff members began planning for this including reviewing available technology and doing initial market tests. This will accelerate in quarter 3.

IR R.3 ENHANCED FINANCIAL SERVICES

Activities R3.1-R.3.3 Facilitate access to input financing; Develop internal skills to secure loans; and Strengthen skills in financial management

Section IR R.1 above already describes many of the activities IICEM implemented to improve partner capacity in financial management and planning—a key element in enhancing access to financial services under IR R.1 above. These included training in calculating *redevance* rates, COMPTEx training and implementation of adapted accounting packages, and management of the repayment process for group loans.

In addition to these activities, IICEM supported clients in preparing specific financing requests including:

- The « Jiguissèmè » women’s group from Tonka in developing and submitting a business plan that was financed for FCFA 2,000,000.
- Sikasso women’s groups obtained input loans totaling FCFA 15.3m of which 47% has already been reimbursed.
- Project staff supported the Loutana women’s group in obtaining the FCFA 2.5m loan to buy rice for warehousing (see above) and are working with the women’s groups to prepare their request for CSV financing in Sikasso.

In quarter 3, as the preparation for the main planting for the season takes place, the need for direct assistance in obtaining financing for rice will accelerate.

IR R.4/R.5 IMPROVED AG AND TRADE ENABLING ENVIRONMENT

Activity R4.1 Improving capacity of cooperative unions to defend members’ interests

As mentioned above, IICEM built the capacity of producer groups in a number of key areas. In particular, training 154 members on all sites in financial management and planning and putting in place the COMPTEx accounting package, providing training in group sales to

POTATO VALUE CHAIN

In quarter two, Mali entered the heart of the potato harvest. IICEM staff focused on continuing to build capacity of the two main producer and trader organizations SICA and the *Union Régionale des Commerçants Exportateurs de Pommes de Terre* (URCEP). Initial data indicates excellent progress with much higher than expected gross margins and strong advances on key transformative activities in building SICA institutional strength, disseminating new potato varieties and obtaining financing.

IR P.1 INCREASED AGRICULTURAL PRODUCTIVITY

Activities PI.1 and I.2 Facilitating access to inputs

As in quarter one, IICEM focused its efforts on the Sikasso apex group for potato producers SICA, and Sikasso based input importer Inter Agro. IICEM staff brought together the majority of SICA producers not eligible for bank financing-covering 430 producers and 16 cooperatives-and negotiated dealer financing for them to obtain inputs. For the remaining SICA members and URCEP traders who are able to obtain bank financing, IICEM focused on working with them to define their needs by producer and negotiate group buys on favorable terms. As a result of these efforts, 768 IICEM partner producers from SICA and URCEP obtained 270T of seeds and 182T of potato-specific fertilizer. These inputs will drive the majority of the production for IICEM partners over approximately 630ha.

Activity PI.3 Introducing potato production to women's groups and in the North

In Mopti, IICEM introduced potato production to women's groups in Bagui and N'Gomi, providing them with training, follow up and facilitating access to inputs.

In Gao, IICEM continued to provide training and technical assistance to producer groups in Djidara, Tondibi et d'Ansongo. Groups in all three areas successfully harvested their first crops in February with the Tondibi producers holding 1.7T for later sale, and the Ansongo and Djidara groups marketing significant volumes at FCFA 300/kg realizing excellent returns.

IICEM also conducted test plantings in Djidara, Bourem, Kalani and Cerefaba and Tondibi with women's groups. In Djidara, Bourem and Tondibi initial indications are very promising with harvest expected in March. In Kalani and Cerefaba, the women harvested the potatoes the week of 16 to 20 February, harvesting and marketing 700kg of potato at FCFA 450 to 500 / kg.

In Timbuktu, IICEM partner NGOs provided support to producer groups Doundoubangou de Sibou, Association Allahidou de Tindahama, Association Yilwoua Kondey de Tinassena, and 11 producer groups in Bouna village. IICEM provided each with improved seeds and Hydro complex fertilizer for demonstration tests. Planting occurred between 20 December and 5 January. In general, potatoes were developing satisfactorily and most had begun harvest toward the end of quarter two to be completed in March. Yields appear variable, from 13T/ha in M'Bouna to 19T/ha in Guindigata. In Sibou, however, the test failed because it was poorly conceptualized by staff and the partner NGO, and the supervision trip came too late to salvage. This failure led to a re-examination of IICEM Mopti site supervision as mentioned in the challenges. During quarter three, IICEM will be rolling a new process for overseeing work with the sites and coordinating with the NGOs.



Figure 3: Hadjara Ouattara, of Sikasso based women's group COFABA, shows potatoes she harvested in March 2009. IICEM helped COFABA introduce potatoes in 2007.

Activities PI.4 and P.I.6 Introducing new technologies and disseminating good practices to existing producers

IICEM staff trained 350 producers from 26 SICA cooperatives on good practices in composting, using organic and mineral fertilizer in combination, ISFM/IPM and good harvesting practices. As a result, IICEM partner producers were much more likely to use fertilizers specific to potato production-up to 768 producers from 175 in the 2007/2008 season, and more than 350 producers followed the right practice in stopping watering at least 15 days before full maturity-critical for maintaining the exterior appearance and quality of the potato.

IICEM organized a conference bringing together producers with participants across the value chain including input suppliers, traders and financial institutions. During the conference, these actors shared results of the new technologies and good practices that IICEM has disseminated ranging from basic cultivation practices such as the ideal density of planting, to introduction of new varieties. IICEM organized the event with the DRA and CRRA which have both been intimately involved in IICEM's activities in the potato value chain. The ORTM provided media coverage. Over 165 value chain participants attended, and pointed out their appreciation in particular of the results of organic plus mineral fertilizers and the 8 new varieties introduced with Inter Agro and others.

High Margins in Potato

IICEM partner producers are expected to achieve gross margins of FCFA 1.2m vs. FCFA 351k per hectare due in large part to high adoption of good practices recommended by IICEM.

Finally, in order to determine the potato production for IICEM partner producers in SICA and URCEP, the potato value chain leader with NGO GREFA set up monitoring plots with 25 producers randomly selected in SICA and URCEP and trained cooperative management to measure and record potato production. The monitoring plots showed a production of 21.5T/ha for IICEM

partners. Based on this data, IICEM staff now estimate overall production will reach 13,609T for the 633 ha planted producing total revenue of FCFA 1.6B with 95% marketable at a farm gate price of FCFA 125/kg. This would result in a much higher gross margin than expected, going from FCFA 351,750 to more than FCFA 1.2m per hectare. This additional gross margin is in large part due to producers adopting better practices as a result of IICEM assistance.

Activity PI.5 Introducing New Potato Varieties in an Alliance with Input Suppliers Inter Agro and la Sikassoise

IICEM has worked with private input suppliers Inter Agro and la Sikassoise to introduce new varieties with the potential to bring producers high returns. The two companies put in place demonstration plots providing the seed potato while IICEM financed the potato-specific fertilizer and providing technical oversight from selecting the producers who would oversee the plots to overseeing the planting and monitoring of the plots. Sikassoise brought three varieties, Appolline, Pamela and Daifla and Inter Agro donated five including Sylvana, Sifra, Bronko, Heros and Sagitta. With the exception of Pamela, which was found to be sensitive to Sikasso conditions with very low germination rates and other problems, tests for other varieties are proceeding normally and initial results appear promising with good growth. The quarter three report will provide data on the results.

IR P.2 IMPROVED ACCESS TO MARKETS AND TRADE

Activity P2.1 Promote grouped sales by producer organizations

IICEM facilitated the creation of 20 five member commercialization committees, one in each of the 20 SICA cooperatives. The committees monitor changes in prices on the potato market and transmit that information to members. IICEM trained the committee members in how to calculate costs, return and sales prices, how to determine gross margin, and how to manage stocks including preparing necessary documents such as the sales tracking sheet. By the end of February, 15 of the 20 committees had already begun group sales to buyers from a number of markets.

Activities P2.2 and P2.3 Building business linkages between Sikasso producers and sub-regional and Bamako buyers

IICEM facilitate a market prospection trip to Abidjan during which Malian producers signed a contract to deliver 900T through the Coopératives de Détaillants d'Abidjan (CVPA) and signed an agreement in principle to deliver 500T to the SDTM-CI to be confirmed in April. We will have final data related to actual deliveries in the quarter 3 report. IICEM staff members have programmed work in building business linkages with Bamako wholesalers for quarter 3.

Activities P2.4 and 2.5 Upgrade existing warehouses and business new warehouses to reduce post-harvest losses

Project staff launched the rehabilitation of the 20 warehouses in February with an expected completion date in April. Before the launch, IICEM selected the 20 sites based have a warehouse with a capacity of 5 to 10 T, and a commitment by the producer to rehabilitate in line with IICEM advice and specifications, to contribute FCFA 10 / kg of potato sold to the cooperative and to provide data on the process to SICA and IICEM.

For the construction of new warehouses, staff prepared technical specifications and selected private companies to perform the work. However, given the high cost of construction by commercial firms, the project and USAID decided to opt instead for lower cost community-based construction. In order to move that process forward, staff began the process of selecting villages based on a series of criteria including commitment to building using clay bricks, commitment to provide land for the construction, and agreeing that the warehouse be governed as part of a network managed by SICA. Using this lower cost method, the project will be able to finance construction of at least 20 warehouses instead of the original target of 15.



Figure 4: Djibril Sanogo in front of storage crates IICEM helped him obtain that will reduce post-harvest losses.

IR P.3 ENHANCED FINANCIAL SERVICES

Activities 3.1 and 3.2 Facilitating Access to Input Financing and strengthening Producer Organization Financial Management

IICEM worked closely with SICA and URCEP to obtain bank financing where possible for potato inputs, in particular:

- Facilitating working meetings with SICA and URCEP to identify those members eligible for bank financing;
- Structuring three meetings between SICA and input supplier Inter Agro to negotiate terms for supplier input financing (see above); and
- Supporting URCEP in preparing and submitting requests for financing to financial institution Kafo Jiginew.

As a result, 27 IICEM partner cooperatives obtained financing of FCFA 249m in overall financing, 175m from the BNDA, 43m from Inter Agro and 31m from Kafo Jiginew including women's cooperative of Bamadougou.

IR P.4/P.5 IMPROVED AG AND TRADE ENABLING ENVIRONMENT

Activities 4.1 to 4.3 Strengthening of umbrella organizations; Training in the LOA; and Strengthening value chain cohesion through the *Interprofession*

To build institutional capacity of SICA, IICEM determined with SICA leadership the necessity of putting in place professional management including an executive Secretary. During Quarter Two, IICEM's Sikasso Coordinator co-developed a terms of reference and worked with SICA leadership to recruit and hire an Executive Director. IICEM also obtained office equipment, outfitted a conference room and is working with the new Executive Director to develop management processes.

IICEM has also worked with SICA to build medium to long term financial sustainability. As part of this process, IICEM convened a series of meetings with SICA leadership to determine needs and plan for building SICA's capital. As a result of these meetings, SICA's management board put in place an internal fee levied on each case of seed potato (FCFA 500 per case obtained through bank financing; FCFA 1000 per case obtained through supplier financing). As a result of this initiative, SICA management expects to build capital of FCFA 5.6m this year. Over time, this will allow SICA to pay the Executive Director, the operating cost of the headquarters office and to begin to make longer term investments in improving the sector including building and maintaining warehouses, distributing units used in storing potatoes and even funding research and tests to improve the production techniques of members.

IICEM staff will conduct training through the *interprofession* next quarter on the LOA.

Activities 5.1 and 5.2 Strengthen Capacity in Cross Border Trade; Advocate for enforcement of trade laws on agricultural products

IICEM did not implement any activities in this area during quarter two, but is planning, through the *interprofession* to conduct training related to cross border trade. These trainings will focus on ECOWAS rules and procedures to empower the private sector so that they comply with all rules, and are in a better position to resist false tariffs and other misapplication of regulations. Trainers will invite exporters from other IICEM value chains to the training as well.

MANGO VALUE CHAIN

During the period December to February, mango producers maintain orchards and make preparations for harvest that will begin in quarter three and go through quarter four. For the fresh market, IICEM focused on intensive training of 800 producers and *pisteurs* associated with three exporter groups, as well as prospecting for sales of lower grade mangos on domestic markets-facilitating significant contracts. For the dried market, IICEM staff attacked multiple weaknesses in the value chain, identifying buyers and soliciting interest, putting in place the process for organic certification, negotiating with gas providers for lower costs and more reliable supply and positioning partner drying units to successfully fulfill orders. Finally IICEM also supported financing applications for more than FCFA 100m in working capital for the upcoming season.

IR M.1 INCREASED AGRICULTURAL PRODUCTIVITY

Activity MI.1 Developing a Best Practices Reference Guide for Producers and *Pisteurs*

After beginning this activity with the preparation of a terms of reference for developing the guide in quarter one, in quarter two IICEM continued to collaborate closely with the wide range of partners in refining the approach including the PCDA and Integrated Framework. After these lengthy consultations with partners, by the end of the quarter IICEM was in the process of recruiting a local team to develop the guide including developing the illustrations.

Activities MI.2 and MI.3 Building Capacity of Mango Exporters in Preparation for IICEM Disengagement

This task is critical for preparing partners for IICEM's disengagement at the end of the 2009 harvest from the fresh mango export value chain. Given this is the high time before the harvest, training of IICEM partner staff was intense. In Sikasso, IICEM staff trained 650 mango producers and harvesters in how to put in place new orchards to increase yields and eventually to create well managed industrial scaled orchards using the right practices for producing quality mangos for export. In addition, IICEM staff trained producers on good practices in production and orchard management to increase returns, including how to use phytosanitary spraying and in line with GLOBAL GAP norms. The IICEM Bamako mango advisor trained an additional 280 exporters and *pisteurs* in the Bamako region. The two IICEM technical experts also focused on integrating quality managers from Yaffa, IB Negoce and AOM to create sustainable knowledge within the exporter groups on how to ensure quality as IICEM disengages.

IR M.2 IMPROVED ACCESS TO MARKETS AND TRADE

Activity M2.1 Seeking export markets for Malian dried mangoes and working with partners to diversify fresh markets

IICEM continued to work with partners to conduct market prospection missions for both dried and fresh mangos. Across the two quarters, IICEM staff and partners conducted prospection missions in Morocco, Senegal, Mauritania and Germany.

IICEM is also working to increase domestic sales of lower grade mangos to reduce loss rates and increase incomes. In quarter two, IICEM staff accompanied a producers' cooperative in Selingué to search for buyers and develop relationships in markets in Kayes and in Northern Mali. The mission found high demand and consumption of mangos in these markets. As a result of the mission, buyers in Mopti and Ansongo placed orders for 60T of fresh mangos. Buyers in Gao decided to continue to come directly to the Sikasso orchards rather than develop contracts with the growers for delivery. Interestingly, for this market segment IICEM determined, despite 33% losses normally caused by shipping mangos in bulk by truck, the investment to

pack mangos in cartons cannot be recovered because consumers in these markets cannot pay the necessary premium.

Activities M2.2 and M.2.3 Strengthening capacity of *pisteurs* and exporters in packaging and quality control

In Sikasso, IICEM's mango expert continued training *pisteurs* and harvesters working in IICEM partner exporters on good practices in harvesting and conditioning in line with hygiene requirements of importers in Europe as well as in line with the process guide established by exporter AOM.

Activity M2.4 Promote dried mangos to support diversification and value addition

IICEM has targeted better organized and lower cost gas supplies as a key element to improving the competitiveness of Malian dried mango. In Sikasso, IICEM facilitated a meeting between producers and Sud Energie, the gas distribution company, to discuss grouped purchases. In the Bamako region, IICEM staff and partner processors discussed obtaining lower cost gas with Total Gaz. The Total Marketing Director committed to make every effort to prevent gaps in supply-something that had caused severe operational problems last year-but demanded in return a deposit of FCFA 500k for each processor. To improve planning, IICEM staff worked with drying unit staff to develop and provide Total Gaz with advance orders for gas cylinders for the upcoming season. The Total Marketing Director also agreed to visit each of the drying units to better understand their business, their location and their gas needs to ensure more efficient supply.

Like lower cost gas, organic certification will drive competitiveness of Malian dried mango exporters. IICEM began the process of working with partner dried mango exporters to obtain organic certification.

Given the harvest and export season begins very soon, project staff rapidly developed a terms of reference and selected an experienced certification organization, ECOCERT, to put in place the system necessary to ensure certification. In Sikasso, AOM and its network of producers has already obtained organic certification. In the Bamako region, however, there are no certified exporters or producers. IICEM therefore has agreed with ECOCERT on a budget to certify not only four drying units, but also 100 producers. Certification activities will begin in April 2009 and will consist of technical assistance, awareness building and training, development of signage necessary for the certification and putting in

place of the necessary system to document organic practices and ensure traceability.

Finally, IICEM understands that to reach the volume level required by identified target markets, Malian drying units will need to ensure a strong supply of fresh mangos-more than 10 times the volume of dried mangos expected. To ensure this supply, IICEM facilitated a number of meetings between mango dryers and fresh mango producers to anticipate and plan for the necessary supply.



Figure 5: Malian dried mangos on display at the end of quarter one. IICEM is diversifying markets, facilitating certification and improving operations for mango processors.

IR M.3 ENHANCED FINANCIAL SERVICES

Activities M3.1 and M3.2 Facilitate access to financing for *pisteurs* and exporters as well as medium term financing for mango drying units

In Sikasso, IICEM worked with 30 *pisteurs* associated with the exporter AOM to obtain working capital for the upcoming harvest season totaling FCFA 57m. In the Bamako region, IICEM is working with two exporter groups and two processors to obtain financing. IICEM staff support them in developing loan requests. Because of the glut of mangos in the market held over during the market saturation last year, processors are not yet giving contracts to producers and consequently banks are waiting to consider financing applications. IICEM staff members expect the stocks to be cleared, contracts to be available and financing to move forward toward the end of March. Financing applications for fresh mango exporters have already been submitted. Dutch importer Bakker continues to be the principal client for fresh mangos-and the only major order already in place consisting of 1500T.

Some important uncertainties remain in dried mango exports. Throughout this quarter IICEM staff and partners have identified a number of promising markets. Unfortunately, however, dried mango exporters do not have the equipment necessary to conduct laboratory tests required by buyers. In addition, many buyers are requesting organic certification-which will not be completed in most cases until April. IICEM partners are also still in search of packaging technology, but have already identified what they believe are adequately adapted technologies in Ghana which they are currently pursuing. IICEM will facilitate the transport of the first mangos in order to ensure tests are conducted as soon as possible after the first mangos are harvested. For the mango drying units, IICEM will facilitate putting in place key elements to make sure exports are possible including federating mango dryers in order to ensure they can fulfill the necessary volume for the key buyers, and to find a lead firm that will take on all of the packaging for the “federation” in order to ensure consistent quality.

IR M.4/M.5 IMPROVED AG AND TRADE ENABLING ENVIRONMENT

Activities M4.1 and M5.1 Building awareness of the LOA and of requirements for sub-regional export.

IICEM undertook no activities under these IRs in the second quarter.

SHALLOT VALUE CHAIN

In quarter two, IICEM's partner producers entered the harvest period. IICEM staff achieved a breakthrough in transforming the value chain by gaining widespread commitment to change the institutional structure of the cooperatives. IICEM also attacked key weaknesses in the supply chain-reconditioning warehouses, building business linkages with buyers, promoting grouped sales and continuing to provide market information. Finally, IICEM continued testing improved fertilizer in alliance with Yara with excellent early results. These tests will have important implications for quality, yield and shelf life.

IR S.1 INCREASED AGRICULTURAL PRODUCTIVITY

Activity S.1.1 Develop business linkages with Niono seed producers

IICEM staff did not pursue this activity during quarter two.

Activity S.1.2 Testing more appropriate fertilizers including through alliances with Yara and other private sector partners

IICEM is partnering with Yara to implement a test to demonstrate to shallot producers the excellent results they can obtain with adapted fertilizer. As described in the previous quarter, IICEM staff selected 50 producers overall, five each from 10 Dogon Plateau cooperatives. IICEM selected them on the basis of their openness to innovation, availability of test vs. control plots, good access to water and their respect for the prescribed process. IICEM and Yara provided a total of 5T of fertilizer to the 50 producers. Initial results are excellent, showing dense, robust plants with large darker colored leaves and voluminous bulbs which indicate a high yield. IICEM and Yara will determine final results in terms of yield, shelf life and quality after harvest.



Figure 6: Yakawara Women explain the advantages of Yara fertilizer for shallots. Initial results are very promising.

Activity S.1.3 Introducing best practices in production including better composting

IICEM staff also worked closely with the 10 Dogon cooperatives to measure yields using test plots over the full 182 ha planted. For each cooperative, IICEM helped producers put in place 5 test squares for each of the 50 test plots and 5 control squares for a total of 500 squares. Given most of the plantings had not yet reached full maturity, full data are not yet available. To date, data is only available for two villages, Yawakanda and

Kokdiogou, but is very encouraging, revealing provisional estimates of 39T/ha compared to 29T/ha baseline for cycle two production, representing a 35% increase.

Through NGO partners, IICEM also trained 50 producers on key production techniques including the advantages of using organic fertilizer versus DAP and mineral fertilizers, how to adapt production processes in view of advanced degradation of soils in the Dogon area, and rapid composting to quickly obtain organic fertilizer. As a result of the training and the dissemination of the techniques, 100 producers made commitments to adopt rapid composting for the third cycle of shallot production.

IR S.2 IMPROVED ACCESS TO MARKETS AND TRADE

Activity S2.1 Promote Group Sales

To put in place a system for group sales, IICEM and partner NGOs organized marketing committees of six producers for each of the 10 Dogon cooperatives. Each of the committee is managed by a President and includes an Administrative Secretary, Treasurer, Stock Manager and two Purchasing Managers. To ensure full commitment, IICEM facilitated a series of meetings to build awareness and train producers on the importance of group sales and the processes needed to govern their cooperation. All the training took place in the Dogon language. With the full commitment of partners, IICEM achieved strong results, with 60 committee members trained, and committees in three cooperatives, Yawakanda, Anakanda and Dioudioulou, already taking the initiative to contract a wholesaler to market 115 T of shallots, including 12 T of dried, powered shallots.

IICEM also provided deep support to the Dogon cooperatives in marketing second cycle shallot production. IICEM partner NGOs developed linkages between partner cooperatives and three wholesalers. Overall, the cooperatives marketed 300T of shallots, 270T fresh at an average price of FCFA 132/kg and 32T of dried shallots at FCFA 775/kg for total sales of FCFA 60m. Partners obtained prices slightly higher than last season, 5% higher for fresh and 3% higher for dried. With the institutional restructuring, improved inputs and group sales just starting, partners have not yet fully realized maximum price increases. The process of constantly informing partner cooperatives on the evolution of shallot prices also continued, greatly facilitating the marketing process.

Activity S2.2 Develop new sub-regional markets

No activities during this period in developing sub-regional markets.

Activity S2.3 Promote improved value added through improving warehouses and shallot grinders

In quarter two, IICEM aggressively targeted improving warehousing in the shallot value chain to improve access to seeds early in the season and provide for warehousing to increase shelf-life and reduce post harvest losses. With the oversight of local masons, IICEM started construction of eight 15T warehouses in Dandoli, Anakanda, Sonigué, Gougou, Dioundioulou, Sinkarma, Kokodiogou and Wolo-Wolo. In addition, the project completed planning with a major wholesaler to build a warehouse with a 25T capacity in the Dogon Plateau for processed shallot products as well as the rehabilitation of the UCAMHO warehouse. By the end of the quarter IICEM staff had signed the necessary contracts, confirmed availability of materials and readied the process to obtain 120T of improved seed that will be warehoused in preparation for early planting in the following season to allow Dogon producers to take full advantage of the early season before Niono shallots hit the Bamako market. Staff members foresee an increase in revenue of more than 150% per Kg based on better market timing.

Co-investing in value-added

IICEM co-invests with shallot producers in grinders to improve value added and increase incomes. Producers take on 30%-40% of the investments in year one.

IICEM also introduced eight shallot grinders in Dogon Plateau, Mopti and Lac Horo to increase value added and help producers diversify their sources of income. For each, the recipients provided their contributions taking on the costs of the accessories including the containers, bags and enclosure as well as the operating costs-about 30% to 40% of the overall investment. Each cooperative put in place a committee to oversee governance of the grinder. At the end of the quarter IICEM staff and partners were finalizing acquisition of the machines and the designated committees were developing processes for management and operation. The quarter three report will provide data on actual production using the machines.

IR S.3 ENHANCED FINANCIAL SERVICES

Activity S3.1 Facilitating Access to Input Financing

IICEM worked with 10 cooperatives to determine input needs and prepare eight requests for financing, totaling 12 million FCFA, to the BNDA. BNDA agreed to finance six of the eight requests, for a total financing of 10 million FCFA.

Project staff also focused closely on re-building an environment of trust between the BNDA and shallot producers to improve overall availability of financing. This began with a wide campaign to promote payment of existing arrears. IICEM and its partner NGOs talked with producers in each of the target villages about the consequences of non-payment. IICEM developed, with the partner cooperatives, a process through which each member would have a certain percentage deducted from their sales to reimburse unpaid loans. While payment of outstanding debts and better repayment in the future depends on larger restructuring of marketing in process, this initial campaign already resulted in 100% recovery of outstanding amounts for a women's cooperative and 60% of outstanding loans for a men's cooperative in Anakanda.

IR M.4/M.5 IMPROVED AG AND TRADE ENABLING ENVIRONMENT

IICEM staff facilitated a workshop to present the extensive diagnostic studies and to facilitate discussion on the deep institutional restructuring of the shallot sector on the Dogon Plateau. The workshop, which took place 21 to 23 January, sought to:

- Present the finds of the studies including a market study of the domestic and sub-regional markets for both fresh and processed shallots, and the institutional diagnostic, two of which were conducted by IICEM directly.
- Facilitate discussion of the recommendations in order to develop an action plan to allow the producer groups in the zone to better organize and improve their efficiency, volume and ultimately their returns.

The participants decided to undertake a substantial restructuring of the Union of producer groups to put in place a process for group marketing. In order to make this happen they recommended

- Mobilization of the *Organisations Professionnelles Agricoles* (OPA) to prepare them for group sales,
- Financial support from PCDA and IICEM to reorganize the process of marketing and to reorganize the producer organizations more broadly
- Technical capacity building for member producer groups through the PCDA and IICEM including market analysis and information
- Deeper engagement of the coordinating group, (*cadre de concertation*) in monitoring the activities of the value chain.
- Specific capacity building for women members cooperatives and those elected to participate in committee as well as a greater commitment to involving women in the trader groups to protect their interests and increase their incomes
- Invitation to all NGOs involved in the Plateau to provide their credentials to the administration of the Union



Figure 7: Women participate in the shallot forum facilitated by IICEM. During the forum, producers committed to restructuring the value chain.

- Putting in place of a committee to follow up on the recommendations and to prepare a strategy to put the recommendations into practice

IICEM also provided training in the cooperative law, leadership for change, cooperative governance and how to build a “campaign plan” to guide planting and marketing activities. As a result, 50 producers built their knowledge of the benefits of the law and the operations of a campaign plan, and the process of providing leadership for change. Many of the cooperatives also signaled they will change their base articles to reflect new principles.

TOMATO VALUE CHAIN

In quarter two, IICEM accelerated its partnership with the *Office de Développement Rural de Sélingué* (ODRS) to extend the host free period (HFP) technique to Sélingué, disseminated lessons learned on virus control through open doors events, brochures and development of a film, and put in place a process for monitoring of the impact of the HFP and the virus resistant and tolerant tomato varieties. IICEM staff also began reinforcing marketing capacity of the *Office du Périmètre Irrigué de Baguinéda* (OPIB) and prospecting for export markets for dried tomato.

IR T.1 INCREASED AGRICULTURAL PRODUCTIVITY

Activities T1.1 and T1.2 Continue and expand Host Free Period and disseminate the concept of virus control

On 15 January 2009, IICEM organized an “open doors” day in Baguinéda to share the results and technologies adopted as part of the host free period and facilitate an exchange among the many actors



Figure 8: IICEM partners look at virus resistant tomato varieties during the open doors event

involved as well as promoting the technique. It included visits to sites at Dougourakoro et Kogniba in the Baguinéda zone. More than 160 different actors from the value chain attended. In addition to 130 producers, IICEM brought together Ministry of Agriculture officials, the Baguinéda government, extension services and OPIB. IICEM conducted the day with financial and technical partners ODRS, the Office du Niger, the Millennium Villages, the PCDA, and private sector alliance partners l’AGRIDEV, Comptoir 2000 and Technisem. The day created linkages across the value chain extending well beyond the virus issues. The most immediate result was the opportunity for the major tomato producers from

Ségou and Sélingué to capitalize on the 2008 Baguinéda experience. In addition, participants recommended that the partners disseminate a national plan for virus control

across all the major producing areas and to carefully capture and put the Baguinéda experience at the disposition of producers nationally.

To prevent further outbreaks and avoid re-infection in the 22 Baguinéda villages, IICEM is supporting the extension of the HFP to 10 bordering villages. During quarter two, IICEM staff identified the 10 villages with the OPIB and explored their involvement in the HFP, and developed an MOU with the ODRS to carryout the HFP in these villages during June-July-with the beginning of detailed implementation in May. Already, 15 people from these villages participated in the open door event described above and IICEM experts have already begun, with ODRS agents, training selected producers and preparing demonstration plots.

Finally, IICEM is conducting wider efforts to raise awareness about virus control using the Baguinéda example. IICEM staff and partners prepared, during quarter two, a brochure and printed 400 copies for distribution through the open door event and through other channels. IICEM is also developing a short documentary film on the fight against the virus and the HFP. The film will take into account all the steps in the production process right up through the current harvest.

Activity T1.3 Transfer skills to ODRS personnel for the HFP

In quarter two, IICEM began in earnest the process of preparing the ODRS to replicate the Baguinéda experience. Project staff, along with partners IER and AVRDC conducted an extensive training in late December. The training focused on building awareness of the mechanics of the Baguinéda HFP, the importance of the IICEM/IER/AVRDC partnership and to build a deeper understanding of the diagnostics, transmission, negative impacts and HFP process along with resistant and tolerant varieties and good practices in nursery management. As a result of the training, 30 ODRS technical staff came out with a strong understanding of the integrated fight against the virus, the mechanics and importance of partnership among multiple actors and the mission and value of IICEM.

IICEM and its partners learned, through site visits, that the virus has thoroughly infested the area around Sélingué causing producers to begin to abandon it as a crop. Manincoura, because it is a new zone, has not experience significant damage. All parties agreed it was critical to implement a Host Free Period in Manincoura to prevent the virus from spreading and to begin distributing virus tolerant and resistant seeds (see below).

Finally, IICEM support the distribution by the ODRS of virus tolerant and resistant seeds to 33 producers with demonstration plots in Manincoura in Sélingué and Yanfolila. Overall, the initial results have been excellent with the seedlings showing very satisfactory growth and no damage excepting two plots in Yanfolila which were attacked by insects. Final results will be available in quarter 3.

Activity T1.4 Expand IPM production zones by disseminating tolerant and resistant seed varieties in alliance with private partners

In quarter two, IICEM closely supervised the trials by 50 selected producers, 37 men and 13 women, of the virus tolerant and virus-resistant tomato varieties. By January 2009, 48 plots still remained active, 22 plots of Shasta and 28 of H8804 against a control group of 20 plots of Roma VF and VC 22 both of which are sensitive to the virus. Two of the original 50 plots were destroyed by bacterial growth. Only one of the plots has been harvested, with the remaining 47 in various processes of development. It's important to note that none of IICEM's 50 test producers continued with varieties sensitive to the virus in their wider production areas outside the test plots, so they have already adopted this critical technology.

Activity T1.5 Monitor and evaluate the impact of the Host Free Period technique

Activities T1.1 through T1.4 describes the various tasks underway to monitor impact. IICEM staff and partners are following up on success of the 50 demonstration plots in the 22 base villages and extending the process to Sélingué as well as monitoring the progress of various improved tomato varieties. IICEM staff will also track the socio-economic impact on incomes and other indicators.

IR T.2 IMPROVED ACCESS TO MARKETS AND TRADE

Activities T2.1 and T2.2 Assist in building trade information and in promoting fresh and dried tomatoes

IICEM reinforced the system in place at OPIB for marketing tomato. In quarter two, OPIB marketed 1080 T from small producers. The price varied from FCFA 200 to 300 per Kg. Initial data indicates there were highly profitable given an estimated yield of 30T/ha the total turnover is estimated to be FCFA 200m over all four sectors of the OPIB.

IICEM also support prospection for export markets through participation in the « BIO FACH » trade fair for organic products in Nuremberg Germany. As a result of the fair, IICEM started extensive conversations with two potential dried tomato buyers in France, Sud France and IRIVIERE. These conversations were continuing at the end of the quarter.

IR T.3 ENHANCED FINANCIAL SERVICES

There were no activities in this area in quarter two.

IR T.4/T.5 IMPROVED AG AND TRADE ENABLING ENVIRONMENT

OPIB, with IICEM financial support conducted a training of 80 members of producer organization leadership December 16 to 19, of which 40% were women. The training focused on administrative and financial management of cooperatives, planning for the campaign and other activities, determining sale price for fresh tomato and the preparation of financial statements.

IICEM also continued developing terms of reference for a workshop to support development of a lobbying strategy specifically targeting the tax on imported seeds that increases costs for tomato producers. Trainers will implement the workshop in the third quarter.

CROSS CUTTING ACTIVITIES AND NEW VALUE CHAINS FOR YEAR 2

Strategic Activities Fund

At the end of quarter two, short-term consultant Ed Keturakis visited Mali to facilitate the launch of the Strategic Activities Fund (SAF). IICEM designed the SAF to facilitate potentially transformative investments in agricultural value chains with a preference for IICEM core value chains as well as for investments relating to food security. The SAF begins with selection of entrepreneurs with promising business plans, significant capital and expertise. Once staff members have selected the entrepreneurs, IICEM will work with them to refine their business plans, find technical partners, obtain bank financing, and by providing a SAF grant to help catalyze the investment.



Figure 9: SAF Advisors meet with possible investors at a Sikasso feed mill

During the launch process, IICEM organized a team to oversee field activities for the SAF and allocated roles and responsibilities. Project staff also issued the request for expressions of interest for SAF entrepreneurs, the RFP for consulting firms who will work with IICEM and the selected entrepreneurs to develop business plans and fine-tuned the schedule of activities. More than 51 potential entrepreneurs and partners (such as banking partner BNDA) attended the SAF launch event on February 26. Five newspapers and the ORTM covered the launch event giving it wide exposure.

The launch started the SAF process. Between the launch and August IICEM will develop up to five financeable business plans. In quarter three, IICEM staff will receive and screen

the expressions of interest, finalize contracts with consulting firms to begin the process of business plan development and recruit technical experts to ensure the feasibility and quality of the investments proposed.

Improved Financial Services

IICEM disbursed the second tranche of the base guarantee fund in quarter two and financing is moving forward in each value chain as the season demands. Financing continues per normal in accordance with the agricultural calendar. Financing of the agricultural campaign is already largely done in the shallots and potato value chains, is in process for mango, and has not yet begun for the rice season. IICEM will launch the medium guarantee fund to support investment to drive value chain growth in quarter three.

As noted in the challenges section, because of government subsidies for inputs as part of the *Initiative Riz*, IICEM staff members have determined the guarantee fund for private input suppliers in Northern Mali is no longer feasible. With no functioning private market for inputs, there is no incentive for private suppliers to use their own capital. IICEM will work with USAID to re-program those funds.

Promoting Shea Butter Marketing with the Peace Corps

In quarter two, IICEM began planning for attendance at the regional Shea Butter marketing event in coordination with the Peace Corps. As foreseen in the workplan, this conference will be a first step in determining what the market prospects will be, and will guide IICEM in planning activities for this year. The quarter three report will provide additional detail on results and next steps including how IICEM will coordinate on an operational level with the Peace Corps program.

Collaboration with INTSORMIL in Sorghum / Millet

In quarter two, IICEM determined a framework for collaboration with INTSORMIL and their partners at IER that is included in the workplan. The framework starts with supporting only INTSORMIL partner villages that have gone through at least one production cycle. IICEM will help them formalize and build the capacity of their farmer groups, develop relationships with micro-finance institutions and put in place a small scale warehouse receipts program like IICEM's CSV. The planning foresees initial joint scoping visits between IICEM and INTSORMIL to six selected villages to put in place a joint workplan. The IICEM Market Advisor will also prepare trainings in cooperative law and warrantage. In addition to direct support to INTSORMIL villages, IICEM also began discussions with IER to ramp up impact achieved through a demonstration of improved millet varieties on 375 ha in the Ségou region, and a seed-multiplication program to increase availability of improved varieties for year 3 to enable much wider dissemination.

Food security activities in Kayes

In this activity, IICEM will provide capacity building and governance assistance to complement the building of a warehouse by the US Department of Defense. USAID provided the final go ahead for this activity only toward the end of quarter two. In late February, IICEM Marketing Advisor Ursula Kohlen began discussions with possible partner women's groups in Kayes as well as NGO Afrique Verte that will be the technical partner on the ground. The quarter three report will provide more details on progress in obtaining a site for the warehouse, selecting the women's group and developing the terms of reference for the capacity building.

NATURAL RESOURCE MANAGEMENT AND BIODIVERSITY

In the second quarter, the IICEM NRM team focused on training advisors on relevant NRM law and regulations as well as making contact with and organizing the various groups that will have to be involved in moving forward the selected conventions. In biodiversity, IICEM developed terms of reference and conducted a selection process to identify subcontractors and grantees to implement each of the biodiversity activities designed in quarter one. NRM and biodiversity activities covered all the core operating regions for IICEM: Sikasso, Mopti, Timbuktu and Gao.

Natural resource management

In NRM, IICEM staff achieved the following results:

- Training 14 staff members of NGO / GIE partners RCGOP and CONFIGES in the process of preparation, adopting and obtaining approval for natural resource management conventions
- Identification of all stakeholders involved in each of the targeted conventions and establishing contacts between IICEM's NGO partners and the government organizations involved. Building on these contacts, the NGOs will take over the process of organizing general assemblies to develop and review draft conventions
- Preparation of the draft MOU concerning the pastoral area in the intercommunal area of Noupagagnon which brings together 16 communes in the *cercle* of Sikasso.
- Assistance to populations in implementing conventions approved during project year 1 covering approximately 18% of anticipated training:
 - Training in NRM for 57 communal counselors and village supervisors in Manako and Diambacourou, in the Mopti region
 - Training 57 stakeholders involved in implementing conventions to protect the Bouberewol and Djenekila. This training was in relevant laws and regulations, especially law 95 on forest resource management, fauna and their habitat, fishing and fish farming and other areas.
- Preparation and signature of the Agreement to establish a green belt around Dire. All concerned stakeholders signed including Mayor's office, women's groups and the local representatives of the Agency for the Conservation of Nature. The greenbelt will be 2 km long and 100m wide.
- Purchase of 100 sacks of 100kg of seeds of the local plant *cram-cram* for future work on fixation of dunes in June and July in the Lac Horo area.

Biodiversity conservation

In biodiversity, the second quarter saw IICEM staff mobilize many of the resources to allow them to implement the activities selected in quarter one:

- **Protected Areas of Bougouni-Yanfolili.** IICEM organized a limited competition and selected implementing partners for each of the activities as follows : AGEFORE will conduct the inventory of fauna; ID-SAHEL will conduct the inventory of plant life; GEDD will do the demarcation; GEDUR will conduct the socio-economic study for the first part and BEACIL for the second, and

Dr. Mariko will buy and analyze satellite photos. All will be completed within 45 to 60 days of award.¹

- **Preparation for Declaring Bagoé Forest a Protected Area:** IICEM issued the limited RFP and selected Fitnè Consult to prepare the initial study. As the quarter ended, IICEM was negotiating final terms. Work is expected to begin 1 April and will last for four months.
- **Joint Work with the Global Sustainable Tourism Alliance in Protecting the Toupere and Samori Forests.** IICEM launched a limited competition to select companies to conduct socio-economic studies. Offers were expected at the end of March.
- **Inventory of Plant and Animal Life in the Sourou River and the Inner-Niger Delta.** IICEM has already begun the work with Wetlands international. The first report is due on March 12, 2009.

¹ Wherever subcontractors are mentioned, USAID consent will be necessary.