



MADAGASCAR

BUSINESS AND MARKET EXPANSION (BAMEX)

AUGUST 2004 – AUGUST 2008 FINAL REPORT

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SECTION I: INTRODUCTION

This final report provides an overview of the project in section I, discusses work done under each of the three results modules in sections II-IV, suggests what our legacy will be and addresses transition activities in section V, and summarizes the budget in section VI. The CD ROM (at the end of the hard copy and available separately) provides copies of the main reports produced under the project.

Context

A four-year program funded through USAID in Madagascar, the Business and Market Expansion Program (BAMEX) started in 2004, a period when the Malagasy economy was beginning to recover from the political crisis that rocked the country in 2002. BAMEX was part of USAID's Ecoregional Alliance and the government of Madagascar's rural and private sector development policy. BAMEX aimed to foster growth by promoting domestic and export trade and by increasing revenues generated by agricultural, mining and gemstones, crafts, and ecotourism products. About nine percent of the funding was earmarked for mining and gemstone work, the subject of a separate final report in August 2007.

Initially, BAMEX operated under USAID's strategic objective number 7 (SO7) by providing technical assistance, capacity building, and support of reforms in the country's legal, institutional, and regulatory framework. These actions were aimed at generating sales, promoting trade, attracting capital, and helping the government promulgate new regulatory texts to improve the business environment and stimulate private sector development. BAMEX worked within this context from 2004 to 2006, using the slogan "A business appointment" (or "Au rendez-vous des affaires").



Like other BAMEX beneficiaries, these litchi producers increased their understanding of and ability to respond to market requirements. Here, they sort litchis as part of a coordinated effort to improve quality standards and increase producer prices.

In May 2006, program changes and budget cuts at USAID compelled BAMEX to reorient and restructure its activities. Though BAMEX remained rooted in the Ecoregional Alliance, its oversight was transferred from SO7 (economic growth) to SO6 (rural and environmental development) and its purpose became poverty alleviation, improved living conditions, and reduced pressures on the forests of USAID's priority eco-regions. This reorientation marked the beginning of the program's second phase (2006 – 2008) with the slogan "Conquering the market together" (or "Ensemble, à la conquête du marché"). Interventions were focused on farmers' associations, notably the koloharena located in USAID's target areas.

This second phase of BAMEX coincided with the official launching of the Madagascar Action Plan (MAP), an ambitious plan that defined national priorities for 2007 to 2011. BAMEX's actions complemented this government policy and contributed to its main objectives of rapid economic growth and poverty reduction.

Despite being split into distinct phases, BAMEX had an integrated approach that brought results to its clients. This was confirmed by the program's final assessment, cited in the box below.

An Approach Valued for Its Relevance

"BAMEX is a successful, integrated approach based on a combination of best practices that should be held up as a model for development programs in Madagascar. ... The main reason for BAMEX's success is its relevance. Its activities respond to a precise intervention logic and are carried out in response to specific problems."

— Evaluation of BAMEX (in translation) by Hermès Conseils, April 2008

Approach to the Project

The BAMEX approach was based on the experience of USAID and other donors executing similar programs in other countries, as well as the team's assessment of Madagascar's particular needs. The approach required the team to identify markets with the greatest potential for existing or potential products produced by the target beneficiaries and then help those beneficiaries meet the most stringent requirements of these markets. The evaluators described BAMEX as having a "precise intervention logic"—as described in the box below.

Interventions Tailored to Specific Opportunities and Constraints

As noted by its evaluators, the BAMEX approach was "determined by the market." It began by identifying the value chains likely to bring the greatest benefit to beneficiaries (enterprises and farmer associations in the areas targeted by USAID's eco-regions). As the evaluators noted, interventions were "oriented toward specific constraints," including constraints at the producer, enterprise, association, and policy levels, although interventions at the producer level were limited in scope.

Evaluators also praised the fact that BAMEX staff had a lot of close contact with the clients. This was possible because BAMEX set up regional business centers, and because both Antananarivo-based staff and the business center managers were trained to follow the BAMEX approach. This approach, which was regularly adjusted according to the context and circumstances in which the program evolved, was characterized by four major pillars: an orientation on the market; a focus on selecting the most promising value chains; interventions at the level of the firm and the sector as well as in the broader business environment; and particular attention on the specific constraints of the target beneficiaries. Each pillar is described below:

Market-orientation. BAMEX's interventions were based on markets as the starting point of its interventions—that is, the project's orientation was more about understanding and meeting the market's demands rather than "pushing supply." BAMEX assisted Malagasy firms and farmer associations to become more competitive in local and international markets; the approach considered market demand in terms of quantity, quality, and deadlines.

Value chain selection. Instead of considering demand for all available products, BAMEX identified priority value chains according to the potential growth of the product and its ability to be competitive in the domestic and global markets.

Intervention at the level of the firm and sector, and in the broader business environment. BAMEX often intervened at the level of individual firms and farmer associations by giving them the necessary support to improve their productivity and increase their competitiveness. In other cases, BAMEX worked with groups of firms within one sector or with the government to improve the administrative, legal, or regulatory framework in which firms work.

Particular attention to beneficiaries' specific constraints. The project's interventions were carried out according to the specific needs of each target beneficiary or group of beneficiaries. Support to help clients deal with their own challenges or specific opportunities was among the most appreciated contributions of BAMEX. BAMEX worked together with the public and private sectors, donors, NGOs, and development institutions to meet the needs of the beneficiaries.



This coffee cupping event was part of an effort to promote specialty coffee. The project, working with both farmers' associations and the exporter Corridor Coffee and Spices, helped farmers produce coffee in compliance with the requirements of local and international markets. Eventually, Corridor Coffee exported 18 tons of gourmet coffee to the United States.

Main Players and Events

USAID oversight of BAMEX was first provided by Madeleine Gauthier, who was replaced by Lisa Gaylord in 2006. Team leadership was provided by Jean-Robert Estimé, who was replaced by Anselme Rakotomanana in 2006.

The project's history was marked by several noteworthy events:

- The national workshop on input supply and distribution in January 2005, which involved private sector operators and the government. This workshop endorsed the key elements of an action plan for the fertilizer sector.
- An agribusiness mission to Thailand in February and March 2006, identified new outlets for Malagasy exports, identified manufacturers and agricultural material and equipment suppliers, and created partnerships.

- The national meeting on bioenergy in October 2006, focused on players and stakeholders in the fields of bioenergy in general and of jatropha in particular, sharing information and exchanging experiences.
- *The agricultural fair* in August 2007, with exhibits promoting *koloharena* products, notably red rice, spice, jatropha by-products (such as soap and candles), and handicrafts.
- The launching of the first Castells Madagascar certified seeds in November 2007, represented the fruit of a partnership between BAMEX and Castells whereby BAMEX facilitated the establishment of the company in Madagascar.
- The export of 150 tons of certified litchis during the 2007 campaign.
- *The specialty coffee day* held in January 2008 in Antanimena, promoted specialty coffee and wet coffee processing. (The picture above shows coffee cupping in Antanimena.)

Main Accomplishments

Over the years, BAMEX became noted for its productive relations with partners, including the government, the private sector, farmer associations, and stakeholders in rural development and economic growth. It generated tangible results for the Malagasy population in general and for the private sector and the rural population in particular. The program had three main expected results: strengthening market opportunities, supporting financial and business services, and improving the institutional and legal framework for business through reforms that promote investment and increase the competitiveness of selected value chains. Results in each of these areas are presented in Sections II-IV; highlights are noted in the box below:

BAMEX's Main Achievements

Over the course of four years, the BAMEX team:

- Helped beneficiaries increase sales by \$13.9 million.
- Supported producers in the negotiation of 121 contracts with buyers amounting to \$1.3 million.
- Created a bi-weekly gemstone market in Antananarivo.
- Facilitated about \$369,000 of investment through the refinancing and guarantee fund (FIEFE).
- Promoted investment in the seed and jatropha value chains, leading to major investments by Castells, D1 Oils, Neo, and JSL.
- Helped launch the jatropha value chain, which brought about the establishment of new technologies such as jatropha candles, soap, and oil used in agricultural engines.
- Created business centers (the so-called BCIs or Business Centers Ivoharena) to help value chain actors access business services.
- Initiated legal and institutional reforms, including the biofuels bill, submitted to parliament in 2008, and the implementation decree of the law on seeds in 2007.

In addition, the team helped beneficiaries adopt new ways of understanding and responding to market requirements. Behavior changes included adopting new methods for the harvesting and marketing of agricultural products such as litchis; increased respect for the rules of hygiene; the incorporation of the jatropha value chain in farmers' agricultural calendar; the use of new jatropha by-products; and the use

of the wet processing method for coffee. Stakeholders demonstrated an increased trust in the *koloharena* associations as did cooperative members, suppliers of inputs and of agricultural equipment, and credit and microfinance institutions. Farmer associations increased their capacity to manage, develop business plans, handle credit, and negotiate with business partners.

Another indication of BAMEX's success was the revival of the litchi and coffee value chains on the global market, a market recently neglected because of a drop in export prices. For both of these commodities, BAMEX raised awareness about product quality and strengthened producers' ability to respond to market requirements. BAMEX also established a new value chain, jatropha, which developed at exponential speed with seven foreign investors and the planting of over 30,000 ha of jatropha.

Lessons Learned

The BAMEX experience demonstrates the value of a holistic approach requiring the contractor to identify specific market opportunities, work closely with clients to overcome constraints, establish necessary relationships, and promote reforms to deal with legal and juridical constraints. The approach worked well. Though budget cuts limited the impact of BAMEX, a lot can be done with little money if one builds on existing foundations, has a good team, and works with strong partners. BAMEX was fortunate to build on the foundations of previous projects that had made in-roads with several private sector operators and associations. This helped us identify promising opportunities quickly. We also benefited from excellent partners in the Ecoregional Alliance, such as ERI. Without these advantages, the small BAMEX budget would have prevented us from offering the broad range of services essential to our integrated approach.

The team learned several lessons during the project's implementation. The three main lessons are presented below:

Lesson 1: To overcome the numerous constraints facing by players at all points in the value chain, one must be ready to work wherever there is a problem. And to foster a more dynamic response from the producers and private sector operators, one must work with clients very closely.

Firms and associations often fail to take advantage of market opportunities because they lack understanding of these opportunities and buyer requirements. They have limited financial resources, hesitate to take risks, and operate in a legal framework that is not always favorable. The BAMEX approach helped clients overcome these numerous challenges. It focused on specific opportunities and allowed the staff to work closely with each client on the specific problems preventing it from meeting these opportunities. According to a 2008 evaluation of the

The Value of an Honest Broker

"Relationship building was one of the main thrusts of the BAMEX program — building relations between producers and buyers, producers and investors, producers with financial institutions."

—BAMEX evaluation (in translation), Hermès Conseils, April 2008

project, assistance from BAMEX staff made it possible for our clients to do things they would not have been able to do on their own or would not have had the courage to do. This close collaboration encouraged our clients to develop a better business sense and to become more dynamic. As shown in the box above, the evaluators noticed a common theme of relationship building (also sometimes called facilitation) running through many of our activities.

Lesson 2: The weakness of producers' and private operators' entrepreneurial spirit is a significant constraint in Madagascar. Encouraging new behaviors requires support. Future projects should have a deliberate focus on promoting a more entrepreneurial culture.

In spite of the fact that many Ecoregional Alliance beneficiaries better understand and are better able to meet market requirements, there is still "a weak entrepreneurial culture" as noted by the evaluators (Hermès Conseils, April 2008). The BAMEX team and evaluators agree that one factor impeding economic growth in Madagascar is still the "influence of tradition." For targeted beneficiaries to obtain more significant returns, a future program should target this issue. Our recommendation for the developers of future projects such as BAMEX is to encourage a greater orientation toward behavioral change and the development of an entrepreneurial spirit.

Lesson 3: The market often demands a greater supply of a given commodity, more reliably delivered, and of better quality than what producers typically produce. Though production is often a main constraint, BAMEX was not tasked to work at the production level; our sister program, ERI, had limited resources in this field. More support should be brought to bear on improving the quality and quantity of production.

Though BAMEX did find limited resources to support the production of some value chains, notably jatropha, the terms of reference for the project did not include assistance at the production level. Therefore, we were generally unable to work along the whole value chain. Our inability to support production limited the producers' potential to capture some promising opportunities. For instance, if we had strengthened rice production, we could have expanded into the largest agricultural market of the country. Faced with this limitation, we nonetheless found a way of contributing to the rice sector with our work on the improved seeds policy and our support to the Castells investment in seed certification and multiplication. For the most part, however, BAMEX's work started only after the production stage and ERI's support was insufficient to the needs. This is a gap that needs to be filled.

SECTION II: INCREASING THE COMPETITIVENESS OF SELECTED VALUE CHAINS

This section examines BAMEX's work under the first results module: increasing the competitiveness of selected value chains. We first provide a summary of accomplishments and then present four case studies illustrating how the project worked with clients to increase competitiveness.

Accomplishments

BAMEX supported participants working with nine priority value chains: litchi, rice, jatropha, onions, potatoes, aromatic and medicinal plants, specialty coffee, handicrafts, and semi-precious stones. The results can be summed up as follows:

- Natural products. We boosted producer awareness of the market's quality standards, increased
 farmers' access to market price information, helped organize sales by setting up harvesting and
 marketing structures at the cooperative level, facilitated contracts between farmers and their
 clients, and found new markets.
- *Ecotourism*. We upgraded selected infrastructure, promoted Madagascar as a destination, and facilitated purchase of a site for an ecolodge where the neighboring population was able to benefit through truck farming and tour guide activities.
- *Handicrafts*. We helped the cooperative create connections within the United States and established labeling for Malagasy crafts products.
- *Gemstones*. We created the gemstone market and expanded awareness of Malagasy gemstones through international fairs in Tucson and Bangkok.

Some specific examples of these accomplishments are shown below:

Level of intervention	Main accomplishments
Production level	Fight against parasites affecting litchis: conducted during the 2006 and 2007 seasons using phytosanitary products in the Toamasina and Manakara plantation areas. Jatropha plantation: setting up nurseries in the Ambatondrazaka, Mahajanga, and Antsirabe areas as well as identification of 30,000 ha. of plantation areas since 2005, training of technicians and planters on planting technique during three planting seasons.
	Organization of pink rice production: set-up of pink rice production structures in the Amparafaravola area. Eighteen members from seven Koloharena associations adopted the SRI production technique over a 12 ha. area.
Marketing level	Creating connections leading to the signing of 121 contracts for a total of \$1,277,711: Koloharena cooperative litchi producers signed contracts with Ramanandraibe Export, Faly Export, GETCO, SCRIMAD, and SAMA and sold 129 tons of litchi for \$50,667 in the Toamasina area and 147 tons of litchi for \$32,667 in the Manakara area. These contracts enabled the producers to obtain a higher price.
	 Eight cooperatives from Ambohimanarivo signed a contract with the IMRA for 1,200 kg of PAM at a value of \$1,667.

Marketing level	
(Cont.)	The Ivolamiarina cooperative and Lotus Food signed a contract for 18 tons of red rice at an amount of \$36,000. Shipment is expected to take place in October 2008 but there is now the matter of the recent export ban.
	 The Tongolaza cooperative signed contracts with the companies HOMEOPHARMA and NormaTrading for 3.2 tons of ginger for a value of \$989, a price which is higher than anywhere else on the market in Madagascar.
	The Anjoma Itsara and Tolongoina producers' associations signed contracts with Corridor Coffee and Spices (CCS) for the purchase of gourmet coffee in the amount of \$ 1,200.
	 Support in the establishment of 79 D1 Oils partnership contracts with its partners (individuals, associations, companies) for the purchase of 2,645 ha. of jatropha and assisted with the identification of potential biodiesel buyers on the local market: ADER, JIRAMA, MADARAIL.
	Assistance to Malagasy crafts companies engaging in international negotiations, notably with the American companies "World of Goods" and "From the Mountain."
	Other support to marketing:
	 Promotion of the manufacture and utilization of jatropha by-products (soap, candles, and oil for agricultural engines) in the rural areas, implemented by trained KH members.
	 Support for the litchi value chain, including training on quality standards and introduction to the EUREP-GAP and Global GAP systems of reference, support for selling products to the United States and market exploration leading to the export of 285 tons of EUREP-GAP litchis and 1,000 tons of standard litchis from Toamasina and the export of 137 tons of EUREP-GAP litchis and 363 of standard litchis from Manakara. Evaluations of BAMEX's role in achieving these results assign a 60 percent contribution coefficient to BAMEX.
	The search for domestic and export markets for the coffee value chain and notably support for the export of 18 tons of coffee by CCS to the U.S.
	 Funding Malagasy companies' participation in international fairs such as the international fair for fruits and vegetables, Fruit Logistica in February 2008 in Berlin, the Sources Show in New York in May 2005, and the Africa Fair in Baltimore in 2006.
Enhancement of competitiveness	Contribution to the creation of a platform for the litchi value chain in 2006, bringing together the actors in the value chain ¹ to promote partnerships, consultations and exchange of information and experience between the players and the stakeholders of the promotion of these value chains.
	Setting up of the Centers of Excellence for the coffee value chain in the Anjoma Itsara- Isorana and Sahendrana-Moramanga rural communes to promote the production of gourmet coffee in compliance with the requirements of local and international markets.
	Support the formalization of mining companies through actions promoting the understanding of the realities of the extraction sector and of the gemstone marketing chain.
Cross-cutting support	Technical supervision of the jatropha vegetable oil extraction processes to promote by- products such as soap and candles. The assistance was given to 115 participants.
	Various trainings: harvesting, wet method processing of coffee for the farmers, producers and the processing agents, quality management for litchi exporting companies, quality

¹ Approximate numbers of participants: 2500-3000 collectors, 15,000-20,000 producers, members of technical training services, notably from other donor-funded projects and ministries (MAEP, MECI).

Cross-cutting support (Cont.)	control for the aromatic and medicinal plant producers (clove, cinnamon, geranium, ginger, vanilla), negotiation techniques for the Koloharena Cooperatives in the Fianarantsoa and Ambatondrazaka areas, general product information, business management and marketing for the resellers and distributors of agricultural inputs.
	Support of loan applications for the purchase of processing units and agricultural material.
	Improvement of the regulatory framework for small mines and gemstones to fight corruption and set-up of the DSTM booth in Ivato.
	Promotion of Madagascar as a tourist destination in the ecotourism sector through the organizing of a round-table in collaboration with ANGAP, technical support to the ministry for setting up of a Tourism Satellite Account or "Compte satellite du Tourisme", financing of the Malagasy tourism sector's promotion campaign geared toward the European market in partnership with the Agence Française de Développment.

The table below groups some of key program indicators in this component.

Indicators	Target	Actual Achievement
Increased value of sales of selected products from BAMEX clients (RM1) in	\$12,642,000 ²	
Natural products and handicrafts		\$13,924,989
Increased expenditures by ecotourists in BAMEX areas of interventions	\$2,040,000 ³	\$2,004,324
Increased value of gemstone sales from BAMEX clients	\$457,000 ⁴	\$593,500
Value of contracts between producers associations and BAMEX clients (ER 1.3)	\$1,095,500 ⁵	\$1,277,711
Number of new technologies or management practices made available for transfer as a result of USG assistance (EG 5.2)	15 ⁶	12
Increase in investment in eco-enterprises (SO6) by BAMEX clients	\$ 444,000 ⁷	\$ 369,000
Increase number of ecotourists in BAMEX areas of intervention	25,000	94,581
Increase in private sector investment in gemstones by BAMEX clients	\$ 40,000	\$ 42,500

As shown above, the project achieved or exceeded its targets in most instances. Of particular note:

- Value of contracts between BAMEX-supported producer associations and clients. More than 120 contracts totaling almost \$1.3 million were signed, exceeding the target. We had expected to facilitate about 50 contracts to meet the target, but since the contracts were smaller than expected, it was necessary to facilitate more of them.
- *Gemstone sector*. In addition to the sales listed here, BAMEX's performance in the gemstone sector is also reflected in the establishment of an independent and sustainable market, i.e., the "Gemstone Market'.8 that guarantees increased sales of Malagasy gemstones on the local market. Work in the gemstone sector is explained in more detail in the final report for that component, dated August 2007.

² \$12,642,000=\$11,970,000+\$672,000 (Monitoring and evaluation plan, August 2005)

³ \$2,040,000=\$510,000+\$1,530,000 (Annual Report December 2005, November 2006)

⁴ Final Report Gemstones, August 2007

⁵ BAMEX Annual Report, December 2005, November 2006, August 2007, Semi-annual Report February 2008

⁶ BAMEX Annual Report, August 2007, Annual Report 2008

⁷ BAMEX Annual Report, December 2005, November 2006

⁸ The number of visitors to the "Gemstone market" totaled 48,466 end of June 2007 (date when the BAMEX supports to the sector stopped) and the market is operational to this date.

• *Increase in investment*. As shown in the table, there is a shortfall in this component. However, the official numbers reflect only those clients increasing investment thanks to the eco-enterprise fund FIEFE. BAMEX can also claim credit for assisting with significant foreign investments in jatropha and seeds.

Case Studies

The following case studies take a more in-depth look at four different ways that we worked to boost clients' competitiveness. They examine:

- Efforts to increase prices earned by farmers by helping their association negotiate contracts with exporters and meet quality standards for litchis
- How the project helped its clients sell pink rice on the U.S. market, which required more a complex coordination of players in the value chain
- How the project developed jatropha, a new value chain in Madagascar
- Challenges faced by producers of traditional products such as ginger and how BAMEX tried to help producers make the most of available opportunities

In each case, we lay out the challenges, initiatives, results, and lessons for the future.

Case 1: Litchis

A study of efforts to increase prices earned by farmers by helping a farmer association sign contracts and meet quality standards

Madagascar is a primary litchi producer for the winter European market with an average annual production of 20,000 tons. However, in spite of the doubling of export volume between 1996 and 2000, the average price for a kilogram of litchis has fallen significantly, going from 1.20 euros FOB (free on board) in 2001 to 0.70 euros FOB in 2005, having serious effects on producers' income. BAMEX's support was aimed at improving income generated by marketing litchis because our research showed that higher prices could be obtained if Madagascar were better able to respond to market requirements.

Numerous initiatives were launched to promote this value chain:

- Marketing contracts. BAMEX helped producers' cooperatives and exporting companies develop marketing contracts. This required facilitating communication and trust between the two groups.
- Structuring the value chain. BAMEX helped establish the litchi value chain coordination group (plateforme de concertation de la filière litchi or PCL) in 2006. This group helped structure the value chain, improve production, set professional standards for private sector operators, and arrange deals.



The partnership between producers and exporters helped to improve quality. Here, fruit is sorted at the packing house.

- Standard setting. BAMEX introduced litchi producers to the EUREP-GAP (later Global GAP) system of reference to help them respond to the European market's quality standards. It also carried out a diagnosis of the litchi exporting companies in terms of the quality management processes.
- Phytosanitary surveillance. BAMEX, in collaboration with the Ministry of Agriculture and the USDA, carried out phytosanitary surveillance of the litchi producing areas of Toamasina, Manakara and Fort Dauphin during the 2005 2006 season. This involved the training of agents in plant protection and quarantine procedures.
- Trade fairs. The program contributed to financing Madagascar's participation to the international fair for fruits and vegetables, Fruit Logistica, in February in Berlin, through the Association of Litchi Exporters (Groupement des Exportateurs de Litchis or GEL). This was an opportunity to promote Malagasy products, to maintain existing markets, and to gain access to new ones.

Support from the BAMEX program led to finding better outlets for litchi and to increasing the volume of clients' sales during these last two years. In 2006, the cooperatives were able to sell 200 tons of litchis thanks to the support of the BCIs. In 2007, the Manakara BCI doubled these sales by helping producers conclude a 500-ton contract with the *Société Ramanandraibe*. Moreover, litchis from the cooperative were sold at a better price: \$0.39 a kilo as compared to \$0.14 for sales on the local market and to middlemen resellers thanks to negotiations with the Société Ramanandraibe and more organized marketing.

Also of note was the development of formalized contracts with other exporters. The Fénérive, Vavatenina Maromitety, Brickaville Anivorano, and Vatomandry Ilaka Est cooperatives signed contracts with the group of exporters Le Pool at the rate of 100 tons per season. In addition, during the 2007 – 2008 season, we worked with the following cooperatives to develop contracts with exporters in the Tamatave area:

- Fanevan' Analanjorofo CKH with Rosin Export and GETCO for 100 tons of certified litchis
- Fanevan'Iazafo CKH with GETCO for 90 tons of certified litchis
- Fanilon'Iazafo CKH with Faly Export, GETCO, SCRIMAD and SAMA for 180 tons of certified and standard litchis

Thanks to the BCIs' support, and in collaboration with Société Ramanandraibe, the technical and administrative skills of cooperative members and companies were strengthened through trainings on production and collection techniques, standards and quality and hygiene compliance, and accounting and management.

The quality initiative was successful as the Manakara litchi producers adopted the EUREP-GAP reference system. Ninety KH associations were able to set up the EUREP-GAP systems of reference for standard compliance. Three exporters were certified for the 2006 season and 64 regional Koloharena offices obtained the EUREP-GAP certification for the 2007 season.

A change in the behavior of the beneficiaries was also noted. Producers are now aware of market opportunities for their product and are striving to increase sales, taking advantage of local microfinance services.

In terms of lessons for the future, BAMEX's interventions were useful in opening up market opportunities and improving quality, but international competitiveness requires still more integration of

the quality standards in the production process and more strengthening of links between producers and exporters. In addition, the financial requirements related to certification, the uncertainties of the economic climate, and the lack of infrastructure (ports, communication, air and maritime transports, namely in Manakara) are impeding the development of the value chain.

Case 2: Pink Rice

A study of how the project organized value chain participants to sell pink rice on the U.S. market

Some varieties of Malagasy rice are prized by local consumers but not well known outside Madagascar. Thanks to efforts of staff from USAID's Landscape Development Interventions project and the subsequent transition project, Europeans were introduced to red rice at the Slow Food Show in Italy in 2004. After that, these staff members made an effort to investigate U.S. buyers' interest in specialty varieties of Malagasy rice. Through connections with Cornell University, a contact was made with Lotus Foods, a U.S. company interested in buying from heirloom varieties of rice from small farmers. Company representatives made a trip to Madagascar and met with the Koloharena associations of Amparafaravola. They expressed interest in receiving a trial shipment and, if that went well, a larger order. A collaboration contract was signed in early 2007 for a 36-kilogram trial shipment. The company's requirements, however, were quite demanding and would require extensive organization and coordination among various players. Specific challenges centered around:

- *Quality*. Farmers needed to achieve organic standards; they needed to stabilize taste by maintaining the organoleptic quality; they needed to stabilize the variety with varietal selection.
- *Deadlines*. To meet the company's deadlines, growers needed a flow management system: production plan, harvest plan, machining and sales plan.
- *Price*. Meeting the buyer's demands meant considerable effort. The market was interesting, but the price needed to be high enough to make it worth participants' effort.

To meet these challenges, BAMEX worked with other partners to:

- Provide baseline information on market requirements. The rice had to be produced according to the SRI technique (intensive rice system), without the use of chemicals (fertilizers, pesticides, herbicides), with a product humidity rate between 12 and 14 percent, and a rate of broken rice under 3 percent.
- Establish a production plan with each Koloharena member filling in commitment forms.
- Organize the harvest to reduce the costs and verify the quantity delivered.
- *Organize storage* by using the Amparafaravola cooperative warehouse.



Rice producers typical of those exporting pink rice. BAMEX helped organize participants in this value chain to export to the US market.

• Identify a miller to meet the unusual size requirements. The Fanampy rice mill machining facility

was identified and an agreement was made to process and sort the rice according to size and color with a broken rice rate of under 3 percent.

- Organize local transport and product delivery according to the capacity and the condition of the material used by the carriers.
- Ship. The Standards Office of Madagascar (Bureau des normes de Madagascar) controlled the quality and sealed the bags, the Société de Surveillance Générale checked the weight, and the Service for the Protection of Plants processed the container and the forwarding agents' contact.

One of the most important results of these efforts was the organizing of relationships and allocation of responsibilities to meet the needs of Lotus Food. The contracting party was the Koloharena Confederation. The responsibilities were:

- *Production.* This was made up of 18 cooperatives drawn from the seven regional offices in three localities (Amparafaravola, Ambohimandroso and Andrebakely) that committed to delivering at least 45 tons of paddy (for 18 tons or one container of red rice).
- *Harvesting*. Harvest bags were allocated according to the quantities to be delivered with a price of \$0.39/kg.
- *Paddy storage*. The paddy was stored at a warehouse with a capacity of around 140m³, located in Ampasimbola, 1.5 kilometers south of Amparafaravola. The warehouse was adapted by widening the entrance gate and installing surplus ventilation.
- *Milling*. Milling was done by the Fanampy Rice Mill, with a milling rate of 14 tons/hour.
- *Transfer*. This was the movement of the stock produced by the plant to the loading port and the transfer of responsibility from the cooperative to the national confederation.
- *Shipment*. Arrangements were made for shipping, including the establishment of the transit order, the export invoice, customs documents, and so on.

Looking to the future, the American market is potentially interesting for the Koloharena since it is a quality niche market, one that is demanding in terms of standards and quality but which could possibly make Koloharena products known worldwide.

It is for this reason that rigorous standards and regulations must be put in place so that all the stages of the chain are correctly controlled and checked. The Koloharena already have the different structures needed (farmer extension agents, local associations, cooperatives, and a confederation) but the challenge will be coordinating among all parties. Production must not be neglected. Indeed, Lotus Food requires the rice be produced according to the SRI production technique and not be subject to any chemical treatment. Thus, periodic monitoring will have to be done by the farmer extension agents in the



BAMEX worked with ERI and private investors to support the plantation of about 30,000 hectares of jatropha. The project also advised seven outside investors interested in the plant as a biofuel.

production fields to ensure that all the recommended technical packages are respected. One immediate, critical threat to the successful shipment of the rice in October 2008 is the export ban on rice, a decision by the Council of Ministers in May 2008. Koloharena leaders are looking for ways to address this problem.

Case 3: Jatropha

The study of how the project developed jatropha, a new value chain in Madagascar

In 2004, at a time when the potential of jatropha was just beginning to be discovered on a broader scale, BAMEX chose to take on the challenge of serving as a facilitator/promoter in the development of this new value chain, helping both investors and farmers work with each other to establish this new crop in Madagascar. The hope was to make Madagascar a biofuel producing country producing enough jatropha to service both the international and domestic markets. The national diesel market was estimated at 400,000m³ in 2006. The law on biofuel will mark the opening of the hydrocarbon market to biodiesel. Petroleum product distributors (Total, Shell, Jovena, Galana, through the Petroleum Grouping of Madagascar) have already shown interest in the marketing of biodiesel with diesel to reduce the cost of imports. Other outlets for jatropha oil and biodiesel include the Agency for Rural Electrification (ADER or Agence de l'électrification rurale), the JIRAMA, the maritime carriers, and the railroad. The soap industry will also constitute a major jatropha oil buyer. The soap market is 20,000 tons. The company Savonnerie Tropicale has already communicated a need for 10 tons of oil without any supplier to meet it, and Mahajanga-based soap manufacturers like the companies Fitiavana, SIB, and Dramco are also in the market. Lastly, the cosmetics sector also represents an outlet, with a market estimated at 10 tons a year. Possible buyers include Bioaroma and Homéopharma, who may be willing to buy high-quality oil at a price as high as \$2.20/liter, which would require cold extraction and rigorous quality control.

To meet the challenge, BAMEX undertook the following initiatives:

- Awareness raising and support to producers
 (private farmers, companies, and, most of all, farmer associations and cooperatives) for the cultivation of jatropha and extraction of the oil. The program supported and trained more than 1,500 farmers grouped in farmer associations in Ambatondrazaka, Antsirabe, and Mahajanga between 2005 and 2008.
- Promotion of investments in the value chain. The project provided guidance to seven foreign investors, most of whom were new to Madagascar, and helped them establish a connection with producers. This was done by sensitizing small- and medium-sized farmers to the potential of jatropha. We also encouraged farmers to set up medium-scale processing units to benefit by moving further along the value chain.



As BAMEX discovered, farmers were more motivated to plant jatropha once they understood the oil's immediate usefulness for soap, candles, and in operating small engines on the farm. This man, standing in front of three-year old jatropha trees, is showing soap made locally from jatropha oil

• Research and development. We investigated local equipment suppliers for the extraction of jatropha oil, as well as suppliers from India, France, and Belgium. We worked with the School

of Agronomy and the *Ecole Polytechnique* at the *Université de Antananarivo* for the development of research on the use of jatropha cakes as fertilizer and as a substitute for charcoal. We also worked with the Industrial and Technological Research Center (or *Centre de Recherche Industrielle et Technologique*) for the development of other jatropha by-products like soap, lighting candles, and the direct utilization of oil in agricultural engines.

- *Policy*. We helped draft the biofuel bill and regulations to be sponsored by the ministries of agriculture, environment, and energy.
- *Financing*. The project worked with donors, financial institutions and various projects to help producers find money to finance cultivation and purchase of extraction units. The program signed an agreement with the PSDR project to finance \$111,111 of jatropha planting for the 2005 2006 season.
- Synergies with partners. The project partnered with other projects such as ERI/USAID,
 PLAE/GTZ for the production and development of small extraction units allowing farmers to produce oil on site.
- *Markets for intermediate products*. The project identified several local outlets for jatropha oil and cakes.
- Training of farmer organizations on the local uses for jatropha. The project carried out training sessions on the use of jatropha oil for candles and soap in Ambatondrazaka, including for the Koloharena association, and on the southern bank in Amparihintsokatra and the western bank in Amparafaravola.

Thanks to these efforts, results include:

- Planting. According to a May 2008 study of the global market for jatropha, conducted by the World Wide Fund for Nature, Madagascar has 35,000 hectares of jatropha under cultivation, more than any other African country. BAMEX can claim a good part of the credit for this number 1 ranking. We have participated in more than 3,000 ha of jatropha planted in the Haute-Matsiatra region with assistance of ERI and in the Vakinankaratra, Alaotra, and Boeny regions with D1 Oils Madagascar. In addition, 11,000 ha have been planted by other small, medium, and large producers and large investors planted 20,000 ha in 2007.
- Malagasy players are trained and in touch with investors: Promotion and training workshops on jatropha production were held for producers in Manakara, Fort Dauphin, Antsirabe, Mahajanga, Toamasina, Ambatondrazaka, and Antananarivo. Partnership contracts were established between



These trainees have just made jatropha candles. About 65 participants received training in the manufacturing of soap and candles. As the chairman of the Ivolamiarina, Amparafaravola farmers' association said:

"The various trainings we've received really motivated us to pursue the cultivation of jatropha. Indeed, BAMEX showed us that we could make soap and candles with jatropha oil. These products are very useful for our daily problems. By making our candles, we manage to save more than 50,000 Ar a month and our children can stay up late at night to learn."

farmer associations and the company D1 Oils: 84 contracts led to cultivation of 4,000 ha.

Financing was identified for the planting of jatropha. A draft protocol between BAMEX, the PSDR, and D1 was signed that allocated \$111,111 to 32 farmer organizations to plant and maintain 700 ha of jatropha in Alaotra and Vakinankaratra.

New technologies: Three models of oil presses were identified and set up as pilots, and can continue to be used in other locations. Various uses have been found for jatropha oil. For example, it can be used as a source of light instead of kerosene, as household cooking fuel, and as biodiesel fuel. Jatropha oil is also used as raw material for the manufacturing of soap and cosmetic products. Jatropha cakes can be used by households as fuel instead of charcoal and in industrial boilers and as biogas after a methanization or gas generator. Jatropha cakes can also be used as fertilizer in agriculture.

• Investment on a large scale. Investors have carried out studies that could eventually lead to \$100 million of investments, cultivation of up to 450,000 ha, an estimated production of 450,000 metric tons and approximately \$230 million in foreign currency. The status of each investor's investment is shown in the table below:

Organizations	Origin	Status	Zones of Operation
D1 Oils Madagascar	UK, South Africa	Cultivation underway with farmers	Ambatondrazaka, Vakinankaratra, Boeny
GEM	UK, Australia	Cultivation underway	Androy, Atsimo Andrefana
MMF	Israel	Cultivation underway	Atsimo Andrefana, Anosy
Nouveau, Jatro-solution	Germany	Research Land identification Experimental cultivation	Haute Matsiatra
Nouveau, J&J Group	South Africa	Project study Land identification	Vatovavy Fitovinany
Nouveau, JSL Biofuel	Germany	Research Experimental cultivation	
Nouveau, Sté NEO	France	Research, Land identification Experimental cultivation	Bongolava

As shown in the box on following page, the World Wide Fund for Nature's global market study of jatropha predicts that Madagascar will become a major jatropha oil producer. This study, conducted as a contribution to the Roundtable on Sustainable Biofuels, is optimistic about the plant's future. WWF and other environmental groups such as Conservation International are interested in jatropha because it can turn degraded lands into sources of income. At the same time, the fact that biofuels are called "renewable energies" does not obviate the need to ensure their sustainability, from either an environmental or a social perspective. It is essential that safeguards be put in place to be sure that jatropha does not crowd out food production. Passage of the law on biofuels would be a first step in the direction of sound management of this new sector.

In addition, significant investment is needed if Madagascar is to meet the challenge of becoming a significant player in this industry. Opportunities for investors include:

• Establishment of jatropha plantations

- Assembly and rental of a seed storage center (warehouses or storage silos)
- Assembly of jatropha oil extraction units
- Assembly of biodiesel refineries
- Transport of biodiesel: activities under license in anticipation of the law on biofuel
- Storage of biodiesel: activities under license in anticipation of the law on biofuel
- Soap, candle, manufacturing unit
- Jatropha fertilizer conditioning unit
- Production and sale of electricity in the rural environment

In the near term, one of the biggest opportunities is the market for jatropha seed for sowing. It is estimated that the demand for jatropha seeds for sowing will experience a dramatic rise between 2008 and 2009. We know of serious investment plans for the planting of 100,000 ha of jatropha; these will require around 500 tons of seeds for a total value of over \$100,000.

Madagascar Positioned for Success in the Jatropha Market

"Many regions throughout Madagascar have very favourable conditions for cultivating jatropha. Today it is commercially farmed, although most projects are operating on a pilot scale. D1-BP and GEM Biofuels, which are listed at the AIM stock market in London, operate in Madagascar. A further nine commercial ventures have been identified in the course of this study. It is expected that Madagascar will be a major jatropha oil producer in the future."

 WWF-funded Global Market Study on Jatropha, May 2008

Case 4: Ginger

A study illustrating the challenges faced by producers of traditional products such as ginger and how BAMEX tried to help them make the most of available opportunities

The Koloharena Tongalaza cooperative in Beforona grouped 75 farmer associations that produce ginger. Before BAMEX began, we worked with this cooperative to help finalize a collaboration contract with the company BIOSAVE for 500 tons of fresh ginger. This order was not filled because of a misunderstanding between the producers and BIOSAVE. BAMEX began around the time the contract was terminated, when the cooperative had 500 tons of ginger available but no buyer, except at a really low price. The project wanted to help the cooperative find new markets and to better understand the responsibilities connected to signing a contract. The challenges of the Tongalaza cooperative consisted of:

- Enhancing the capacity of this cooperative to be able to capture market opportunities
- Better structuring the cooperative to face the market
- Better organizing group sales

The major constraint was a lack of knowledge about the market. The farmer associations did not understand market mechanisms or how the quality of their ginger did not meet regional and international market requirements. Moreover, the Koloharena members had not completely adopted the spirit of group sales, despite having a well-structured cooperative.

After a market study, the BAMEX program identified the fresh ginger value chain as being a priority value chain and decided to focus on enhancing the cooperative's competitiveness. The goal was to put producers in touch with national and foreign buyers, provide them with training and market information, and set up a group sales structure that would allow them to fill orders of up to 500 tons of ginger per year at the best price possible. Specifically, it aimed to do the following:

• Put the cooperative in touch with buyers. The project organized various meetings and roundtables to put the cooperative in touch with buyers. The cooperative also participated in various trade events such as the Foire Internationale de l'Economie Rurale (Fiermada) and the regional fair. BAMEX then facilitated a series of negotiations to support the signing of a contract and to make sure commitments were met. These interventions enabled the Beforona cooperative to establish commercial ties with Normatrading, Homéopharma, International trade and Development and Madaspice. Orders for seven tons per month were signed. In addition, BAMEX looked for international outlets in Europe through Crimson Capital. Three potential buyers based in England were identified: ExoticFarms, Wealmoon and Paul's. Paul's was interested in fresh ginger meeting specific quality standards and the cooperative sent samples, but in the end did not get the order because it did not master the standards.

- *Train and build capacity*. For the cooperative to grasp marketing techniques and be able to comply with sales commitments, several trainings sessions were given, including ones in negotiation techniques, marketing, standards, and establishing a marketing structure in Beforona.
- Access information. The Beforona cooperative accessed various communication tools developed by BAMEX, including the Kolotsena information bulletin, the radio show Ivoharena for market prices and opportunities, technical notes on ginger describing importers' requirements, and various export-related regulations and procedures.
- Improve the marketing structure. BAMEX helped the Tongalaza cooperative set up a marketing structure to guarantee the efficient collection, transport and delivery of the product to the client. The cooperative collected products from interested association members and handed them over to the regional or national Koloharena offices for delivery to the buyer. Several meetings were held to encourage a spirit of trust and strengthen the spirit of belonging to the cooperative. Finally, a marketing procedures manual was developed to standardize the collaboration between the cooperative, regional office, and national confederation.

One of the most important benefits of BAMEX's intervention was that cooperatives are now able to negotiate deals based on a better understanding of market prices and their own delivery capacity. In addition, the contacts with English clients helped the cooperative get to know the quality requirements of the European market as well as the desirable chemical properties of their particular ginger. As a result of this information, they decided to target the local fresh ginger market and to seek a 10,000,000 Ar loan to set up a processing unit for the production of ginger essential oil.

In terms of specific contracts, we facilitated the following contracts between the Beforona cooperative and its partners:

- Contract with Homéopharma. The sales contract for ginger with Homéopharma is for \$0.5/kg if the price on the local market is not in excess of \$0.2/kg. This large profit margin is due to the cooperative's capacity to demonstrate the value of Beforona ginger for the niche market.
- *Contract with Normatrading*. The collaboration contract calls for 2 tons of fresh ginger per week for a one-year period—i.e., for 100 tons—with the essential oil exporting company Normatrading. The collaboration is such that it benefits the cooperative because payment is made before the harvest and the price is linked to the Beforona market.
- Contract with ITD. The purchasing contract is for 2 tons of fresh ginger delivered in Beforona at the price of \$0.2/kg.
- Contract with MADA SPICE. This is a collaboration pertaining to the supply of high quality

ginger for export. The cooperative was able to deliver 2 tons of ginger to MADA SPICE at the price of \$0.25/kg delivered in Beforona.

The table below shows the results the cooperatives attained. These quantities fall short of 500 tons per year, but the prices are better than the 200 Ar/kg the cooperative members were getting on their traditional market.

Product	Quantity	Unit Price	Total Purchase	Clients
		(Ar)	Price (Ar)	
Ginger	38 715	350	13 550 250	Normatrading
	2 000	350	700 000	ITD
	2 000	450	900 000	MADA SPICE
	1 200	900	1080 000	Homéopharma

Two recommendations flow from this discussion regarding ginger. First, more farmers need to be sensitized to the benefit of group sales. Second, the national confederation and the local cooperative need to streamline procedures so they can work together more quickly and efficiently.

SECTION III: STRENGTHENING THE CAPACITY AND USE OF **BUSINESS SERVICES, FINANCIAL SERVICES, AND RESEARCH INSTITUTES**

This section summarizes the project's accomplishments under Results Module 2 and presents two case studies related to business services and financial services.

Accomplishments

This results module focused on support provided through business centers and financial institutions. Main accomplishments include:

- Business centers. BAMEX created the Business Center Ivoharena (BCI) concept and established seven BCIs housed by permanent organizations within the local community. (Ivoharena is a Malagasy word meaning source of wealth.) BCIs responded to an important constraint in rural Madagascar and the concept was picked up by the Madagascar's Millennium Challenge Account in what they have called Agri Business Centers (ABCs). Toward the end of BAMEX, the Antsirabe BCI was transformed into an ABC and many of the functions of the others were taken over by the local organizations that had housed them.
- Financial services. Using funds earmarked for microfinance, we provided training for professionals affiliated with microfinance institutions, organized a microfinance conference, and carried out a study on the implementation of the newly passed law on microfinance. Using unrestricted (Development Fund for Africa) funds, we provided training and consultation to prospective borrowers, both from firms and farmers' associations. We helped develop bankable projects and loan applications for about \$8 million of loans financed mainly by the FIEFE and FCPA.

Due to funding constraints, our work with research institutes was limited; however, we did collaborate with research institutes such as the Ecole Supérieure des Sciences Agronomiques and the Institut Malgache des Recherches Appliquées. This work was conducted during the course of work on jatropha and medicinal and aromatic plants, so it is covered in Section II under discussion of those value chains. These are four results indicators associated with this results module:

Indicators	Target	Actual Achievement
Number of agriculture-related firms benefiting directly from USG interventions.	70 ⁹	131
Number of farmer associations and assisted firms using business and financial services	792	695 ¹⁰
Number of persons trained with BAMEX support	250 ¹¹	758 ¹²
Volume of credit given to farmer associations and assisted firms with BAMEX support	\$5,400,000	\$8,803,043 ¹³

⁹ These 70 beneficiaries represent the combination of the objectives of 40 for the August 2006 to July 2007 period and of 30 for the period of August 2007 to June 2008.

10 695 = 261 + 183 + 251 (Annual Reports Dec 2005, Nov 2006, Semi-Annual Report February 2008)

¹¹ 250 = 100 + 150 (Annual August 2007 and Annual Report August 2007 to June 2008)

¹²758 = 215 + 480 + 63 (Annual Report August 2007 and Semi Annual Report February 2008) 63: accomplishment February 2008 to June 2008

Of note, the first and third indicators were created in October 2006 and thus represent work of less than two years' duration. The second indicator tracks the number of BCI clients during all four years of BAMEX interventions. The fourth indicator includes loans made by the FIEFE and to the FCPA during the first two years when BAMEX was providing significant support to this organization.

The program also carried out trainings in the mining and gemstone sector. Those results, noted in the final report for the gemstone sector, also surpassed the targets for each indicator (number of trainers/trainees trained in cabochon cutting jewelry and number of small miners trained in gemology & environmental impact assessment).

Using Business Centers to Provide and Strengthen Business Services

BAMEX created seven business centers, all lodged in partner institutions that were deemed likely to continue the work of the business center after the project closed. Their purpose was to offer affordable business services to companies and farmer associations, and to facilitate these groups' dealings with other service providers, especially those who could provide financial services. Business services were to help clients overcome constraints to increasing their sales, penetrating new markets, and developing their investments. Thus, the BCIs were called upon to provide management support, marketing assistance (information on market prices, connecting, structuring), access to financing, access to technologies, access to training, and investment promotion. In the course of this work, the BCIs were to professionalize the private sector operators by building their technical and managerial capacities and by improving their ability to meet market requirements. This goal is echoed in the Madagascar Action Plan.

After conducting a market analysis, BAMEX identified seven towns where BCIs were to be established. Priority value chains were selected according to the specificities of each region, as shown below.

Regions	Priorities	
Antsirabe	Potatoes, jatropha, artemesia, onions, precious	
	stones, handicrafts, ecotourism	
Mahajanga	Onions, raffia, jatropha, peanuts, dried produce,	
-	seafood	
Taolagnaro	Fruits and vegetables, litchi, essential oils, ecotourism,	
	gemstones, handicrafts	
Fianarantsoa	Jatropha, gemstones, ecotourism, handicrafts, ginger,	
	onions, beans, essential oils, fruits and vegetables	
Manakara	Litchi, jatropha, ginger, gemstones, ecotourism	
Ambatondrazaka	Jatropha, vegetables, peanuts, gemstones	
Toamasina	Litchi, spices, essential oils, ecotourism, gemstones	

The BCIs received an average of 2,000 visitors and clients annually and close to 200 associations and/or firms became clients. Details of the utilization of BCI services are presented in this table:

Year	Number of Regions	Visits	Clients	Total
2005	8	793	261	1054
2006	8	1625	183	1808
2007	4	2050	251	4747
2008	4	2446		

 $^{^{13}}$ \$8,803,043 = \$975,000 + \$7,687,850 + \$84,300 + \$55,893 (Annual Report Dec 2005, Nov 2006, August 2007, August 2007 to June 2008). This result is above the cumulative target of \$5,400,000.

The BCIs met their program objectives:

- They enhanced the competitiveness of firms by stimulating buyer-seller connections, providing trade information, and facilitating access to information.
- They promoted investments and improved the business environment by facilitating investment projects, stimulating exploration and identification of business potential, strengthening the administrative capacity and tax formalization of firms, and helped in the development of business plans and the putting together of financing documents.





BAMEX helped farmers' associations in remote villages get access to market information via BLU (single sideband) radio. To set up the radio in Sahaviavy Ifito (in the Tamatave region) BAMEX staff and porters traveled two days on foot and by canoe. The first picture shows the arrival of poles for the antenna and solar panel; the second shows the solar panel set up on the roof. The BLU allowed farmers from four associations to receive price information and send out information about quantities available for sale.

The following table shows the activities provided by BAMEX to their clients thanks to the BCI network:

Type of Support	2005	2006	2007	2008	TOTAL
Management Training	41	11	24	5	81
Financial Training	198	49	102	80	429
Market Information	189	50	76	161	420
Access to techniology	71	3	-	4	78
Access to Training	147	213	123	64	547
Comparison of operating procedures	15	16	35	7	73
New Project Ideas	22	10	9	4	45
Commercial Demonstrations	11	0	1	-	12
Environmental Compatibility	12	-	-	-	12
Administrative and Fiscal information	4	10	-	2	16
Information on Quality and Certification	20	3	1	-	24
Other Trainings	29	26	44	20	119
Solutions for Administrative Problems	6	17		2	25
Investment Promotion	1	4	7	1	13

The services offered by the BCIs generated \$4,250 in fees for BCIs' partners (FCPA, CCI, CCIAA). At the BCI client level, the additional sales of the supported associations and firms are estimated at \$70,600 in 2006, \$78,300 in 2007, and \$108,800 in 2008. Furthermore, new investments created thanks to BCI support are estimated at \$243,500.

One widely appreciated service was market information collection and dissemination. Producers filled in information collection forms on prices and products for sale, the information was processed by the BAMEX program sent back in the form of a Kolotsena rural bulletin. The Kolotsena bulletin was read on the local radio in Fianarantsoa and Ambatondrazaka and disseminated by the national confederation via BLU radio. This information helped raise farmers' awareness about prices. The installation of BLU radios in remote regions was an involved process but appreciated by the beneficiaries.

Clients also had access to the BAMEX program documentation center, in place since the time of the LDI. At the beginning of BAMEX, there were 2,000 documents in the Endnote database; at the end of BAMEX, there are almost 3,000. We also subscribed to information on product prices at the global level through The Public Ledger and web sites like that of the International Trade Center (www.intracen.org). On average, 15-30 visitors visited the center each month. Studies on agricultural value chains and marketrelated information were the most sought after.

Increasing Access to Financing

Part of BAMEX's financial services work was oriented to helping institutions and individuals providing microfinance services, another was focused on helping borrowers access and manage credit. In terms of support to microfinance institutions, the project carried out:

- Capacity building. Fifty-four microfinance institution members benefited from training in 2005, with the collaboration of the APIFM (Professional Association of Mutualist Microfinance Institutions or Association Professionnelle des Institutions Financières Mutualistes).
- Events. The organizing of the international African conference in the framework of the international year for microfinance in 2005.
- A study on the implementation of the new law on *microfinance* to help the Banking and Financial Supervision Commission (or Commission de Supervision Bancaire et Financière — CSBF) to bring out the regulatory texts as applied to MFI activities. The study bore fruit with the issuance in May 2007 of the implementation decree of the new law with simplification of the license and approval procedures by the Commission.

Thus, 15 institutions were officially approved to practice their financial activities. In parallel, given the simplification of the approval procedures, new microfinance institutions were created, including

Microcred and Accès Banque Madagascar.

To enable firms and farmer associations to identify the appropriate types of credit and benefit from financing, the BAMEX program encouraged financial institutions to use the FIEFE refinancing mechanism. Negotiations led to the participation of the banks BNI CA, BOA, of the holding company SONAPAR and microfinance institutions such as the *Entreprendre à Madagascar* network. Thus, the project collaborated with a range of institutions (commercial banks such as BNI-CL/CA, BFV-SG, and BTM/BOA; venture capital firms such as FIARO and SONAPAR; financing bodies such as AFD, SFI/SME, CEM, and the IFC; microfinance institutions such as EAM, OTIV, TIAVO, and CECAM),

Help in accessing credit: one of the project's most appreciated services

"The loan for the community granary helped us avoid being forced to sell our products at low prices immediately after harvest as we did in the past. We were also able to develop our counterseasonal activities. This is the third time we have used this credit and we plan to continue with each rice season to come."

- Koloharena Chairman Safidy Lalaina

allowing borrowers to find sources of short- or mid-term financing to purchase raw materials, fertilizers, or seeds and materials and equipments using the FIEFE or FCPA mechanisms.

To build the capacity of farmer organizations and their members, awareness raising campaigns were held on credit and entrepreneurship; in addition, trainings were held on putting together documents, simplified accounting, and cost calculation.

The BCI finance support service enabled clients to identify and benefit from financing sources that met their specific needs. The service provided a technical review of the project, help in assembly of the loan application, and monitoring of requests with the participating financial institutions. BCIs' junior expert consultants were in charge of putting together business plans or financial request documents for the farmer associations, of accompanying them in the disbursement of their credits, and of monitoring their loan repayment.

FIEFE. The Fund for Investment in Eco-friendly Enterprises (or Fonds d'Investissement pour les Entreprises Favorable à l'Environnement) is both a refinancing fund and a guarantee fund. This mechanism was set up at the time of the LDI. The Malagasy Savings Bank (Caisse d'Epargne de Madagascar or CEM) had responsibility for managing the fund and making sure the fund was sustainable, that loans were repaid and that the interest was credited to the revolving fund. At the end of LDI, 11 firms had benefited from the fund. At the beginning of BAMEX, the FIEFE had \$450,000 in capital to refinance up to 80 percent of approved loans in ecotourism or agriculture. Most loans were long- or medium-term ranging from \$5,000 to \$22,000. During BAMEX, the fund began financing not only firms but farmer associations located in the BCIs' intervention areas. During the project, seven firms and 31 Koloharena associations/cooperatives, including around 600 members, benefited from the FIEFE financing mechanism for loans totaling over \$300,000. The average size of the loans for the farmer associations was about \$2,600. The loan committee, made up of EAM, BAMEX, and CEM, approved loans for:

- Short-term cash flow credit: faisance valoir, village granaries, working capital
- Medium-term investment credit for the purchase of equipment, agricultural materials (plows, cultivators, building of a warehouse).

Application details by BCI are shown below.

BCI	Registered Requests	Finalized and Transmitted to IFIs	Applications Granted	Applications Refused
BCI Fianarantsoa	41	40	40	1
BCI Ambatondrazaka	24	21	7	4
BCI Tamatave	24	7	5	0

To promote a better understanding of the FIEFE and BCI activities in Fianarantsoa and Manakara, a workshop called "Financing, a Development Tool" was organized in December 2007 with 50 or so participants from financial institutions, support bodies, farmer organizations and SMEs attending. The objective of this workshop was to inform partners about different financing options and facilitation mechanisms. To cite one result: the Millennium Challenge Corporation and Millennium Challenge Account built on the FIEFE model when designing a similar fund for their own program.

A June 2008 review of fund management found a high level of problem loans and recommended that the CEM increase the resources allocated to fund management.

FCPA. The Agricultural Products Marketing Fund (Fonds de Commercialisation des Produits Agricoles or FCPA) is a warehouse financing mechanism and institution created in 2002 with an initial capital of \$1 million provided by the government of Madagascar, with technical assistance from the USAID/LDI project. FCPA gives short-term credit, with inventories of agricultural products as collateral, to eligible agribusinesses and farmer associations willing to purchase and store non-perishable products. In 2004, for the first time, commercial banks (BFV-SG, BNI-CL and BOA Madagascar) signed an agreement to cofinance FCPA operations all over the country. FCPA is a legal entity completely independent from BAMEX from a financial and managerial viewpoint. At the beginning, BAMEX provided logistical support to FCPA in Antananarivo, while FCPA paid half of the salary of one senior BAMEX staff, and housed the BCI in Ambatondrazaka, based on an MOU that benefited both parties. At the end of 2006, the FCPA left the BAMEX office yet collaborated with the project to support farmers associations and agribusinesses involved in rice storage, processing and marketing, particularly in the Lac Alaotra region, and in financing the production of improved seeds of rice in the Fianarantsoa province.

Because of BAMEX's initial support and continuous collaboration with FCPA, we make brief note of their accomplishments here. Since the 2004 – 2005 season, the FCPA, in collaboration with the partner banks, disbursed close to \$9 million from its revolving account to enterprises and agricultural cooperatives meeting eligibility criteria. Most of the financing was for paddy and rice seeds but other products such as maize, groundnut, clove, and beans were also involved. The FCPA also provided \$5.9 million of loans to farmer associations in the form of seeds and fertilizers.

Case studies

Our first case study in this section examines the range of services provided by a typical business center; the second examines a common challenge of providing credit.

Case 5: Business Center Services

A study of how business centers were able to help farmers associations strengthen their ability to capture market opportunities, as illustrated in the case of the Ambatondrazaka Business Center.

The Lac Alaotra area is one of the most fertile areas of Madagascar, with many unexploited commercial opportunities. It was for this reason that BAMEX set up a Business Center in Ambatondrazaka and offered to help farmers' associations and private operators develop their capacity to capture opportunities in red rice, onion, jatropha, and aromatic and medicinal plants.

BAMEX provided an array of services, some of which were for a fee. To promote its services, the BCI organized various events, such as regional fairs, to attract clients. The most requested services were market information, identification and negotiation with buyers and investors, training, and help in accessing financing. Key BCI initiatives and results of these initiatives are described below.

- *Price and market information*. With the support of radio journalists, the BCI developed the program "Ivoharena" during which relevant market information was periodically broadcast on the radio in the Ambatondrazaka region.
- Investment promotion. The BCI worked with the Spanish company Castells, which eventually set
 up an operation for the production of certified seeds. It also worked with the British company D1
 Oils to help them connect with farmers associations for the production and the marketing of
 jatropha as a biofuel.

• Helping farmers associations with specific market opportunities. The Ambatondrazaka BCI supported several key deals between Koloharena producers and buyers. One of these, the contract to sell pink rice to Lotus Foods, was described above.

Two deals involved onions: the Rindran'Alaotra and Alaotra Mirindra Koloharena cooperatives developed partnerships with AGRIVET for the purchase of 600 bags of Red Créole onion seeds and with the company SENI, a firm that exports onions.

The BCI also supported deals related to aromatic and medicinal plants. In one, they put the Meva Aromatika Association in touch with Clos d'Aguzon and Homéopharma for the marketing of geranium essential oils. In another, they helped three cooperatives (Alaotra Mirindra, Ivolamiarina, Fiavotana) and a regional association work with the Institut Malgache pour les Recherches Appliquées (IMRA) for the harvesting of medicinal plants in the region. The BCI also helped the Meva Aromatika and Soamiaraka associations access financing for the production and marketing of aromatic and medicinal plants.

The BCI also put D1 Oils in touch with the Ambatondrazaka producers associations in connection with jatropha. Since 2007, 79 associations and cooperatives have finalized production plans and marketing contracts for jatropha. With support of the BCI and the ERI program, the area planted reached 160 ha.

- *Training*. The Ambatondrazaka BCI offered training in the "culture of credit" (how to access and manage credit, 33 participants), environmental education and basic gemology (63 participants including mine owners), and simplified accounting (17 members).
- Access to financing. The BCI helped borrowers prepare credit applications, did a preliminary
 review of the applications, and helped monitor the progress of loans from the FCPA, banks,
 FIEFE, and PSDR. Firms benefiting from FCPA financing with the support of the BCI increased
 their sales by over \$550,000.

The FCPA, who had been housing the BCI and working closely with it from the beginning, has agreed to take over many of the BCI functions in the post-BAMEX period. There will continue to be a role for donor or government-provided services related to capacity building and facilitation.

Case 6: Credit

A look at the challenges involved in provision of credit to a farmers' association.

The Tranambo association, created in January 2001 by the LDI project, is a farmers' association of eight active members located in Lokomby, in the Manakara district of the Vatovavy-Fitovinany region. The association is in a rice producing area of the region and produces about 425 tons of paddy per year. The area is isolated because of the bad road conditions and the nearest huller (*décortiquerie*) is 50 km away. The need to grind the rice manually took about one quarter of women's daily time.

BAMEX decided to support the Tranambo Association in buying their own hulling unit and creating added value before selling their rice. The project provided two types of support:

• *Training*. Training, information, and awareness raising sessions on credit, entrepreneurship, and the FIEFE mechanism were offered, as were trainings in management and development of loan applications.

• *Technical advice and consultation*. A junior expert supported the Tranambo association throughout the process. He helped plan the project and type of credit, establish the loan application, and monitor the loan repayment. Analysis showed that the huller could generate \$4,000 a year for the association and create four jobs.

The association succeeded in getting a \$3000 loan and buying the unit. However, unexpected problems arose. The machine experienced periodic breakdowns. Given local shortages of spare parts and repair skills, operations had to be suspended for days at a time, thus reducing revenues and pushing the loan into arrears.

As stated above, farmers' associations working with BAMEX generally had a good collection rate. However, staff involved with this situation suggested that the association may not have taken the responsibility of paying back the loan seriously enough. We include this case in our report to acknowledge the fact that problems inevitably arise and can threaten the success of a business venture, whether it be an investment in equipment or a deal with a buyer. One lesson learned in this case is that we should have helped the association think more about the sorts of problems that could arise and anticipate how they might solve these problems. We sometimes focus too much on obtaining the loan as an end in itself, whereas the actual goal is the successful operation of a business. Training in the "culture of credit" and entrepreneurship are useful first steps, but more needs to be done to reinforce the importance of repaying credit and strengthening borrowers' skills and determination to solve problems that can arise along the way.

SECTION IV: ADVANCING POLICIES AND RELATED INITIATIVES

This section summarizes the accomplishments under Results Module 3, which was aimed at improving the enabling environment for private enterprise development and trade and investment. It presents two case studies illustrating our work developing laws and implementing decrees.

Accomplishments

Most of BAMEX's work under this component involved policy work related to biofuels and inputs. The official indicators and results are shown below:

Indicators	Target	Actual Achievement
Development of a law on biofuels	Law on biofuels finalized and adopted	Law finalized but not yet voted upon by the National Assembly
Development of a legal and regulatory framework for agricultural inputs	Commercial seed imports authorized.	
	Fertilizer sector partnership charter adopted	Achieved

In all instances, BAMEX worked with a range of stakeholders to help them think through the implications of the proposed policy change and consulted closely with experts to understand the technical issues.

Taking each of the accomplishments in turn:

• Transfer of the management of the Anosy seed multiplication center. In 1985, the Malagasy government committed to disengage from the agricultural production sector, yet when BAMEX began, most seed multiplication centers were still under the control of the ministry of agriculture (Ministère de l'Agriculture de l'Elevage et de la Pêche or MAEP). A BAMEX study on inputs carried out by the International Fertilizer Development Corporation (IFDC) in 2005 recommended that the state disengage from management of the Anosy seed multiplication center outside of Fianarantsoa.

BAMEX carried out a diagnosis of a grouping of seed-producing farmers (*Groupement de Paysans Semenciers* or GPS) in Nasandratrony to determine whether they were qualified to manage the Anosy seed multiplication center. The recommendation was that they would be qualified, provided that a technician was hired to run the operations. Semis Direct of Madagacar (SD Mad) was hired to provide technical and administrative assistance to the GPS. A management concession (*location gérance*) agreement was signed by SD Mad for three years, renewable, beginning with the 2006 – 2007 season. The goal is to improve seed production and train farmers, especially the GPS.

• Implementation decree for the seed law. A seed law (Malagasy legislation Number 94-038) was promulgated on January 3, 1995 but could not be carried out without the implementing texts. BAMEX, in collaboration with the FAO and the line ministry, supported drafting of the implementation decree texts (notably the one relating to the bodies responsible for the law's implementation); it also worked with the ministry to be sure that this initiative moved forward. The implementation decree (le décret d'application) was issued in September 2006.

- Participation in the formulation of the national strategy on fertilizers. In December 2005, the minister of the MAEP asked a working group on fertilizers (groupe de travail engrais or GTE) to work on Madagascar's national strategy. A subgroup (FAO, BAMEX, UPDR, FOFIFA) hired two consultants to develop the national strategy document on fertilizers, based on guidelines developed by NEPAD. This subgroup met with key stakeholders and organized a workshop where stakeholders validated the draft strategy. The final version of the strategy came out in May 2006. BAMEX was an integral part of this working group and paid for one of the two consultants hired to do the technical work.
- Implementation decree for the law on microfinance. A BAMEX subcontractor (Planet Finance) developed recommendations related to implementation of the new law on microfinance to help the Banking and Financial Supervision Committee develop regulatory texts related to microfinance institution activities. The implementation decree of this law came out in May 2007 and simplified the procedures for granting licenses and approvals by the Banking and Financial Supervision Committee (CSBF).
- Biofuels bill. Development of a biofuels bill took two years. As we discuss in Case Study 7, BAMEX played the role of gathering technical information and helped a wide number of stakeholders understand and address the issues. We encouraged diverse groups like the Ministry of Energy (Ministère de l'Energie), the Malagasy Office of Hydrocarbons (Office Malgache des Hydrocarburants), and oil companies to work together. The purpose of the bill was to provide a legal foundation for activities in the biofuel sector and open the Malagasy market to this new product. A biofuel plan was also developed. The Ministry of Energy was to present the bill to the National Assembly in the May–June parliamentary session, however, the vote was delayed. If not resolved soon, this indecision will have a dampening effect on the pace of biofuel development in the country.

Case Studies

Case 7: Bio-fuels Bill

A study of how BAMEX helped develop a biofuels bill.

The biofuel sector in Madagascar is in its infancy. Because of Madagascar's climate and available land, Madagascar has attracted a good deal of initial investment in biofuels, but there is a limit to how much the sector can develop without a legal foundation for its activities.

In collaboration with the Malagasy Office for Hydrocarbons (or *Office Malgache des Hydrocarbures*) and Ministry of Energy, the BAMEX program helped develop a biofuels bill aimed at creating a climate favorable to new investments, job creation, and in-country value added. The bill also aimed at creating alternative sources of energy for the country and reducing both deforestation and greenhouse gas emissions, thus meeting the country's obligations according to the Kyoto Protocol.

The approach taken by BAMEX was participatory, involving interested parties in the debate so that they could take ownership of the issues and find solutions. These players included the Ministries of Energy, Industry and Trade, and Finance and Budget, as well as petroleum companies, car dealers, donors, investors in biofuels, and scientific communities. The steps involved:

- *Research*. BAMEX carried out research on other biofuel laws developed in other places like the European Union, Brazil, Asia, and Australia.
- *First draft.* BAMEX developed a first version of the law after individual consultations with interested players.
- Working group. A working group was put together, made up of BAMEX, the OMH and representatives of other entities, notably the petroleum companies, car dealers, and ministries. This working group came up with a revised draft, but a series of changes in ministers at the Ministry of Energy delayed its presentation to the parliament, so another round of consultation and drafting was conducted.
- Presentation of the bill. At the end of all these actions, a biofuels bill was presented to the parliament during the May–June parliamentary sessions. This bill includes a definition of biofuels (mainly biodiesel and bioethanol) and regulations on manufacturing, storage, distribution, and marketing of biofuel.

Key provisions of the bill, which covers biofuel production, processing, storage, distribution, import and export, include:

- The *Office Malgache des Hydrocarbures* (OMH) is the regulatory body.
- Biofuels must be blended with fossil fuels on the domestic market.
- Biofuel production does not require a license, but other activities such as transport, storage, distribution, marketing do require a license.
- The price is freely determined by the market;
- Private operators must report on their activities.
- Taxation for the sector is governed by the finance law.
- Sanctions are provided for the offenders.



First motocultivator operated by jatropha oil in Amparafaravola

The participatory approach enabled BAMEX to collect opinions and suggestions of the interested parties in the sector. The approach should serve as an example for the establishment of other regulatory frameworks for this sector. There are two other matters that will need attention to complement this law:

- Creation of tax incentives to encourage investment in biofuels.
- Establishment of safeguards to avoid competition between jatropha and food crops.

Furthermore, an intensive communication campaign should be carried out during the extension of the debate on biofuels legislation. The technical and financial partners will have to participate actively in this campaign.

The fact that the bill presented in the recent legislative session was not adopted points to the fact that decision makers have not yet agreed on how to move forward in this sector. The timing of these policy discussions is key because the first biofuel production will arrive on the market sometime in 2009–2010. Once the basic bill is passed, the implementation decree (which will require further consultations with the biofuel producers themselves) will have to be drafted.

Case 8: Implementing Texts for the Seed Law

A study of how BAMEX helped draft implementing texts for the seed law.

The seed industry in Madagascar failed to develop in a satisfactory manner in part because it lacked an appropriate legal framework. A national seed law (Number 94-038) was promulgated in January 1995. However, this law was inoperative because the regulatory texts were never drafted.

For the seed law to go into effect, BAMEX and FAO set up a task force to prepare the implementing texts. The work of the task force was validated by an expanded committee and the validated texts were given to the Ministry of Agriculture (MAEP) for its remarks before being presented at a cabinet meeting. Remarks from the MAEP related to the delimitation and the number of districts (CIRESEM) to put in place, to the make-up of the National Council on Seeds (*Conseil National des Semences* or CONASEM) and to the attributions of the service for the control of seeds (*service de contrôle de semences* or SOCS). These discussions took place during the first quarter of 2006 and the draft decree was amended accordingly and presented again to the MAEP in March 2006.

The implementation decree related to the bodies in charge of implementing the national policy on seeds was passed in September 2006. The concerned bodies were the National Council on Seeds (*Conseil National des Semences* or CONASEM), the Official Service for Seeds (*Service Officiel des Semences* or SOC) and seed institutions. Issuance of the decree generated two major changes at an institutional level:

- The set-up of the CONASEM in 2007, which will be in charge of overall policy in the seed subsector. This body is in operation and actively participates in any technical assistance for any design and policy decisions relating to the area of seeds. This structure is part of the committee for the validation of the national strategy on seeds, which is currently being elaborated.
- The establishment of regionally based seed controllers to improve the quality of the seeds used by farmers. Seventeen regions will have these controllers, who will be in charge of providing technical support to seed-producing institutions such as the Center for the Multiplication of Seeds (or *Centre Multiplicateur de Semences*, CMS) and the Seed Producer Grouping (or *Groupement de Producteurs Semenciers*, GPS).

The first strong point of our approach was that our interventions were relevant and met a critical and strategic need. The implementation decree opened the way forward in the agricultural sector and constituted an important step toward the green revolution in Madagascar. Another strong point was that the task force brought together all the players of the agricultural input sub-sector as well as those of the administration. This allowed the concerned parties to study the issue from all perspectives and ensured approval of the state.

SECTION V: THE WAY FORWARD

BAMEX's Legacy

Discussions with BAMEX's evaluations, partners and beneficiaries helped identify the program's legacy. In short:

- Value-chain approach. The BAMEX value chain approach can be used in the future. It produced
 results because it began with the market and worked closely with farmers and others in the value
 chain to overcome whatever constraints
 impeded their realizing specific
 - impeded their realizing specific opportunities.
- Increased awareness of market requirements, increased capacity to meet these requirements. We see a gradual change in mindset among individual entrepreneurs and as illustrated in the box at the right in farmers' associations as they are more ready to recognize and capture market opportunities.

A Perspective on the Koloharena

"The Koloharena cooperatives have evolved a lot since 2000. This evolution is evidenced by their capacity for analysis, negotiation, and leadership. And the koloharena cooperatives have distinguished themselves from others due to their competence in the domain of environmental and rural development."

- Georges Rakotozafy, leading specialist in cooperative and association development
- Jatropha value chain. BAMEX can be considered a midwife of the jatropha value chain, which was almost non-existent in 2004.
 BAMEX support led to increases in production and investment, as well as greater organization of the value chain.
- *Gemstone market*. A financially autonomous gemstone market was put in place and has potential for growth.
- Business centers. The Business Center Ivoharena will live on, some absorbed into their hosts' operations and one transformed into an Agri Business Center (ABC) supported by the Millennium Challenge Account and eventually perhaps by a foundation.
- DTSM stand. The Droits Spéciales sur les Transactions Minières stand at the Ivato International Airport, a one-stop shop for gemstone exports, continues to exist and is helping to formalize the gemstone sector.
- Legal reforms. Legal reforms undertaken and institutional reforms initiated by the program including the law on biofuels, the implementation decree of the law on seeds, and the national fertilizer strategy. These are helping boost the competitiveness of biofuels and the agriculture sector in general.
- *Certified seeds*. Improved seed quality will result from the introduction of certified seeds, the redynamisation of the Anosy (Fianarantsoa) seed multiplication center, and the trials carried out for the new and improved seeds.

Continuing our Work

Many partners and beneficiaries will continue the work that BAMEX has begun. To prepare these groups, we carried out several workshops and training sessions during the first half of 2008 and prepared a CD

ROM of key project reports for them to use as a reference. A list of documents on this CD ROM is presented in Annex A; we describe below the activities that we have handed over to these entities:

- Business centers. The Antsirabe BCI was transferred to MCA-funded management, the Taolagnaro center was closed, and the other five have been taken over by their host entities: the Mahajanga BCI by the NGO GREEN, the Ambatondrazaka BCI by the Fond de Commercialisation des Produits Agricoles, and the Toamasina, Fianarantsoa, and Manakara BCIs by their respective chambers of commerce. They are continuing most of the activities carried out under BAMEX, although at a reduced level.
- Market information and business development services. BAMEX's information system (including price, product information, offers from farmers' associations, and a buyers' database) was transferred to MCA's ABIP project. MCA will also continue business development services in their areas, but Moramanga, Ambatondrazaka, and Analanjirofo will not be covered.

The director of a seed multiplication center surveys his fields. Improved seeds are a legacy of BAMEX, thanks to our help with the seed law, the Fianarantsoa seeds center, and the establishment of a major European seed company in Madagascar.

- Farmer associations. The Koloharena structure (associations for production, cooperatives for commercialization, regional offices for regional marketing, and the National Confederation for national and international marketing) will allow the Koloharena to sustain their movement and assure recognition from technical, financial, and public partners. However, they will continue to need more capacity building and support for collection and circulation of information among the various structures, especially information about market prices and agricultural input needs.
- Financial services. The BCIs will continue to help identify profitable projects, develop business plans, and help clients find financing. The FIEFE will continue to work with revolving funds to support local initiatives presented by rural organizations, members of associations, and environmental-friendly firms. Financing through FIEFE presents the lowest interest rate, around 19 percent per year, in the field of microfinance. Moreover, guarantees required by this type of financing are adapted to the needs of the individual farmers and are principally based on moral security. The FIEFE will also offer financial products compatible with the needs of the different intervention zones as short-term loans for activities like promoting cash flow and purchasing agricultural commodities as well as middle-term loans for the purchase of agricultural materials, the building of stocking shops, and so on. Some streamlining of FIEFE procedures is recommended, as well as some tightening of their procedures in line with a recent outside review of their management.
- Training. Farmers living in isolated zones are disadvantaged when it comes to financial training. Microfinance institutions don't practice in these zones because the cost of loans is expensive; it is therefore difficult to establish a culture of credit. Training to encourage financial access in these isolated areas constitutes one of the primary needs one must satisfy if sustainable rural development is to be achieved. This is as yet an unmet need.

• *Other*. The following table summarizes the transfer of other activities:

Activites	Entities	Mode of Transfer	Observations	Time Line
Database with technical information	CRS - CARE	Database Transfer		June 08
KH partnership with the government, lenders, sector operators.	CNKH	Introduction document on KH movement.	Collaboration with ERI	May 08
Support to centers of excellence and promotion of gourmet coffee	ccs	Handover meeting		May 08
KH support in intensifying production and commercialization	ERI	Database Transfer	Ambatondrazaka, Fianarantsoa	
Support to the jatropha and biofuel sectors	Tany Meva D1	Database Transfer		June 08
Information on sectors with growth potential	EDBM	Database Transfer	National coverage	June 08
Microfinance institution strengthening	MCA	Document Transfer		June 08
Promotion of the use of agricultural inputs	ABC Project	Document Transfer		June 08
Continuity of BCIs	CCI Fianarantsoa and CCIAA Toamasina	Reorientation of activity; transfer of furniture	Furniture transfer	March – June 08

Recommendations

The project believes there is a need for continued support in the following areas:

- Information. There is a need for continued dissemination of information about prices on the local and the global market, as well as new production techniques and technologies. Specifically, there is a need to sustain and maintain the website and printing and distribution of the Kolotsena bulletin. We recommend that the ERI project support these activities for a few months but that in the meantime the National Confederation of Koloharena, during their upcoming annual budget discussions, consider funding continuation of the website and bulletin.
- Facilitation. Facilitation (the creation and strengthening of contacts between producers and buyers in order to develop contracts) is an ongoing need. Given the still-rudimentary structure of the market in Madagascar, there is still a need for an honest and informed broker to play this role. In the near term, it would be useful for a marketing specialist to follow up on some of the deals that are already in place with buyers such as CORA, FALY Export, GETCO, D1, IMRA, Homéopharma, NormaTrading, CCS, and Lotus Food to be sure that any problems are worked out and that the good relations are maintained.
- Quality. When it comes to improving the competitiveness of Malagasy products, quality is key.
 There is a need for continued awareness-raising and support for improved quality. This is true for
 all products, but litchi is an excellent example because of the need for an accelerated program to
 help people achieve GlobalGap certification.

- Credit. To support improved competitiveness, there is a continuing need for various types of credit, including for medium-term investment (a wide range of projects including those financed by the FIEFE and upcoming DCA facilities) and production (such as speciality coffee production and expanded jatropha production). The FIEFE's relationship with the BCIs should be maintained since this will help the fund identify more bankable projects and make more informed lending decisions. Regarding the proper management and sustainability of the FIEFE, CEM should develop an action plan to address recommendations from a recent review of its operations and update its procedures as necessary.
- Training and knowledge sharing. Those developing future training should be sure to gear the curriculum to the level of the participants and link the training to real world activities—such as the planning and implementation of specific commercial activities or investments. Knowledge sharing should be continued to promote the exchange of experiences between farmers—for example, between the Centers of Excellence—so that farmers will better understand others' experiences producing coffee in accordance with market requirements.
- *Jatropha*. Continued support to the organization and the development of the jatropha value chain will help Madagascar and its people reap the benefits of the biofuel revolution. An immediate priority is to follow up on the outstanding biofuel legislation. Also important will be structuring the operators of the value chain, safeguards to the planting of jatropha so as not to interfere with food production, extension of research findings to the rural population, and sharing of experiences in other countries.

SECTION VI: BUDGET HIGHLIGHTS

The ceiling price of the BAMEX task order was \$5,262,497. The labor-materials breakdown was:

Labor: \$2,547,868Material: \$2,714,629

The following table shows how the budget was spent by source of funds, i.e., Contract Line Item:

Source	Obligated Amount	Spent
DA Funding	\$ 4,246,159	\$4,246,159
Prime Funding (for microfinance activities)	\$ 300,000	\$299,902
ESF Funding (for gemstone activities)	\$ 491,338	\$491,335
REDSO Litchi Funding	\$ 225,000	\$225,000
TOTAL	\$ 5,262,497	\$5,262,486

CD-ROM Contents

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Handbooks:

- BCI Handbook—in French, a handbook on the Ivoharena business centers—what they do, how they are set-up and organized, and how they help their clients.
- Guide KoloHarena—in French, a handbook for people seeking to build their own Koloharena farmer associations, a type of association that works both to increase wealth and protect the environment.
- Manuel Intensification Agricole—in French, a handbook for farmer associations seeking to intensify their agricultural productivity.

Reports on the following topics:

- Agricultural inputs (provision and distribution)
- Gemstones (final report)
- Gemstones (feasibility of a single export counter)
- Jatropha (planting, the feasibility of jatropha presses, various uses of jatropha oil, and the future of the jatropha sector)
- Litchis (production and commercialization)
- Litchis (pests and diseases)
- Specialty coffee

Lists

- Catalogue of agricultural equipment and materials
- List of suppliers of agricultural equipment

