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WINNER
WATERSHED INITIATIVE FOR NATIONAL
NATURAL ENVIRONMENT RESOURCES

ANNUAL REPORT FISCAL YEAR 2010



October 2009 - September 2010

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ANNUAL REPORT

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

INTRODUCTION

This annual report presents the results of the WINNER project to date, and covers the period of Fiscal Year 2010 from October 2009 through September 30th 2010. This document also details project activities and results for the Third Quarter of 2010 (July through September) and thus serves as the quarterly report for that period. As such, activities undertaken in the third quarter of 2010 are highlighted throughout the report.

As stated in our Task Order, the purpose of WINNER is:

To implement broad scale investments in sustainable natural resource management at the scale and density needed to produce future landscape level reductions in environmental, infrastructural, and economic vulnerability in the Cul de Sac, Cabaret, Gonaives/La Quinte, Mirebalais, and other selected watersheds.

USAID has directed the project to work in the Cul de Sac, Gonaives/La Quinte, Arcahaie/Cabaret, and Mirebalais/Saut d'Eau watersheds during the period covered by this work plan.

The long-term vision of the WINNER program, as stated in our Task Order is the following:

People living within targeted watersheds will have improved livelihoods, reduced threat from flooding and have invested in sustainable economic growth and environmental protection in the watershed. Their experience will serve as a model approach to replicate both within and beyond the targeted watersheds.

To achieve the project vision, our approach is centered on farmers and aimed at reversing the course of economic and environmental decline in targeted watersheds. We still have a farmer-centered approach because it is the farmers who must become the driving force behind the revitalization of Haitian watersheds. We are helping farmers acquire the resources and capacity to become more productive and generate higher incomes in a sustainable manner that protects the environment. We also work with the government at all levels, the private sector and other stakeholders to reduce threats from flooding, improve and enforce the legal and regulatory framework, and create strong economic linkages between farmer organizations and private enterprises that will foster new business opportunities and lead to improved livelihoods.

Our approach rests on five principles. Agreement on these principles helps our team retain a common vision, communicate clearly with stakeholders, and encourage farmers' sense of ownership in the targeted watersheds. The principles are:

- *Speed and focus.* Intervene rapidly and generate tangible results, while remaining focused on the project purpose.

- *Impact.* Concentrate efforts and resources where we can maximize impact in terms of risk reduction and improved livelihoods.
- *Hope and empowerment.* To stop environmental degradation and expanding poverty, provide farmers with enough resources and training to give them hope and a chance to improve their lives.
- *Support for good governance.* Work in partnership with the government, making sure activities advance its plans and approaches.
- *Sustainability.* Set up structures and mechanisms that will continue to operate after WINNER ends.

Results Framework

WINNER's result framework is presented in the Table below. WINNER's five Key Result Areas are:

1. **Livelihoods of people living in the watershed improved through increased agricultural productivity and alternative income generation sources**
2. **Critical infrastructure improved and the threat of flooding reduced**
3. **Watershed governance strengthened**
4. **Public-private partnerships established**
5. **Earthquake recovery enhanced through job creation in rural areas and assistance to small business**

Project Launch

The WINNER project was officially launched on October 8th, 2009 in presence of President Preval, United States Ambassador Merten and more than 500 guests. The launch event included a series of presentations, videos and testimonies from target groups that provided a comprehensive explanation of the holistic approach of our project to watershed management, rural development, governance and public private partnership.

Livelihoods of people living in the watershed improved through increased agricultural productivity and alternate income generation	Critical infrastructure rebuilt and improved and threat of flooding reduced	Watershed governance strengthened	Earthquake Recovery Enhanced
1.1: Sustainable hillside agricultural production increased	2.1: Structures that strategically stabilize hillsides & control floods in plains established	3.1: Watershed governance structures established	5.1: Emergency food provided
1.2: Alternative forms of non-farm livelihoods for hillside farmers identified	2.2: Irrigation systems restored	3.2: Costs of public works increasingly covered by the watershed population	5.2: Temporary shelter provided
1.3: Productivity through better land use management increased	2.3: Potable groundwater levels in watersheds increased	3.3: Representative governing bodies strengthened	5.3: Small business assisted and day labor employed in ways that benefit rural economy
1.4: Agreements between producer groups, MSMEs, and entrepreneurs signed	2.4: Critical transportation infrastructure rebuilt and repaired	3.4: Policy constraints identified, assessed, and recommendations made in a participatory manner	5.4: Quick boost in agricultural production supported
1.5: Income and productivity in lowland agricultural systems increased	2.5: Flood warning systems installed and maintained	3.5: Participatory watershed management plan created	
1.6: Local organizations strengthened		3.6: Sustainably financed, community based NRM of biologically significant sites implemented	
1.7: Competitiveness of value chains strengthened		3.7: Participatory disaster management plan for watershed developed	
1.8: Watershed biodiversity restored		3.8: Donor coordination in watersheds strengthened	
Public-Private Partnerships Established			
4.1: Public-Private Partnerships for the majority of watershed interventions leveraged			

A. OVERVIEW

From its inception to the end of September 2010, the WINNER project has been very productive despite a difficult environment characterized by the catastrophic consequences of the January 12 earthquake. We were able to successfully expand our operations in Cabaret and Mirebalais, hire new staff, adopt strict procedures and forge a team that performed well under challenging circumstances. We helped farmers significantly increase their yields, rehabilitated key irrigation systems, implemented spectacular works to protect rural and urban areas against flood threats, collaborated closely with governmental agencies to promote good governance, developed fruitful business relations between producers and private enterprises, and undertook an important earthquake recovery program. Some of the most important achievements and lessons learned during the year are highlighted below, by component.

A1 Livelihoods

Establishment of Sustainable Development Centers (CRDD) in all WINNER regions: A total of 8 CRDDs were set up: in Bas-Boen, Kenscoff, and Duvier (near Petionville) for the Cul de Sac watershed; in the Gonaives plain, La Branle and Bassin Magnan for the Gonaives/La Quinte watershed; Cabaret, and Saut d'Eau, in the new zones of intervention. The Bas-Boen CRDD is located in a five-hectare farm that belongs to the Ministry of Agriculture, Natural Resources and Rural Development (MARNDR). The other CRDDs were established in partnership with private entities and farmer associations. CRDDs are organized as demonstration and training centers, independently managed by committees that include representatives of the MARNDR, local governments, and producer groups. They are structured to become increasingly self-sustaining. CRDDs are essential to training master farmers; introducing new varieties, like the Pioneer and Monsanto hybrid corn; showing new techniques, like protected and vertical agriculture in low-cost green house on the Wynne farm in Kenscoff; and disseminating modern equipment like the urea-briquette machine in Bas Boen. The CRDDs have a positive impact on target groups, but we need to strengthen the managerial skills of supervisory committees and technical staff, and develop sustainable relationships with research and extension centers linked to the University of Florida.

Implementation of the Spring Campaign: On March 4, 2010, the Minister of Agriculture, Joanas Gué, the Mission Director, Carleene Dei, and WINNER Chief of Party, Jean-Robert Estimé, signed a major agreement to provide technical, financial and material support to the Government to launch an Enhanced Agricultural Production Program aimed at growing more than 10,000 ha of food crops in our areas of intervention. This partnership enabled farmers to benefit from mechanized plowing and harrowing, which is cheaper and more efficient than the traditional, man-based technique applied for soil preparation. WINNER provided a technical package to participants, including extension services through more than 200 young agronomists, and access to agricultural inputs in farmer stores managed by producer organizations. The overall results were remarkable: on average 75% productivity increase, with peaks at 118% for maize and 139% for sorghum. But, we know that we can do more in the future, by: i) better training extension agents (REAs: Responsables de l'Encadrement Agricole); applying more strictly modern

practices; iii) expanding the utilization of tractors for land preparation; iv) making inputs more accessible to small farmers on a timely manner; v) and strengthening managerial skills of farmer store leaders.

Agro-forestry activities: We developed and implemented a vast agro-forestry program as a key feature of WINNER interventions in order to help small farmers plant mainly fruit trees that will rapidly generate incomes. The goal is to expand the perennial cover on hillsides to reduce erosion and improve soil conservation, while promoting alternative energies to lower the demand for charcoal and fuel wood. We worked with farmer associations in priority in areas where we can combine agro-forestry activities with ravine treatments to reduce run-offs and stabilize eroded hillsides. We helped 131 farmer associations set up 133 nurseries of mostly fruit trees. Finally, by the end of September 2010, a total of about 1 million trees were transplanted, of which 30 were fruit trees. By the end of 2010, we will transplant 1.8 million trees but we will fall short of our goal of 4.2 million trees for the year. We conducted an in-depth assessment of our agro-forestry program and identified weaknesses and mistakes that will be corrected in the future: lack of ownership by beneficiaries, limited involvement of regional offices, poor quality of some seeds and seedlings, and insufficient monitoring, especially at the nursery and transplantation levels.

Master Farmer Training: We trained more than one thousand (1264) of farmers in four basic courses (agriculture, environment, small farm management and family planning), as well as specialized courses (cereals, vegetables, soil conservation, etc.). Candidates were presented by farmer associations and passed a test to take the courses. Professors mainly came from the School of Agronomy. At the end of August, we certified the first 60 master farmers who received a diploma signed by the Ministers of Agriculture and Environment. They act as proximity extension agents who provide basic technical guidance to fellow farmers. This training program is very important and generated a lot of interest from target groups, but it took some time to finalize the curriculum, harmonize regional initiatives and proceed in a well-planned fashion. This is why the program had a slower start than anticipated.

We also selected, and gave scholarships to, eight Haitians enrolled in a 2-year master's program at the University of Florida in various disciplines, including agribusiness development, food technology, environmental management, etc. The students registered first for an English training program that will be completed by the end of this year.

Technical Innovation: We teamed up with the University of Florida to introduce technical breakthroughs and modernize Haitian agriculture. Experts from the UF analyzed 1200 soil samples, designed fruit processing centers, and set up the first low-cost, green house with drip irrigation in Kenscoff. This technique of protected and vertical agriculture can generate more money per year on 70 m² than a farmer usually makes on one hectare with traditional practices. This innovative technology will free up spaces on hillsides for soil conservation and agro-forestry in the broader landscape. We also set up the first briquette machine for deep urea placement that reduces fertilizer consumption by 25%.

One of the most successful and spectacular innovations was the introduction of SRI (System of Rice Intensification), which is a new technique that significantly increases rice yields with less seeds (20%), less water (70%) and less fertilizers (50%). It is based on 5 principles: i) early transplantation of rice seedlings (one week); ii) transplantation of one slip only per seedling; iii) frequent weeding; iv) utilization of compost to provide organic matter to the soil; v) drainage of rice fields to maintain soils humid but not submerged. First results show that yields increased from 2.5 T/ha on average to 4.5 T/ha, with a peak at 11 T/ha in Bayonnais and Mirebalais. Net farmer income jumped from \$933/ha to \$1,913/ha. With SRI, we introduced the conic weeding machine, unknown in Haiti, to clean rice fields more rapidly and more effectively. One of the clear results of this technical innovation is to drastically cut production costs and make Haitian rice very competitive compared to imported rice.

A2 Infrastructure

Potable water systems: We rehabilitated many potable water systems in Bassin Mangnan, near Gonaives, in Duvier, near Pétionville, in Dumisseau, near Kenscoff for a total of 90,000 beneficiaries. In most cases, we set up management committees based on cost recovery principles, to ensure that people will pay an affordable fee and the systems will be well maintained.

Rehabilitation of the Rivière Grise Irrigation System: To save the 2009/2010 bean campaign in the plain of Cul de Sac, we first dredged the equivalent of 14 kilometers of canals, removed 39,000 cubic meters of sediment, and fixed masonry walls. This key intervention was completed in five weeks and water was back in the canals on December 5th 2009. Then, we intervened in 2010 to clean a total of 35 km of secondary and tertiary canals, repaired seven bridges, consolidated the intake dike and installed an iron gate to control water flows in the primary canal. The rehabilitated irrigation canals provide water to more than 4,000 hectares of land. The 2010 bean season meant more than \$1 million in revenues for farmers in the plain of Cul de Sac. WINNER also partnered with the Ministry of Agriculture, local authorities, and farmer associations to put in place a temporary management and maintenance organization while taking the steps to create a water-user association that will collect irrigation fees and take care of the whole system.

River widening and bank strengthening: WINNER implemented important flood-prevention works in the Rivière Grise, between the Tabarre bridge and the bridge of Croix des Missions. We installed gabions on sharp river beds and widened the river in critical areas over a 12 kilometer stretch to increase the water capacity to 900 cubic meters per second and protect local populations. We also achieved spectacular results in the la Quinte River where we widened the banks from 12 to 60 meters on 1800 meters, downstream from Pont Gaudin, and built a dyke to raise the flood capacity to 500m/s, while protecting the water intakes of small farmers. Flood-protection works are very well received and appreciated by local populations. When combined with vetiver rows to stabilize banks, they produce remarkable and long-lasting effects.

Ravine treatments: We gave grants and provided technical assistance to 13 farmer organizations to implement high quality ravine treatment works, with check dams and

vegetal protection to reduce run-off and erosion. Those ravines were selected through GIS mapping that helped identify the most aggressive ones and highlighted their connections with the main rivers in the Cul de Sac and Gonaives watersheds. We need to increase the number of ravine treatments in connection with agro-forestry interventions in critical spots of watersheds, to slow down water flows and improve soil conservation.

A3 Governance

Strong relationship with the GOH at all levels. We signed Memoranda of Understanding (MOUs) with the MARNDR, the Ministry of Environment (MDE), the Ministry of Women Development, and the Comité Interministériel d'Aménagement du Territoire (CIAT), which is chaired by the Prime Minister. We provided material assistance to the CIAT, the Agence Nationale des Aires Protégées (ANAP), the mayor's offices in Kenscoff, Pétionville, Croix des Bouquets, Cabaret, Saut d'Eau and Mirebalais and we trained the staff on GIS mapping at the Mayor's office in Kenscoff and Petionville and at the MDE.

Creation of the Haitian Designated National Authority (DNA) for the Clean Development Mechanism (CDM). The decree creating the Haitian Designated National Authority, in accordance with the Kyoto Protocol on global climate change, was published on May 31st in "Le Moniteur", the Official Journal of the Haitian Government. WINNER provided technical assistance to the Ministry of Environment to draft this important decree that allows Haiti to access financing for eligible activities through carbon credit trading and technical assistance related to the CDM.

Development of Contingency Plans: We helped develop contingency plans with the municipal teams at Gonaives, Croix des Bouquets and Kenscoff, in close partnership with local communities, CASEC and ASEC to ensure full ownership of the plans by all stakeholders. In Gonaives, we also set up a robust flood early warning system managed by local communities, municipal authorities, the MARNDR and the Direction de la Protection Civile (DPC).

Drafting of regulations for the 2006 Decree on the Environment: We recruited a legal expert to start drafting the application regulations that are indispensable for full enforcement of the 2006 Decree on the Environment. This huge task will result in a complete overhaul and modernization of the legal and regulatory framework that governs many key domains related to the environment and agriculture, such as natural resource management, protected areas, waste recycling, etc.

Watershed management plans: With the help of an international team from CH2MHILL, we developed the framework and established a detailed scope of work for watershed management plans, in close collaboration with the CIAT. We also developed a detailed land use/land cover map for all WINNER regions of intervention, with the assistance of our international partner, RPI, specialized in imagery and GIS mapping.

A4 Public- Private-Producer Partnerships (PPPP)

Creation of strong public-private-producer partnerships (PPPP): WINNER assisted about 20 private enterprises forge strong business partnerships with farmer associations to create new job opportunities and expand production in key value chains, such as sugar cane, maize, sorghum, mango, tomato, cut flowers, coffee, etc... We completed the traceability plan for mango exporters and worked with enterprises involved in coffee processing to help farmer organizations in Belle Fontaine set up nurseries with 250,000 seedlings of coffee trees. We provided material and financial assistance to MFT to build a new feed mill in Gonaives that buys raw material from, and sell finished products to, local farmer associations that produce eggs for the domestic market. We are helping a company in Mirebalais set up a mango collection center and processing unit that will make mango pulp for the local market and we are assisting a farmer association partner with a private enterprise to produce dried mango for export.

A.5 Accelerated Earthquake Recovery Program

Humanitarian aid: In the days following the January 12 earthquake, WINNER distributed food and water to 200,000 people in areas where refugees had congregated in Pegyville, Petionville, Cul-de-Sac and Kenscoff. WINNER also distributed tents and tarps to affected people and conducted studies on displaced populations from the earthquake in Gonaives and Mirebalais.

Work for Recovery Program: Under this initiative WINNER gave work to almost 20,000 people (235,000 persons/day) and cleaned 659 km of irrigation and drainage canals to boost agricultural production in rural areas affected by the consequences of the earthquake.

Small Business Recovery Initiative: WINNER first conducted a comprehensive assessment of losses to the private sector as a result of the earthquake. All businesses, from micro-enterprises to large companies were included; more than 500 firms were interviewed and focus groups were organized; precise GIS maps were developed with key information on damaged enterprises and the business district. Main results show that private sector losses, excluding banks and insurances, represented \$2.1 billion or 30% of Haiti GDP and there was an urgent need to put in place a \$200 million guarantee fund to facilitate access to credit. Following the study we launched the Small Business Recovery Initiative that provides grants and facilitates access to affordable credit for SMEs affected by the earthquake. We signed MOUs with three financial institutions: SOGEFAC, SOFIHDES, and FDI. We received 51 demands for SBRI financing from SMEs; 34 were accepted, among which most enterprises are bakeries and food shops.

A6 Watershed Investment Fund (WIF)

We financed activity implementation through the WIF, using a variety of instruments, including grants, subcontracts, technical assistance and direct procurements of goods and services. We spent almost \$14 million, with livelihood and infrastructure representing

80% of disbursed amounts. We are working on a revision of the WIF manual to include training as a new instrument and align our contract with the content of our WIF manual.

B. LIVELIHOODS

In this section, we present the activities related to the livelihoods component of WINNER undertaken since the project's inception in all zones of intervention.

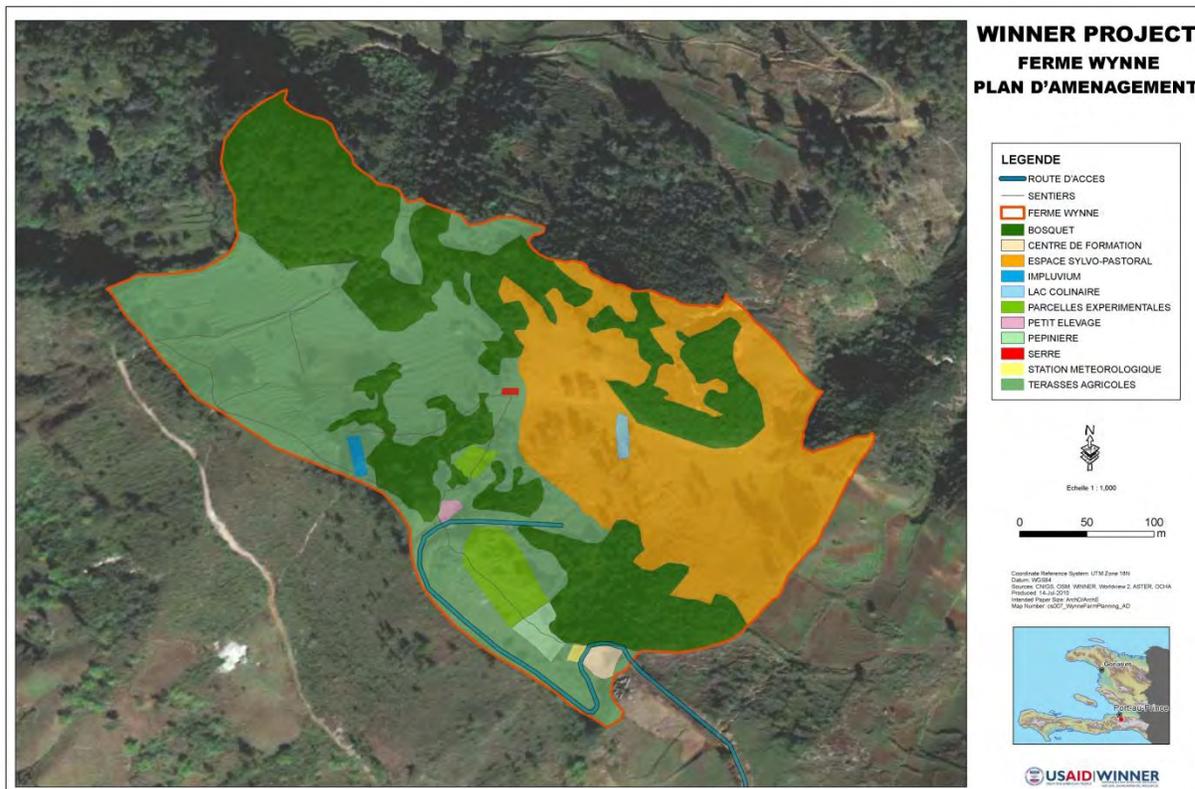
B1. Sustainable Rural Development Centers (CRDD) and Farmer Training

A key feature of the WINNER program since its inception has been the establishment of sustainable rural development centers or Centre Rural de Développement Durable (CRDD). The functions of these centers are to train master farmers and to demonstrate best agricultural practices through demonstration plots and innovative technologies. During fiscal year 2010 (FY10), WINNER installed CRDDs in Kenscoff (Cul-de-Sac watershed hillside areas), Bas Boen (Cul-de-Sac watershed plain), Tarasse (Gonaïves plain), La Branle (Gonaïves hillside), Mirebalais, and Cabaret.

Kenscoff CRDD

In Kenscoff, we established the CRDD at the Jane Wynne farm. We recruited the technical teams to work in the Kenscoff CRDD in the fall of 2009, including an agronomist, a phytosanitary technician, and a training coordinator. Based on a diagnostic survey of agricultural activities in the Kenscoff region conducted by the consulting firm Agroconsult in the fall of 2009, we identified higher yield integrated production systems to be demonstrated at the CRDD to promote increased sustainable hillside agricultural production. We also met with the Faculty of Agronomy and Veterinary Medicine (FAMV) to discuss training modules related to the increase of agricultural productivity. We then launched the training of master farmers in Kenscoff in March 2010 after contacting farmer associations to identify candidates for the program.

We then undertook soil preparation activities on the WYNN farm in Petionville that will be used as a demonstration center for sustainable agricultural practices. WINNER also found a site and signed a contract for the implementation of a satellite CRDD in Duvier. We also conducted soil analyses at the Kenscoff CRDD to determine the best types of crops to grow. In the spring of 2010, we prepared a detailed plan for the CRDD in Kenscoff (see below)



Bas Boen CRDD

In the fall of 2009, we identified a site in Bas Boen for the implementation of the CRDD in the Cul-de-Sac plain. We then prepared a detailed plan for the CRDD including a plan of the site and a list of activities to be conducted there. In the spring of 2010, we established a mango plantation on one hectare; planted one hectare in vegetables (Eggplant, Okra and Watermelon); tested various cereal seedlings (Sorghum and Corn) on 0.54 hectares; planted corn one one hectare in association with the mango trees; established a trial plantation of *Jatropha curcas* on 3,239 m²; constructed two fish breeding ponds have been constructed on 500m²; and installed a nursery of 15,000 vetiver seedlings.

Gonaives / La Quinte CRDDs

In this first year of implementation, WINNER established three rural centers for sustainable development (CRDDs) in the Gonaives/La Quinte watershed. A main CRDD was set up in the plain in Tarasse, and satellite CRDDs were established in the hillside areas of La Branle and Bassin Mangnan.

For the Tarasse CRDD, we renovated two buildings at the site, installed an enclosure for the 5 hectare farm, and ensured electricity supply for site. We also prepared a land use plan that includes space for:

- A fish breeding pond ;

- A rain gauge;
- A well, equipped with a four inch pump ;
- Unlined irrigation canals ;
- A warehouse used as an observation point for the farm ;
- Spaces for the implementation of demonstration plots.

The La Branle CRDD is on a farm of 3 hectares. In order to ensure adequate water for irrigation, we started the construction of a water catchment basin in the spring of 2010. We also prepared an experimental plot of different varieties of *Jatropha*, built a 1600 meter enclosure, and installed a nursery of forest and fruit species.

Mirebalais / Saut d'Eau CRDD

A memorandum of understanding (MOU) has been signed on June 8, 2010 between the Farmers' Association for Development of Wanny (APDW) and WINNER. According to the terms of this agreement, APDW has made an area of 6 ha available to WINNER for the installation of a CRDD in the Mirebalais/Saut-d'Eau area.

The administrative and technical procedures to enclose the land have been undertaken. The CRDD director and the director for the infrastructure component are working to draft the exploitation and investment plan for the CRDD. While awaiting the final plan, the CRDD's director has completed certain activities:

1. A demonstration plot for the culture of corn on 800 m² (400 m² in Cesda 88 and 400 m² in a hybrid variety) has been established;
2. A demonstration plot for the culture of vetiver on 300 m² has been put in place;
3. Close to 0.33 m² have been plowed to experiment the culture of sorghum.

Cabaret / Arcahaie CRDD

An area covering 6.12 ha has been made available to the project by their owners in agreement with the area's local authorities and farmers' organizations to set-up a CRDD in Cabaret. A memorandum of understanding (MOU) has been signed with the owners to ensure the continuation of activities started at the beginning of April. Close to 50% of these lands have been plowed and ameliorated while taking into account the main crops cultivated in the area and respecting a rigorous schedule. The crops experimented in the CRDD are corn (Milho, Pionner and a local variety called *tibourik*), okra and eggplant.

The CRDD has also served as an experimental farm for the training of extension farmers which was organized in June. The farmers were able to run germination tests and observe the crops planted at the CRDD respecting a technical program.

Activities in the Third Quarter 2010

Kenscoff CRDD

In the third quarter of 2010, activities in the Kenscoff CRDD picked up pace. We installed a hoop house to demonstrate drip irrigation and vertical agriculture. We put in place a vetiver multiplication plot and several crop demonstration plots including cabbage, carrots, and tomatoes.

We also completed a water catchment structure to irrigate both the greenhouse and the demonstration plots. This CRDD is fast becoming a showcase for WINNER. It will be completed in the next six months with the installation of a fish pond and the building of the training and administrative center.

In the third quarter of 2010, the following activities were implemented at the Wynne farm CRDD :

- Installation of 2 vetiver nurseries;
- Installation of flat terraces in zones of steep slopes;
- Installation of a drip irrigation system on flat terraces;
- Installation of a rain gauge;
- Construction of two structures to install tree nurseries;
- Installation of 2 rabbit cages;
- Plantation of fruit trees.

Bas Boen CRDD

During the spring 2010 agricultural campaign, six field trials of corn were implemented at the Bas Boen CRDD to test 3 new varieties compared to the local varieties. The average yield obtained was 2,098 tons/hectare for all corn varieties using an improved technical itinerary versus 1,533 tons per hectare with the traditional technical itinerary (a 37% increase). For sorghum, a yield of 4,378 tons/hectare was obtained with the improved itinerary versus 4,326 tons per hectare with the traditional itinerary (a 1% increase). With the “Black Beauty” variety of eggplant, a yield of 17.73 tons per hectare was obtained versus a yield of 22.07 tons per hectare for the local variety using an improved technical itinerary based on organic and mineral fertilization, plowing and tillage. In addition, the vetiver nursery was expanded with the plantation of 8,000 new plants.

Gonaïves / La Quinte CRDDs

In the third quarter of 2010, various activities were implemented in the CRDDs of the Gonaïves region. In the Tarasse CRDD, field demonstration trials were implemented in the lower plain of Gonaïves, Bayonnais and Gandmont. In addition, activities undertaken at the Tarasse site included:

- Rehabilitation and completion of the office and guest quarters of the Tarasse CRDD;
- Construction of a depot to store agricultural inputs;
- Construction of irrigation basins with gates for demonstration plots.

At the satellite CRDD in Labranle, the following works were undertaken:

- Construction of a water catchment;
- Stone and grass removal to prepare demonstration plots;
- Implementation of a jatropha demonstration plot;
- Fencing of the site with pillars and barbed wire.

Mirebalais / Saut d’Eau

The management plan for the CRDD in the Mirebalais / Saut d’Eau region was prepared in the third quarter of 2010. The fence was installed with concrete posts and barbed wire. Two fields with a total of 6 hectares were secured with a metal gate. In the meantime, the management committee for the CRDD was elected. The committee is comprised of a representative of the owners of the donated land, a representative of the APDW producer association, and a representative from the WINNER project. Other producer associations will also join the management committee, as well as the regional direction of the Ministry of Agriculture and the Commune of Mirebalais. In terms of production activities, three demonstration plots are being implemented on the farm (corn, sorghum and vetiver). The global investment plan is also being prepared. The management plan for the site on the Wanny farm is shown below.



Figure 1. Land use map of the Wanny farm

Cabaret / Archaie

In the third quarter of 2010, the plan for land use at the CRDD was prepared (see Figure). The site will include buildings that will house a conference and training room, a cafeteria, sleeping quarter, a small laboratory, and agricultural land for demonstration plots. The CRDD will be jointly managed by WINNER and a management committee according to an annual work plan and budget. The management committee is comprised of a representative from the Communal Agricultural Office of Cabaret, a representative from WINNER, a representative from a farmer association from the locality of Robert (ONADEV), and a representative from each of the communal sections of Cabaret and Archaie.



Activities implemented at the CRDD in the quarter include:

- Establishment of demonstration plots of eggplant, okra, and corn;
- Harvest of eggplants, okra, and corn produced this year;
- Maintenance of seedlings in the nurseries;
- Composting of crop waste and weeds produced on the farm;
- Completion of the site enclosure;

In the nursery, 2,294 plants of mangos, grapefruit, corossol, cherries, and vetiver were produced ; as well as 27,000 plants of fruit trees (mangos, avocado, lemon and orange) and 4,000 plants of forest species (oak, cedar, and acajou).

TRAINING

WINNER was very active in training farmers and others during Fiscal Year 2010. Table 1 presents a summary of training sessions provided to master farmer candidates in our areas of intervention.

Table 1. Master Farmer Training

Course Title	Cul-de-Sac	Gonaives	Mirebalais Saut d'Eau	Cabaret Arcahaie	Total
<i>Core Courses</i>					
General agriculture	377	308			685
Management of small farms	378	263			641
Family Planning	164	43			207
Sustainable environmental management	127				127
<i>Specialization Courses</i>					
Soil conservation techniques	68	43			111
Phytosanitary control	144				144
Techniques of vetiver planting	231	57	257	112	657
Composting	281				281
Agro-forestry	314	139	138	78	669
Bean production techniques	230	81			311
Corn production techniques	79	94	201		374
Sorghum production techniques	51	64			115
Vegetable crops	471	75			546
Small animal husbandry	203				203
Prophylactics and animal health	38				38

We graduated the first class of master farmers on September 2nd 2010. In all there were 60 graduates including 43 men and 17 women (28.3%). The graduation ceremony was attended by Minister of Environment Jean Marie Claude Germain, Secretary of State for Livestock Michel Chancy, and Acting EG Director Tham Truong of USAID.

[Insert Picture of Graduation]

In addition to training master farmers, WINNER also provided training to project partners and beneficiaries on such topics as management of agricultural input supply stores, ravine treatment, risk and disaster management. Table 2 provides a summary of these training sessions.

Table 2. WINNER training outside agriculture

Training topic	Cul-de-Sac	Gonaïves	Total
Public water hygiene		33	33
Management of agricultural input supply stores (BIA)	84		84
Risk and Disaster management	117	199	316
Ravine treatment	136	138	274
Use of LPG Cookstoves	22		22

Scholarship Program

In June 2010, we launched a scholarship program for 8 Haitian graduate students in agriculture and natural resources management at the University of Florida. The students are currently attending UF and are specializing such diverse fields as horticulture, aquaculture, zoo-technology, natural resources, and agribusiness.

B2. AGRICULTURAL CAMPAIGNS

During FY 2010, WINNER supported two major agricultural campaigns: a winter bean campaign and the spring 2010 agricultural campaign. This section presents the key results from these campaigns.

B2.1 Winter 2009-2010 Bean Campaign

Cul-de-Sac

Winter bean campaign. During the winter campaign, WINNER distributed 66 metric tons of bean seeds. The project provided technical training to members of 10 input supply stores (BIAs) and helped 13 stores designate their three-person management committees. The project hired 13 young agronomists as agricultural extension agents (Responsables d'Encadrement Agricole or REA) to support 1432 farmers in applying the bean protocol, which ultimately helped farmers earn an average net profit of 24,000 gourdes per hectare. In Cul de Sac, the average yield was 0.8 metric tons per hectare compared to the normal 0.7 tons per hectare.

Gonaïves

Winter bean campaign. As mentioned in the previous section, during the winter campaign, WINNER distributed bean seeds, provided capacity building to those managing input supply stores, and provided extension support to farmers. In Gonaïves, the yield was only 0.21 tons per hectare because of an electricity shortage affecting irrigation systems, which caused a drastic drop in water availability during a critical production phase.

B2.2 Spring 2010 Agricultural Campaign

Starting in March 2010, WINNER worked with the Ministry of Agriculture in the context of the emergency food production program that resulted from a memorandum of understanding between signed on March 3rd 2010 between USAID Director Carlene Dei and Minister of Agriculture Johanas Gué.

Table 3 presents a summary of WINNER's assistance for the spring 2010 agricultural campaign. The spring agricultural campaign supported by WINNER generated revenues of 209,935,485 Gourdes (\$5.31 million). Since over 10,000 farmers were assisted by WINNER, the average income per farmer was about \$500. Further details on WINNER's technical assistance to improve agricultural production are provided in Annex 1.

Table 3

Summary of WINNER's support for the Spring 2010 agricultural campaign

Region: Cul-de-Sac Plain										
Commune	Number of REAs	Number of hectares supported	Planted area (hectares)			Number of Hectares Plowed	Number of Hectares Irrigated	Number of farmers assisted	Number of associations assisted	Number of input supply stores assisted
			Local seeds	Imported seeds	Total seeds					
Croix-des-Bouquets	25	798.1	603.5	194.6	798.1	534	925.8	1749	21	5
Ganthier	3	152.8	115.3	37.5	452.8	46	154.6	152	3	2
Thomazeau	11	795.6	709.6	86.0	795.6	87	795.7	770	7	-
Cité Soleil	1	100.0	100.0	0.0	100.0	13.5	79.0	50	1	-
Total Cul-de-Sac	40	1846.5	1528.4	318.1	680.4	680.5	1955.1	2721	32	7
Region: Kenscoff/Pétion-ville										
Kenscoff	20	909.1	499.5	409.6	909.1	0.0	0.0	944	23	4
Pétion-Ville	12	574.5	107.8	466.7	574.5	0.0	0.0	622	27	2
Total Kenscoff/Pétion-Ville	32	1378.6	307.4	1071.2	1378.6	0.0	0.0	1566	50	6
Region: Mirebalais / Saut d'Eau										
Mirebalais	20	917.5	821.3	96.1	917.5	483.7	800.0	1205	78	4
Saut d'Eau	27	678.7	641.6	37.1	678.7	23.9	0.0	869	40	6
Total Mirebalais / Saut d'Eau	47	1596.2	1462.9	133.3	1596.5	507.5	800.0	2074	118	10
Region: Cabaret / Arcahaie										
Cabaret	22	1398.2	1156.4	241.8	1398.2	93.1	805.3	925	10	2
Arcahaie	28	972.6	692.9	279.7	972.6	376.3	796.7	824	10	2
Total Cabaret / Arcahaie	50	2370.8	1849.3	521.5	2370.8	469.4	1602.0	1749	22	4
Region: Gonaïves										
Gonaïves	51	1986.7	1659.6	327.1	1986.7	625.0	3139.7	2534	14	10
Total Gonaïves	51	1986.7	1659.6	327.1	1986.7	625.0	3139.7	2534	14	10

Grand Total	220	9283.7	7107.6	2176.2	9283.7	2282.3	7496.7	10,644	236	37
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B3. Agro-forestry

WINNER launched an agro-forestry program in the first quarter of 2010. We have conducted two agro-forestry campaigns. Table 4 presents a summary of the number of tree seedlings produced and transplanted in these two campaigns. Overall, the agro-forestry campaign had mixed results. While a significant number of trees were produced in nurseries and have been planted, there were significant losses in some areas due to the insufficient involvement of farmer associations. From this lesson learned, in the coming year, WINNER will make a significant effort to build the capacity of farmer associations and community-based groups. Further details on the agro-forestry campaigns are provided in Annex 2.

Table 4. Number of tree plants produced during WINNER's two agro-forestry campaigns in 2010

Region	Number of nurseries	Number of tree seedlings to produce	Number of tree seedlings actually produced	Number of local organizations involved
First agro-forestry campaign				
Cul-de-Sac plain	11	220,000	138,093	1
Kenscoff/Petion Ville	9	155,000	144,479	9
Gonaïves	7	132,000	140,086	7
Total Campaign 1	27	507,000	422,658	17
Second agro-forestry campaign				
Arcahaie / Cabaret	12	400,000	105,452	12
Gonaïves	27	540,000	438,492	27
Kenscoff / Petion-ville	63	4,638,000	401,068	19
Mirebalais / Saut d'Eau	27	1,020,000	353,757	72
Cul-de-Sac plain	4	120,000	109,470	1
Total Campaign 2	133	3,718,000	1,408,239	131
Total Campaigns 1 & 2	133	4,225,000	1,830,897	131

B4. Technological innovation

During FY 2010, WINNER introduced a number of technological innovations in Haitian agriculture.

Extension services by SMS

At the beginning of March 2010, WINNER ordered a feasibility study of an agricultural extension system via SMS. The results indicated that more than 90% of the populations living in WINNER's areas of intervention own a cell phone. Among them, more than 60% know how to receive SMS messages and 89 % know someone who can read the SMS messages for them. Based on this information, WINNER decided to implement an agricultural extension system via SMS. The system's goal is to send to members of organizations working with WINNER, target and useful information which will help them improve production and reduce vulnerability to natural disasters.

We recruited a consultant to establish the data base which will be used for the trial period which included 607 farmers in the project's five regions of intervention. We also signed a contract with Digicel for the sending of bulk SMS messages at a lower price (one gourde per message instead of the regular two gourdes, this price is a special favor granted on the basis of thirty thousand SMS per group are sent).

Activities in the Third Quarter of 2010

Following the study requested by WINNER on the feasibility of an extension service via SMS, WINNER decided to implement a Pilot project in order to study the impact such a dissemination method can have on farmers. After signing an agreement with a local operator (Digicel) to provide the project with the capacity for sending bulk SMS messages, this pilot phase started in mid-August 2010 with seven hundred and forty-seven (747) participants distributed among all the regions where WINNER operates (Table 5).

Table 5. Number of farmers participating in the pilot phase of agricultural extension through SMS messaging

WINNER areas	Number of farmers participating in the SMS trials
Arcahaie/Carbaret	213
Bas-Boën	161
Gonaïves	39
Kenscoff	194
Mirebalais/Saut d'eau	140
Total	747

In the period from August 16th to September 27th, WINNER sent nine SMS messages to the recipients. The contents of the messages went from the availability of products in the input supply stores supported by WINNER to the correct agronomic practices that farmers should follow if they are planting specific crops (e.g., maize, sorgho). There was also a message indicating the correct distances that the tractor operator should follow when plowing a field for a farmer.

In the month of November, with the hiring of field extension agents, the impact of the SMS technology will be evaluated so that the usefulness of this program can be assessed. The study will be conducted through a questionnaire whose results will be analyzed.

Hoop house & vertical agriculture

In partnership with the School of Agriculture of the University of Florida, WINNER introduced protected and vertical agriculture with drip irrigation in order to show small farmers how they can considerably increase their income on a limited amount of land. The 70 m² hoop house in the Kenscoff CRDD can generate an income of \$2,000 a year, which is equivalent to the average yearly income of a small farmer on one hectare of land.

SRI

With the assistance of international consultant Joeli Barison, WINNER introduced a new rice growing system in Haiti, the intensive rice growing system or SRI (système de riziculture intensive). We launched field trials in May 2010 in the Cul-de-Sac plain, Mirebalais, and Gonaïves.

The intensive rice production system or SRI (Système de Riziculture Intensive) is a cultivation method that generates a doubling of yields while using fewer seeds, fertilizer and water. It is based on five fundamental principles working together to in synergy to increase yield : (1) the replanting of young leaves, (2) the replanting of one stem in squares of 25x25cm², (3) keeping the soil moist during the vegetative period of the plant, (4) early and frequent tilling using a mechanical tiller, (5) organic fertilization. The method consists of creating an adequate cultivation environment to maximize the number of shoots of rice, thus resulting in a better production of grains. SRI was discovered in Madagascar during the 1980s and is now practiced in about forty counties in Africa, Asia, and Latin America.

The results obtained in these different countries have shown that the SRI method can increase productivity per unit area in a wide range of agro-ecological zones. Three pilot demonstration sites were implemented by WINNER in Haiti in order to assess the productivity of SRI under Haitian environmental conditions. In May 2010, SRI trials sites were installed in the Cul-de-Sac plain, Mirebalais, and Gonaïves. The performance of the SRI method was evaluated against the traditional rice cultivation method, with and without the addition of compost, using three rice varieties (one variety with low market value (TSC10) and two varieties with high market value (Shela et Shelda).

The results obtained in the experimentation plots have shown that the SRI method provides a increase in yield between 1.5 times and 1.9 times over the traditional practices. The average yield using traditional methods is 2 – 3 tons per hectare, while the average yield using SRO is 4 – 5 tons per hectare. The TCS10 variety provided the best response to the SRI method with respect to yield increase due to its longer production cycle than Shella and Shelda (120-130 days vs. 110 days). An exceptional yield of 11 to 12 tons per hectare was obtained in Mirebalais and in the Bayonnais area of Gonaïves. However, attacks by birds, commonly known as Madame Sara, on the plots cultivated with the Shella and Shelda varieties hindered the analysis of results for these two varieties,

although we were able to observe an increase in yield of 1.5 with the Shelda variety. This increase was obtained using 80% fewer seeds, 30% less water, and 50% less fertilizer. We estimate that the SRI method increases the gross profit of farmers by up to 76,500 Gourdes (\$1,913) per hectare, whereas the traditional method generates an average gross profit of only 37,300 Gourdes (\$933). In addition, using SRI, farmers can save 2,200 Gourdes (\$55) per hectare on fertilizer.

After seeing the results generated by SRI, farmers have expressed a strong interest in the dissemination of this practice. Thus, 11 new sites for SRI cultivation were installed in the summer of 2010 in a total area of 5,400 m² in the Cul-de-Sac plain, Mirebalais, and Gonaïves. WINNER plans to introduce mechanized tools for rice cultivation that will improve harvesting and further increase revenues.

C. INFRASTRUCTURE

In this section, we present the results of WINNER infrastructure activities since the inception of the project.

C1. Ravine treatment and soil conservation

Kenscoff / Petionville

To reduce soil erosion, WINNER rehabilitated six kilometers of ravine in Belle Fontaine, in the upper Cul-de-Sac watershed, through a grant to a local community organization (SOHARDEK). This ravine treatment will help reduce water velocity and the risks of flooding downstream. Other ravines in the Cul-de-Sac watersheds are being treated by IOM. The mechanical stabilization of ravines will be supplemented by the planting of vetiver to further fixate soils and reduce erosion.

WINNER carried out ravine treatment in Kenscoff, involving four ravines in Grand Fonds about 5 kilometers long. So far, 3.6 kilometers have been treated and 1675 m³ of stone steps have been installed.

In February and March, the WINNER project fielded Criss Juliard, a vetiver expert, to develop a plan for the implantation of vetiver to stabilize hillsides in WINNER's areas of intervention and complement the mechanical stabilization of ravines. Dr. Juliard designed a program to start vetiver nurseries to produce enough material for the project's needs, trained WINNER staff and farmer associations on the uses and benefits of vetiver, and provided technical guides to disseminate the proper techniques for vetiver applications for ravine treatment and soil stabilization. Vetiver will also be used to protect river banks in the lower part of the watershed.

In the commune of Kenscoff, particularly in Grand Fonds, WINNER is treating four ravines on 5.175 km. Training has been given to 135 persons on soil conservation techniques. To date, a section of 4.65 km of ravines has been treated by constructing 2,153.57 m³ of gabions.

Gonaïves

In the Gonaïves area, the work related to the ravine treatment executed by WINNER includes 3 ravines: Mémé, La Branle and Dubédou. The treatment of these ravines started in the second quarter of 2010 through grants provided to community-based organizations.

Activities in the third quarter of 2010

In the third quarter of 2010, we completed the soil conservation projects in Mémé (Bassin Mangnan), La Branle and Dubédou. These projects, implemented through grants to local farmer associations, treated 16.5 kilometers of ravines through the installation of 11,397 m³ of dry stone check dams and gabions in the ravines, the construction of 6,000 meters

of stone walls on 6 hectares of farm land, the plantation of 3,000 plants of bamboo on the banks of ravines and of 15,000 grass strips above the check dams, and the training of 132 people on soil conservation techniques.

Vetiver for soil stabilization

In March 2010, WINNER initiated a Vetiver dimension to its program to prevent soil erosion and protect most of the project rehabilitated infrastructures as well as those of others. An initial technical assistance mission spent 4 weeks in Haiti to provide training to WINNER staff, partner associations and community leaders on the value and applications of the Vetiver System (VS), its capacity to improve livelihoods and natural resource management as well as improve the sustainability of rehabilitated irrigation and transport infrastructure. The training consisted of 15 day sessions in 10 localities (including all CRDDs) and which reached over 500 participants.

A second mission was held in July and August to follow-on activities as the Vetiver initiative is increasing in importance and scope. Plant materials which were not readily available in March were being multiplied in each CRDD through nurseries. This assignment allowed the consultant to provide Vetiver handling and training in “ribbon” nursery technique (five “ribbon” demonstration sites), site visits and remediation recommendations, establish four application demonstration sites, visits to project multiplication nurseries and recommendations, and reviews of responses to the *Appel à Manifestation d'Intérêt* that were issued by each regional offices in mid-July. The consultant conducted activities in 12 localities: Arcahaie, Cabaret, Mirebalais, Saut d'Eau, Bas Boën, Croix des Bouquets, Kenscoff, Mahotièrè rural road and Gonaives' La Branle River, Dubédou River, Bassin Magnan and La Quinte, and Rivière Grise for which WINNER prepared recommendations to protect the installed gabions and constructed embankments. Both theoretical and field level training models were reinforced and made more rigorous, and training shifted to addressing specific situations where the project had completed or were near completing infrastructure rehabilitation projects that required a medium to long term maintenance intervention. This was the case for the flood prevention work on Rivière Grise in Croix de Bouquets, the River La Quinte in Gonaives, the irrigation canal in the plain of the Cul de Sac (Dumai), for the constructed rural road path of Mahotièrè in the Kenscoff zone, and planned gabion protection of rivers in Cabaret/Arcahaie

During the short four months between the two consultancies, WINNER hired a full-time Vetiver coordinator, purchased over 80,000 Vetiver plants and installed operational multiplication nurseries in every region of the program, published the pocket size Vetiver technical manual in French adapted for Haiti, and created enough interest among some of its staff, private businesses and NGOs that new sources of Vetiver, demand for Vetiver and training increased significantly.

C2. Flood Protection Works

Cul-de-Sac

Starting in the Fall of 2009, we prepared engineering studies for the reprofiling of the Rivière Grise. We also prepared a detailed environmental assessment of the project. After validation of the studies, the bid documents were prepared and the bids were received in January. The work, consisting of river widening and bank strengthening on a 12 kilometer segment of the river was divided into four contracts issued to two firms. Construction began in the Spring of 2010.

Activities in the Third Quarter of 2010

In the third quarter of 2010, we completed the work to widen the Rivière Grise and strengthen its banks at five critical points between the Tabarre bridge and the Road 9 bridge. This work significantly reduces flood risk to populations living on the banks of the river and to agricultural lands. In addition to river widening and bank stabilization by gabions, WINNER installed grass strips and vetiver at critical points to further stabilize the banks.

Gonaïves

Starting in November 2009, the project dredged 1.6 kilometers of the D7 drain, helping with 4 crossing culverts, and removing grass over 2.5 kilometers. In addition to providing flood protection to the lower Gonaïves plain, this project also helps provide irrigation to an area that has been fallow.

We started working on studies for the reprofiling of the La Quinte river in the first quarter of 2010. In the second quarter of 2010, we prepared the bid documents and conducted a detailed environmental assessment with the assistance of the US Army Corps of Engineers. The contract for this work was awarded in June 2010 and construction began immediately thereafter.

Activities in the Third Quarter 2010

La Quinte river reprofiling

A major achievement in the third quarter of 2010 was the near completion of the flood protection works in the La Quinte river. This project covered an area of 1.6 kilometers downstream from Pont Gaudin and will reduce the risks of flooding for the city of Gonaïves. Through these flood protection works, the river can handle a peak flow of 500 m³/s without risk of flooding. At the same time, the irrigation intakes from the river were rehabilitated. These activities will leverage the work undertaken by the CNE upstream. Although heavy rains during the period hampered progress on the site, the works were 85% completed at the end of September.

Rivière La Quinte upstream from the Granmont intake

Curing of the Biennac Drain

In order to reduce flooding and protect the people of Gonaïves, WINNER also started work to cure the Bienac drain on 7 kilometers from the Saint Cyr bridge to the Dolant bridge. These works cost \$243,000.00 and were completed in the third quarter of 2010.

Cabaret / Arcahaie

In the Cabaret/Arcahaie region, we launched three projects related to the protection of the river banks at the request of the Ministry of Environment. (1) The Protection and prevention against the threat of flooding at Arcahaie on the River Courjolles; (2) a project of protection and prevention against the threat of flooding in the commune of Cabaret on the Torcelle river; and (3) a project of protection and prevention against the threat of flooding in the commune of Cabaret on ravine Manègue.

The grant contracts for these three projects were signed in the second quarter of 2010 with community-based organizations.

Activities in the Third Quarter of 2010

These projects started in the third quarter of 2010. The costs are 7,746,820 Gourdes for the Courjolle river, 6,675,345 Gourdes for the Torcelle river ; and 1,188,828 Gourdes for the Manègue river. The projects started in June 2010, and were 60 to 70% completed by the end of September.

Strengthening of the banks of the Torcelle river

C3. Irrigation system rehabilitation

Cul-de-Sac Plain

In the fourth quarter of 2009, WINNER rehabilitated 13 kilometers of canals in the irrigation system of the Cul-de-Sac plain flowing from the Rivière Grise. The canals had been inoperative for over twenty years and as a result, extensive agricultural land was lying fallow in the dry season. The rehabilitation of the canals has led farmers to undertake field preparation and planting and to reclaim 4,000 hectares of land for agricultural production.

WINNER conducted an evaluation for the rehabilitation of the thermal power plant in Bas Boen that has been inoperative since 1990 and used to provide power to 19 pumping stations for the irrigation of a large part of the Cul-de-Sac plain. WINNER plans to launch bids in February 2010 for the rehabilitation of the plant. In the meantime, WINNER rehabilitated three pumping stations in Bas Boen that have enabled the irrigation of 210 hectares of agricultural lands.

In Cul de Sac, WINNER has made the following progress in water management:

- Establishment of a provisional irrigation management system for the Grise River.
- Conduct of a participative study resulting in the establishment of a defined structure for management and maintenance of the irrigation system in the Cul de Sac plain.
- Reorganization of the management committees for 19 pumping stations for irrigation in Bas Boën.

In the first quarter of 2010, the project's irrigation work was focused on the Riviere Grise system where we completed the clearing of canals at Drouillard.

We also completed the gabions to reinforce the dike at the 590 m³ main basin. We completed 95 percent of the work on seven small bridges and 90 percent of the work on the metal gates on the uptake of the river.

Activities in the third quarter 2010

In the third quarter of 2010, we rehabilitated a section of the main canal of the Rivière Grise irrigation system. This segment had been damaged and the rehabilitation will significantly improve water flow. To date, we have cured 35 kilometers of secondary and tertiary irrigation canals in the Cul-de-Sac plain.

Gonaïves

We completed a study for the rehabilitation of the Dubedou water retention structure. Following this study, WINNER rehabilitated the water catchment infrastructure of Dubedou that was destroyed by tropical storm Jeanne in 2004, rebuilt, and then completely destroyed by Hurricane Hanna. The Dubedou irrigated perimeter is the largest in the high Gonaïves plain. The rehabilitation of the water catchment infrastructure is essential to increase agricultural productivity and farmer incomes in the area. The rehabilitated system was inaugurated in December 2009.

In the first quarter 2010, WINNER began studies for the rehabilitation and repair of 11 pumping stations to irrigate the low plain of Gonaïves. Bids were launched in the spring of 2010 for the repair of the pumps. However, no acceptable bid was received. We expect the pump repairs to be undertaken in the fourth quarter of 2010 in time for the winter bean campaign.

C4. Water systems

Activities in the third quarter 2010

In Duvier (Pétion-Ville), we rehabilitated a gravity potable water system that provides water to 15 nearby communities. This project will provide water to a total population of

25,000 people. The cost of the rehabilitation was 2,019,680.00 gourdes. The work started on the 27th of July and was 85% completed as of the end of September 2010.

In the third quarter of 2010, we initiated a project to build four water catchment bassins in Mahotiere, Despinasse, Comnette, and Bois Neuf and two potable water systems in Dumisseau to provide water to more than 25,000 people. These projects started in August 2010 and are being implemented through a grant to MONAJEP, a community-based association. To date, the works are 35% completed. The cost of the project is 9,953,228.00 Gourdes.

WINNER also assisted with the completion of the Lefèvre potable water system that had been started by another NGO by providing a grant of nearly 2.7 million Haitian Gourdes to the AFÈ NÈG COMBITE (ANC) community-based association. This work started on August 2nd 2010 and was 80% completed by the end of September. Once completed, this system will provide potable water to 15,000 people.

Gonaïves

In the fall of 2009, WINNER rehabilitated the potable water system in Bassin Mangan, which serves 25,000 people. The system was destroyed by recent tropical storms and hurricanes. The new system has a greater storage capacity and is more resistant to storms. The system was inaugurated by U.S. Ambassador Kenneth Merten in October 2009.

[Insert pictures of water systems]

C5. Rural roads

WINNER built a 5.5 kilometer rural road in the Commune of Kenscoff through a local community organization (MONAJEP). The road, which was completed in December 2009 allows 4,500 inhabitants of Belle Fontaine between Mahotiere and Bois Pini to have easier access to schools and health services, and to better bring their agricultural products to markets.

Dr. Criss Juliard, who was fielded in February and March, provided training to WINNER staff on the use of vetiver to stabilize rural roads. He visited the road rehabilitated by WINNER in Kenscoff and made recommendations on how the road could be improved by planting vetiver along its sides.

In this quarter, the WINNER project identified critical rural roads to be rehabilitated in the Cul-de-Sac watershed including: a road from Petionville to Belle Fontaine, and a road from Bassin General to Croix-des-Bouquets. These rural roads will improve the ability to transport agricultural products and will improve the efficiency of agricultural value chains.

In the third quarter of 2010, WINNER launched a bid for the design of the rural road from Nouailles to Dumay. Bids were received from four firms and evaluated. However,

the contract signature is awaiting the preparation of an economic pre-feasibility study to ensure that the project's cost is justified by the potential economic benefits generated.

Gonaïves

WINNER conducted preliminary studies of rural roads in the Gonaïves region, specifically roads to link Gonaïves to La Branle which is a primary mango growing area. However, preliminary studies showed that the cost and timing to complete this road, compared to the potential economic benefits do not justify this investment under WINNER.

C6. Construction

In Kenscoff, several construction activities were completed at the Wynn Farm including the rehabilitation of the water catchment basin, the rehabilitation of the reservoir to collect rainwater and the construction of a perimeter fence.

In Duvier, the entry road to the farm was completed and the enclosure of the farm is 50 percent complete.

Bas Boen CRDD

WINNER started the design and bid documents for the construction of the Bas Boen CRDD buildings in the fourth quarter of 2009. The construction bid was going to be launched in January 2010. However, following the earthquake, we asked the engineering firm LGL to revise the site drawings to ensure that the buildings would be earthquake resistant and in conformity with internationally recognized seismic standards.

Activities in the third quarter of 2010

The construction of the Bas Boen CRDD was halted to await the results of the revised technical drawings to ensure that the site is earthquake proof. Following the completion of the revised engineering design, construction work began in the third quarter of 2010 for the buildings of the CRDD that will include a dormitory, a training center, office space, and a laboratory. Work has not yet started on the storage unit. The site foundation was completed as well as the pillars for the buildings, representing 20% of the total construction. It is worth noting that, with the addition of earthquake resistant norms, the cost of the construction increased from 14,760,084.52 gourdes to 15,647,146.20 gourdes (a 6% increase).

Gonaïves

In the third quarter of 2010, we completed the construction of a water catchment basin of 10,000 gallon capacity in the satellite CRDD of La Branle whose purpose is to irrigate demonstration plots. The construction cost of this project was 2,653,232.00 Haitian Gourdes.

D. GOVERNANCE

This section presents the governance activities and results since WINNER's inception.

D1. Institutional capacity building

Support to Municipalities

Since the start of the project, WINNER has fostered strong relationships with municipalities. In the third quarter of 2009, WINNER signed MOUs with the Communes of Petionville and Kenscoff and provided equipment and training on GIS software to communal staff.

In 2010, WINNER signed MOUs with the Communes of Croix des Bouquets, Mirebalais, Saut d'Eau, Cabaret, Arcahaie, Ganthier and Thomazeau. These MOUs provide a framework of collaboration between the municipalities and WINNER.

In the third quarter of 2010, WINNER provided computer and office equipment (computers, printer, desks, and chairs), to the Municipalities of Croix des Bouquets, Mirebalais, Saut d'Eau, Cabaret and Arcahaie. We also provided an internet connection to the Municipality of Kenscoff. In the next quarter WINNER will provide management and accounting training to these municipalities so that they can improve their capacity and effectively use the equipment provided.

Several municipalities have expressed a strong interest in collaborating with WINNER on the alternative energy program to encourage the use of LPG rather than wood charcoal, as well as on solid waste management issues and market rehabilitation. We also plan to work closely with Municipalities in the preparation of the watershed management plans.

Support to the CIAT

In November 2009, WINNER signed a memorandum of understanding with the Comité Interministériel d'Aménagement du Territoire (CIAT). Under the terms of the MOU, WINNER will support CIAT by providing equipment and technical assistance and CIAT will work closely with WINNER on critical issues such as the development of watershed management plans, land use planning, and zoning in the Cul-de-Sac and Gonaives watershed. As the national entity that coordinates watershed management among different Ministries (Agriculture, Environment, Planning, Public Works, Interior), CIAT is a key WINNER institutional counterpart in the development of our target watersheds. WINNER held several meetings with CIAT and other partners on the development of watershed management plans.

In February 2010, WINNER procured computer and office equipment for the CIAT to improve their capacity for analysis and map making. As the lead Government Agency for the development of land use plans following the January 12th earthquake, the capacity building of CIAT is critical to improve the capacity of the Haitian Government to make strategic choices on the reconstruction of the Port-au-Prince area and the development of provinces that are hosting large numbers of refugees from the earthquake.

WINNER participated actively at the workshop organized by CIAT in June 2010 on watershed management and is working closely with CIAT to produce the first model watershed management plan for the Cul-de-Sac.

Support to the CNIGS

In December 2009, WINNER signed an MOU with the Haitian remote sensing center CNIGS. Under the terms of this MOU, WINNER and CNIGS will collaborate to update geospatial data in WINNER's areas of intervention, contribute to data harmonization at the river basin and sub-basin level, facilitate the exchange of newly acquired geospatial data, support the implementation of a National Observatory for early warning systems, and implement a data base on "who does what where" in WINNER's areas of intervention in order to improve donor coordination. Unfortunately, the CNIGS was severely damaged in the January 12th earthquake and is taking time to recover. WINNER will resume its collaboration with the CNIGS once the institution is back on its feet.

Other support to the Government

In the Fall of 2009, WINNER signed an MOU with the Ministry of Women's Affairs. Under the terms of the MOU, WINNER and the Ministry of Women's Affairs will collaborate to include gender considerations in WINNER activities, include women in WINNER training and institutional capacity building activities, and raise the awareness of institutional partners and beneficiaries on the importance of gender issues in the implementation of WINNER technical activities.

At the request of the Ministry of Interior, WINNER contributed to an extensive survey of people displaced by the earthquake to the Gonaïves area. The survey assessed the number of families displaced, the professional backgrounds of displaced people, and their most urgent needs.

D2. Disaster contingency plans

Since the spring of 2010, WINNER has provided active support to develop municipal disaster contingency plans in Gonaïves, Kenscoff, and Croix des Bouquets. The primary goals of the contingency plans are to (1) organize response mechanisms in the commune in case of a natural disaster; and (2) guarantee a rapid, coordinated and efficient response to the affected populations.

WINNER, in collaboration with the DPC, the local authorities, the Gonaïves communal civil protection committee, the NGOs, the governmental agencies and members of the private sector, prepared a disaster contingency plan for Gonaïves. The plan includes the hydro meteorological factors and the related risks and will allow the populations in Gonaïves to be better prepared to emergencies caused by a natural disaster.

A multi-risk contingency plan has been elaborated for the Kenscoff area. This plan specifically aims to:

1. Clearly defines the context and an emergency intervention plan ;
2. Determines the level of intervention and the actions to be undertaken;
3. Identifies the roles and responsibilities of the institutions involved in the response in case of an emergency ;
4. Ensures optimal use and is adapted to all resources involved.

During the plan's elaboration, two important workshops were organized in Kenscoff with the participation of all the actors involved, the NGOs, the communal associations as well as the CASECs from the different communal sections.

In September 2010, WINNER technical staff met with representatives of the French cooperation from Martinique on training for the implementation of the disaster contingency plan.

D3. Flood Early Warning System in Gonaïves

In the third quarter of 2010, we completed a temporary flood early warning system for the Gonaïves area. To that end, the following activities were undertaken:

- Creation and training of local civil protection committees in Bassin, La Branle and Bayonnais.
- Activation and strengthening of local civil protection committees in Poteau, Pont Tamarin, Bas and Haut Passe Reine.
- Installation of a network of 10 rain gauges in Ennery, Passe Reine, Bas Chemin Neuf, Poteau, CRDD La Branle, Bayonnais, Centre-Ville des Gonaïves, CRDD Tarasse, Bassin Mangnan and Sedrenne.
- Training of association members and civil protection committees on how to read and manage the information registered on the pluviometers.
- Installation of flow meters in the Laquinte/Ennery, La Branle and Bayonnais rivers.
- Distribution of equipment to flood risk monitors for the proper functioning of the early flood warning system:
 - Flashlights
 - Overalls
 - Rubber boots

- Helmets
- Cellular telephones
- Sirens
- Preparation of radio programs on the implementation of the early flood warning system and the disaster contingency plan in Gonaïves.

We met with CIAT consultants on collaboration and sharing of rainfall data.

D4. Preparation of watershed management plans

Following work begun in the previous quarter, we continued to prepare the watershed management plan for the Cul-de-Sac. A team of experts from subcontractor CH2MHill was fielded in May and June to collect data on the watershed and to meet with institutional partners and international donors involved in watershed management. In this quarter we began work on a GIS land cover map for the Cul-de-Sac watershed based on high resolution post-earthquake satellite imagery. WINNER presented the key elements of the Cul-de-Sac watershed management plan on June 18th at an international workshop coordinated by CIAT and co-sponsored by USAID.

In the third quarter of 2010, we received the digitalized land use map of the Cul-de-Sac watershed from RPI. This land use map, based on very recent satellite images, identify the current land used patterns in the watershed and will serve as the baseline for the elaboration of the watershed management plan. We also prepared a detailed outline of the watershed management plan for the Cul-de-Sac and we discussed the preparation of the plan with the CIAT.

We expect a first draft of the Cul-de-Sac watershed management plan to be ready by the end of the year.

D5. Legal and regulatory support

Designated national authority

The decree creating the Haitian Designated National Authority charged with the implementation of activities related to the Clean Development Mechanism (CDM) of the Kyoto Protocol on global climate change was prepared by a WINNER consultant in December 2009. The decree was cleared by the Ministry of environment in early January 2010. Although delayed by the January 12th earthquake, the decree was approved and published on May 31st in “Le Moniteur”, the Official Journal of the Haitian Government.

Update and analysis of legislation on natural resource management

We provided technical assistance to the Ministry of Environment to prepare the terms of reference for the selection of a firm to prepare the application decrees and regulations emanating from the framework decree on environmental management of January 26th 2006.

In the third quarter of 2010, we engaged a legal consultant to start drafting the relevant application decrees emanating from the framework Environmental Decree of January 2006. The consultant analyzed the Decree to determine the types of legal tools that need to be developed for each Chapter of the decree.

D6. Protected Areas Management

Parc la Visite Protection

In the Fall of 2009, international consultant Joel Tymian prepared a strategy for the management of the Parc La Visite, taking into consideration the fragile ecosystem and human and institutional factors that contribute to its continued degradation.

Following a visit made to Foundation Seguin in April in order to explore revenue producing activities in the area, members of the Foundation have expressed their concerns relative to the degradation noted on the Parc La Visite, particularly with the absence of forest wardens since the earthquake.

WINNER has immediately contacted the MDE to offer its assistance for the reintegration of an environmental surveillance in the Parc. MDE has presented a budget for the hiring of 20 forest wardens for a program which will span several years. We have also asked that a one-year action plan be prepared which is to be presented in July at a round table on environment and relative to the management of Parc La Visite and Foret des Pins.

After the July round table, a working group was set up to delineate the area to be covered by the forest wardens (Corps de Surveillance) and to prepare an action plan for the first year of management of the Parc La Visite. In September 2010, WINNER attended a meeting organized by the Ministry of Environment on the preparation of the action plan.

The action plan for the deployment of forest wardens should be ready by the end of the year.

Support for ANAP

Following a request by the Minister of Environment, WINNER provided equipment to the newly created Agence Nationale des Aires Protégées (ANAP) in the third quarter of 2010. We also provided a consultant to work with ANAP on preparing a first year operational workplan for the agency. However, the consultant selected is no longer available and a replacement is being sought.

D7. Maintenance of infrastructure

One critical aspect of Governance is for community-based organizations to develop the organizational skills and raise the funds necessary to maintain critical infrastructures such as irrigation canals and rural roads. In the fall of 2009, we started organizing

farmers in the Rivière Grise irrigation system to revive organizations to maintain the rehabilitated canals. This process included meeting with ASECs, CASECs and representatives of farmer associations; coordinating with the regional representatives of the Ministry of Agriculture, setting up local committees by irrigation sector, and providing financial support for the associations. In June and July of 2010, we organized awareness raising workshops with farmers discussing the following topics:

- The relationship between water, irrigation infrastructure, irrigation water user fees, and the management authority in an irrigated perimeter;
- The new policy of the Ministry of Agriculture on the management of irrigated perimeters;
- The need for an integrated and participatory management structure and strategies for implementing a maintenance system for irrigated perimeters;
- The elements of a model for billing and fees per hectare for irrigation water.

Table 6. Summary of Awareness Raising Workshops on Irrigated Water Management

Number of meetings	Number of farmers participating	Number of irrigated zones represented	Total number of irrigated zones	% of irrigated zones
9	322	14	46	30,4%

A temporary brigade was set up with farmers for the maintenance of irrigation canals rehabilitated through WINNER cash for work activities.

Activities in the third quarter of 2010

In the third quarter of 2010, WINNER provided support to set up water users associations that need to ensure the proper management and maintenance of the Rivière Grise irrigated perimeter. The following activities were undertaken:

- Meetings with the ASECs, CASECs, and representatives from community-based organizations and large farmers;
- Meetings with the regional representatives of the Ministry of Agriculture;
- Setting up of farm committees, sector committees, and an oversight committee;
- Strengthening of the committees through training and site visits.

In August and September, WINNER assisted in setting up the committees and ensuring that the old structure of «chef canals » is restarted in the Cul –de-Sac plain. Out of 45 farms, 13 committees have been created. The next step will be to federate these committees.

E. PUBLIC-PRIVATE-PRODUCER PARTNERSHIPS

In this section, we describe progress main in the public-private-producer partnerships component since the inception of WINNER. This section is organized by value chain.

E1. Sugar cane value chain

In the sugar value chain, we signed a memorandum of understanding with Rhum Barbancourt to work with sugar cane farmers on the next production campaign. The assistance provided by WINNER includes: the provision of sugar cane plants, soil preparation, tools for harvesting, and technical assistance on best practices. WINNER gave a grant of \$115,000 to the Société du Rhum Barbancourt to help assist sugar cane farmers increase production in the Cul-de-Sac plain. To date, 51.6 hectares of land have been plowed by Rhum Barbancourt and more than 30 hectares were planted with sugar cane.

This partnership has led Barbancourt to request a new grant for field trials of new sugar cane varieties. Barbancourt is ready to provide 4 to 5 hectares of land, and WINNER will provide technical assistance and introduce new varieties with the help of experts from the University of Florida and from USDA. Haitian farmers predominantly use one variety of sugar cane that is now very vulnerable to diseases and whose yield is about 36 tons per hectare whereas average international yields are around 60 tons per hectare.

In the third quarter 2010, WINNER started negotiations with AGRITEC, based in Mirebalais for a project to intensify sugar cane production in the region. This project consists in the creation of a credit fund of \$250,000 to boost the production of sugar cane farmers. Under this project, 160 farmers linked to AGRITEC on 270 hectares will provide sugar cane to the company. AGRITEC will constitute a revolving credit fund for future loans to farmers to procure soils preparation services or inputs.

E2. Tomato value chain

In the tomato value chain, WINNER drafted an MOU with Shaisa, a company producing tomato paste near Croix des Bouquets, to work with tomato farmers in the Cul-de-Sac plain to increase their production. In addition, WINNER conducted an assessment of the rehabilitation of the Shaisa tomato paste unit.

In August 2010, WINNER was introduced to SONAPA that can also provide fresh tomatoes to SHAIISA. SONAPA plans to install a drip irrigation system on its farms in the Cul-de-sac plain in order to engage in intensive tomato production. SONAPA submitted a grant application to WINNER for the rehabilitation of 500 hectares of land

that will be planted in cereal crops and tomatoes (including 77 hectares of tomatoes). The total cost of the project is \$1.85 million and the amount request from WINNER is \$240,000 (13% of the total).

E3. Coffee value chain

WINNER worked to foster a partnership in the coffee value chain between two coffee exporters (Geo Wiener and REBO) and the farmer associations of Belle Fontaine. There are significant opportunities to restart large scale coffee production in Belle Fontaine that used to be a prime coffee growing region. Under the partnership being developed, the coffee exporters will provide coffee seeds and buy the eventual coffee production from the area; the farmers of Belle Fontaine will grow coffee according to the specifications of the exporters; and WINNER will finance coffee nurseries, and coffee washing stations in Belle Fontaine.

Following the signature of a Memorandum of Understanding (MOU) in March 2010 between the Fédération Groupement Planteurs de Belle-fontaine (FGPB), the Municipality of Croix-des-Bouquets, coffee exporters (REBO and GWSA), and WINNER, the following activities were conducted:

- 240,000 coffee seedlings were donated by REBO and GWSA at the beginning of April and planted in nurseries supervised by WINNER.
- The Deputy Mayor of Croix-des-Bouquets worked with farmer associations to identify suitable areas for planting coffee in Belle Fontaine. More than 100 small farms were identified and will be pinpointed using GPS.
- A total of 300,000 plants produced in the nurseries were planted in September.

E4. Poultry value chain

MFT S.A. received two grants from WINNER to implement an animal feed production unit in Gonaïves and a service to support egg production in the area. The unit is completed and two « open door » days are planned to allow potential egg producers to understand the various products and services offered by MFT. While the feed production unit is completed, the production of laying hens has been delayed due to a land dispute. In the meantime, the laying hens are being raised at another MFT unit in the Port-au-Prince area (Santo).

The second grant to MFT is for the rehabilitation of an animal feed unit in Bon Repos that was damaged in the January 12th earthquake. The rehabilitation was nearly completed as of the end of September.

The number of beneficiaries that will receive chicken coops through WINNER was increased from 300 to 8,000 in all of WINNER's zones of intervention. In the third quarter of 2010, many potential beneficiary associations were identified and priorities were established. In Gonaïves, 250 farmers belonging to 11 farmer associations attended

a meeting with WINNER and MFT to discuss the modalities of egg production. WINNER will subsidize the purchase of the chicken coops by 65%, with a 5% participation by the beneficiaries and a 30% contribution from MFT in the form of a producer credit to farmers.

In July, WINNER used a consultant to prepare a study of the egg value chain and a marketing plan for eggs produced locally through this program. Based on this document, WINNER produced an action plan for the development of egg production in the Gonaïves region. The first chicken coops are expected to be distributed to farmers in December 2010. WINNER also prepared a document detailing the egg development program as well as a management program for the farmer associations.

E5. Corn value chain

In the maize value chain, we worked with agro-processing firm Stanco, who makes corn snacks, to assess their needs for corn produced by farmers in the Cul-de-Sac plain, and the potential for upgrading their facility. We also determined opportunities for assigning a young professional to Stanco to improve their technical operations.

In the third quarter of 2010, GIKEN, a producer of cornmeal, approached WINNER to propose a partnership between his company, WINNER, and corn producers in the Cul-de-Sac plain. The project will provide equipment to GIKEN to expand its production capacity for the production of corn and sorghum flour. The farmer associations will be linked by contract to GIKEN and provided with technical assistance from WINNER to ensure quality production. Under this agreement, GIKEN will be able to transform 400 tons of grains per year.

E6. Jatropha value chain

In the jatropha value chain, we signed an MOU with Chibas to conduct research on the best varieties of jatropha adapted to agro-climatic conditions in the Cul-de-Sac watershed. Under this program, seeds will be provided by D1BP and farmer associations will plant jatropha on degraded hillsides in areas where food crops can't grow. The jatropha products will then be used for biodiesel production. The project was very active in fostering public-private-producer partnerships in the first quarter of 2010.

As part of its program of developing alternatives to wood charcoal, WINNER signed a contract with Biocarburants d'Haiti to subsidize the production of biodiesel through the production and use of jatropha that can be planted in remote and mountainous areas where food crops cannot grow. This program will help regenerate vegetation in degraded areas and provide additional income to farmers in upstream areas of the WINNER watersheds.

It is expected that Biocarburants d'Haiti will procure a oil extraction machine to produce biodiesel. The company will purchase jatropha oil from producer associations receiving WINNER assistance.

Biocarburants d'Haiti received a \$72,000 grant to promote the production of jatropha oil and biodiesel in the Cul-de-Sac plain. The company has to plan 50 hectares of jatropha for the production of biodiesel. The project team visited the site in August.

Currently, there are more than 15 hectares planted with jatropha. Biocarburants has also acquired 40 hectares of land in the Cabaret area where jatropha nurseries are being installed. Biocarburants plans to purchase part of the oil from farmer associations, and use its own plantations to produce more oil. To this end, some of the WINNER grant will be used to purchase the necessary oil extraction equipment.

E7. Honey

During its April 2010 visit to Seguin, the WINNER team met with producers and local authorities in the area and discussed the activities Foundation Seguin hopes to undertake in the context of the project's PPPP's component. One of the opportunities discussed is the development of income generating activities for the population living in the area. Coffee production and apiculture value chains have been identified as opportunities to explore.

A memorandum of understanding (MOU) was signed between Foundation and WINNER to develop the apiculture value chain. In June, the Foundation presented a draft document with a supporting budget; these documents are actually under revision. This activity will assist 100 apiculture farmers and support the Foundation in implementing a « honey farm » for the production of honey for sale on local markets. This project is an initiative of GTZ, and the funding has expired.

E8. Mango value chain

In the mango value chain, WINNER held several meetings in the first quarter of 2010 with representatives of the Mango producers association, as well as with USAID's MARCHE project, to develop partnerships with mango producers in the Gonaives area.

Through a consultant, WINNER produced a study in July on the implementation of a traceability system for mangos in order to facilitate exports and be in conformity with USDA regulations. The study recommended the creation of a technological platform and the creation of quality centers for mangos.

On August 26th, 2010 WINNER signed an MOU with AGRITEC to develop a mango pulping unit in Mirebalais considering that more than 50% of the mangoes produced in the Mirebalais watershed are wasted, that there is a local demand for mango pulp, and considering the importance of added value in income generating revenues and job creation.

The first step of this partnership is to assist AGRITEC in developing a business plan for the implementation of the pulping unit in Mirebalais; based on the results of investment and cost benefit analysis assessment to be conducted by a consultant hired by WINNER in October, AGRITEC will build a pulping unit to include a collection center and a packing shed.

The dried fruits company « DFSA » signed a contract with the ADAIM mango producer association based in Mirebalais. Under this agreement, ADAIM will provide DFSA with mangoes dried under specific conditions consistent with export market requirements.

WINNER will provide a grant to ADAIM for the construction of a mango drying unit. The grant will include the construction of the building and the procurement of the necessary equipment. DFSA will provide technical assistance for the specifications of the unit and will train ADAIM staff on the proper use of the equipment. WINNER will provide a grant to DFSA to develop a web site that will facilitate the export of the dried fruits. The total cost of the project is estimated at \$130,000. DFSA plans to purchase 6,000 pounds of dried fruits per month from ADAIM, which should generate monthly revenues of about \$70,000 for the association.

Partnership with Technoserve

In March 2010, The Coca-Cola Company launched the Mango Haiti Hope Project whose total investment in the reaches \$7.5 million, with \$3.5 million from The Coca-Cola Company, \$3 million from the Inter-American Development Bank's Multilateral Investment Fund (MIF) and \$1 million from USAID. TechnoServe will be implementing the Project on the ground through a \$1 million grant given to WINNER.

The project aims mainly to empower Producer Business Groups (PBGs) to increase production and to improve the supply chain to strengthen market linkages for the mango exports.

Technoserve and WINNER are now working on the procedures and the finalization of their respective technical approach in order to be ready for the implementation of their partnership when the amount will be granted.

E9. Fresh cut flowers

In Kenscoff, WINNER identified an opportunity for the production of fresh cut flowers for both the domestic and export markets. WINNER fielded a flower expert that met with potential producers in the area and identified flower species that have great potential for being grown in Kenscoff. WINNER worked with a local entrepreneur whose family has been in the flower business for three generations and with both domestic and foreign market connections. In the next quarter, WINNER will work to finalize a PPPP between flower producers in Kenscoff and flower distributors and exporters.

As a UF participant in the WINNER Project, Richard Féthière conducted his 3rd and 4th

missions to Haiti in July and in August to provide technical support in the area of cut-flower production. The drip irrigation system is now completed and the structure is ready for new germplasm to be introduced and tested.

The consultant also conducted a workshop at the end of August with the flower members of the Association of Flower Producers of Kenscoff (APFK) at the Kenscoff Office of WINNER. The producers had just finished the paperwork necessary to be recognized as an Association. The workshop covered several topics including new techniques for reproducing plants from soft tissue cuttings; new techniques to support plant stems were also introduced. The workshop reminded the producers of the importance of light management in the production of quality cut flowers for certain species like chrysanthemums and introduced techniques that will help them achieve that goal. New varieties of different species were introduced and distributed among the workshop participants.

The producers are to use the new germplasm to replicate the process of multiplying them by soft tissue cuttings. The protected agriculture structure is used to demonstrate innovative techniques to improve cut flower production in the area of Fermathe, Kenscoff and Fort-Jacques, and to demonstrate vertical agriculture where vegetable and fruits can be produced.

E10. Alternative energy

WINNER launched a solicitation for the provision of solar panels to 25 farmer associations in our areas of intervention. In the third quarter of 2010, we selected a firm to provide and install the solar panels. The panels will be installed in the next quarter.

Two bakeries were identified in March as good candidates to convert from the use of wood charcoal to light propane gas (LPG). In the fourth quarter of 2010, WINNER worked with the bakery owners to determine the type of LPG stove required. One of the facilities has already undertaken renovation works and has applied for a WINNER grant in the amount of \$30,000. A study commissioned by WINNER has shown that conversion to LPG will save the bakeries \$1,000 a month in operating costs.

E11. Marketing of agricultural products

In the third quarter of 2010, the ODAI-L association, based in Kenscoff, responded to a WINNER solicitation for the transformation and marketing of agricultural products. Following a site visit of the association by WINNER staff in August, we are preparing a project to develop a vegetable conditioning center on the Kenscoff road with ODAI-L. The first step will be to update the information on the quantities of vegetables produced and sold in the region. This association has a network of about 1,000 farmers that will benefit from the conditioning center and from joint marketing efforts and better market linkages. We expect ODAI-L to submit a grant application to WINNER in the next quarter.

F. EARTHQUAKE ACCELERATED RECOVERY PROGRAM

Following the January 12th earthquake, WINNER launched the earthquake accelerated recovery program. This section describes the activities implemented by WINNER under this program.

F1. Post-Earthquake Response

In the days following the earthquake, WINNER distributed food and water to 200,000 people in areas where refugees had congregated in Pegyville, Petionville, Cul-de-Sac and Kenscoff. WINNER also distributed tents and tarps to affected people and conducted studies on displaced populations from the earthquake in Gonaives and Mirebalais.

WINNER conducted a comprehensive assessment of losses to the private sector as a result of the earthquake. This assessment was integrated into the Post Disaster Needs Assessment carried out by the GOH with donors, and data collected by WINNER were used by the Haitian Government to discuss with the international community. All businesses, from micro-enterprises to large companies were included; more than 500 firms were interviewed and focus groups were organized; precise GIS maps were developed with key information on damaged enterprises and the business district. Main results were as follows:

- Private sector losses, excluding banks and insurances, represent \$2.1 billion or 30% of Haiti GDP
- Financing needs amount to \$2.7 billion, with 74% for MSMEs
- There is an urgent need to put in place a \$200 million guarantee fund to facilitate access to credit
- Businesses are asking for affordable loans, and are ready to resume their activities.

In the second quarter of 2010, we started the Work for Recovery program and we launched the Small Business Recovery Initiative (SBRI) to provide grants and facilitate access to affordable credit for SMEs affected by the earthquake.

F2. Work for Recovery

The WINNER work for recovery program began in March 2010 and will be completed by the end of October 2010. Table 7 below presents a summary of the work days generated by this program. Detailed tables are provided in Annex 4.

Table7. Summary of Work for Recovery Program from April 13th to September 30th 2010

Region	Activity	Zone	Amount realized (meters)	Amount realized (m³)	Number of workers	Man Days
Cul de Sac	Curing of irrigation canals	Ganthier/Thomazeau	42,160.00		1,637	19,106
	Curing of irrigation canals	Croix des Bouquets	135,200.00		4,286	48,852
	Curing of urban drainage canals	Kenscoff	9,360.00		428	5,136
Gonaïves	Curing of urban drainage canals	Gonaïves	229,198.00		8,325	99,900
	Removal of debris			10,000.00		
Arcahaie	Curing of irrigation canals		53,951.00		3,053	36,636
	Soil preparation		25,599.00			
	Cleaning of urban canals and removal of waste		8,632.00	26,879.00		
Mirebalais/Saut d'eau	Curing of urban drainage canals		155,135.00		2,140	25,680
Grand total			659,235.00	36,879.00	19,869	235,310

F3. Small Business Recovery Initiative

The Small Business Recovery Initiative (SBRI), in association with three financial institutions, has for mission to help to the re-building of businesses severely damaged or destroyed by the January 12th earthquake. WINNER provides grants that can be used by the financial institutions as collateral for loans.

After launching the project and some re-adjustments demanded by USAID (above all that the activity of the considered business is centered around agriculture and agri-business. WINNER has been considering, after USAID clarification, twenty-two businesses, seventeen have approved, five have been rejected.

Out of these seventeen, fourteen are food depot that will be supplied with products from farmers associations supported by WINNER. For thirteen out of fourteen, in agreement with FHAPME (a federation of small businesses) who sponsored them, it has been decided to wait for the opening of the Grameen Bank in order to get lower rates in the loans.

Two bakeries have completed the process (LPG ovens have been bought for them in the USA) and are waiting for the arrival of the materials. A third one, a diesel shop which specialized in the repairing of diesel motors and equipments, is in the process of finalizing the list of materials he needs.

G. PROJECT LEVEL ACTIVITIES

G1. Promotion of alternative energy

After distributing a hundred (100) locally built stoves to sixty-five (65) street food merchants, WINNER studied the economic impact of these stoves on the finances of these merchants. This information is crucial in order to establish an effective policy that can foment the usage of LPG stoves so that the pressure on the remaining biomass of the country can be reduced. This study also was very much in need at time when major policies for the adoption of LPG as fuel are being considered but on field hard data are missing.

The WINNER study proved, based on data collected with the street merchants, that the passage to LPG stoves is economically feasible for them. The main hindrance to this shift is the access to the LPG stoves themselves. The imported stoves can be as twenty-five (30 to 35%) more expensive than the locally produced destroying the profitability of the investment. Even if the merchant is willing to incur in the expense, sometimes, they have a hard time finding the stoves. Consequently, WINNER recommended in the study to support the building of locally built stoves and giving some form of credit to the merchants so that they can acquire the stoves.

H. MONITORING AND EVALUATION

WINNER has developed a sturdy monitoring and evaluation program to track the results of our activities. We have coordinated closely with USAID to update our table of indicators and our targets. The indicator tables for WINNER are presented in Annex 5.

I. CROSS-CUTTING ACTIVITIES

I1. GIS and mapping

During Fiscal Year 2010, WINNER produced a lot of maps through its Geographical Information System (GIS) unit. The maps include our areas of intervention, and detailed maps showing the spatial distribution of WINNER activities.

The GIS unit produced a Google trip, which is a virtual three-dimensional tour through WINNER's zones of interventions. This Google trip was presented at the WINNER launch and has been integrated into WINNER presentations.

Following the January 12th earthquake, the GIS team produced a tool to pinpoint the damaged businesses in the Port-au-Prince area. This tool was one of the elements of the detailed assessment of losses to the private sector from the earthquake.

Finally, WINNER's institutional subcontractor RPI produced a digital map of land use in the Cul-de-Sac watershed using high resolution satellite imagery of Haiti taken in January. This is the most up-to-date soil cover and land use map of the Cul-de-Sac watershed and it is being used in the preparation of the watershed management plan.

I2. Communications

The WINNER communications team has been very active during Fiscal Year 2010. We have developed a web site: www.winner.ht that presents information on the project; we have produced monthly success stories (see Annex 6); we have produced several videos (winter bean campaign, damage to the private sector from the earthquake); and we have sponsored a radio program (Action et Développement) on topics related to WINNER activities (see Annex 7).

In addition, WINNER has worked closely with the Public Affairs Section of the U.S. Embassy in high profile events and on a series of positive press articles on the project that have appeared in local newspapers.

Through these various communication activities, the project has achieved a very high level of visibility in its first year of implementation.

K. WIF EXPENDITURES

WINNER activities are financed through the Watershed Investment Fund (WIF) using a variety of instruments including: grants, subcontracts, direct procurement, training, and short-term technical assistance (STTA).

Table 8 summarizes WIF expenditures in Fiscal Year 2010 by instrument and project component. In total, we spent \$13,974,521 through the WIF in the reporting period. The infrastructure and livelihoods components accounted for nearly 80% of WIF expenditures.

Table 8. WIF Expenditures – October 2009 – September 2010

WIF Instrument	Livelihoods	Infrastructure	Governance	PPPP	Recovery	Total
Grants	\$1,491,576	\$1,398,640	\$43,233	\$592,623	\$0	\$3,526,072
Subcontract	\$485,538	\$3,390,391	\$36,420	\$106,055	\$46,583	\$4,064,987
Direct Procurement	\$2,866,717	\$851,872	\$137,140	\$7,439	\$1,793,295	\$5,656,463
Training	\$391,080	\$64,175	\$0	\$30,190	\$8,572	\$494,017
STTA	\$206,862	\$0	\$26,121	\$0	\$0	\$232,983
Total	\$5,441,722	\$5,705,078	\$242,914	\$736,307	\$1,848,450	\$13,974,521

Table 9 presents WIF expenditures for the third quarter of 2010 by component and WIF instrument. WIF expenditures totaled \$6,398,243 for the quarter.

Table 9. WIF Expenditures – July - September 2010

WIF Instrument	Livelihoods	Infrastructure	Governance	PPPP	Recovery	Total
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Grants	\$310,139	\$612,470	\$0	\$192,165	\$0	\$1,114,774
Subcontract	\$186,303	\$1,712,600	\$36,420	\$0	\$0	\$1,935,323
Direct Procurement	\$1,505,158	\$342,443	\$61,348	\$145	\$1,134,244	\$3,043,339
Training	\$121,145	\$37,170	\$0	\$7,310	\$5,633	\$171,259
STTA	\$120,638	\$0	\$12,910	\$0	\$0	\$133,548
Total	\$2,243,384	\$2,704,684		\$199,620	\$1,139,877	\$6,398,243

In terms of the use of WIF instruments, WINNER made a total of 52 grants in Fiscal Year 2010 including: 18 grants in kind, 26 fixed obligated grants, 1 standard grant, and 7 procurements for grants in kind not yet finalized. We also issued 22 subcontracts. Finally, there were 43 activities financed through direct implementation, including 20 procurement actions for institutional partners.

ANNEX 1

AGRICULTURAL PRODUCTION TABLES

Table A3. Revenues generated by the agricultural campaign by region

Region	Number of farmers assisted	Total revenues (gourdes)	Average revenues (gourdes)	Average Revenues (\$)
Kenscoff/Petionville	1,566	127,369,981	81,335	\$2,059
Cul-de-Sac plain	2,721	4,4789,510	16,461	\$417
Gonaives	2,534	17,524,180	6,916	\$175
Cabaret/Arcahaie	1,749	9,266,708	5,298	\$134
Mirebalais / Saut d'Eau	2,074	5,985,105	2,886	\$73
	10,644	204,935,485	19,254	\$487

Table A4. Revenues generated per crop

Crops	Variety	Yield (T/ha)	Average price (gourde/kg)	Average cost (gourde/ha)	Average revenue (gourde/ha)	Gross Margin (gourde/ha)	Area (ha)	Total Revenue (gourdes)
Kenscoff/Pétion-Ville region								
Potato	Local	5.5	40	110,603	220,000	109,396	360	39,426,348
	Granola	12.5	40	110,603	499,972	389,368	60	23,556,799
Tomato	Imported	8.2	25	107,432	205,015	97,583	278	27,186,678
Beans	Icta Lijero	0.8	34	22,463	27,185	4,722	247	1,165,994
Leeks	Imported	1.92	53.68	53,933	102,825	48,892	244	11,934,711
Pepper	Imported	7.9	18.75	43,033	148,099	105,066	188	19,762,949
Carrot	Imported	4.9	20	56,700	98,000	41,300	105	4,336,500
							1483	127,369,981
Cul de Sac plain region								
Sorghum	Local	4.93	10	15,112	49,300	34,187	565	19,329,612
	Imported	4.1	10	15,112	41,000	25,887	94	2,443,780
Okra	Local	3.5	12	18,943	41,959	23,016	272	6,262,767
	Imported	4.8	12	18,943	57,600	38,656	56	2,157,042
Corn	Local	2.39	12	17,611	28,709	11,098	222	2,460,530

	Imported	2.93	12	17,611	35,118	17,507	104	1,824,277
Eggplant	Local	22.07	7.5	68,312	165,525	97,213	64	6,192,468
	Imported	17.73	7.5	68,312	132,975	64,663	64	4,119,033
							1441	44,789,510
Gonaïves region								
Corn	Local	2.47	12	15,050	29,580.00	14,530	88	1,278,640
	Imported	3.57	12	15,050	42,840.00	27,790	24.5	680,855
Sorghum	Local	1.75	10	10,450	17,500.00	7,050	1,572	11,079,921
	Imported	2.53	10	10,450	25,272.73	14,823	302	4,484,764
							1987	17,524,180
Cabaret-Arcahaie region								
Corn	Local	0.96	12	10,258	11,520	1,262	227	286,390
	Imported	2.28	12	10,258	27,336	17,078	152	2,601,008
Beans	Icta Lijero	1.31	34	21,500.00	44,540.00	23,040.00	54.2	1,248,768
Melon	Local	0.11	7.5	12,148.02	825	-11,323.02	84.6	-957,927
	Imported	3.59	7.5	11,847.84	26,925.00	15,077.16	326.3	4,919,677
Eggplant	Imported	2.41	7.5	16,724.09	18,075.00	1,350.91	391.7	529,150
Okra	Local	1.26	12	8,382.99	15,120.00	6,737.01	83.1	559,845
	Clemson Spineless	1.93	12	8,382.99	23,160.00	14,777.01	5.4	79,795
							1324.5	9,266,708
Mirebalais-Saut d'Eau region								
Corn	Local	1.21	12	5,108.23	14,519.11	9,410.88	226.9	2,135,329
	Imported	1.53	12	5,999.85	18,318.55	12,318.70	152.3	2,601,007
Beans	Icta Lijero	0.22	34	7,260.97	7,471.36	210.38	300.73	1,248,768
							679.93	5,985,105
Total for all regions							6,669.18	204,935,485

Kenscoff / Petionville

In the spring 2010 agricultural campaign, WINNER provided technical assistance to 1,566 farmers in the Kenscoff area that belonged to 50 farmer associations (Table A5). Five agricultural input supply stores received inputs to be sold to farmers within associations. Extension services were provided to farmers by 32 extension agents called Responsables d'Encadrement Agricole (REAs). In the Kenscoff region, 1,378 hectares were planted primarily with potatoes, tomatoes, beans, leeks, and peppers (Table A6). The total revenues generated by these crops in the region were 118,716,357 Gourdes (approximately \$3 million). Potatoes and peppers were the most profitable crops in the area.

Table A5. Summary of the spring agricultural campaign in the Kenscoff/Pétionville region

Commune	Number of REAs	Number of hectares supported	Planted area (hectares)			Number of Hectares Plowed	Number of Hectares Irrigated	Number of farmers assisted	Number of associations assisted	Number of input supply stores assisted
			Local seeds	Imported seeds	Total seeds					
Kenscoff	20	804.1	199.6	604.5	804.1	0.0	0.0	944	23	4
Petion-Ville	12	574.5	107.8	466.7	574.5	0.0	0.0	622	27	2
Total Kenscoff/Pétion-Ville	32	1378.6	307.4	1071.2	1378.6	0.0	0.0	1566	50	6

Table A6. Revenues generated by the crops cultivated in the Kenscoff/Pétionville region

Crops	Variety	Yield (T/ha)	Average price (gourde/kg)	Average cost (gourde/ha)	Average revenue (gourde/ha)	Gross margin (gourde/ha)	Area (ha)	Total revenues (gourde)
Potato	Local	5.50	45.45	110,603.92	249,986.25	139,382.33	360.40	50,233,393.01
	Granola	12.50	20.00	110,603.92	249,986.25	139,382.33	60.50	8,432,631.18
Tomato	Imported	8.20	25.00	107,432.59	205,015.79	97,583.20	278.60	27,186,678.25
Beans	Icta Lijero	0.80	34.00	22,463.29	27,185.83	4,722.54	246.90	1,165,994.89
Leeks	Imported	1.92	53.68	53,933.20	102,825.91	48,892.71	244.10	11,934,711.13
Peppers	Imported	7.90	18.75	43,033.53	148,099.72	105,066.19	188.10	19,762,949.40
TOTAL								118,716,358

Cul-de-Sac Plain

In the Cul-de-Sac plain, WINNER provided technical assistance to 2,721 farmers belonging to 32 producer associations, and who planted crops on 1,847 hectares (Table A7). Extension services were provided by 40 extension agents or Responsables d'Encadrement Agricole (REAs). Agricultural inputs were provided to farmers through agricultural input supply stores (boutiques d'intrants agricoles (BIAs)). The main crops planted in the spring campaign in the Cul-de-Sac plain were sorghum, okra, corn, rice, and eggplant (Table A8). In the entire area, these crops generated revenues of 44.8 million Haitian Gourdes (approximately \$1.1 million).

Table A7. Main achievements of the spring agricultural campaign in the Cul-de-Sac plain region

Commune	Number of REAs	Number of Hectares Supported	Area planted (ha)			Number of Hectares plowed	Number of hectares irrigated	Number of farmers assisted	Number of associations assisted	Number of supply stores assisted
			Local seeds	Imported seeds	Total					
Croix des Bouquets	25	798.1	603.5	194.6	798.1	534	925.8	1749	21	5
Ganthier	3	152.8	115.3	37.5	152.8	46	154.6	152	3	2
Thomazeau	11	795.6	709.6	86.0	795.6	86.946	795.7	770	7	
Cité soleil	1	100.0	100.0	0.0	100.0	13.5	79.0	50	1	
Total Cul de Sac	40	1846.5	1528.4	318.1	1846.5	680.4	1955.1	2721	32	7

Table A8. Revenues generated by the crops planted in the Cul-de-Sac plain region

Crops	Variety	Yield (T/ha)	Average price (gourde/kg)	Average cost (gourde/ha)	Average revenue (gourde/ha)	Gross margin (gourde/ha)	Area (ha)	Total revenues (gourdes)
Sorghum	Local	4.93	10	15,112.50	49,300.00	34,187.50	565.40	19,329,612.50
	Imported	4.10	10	15,112.50	41,000.00	25,887.50	94.40	2,443,780.00
Okra	Local	3.50	12	18,943.33	41,959.75	23,016.42	272.10	6,262,766.97
	Imported	4.80	12	18,943.33	57,600.00	38,656.67	55.80	2,157,042.00
Corn	Local	2.39	12	17,611.50	28,709.97	11,098.47	221.70	2,460,529.81

	Imported	2.93	12	17,611.50	35,118.96	17,507.46	104.20	1,824,277.25
Eggplant	Local	22.07	7.5	68,312.00	165,525.00	97,213.00	63.70	6,192,468.10
	Imported	17.73	7.5	68,312.00	132,975.00	64,663.00	63.70	4,119,033.10
TOTAL								44,789,509

Gonaïves

For the spring 2010 agricultural campaign, WINNER provided technical assistance to farmers on 1,986.68 hectares. Of this area, 625 hectares (31%) were plowed with the use of tractors. A total of 2,534 farmers belonging to 14 producer associations received technical assistance from WINNER. Extension services were provided by 51 extension agents (REAs). Agricultural inputs were provided to farmers through grants to 10 agricultural input supply stores. The main crops grown in the area were corn and sorghum (Table A9). The revenues generated in Gonaïves from the spring agricultural campaign are estimated at 22,896,330 Haitian Gourdes (approximately \$572,500).

Table A9. Revenues generated by the crops planted in the Gonaïves region

Crops	Variety	Yield (T/ha)	Average price (gourde/kg)	Average cost (gourde/ha)	Average revenue (gourde/ha)	Gross margin (gourde/ha)	Area (ha)	Total revenues (gourdes)
Corn	Local	2.47	12.00	15,050.00	29,580.00	14,530.00	88.00	1,278,640.00
	Imported	3.13	12.00	15,050.00	37,594.29	22,544.29	24.50	552,335.00
Sorghum	Local	2.10	10.00	10,450.00	21,000.00	10,550.00	1,571.62	16,580,591.00
	Imported	2.53	10.00	10,450.00	25,272.73	14,822.73	302.56	4,484,764.36

Mirebalais / Saut d'Eau

For the spring 2010 agricultural campaign in the Mirebalais / Saut d'Eau region, 2,074 farmers belonging to 118 farmer associations were supported by WINNER. They received extension services from 47 extension agents. Ten agricultural input supply stores received inputs through WINNER grants that were sold to farmers (Table A6). The main crops planted were corn, beans, rice and sorghum. The average yield per hectare obtained for the different varieties of corn is presented in Table A10. This year, all varieties of corn planted with the assistance of WINNER in the region produced significantly higher yield than corn produced with traditional methods, which yields between 600 and 800 kilograms per hectare. The revenues generated by the agricultural campaign in the region (principally corn) totaled 5,985,1054 Haitian Gourdes (approximately \$150,000) (Table A11).

Table A10. Main results of the spring agricultural campaign in the Mirebalais-Saut d’Eau region

Commune	Number of REAs	Number of Hectares Assisted	Total area planted (ha)			Number of hectares plowed	Number of hectares irrigated	Number of farmers assisted	Number of associations assisted	Number of input supply stores assisted
			Local seeds	Imported seeds	Total					
Mirebalais	20	917.5	821.3	96.1	917.5	483.7	800.0	1205	78	4
Saut-d’Eau	27	678.7	641.6	37.1	678.7	23.9	0.0	869	40	6
Total	47	1596.2	1462.9	133.3	1596.2	507.5	800.0	2074	118	10

Table A11. Revenues generated by the crops planted in the Mirebalais-Saut d’Eau region

Crop	Variety	Yield (T/ha)	Average price (gourde/kg)	Average cost (gourde/ha)	Average revenues (gourde/ha)	Gross margin (gourde/ha)	Area (ha)	Total revenues (gourde/ha)
Corn	Local	1.21	12	5,108.23	14,519.11	9,410.88	226.90	2,135,329.28
	Imported	1.53	12	5,999.85	18,318.55	12,318.70	152.30	2,601,007.96
Beans	Icta Lijero	0.22	34	7,260.97	7,471.36	210.38	54.20	1,248,768.00

Cabaret / Arcahaie

For the spring 2010 agricultural campaign in the Cabaret-Arcahaie region, WINNER provided assistance to 1,749 farmers belonging to 22 producer associations, that planted 2,371 hectares (Table A12). Extension services were provided by 50 extension agents (REAs). Agricultural inputs were provided to farmers through four agricultural input supply stores. The main crops produced during the campaign are melon, eggplant, beans, and okra. These crops generated total revenues of 9,266,708 Haitian Gourdes (approximately \$231,667). The excessive rains recorded during this period during the fructification phase of the local melon variety led to a significant decrease in yield.

Tableau A12. Main results of the spring 2010 agricultural campaign in the Cabaret-Arcahaie region

Commune	Number of REAs	Number of hectares assisted	Area planted (ha)			Number of hectares plowed	Number of hectares irrigated	Number of farmers assisted	Number of associations assisted	Number of input supply stores assisted
			Local seeds	Imported seeds	Total					

Cabaret	22	1398.16	1156.4	241.8	1398.2	93.1	805.3	925	10	2
Arcahaie	28	972.64	692.94	279.7	972.6	376.28	796.7	824	12	2
Total	50	2370.8	1849.3	521.5	2370.8	469.4	1602.0	1749	22	4

Table A13. Revenues generated by the crops planted in the Cabaret-Arcahaie region

Crops	Variety	Yield (T/ha)	Average price (gourde/kg)	Average cost (gourde/ha)	Average revenue (gourde/ha)	Gross margin (gourde/ha)	Area (ha)	Total revenues (gourdes)
Corn	Local	0.96	12.00	10,257.81	11,520.00	1,262.19	226.90	286,390.34
	Imported	2.28	12.00	10,257.81	27,336.00	17,078.19	152.30	2,601,007.96
Beans	Icta Lijero	1.31	34.00	21,500.00	44,540.00	23,040.00	54.20	1,248,768.00
Melon	Local	0.11	7.50	12,148.02	825.00	-11,323.02	84.60	-957,927.68
	Imported	3.59	7.50	11,847.84	26,925.00	15,077.16	326.30	4,919,677.68
Eggplant	Imported	2.41	7.50	16,724.09	18,075.00	1,350.91	391.70	529,150.71
Okra	Local	1.26	12.00	8,382.99	15,120.00	6,737.01	83.10	559,845.18
	Clemson Spineless	1.93	12.00	8,382.99	23,160.00	14,777.01	5.40	79,795.83

ANNEX 2

AGRO-FORESTRY TABLES

This annex presents detailed tables for the agro-forestry campaign by WINNER zone of intervention

Cul-de-Sac

WINNER embarked on a major agro-forestry program to generate income for hillside farmers and to substantially increase soil cover and slow the degradation of watersheds. The program started in January and the initial phase consisted of the establishment of nurseries to develop trees for plantation on degraded hillsides.

Table B1 below summarizes the agro-forestry activities undertaken in the first quarter of 2010 in the Cul-de-Sac watershed.

Table B1. Summary of agro-forestry activities in the Cul-de-Sac watershed

Area	# of Nurseries Established	# of trained staff	# of local Organizations involved	Number of trees produced			# of jobs Created
				Forest	Fruit	Total	
Cx des Bouquets	11	55	11	182,443	38,854	221,297	973
Kenscoff	7	35	7	49,463	60,455	109,918	328
Duvier	2	10	2	18,009	29,385	47,394	171
Total	21	100	21	249,915	128,694	378,609	1,472

Activities in the third quarter 2010

Four jathropha nurseries were established in the locality of Chacha located in Belle-Fontaine. Out of a total of 109,570 plants ready to be transplanted, 58,478 were planted (53%).

For the agroforestry program, in the Kenscoff region, 4,271 beneficiaries planted 316,831 seedlings (175,191 forest species and 141,640 fruit trees) (Table B2). The forestry species planted include oak, frêne, capable, cedar, grevilia and saman. The main fruit trees planted include coffee, avocado and citrus.

Table B2. Summary table of trees transplanted in Kenscoff

Forest species	Quantity	Fruit trees	Quantity
Oak	52,262	Coffee	112,273
Frêne	34,546	Avocado	8,253
Capable	29,097	Loquat	8082
Cedar	21,921	Citrus	8030

Grevilia	11,051	Orange	2560
Saman	10,412	Grapefruit	1,045
Acacia	9,135	Prune	932
Cassia	2,240	Cherry	240
Eucalyptus	1,602	Mango	200
Cypress	1,277	Corossol	25
Acajou	502	Total fruit trees	141,640
Pine	500		
Jimpa	496		
Delin	90		
Gliricidia	60		
Total forest species	175,191		

Gonaïves

As part of its reforestation program to generate income for hillside farmers and to substantially increase soil cover and slow the degradation of watersheds. The program started in January and the initial phase consisted of the establishment of nurseries to develop trees for plantation on degraded hillsides. During the first campaign, 140,086 seedlings have been produced over an expected total of 132,000 seedlings. The surplus can be explained by the fact that 10% of the additional bags have been given to each nursery to compensate losses due to seedling. Since there were no problems in Gonaïves, the expected production was more than 6%. Close to 60% of the seedlings produced (83,665) have been transplanted. Seven (7) nurseries prepared the seedlings for production. A total of 450 farmers members of 7 organizations have already benefitted from the seedlings produced during this campaign.

Table B2. Seedlings produced and transplanted by organization for the Gonaïves region

Region	Nurseries established	Organizations Involved	Number of seedlings planned	Number of seedlings produced	Number of seedlings transplanted*	Number of beneficiaries
Cinq Carreaux	1	PRODIB	20,000	19,443	7,323	19

Bassin	1	OFMMB	12,000	12,169	11,197	57
Descarreux	1	OPUDB	20,000	12,535	3,312	106
Sedren	1	GPDBS	20,000	21,500	18,100	29
Vieux Coton	1	OJDDPAB	20,000	19,379	17,878	150
Dorlette	1	OPLA	20,000	34,438	20,428	36
Dubois	1	OTHL	20,000	20,622	12,750	53
Total	7	7	132,000	140,086	83,665	450

* The tree plantings continue until the stocks are exhausted

In the second campaign, we planned to produce 540,000 seedlings; and to achieve this objective 27 nurseries were set-up by 27 organizations.

Table B3. Number of nurseries, organizations involved and quantities of seedlings planned for the second campaign in the Gonaïves region

Zones d'Intervention	Number of nurseries established	# of seedlings planned	Organizations Involved	
			Number of Organizations	List of Organizations
Mangnan/Bassin	1	20,000	1	MODEM
Nan Kolon/Bassin	1	20,000	1	APC
Terre Salee/Bassin	1	20,000	1	MODETES
Declin/Bassin	1	20,000	1	CIB
Sedren/Bassin	1	20,000	1	OJPM
Bassin /Bassin	1	20,000	1	OFMMB
Vieux Coton/Bassin	1	20,000	1	OJDDPAB
Sedren/Bassin	1	20,000	1	GPDBS
Grand Ravin/La Branle	1	20,000	1	OPLA
Ka Chal/La Branle	1	20,000	1	OTKL
Chal/La Branle	1	20,000	1	AJDEL
Tet Kanal/La Branle	1	20,000	1	ADPC
Dorlette/La Branle	1	20,000	1	OSCL

Dorlette/La Branle	1	20,000	1	OSDESC
Dorlette/La Branle	1	20,000	1	MOPAL
Revellark/La Branle	1	20,000	1	ATL
Revellark/La Branle	1	20,000	1	ATJL
Davy/La Branle	1	20,000	1	ATHL
Duferrier/La Branle	1	20,000	1	ATDHL
Duferrier/La Branle	1	20,000	1	OTHL
Grand Fond/La Branle	1	20,000	1	APD
Korossol/La Branle	1	20,000	1	ATPHLD
Korossol/La Branle	1	20,000	1	AFFMMDD
Korossol/La Branle	1	20,000	1	OJHLD
Dubois/La Branle	1	20,000	1	OPHL
Dubois/La Branle	1	20,000	1	KOPAL
Dubois/La Branle	1	20,000	1	AFDHL
Total	27	540,000	27	

Activities in the third quarter 2010

In the Gonaïves nurseries, 317,408 plants are ready to be transplanted out of 540,000 planned (58% germination). As of the end of September, only 5,309 plants were transplanted by 82 farmers. The bulk of the transplantation will occur in early November based on common practices in the area.

Mirebalais / Saut d'Eau

In Mirebalais/Saut-d'Eau, the objective for this first reforestation campaign was to produce 1,020,000 seedlings. To that end, 27 nurseries belonging to 72 organizations were used.

Table B4. Number of nurseries, organizations involved and quantity of seedlings planned for the second campaign for the Mirebalais/Saut d'Eau Region

Intervention zones	Number of nurseries established	# of seedlings planned	Organizations Involved	
			Number of Organizations	List of Organizations
Desvarieux/Gascogne	1	40,000	4	AJPD*, ODSEC, AJEDP, COREPDA

Kolare/Gascogne	1	40,000	4	ADPL*, ODPSC, CJG, ASSOJEPC
Marche Kana/Gascogne	1	40,000	4	IFSAG*, ODSEG, KOFAG, KOFAM
Fegeat/Sarazin	1	40,000	3	APDF*, ODPSC, APDW
Chambrun/Sarazin	1	40,000	3	APDW, KOPB*, ODPSC
Sarazin	1	40,000	3	ASPC*, ODCS, APDW
Gilbert/Grand Boucan	1	40,000	4	MPGB*, SOFAGAB, ODEPMI, OVHDGB
Dossan/Grand Boucan	1	40,000	2	UVHAPSO, AAPGB*
Fond Cheval/Grand Boucan	1	40,000	6	MOFADEG*, ATPL, AJED, OJDFM, GPP, GPFCM
Nicolas/Crete Brulee	1	40,000	3	AKPN*, OPDCB, OPDL
Mina/Crete Brulee	1	40,000	3	APELADEK, OPDL*, KOTAK
Jimbale/Crete Brulee	1	40,000	4	RJPM, ACPG*, OPDET, MPDN
Total Mirebalais	12	480,000	43	

Dubisson/La Selle	1	40,000	2	APDD*, AJDEM
Lamarre/La Selle	1	40,000	2	APDL*, AJPL
Carrefour Cimetiere/La Selle	1	40,000	2	MPDS*, KOTAH
Dalez/Riviere Kano	1	40,000	3	ATECS, SKS*, KAPS
Mme Jacques/Riviere Kano	1	40,000	3	KOFAR*, ODCPHA, OJPR
Jolimot/Riviere Kano	1	40,000	3	OADES+*, PERJAS, OPDES
Grande Hatte/ Koup Mardi Gras	1	40,000	3	APDK-MA*, MOPALACO, APPDASA
Aime	1	40,000	3	OPCS, GTDAL, GPL*
Brillant	1	40,000	2	FGPKLS*, MFDKM
La Borne/Montagne Terrible	1	20,000	1	KOPDMT
Rechimot/Montagne Terrible	1	20,000	1	MOPADEM
Brillant/Montagne Terrible	1	20,000	1	UPDM
Zoranger	1	40,000	1	GREDO
Zoranger	1	40,000	1	AGPAVO
Zoranger	1	40,000	1	SATDO
Total Saut d'Eau	15	540,000	29	

Total Mirebalais/Saut d'Eau	27	1,020,000	72	
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Activities in the third quarter 2010

In the Mirebalais-Saut d'Eau region, 12 nurseries were established for the agro-forestry campaign. The number of plants produced in the nurseries is 353,757 out of 480,000 planned (73%). As of the end of September, 74,307 tree seedlings were planted by 1,153 beneficiaries.

Cabaret / Arcahaie

Table B5 presents the associations involved in the second agro-forestry campaign in the Cabaret / Arcahaie region.

Table B5. Number of nurseries, organizations involved and quantity of seedlings planned for the second campaign for the Cabaret/Arcahaie region

Intervention zones	Number of nurseries established	# of seedlings planned	Organizations Involved	
			Number of Organizations	List of Organizations
1ère Boucassin/Arcahaie	4	160,000	4	AJADCO, AFPDA, REIDEC, OTAPMA
4ème Casale/Cabaret	3	120,000	3	GFVK, GVADK, VDC
1ere Boucassin/Cabaret	1	30,000	1	APAB
4ème Fonds Blancs/Cabaret	1	30,000	1	OPADH
4ème Delbourg/Cabaret	1	30,000	1	APDG
3eme des Vases/Arcahaie	2	30,000	2	RACADAMA, FOFA
Total	12	400,000	12	

Activities in the third quarter of 2010

In the third quarter of 2010, 457 beneficiaries transplanted 16,834 plants produced in the nurseries. An additional 47,000 plants of mangos will be transplanted soon by members of farmer associations.

In addition, coffee has been introduced as a primary crop to complement other fruit and forest tree species in order to create a sturdy agro-forestry system in the area. To this end, 27,965 banana plants out of 75,000 were distributed and planted by 324 farmers in an area of about 38.3

hectares (an average of 750 plants per hectare). In addition, 200 pounds of coffee seeds were introduced in 3 nurseries located in Michel, Dion and Lachenet.

ANNEX 3
TRAINING ACTIVITIES

This annex presents detailed information on the training activities undertaken by WINNER during Fiscal Year 2010.

Kenscoff / Pétionville

In the Kenscoff / Pétion-Ville area, 882 farmers of which 285 are women (32%) participated in the training program for the extension farmers (Table C1) in the spring of 2010. They attended the following courses: breeding techniques of egg-laying hens for egg production, techniques for growing cabbage, basic agricultural techniques and family planning. Furthermore, other training programs including composting and management techniques for the BIAs, nursery set-up and management of risks and disasters have taken place in Kenscoff. A total of 428 persons have been trained of which 138 are women.

Table C1. Number of people trained in the Kenscoff/Pétion-Ville region

Training topic	Men	Women	% of women trained	Total
Techniques for raising egg-laying hens	54	24	30.77	78
Techniques for raising rabbits	73	30	29.13	103
Techniques cultivating cabbage	20	7	25.93	27
Basic Agricultural Concepts	112	66	37.08	178
Family planning	48	20	29.41	68
Composting	183	98	34.88	281
Management of agricultural input supply stores	29	19	39.58	48
Setting up nurseries	12	13	52.00	25
Disaster management	66	8	10.81	74
Total	597	285	32.31	882

Activities in the Third Quarter 2010

230 master farmer trainees received the following basic courses:

- Farm management
- Phytosanitary control
- Sustainable environmental management
- Animal health and prophylactics
- Basic agricultural techniques

Cul-de-Sac plain

In the Cul-de-Sac plain, 400 people including 118 women (30%) have been trained in six areas. For the training program for master farmers, 361 farmers, including 90 women have been trained in farm management, family planning, and basic agricultural concepts. In addition, 39 people including 28 women were trained on setting up tree nurseries, introduction to OSM and the use of propane gas stoves.

Table C2. Number of persons trained in the Cul de Sac Plain region

Training topic	Men	Women	% Women trained	Total
Management of agricultural farms	147	45	0.23	192
Family planning	72	24	0.25	96
Basic General Agricultural Concepts	52	21	0.29	73
Introduction to OSM	4	1	0.20	5
Use of propane gas stoves	0	22	1.00	22
Setting up nurseries	7	5	0.42	12
Total	282	118	0.30	400

Activities in the third quarter 2010

For the third quarter of 2010 (july – september), 312 master farmers, including 80 women received training in core courses and in specialization courses over ten sessions. The course curriculum includes: general agriculture, phyto-sanitary control, sustainable environmental management and techniques for the multiplication of vetiver. A first group of 60 master farmers completed the training curriculum and 50 received their master farmer certificate. A graduation ceremony was held at the Bas Boen CRDD for the 59 master farmer graduates from Kenscoff and the Cul-de-Sac plain.

Gonaïves

In the first quarter of 2010, as part of the training to develop contingency plans for floods in Gonaïves, WINNER worked with DPC to provide training on flood preparedness and management to the Commune of Gonaïves, ASECs and CASECs, community groups, and regional representatives of the Ministry of Agriculture, Ministry of Environment, Ministry of Public Works, and Ministry of Finance.

In the second quarter of 2010, a total of 628 persons, including 15% of women were trained (Table C3) in Gonaïves. Concerning the extension farmers' training, 158 persons, of which 59 are women, were trained in the following activities: market gardening techniques, family planning, basic agricultural and rice growing techniques. Furthermore, 199 persons, of which 37 are women, have been trained on risks and disaster management.

Table C3. Number of persons trained in the Gonaïves Region in the Second Quarter 2010

Training topic	Men	Women	% of women trained	Total
Techniques for cultivating cash crops	64	11	14.67	75
Family planning	39	4	9.30	43
Basic General Agriculture	230	41	15.13	271
Techniques for rice production	37	3	7.50	40
Disaster management	162	37	18.59	199
Total	532	96	15.29	628

Activities in the third quarter 2010

In the third quarter of 2010, 123 master farmer trainees received courses in soil and water conservation techniques, and general agriculture. In addition, all candidates attended a course on the management of small agricultural enterprises.

Mirebalais / Saut d'Eau

In the second quarter of 2010, a training session on the cultivation of corn was given in the Mirebalais region. This two-day training was composed of four sessions attended by 35 farmers per class. A total of 140 persons, involving 123 associations, were trained. Overall, 102 men and 38 women received the training.

Activities in the third quarter of 2010

In the third quarter of 2010, vetiver specialist Criss Juliard, provided training in both Mirebalais and Saut d'Eau on the importance of vetiver, its characteristics, and its various uses. A total of 70 people attended the training. In addition, 330 candidates, belonging to producer associations, for the master farmer training were selected in the region based on a screening test.

Cabaret / Arcahaie

In the context of the extension farmers' training program 53 persons, including 16 women, were trained in corn and eggplant growing techniques.

Activities in the third quarter 2010

In the context of the training of master farmers, 280 candidates belonging to 50 associations passed the admission test to the program. They attended courses on the management of small farms in groups of 30-40. This is one of the four core courses necessary to obtain the Master Farmer certificate.

Summary of Third Quarter 2010 training

In the third quarter of 2010, we provided training to 1,142 people, including 314 women (27%). The table below summarizes training activities in the quarter.

Table 1. Summary of WINNER Training Activities in the Third Quarter 2010

Date	Training Topic	Region	Men	Women	% Women	Total
	Master Farmers					
July	Basic Agricultural Concepts	Cul-de-Sac	53	15	22%	68
July	Phytosanitary control	Cul-de-Sac	24	9	27%	33
August	Techniques for planting vetiver	Cul-de-Sac	24	12	33%	36
August	Sustainable environmental management	Cul-de-Sac	20	14	41%	34
August	Phytosanitary control	Cul-de-Sac	20	14	41%	34
August	Basic Agricultural Concepts	Cul-de-Sac	26	5	16%	31
July	Management of small farms	Kenscoff	115	71	38%	186
July	Phytosanitary control		27	24	47%	51
August	Techniques for planting vetiver	Kenscoff	34	23	40%	57

August	Sustainable environmental management	Kenscoff	21	11	34%	32
August	Phytosanitary control	Kenscoff	14	12	46%	26
September	Prophylactics and animal health	Kenscoff	24	14	37%	38
July	Soil and water conservation techniques	Gonaïves	33	10	23%	43
July	Soil and water conservation techniques	Gonaïves	33	10	23%	43
July	Basic Agricultural Concepts	Gonaïves	32	5	14%	37
August	Management of small farms	Gonaïves	228	35	13%	263
July	Importance and use of vetiver	Mirebalais	53	12	18%	65
July	Importance and use of vetiver	Cabaret/Arcahaie	47	18	28%	65
TOTAL			828	314	27%	1,142

ANNEX 4

WORK FOR RECOVERY TABLES

This annex presents detailed tables of the Work for Recovery activities started in March by WINNER as part of the Earthquake Accelerated Recovery Program.

Cul-de-Sac

Under the Work for Recovery program, 117,120 meters of irrigation and drainage canals were cleaned in the third quarter of 2010 in the Cul-de-Sac watershed. This work generated jobs for 3,689 people. The table below provides details on the execution of this work.

Table D1. Work for Recovery program in the Cul de Sac (Third Quarter 2010)

Region	Activity	Zone	Work days	Amount realized (meters)	Number of workers	Person days	Amount paid HTG
Cul-de-Sac	Curing of canals	Thomazeau	12	17,160	561	6,732	1,470,000
Cx-des-Bqts	Curing of canals	Varreux	12	24,000	964	11,568	2,523,600
		Varreux	12	30,600	962	11,544	2,523,000
Kenscoff	Curing of drainage canals	Kenscoff	12	4,200	214	2,568	556,000
			12	5,160	214	2,568	556,800
Bassin Général	Curing of canals	Dumay	12	7,300	172	2,064	451,200
			12	7,700	172	2,064	451,200
	Curing of canals	Noailles	12	11,000	215	2,580	564,000
			12	10,000	215	2,580	564,000
S/Total C-de-Sac				117,120	3,689	44,268	4,866,800

Gonaïves

In Gonaïves, 107,310 meters of canals were cleaned in the third quarter of 2010, providing jobs to 4,173 people (Tableau 13).

Tableau D2. Work for Recovery program in Gonaives (Third Quarter 2010)

Region	Zone	Work days	Amount realized (meters)	Number of workers	Man days	Amount paid HTG
Gonaïves	Bayonnais	12	17,700	428	5,136	556,800
		12	23,800	428	5,136	556,200
	Granmont	12	5,780	214	2,568	555,800
		12	10,700	428	5,136	556,200
	Basse Plaine	12	-	749	8,988	1,943,800
		12	13,900	407	4,884	1,060,600
	Bienac	12	1,200	428	5,136	1,113,600
Gonaïves	Bienac	12	1,800	428	5,136	1,113,600
		12	1,800	428	5,136	1,112,000
		12	1,080	428	5,136	1,113,600
S/Total Gonaïves			107,310	4,173	50,076	8,568,600

Cabaret / Archaie

Following devastating floods in the summer of 2008, irrigation canals in the Cabaret/Archaie region filled with gravel and trash, severely impeding water flow. In the Third Quarter of 2010, WINNER cleaned irrigation canals in the perimeters receiving water from the Courjolles and Torcelle rivers under its Work for Recovery program. A total of 62,937 meters of irrigation canals were cured in the period (29,783 meters for the Courjolles river and 33,154 meters for the Torcelle river). This work generated temporary jobs for 3,711 people during two consecutive two-week periods (1,743 for the Courjolles river and 1,968 for the Torcelle river).

Mirebalais / Saut d'Eau

The table below summarizes the Work for Recovery activities in the Mirebalais / Saut d'Eau region undertaken in the third quarter of 2010. A total of 155 kilometers of irrigation canals were cleaned to allow for improved water flow for more than 1,000 hectares. This work generated temporary jobs for 2,140 people.

Tableau D3. Work for Recovery program in Mirebalais / Saut d'Eau (Third Quarter 2010)

Commune	Section	June - July 2010		July 2010		August 2010		August – Sept. 2010	
		# of workers	Length cleaned (meters)	# of workers	Length cleaned (meters)	# of workers	Length cleaned (meters)	# of workers	Length cleaned (meters)
Mirebalais	Gascoigne	235	17929.9	235	16018	214	16166.4	214	15020.7
	Sarasin	86	3070.88	86	3762.7	65	4415	65	1937
	Subtotal	321	21000.8	321	19780.7	279	20581.4	279	16957.7
Saut d'Eau	La Selle	107	7294.99	107	6821.8	0	0	0	0
	Coupe Mardi Gras	128	7260	128	8550	170	16665.6	170	16998
	Rivière Canot	0	0	0	0	65	6614.8	65	6610
	Subtotal	235	14555	235	15371.8	235	23280.4	235	23608
TOTAL		556	35555.8	556	35152.5	514	43861.8	514	40565.7

ANNEX 5

TABLE OF INDICATORS

Ind #	Descriptions	Achievement up to Third quarter 2009	Achievement up to Fourth quarter 2009	Achievement up to First quarter 2010	Achievement up to second quarter 2010	Achievement up to third quarter 2010	FY10 actual	FY10 target	Target for life of the project	Remarks for this quarter
1	Increase in annual income of WINNER assisted households							10%	100%	
2	Number of vulnerable households benefiting directly from WINNER assistance	7,800	31,066	60,462	48,126	65,000	212,454	40,000	160,000	Number of people benefiting from of rehabilitation of the potable water system in Bassin Mangnan, construction de moulin ADEBAABO (Third Quarter 2009). Rehabilitation of the irrigation canals in the Cul-de-Sac plain, irrigation pumps in Bas-Boen, rehabilitation of the Dubedou intake in Gonaives, Curage D7, treatment of ravines in Belle Fontaine and Gonaives, reforestation program, kenscoff road, campagne haricot d'hiver (Fourth Quarter 2009). River Grise banks containment and protection project, agricultural spring campaign, Treatment of ravines a Kenscoff, Belle

Ind #	Descriptions	Achievement up to Third quarter 2009	Achievement up to Fourth quarter 2009	Achievement up to First quarter 2010	Achievement up to second quarter 2010	Achievement up to third quarter 2010	FY10 actual	FY10 target	Target for life of the project	Remarks for this quarter
										Fontaine and Gonaives, Second campain Tree planting (First Quarter 2010). Reprofilage LaQunite, Cabaret-Arcahaie rivers bank protection (Second Quarter 2010). Potable water in Duvier, Lefevre, Dumisseau and water catchments in Kenscoff (Third Quarter 2010).
F-4.5.2.8	Number of rural households benefiting directly from USG assistance	7,800	29,066	49,646	0	65,000	151,512	6,000	60,000	Number of people benefiting from of rehabilitation of the potable water system in Bassin Mangnan, construction of a mill for ADEBABO (Third Quarter 2009). Rehabilitation of the irrigation canals in the Cul-de-Sac plain, irrigation pumps in Bas-Boen, rehabilitation of the Dubedou intake in Gonaives, treatment of ravines in Belle Fontaine and Gonaives, reforestation program, Kenscoff road, winter bean campaign (Fourth Quarter 2009). Agricultural spring campaign, Treatment of ravines a Kenscoff, Belle Fontaine and Gonaives, Second campain Tree

Ind #	Descriptions	Achievement up to Third quarter 2009	Achievement up to Fourth quarter 2009	Achievement up to First quarter 2010	Achievement up to second quarter 2010	Achievement up to third quarter 2010	FY10 actual	FY10 target	Target for life of the project	Remarks for this quarter
										planting (First Quarter 2010). Potable water in Duvier, Lefevre, Dumisseau and water catchments in Kenscoff (Third Quarter 2010).
F-4.8.1.4	Number of people with increased economic benefits derived from sustainable natural resource management and conservation as a result of USG assistance	88	5,097	24,674	246	1,466	30,105	15,000	100,000	Number of jobs created from of rehabilitation of the potable water system in Bassin Mangnan, construction de moulin ADEBAABO (Third Quarter 2009). Rehabilitation of the irrigation canals in the Cul-de-Sac plain, rehabilitation of the Dubedou intake in Gonaives, Curage D7, treatment of ravines in Belle Fontaine and Gonaives, reforestation program, kenscoff road (Fourth Quarter 2009). River Grise banks containment and protection project, Treatment of ravines a Kenscoff, Belle Fontaine and Gonaives (First Quarter 2010). Reprofilng of LaQunite, Cabaret-Archaie rivers bank protection, Second campaign Tree planting (Second Quarter 2010). Potable water in Duvier, Lefevre, Dumisseau and

Ind #	Descriptions	Achievement up to Third quarter 2009	Achievement up to Fourth quarter 2009	Achievement up to First quarter 2010	Achievement up to second quarter 2010	Achievement up to third quarter 2010	FY10 actual	FY10 target	Target for life of the project	Remarks for this quarter
										construction of water catchment in Kenscoff (Third Quarter 2010).
F-4.5.2.5	Number of additional hectares under improved technologies or management practices as a result of USG assistance		1,320		7963.7		9,284	4,000	50,000	Number of hectares assisted in the winter bean campaign (Fourth Quarter 2009). Number of hectares assisted in the spring campaign (Second Quarter 2010).
F-4.5.2.12	Number of individuals who have received USG supported short term agricultural sector productivity training		249	656	1,634	1142	59	500	7,000	Training of master farmers on best practices for the bean campaign in Bas Boen (168) and Gonaives (81) (Fourth Quarter 2009). Training of master farmers on best practices for the agricultural spring campaign on corn, sorghum, eggplant, gumbo, cabbage, bean, potato, tomato, pepper (218 Cul de Sac, 281 Kenscoff, 157 Gonaives) (First quarter 2010). Focus on the master farmers training program in Kenscoff, Cul de Sac plain and Gonaives (1634). Basic courses: General agriculture, farm management, family planning familial. (Second Quarter 2010). Training of

Ind #	Descriptions	Achievement up to Third quarter 2009	Achievement up to Fourth quarter 2009	Achievement up to First quarter 2010	Achievement up to second quarter 2010	Achievement up to third quarter 2010	FY10 actual	FY10 target	Target for life of the project	Remarks for this quarter
										master farmers (1614) : Techniques for planting vetiver, sustainable environmental management, phytosanitary control, Prophylactics and animal health, Techniques of soil and water conservation, general agriculture, small farm (Third quarter 2010).
3	Increase in agricultural production in WINNER intervention zones							10%	100%	
4	Number of farmers adopting new improved practices as a result of WINNER assistance		1,432		9,212		10,644	5,000	27,000	Supervised planters applying the technical route for the culture of bean during the agricultural winter campaign (1,432) and spring campaign (10,644)
5	Number of farmer stores created or strengthened as a result of WINNER assistance		11	26			37	12	35	Number of farmer stores involved in the agricultural winter campaign in Cul de Sac, Kenscoff, Mirebalais, Cabaret-Arcahaie, Gonaives (11 in the agricultural winter campaign and 37 in the spring campaign)

Ind #	Descriptions	Achievement up to Third quarter 2009	Achievement up to Fourth quarter 2009	Achievement up to First quarter 2010	Achievement up to second quarter 2010	Achievement up to third quarter 2010	FY10 actual	FY10 target	Target for life of the project	Remarks for this quarter
6	Number of households involved in nonfarm activities attributable to WINNER	88	4,087	1,613	246	1,466	7,500	200	2000	Number of households involved in rehabilitation of the potable water system in Bassin Mangnan, treatment of ravines in Belle Fontaine, kenscoff road (First Quarter). Dredging D7, treatment of ravines (Second Quarter). Treatment of ravines in Kenscoff and Gonaives (Third Quarter). Reprofiling Riviere Grise (Fourth Quarter).
F-4.5.2.9	Number of producers organizations, water- users associations, trade and business associations, community based organizations (CBOs) receiving USG assistance	1			275		276	20	120	Associations involved in agricultural development , PPPP, agro-forestry, Soil Conservation, infrastructure rehabilitation, Irrigation
7	Annual yield increase for selected crops as a result of WINNER assistance		N/A	0.8 t/ha bean		Maïs: 2.28 t/ha, Sorgho: 2.70 t/ha, Haricot: 1.05 t/ha, Poireau: 1.90 t/ha, Carotte: 4.90 t/ha, Okra: 3.09 t/ha, Tomate: 8.20 t/ha, Pomme de terre: 9.00 t/ha		10%	100%	33% annual yield increase for beans in the Cul de Sac plain (baseline 0.6 t/ha) (Winter bean campaign). Annual yield increase Corn: 226%, Sorghum: 170%, Beans: 110%, Leeks: 27%, Carott: 9%, Okra: 3%, Tomato: 2%, Potato: -10% (Spring agricultural campaign 2010)

Ind #	Descriptions	Achievement up to Third quarter 2009	Achievement up to Fourth quarter 2009	Achievement up to First quarter 2010	Achievement up to second quarter 2010	Achievement up to third quarter 2010	FY10 actual	FY10 target	Target for life of the project	Remarks for this quarter
F-4-5-2-10	Number of agriculture related firms benefiting directly from USG supported interventions		N/A	3			3	5	30	PPPP with Barbancourt, MFT and Biocarburant
F-4.5.1.3	Number of institutions/organizations undergoing capacity/competency assessments as a result of USG assistance	1		5			6	20	120	Public institutions supported by WINNER : MARNDR, MDE, MCF, DPC, CIAT, CNIGS
F-4.5.1.4	Numbers of institutions and organizations making significant improvement based on recommendations made via USG supported assessment		1					5	16	CIAT
F-4.5.2.4	Number of new technologies or management practices made available for transfer as a result of USG assistance		1		10		11			Crops of the agricultural spring campaign: Corn, Sorghum, Rice, Bean, Potato, Leeks, Pepper, Tomato, Eggplant, Gumbo, Carrot. For each crop, application of a technical itinerary and support of farmers by extension agents (REA).
F-4.8.1.1	Number of hectares under improved natural resource management (NRM) as a result of USG assistance						460	10,000	75,000	1,567,224 tree seedlings produced including 422,658 seedlings produced during the first agro-forestry campaign and 1,144,566 seedlings produced during the second agro-forestry campaign. 190 hectares

Ind #	Descriptions	Achievement up to Third quarter 2009	Achievement up to Fourth quarter 2009	Achievement up to First quarter 2010	Achievement up to second quarter 2010	Achievement up to third quarter 2010	FY10 actual	FY10 target	Target for life of the project	Remarks for this quarter
										planted with forest tree species and 4,275 hectares planted with fruit tree species (Plantation density: 1500 trees per hectare for forest trees and 300 trees per hectare for fruit trees).
F-4.8.1.2	Number of hectares in areas of biological significance under improved management as a result of USG assistance							200	1,000	
F-4.8.1.5	Number of people receiving USG supported training in Natural resource and/or biodiversity conservation	338	261	305	746		1312	400	1,300	Training for mayors and MDE in GIS, treatment of ravines, tree nursery (338) (Third Quarter 2009). Treatment of ravines, public hygiene for drinking water, tree nursery, Disaster and risk management (261) (Fourth Quarter 2009). Training on vetiver, use of GPS (305) (First Quarter 2010). Introduction of OSM, tree nursery, disaster and risk management, use of LPG stoves, treatment of ravines(746) (Second Quarter 2010).

Ind #	Descriptions	Achievement up to Third quarter 2009	Achievement up to Fourth quarter 2009	Achievement up to First quarter 2010	Achievement up to second quarter 2010	Achievement up to third quarter 2010	FY10 actual	FY10 target	Target for life of the project	Remarks for this quarter
F-4.8.1.6	Number of hectares of natural resources showing improved biophysical conditions as a result of USG assistance							0	500	
8	Number of people who benefit from WINNER infrastructure work	25,000	52,680	62,145	50,630	325,000	515,455	350,000	720,000	Number of people benefiting from of rehabilitation of the potable water system in Bassin Mangnan, rehabilitation of the irrigation canals in the Cul-de-Sac plain, rehabilitation of the Dubedou intake in Gonaives, treatment of ravines in Belle Fontaine and Gonaives, reforestation program, kenscoff road. Reprofiling rivers and treatments ravines in Kenscoff and Gonaives and Cabaret (This quarter).
9	Number of hectares protected or irrigated as a result of WINNER infrastructure work		4,925	0			4,925	6,000	50,000	Irrigated hectares resulting from the rehabilitation of the irrigation canals in the Cul-de-Sac plain (4,000), irrigation pumps in Bas-Boen (225), and the rehabilitation of the Dubedou intake in Gonaives (700)
10	Runoff reduction in critical ravines as a result of							10%	40%	

Ind #	Descriptions	Achievement up to Third quarter 2009	Achievement up to Fourth quarter 2009	Achievement up to First quarter 2010	Achievement up to second quarter 2010	Achievement up to third quarter 2010	FY10 actual	FY10 target	Target for life of the project	Remarks for this quarter
	WINNER assistance									
11	Number of kilometers of mechanical structures build as a result of WINNER assistance		10.77	9.69		15.84	36.30	10	150	Number of kilometers of ravines treated in Kenscoff, Gonaives and Cabaret
12	Capacity increase of main watershed rivers as a result of WINNER assistance							20%	200%	
C-5.2.1.5	Number of kilometers of irrigation systems repaired if mechanical work includes irrigation systems		16.7	0		32.926	49.626	20	350	Rehabilitation of the irrigation canals in the Cul-de-Sac plain and the rehabilitation of the Dubedou intake in Gonaives
C-3.1.8.2	Number of people in target areas with access to improved drinking water supply as a result of USG assistance		25,000	0		65,000	90,000	30,000	140,000	Rehabilitation of the potable water system in Bassin Mangnan
C-5.1.2.2	Number of Water systems/points returned to use as a link to 3.1.8.2		1	0		7	8	2	14	Rehabilitation of the potable water system in Bassin Mangnan
13	Number of potable water community organizations with sustainable management as a result of WINNER assistance		1	0			1	2	14	Rehabilitation of the potable water system in Bassin Mangnan
F-4.4.3.1	Kilometers of transportation infrastructure constructed or repaired		5	0			5	20	150	Construction of Kenscoff road

Ind #	Descriptions	Achievement up to Third quarter 2009	Achievement up to Fourth quarter 2009	Achievement up to First quarter 2010	Achievement up to second quarter 2010	Achievement up to third quarter 2010	FY10 actual	FY10 target	Target for life of the project	Remarks for this quarter
	through USG assistance									
14	Estimated economic return of roads rebuilt and repaired (not cumulative)							15%	15%	
15	Number of early flood warning systems installed and maintained with community involvement as a result of WINNER assistance		0	0		1	1	1	4	
16	Number of people protected by early flood warning systems as a result of WINNER assistance					230,915	230,915	200,000	400,000	City of Gonaives and the Bayonnais neighborhood
17	Number of Local Watershed Management Councils (LWMC) created or strengthened as a result of WINNER assistance		0	0			0	0	5	
18	Number of water users or road users associations established or strengthened with WINNER assistance		1	1			2	2	9	Management of the Rivière Grise irrigation system and the Kenscoff road
19	Percentage of dues paid by WINNER assisted water users and road users associations							20%	20%	

Ind #	Descriptions	Achievement up to Third quarter 2009	Achievement up to Fourth quarter 2009	Achievement up to First quarter 2010	Achievement up to second quarter 2010	Achievement up to third quarter 2010	FY10 actual	FY10 target	Target for life of the project	Remarks for this quarter
20	Number of governing bodies supported by WINNER		1	2	6		9	9	20	Pétion-Ville City Council, Kenscoff City Council , Croix des Bouquets City Council, Thomazeau City Council, Ganthier City Council, Cabaret City Council, Arcahaie City Council, Mirebalais City Council, Saut d'Eau City Council.
21	Number of governing bodies making significant improvement in watershed management based on recommendations of WINNER assistance		0	1			1	4	10	Croix des Bouquets City Council
F-4.8.1.3	Number of policies, laws, agreements, or regulations promoting sustainable natural resource management and conservation that are implemented as a result of USG assistance		0	0			0	0	2	
F-4.5.1.1	Number of policy reforms analyzed with USG assistance		1	0			1	1	5	Study on the opportunities for Haiti's environmental management resulting from the Climate Change conference in Copenhagen
F-4.5.1.2	Number of policy reforms presented for legislation/decree as a result of USG assistance		1	0			1	0	4	Decree creating the Designated National Authority to manage carbon credits

Ind #	Descriptions	Achievement up to Third quarter 2009	Achievement up to Fourth quarter 2009	Achievement up to First quarter 2010	Achievement up to second quarter 2010	Achievement up to third quarter 2010	FY10 actual	FY10 target	Target for life of the project	Remarks for this quarter
22	Number of people involved in watershed management plan development as a result of WINNER assistance		338	185	305	746	1574	600	5,400	Mayor technical staff trained in Google earth software, People trained in soil conservation, tree nursery and vetiver
23	Number of financially viable communities or organizations involved in natural resources management of biologically significant sites as a result of WINNER assistance		0	0			0	0	10	
C-5.2.1.3	Number of communities with Early Warning Systems linked to a response system in place as a result of USG assistance						10	20	41	Communal sections of Gonaives, neighborhood of Bayonnais and city of Gonaives
24	Number of people involved in disaster management plan development as a result of WINNER assistance		0	74	199	40	313	600	4,800	Disaster management plan development in Kenscoff, Gonaives and Croix des Bouquets
25	Number of disaster management plans developed as a result of WINNER assistance		0	1	1	1	3	3	9	Disaster contingency plans prepared for Kenscoff, Gonaives and Croix des Bouquets
26	Improved performance of Watershed Donor Coordination group as a result of WINNER assistance		YES	YES			YES	YES	YES	

Ind #	Descriptions	Achievement up to Third quarter 2009	Achievement up to Fourth quarter 2009	Achievement up to First quarter 2010	Achievement up to second quarter 2010	Achievement up to third quarter 2010	FY10 actual	FY10 target	Target for life of the project	Remarks for this quarter
F-4. 5. 2. 11	Number of public-private partnerships (PPP) formed as a result of USG assistance				3		3	5	20	PPP with MFT, Biodiesel, Barbancourt,