# HURRICANE GEORGES RECOVERY PROGRAM

# Final Report

## September 20, 1999-November 30, 2001
## USAID Cooperative Agreement No. 521-A-00-99-00072-00


*Submitted by*
*The Pan American Development Foundation*
*Washington, DC / Port-au-Prince*
*www.padf.org*

*January 2002*

## Acronyms

**General**

| | |
|---|---|
| CBO | Community-Based Organization |
| CDMP | Caribbean Disaster Mitigation Project |
| DMP | Disaster Mitigation and Preparedness |
| HGRP | Hurricane Georges Recovery Program |
| IR | Intermediate Result |
| KPSL | Kòmite Pwoteksyon Sivil Lokal |
| M & E | Monitoring and Evaluation |
| MIS | Management Information System |
| NGO | Non-Governmental Organization |
| PVO | Private Voluntary Organization |
| RFA | Request for Application |
| SO | Strategic Objective |

**NGOs**

| | |
|---|---|
| CARE | Cooperative for Assistance and Relief Everywhere |
| CDRH | Center for Human Resource Development |
| CECI | Canadian Centre for Studies and International Cooperation |
| CHF | Cooperative Housing Foundation |
| CIAT | International Center for Tropical Agriculture |
| CRS | Catholic Relief Services |
| FAVA/CA | Florida Association of Voluntary Assistance/Caribbean Action |
| HAP | Hillside Agriculture Program |
| ORE | Organization for the Rehabilitation of the Environment |
| PADF | Pan American Development Foundation |
| PLUS | Productive Land Use Systems |
| SECID | South-East Consortium for International Development |

**Governmental Organizations**

| | |
|---|---|
| DPC | Haitian Civil Protection Directorate |
| FEMA | US Federal Emergency Management Agency |
| GOH | Government of Haiti |
| MARNDR | Haitian Ministry of Agriculture, Natural Resource Management, and Rural Development |
| MENJS | Haitian Ministry of Education, Youth, and Sports |
| MPCE | Haitian Ministry of Planning and External Cooperation |
| MTPTC | Haitian Ministry of Public Works, Transportation, and Communication |
| OAS | Organization of American States |
| OFDA | US Office of Foreign Disaster Assistance |
| RIG | USAID Regional Inspector General |
| USACE | US Army Corps of Engineers |
| USAID | US Agency for International Development |

**Community-Based Organizations**

| | |
|---|---|
| AGPG | Association des Groupements de Planteurs de Gaillard |
| ATASE | Association des Techniciens Agricoles du Sud-Est |
| ATRADEM | Association des Travailleurs de pour la Développement de Merceron |
| CODHA | Conservationistes d'Haïti |
| COREM | Comité de Redressement de Musac |
| FACN | Fédération des Associations Caféiers Natives |
| FEUCAJ | Fédération des Usagers de Cayes-Jacmel |
| IPDG | Inite Peyizan Pou Devlopman Gaya |
| KOMELAK | Komité pou mété Lafond Kampé |
| MODPA | Mouvman Devlopman Peyizan Ansapit |
| TADI | Techniciens Associés pour la Développement Intégré |

## Executive Summary

The Hurricane Georges Recovery Program (HGRP) successfully brought together a broad range of local, national, and international organizations as well as six Haitian Government Ministries and four US Government agencies to implement 79 activities to create 22 disaster resistant communities in Haiti. Through tight coordination, the HGRP was able to maximize the contribution of each partner and minimize the conflicts. As a result of the HGRP interventions, the targeted communities have better infrastructure, higher agricultural production, and greater awareness of disaster management and are thus more resilient to future disasters.

The HGRP was the third phase of USAID's response to the devastation caused by its namesake in September 1998. Following an initial phase of immediate relief and a second phase of immediate rehabilitation (*Operation Bounce Back)*, USAID recognized that a longer-term reconstruction program was required to help Haiti recover. This program was funded through the Special Georges and Mitch Appropriation and was designed to be an integrated response to help the targeted communities become more resilient to the impact of future disasters. It included raising agricultural incomes to improve farmers' abilities to cope with disasters, rebuilding infrastructure, and protecting watersheds to reduce communities' vulnerability, and providing training and public awareness on disaster mitigation, preparedness, and response.

The Pan American Development Foundation won the bid for this grant and implemented it through a variety of organizations including international organizations (Catholic Relief Services, the Cooperative Housing Foundation, Plan International, Winrock International, and the Canadian Center for Studies and International Cooperation), national organizations—both non-profit organizations (the Organization for the Rehabilitation of the Environment and the Center for Human Resource Development), and for-profit engineering firms, as well as through numerous local, community-based organizations.

The program lasted for 26 months for a total cost of $10.3 million, of which USAID contributed $8.4 million, the non-profit partners contributed $1.5 million, and the local communities contributed $380,000, mostly through voluntary labor.

Notable successes of the HGRP include:

1. Implementing successfully 27 subprojects (2 roads, 7 irrigation systems, 10 potable water projects, 8 soil conservation projects), 25 school reconstruction/rehabilitation projects, 3 studies, and 6 series of training sessions.

2. Fielding 27 volunteer American experts to provide specific technical assistance to local community-based organizations, distributing 463 tons of improved seeds, and introducing two new seed varieties to Haiti.

3. Raising awareness of disaster management from 5% before the training began to 89% by the end of the program (based on door-to-door surveys conducted by SECID) and helping all 22 communities to develop vulnerability analysis and detailed disaster mitigation, preparedness, and response plans.

The HGRP exceeded nearly all of its targets, was implemented on-time and on-budget and received clean audits from both the RIG and the local auditing firm despite being a short-term emergency program implemented during a very difficult political time in Haiti.

A number of initiatives started under the HGRP continue with private funding, additional USAID funding and most significantly through the first phase of a three-year, $9 million *Food for Progress* program (USDA food monetization) entitled *Community Reconstruction for Economic and Environmental Resiliency* (CREER).

The HGRP produced the following results:

| Activity | Goal | Actual | Percent |
|---|---|---|---|
| Production of improved commercial seeds | 715 tons | 708 tons | 99% |
| Stockpiling of basic seeds | 25 tons | 25 tons | 100% |
| Families using the improved seeds | 15,000 | 41,000 | 273% |
| Schools repaired or strengthened for use as emergency shelters | 24 | 25 | 104% |
| Kilometers of road rehabilitated | 12 | 22.2 | 185% |
| Hectares of land under rehabilitated irrigation systems | 1,700 | 3,090 | 182% |
| Kilometers of pipes in restored potable water systems | 27 | 36 | 133% |
| Kilometers of ravine protected | 80 | 85 | 106% |
| Hectares of land under improved soil and water conservation practices | 900 | 1,103 | 123% |
| People directly trained in disaster preparedness and mitigation | 2,440 | >5,000 | >200% |
| Communities with functioning disaster preparedness and mitigation committees and plans in place | 20 | 22 | 110% |
| Percentage of the population that could list at least three mitigation or response measures | 20% | 33% | 165% |

In addition to the work done under the PADF grant, three US government agencies provided assistance:

- The Federal Emergency Management Agency that provided technical assistance to the National Civil Protection Directorate and funded PADF to implement a local disaster preparedness initiative in the town of Jacmel.
- The US Army Corps of Engineers that provided technical assistance to the USAID Mission and implemented two river basin flood studies.
- The US Department of Agriculture that provided technical assistance to the USAID mission and funded several small soil and water conservation activities.

# Table of Contents

## Annexes:

**1 Subproject Summary Tables**
- a. Improved Seed Distribution
- b. Winrock Farmer-to-Farmer Volunteers
- c. School Rehabilitation
- d. Irrigation System Rehabilitation
- e. Potable Water System Rehabilitation
- f. Soil and Water Conservation Projects
- g. HGRP Targeted Communities
- h. FAVA/CA Volunteers
- i. Listing of HGRP Subcontracts
- j. Listing of USAID Approval Requests

**2 Detailed Gantt Chart**

## Reports in Volume 2 (3 binders)

**Binder 1**

**1 Germplasm Improvement and On-Farm Adaptive Research: International Center for Tropical Agriculture**

**2 Farmer-to-Farmer Technical Assistance: Winrock International**

**3 Pan American Development Foundation Subprojects**
- a. Thomazeau Road Rehabilitation Project
- b. Cap Rouge Road Rehabilitation Project
- c. Cajeun Irrigation System Rehabilitation Project
- d. Despuzeau Irrigation System Rehabilitation Project
- e. Anse-a-Pitres Irrigation System Rehabilitation Project
- f. Cajeun-Charettes Soil and Water Conservation Project
- g. Source Kakont Soil and Water Conservation Project
- h. Nan Plezi Soil and Water Conservation Project
- i. Citigroup-Financed Schools

**4 Sample KPSL Action Plan (Lafond)**

**5 School and Potable Water System Rehabilitation: Cooperative Housing Foundation**

**Binder 2**

**1 Belle Fontaine School Rehabilitation: Winrock International**

**2 Catholic Relief Services**
- a. Thiotte, Belle Anse and Grand-Gossier Potable Water System Rehabilitation Project
- b. Dory-Caviallon Irrigation System Rehabilitation Project
- c. Dory-Cavaillon Soil and Water Conservation Project
- d. Musac Soil and Water Conservation Project
- e. Palmist-a-Vin Soil and Water Conservation Project
- f. Ravine Matwala Soil and Water Conservation Project

**3 Canadian Centre for Studies and International Cooperation**
- a. Desmarth-Blaise-Munitie Irrigation System Rehabilitation Project
- b. Orangers-Meyer-Cyvadier Irrigation System Rehabilitation Project
- c. Jean-David Irrigation System Rehabilitation Project

**4 Plan International**
- a. Lafond Soil and Water Conservation Project
- b. Lafond Potable Water System Rehabilitation Project

**Binder 3**

**1 Maintenance Training**

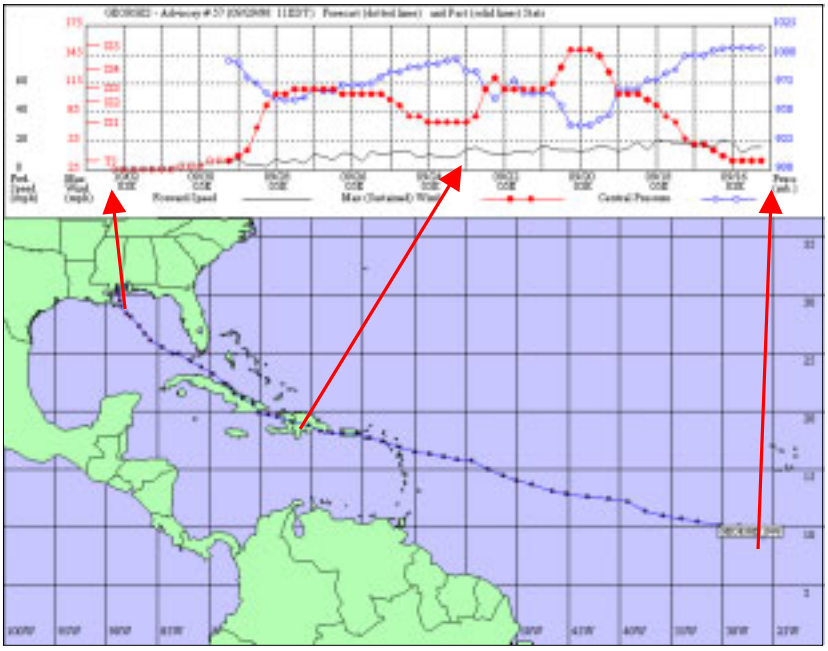
a. Irrigation System Users Committee Training
b. Soil and Water Conservation Training
c. Thomazeau Road Maintenance Training

**2 Studies conducted under the HGRP:**

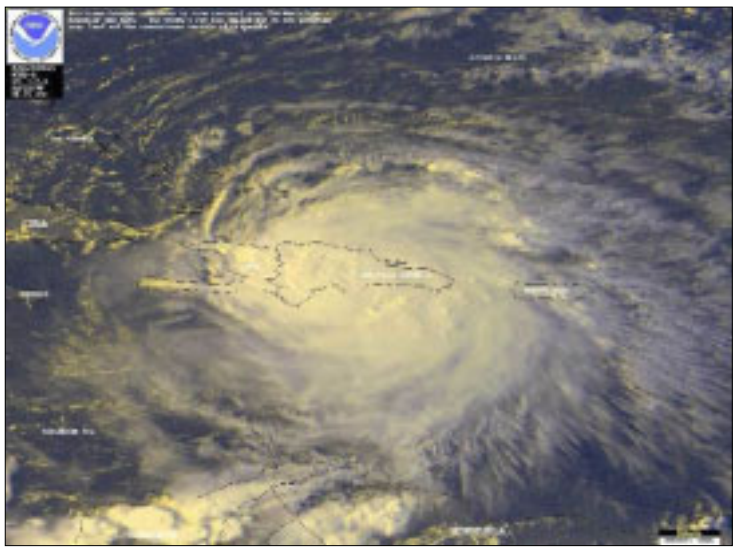
a. Watershed Study for the Jacmel Rivers: ESC
b. Choice of Temporary Shelters for Victims of Natural Disasters: CHF
c. Analysis of the Problems in the Production and Distribution of Improved Seeds

## I. Hurricane Georges

Hurricane Georges formed south of the Cap Verde islands on September 15th and quickly accelerated into a major hurricane. It reached the peak of its strength on September 20th with winds of 150 mph. As it passed over first Antigua and Barbuda and later Puerto Rico, it began weakening. When Hurricane Georges approached the Dominican Republic on September 22nd, it had winds of 120 mph (Category 3). As it crossed over Hispaniola, the storm weakened so that by the time it crossed into Haiti late on September 22nd, its winds had dropped to 81 mph (Category 1).



The eye of the hurricane crossed over central Haiti and continued through the Artibonite, however as can be seen from the photograph to the left, the entire country was impacted by the hurricane. High winds and heavy flooding caused an estimated $90 million in direct impacts and an additional $90 million in indirect losses. The majority of the loss was to crops ($53 million). Rains and flash flooding eroded unprotected hillside farms, destroyed erosion control structures, decimated or filled in irrigation systems, and washed out roads.



The vulnerability of many localities, areas where a large percentage of the population was already suffering from high levels of poverty, was significantly heightened by this natural disaster.

USAID responded immediately with both food aid and reconstruction funding. However, it quickly became clear that Haiti would need more than these quick interventions to recover from the impact of this hurricane.

On February 16, 1999, the Clinton Administration announced the request of $956 million in supplemental FY 1999 funds for the Central American countries affected by Hurricane Mitch as well as the Caribbean countries affected by Hurricane Georges. Congress approved this vital assistance on May 21, 1999. Out of this assistance, $9.8 million was targeted for Haiti

and of that, $8.4 million was targeted for what became the PADF component of the Hurricane Georges Recovery Program.

## II. Overview of the HGRP

The Hurricane Georges Recovery Program (HGRP) was the backbone of USAID's special strategic objective:

**To Help Communities Recover from Hurricane Georges' Impact and to Reduce their Vulnerability to Future Natural Disasters**

> The story is told in Haiti that when hurricanes hit the Dominican Republic, they do so with their full fury. When they cross the mountains and reach the Haitian border, they look down at the countryside devastated by years of poverty and neglect, say *Someone else must have just been here*, and turn away or die out.

The last major natural disaster to hit Haiti was Hurricane Inez in 1966, yet every year flooding kills Haitians. As little as 100mm (4 inches) of rain is enough to cause deaths. Haitians suffer from the effects of these minor events because Haiti's hillsides are deforested to the extent that nearly all rainfall becomes runoff and can cause flash flooding. Haitians are so poor that losing even part of their crop or a couple of chickens can result in a severe financial setback. Haiti's infrastructure is in such bad shape that with even minor storms, roads wash out, irrigation systems silt over and school buildings are damaged.

The HGRP was designed to address a broad spectrum of the problems causing rural communities to be vulnerable to disasters. The targeted results of the program were as follows:

- to restore food production capabilities in affected areas through production of high-yielding staple crop seeds and plant materials to be made available to participating farmers (Intermediate Result #2);
- to restore productive and social infrastructure by reconstructing farm-to-market secondary and tertiary roads, rehabilitating small irrigation systems, repairing potable water systems, and fixing rural schools damaged by the hurricane (Intermediate Result #3);
- to reduce the environmental impact of future disasters through soil conservation interventions and treatment of degraded ravines, through promotion of environmentally sustainable agricultural practices, and by undertaking a series of small-scale environmental protection initiatives in key micro-zones (Intermediate Result #4);
- to increase local capacities to address disaster mitigation and preparedness through an extensive training program at local levels, accompanied by workshops, conferences, and coordination efforts at the regional and national level (Intermediate Result #5).

The program was designed to address the identified needs of communities affected by Hurricane Georges. Providing high quality seeds and plant materials such as corn, bean, and sorghum promotes increases in agricultural production. Rehabilitation of damaged irrigation systems promotes increased production. Rehabilitation of secondary and tertiary roads improves access to markets and stimulates commerce. Reestablishing supplies of potable water improves the physical well being and social welfare of targeted communities. Strengthening schools to be used as emergency shelters improves their durability as well as

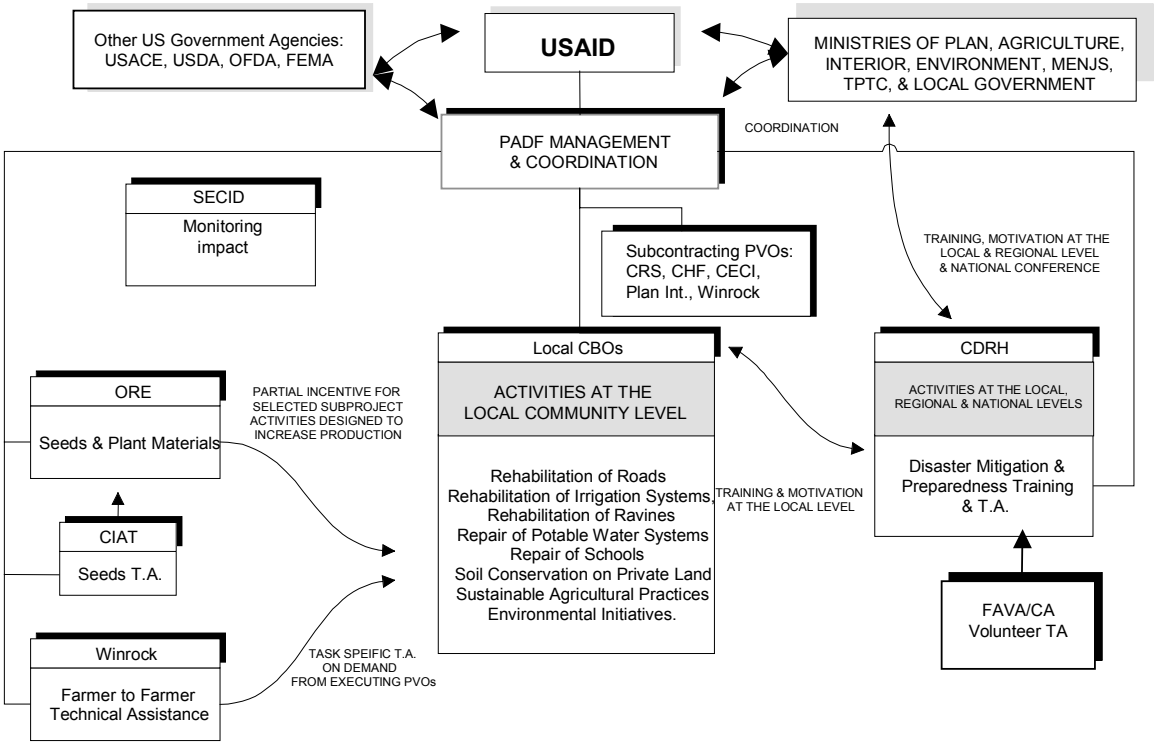
provides a safe-haven for future disasters. In the long-term, hillside conservation measures, rehabilitation of ravines, and other environmental measures help to diminish the effects of similar future disasters and promote sustainable agriculture.

To tie all of these components together and to reduce the impact of future disasters, the program included a strong disaster management training component that was implemented in all of the targeted communities. In each community, the HGRP first held a general community awareness seminar to explain the basics of disaster preparedness and mitigation. Out of this seminar, a core group was drawn. The HGRP led this core group through a yearlong series of seminars to develop their community's disaster preparedness and mitigation plan.

PADF implemented the program with a variety of partners. These included international PVOs, such as CRS, CIAT, CHF, Plan International, and CECI; Haitian NGOs, such as ORE and CDRH; and local community-based organizations (CBOs). PADF also established a strong partnership with the Haitian Government through a special Steering Committee (*le Comité de Suivi*). This committee included representatives from the main ministries such as Agriculture, Interior, Public Works, and Education as well as from the PL480 office.

The integration of physical interventions was facilitated by the development of local institutions that recognize the interaction of land use practices and the reconstruction and maintenance of infrastructure in influencing the vulnerability of communities to disasters. Disaster mitigation and preparedness is more effectively achieved through timely and coordinated community efforts to reduce hazards rather than through the application of reaction and coping strategies after a disaster has occurred.

The following flow chart shows the relationship among the major program activities.



While the HGRP was being implemented, Haiti suffered through a series of violent uprisings and political protests. Due to a political stalemate over a series of election problems, very little economic assistance was provided to Haiti during this time. Both the Interamerican Development Bank and the World Bank suspended activities in Haiti, the European Union stopped funding the Haitian Government and USAID dropped its assistance to Haiti from $107 million in FY 1999 to $50 million in FY 2002. At the same time, there was very little private investment. Haiti's infrastructure deteriorated and violent crimes increased. Following a series of violent demonstrations and random pipe bombs, in November 2000 the US State Department authorized a voluntary evacuation for dependents. This was not lifted until April 2001.

The civil unrest caused USAID, PADF, and the HGRP partners to close their offices on a number of occasions. For most of the project, the Regional Security Officer had to approve all international travel and often did not allow consultants to come. Several HGRP staff members were victims of violent crimes. Nevertheless, the HGRP was implemented on time and on budget.

## III. Program Activities and Results

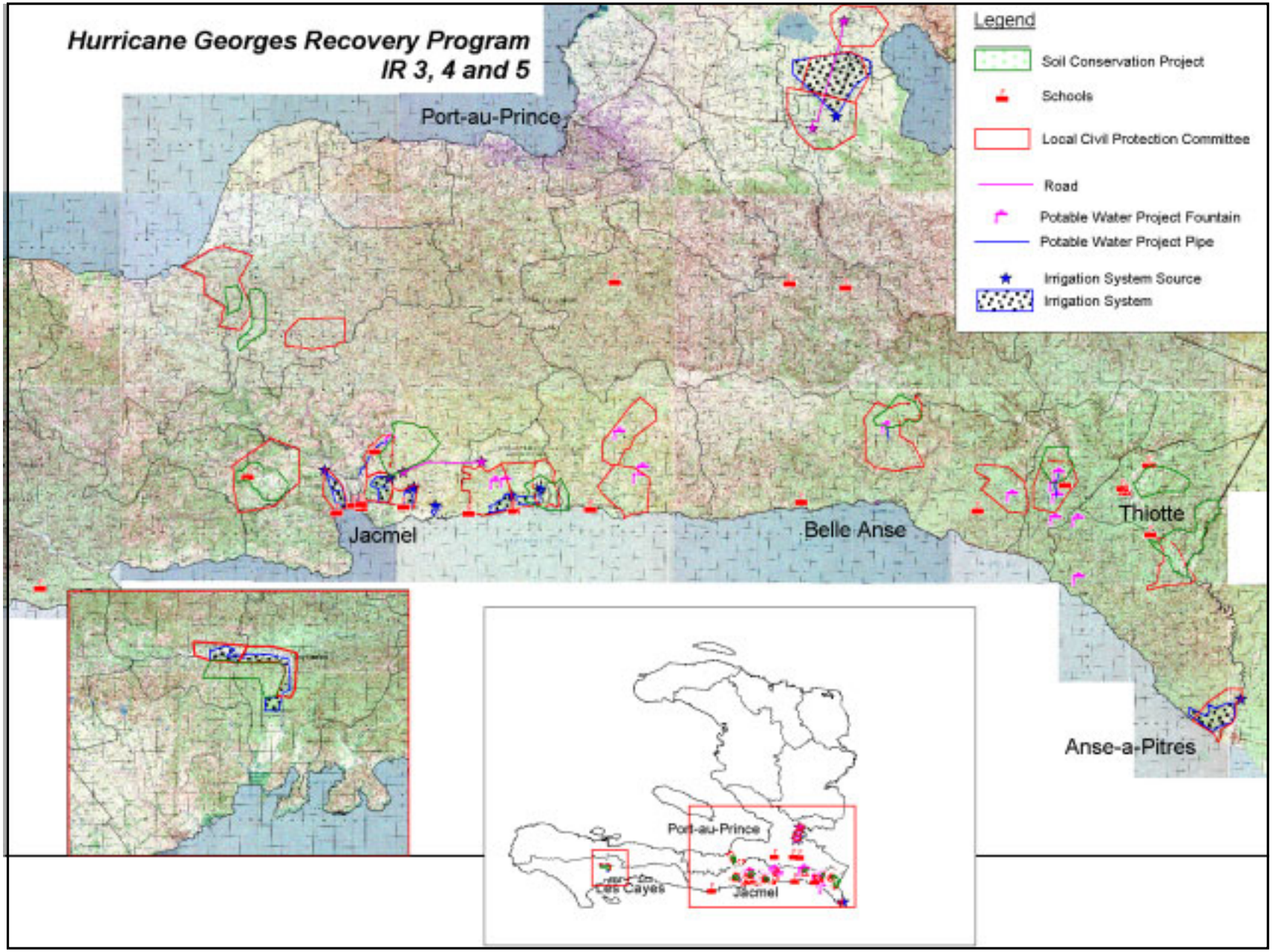
All HGRP activities fit in the four Intermediate Results described above: capacity for agricultural production improved, damaged infrastructure repaired, environmental impact of future disasters reduced, and local capacity to mitigate and prepare for future disasters increased. Work under the HGRP began by identifying the infrastructure and environmental projects to be implemented. Once these were selected, the HGRP offered agricultural assistance and disaster training within the targeted areas. The original bidding documents for the program listed six priority subprojects: one road, three irrigation systems, and two soil and water conservation projects. The rest of the subprojects were chosen in collaboration with USAID, PADF, the implementing partners, and the Haitian Government. The selection was based on the HGRP's geographic focus in the Southeast and South and the need to repair damage caused by Hurricane Georges and the willingness of the local community to volunteer their time for the program. The map on the following page shows the implementation areas for each of the subprojects.

The following sections describe the work done in each of the four areas. Technical details on the work accomplished are included in the Annex 1 in this volume of the report. Detailed subproject final reports are in Volume 2 of this report.

### A. IR2: Capacity for Agricultural Production Improved

Haiti's vulnerability to disasters has its roots in Haiti's poverty. Since the rural population has so few resources, their coping capacity is very low—even losing a couple of chickens to a flood can cause extreme hardship. Therefore raising farmer income is a key step in reducing their vulnerability to disasters.

Most Haitians farm using grain from previous harvests as seed rather than using genetically selected, pesticide-treated seeds. These traditional seeds have a very low germination rate, produce poorly, and are highly vulnerable to numerous diseases. As was found with the Green Revolution in India, by switching from traditional grains to improved, genetically selected seeds, harvests can be dramatically increased. Additionally, Haiti's food security situation is tenuous. Following Hurricane Georges there was a shortage of seeds. Therefore, to help the rural villagers increase their income and thus reduce their vulnerability to


Hurricane Georges Recovery Program
IR 3, 4 and 5
Port-au-Prince
Jacmel
Belle Anse
Thiotte
Anse-a-Pitres
Legend
Soil Conservation Project
Schools
Local Civil Protection Committee
Road
Potable Water Project Fountain
Potable Water Project Pipe
Irrigation System Source
Irrigation System
Port-au-Prince
Les Cayes
Jacmel

disasters, USAID included in the HGRP a component to increase ORE's capacity to produce seeds, to improve the germplasm in Haiti, and to produce and distribute 715 tons of improved corn, bean, and sorghum seed. Additionally, a farmer-to-farmer program was funded to provide targeted technical assistance.

### 1. Improved Seed Production and Distribution

Improved seeds have been available in Haiti since the 1970s, but farmers have been slow to adopt them. Since the mid-1990s, USAID and other donors have subsidized improved seed production to increase adoption rates. Initially the donors encouraged free distribution of the seeds and slowly the donors have been gradually removing the subsidies on the seed so that ultimately it could be commercially viable to produce and sell seed without donor support. However, within the 22 HGRP communities, only the two in the Southern Department had any history of improved seed use.

Therefore, to encourage farmers to adopt the improved seed it was sold at a subsidized price—the same price as traditional grain. Initially, the farmers were reluctant to try the new seed, but after extensive marketing by PADF and ORE, they are slowly adopting it.

By the end of the program, ORE had produced 708 tons of seed and distributed 463 tons. ORE will sell the remaining 245 tons of seed in February 2002 and the revenues generated will allow ORE to continue working on improved seed production.

***Improved bean field in the Palmist-a-Vin area***

Based on an estimation of the average yield of these crops and prices at harvest time, the improved seed yielded a total harvest value of $8 million—an increase of $3 million over the value of an equivalent harvest from traditional seed (refer to table in Annex 1 of this report).

To evaluate the impact of the seed distribution and to study what future actions are required to improve the adoption of improved seed in Haiti, ORE hired an agro-economist to evaluate the impact of the improved seed. The main conclusions of this report were:

- Farmers were most impressed with the bean seed which consistently had a 30% increase in production over traditional seed.
- Farmers were less satisfied with the corn and sorghum. Some of the sorghum suffered from poor handling and did not produce well whereas the corn performed satisfactorily, but not exceptionally well. The only areas where the corn did notably well were Camp-Perrin and Dory.
- The main constraint to a wider adoption of the improved seed is lack of knowledge—a better marketing program is needed. The second constraint is cash. Many farmers were not able to front the cash required to purchase the seed.

## 2. Increased Capacity

In addition to funding the production and distribution of improved seed, a goal of the HGRP was to strengthen ORE's institutional capacity to produce seed. This was done in two ways. First, ORE was permitted to purchase over $300,000 of equipment including two tractors, three pickup trucks, eight motorcycles six silos (total capacity: 140 MT), as well as irrigation pumps and office equipment. All of this equipment was turned over to ORE at the end of the program. Secondly, ORE staff was trained by CIAT in germplasm improvement. Three of ORE's senior staff made a total of four trips to CIAT's facilities in Columbia and Costa Rica to learn about the advances made in bean, cassava, and forage germplasm improvement. Additionally, CIAT held a two-week training course in June 2001 for 27 agronomists from ORE, other NGOs, and the government. The focus of the seminar was on presenting the research that has been done on improving bean, manioc, corn, banana, and forage and the advantages offered by these new varieties.

## 3. Improved Germplasm

CIAT's work under the HGRP focused not only on providing technical assistance to ORE, but also on improving germplasm for bean, corn, cassava, and forage in Haiti. They conducted 51 field trials throughout the departments of the Southeast, South, and West. Of the four crops, most progress was made with bean. Two varieties of bean, a black bean, BAT304, and a red bean, Tio Canela, were tested and found to be well adapted to Haitian conditions and offering yields of more than 200% greater than traditional seed and 20% greater than the current improved bean being used in Haiti (Tamazulapa). By the end of the program, 1.5 tons of the first bean had already been multiplied by ORE and 340 kg of the second bean were ready for multiplication.

***CIAT scientists working with Haitian farmers near Camp Perrin.***

For the other three crops, promising varieties have been identified and testing continues by CIAT under the USAID-financed Hillside Agriculture Program (HAP).

## 4. Farmer-to-Farmer Program

Winrock International implemented a technical assistance program in which agriculture experts from the United States volunteered their time to come to Haiti and respond to specific technical requests from local farmer groups. They placed a total of 20 volunteers, five more than their contracted amount. These placements are listed in annex.

The great strength of the Farmer-to-Farmer program was that the experts were able to spend enough time concentrating on specific problems to not only identify the needed solution, but also to begin to implement the required change. The best example of this success was with the beekeeper volunteer, Ann Harmon, who worked with a small bee-keeping cooperative. Upon arrival she found that because they had not made the beehives to the proper specifications, the bees had gummed up the slats in the hives making it very difficult to remove the slats to harvest the honey. When she explained the importance of maintaining exact spacing within the hive and insisted that all of the hives be dismantled and rebuilt, the

local carpenters were upset. However, when over the following days, she took the time to help them to rebuild the hives correctly, the carpenters changed from being hostile to her to being proud of their improved skills. If she had not had the full two weeks in the village, she would not have had time to win the carpenters over to the importance of the change.

## B. IR3: Damaged Infrastructure Repaired

### 1. Schools Repaired

One of the most innovative and successful components of the HGRP was the school rehabilitation program. Through this program 22 schools were rehabilitated for an average cost of $7,000 and 3 schools were completely rebuilt. These repairs included replacing rotting timbers and tin in the roof, installing doors, windows, and hurricane clips, and repairing the walls and floor. What made this program innovative was that for a relatively small amount of funding, the school buildings could be restored to new condition and rendered much more resistant to wind and rain damage. The repairs to the buildings greatly boosted the morale of the teachers and students and generally resulted in a significant increase in local enrollment. Additionally, a study conducted by the US Army Corps of Engineers found that these schools were the buildings most resistant to hurricanes in their areas. The program was so successful that three American companies, Citigroup, Texaco, and ESSO have funded the retrofitting of six schools (four of these schools are not within the HGRP area and are therefore not included in the project total).

***The building in the center of the photo was in the same condition as the one to the left before the HGRP intervention. For $6,000 an unusable shell was turned into a beautiful school.***

Of the three schools that were completely rebuilt, two are in the mountains above Port-au-Prince (Belle Fontaine) and the third was in the Thiotte area. The first two were in the area that Winrock International was implementing the ASSET project and were schools completely destroyed by Hurricane Georges. The third was a priority project for the Haitian Government.

### 2. Roads Rehabilitated

PADF designed and supervised the rehabilitation of two roads that were damaged by Hurricane Georges. The first road was one of the six priority projects identified in the HGRP RFP. It extends from National 102 just east of Croix de Bouquets 11.7 km north to Thomazeau. This road was basically a cleared path across weak soil. Following the passage of Hurricane Georges, water ponded across the entire plain with an average depth of over one meter. Once the water receded, the road was passable only in a good four-wheel drive vehicle. Before work began, at best a couple of vehicles passed each week. The repair work consisted of adding 25,000 $m^3$ of quality fill and installing 31 culverts to allow drainage and irrigation. Once the repairs were complete, traffic increased to nearly 100 vehicles per day

and a number of agribusinesses including a refrigeration plant and a mill, as well as a health clinic sprang up along the road.

***Before the Thomazeau road was repaired, vehicles were so rare that the sick had to be transported several kilometers by stretcher to reach a clinic.***

In December 2000, it became clear that the HGRP had a sizable surplus due to the devaluation of the local currency, the Gourde. Therefore, the HGRP undertook the rehabilitation of a second road, the 10.7 km road leading up to the Cap Rouge Plateau. This steep mountain road was badly eroded by Hurricane Georges. It was selected due to USAID's investment in agricultural production on the plateau through the PLUS and HAP projects as well as being a Haitian Government priority project. The road had deteriorated to the point where large trucks were having difficulty reaching the plateau and thus farmers were struggling to export their crops. Recently, an entire year's coffee crop was lost when late rains kept the road too wet for trucks to reach the Plateau.

***Following the HGRP intervention on the Cap Rouge road, a wide range of vehicles ranging from large trucks to small taxis were able to reach the Cap Rouge plateau.***

Since this subproject was chosen quite late, there was little time to conduct a detailed design before putting the work out for bid. Instead, the HGRP put the road out to bid as a design-build project. Through strict supervision from both PADF and USAID's engineers, the project was put out for bid in March, awarded in April, and the works were completed in October—a remarkably short period of time for such a technically difficult road. The main work consisted of building concrete pavement on the steepest sections, adding culverts, and regrading and backfilling the road.

### 3. Irrigation Systems Repaired

Through the HGRP, seven irrigation systems were rehabilitated covering a total of 3,090 ha. These ranged from small systems such as the Cajeun and Meyer systems with less than 100 ha to very large systems such as Dory with 674 ha and Despuzeau with 1,000 ha. In all cases, the work included both cleaning the canals and reinforcing them with masonry sides and steel gates. Since siltation is one of the main threats to the systems, soil conservation projects were implemented upstream from nearly all of the systems to protect them.

The irrigation systems are managed by users' committees to ensure that water is distributed in an equitable manner and that the systems are maintained. The HGRP hired the consulting firm of Hydrotech to study each system and to organize a series of training seminars for these committees. As a result of this training, all nine committees have begun meeting regularly and several have begun charging a user's fee to cover the maintenance costs.

### 4. Potable Water Systems Repaired

Ten potable water systems were repaired under the HGRP totaling 36 km of piping and serving over 30,000 beneficiaries. The repairs ranged from improving the spring capping to repairing or rebuilding reservoirs and replacing pipes and public fountains.

In addition to the physical works, the HGRP provided two types of training. First, CDRH provided training on how to repair the pipes and faucets. Secondly, CHF provided management training to the water users' committees.


***In the hills above Belle Anse there are no potable water systems. Hundreds of people a day came to get their water from a small spring at Kakont. As part of a soil conservation project, the HGRP capped this spring and installed a small reservoir and distribution system. Before the works, people had to scoop water cup-by-cup to fill their buckets. As can be seen in the second photo, the construction of the water distribution system greatly reduced the time required to gather water.***

## C. IR4: Environmental Impact of Future Disasters Reduced

### 1. Soil and Water Conservation Projects

Through the HGRP, parts of eight watersheds were protected encompassing 1,100 ha of hillside and 85 km of ravine. Each area was protected with a variety of interventions including building 41,000 $m^3$ of gully plugs in the ravines to create a series of terraces to slow the stream flow velocity; covering the hillsides with 15 km of contour canals, 494 km of hedgerows, and 99 km of rock walls to slow down the runoff and increase infiltration; and planting over 600,000 trees.

***Newly built rock walls. Sediment will fill in behind these walls to create a series of terraces that will be planted with bananas and other fruit trees.***

As a result of these interventions, the ravines have been transformed from being a danger to the surrounding community to becoming productive farm plots. The hillsides that farmers had once abandoned are again becoming productive and the villages are less threatened by flash floods.

As with the infrastructure work, the HGRP

provided detailed training to local farmers on the importance of the soil conservation measures and how best to maintain them. By first training trainers and facilitating the subsequent training of farmers, over 800 farmers were trained.

## D. IR5: Local Capacity to Mitigate and Prepare for Natural Disasters Increased

### 1. Public Awareness

Haiti's greatest problem in confronting disasters has always been the lack of local knowledge of how to reduce vulnerability and prepare for and survive a disaster. At the beginning of the program, SECID conducted a door-to-door survey that included the question, "What can you do to reduce the impact of a natural disaster." Only 5% of the respondents could list any actions—*Nou nan men Bondye, (We are in God's hands*). To overcome this fatalism, the HGRP first focused on showing people that even within their own community, there are different levels of risk. Once people realized, for example, that their house was likely to be flooded whereas their neighbor's was not, they knew that to reduce the impact of a disaster all they needed to do is to go stay with their neighbor. Thus empowered, they were ready to consider a range of mitigation measures.

**Hurricane Iris**
On Friday October 5th, 2001 Hurricane Iris formed in the Caribbean basin. By 5 p.m. it was a hurricane and was predicted to pass within 100km of Jacmel. The local committees in Jacmel and along the coast quickly responded. Most held meetings to discuss how to respond and then activated their alert network. Fortunately the hurricane turned to the south and Jacmel received only light rain. Nevertheless, this proved that the local committees were ready to respond.

To complement the training and public awareness campaign, HGRP funds were used to develop a theme song entitled *Organize-W* (*Get Ready*) and six radio spots. PADF then used its counterpart funds to produce and distribute 200 copies of these on CD. PADF also used its counterpart funds to develop and distribute 120,000 copies of a pamphlet on disaster preparedness.

As a result of these efforts, in the final impact survey, SECID found that 89% of the respondents could cite something that they can do to protect themselves—the HGRP had reached nearly every household.

### 2. Creation of Local Disaster Mitigation and Preparedness Committees

In parallel with the public awareness campaign, the HGRP trained a core group of people in 22 areas to serve as the local disaster mitigation and preparedness committees (in Creole, *Komite Pwoteksyon Sivil Lokal*—KPSL). CDRH guided these committees through a yearlong series of seminars in disaster management. During these seminars, the participants mapped out the areas in their community at risk to flooding, high winds, fire, and landslides and then developed an action plan outlining the mitigation measures required to reduce their vulnerability and their disaster

***Members of the Lafond KPSL present one of their risk maps.***

response plan. All 22 committees were legally recognized by their mayors and succeeded in completing their action plans. Copies of these plans were filed with the local mayor and given to the National Civil Protection Directorate. A sample plan is provided in Volume 2.

### 3. Disaster Management Technical Assistance

FAVA/CA fielded seven disaster specialist volunteers under the HGRP. Five of these volunteers worked with CDRH to improve their training program and two worked with the Civil Protection Directorate in finalizing the National Response Plan. The input of these volunteers was critical to the success of the program since Haiti has such little expertise in disaster management.

### 4. Jacmel Watershed Study

The greatest threat to the Southeast is flooding. The greatest flooding risk in the Southeast is from the Jacmel watershed. The four rivers that comprise the Jacmel watershed (the Grande Rivière de Jacmel, the Gossilene, the Left Branch and the Orangers) come together in the town of Jacmel. Despite this frequent flooding, no mapping had been done of the impact of past floods or any predictions for future events. Given that three of the KPSLs and eight subprojects are within the watershed, the HGRP undertook to contract a detailed study of the flooding potential in the area. A local engineering firm was hired to first gather all meteorological data from the area to determine return rainfall frequencies, then to investigate and map out the watersheds. Given that historically the Orangers River posed the greatest threat of flooding, the firm conducted a more detailed assessment of this river.

This study showed that the main branches of the Jacmel River did not pose serious flooding problems, but that the Orangers River was dramatically too large for its bed. The estimated flood level for the Orangers River was 350 $m^3/s$ whereas the riverbed could only hold 20 $m^3/s$. The study conclusively proved that cleaning the riverbed would not be enough to protect the town of Jacmel from flooding and that a larger scale mitigation effort was required.

### 5. Shelter Study

Before the HGRP, no survey of shelters existed for the project areas. Although each KPSL tried to identify possible shelters, they lacked the technical expertise to be able to properly evaluate the quality of the buildings. Therefore, CHF was asked to develop a list of potential shelters in the 22 HGRP communities. They identified 23 buildings that could be used. Significantly, CHF was able to identify shelters in only 13 of the 22 communities. The other 9 are in critical need of shelters.

## E. Complementary Initiatives

In addition to the main activities, the HGRP undertook a range of complementary initiatives:

- Establishing a tool bank of wheelbarrows, picks, and shovels for a community group in the Archaine to help them execute soil conservation projects in their community.
- Supporting Environment Day in Jacmel: The University of Quisqueya organized this event for which the HGRP financed publicity for the event and gave several presentations.

- Purchasing an ambulance for Jacmel: when the UN pulled out of Haiti, they sold off their surplus equipment. PADF used its counterpart funds to purchase and equip an ambulance for Jacmel.

- Disaster Management Presentation for the Business Community: The HGRP gave a presentation to the Haitian-American Chamber of Commerce on disaster management and preparedness.

- Cape Haitian Flooding Response: On November 1st, the northern city of Cape Haitian received unusually high rains that caused flooding in the suburbs. The HGRP dispatched the first response team to the area. This team arranged for local purchase of the most desperately required supplies. Later the HGRP arranged for the distribution of potable water and financed CRS to restock the supplies they had used.

- Remittances for Development: As part of the effort to better involve the Haitian overseas community in Haiti's development, PADF funded a trip for the HGRP Technical Director and the Project Impact Coordinator to Boston to conduct a seminar with the Haitian community in November 2001. The seminar was very productive and a follow-up seminar has been scheduled for January 2002.

### F. Creating Disaster Resistant Communities

The goal of the program was not to implement each activity in isolation, but to create disaster resistant communities. As such, all of the interventions were performed within 22 targeted areas. As shown in the table to the right, each community received an average of five interventions including the sale of improved seed, infrastructure works, and training. This table is shown with additional detail in annex. By implementing a package of activities in each community, the HGRP was able to provide the tools these communities need to better resist future disasters.

| | Site | Improved Seeds Distributed | Farmer-to-Farmer Placement | Road Rehabilitation | Irrigation System Repaired | Potable Water System Repaired | School Strengthened | Soil Conservation Project | Action Plan Developed | Public Awareness Campaign |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Beauge | X | X | X | X | | | | X | X |
| 2 | Palmiste-a-vin | X | X | | | | | X | X | X |
| 3 | Fondwa | X | | | | | | | X | X |
| 4 | Merceron | X | X | X | X | | | | X | X |
| 5 | Source Sable | X | X | X | X | | | | X | X |
| 6 | Bercy | X | | | X | | | X | X | X |
| 7 | Dory | X | | | X | | | X | X | X |
| 8 | Bois d'Orne | X | | | | | X | X | X | X |
| 9 | Anse-a-Pitres | X | | | X | | | | X | X |
| 10 | Bel-Air | X | | | | X | X | X | X | X |
| 11 | Ka David | X | | | X | X | X | | X | X |
| 12 | Cajeun | X | X | | X | X | X | X | X | X |
| 13 | Charettes | X | X | | X | X | X | X | X | X |
| 14 | Mapou | X | | | | X | X | X | X | X |
| 15 | Bodarie | X | | | | X | X | X | X | X |
| 16 | Musac | X | X | | | | | X | X | X |
| 17 | Lafond | X | | | | X | X | X | X | X |
| 18 | Zoranje | X | | | X | | | X | X | X |
| 19 | Lavanneau | X | | | X | | | | X | X |
| 20 | Cyvadier/Meyer | X | | | X | | | | X | X |
| 21 | Macary | X | | | | X | | | X | X |
| 22 | Marigot/Peredo | X | | | | X | | | X | X |

## IV. Other Complementary US Government Activities

### A. The Federal Emergency Management Agency

The Federal Emergency Management Agency (FEMA) was granted $500,000 for each of the six countries affected by Hurricanes Georges and Mitch (Haiti, the Dominican Republic, El Salvador, Nicaragua, Guatemala, and Honduras). In each of the countries, they divided the funds between strengthening the national capacity for disaster management and executing a local disaster mitigation program along the lines of their Project Impact work in the US.

### 1. Strengthening the National Capacity for Disaster Management

To strengthen the national management capacity, FEMA undertook two actions. The first was to hold an emergency management summit at their training facility in Emmitsburg, MD in June 2000. FEMA invited delegations from each of the six countries to attend. These delegations included representatives from host governments, non-governmental agencies, and the private sector. During this weeklong summit, FEMA presented the basics of how the US manages its disasters. The summit was very successful, both at creating a common understanding of how disasters should be managed and at team building. By the end of the seminar, the Haiti delegation was able to clearly map out Haiti's priorities for disaster management.

The second activity was to work with the DPC and the Ministries to develop both a legal framework for the DPC and the National Disaster Response Plan. For the legal framework, FEMA hired a legal specialist to work with the DPC. For the National Response Plan, FEMA sent two teams to Haiti to draft and revise this plan (in addition, HGRP financed two FAVA/CA placements). By the end of their program, FEMA had completed draft versions of both of these documents.

### 2. Project Impact–Jacmel

FEMA contracted with PADF to implement the local disaster mitigation program, entitled *Project Impact–Jacmel,* for $250,000. The purpose of this program was to bring together the public and private sectors in Jacmel to build a disaster resistant community. Whereas the HGRP focused on rural areas throughout the Southeast, Project Impact–Jacmel focused on the departmental capital and thus developed the overall framework that tied the HGRP initiatives together. The main successes of Project Impact–Jacmel were:

- Jacmel Action Plan: Project Impact assisted the mayor and leading citizens of Jacmel through a yearlong series of seminars to develop an emergency response structure, determine the main threats to the municipality, and to describe the most important mitigation measures that are required. The result of this work is the Jacmel Action Plan.

- Creation of Municipal Committees: At the beginning of Project Impact, there was only one Civil Protection Committee in Jacmel and it covered both the town of Jacmel and the Southeast Department. At the insistence of the DPC, Project Impact helped this committee divide into a departmental committee and ten municipal committees covering each of the municipalities in the Southeast. The DPC and Project Impact worked together to help each of these committees develop an emergency response plan.

- Community Emergency Response Team: One of the needs stressed in the Jacmel Action Plan was for a well-trained team to respond immediately following a disaster. In response, FEMA trained a group of twenty people in Jacmel on first aid,

***FEMA Consultant Steve Pratt explaining search and rescue techniques in Jacmel.***

search and rescue, and fire suppression.

- Mitigation Activities: The Jacmel Civil Protection Committee identified three projects as the top priorities for mitigation works: the construction of a fire station, the protection of the national highway from erosion at the entrance to town (Bassin Caiman), and the protection of the hydroelectric station at Gaillard.

- Public Awareness: As was mentioned above, the lack of public awareness of disaster management is one of Haiti's most serious problems. In addition to further distributing the pamphlets and CDs developed under HGRP, Project Impact sponsored a workshop for journalists on disaster management and presented several radio programs.

## B. The US Department of Agriculture

The US Department of Agriculture provided technical assistance to USAID, funded small soil and water conservation projects, and held a national workshop. Their point person for technical assistance made numerous trips to Haiti during the HGRP. The projects that USDA funded included extending the work on the Palmist-a-Vin and Musac soil conservation projects and executing three small projects with Peace Corps volunteers. In December 2001, the USDA organized the national workshop on improving the durability of soil and water conservation projects

## C. The US Army Corps of Engineers

The main focus of the US Army Corps of Engineers was executing studies of the Jacmel and Marigot River basins. Due to a variety of problems, they did not begin work on these studies until January 2001. They used ground-seeking radar to produce excellent topographic maps of the mouths of these two rivers. However, the Army Corps was unable to obtain enough local information to properly calibrate their watershed models. As a result, they used data from the Dominican Republic and Puerto Rico to complete the models. The flood levels predicted by their models appear to dramatically underestimate the local flooding conditions. USAID has not yet accepted these reports pending clarification on the data and assumptions used in developing the hydrological models. The Army Corps study did however demonstrate that the greatest threat to flooding for the town of Jacmel comes from the Orangers River.

Note that since the Army Corps was so late in starting and did not use local data, the HGRP commissioned the earlier-mentioned Jacmel watershed study. The HGRP study had a narrower focus and complemented the work done by the Army Corps.

Additionally, the Army Corps hired the American architectural firm of Hernandez-Klein to review the HGRP school retrofitting program and to hold a seminar on disaster resistant construction. Through the study, Hernandez-Klien made a number of recommendations as to how future school retrofitting work should be conducted and concluded that the HGRP schools could withstand a minor hurricane and were the strongest buildings in their areas. As a result of the seminar, the Ministry of Public works formed a working committee to review the adoption of a building code for Haiti. This committee continues to hold work sessions as they review the different components of the *International Building Code*.

# V. Management of the Program

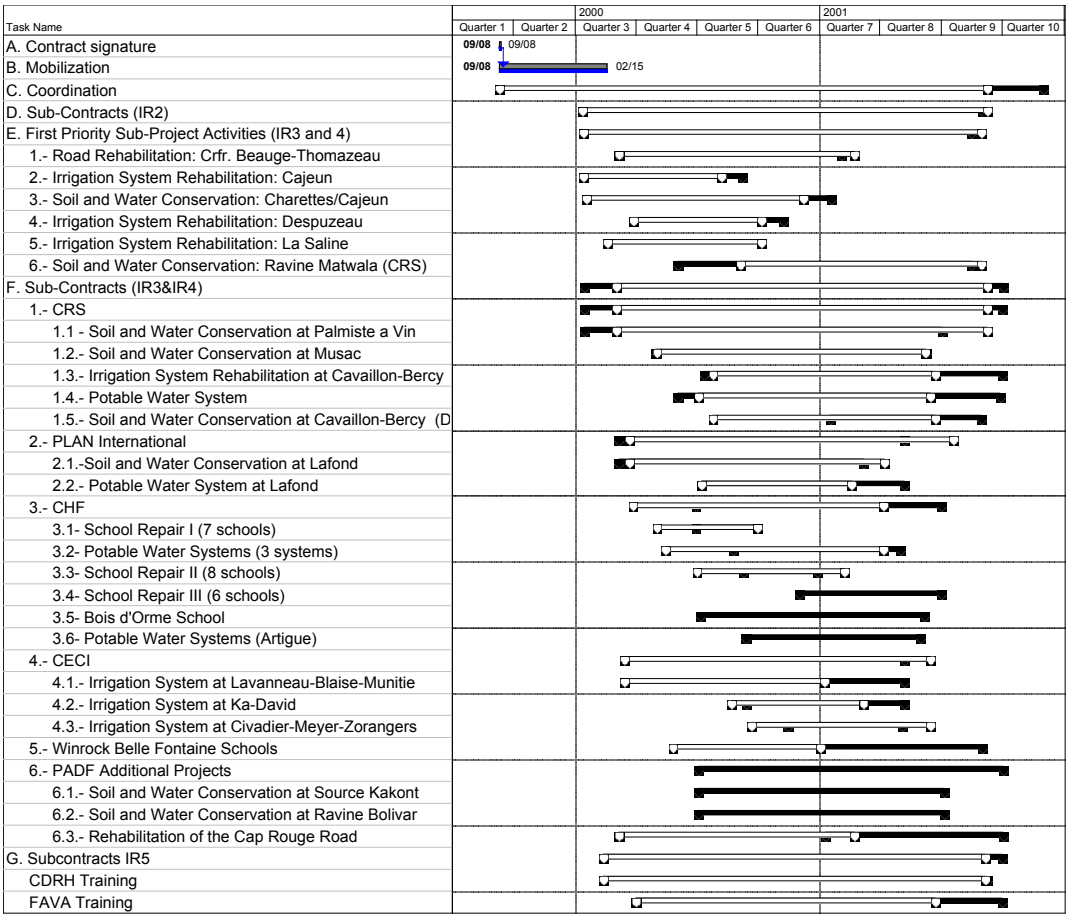
## A. Program Partners

PADF contracted with 24 organizations and individuals to implement the HGRP. The complete list of organizations and details of the contracts and agreements are in annex. The main partners were the following organizations:

- The Center for Human Resource Development (CDRH): Provided training and technical assistance to the 22 local disaster committees.
- Canadian Center for Studies and International Cooperation (CECI): Rehabilitated three irrigation systems.
- Cooperative Housing Foundation (CHF): Repaired 21 schools and four potable water systems.
- The International Center for Tropical Agriculture (CIAT): provided technical assistance to ORE in improving germplasm and conducted field trials of new varieties.
- Catholic Relief Service (CRS): executed four soil and water conservation projects, one potable water project, and one irrigation system rehabilitation project.
- Florida Association of Voluntary Assistance/Caribbean Action (FAVA/CA): fielded seven disaster management volunteers to assist CDRH and the DPC.
- Organization for the Rehabilitation of the Environment (ORE): produced 698 tons of improved seed (an additional ten tons were purchased from Agrotechnique).
- Winrock International: managed the Farmer-to-Farmer program and rehabilitated two schools.
- Plan International: executed one soil and water conservation project and one potable water project.

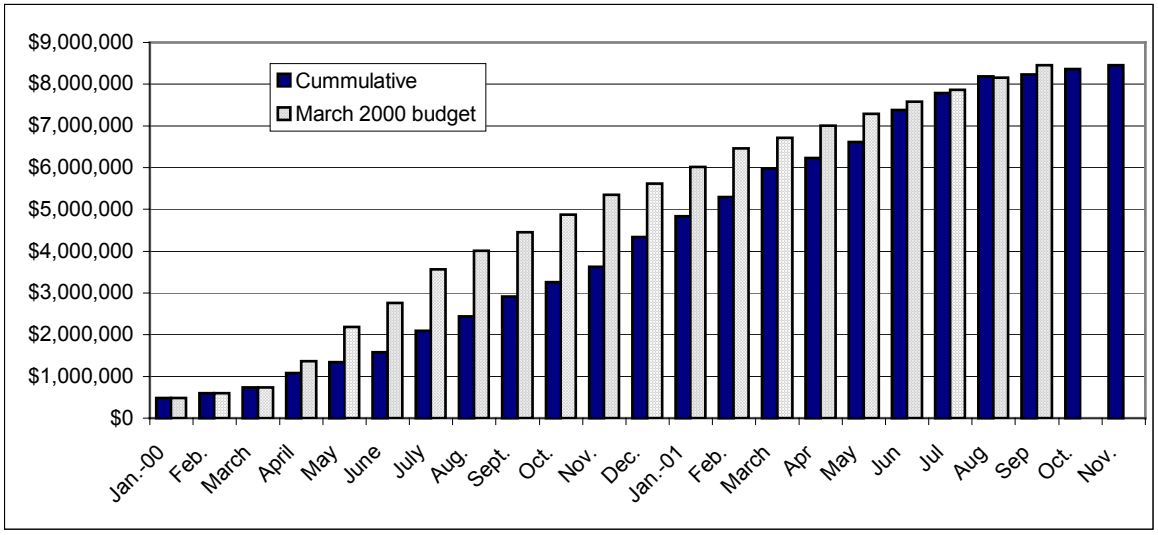
## B. Program Schedule

The HGRP agreement was signed on September 20, 1999. During the final quarter of 1999, PADF focused on mobilizing its office and staff. During the first quarter of 2000, PADF began its first subcontracts and negotiated the contracts with its main partners. Most program activities were implemented from April 2000 through September 2001. The last two months of program implementation were focused on closing down activities and producing the final reports. A summary Gantt chart comparing the original and actual program schedule is on the following page. A detailed version of this Gantt chart is in annex.




## C. Expenditure Rates

The HGRP was continually under intense pressure from USAID/Washington to keep expenditures high, expenditures being equated with progress. USAID/Washington took the March 2000 Work Plan budget as the milestone against which all future expenditures were measured. Unfortunately, project expenditures lagged behind this projection from April 2000 through June 2001 as can be seen in the following graph.



Two significant factors caused this lag. The first was that in March 2000, the US Congress put a hold on all obligations for Haiti. Although the HGRP had already been fully obligated, both PADF and Winrock International had programs that were affected. In both cases this funding hold, which lasted until June 2000, caused a significant amount of additional work as resources were reallocated. In the middle of this freeze, Winrock International announced that they no longer had the resources to develop a $300,000 program under the HGRP. PADF then had to reprogram these funds.

The second factor was underestimating the time required to finalize subagreements, obtain all the required USAID approvals and mobilize the worksites. PADF had originally foreseen most subprojects starting in April. Instead, most work actually began around September 2000.

Finally, the Gourde depreciated rapidly from May through December 2000, losing 25% of its value. Implementation costs did not increase at the same rate. As a result, the program had a surplus of funds. This surplus was used to finance the watershed and shelter studies as well as the Cap Rouge road project.

Although PADF issued a revised budget forecast in July 2000 taking these factors into account, USAID/Washington continued to monitor progress against the March Work Plan.

### D. Monitoring and Evaluation

USAID hired SECID to monitor the implementation of the HGRP. SECID conducted a baseline, midterm, and final impact survey and held a series of small group interviews to discuss the beneficiaries' impressions of the project. SECID produced reports on each of the surveys and focus groups and a final evaluation that documented the rise in disaster awareness and seed use as described above.

### E. Financial Audits

The RIG hired the auditing firm of Mérové-Pierre (a member of the US firm, KPMG) to conduct regular audits of program expenditures. They are conducting a total of seven audits (quarterly for year one, bi-annual for year two, and a final audit covering the two months in fiscal year 2002). These audits have revealed only minor issues, most of which were corrected long before the auditors discovered them.

## VI. Successes and Lessons Learned

The HGRP held a retreat on June 25th 2001 to discuss the successes and lessons learned from the program. The main conclusions of this retreat were the following points:

### A. The Importance of Tight Financial and Technical Controls

To implement a program as diverse as the HGRP, it was critical to maintain several levels of checks for both technical implementation and financial control. Most activities were implemented by local organizations and supervised by nongovernmental organizations that were in turn supervised by PADF. Additionally, USAID supervised PADF and the RIG monitored USAID. Through a tight coordination of the different levels, the HGRP was able to benefit from the expertise of each level without becoming bogged down by the weight of the structure. USAID and PADF's highly skilled engineers, agronomists, and accountants were able to assist the field staff to implement and administer the works much more effectively and to a higher standard than would otherwise have been possible. Therefore the

additional cost of having these multiple layers was more than compensated for by the higher quality work produced. These multiple layers of control should be established for future recovery projects.

## B. Advantage of the Partnership

PADF implemented the HGRP as an umbrella grant program, awarding contracts to 22 different organizations to implement over 40 subprojects, six series of training programs and three studies. By relying on a network of organizations, the HGRP was able to benefit from a broad range of experience. The downside to this partnership was that the program was slow in starting. The partnership succeeded because both USAID and PADF focused on maintaining tight coordination among all of the implementers. This was done through regular partners' meetings, USAID coordination meetings, Haitian Government Steering Committee meetings, and through sharing reports. As a result of this high level of coordination and cooperation, the HGRP benefited from a wide range of implementation experience and the partners gained valuable implementation and administration experience. Rather than creating one large implementing organization that would close at the end of the program, the HGRP strengthened a broad coalition of organizations that continue functioning. Well-coordinated, umbrella projects are the ideal formula for recovery projects.

## C. Community Fund and the 3-2-1 Formula

To ensure a high level of local ownership of the subprojects and to build local capacity, the HGRP paid workers only a portion of the time that was worked. Out of each six-day week, workers were paid for three days of work, two days of work were unpaid, and one day's wages went into a community fund. The purpose of the two days of unpaid labor was both to reduce the cost of the program (unpaid labor accounted for the $300,000 in community participation) as well as to ensure that the local community was willing to invest in the project. The one-day's wage, paid into the community fund, provided a means for the community to continue working after the end of the HGRP. As described above, this fund was used for maintenance, to finance cooperatives, and for a variety of other purposes. Future civil works projects should include both a voluntary labor and a community fund component.

## D. Marketing Improved Seed

The seed distribution program in the HGRP was designed with the assumption that a strong demand existed for the improved seed. As such, no provisions were made for marketing it. However, during the first planting season, few farmers were interested in purchasing the improved seed. Instead, they viewed it as a risky investment. To build interest, the HGRP first focused on educating the HGRP partners on the value of the improved seed and then on marketing it to the farmers. With this increased push, the demand for seed jumped dramatically the second year. Instead of having a surplus, ORE could not produce enough bean seed to meet the demand. At the end of the HGRP, improved seed was accepted throughout the Southeast. However, any future projects involving improved seed must include a significant marketing component.

## E. Administrative Delays in an Emergency Program

Although the HGRP was a short-term emergency program with a fixed completion date and under intense pressure to begin implementation, USAID was still required to review a total of 122 approval requests including:

- 15 approvals for staff

- 21 approvals for the purchase of equipment
- 44 approvals for subcontracts
- 31 approvals for travel authorization
- 4 approvals for contract modification
- 7 miscellaneous approvals

The USAID Haiti mission worked very hard to issue approvals as quickly as possible and worked to give PADF wide latitude in approvals. Nevertheless, USAID did not have authorization for blanket waivers, so the HGRP was forced to continually request approvals. In some cases the approvals concerned important issues that USAID needed to review, such as the four concerning contract modifications. Other approvals were more frivolous such as requesting permission to purchase non-US manufactured motorcycles rather, when no US company has manufactured off-road motorcycles for twenty years. For a future recovery program, USAID should have the authorization to grant blanket waivers for equipment purchase and international travel and should only approve the top project management personnel.

## VII. Follow-on Activities

The successes of the HGRP have resulted in new local initiatives, new government programs and new projects in Haiti. Following are some examples:

- USAID is funding a new program entitled *Program for the Reduction in the Impact of Disastrous Events* (PRIDE) to continue the training and technical assistance for the civil protection committees begun under the HGRP and to determine solutions for the Orangers River flooding problem and to complete the shelter study for the Southeast.

- USDA has agreed to fund the first phase of the *Community Reconstruction for Economic and Environmental Resiliency* (CREER) Program. CREER will build upon the successes of the HGRP in disaster management training, soil and water conservation, and infrastructure repair. This three-year program is budgeted at $9.0 million. The first phase is the first year and is budgeted at $3.4 million.

- CIAT has signed a four-year contract under the USAID-funded Hillside Agriculture Program to continue the seed research begun under the HGRP.

- The Haitian Government has formed a committee that has been meeting every two weeks since September to review the adoption of a building code that will result in more disaster-resistant construction.

- A number of initiatives started by HGRP-financed CBOs continue as well. As examples, one of the local CBOs, CODHA has formed a departmental partnership for the Southeast. Another, ATRADEM has developed a self-supporting cooperative.

- The private sector in Haiti has continued funded the retrofitting of schools. To date, a total of six schools have been funded.

## VIII. Conclusion

The HGRP successfully built disaster resilient communities through tightly coordinating the efforts of a broad range of local, national, and international organizations. USAID is to be commended for providing excellent guidance and support and for working tirelessly to ensure that the other US government agencies' efforts were integrated into the HGRP. Each of the HGRP partners has grown stronger as a result of the program. Even the international NGOs are now better trained and have higher technical standards. Haiti is fortunate to have now gone three years since the last hurricane and, thanks to the work done under HGRP, Haiti is in better shape to face the next one.

# Annex 1
# Subproject Summary Tables

1. **Improved Seed Distribution**
2. **Winrock Farmer-to-Farmer Volunteers**
3. **School Rehabilitation**
4. **Irrigation System Rehabilitation**
5. **Potable Water System Rehabilitation**
6. **Soil and Water Conservation Projects**
7. **HGRP Targeted Communities**
8. **FAVA/CA Volunteers**
9. **Listing of HGRP Subcontracts**
10. **Listing of USAID Approval Requests**

# *Improved Seed Production and Distribution*

### *Commercial Seed Production and Distribution*

| Crop | Variety | Target (tons) | Produced (tons) | Distributed (tons) | Remaining (tons) | % produced | % distributed |
|---|---|---|---|---|---|---|---|
| Corn | Chicken Corn | | 451 | 289 | 162 | | |
| | La Maquina 7827 | | 76 | 35 | 41 | | |
| | **Total** | **500** | **527** | **323** | **204** | **105%** | **65%** |
| Bean | Lore 87 | | 68 | 64 | 4 | | |
| | Tamazulapa | | 37 | 29 | 8 | | |
| | Arroyo Loro Negro | | 10 | 10 | - | | |
| | **Total** | **140** | **115** | **103** | **12** | **82%** | **73%** |
| Sorghum | | **75** | **66** | **37** | **29** | **88%** | **49%** |
| Total | | **715** | **708** | **463** | **245** | **99%** | **65%** |

*Note that the ten tons of Arroyo Loro Negro were purchased directly by PADF from Agrotechnique to fill a shortfall in ORE's bean production*

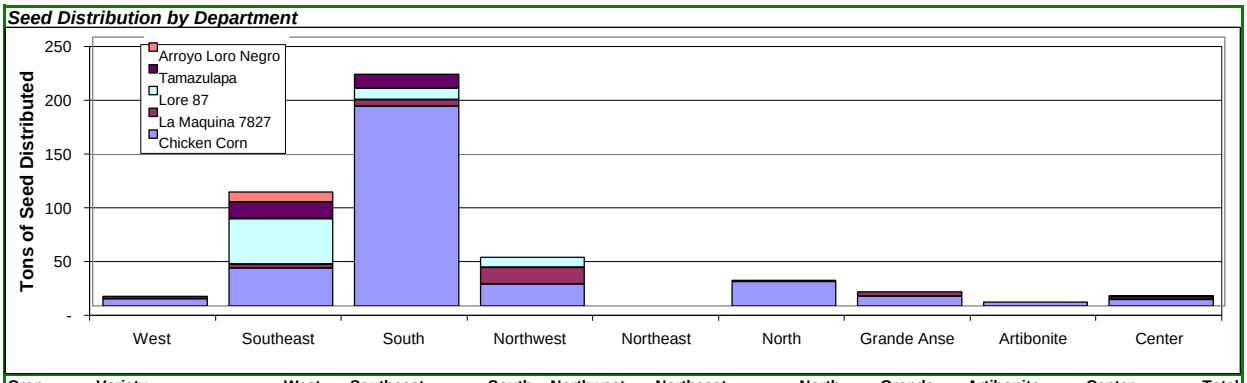
### *Production of Basic Seed*

| Crop | Tons |
|---|---|
| Corn | 13.5 |
| Bean | 10.4 |
| Sorghum | 1.2 |
| **Total Seed** | **25.0** |

### *Seed Use*

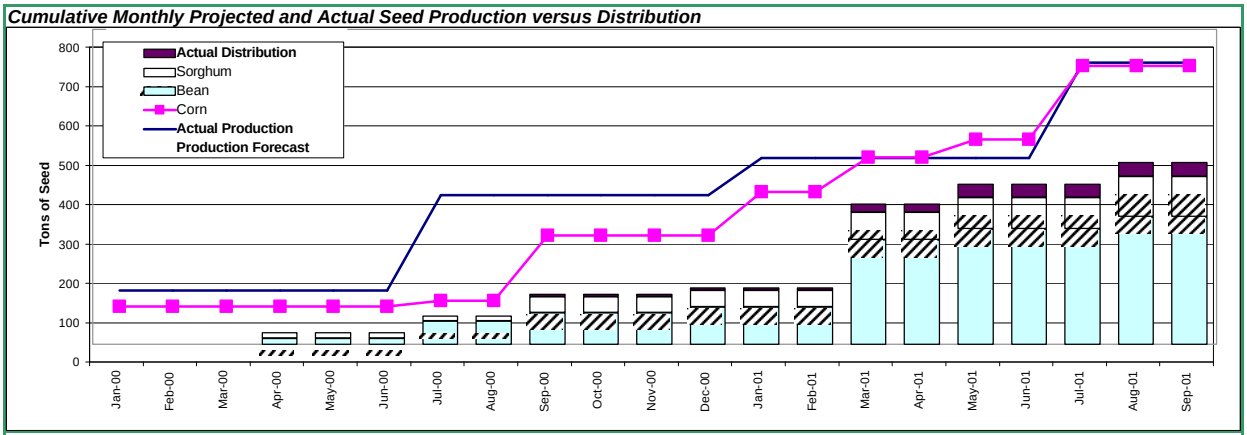
| Crop | Tons of seed distributed | Hectares planted from one ton of seed | Estimated households at 0.75 ha/family | Additional Yield over Traditional Seeds (tons/ton) | Additional Harvest (tons) | Value of Harvest ($/ton) | Additional Value of Harvest from Improved Seeds |
|---|---|---|---|---|---|---|---|
| Corn | 323 | 50 | 20,009 | 40 | 12,935 | $ 180 | $ 2,328,264 |
| Bean | 103 | 125 | 16,455 | 5 | 506 | $ 1,000 | $ 506,177 |
| Sorghum | 37 | 100 | 4,913 | 50 | 1,852 | $ 180 | $ 333,360 |
| **Total** | **436** | | **41,378** | | **15,293** | | **$ 3,167,801** |

### *Seed Distribution by Department*




| Crop | Variety | West | Southeast | South | Northwest | Northeast | North | Grande Anse | Artibonite | Center | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Corn | Chicken Corn | 6.59 | 35.32 | 185.86 | 20.45 | - | 22.55 | 8.64 | 3.50 | 5.82 | 288.73 |
| | La Maquina 7827 | 2.51 | 3.64 | 5.68 | 15.00 | - | 0.86 | 4.45 | - | 2.50 | 34.64 |
| | **Total** | **9.10** | **38.96** | **191.54** | **35.45** | **-** | **23.41** | **13.09** | **3.50** | **8.32** | **323.37** |
| Bean | Lore 87 | - | 42.05 | 10.80 | 9.95 | 0.09 | - | 0.05 | - | 1.00 | 63.94 |
| | Tamazulapa | - | 15.23 | 13.22 | - | 0.09 | - | 0.05 | - | - | 28.59 |
| | Arroyo Loro Negro | - | 10.00 | - | - | - | - | - | - | - | 10.00 |
| | **Total** | **-** | **67.28** | **24.02** | **9.95** | **0.18** | **-** | **0.10** | **-** | **1.00** | **102.53** |
| Sorghum | | **12.27** | **2.73** | **7.36** | **11.36** | **0.09** | **0.73** | **0.41** | **-** | **2.09** | **37.04** |
| Total | | **21.37** | **108.97** | **222.92** | **56.76** | **0.27** | **24.14** | **13.60** | **3.50** | **11.41** | **462.94** |

### *Cumulative Monthly Projected and Actual Seed Production versus Distribution*




| | Oct-99 | Jan-00 | Apr-00 | Jul-00 | Sep-00 | Jan-01 | Mar-01 | May-01 | Aug-01 | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| **Production Forecast** | **70.00** | **66.00** | **-** | **243.00** | **-** | **94.00** | **-** | **-** | **243.00** | **716.00** |
| **Actual Production** | **-** | **96.00** | **-** | **15.00** | **165.30** | **110.07** | **88.60** | **45.00** | **188.00** | **707.97** |
| **Actual Distribution** | **-** | **-** | **28.85** | **43.04** | **55.31** | **15.61** | **212.20** | **50.00** | **57.93** | **462.94** |
| Corn | - | - | 15 | 43 | 21 | 16 | 170 | 28 | 31 | 323 |
| Bean | - | - | 14 | - | 28 | - | 28 | 10 | 22 | 103 |
| Sorghum | - | - | - | - | 6 | - | 15 | 12 | 4 | 37 |

## *Winrock Farmer-to-Farmer Volunteers*

| # | SOW | Name | Description | Location of Work | CBO Sponsor(s) | Start | End | No. Days |
|---|---|---|---|---|---|---|---|---|
| 1 | HAI001 | Arden Colehour | Integrated Farming | Despuzeau | Groupement Paysan de Cotin | 5-Jun-00 | 19-Jun-00 | 14 |
| 2 | HAI002 | Mark Stopha | Aquaculture | Cap Rouge, Palmist-a-Vin | IDPG | 14-Oct-00 | 30-Oct-00 | 16 |
| 3 | HAI005 | John Fitzgerald | Garlic Expert | Despuzeau, Cayes-Jacmel | Groupement de Paysan de Cotin, CODHA | 16-Sep-00 | 30-Sep-00 | 14 |
| 4 | HAI008 | Greg Fonsah | Banana Production | Cap Rouge, Palmist-a-Vin | IDPG, CODHA | 9-Oct-00 | 23-Oct-00 | 14 |
| 5 | HAI009 | Norm Bezona | Coffee production | Cap Rouge | IDPG, CODHA | 6-Mar-01 | 21-Mar-01 | 15 |
| 6 | HAI010 | Doyle Burch | Irrigation | Camp Perrin | ORE | 22-Apr-01 | 5-May-01 | 13 |
| 7 | HAI011 | Ann Harmen | Beekeeping | Roseaux and Gommiers | Société de Développement des Gommiers (SODECOM), Jérémie, Grande-Anse | 16-Apr-01 | 28-Apr-01 | 12 |
| 8 | HAI012 | David Willett | Cooperative Development | Beaumont | Cooperative Agricole pour le Développement de Fond Déron, KADEFB, Grande-Anse | 7-Mar-01 | 21-Mar-01 | 14 |
| 9 | HAI007 | Gary Pelter | Vegetable Crop | Palmist-a-Vin, Cajeun | AGPG | 10-May-01 | 25-May-01 | 15 |
| 10 | HAI003 | Jim McNitt | Rabbit | Cajeun | IDPG, CODHA | 14-May-01 | 26-May-01 | 12 |
| 11 | HAI015 | Fred Billerbeck | Fruit Processing | Camp Perrin | ORE | 20-May-01 | 3-Jun-01 | 14 |
| 12 | HAI013 | Howard Hirae | Banana | Camp Perrin | ORE | 13-Jun-01 | 27-Jun-01 | 14 |
| 13 | HAI006 | Adaire Morse | Marketing &Accounting | Musac | COREM | 10-Jun-01 | 23-Jun-01 | 13 |
| 14 | HAI004 | Bruce Olcott | Goat Breeding | Cayes-Jacmel | CODHA | 10-Jun-01 | 24-Jun-01 | 14 |
| 15 | HAI004 | Donya Olcott | Goat Breeding | Cayes-Jacmel | CODHA | 10-Jun-01 | 24-Jun-01 | 14 |
| 16 | HAI017 | Bill Daniels | Aquaculture | Palmist-a-Vin | AGPG | 30-Jun-01 | 17-Jul-01 | 17 |
| 17 | HAI016 | Frank Babiak | Coffee | Cap Rouge and Baumont | FACN | 30-Jun-01 | 7-Jul-01 | 7 |
| 18 | HAI014 | Michael Kessler | Corn Grit Production | Camp Perrin | ORE | 16-Jul-01 | 2-Aug-01 | 17 |
| 19 | HAI018 | John Fitzgeralds | Garlic and Vegetable Production | Despuzeau, Cayes-Jacmel | Groupement de Paysan de Cotin, CODHA | 22-Jul-01 | 5-Aug-01 | 14 |
| 20 | HAI019 | Michelle Fitzgeralds | Grant Writing | Port-au-Prince | Organisation Internationale de Femmes Indépendantes d 'Haïti | 22-Jul-01 | 5-Aug-01 | 14 |
| | | | | | | | **Total** | **277** |

## *Summary of IR 2 and IR3 Subprojects*

| Type of Work | Objective | | USAID Financed | Counterpart Financed | Community Participation | Total |
|---|---|---|---|---|---|---|
| Soil Conservation | 1,103 | ha | $ 774,728 | $ - | $ 170,343 | $ 945,072 |
| Road Rehabilitation | 22 | km | $ 645,902 | $ - | $ 10,967 | $ 656,869 |
| Irrigation Systems | 3,090 | ha | $ 845,286 | $ - | $ 118,392 | $ 963,678 |
| Potable Water Syster | 36 | km | $ 207,999 | $ 53,889 | $ 65,424 | $ 327,312 |
| Schools | 25 | units | $ 244,706 | $ 20,833 | $ 14,079 | $ 279,619 |
| | | | $ 2,718,621 | $ 74,722 | $ 379,206 | $ 3,172,549 |

## *Schools Rehabilitated or Rebuilt under the HGRP*

| # | NGO | Name of School | Municipality | Depart. | Financed Cost | Community Participation | Total Cost | Principal Work Performed |
|---|---|---|---|---|---|---|---|---|
| 1 | CHF | Ecole Nationale de Bony | Anses à Pitres | Southeast | $ 4,190 | $ 261 | $ 4,451 | Rehabilitation of the roof, plastering, doors, 1340 $m^2$ |
| 2 | CHF | Ecole Nationale de Grisgris | Bainet | Southeast | $ 4,369 | $ 168 | $ 4,537 | Rehabilitation of roof and windows, plastering |
| 3 | CHF | Ecole Nationale de Cibao | Belle Anse | Southeast | $ 5,278 | $ 375 | $ 5,653 | Rehabilitation of the roof, plastering, doors, 350 $m^2$ painting, sanitary block |
| 4 | CHF | Ecole Nationale de Nan Malgre | Belle Anse | Southeast | $ 6,044 | $ 180 | $ 6,224 | Rehabilitation of roof, walls and windows, plastering |
| 5 | CHF | Lycee of Belle Anse | Belle Anse | Southeast | $ 7,163 | $ 162 | $ 7,325 | Rehabilitation of the roof, plastering, windows, 12 $m^2$ of wall, doors |
| 6 | CHF | Collège Notre Dame de l'Assomption | Cayes Jacmel | Southeast | $ 4,117 | $ 290 | $ 4,406 | Rehabilitation of the roof, plastering, doors, 58 $m^2$ of wall, 47 $m^2$ of outdoor paved floors |
| 7 | PADF | Ecole National Raymond | Cayes-Jacmel | Southeast | $ 10,417 | $ 333 | $ 10,750 | Rehabilitation of the roof, reparing walls, painting, replacing 11 doors, improving the plumbing |
| 8 | PADF | Ecole Leslie Lamour | Jacmel | Southeast | $ 10,417 | $ 333 | $ 10,750 | Rehabilitation of the roof, plastering, painting, replacing 12 doors, rewiring the electricity, repairing the wall |
| 9 | CHF | Ecole Nationale de Meyer | Jacmel | Southeast | $ 3,743 | $ 39 | $ 3,782 | Rehabilitation of the roof, plastering, doors |
| 10 | CHF | Nationale de Edesse Gousse | Jacmel | Southeast | $ 5,046 | $ 198 | $ 5,244 | Rehabilitation of roof, floor, doors, windows |
| 11 | CHF | Ecole Nationale de Lafond | Jacmel | Southeast | $ 6,597 | $ 237 | $ 6,834 | Rehabilitation of the roof, plastering |
| 12 | CHF | Ecole Nationale Exina Gilles | Jacmel | Southeast | $ 7,163 | $ 264 | $ 7,427 | Plastering of ceiling of concrete slab and foundations |
| 13 | CHF | Ecole Nationale de Cabaret | Jacmel | Southeast | $ 8,701 | $ 104 | $ 8,804 | Rehabilitation of the roof, plastering, doors, 106 $m^2$ of wall, window |
| 14 | CHF | Ecole Nationale Charles Moravia | Jacmel | Southeast | $ 16,343 | $ 138 | $ 16,481 | Rehabilitation of the roof, plastering, 8 doors and windows, 192 $m^2$ of ceiling, 192 $m^2$ of floor |
| 15 | CHF | Ecole Nationale Sainte Rose de Dade | La Vallée de Jacmel | Southeast | $ 3,789 | $ 285 | $ 4,074 | Plastering, doors, 37 $m^2$ of wall, 132 $m^2$ of floor |
| 16 | CHF | Ecole Nationale des Filles de Marigot | Marigot | Southeast | $ 7,028 | $ 459 | $ 7,487 | Rehabilitation of roof, 135 $m^2$ of ceiling, doors, window |
| 17 | CHF | Ecole Nationale de Garcons de Marigot | Marigot | Southeast | $ 8,144 | $ 117 | $ 8,260 | Roof rehabilitation, plastering, painting, 3 doors |
| 18 | CHF | Ecole Nationale de Thiotte | Thiotte | Southeast | $ 3,091 | $ 216 | $ 3,307 | Rehabilitation of the roof, plastering, doors, 720 $m^2$ painting |
| 19 | CHF | Ecole Nationale de Bodarie | Thiotte | Southeast | $ 3,270 | $ 102 | $ 3,372 | Rehabilitation of roof, windows and plastering |
| 20 | CHF | Ecole Communautaire Jean XXIII | Thiotte | Southeast | $ 6,077 | $ 189 | $ 6,266 | Rehabilitation of the roof, plastering, 350 $m^2$ of wall |
| 21 | CHF | Ecole Morne des Commissaires | Thiotte | Southeast | $ 13,026 | $ 762 | $ 13,788 | Rehabilitation of two buildings including roof, plastering, doors, 500 $m^2$ of wall, 154 $m^2$ of floors |
| 22 | CHF | Ecole Nationale de Bois d'Orme | Thiotte | Southeast | $ 50,547 | $ 3,139 | $ 53,686 | Reconstruction of two buildings plus latrines and a cisterne |
| 23 | Winrock | Ecole de Grande Chasse | Belle Fontain | West | $ 33,333 | $ 2,000 | $ 35,333 | Reconstruction of one building plus latrines and a cisterne |
| 24 | Winrock | Ecole de Grande Savanne | Belle Fontain | West | $ 33,333 | $ 2,000 | $ 35,333 | Reconstruction of one building plus latrines and a cisterne |
| 25 | CHF | Centre Educatif de Furcy | Furcy | West | $ 4,315 | $ 1,728 | $ 6,043 | Roof repair, columns, windows |
| | | **Total** | | | $ 265,540 | $ 14,079 | $ 279,619 | |

## *Road Rehabilitation*

| | Carrefour Beaugé-Thomazeau | The Cap Rouge Road | Total |
|---|---|---|---|
| NGO | PADF | PADF | |
| Contractor | NACOSSE | G&P Engineering | |
| CBO | ATRADEM | - | |
| Length (km) | 11.7 | 10.6 | 22.3 |
| Clearing and Grubbing (km) | 11.7 | 10.6 | 22.3 |
| Excavation: Unsuitable (m3) | 3,236 | 3,996 | 7,232 |
| Backfill (m3) | 33,516 | 14,027 | 47,543 |
| Grading and compacting (m2) | 81,900 | 60,682 | 142,582 |
| Concrete pavement (m2) | - | 316 | 316 |
| Earthen ditches (m) | 15,410 | 2,738 | 18,148 |
| Masonry ditches (m) | - | 300 | 300 |
| Culverts (units) | 31 | 21 | 52 |
| Gabions (m3) | - | 175 | 175 |
| | | | |
| HGRP Financed | $355,984 | $289,918 | $645,902 |
| Community Participation | $10,967 | - | $10,967 |
| **Total** | $366,951 | $289,918 | $656,869 |
| **Cost per kilometer** | $31,363 | $27,480 | $29,422 |

## *Irrigation System Rehabilitation Projects*

| # | NGO | CBO | Name of the Irrigation Systems | *Area (ha)* | *Canal Cleaning (m3)* | *Reinforcement of banks (km)* | *Masonary Work (m3)* | *Concrete (m3)* | *Gates* | *Gabions (m3)* | *Plaster coating (m2)* | *Excavation at Spring or Dam (m3)* | *USAID Financed Cost* | *Community Partticipation* | *Total* | *Cost per hectare* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | PADF | IPDG | Cajeun | 50 | 4,720 | - | 1,074 | 133 | 15 | - | - | 75 | $ 84,502 | $ 21,700 | $ 106,202 | $ 2,124 |
| 2 | CRS | CARITAS | Cavaillon, Bercy & Clonard | 574 | 9,500 | 17.1 | - | - | 30 | - | - | - | $ 203,863 | $ 27,211 | $ 231,074 | $ 403 |
| 3 | CECI | ATASE | Civadier--Meyer--Orangers | 216 | 3,700 | - | 800 | 105 | 35 | 80 | - | - | $ 74,847 | $ 8,542 | $ 83,388 | $ 386 |
| 4 | PADF | TADI | Despuzeau | 1,075 | 17,400 | - | 780 | 185 | 15 | - | - | 1,350 | $ 148,741 | $ 20,621 | $ 169,362 | $ 158 |
| 5 | PADF | MODPA | La Saline (Anse-à-Pitres) | 350 | 9,450 | - | 1,570 | 185 | 35 | - | 60 | 405 | $ 113,793 | $ 15,433 | $ 129,225 | $ 369 |
| 6 | CECI | Sauvons Un Pays | Lavaneau--Desmarathe--Blaise--Munitie | 450 | 3,230 | - | 861 | 101 | 11 | 1,970 | - | - | $ 125,510 | $ 12,040 | $ 137,549 | $ 306 |
| 7 | CECI | FEUCAJ | Ka David | 375 | 6,113 | - | 869 | 69 | 35 | 190 | - | - | $ 94,031 | $ 12,846 | $ 106,877 | $ 285 |
| | | | **Totals** | 3,090 | 54,113 | 17 | 5,954 | 778 | 176 | 2,240 | 60 | 1,830 | $ 845,286 | $ 118,392 | $ 963,678 | $ 576 |

**Notes:** 1. The Cajeun system was significantly more expensive per hectare than the other systems because it involved almost exclusively masonry works.
2. The Despuzeau system was the least expensive because it involved the least amount of masonry per hectare.

## *Potable Water System Rehabilitation Projects*

| # | NGO | CBO | Description | Length (km) | Number of Benificiaries | Gabions (m3) | Repairs to pipes (km) | New Pipe Installed | Repairs to Spring Capping (units) | Repairs to resevoir (m3 capacity) | Construction of resevoir (m3 capacity) | Public Fountains Repaired (unit) | Public Fountains Built (unit) | Public washing areas built (units) | Public washing areas repaired (units) | USAID Financed | Counterpart Financed | Community Participation | Total | Cost per km |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Plan | KOMELAK | Lafond | 5.1 | 2,000 | 1,200 | 5.1 | | - | - | 265 | 8 | 4 | 2 | - | $ 86,641 | - | $ 17,305 | $ 103,946 | $ 20,382 |
| 2 | PADF | IPDG | Cajeun | 0.2 | 2,000 | - | - | 0.2 | - | - | - | - | 1 | 1 | - | $ 14,000 | - | $ 1,000 | $ 15,000 | $ 75,000 |
| 3 | CHF | FPGD | Charette | 4.5 | 2,500 | - | - | 3.6 | - | 250 | - | 6 | - | - | 4 | $ 11,747 | - | $ 8,926 | $ 20,673 | $ 4,594 |
| 4 | CRS | CARITAS | Bodarie | 3.5 | 6,600 | - | 1.5 | | 2.0 | 212 | - | 3 | - | 1 | - | $ 16,876 | $ 34,283 | $ 11,154 | $ 62,313 | $ 17,804 |
| 5 | CRS | CARITAS | Zorange and Marjoffre | 0.5 | 1,800 | | 0.3 | | | 100 | | | | | | $ 2,471 | $ 4,899 | $ 1,595 | $ 8,965 | $ 17,930 |
| 6 | CRS | CARITAS | Bolivar | 1.0 | 6,600 | | 0.9 | | | 200 | | | | | | $ 7,258 | $ 14,707 | $ 4,779 | $ 26,744 | $ 26,744 |
| 7 | CHF | ART-LIM | Artigue and Limè | 9.0 | 800 | - | | 3.0 | - | | - | 8 | - | - | - | $ 10,243 | - | $ 7,736 | $ 17,979 | $ 1,998 |
| 8 | CHF | MACARY | Macary-Moril | 5.3 | 5,200 | - | | 2.4 | - | | 10 | 8 | - | - | - | $ 11,093 | - | $ 6,511 | $ 17,605 | $ 3,322 |
| 9 | CHF | UJM | Mahotiere | 5.2 | 3,750 | - | | 3.8 | - | 60 | - | 3 | - | - | 4 | $ 13,206 | - | $ 5,418 | $ 18,624 | $ 3,582 |
| 10 | PADF | CARITAS | Source Kakont | 1.5 | 2,500 | - | 1.5 | - | - | | 19 | | 2 | - | - | $ 34,464 | - | $ 1,000 | $ 35,464 | $ 23,643 |
| | | | | **35.8** | **33,750** | **1,200** | **9.3** | **13** | **2** | **822** | **294** | **36** | **7** | **4** | **8** | **$ 207,999** | **$ 53,889** | **$ 65,424** | **$ 327,312** | **$ 19,500** |

**Notes:**

1. The Cajeun system rehabilitated as part of the Cajeun Irrigation project. The work consisted of installing public fountains and showers near the spring.
2. The Source Kakont system was rehabilitated as part of the Source Kakont Soil and Water Conservation project. The work involved installing two sets of fountains, one at the spring and a second 1.5 km away.

## *Soil and Water Conservation Projects*

| # | NGO | CBO | Description | *Area (ha)* | *Ravines (km)* | *Gulley Plugs (m3)* | *Gabions (m3)* | *Trees* | *Other Plants* | *Hedgerows (km)* | *Contour Canals (km)* | *Dry Stone Wall (km)* | *Financed Cost* | *Community Participation* | *Total* | *Cost per hectare* | *Cost per km of Ravine* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | CRS | COREM | Bahot-Musac | 86 | 5.6 | 1,044 | | 41,338 | | 56 | | | $ 69,265 | $ 7,216 | $ 76,481 | $ 890 | $ 158 |
| 2 | CRS | CARITAS | Cavaillon-Bercy | 204 | 6.0 | 6,917 | | 47,418 | | 160 | | 10 | $ 66,648 | $ 23,125 | $ 89,773 | $ 440 | $ 73 |
| 3 | CRS | AGPP | Palmiste à Vin | 114 | 8.2 | 3,946 | | 52,100 | | 76 | | | $ 113,319 | $ 20,121 | $ 133,440 | $ 1,169 | $ 143 |
| 4 | CRS | AASCOB | Ravine Matwala | 48 | 13.0 | 10,000 | | 48,000 | 12,000 | | | 10 | $ 120,336 | $ 24,982 | $ 145,318 | $ 3,017 | $ 232 |
| 5 | PADF | CARITAS | Source Kakont | 80 | 6.4 | 2,493 | 40 | 85,214 | 36,600 | | | 18 | $ 53,973 | $ 17,240 | $ 71,213 | $ 893 | $ 139 |
| 6 | PADF | CODHA | Charettes/Cajeun | 289 | 21.0 | 2,000 | | 190,000 | 23,000 | 120 | 12 | 20 | $ 187,888 | $ 42,316 | $ 230,204 | $ 796 | $ 38 |
| 7 | PADF | GRASE | Nan Plézi | 132 | 16.4 | 6,423 | 113 | 80,886 | 110,653 | 45 | 3 | 17 | $ 60,317 | $ 12,603 | $ 72,920 | $ 552 | $ 34 |
| 8 | Plan | KODEL | Lafond | 149 | 8.6 | 8,812 | | 120,000 | 50,000 | 38 | | 24 | $ 102,982 | $ 22,740 | $ 125,722 | $ 842 | $ 97 |
| | | | | 1,103 | 85.2 | 41,635 | 153 | 664,956 | 232,253 | 494 | 15 | 99 | 774,728 | 170,343 | $ 945,072 | $ 1,075 | $ 114 |

The area covered by the soil conservation projects is the actual area protected by the structures. It is calculated by adding together the area protected by each of the interventions. The details of the calculation are as follows:

| | Calculation | | Notes |
|---|---|---|---|
| | Ravines: | L x 1000m/km x 4m width | 4 meters is the average width of the ravines. Only the ravine bed is considered in this calculation. |
| + | Trees: | N x 10$m^2$/tree x 66% survival rate | Each tree or plant is assumed to protect the area immediately around itself. |
| + | Other plants: | N x 1$m^2$/plant x 66% survival rate | |
| + | Dry Stone Wall : | L x 1000m/km x 10m width | Dry stone walls, hedgerows and contour canals are built at 10m intervals |
| + | Hedgerows: | L x 1000m/km x 10m width | |
| + | Contour Canals: | L x 1000m/km x 10m width | |
| | Total Area: | | The total area in meters divided by 10,000 $m^2$/ha to convert to hectares |

The Ravine Matwala project was significantly more expensive than the others since most of the work was focused on constructing gulley plugs to protect ravines rather than on the less expensive hillside measures.

## *Resiliency of the Targeted Communities*

| | Site | Rural Section | Municipality | Dept. | Improved Seeds Distributed | Farmer-to-Farmer Placement | Road Rehabilitation | Irrigation System Repaired | Potable Water System Repaired | School Strengthened | Soil Conservation Project | Action Plan Developed | Public Awareness Campaign | Number of Interventions |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Beauge | 1ere Galet Chambon | Ganthier | West | X | X | X | X | | | | X | X | 6 |
| 2 | Palmiste-a-vin | 15eme Palmiste-a-vin | Leogane | West | X | X | | | | | X | X | X | 5 |
| 3 | Fondwa | 10eme Fondwa | Leogane | West | X | | | | | | | X | X | 3 |
| 4 | Merceron | 2eme Grande Plaine | Thomazeau | West | X | X | X | X | | | | X | X | 6 |
| 5 | Source Sable | 2eme Grande Plaine | Thomazeau | West | X | X | X | X | | | | X | X | 6 |
| 6 | Bercy | 2eme Martineau | Cavaillon | South | X | | | X | | | X | X | X | 5 |
| 7 | Dory | 10eme Dory | Maniche | South | X | | | X | | | X | X | X | 5 |
| 8 | Bois d'Orne | 2eme Bois d'Orne | Anse-a-Pitres | Southeast | X | | | | | X | X | X | X | 5 |
| 9 | Anse-a-Pitres | 1ere Anse-a-Pitres | Anse-a-Pitres | Southeast | X | | | X | | | | X | X | 4 |
| 10 | Bel-Air | 5eme Bel-Air | Belle Anse | Southeast | X | | | | X | X | X | X | X | 6 |
| 11 | Ka David | 1ere Ravine Normande | Cayes-Jacmel | Southeast | X | | | X | X | X | | X | X | 6 |
| 12 | Cajeun | 2eme Gaillard | Cayes-Jacmel | Southeast | X | X | | X | X | X | X | X | X | 8 |
| 13 | Charettes | 2eme Gaillard | Cayes-Jacmel | Southeast | X | X | | X | X | X | X | X | X | 8 |
| 14 | Mapou | 1ère Bodarie | Grand Gosier | Southeast | X | | | | X | X | X | X | X | 6 |
| 15 | Bodarie | Quartier | Grand Gosier | Southeast | X | | | | X | X | X | X | X | 6 |
| 16 | Musac | La Vallee de Jacmel | Jacmel | Southeast | X | X | | | | | X | X | X | 5 |
| 17 | Lafond | 1ere Bas Cap Rouge | Jacmel | Southeast | X | | | | X | X | X | X | X | 6 |
| 18 | Zoranje | 1ere Bas Cap Rouge | Jacmel | Southeast | X | | | X | | | X | X | X | 5 |
| 19 | Lavanneau | 12eme Lavanneau | Jacmel | Southeast | X | | | X | | | | X | X | 4 |
| 20 | Cyvadier/Meyer | 1ere Jacmel | Jacmel | Southeast | X | | | X | | | | X | X | 4 |
| 21 | Macary | 3eme Macary | Marigot | Southeast | X | | | | X | | | X | X | 4 |
| 22 | Marigot/Peredo | 1ere Marigot | Marigot | Southeast | X | | | | X | | | X | X | 4 |
| | | | | | | | | | | | | | Average | 5.3 |

The goal of the HGRP was not to implement individual subprojects, rather to create disaster-resistant communities. Therefore, the HGRP focused on providing a wide range of assistance to each community including seed distribution, infrastructure works, and training.

The above table indicates the types of activities implemented in each community. By providing an average of 5.3 activities per community, the HGRP was able to assist these areas in becoming more resilient to future disasters.

Note that the only community that did not receive an HGRP IR3 or IR4 project was Fondwa. HGRP had planned on rehabilitating a road in this area but found that the work was not technically feasible. This community did benefit from a large PL-480 funded soil and water conservation project

## *FAVA/CA Disaster Management Volunteers*

| # | Name | Assignment | Dates |
|---|---|---|---|
| 1 | Julie Collins | Review the CDRH training program | June 20-23, 2000 |
| 2 | David Crisp | Enhance emergency training at the grassroots level. | January 8-13, 2001 |
| 3 | Irene Cabral | Technical assistance for the civil protection action plan. | March 1-4, 2001 |
| 4 | William Pollock | Technical assistance for improving GIS for action plans | March 1-4, 2001 |
| 5 | Julie Collins | Design of a disaster simulation | April 24-29, 2001 |
| 6 | Julie Collins | Technical assistance on the National Response Plan | September 6-13, 2001 |
| 7 | Marc Roger | Technical assistance on the National Response Plan | September 21-29, 2001 |

## *Listing of HGRP Subcontracts and Subagreements*

| | Organization | Date Signed | Amount | Description |
|---|---|---|---|---|
| 1 | CIAT | 1-Jan-00 | $400,000 | Technical assistance to ORE to develop improved germplasm |
| 2 | ORE | 13-Jan-01 | $385,169<br>G 18,301,565 | Sale and distribution of improved corn, bean and sorghum seeds |
| 3 | Winrock International | 13-Jan-01 | $200,025 | Provision of 15 volunteer consultancies from US farmers |
| 4 | IPDG | 17-Feb-01 | G 2,608,797 | Rehabilitation of the irrigation system at Cajeun |
| 5 | CODHA | 17-Feb-01 | G 4,735,390 | Soil conservation at Cajeun-Charette |
| 6 | MOPDA | 26-Mar-01 | G 3,044,738 | Rehabilitation of the irrigation system at Anse-a-Pitre |
| 7 | CDRH | 8-Mar-01 | $156,927<br>G 7,150,408 | • Training in disaster preparedness and mitigation;<br>• Training in infrastructure maintenance<br>• Community mobilization |
| 8 | FAVA/CA | 6-Apr-01 | $48,000 | Provision of eight volunteer consultancies in disaster preparedness and mitigation. |
| 9 | CRS | 6-Apr-01 | $767,104 | • Soil conservation at Palmist-a-Vin<br>• Soil conservation at Musac<br>• Soil conservation at Matwala<br>• Irrigation rehabilitation at Cavaillon<br>• Potable water system repairs in SE |
| 10 | CHF | 4-May-01 | $119,914<br>G 7,521,345 | Repairs to 22 schools, 20 km of potable water systems and a shelter study |
| 11 | TADI | 16-May-01 | G 3,101,847 | Rehabilitation of the Despuzeau irrigation system |
| 12 | ATRADEM | 17-May-01 | G 3,579,055.60 | Rehabilitation of the road from Thomazeau to the Carrefour Beaugé |
| 13 | Plan International | 22-May-01 | $339,508 | • Soil conservation at Lafond<br>• Potable water at Lafond<br>• River Bank protection for Les Orangers |
| 14 | CECI | 26-May-01 | $443,662 | Repairs to 3 irrigation systems |
| 15 | NACOSE | 27-Jul-01 | G 5,227,763.40 | Rehabilitation of the road from Thomazeau to the Carrefour Beaugé |
| 16 | Winrock International | 30-Aug-01 | G 1,060,844.10 | Rehabilitation of two Belle Fontaine Schools |
| 17 | CARITAS | 11-Oct-01 | G 1,716,845.76 | Soil conservation in Bel Air |
| 18 | GRASE | 18-Oct-01 | G 1,500,029.55 | Soil conservation in Nan Plezi |
| 19 | CRS | 11-Dec-01 | $27,572 | Replace emergency supplies used during Cap Haitian Flooding |
| 20 | ESC | 22-Dec-01 | G 1,640,990 | Watershed study for the Jacmel Rivers |
| 21 | G&P Engineering | 5-Apr-01 | G 6,533,200 | Rehabilitation of the Cap Rouge Road |
| 22 | Hydrotech | 12-Jun-01 | G 920,000 | Irrigation system maintenance training |
| 23 | AJKD | 12-Jun-01 | G 437,500 | Soil and water conservation maintenance training |
| 24 | Suze Gesse | 12-Jun-01 | G 125,028.75 | Road maintenance training |

## *Listing of USAID Approval Requests*

| | Date | Description | Key Staff Positions | Purchases | Subcontract Approvals | Travel Authorizations | Modifications to Contract | Other |
|---|---|---|---|---|---|---|---|---|
| 1 | 27-Sep-99 | Transfer equipment to HGRP | | X | | | | |
| 2 | 5-Oct-99 | Permission to hire Fillippi | X | | | | | |
| 3 | 6-Oct-99 | Purchase vehicles for PADF | | X | | | | |
| 4 | 4-Nov-99 | Permission to hire Judette | X | | | | | |
| 5 | 10-Nov-99 | Revise work plan submittal schedule | | | | | X | |
| 6 | 15-Nov-99 | Waiver on stickers on vehicles | | | | | | X |
| 7 | 20-Dec-99 | Hire Dan O'Neil | X | | | | | |
| 8 | 5-Jan-00 | CIAT contract | | | X | | | |
| 9 | 5-Jan-00 | ORE Contract | | | X | | | |
| 10 | 6-Jan-00 | Request to purchase tools | | X | | | | |
| 11 | 28-Jan-00 | Vehicle use policy | | | | | | X |
| 12 | 9-Feb-00 | Request for ORE Motorcycles | | X | | | | |
| 13 | 11-Feb-00 | Submission of CDRH contract | | | X | | | |
| 14 | 14-Feb-00 | Request to purchase vehicle CIAT-ORE | | X | | | | |
| 15 | 20-Feb-00 | Permission for Anse-a-Pitres | | | X | | | |
| 16 | 22-Feb-00 | Submission of Cajeun Irrigation subproject | | | X | | | |
| 17 | 23-Feb-00 | Request for approval to purchase pesticides | | X | | | | |
| 18 | 13-Mar-00 | Submission of Charettes soil conservation project | | | X | | | |
| 19 | 14-Mar-00 | General request for travel in the DR | | | | X | | |
| 20 | 15-Mar-00 | Request for Amendment 2 | | | | | | X |
| 21 | 15-Mar-00 | Submission of CRS contract | | | X | | | |
| 22 | 15-Mar-00 | Submission of Thomazeau road project | | | X | | | |
| 23 | 16-Mar-00 | Request for vehicle waiver | | | | | X | |
| 24 | 22-Mar-00 | Request for permission to purchase motorcycles | | X | | | | |
| 25 | 22-Mar-00 | Request for permission to purchase tractors | | X | | | | |
| 26 | 22-Mar-00 | Request for permission to hire CDRH PM | X | | | | | |
| 27 | 22-Mar-00 | Request for permission to hire CRS PM | X | | | | | |
| 28 | 27-Mar-00 | Submission of CHF contract | | | X | | | |
| 29 | 27-Mar-00 | Submission of Plan contract | | | X | | | |
| 30 | 28-Mar-00 | Request for permission to hire CIAT PC | X | | | | | |
| 31 | 28-Mar-00 | Request for permission to travel to Columbia | | | | X | | |
| 32 | 28-Mar-00 | Submission of CECI contract | | | X | | | |
| 33 | 29-Mar-00 | Submission of FAVA/CA contract | | | X | | | |
| 34 | 1-Apr-00 | Request to purchase CDRH vehicle | | X | | | | |
| 35 | 18-Apr-00 | ORE approval for tractors | | X | | | | |
| 36 | 19-Apr-00 | Submission of Rehabilitation Despuzeau Irrigation System | | | X | | | |
| 37 | 11-May-00 | Request for permission to hire FtF PC | | X | | | | |
| 38 | 17-May-00 | Request for permission to hire CHF RE | | X | | | | |
| 39 | 22-May-00 | Submission of contractors for Thomazeau road | | | X | | | |
| 40 | 25-May-00 | Submission of Belle Fontain School Project | | | X | | | |
| 41 | 2-Jun-00 | Submission of Musac soil and water conservation project | | | X | | | |
| 42 | 13-Jun-00 | Request 1 for international travel for FAVA-CA | | | | X | | |
| 43 | 26-Jun-00 | Request 2 international travel for CIAT | | | | X | | |
| 44 | 6-Jul-00 | Submission of CHF schools lot 1 | | | X | | | |
| 45 | 12-Jul-00 | Submission of Thomazeau bids | | | X | | | |
| 46 | 18-Jul-00 | Purchase motorcycles for CECI | | X | | | | |
| 47 | 18-Jul-00 | Purchase motorcycles for ORE | | X | | | | |
| 48 | 20-Jul-00 | Approval for financing disaster song | | X | | | | |
| 49 | 21-Jul-00 | Approval for disaster pamphlet | | X | | | | |
| 50 | 31-Jul-00 | Request international travel for FAVA-CA 2 | | | | X | | |
| 51 | 3-Aug-00 | Additional equipment for ORE | | X | | | | |
| 52 | 8-Aug-00 | Transfer vehicle from Justice to Winrock | | X | | | | |

## *Listing of USAID Approval Requests*

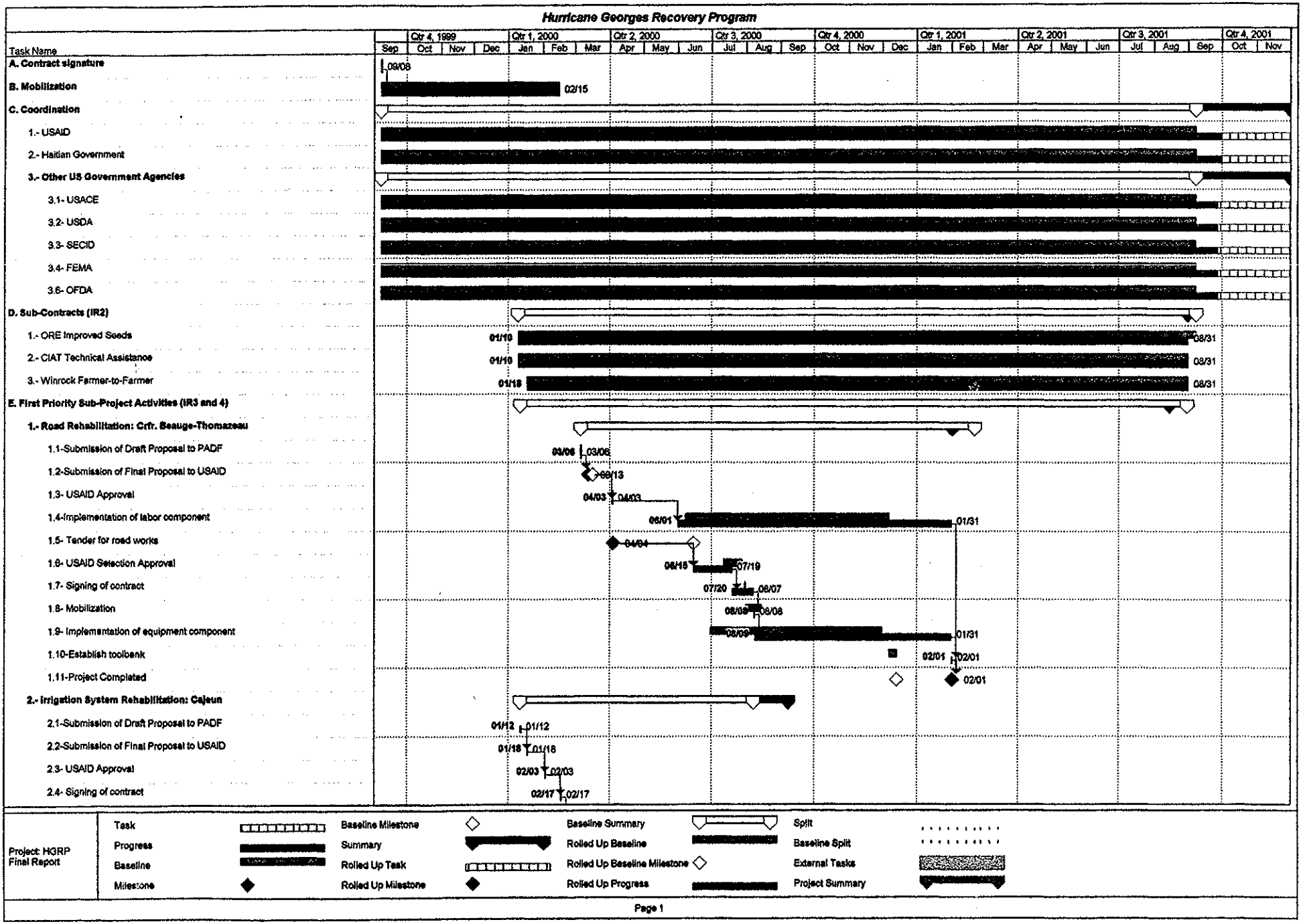
| | Date | Description | Key Staff Positions | Purchases | Subcontract Approvals | Travel Authorizations | Modifications to Contract | Other |
|---|---|---|---|---|---|---|---|---|
| 53 | 17-Aug-00 | Submission of Plan potable water project | | | X | | | |
| 54 | 6-Sep-00 | Submission of CRS irrigation | | | X | | | |
| 55 | 6-Sep-00 | Submission of CHF Bois d'Orne | | | X | | | |
| 56 | 7-Sep-00 | Request international travel for Farmer-to-Farmer | | | | X | | |
| 57 | 7-Sep-00 | Submission of SADA proposal | | | X | | | |
| 58 | 20-Sep-00 | Submission of CRS Matwala | | | X | | | |
| 59 | 22-Sep-00 | Clarification on expenditures from Emergency Fund | | | | | | X |
| 60 | 25-Sep-00 | Submission of Belle Anse and Ravine Bolivar | | | X | | | |
| 61 | 26-Sep-00 | Request for approval of Brady | X | | | | | |
| 62 | 27-Sep-00 | Submission of CHF lot 2 | | | X | | | |
| 63 | 30-Sep-00 | Approval to purchase generator | | X | | | | |
| 64 | 4-Oct-00 | Hire Rachel | X | | | | | |
| 65 | 10-Oct-00 | Approval for Schools II | | | X | | | |
| 66 | 12-Oct-00 | Request 2 international travel for Farmer-to-Farmer | | | | X | | |
| 67 | 12-Oct-00 | Submission of Jean David irrigation | | | X | | | |
| 68 | 19-Oct-00 | Approval for Schools II part II | | | X | | | |
| 69 | 19-Oct-00 | Approval for Bois d'Orme | | | X | | | |
| 70 | 20-Oct-00 | Approval for FtF volunteers 3 and 4 | | | | X | | |
| 71 | 20-Oct-00 | Submission of Kakont plans | | | X | | | |
| 72 | 1-Nov-00 | Request 3 international travel for CIAT | | | | X | | |
| 73 | 1-Nov-00 | Submission of potable water I | | | X | | | |
| 74 | 3-Nov-00 | Hire Belle Anse Verifier | X | | | | | |
| 75 | 3-Nov-00 | Hire Georges Valentine | X | | | | | |
| 76 | 6-Nov-00 | Request for vehicles | | X | | | | |
| 77 | 13-Nov-00 | Request for approval for Fondwa study | | | X | | | |
| 78 | 13-Nov-00 | Request for approval for Jacmel watershed study | | | X | | | |
| 79 | 22-Nov-00 | Travel authorization for Carolle | | | | X | | |
| 80 | 28-Nov-00 | Request 2 for pesticides | | X | | | | |
| 81 | 29-Nov-00 | Submission of potable water II | | | X | | | |
| 82 | 4-Dec-00 | Request for approval for CRS emergency supplies | | | X | | | |
| 83 | 5-Dec-00 | Submission of Cylvadier | | | X | | | |
| 84 | 8-Dec-00 | Request for Cajeun study | | | X | | | |
| 85 | 12-Dec-00 | Request for Amendment v3 | | | | | X | |
| 86 | 12-Dec-00 | Request 3 international travel for FAVA-CA | | | | X | | |
| 87 | 13-Dec-00 | Request 4 international travel for Farmer-to-Farmer | | | | X | | |
| 88 | 22-Dec-00 | Submission of CHF lot 3 | | | X | | | |
| 89 | 30-Jan-01 | Approval for JSR as a consultant | X | | | | | |
| 90 | 30-Jan-01 | Hire Nadine-CDRH | X | | | | | |
| 91 | 31-Jan-01 | Request to bring Carolle Home | | | | X | | |
| 92 | 2-Feb-01 | Request for approval to hire Alix | X | | | | | |
| 93 | 8-Feb-01 | Submission of Dory Soil Conservation | | | X | | | |
| 94 | 12-Feb-01 | Submission of contractors for Cap Rouge road | | | X | | | |
| 95 | 13-Feb-01 | Request 5 international travel for Farmer-to-Farmer | | | | X | | |
| 96 | 14-Feb-01 | Submission of CRS potable water | | | X | | | |
| 97 | 21-Feb-01 | Request 6 international travel for Farmer-to-Farmer | | | | X | | |
| 98 | 22-Feb-01 | Request 4 international travel for FAVA-CA | | | | X | | |
| 99 | 5-Mar-01 | Request to hire CDRH replacement PM | X | | | | | |
| 100 | 5-Mar-01 | Request international travel 4 for CIAT march-01 | | | | X | | |
| 101 | 13-Mar-01 | Request to Hire Lafleur-CDRH | X | | | | | |
| 102 | 22-Mar-01 | Submission of Cap Rouge bids | | | X | | | |
| 103 | 27-Mar-01 | Request 7 international travel for Farmer-to-Farmer | | | | X | | |
| 104 | 29-Mar-01 | Request for international travel for PADF and auditor | | | | X | | |

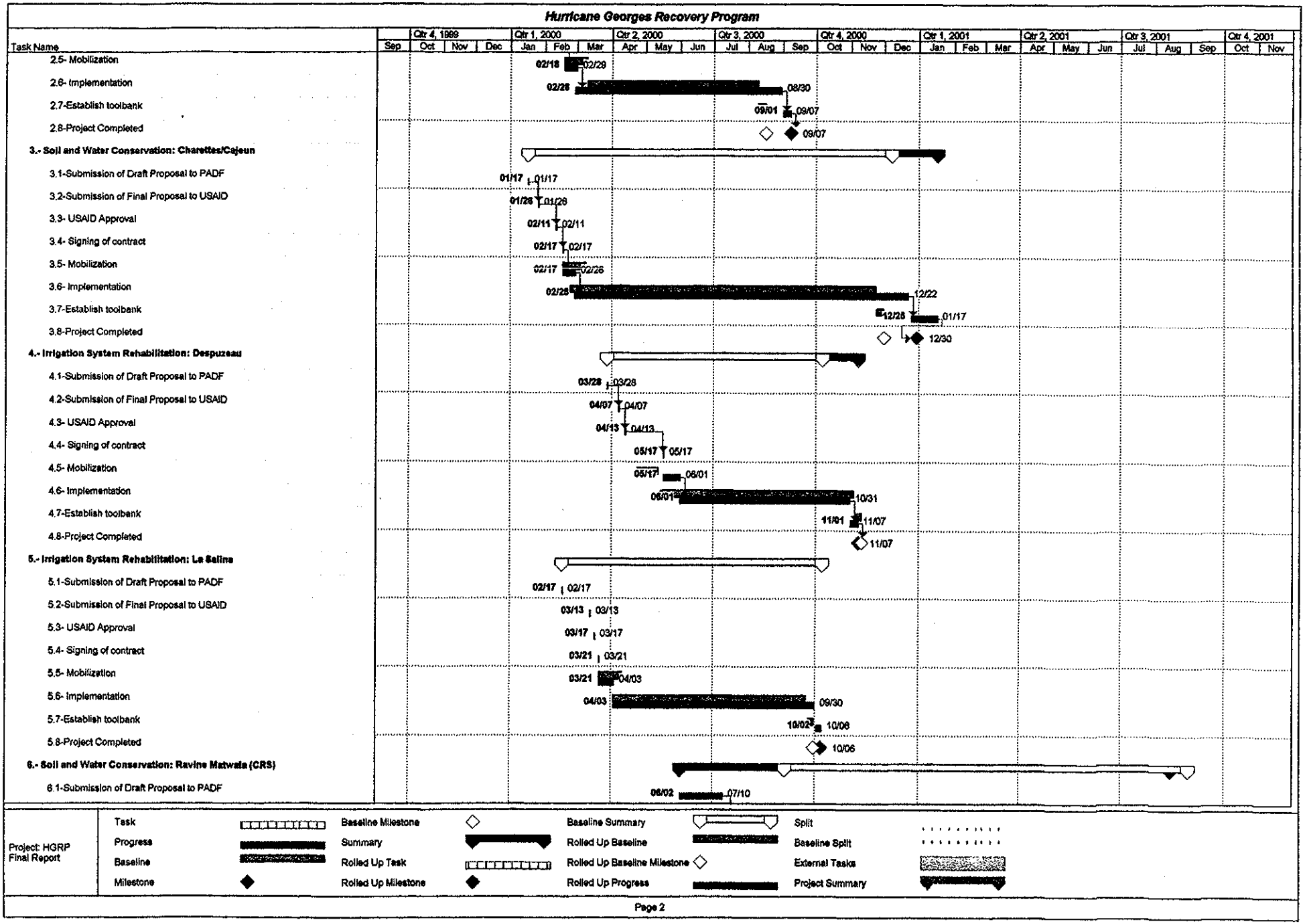
## *Listing of USAID Approval Requests*

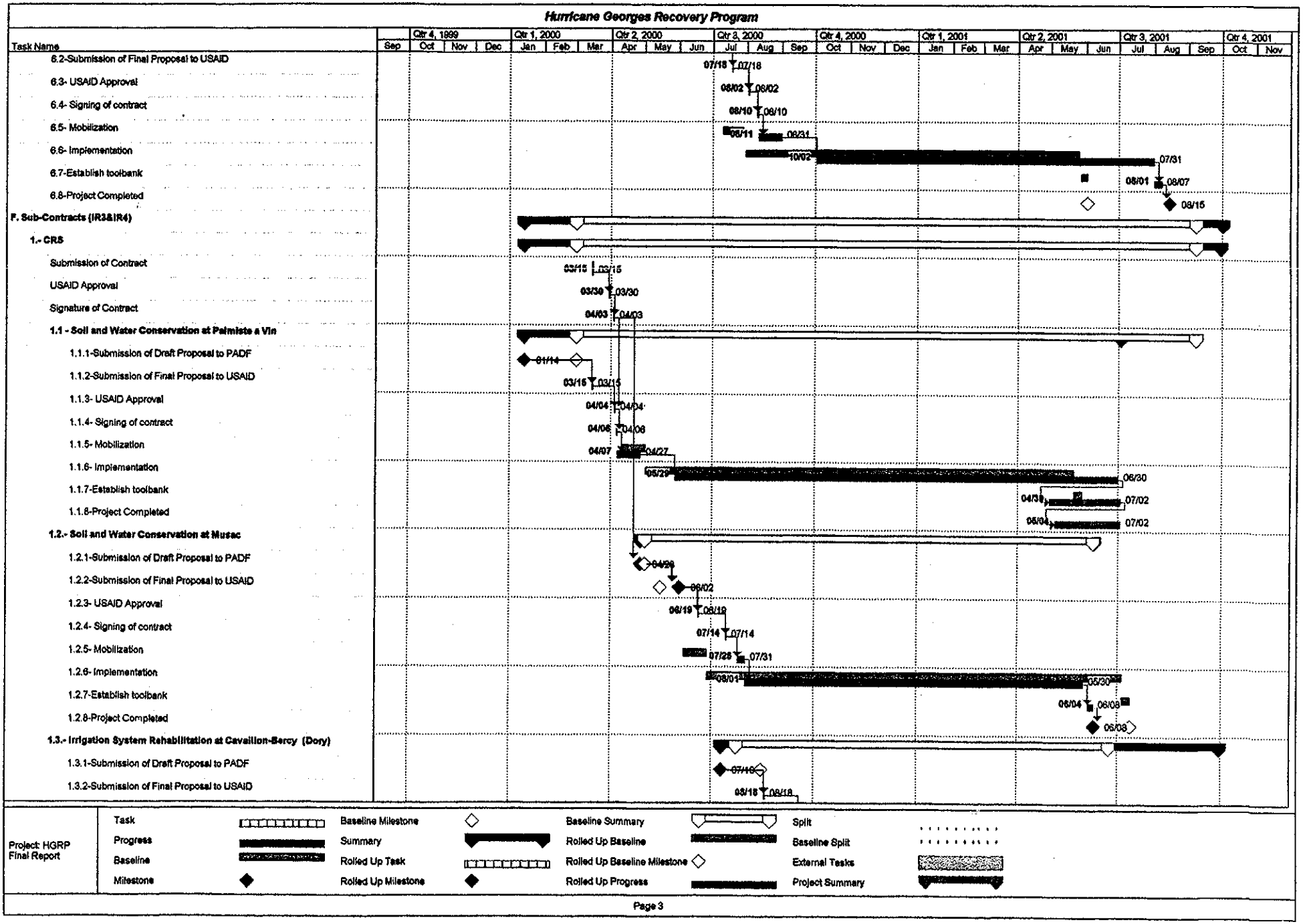
| | Date | Description | Key Staff Positions | Purchases | Subcontract Approvals | Travel Authorizations | Modifications to Contract | Other |
|---|---|---|---|---|---|---|---|---|
| 105 | 10-Apr-01 | Request 5 international travel for CIAT april-01 | | | | X | | |
| 106 | 10-Apr-01 | Request 5 international travel for FAVA-CA | | | | X | | |
| 107 | 2-May-01 | Request 8 international travel for Farmer-to-Farmer | | | | X | | |
| 108 | 2-May-01 | Request for approval for maintenance work | | | X | | | |
| 109 | 21-May-01 | Request 9 international travel for Winrock FtF | | | | X | | |
| 110 | 21-May-01 | Approval for CIAT trainers | | | | X | | |
| 111 | 1-Jun-01 | Request 10 international travel for Farmer-to-Farmer | | | | X | | |
| 112 | 20-Jun-01 | Request 11 international travel for Farmer-to-Farmer | | | | X | | |
| 113 | 22-Jun-01 | Jacmel environment day project | | | X | | | |
| 114 | 9-Jul-01 | Request 12 travel for Winrock farmers Kessler | | | | X | | |
| 115 | 18-Jul-01 | Request 13 travel for Winrock farmers Fitzgeralds | | | | X | | |
| 116 | 24-Jul-01 | Memo requesting audit for CDRH 2001 aid | | | | | | X |
| 117 | 3-Aug-01 | Request for permission for admin seminar | | | | X | | |
| 118 | 7-Aug-01 | Request 14 travel for Winrock farmers | | | | X | | |
| 119 | 28-Aug-01 | Request 6 for FAVACA travel | | | | X | | |
| 120 | 5-Oct-01 | ORE approval for seed revenue | | | | | | X |
| 121 | 19-Oct-01 | Letter aid approval ORE seed rev as expense | | | | | | X |
| 122 | 19-Nov-01 | Request for amendment 4 | | | | | X | |
| | | **Subtotal** | 15 | 21 | 44 | 31 | 4 | 7 |
| | **Grand Total** | **122** | | | | | | |

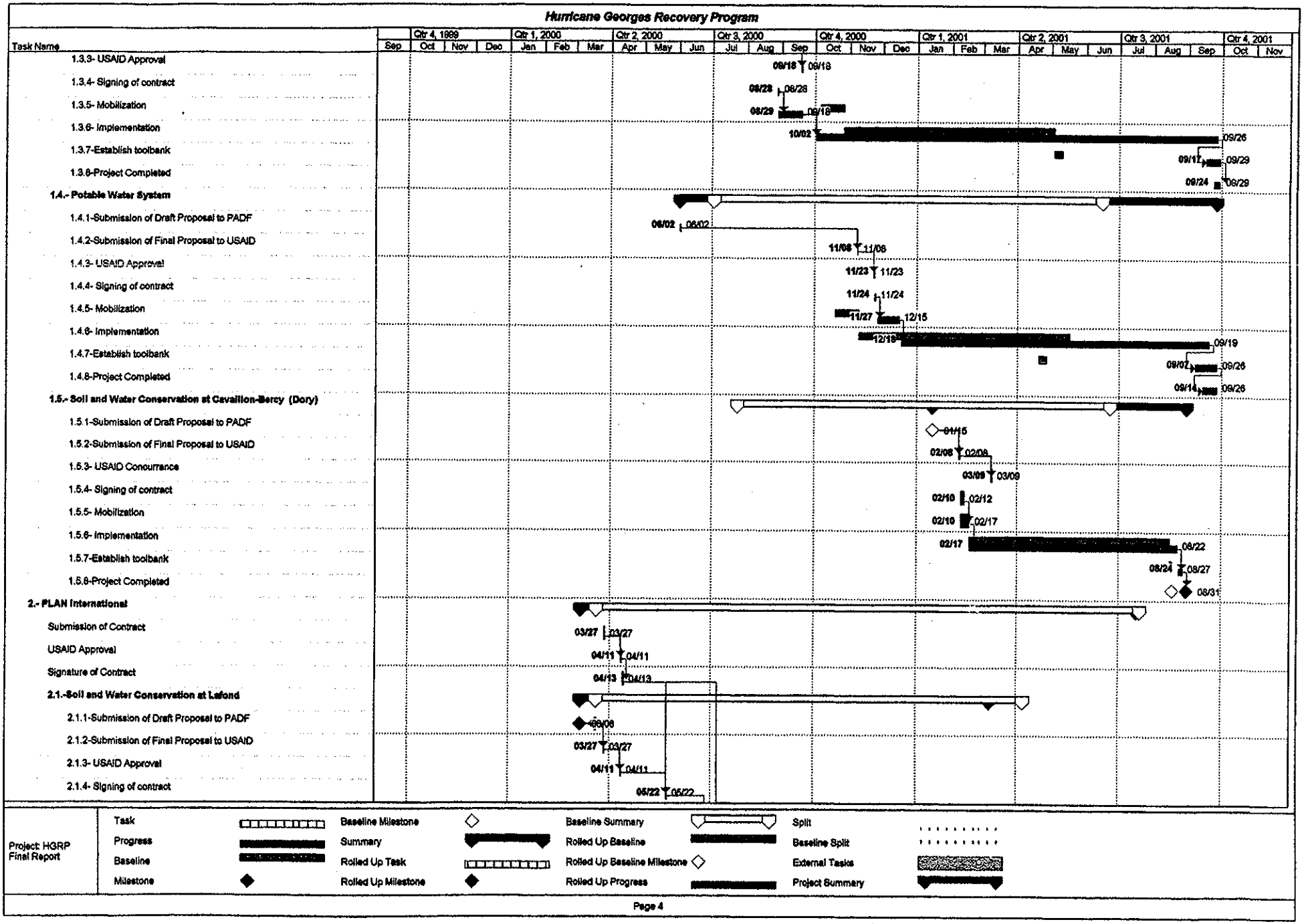
# Annex 2

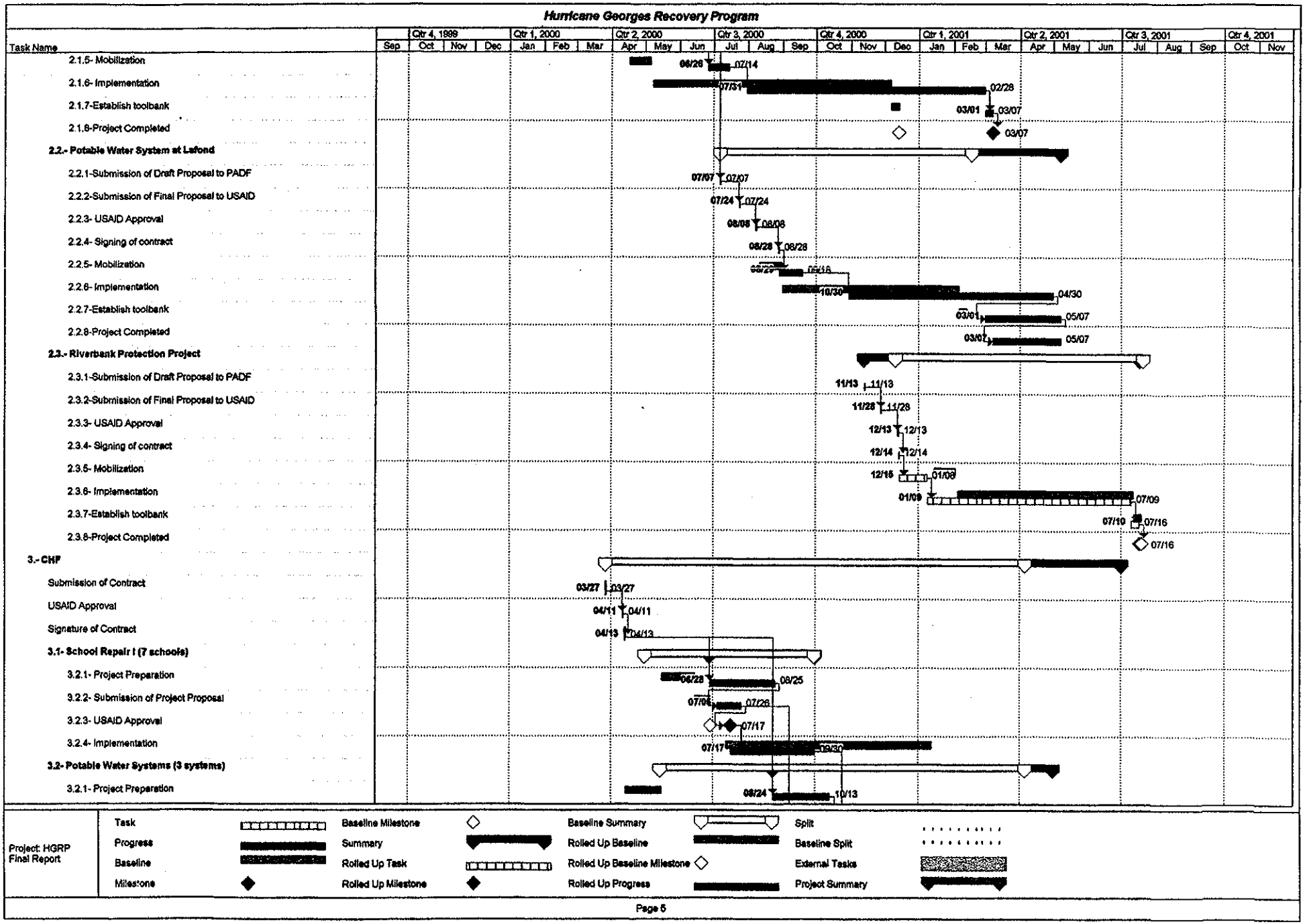
# Detailed Gantt Chart

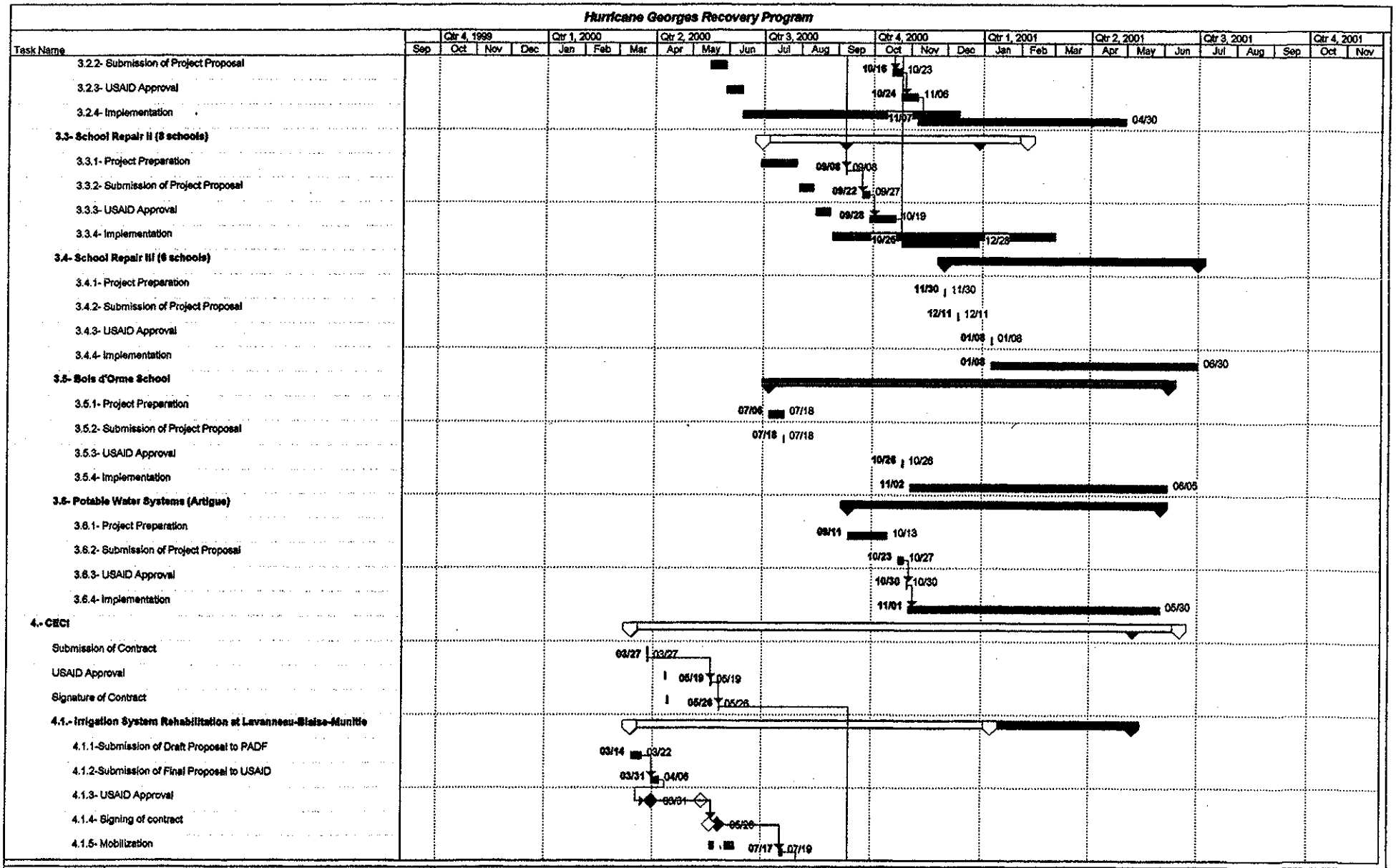

Hurricane Georges Recovery Program
Task Name
Qtr 4, 1999
Qtr 1, 2000
Qtr 2, 2000
Qtr 3, 2000
Qtr 4, 2000
Qtr 1, 2001
Qtr 2, 2001
Qtr 3, 2001
Qtr 4, 2001
Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov
A. Contract signature
09/08
B. Mobilization
02/15
C. Coordination
1.- USAID
2.- Haitian Government
3.- Other US Government Agencies
3.1- USACE
3.2- USDA
3.3- SECID
3.4- FEMA
3.6- OFDA
D. Sub-Contracts (IR2)
1.- ORE Improved Seeds
01/10
08/31
2.- CIAT Technical Assistance
01/10
08/31
3.- Winrock Farmer-to-Farmer
01/18
08/31
E. First Priority Sub-Project Activities (IR3 and 4)
1.- Road Rehabilitation: Crfr. Beauge-Thomazeau
1.1-Submission of Draft Proposal to PADF
03/06
03/06
1.2-Submission of Final Proposal to USAID
03/13
1.3- USAID Approval
04/03
04/03
1.4-Implementation of labor component
05/01
01/31
1.5- Tender for road works
04/04
1.6- USAID Selection Approval
06/15
07/19
1.7- Signing of contract
07/20
08/07
1.8- Mobilization
08/08
08/08
1.9- Implementation of equipment component
08/09
01/31
1.10-Establish toolbank
02/01
02/01
1.11-Project Completed
02/01
2.- Irrigation System Rehabilitation: Cajeun
2.1-Submission of Draft Proposal to PADF
01/12
01/12
2.2-Submission of Final Proposal to USAID
01/18
01/18
2.3- USAID Approval
02/03
02/03
2.4- Signing of contract
02/17
02/17
Project: HGRP Final Report
Task
Progress
Baseline
Milestone
Baseline Milestone
Summary
Rolled Up Task
Rolled Up Milestone
Baseline Summary
Rolled Up Baseline
Rolled Up Baseline Milestone
Rolled Up Progress
Split
Baseline Split
External Tasks
Project Summary
Page 1

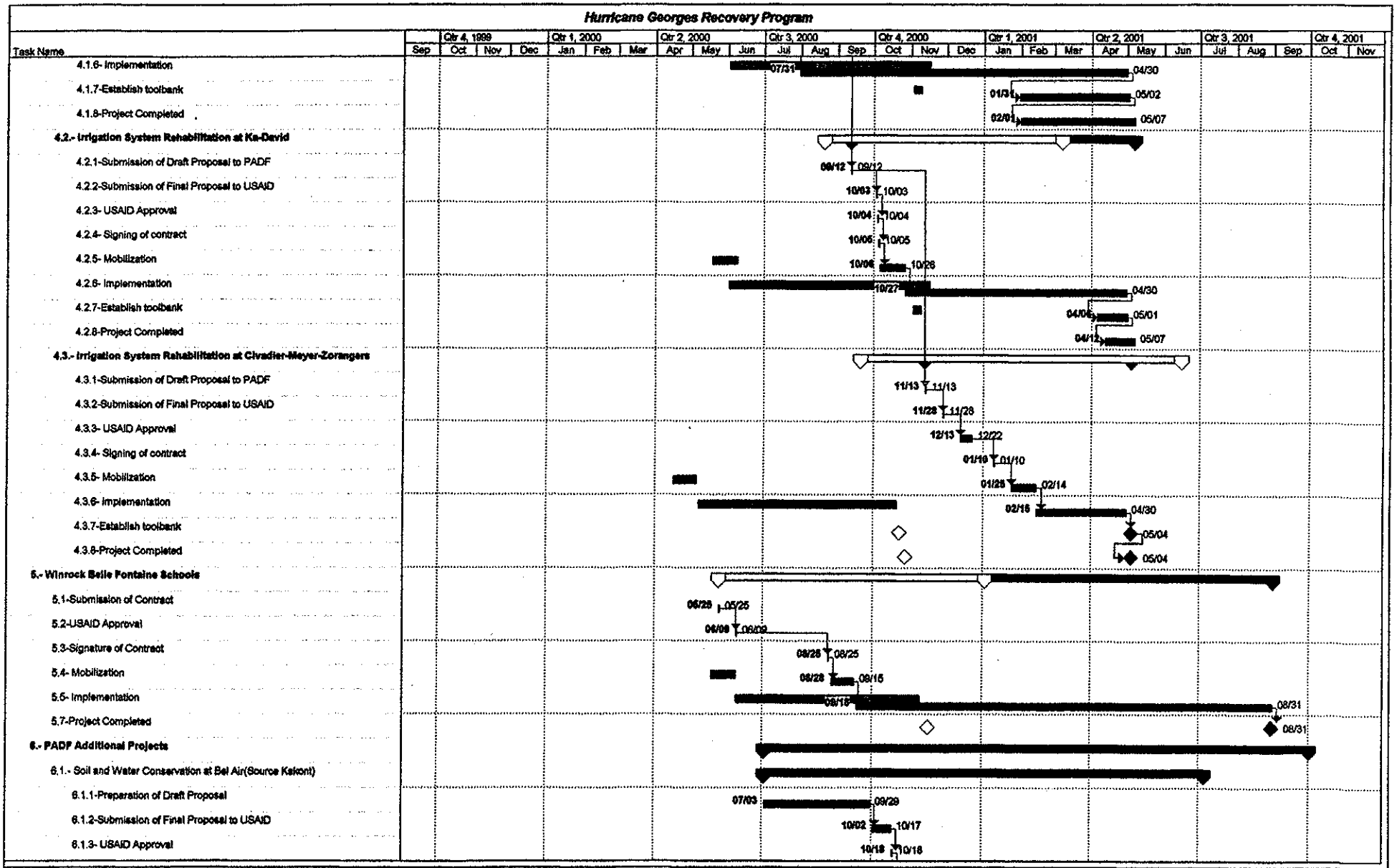

Hurricane Georges Recovery Program
Task Name
Qtr 4, 1999
Qtr 1, 2000
Qtr 2, 2000
Qtr 3, 2000
Qtr 4, 2000
Qtr 1, 2001
Qtr 2, 2001
Qtr 3, 2001
Qtr 4, 2001
Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov
2.5- Mobilization
2.6- Implementation
2.7-Establish toolbank
2.8-Project Completed
3.- Soil and Water Conservation: Charettes/Cajeun
3.1-Submission of Draft Proposal to PADF
3.2-Submission of Final Proposal to USAID
3.3- USAID Approval
3.4- Signing of contract
3.5- Mobilization
3.6- Implementation
3.7-Establish toolbank
3.8-Project Completed
4.- Irrigation System Rehabilitation: Despuzeau
4.1-Submission of Draft Proposal to PADF
4.2-Submission of Final Proposal to USAID
4.3- USAID Approval
4.4- Signing of contract
4.5- Mobilization
4.6- Implementation
4.7-Establish toolbank
4.8-Project Completed
5.- Irrigation System Rehabilitation: La Saline
5.1-Submission of Draft Proposal to PADF
5.2-Submission of Final Proposal to USAID
5.3- USAID Approval
5.4- Signing of contract
5.5- Mobilization
5.6- Implementation
5.7-Establish toolbank
5.8-Project Completed
6.- Soil and Water Conservation: Ravine Matwais (CRS)
6.1-Submission of Draft Proposal to PADF
02/18 02/29
02/28 08/30
09/01 09/07
09/07
01/17 01/17
01/26 01/26
02/11 02/11
02/17 02/17
02/17 02/26
02/28 12/22
12/25 01/17
12/30
03/28 03/28
04/07 04/07
04/13 04/13
05/17 05/17
05/17 06/01
06/01 10/31
11/01 11/07
11/07
02/17 02/17
03/13 03/13
03/17 03/17
03/21 03/21
03/21 04/03
04/03 09/30
10/02 10/06
10/06
06/02 07/10
Project: HGRP Final Report
Task
Progress
Baseline
Milestone
Baseline Milestone
Summary
Rolled Up Task
Rolled Up Milestone
Baseline Summary
Rolled Up Baseline
Rolled Up Baseline Milestone
Rolled Up Progress
Split
Baseline Split
External Tasks
Project Summary

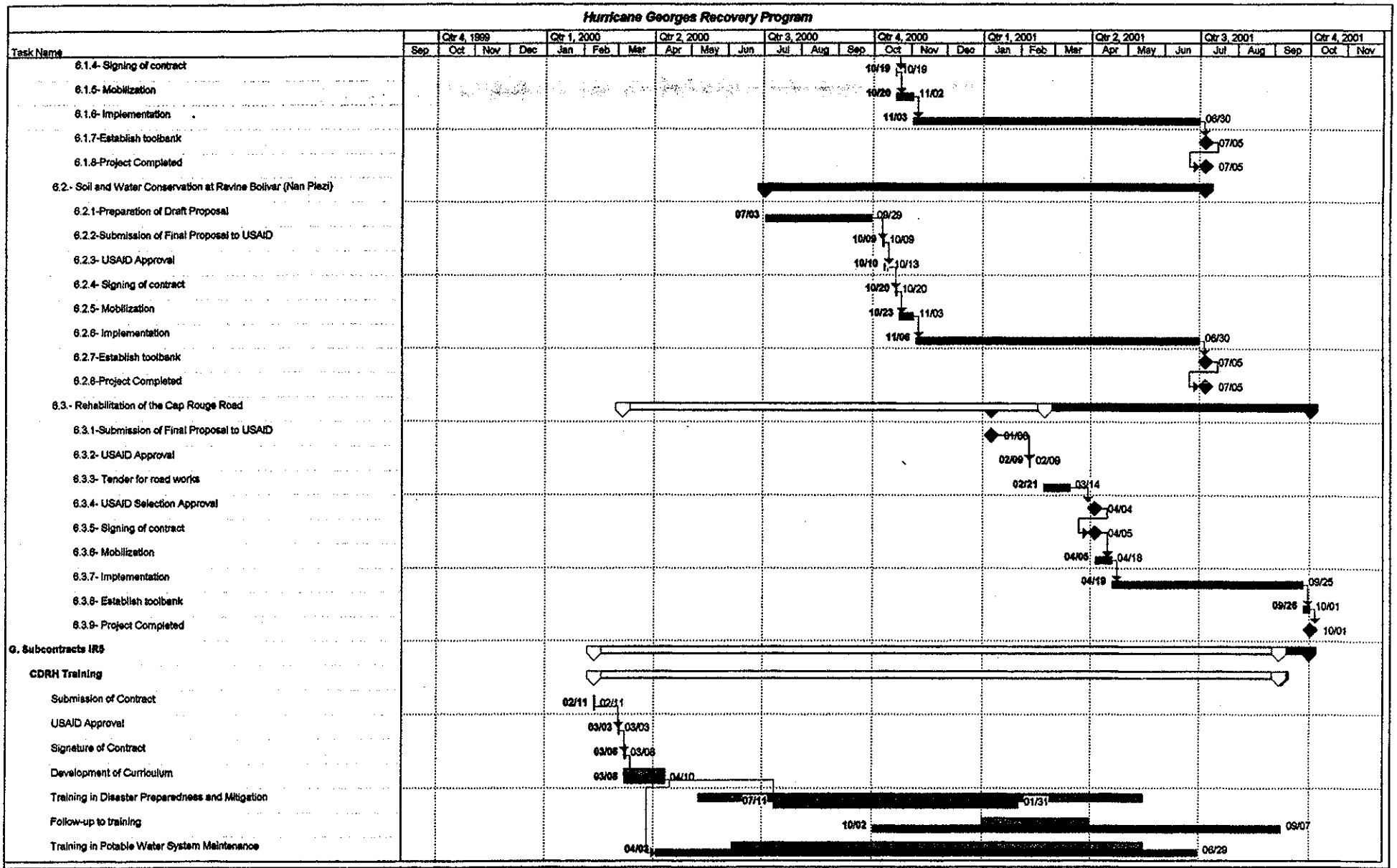

Hurricane Georges Recovery Program
Task Name
Qtr 4, 1999
Qtr 1, 2000
Qtr 2, 2000
Qtr 3, 2000
Qtr 4, 2000
Qtr 1, 2001
Qtr 2, 2001
Qtr 3, 2001
Qtr 4, 2001
6.2-Submission of Final Proposal to USAID
6.3- USAID Approval
6.4- Signing of contract
6.5- Mobilization
6.6- Implementation
6.7-Establish toolbank
6.8-Project Completed
F. Sub-Contracts (IR3&IR4)
1.- CRS
Submission of Contract
USAID Approval
Signature of Contract
1.1 - Soil and Water Conservation at Palmiste a Vin
1.1.1-Submission of Draft Proposal to PADF
1.1.2-Submission of Final Proposal to USAID
1.1.3- USAID Approval
1.1.4- Signing of contract
1.1.5- Mobilization
1.1.6- Implementation
1.1.7-Establish toolbank
1.1.8-Project Completed
1.2.- Soil and Water Conservation at Musac
1.2.1-Submission of Draft Proposal to PADF
1.2.2-Submission of Final Proposal to USAID
1.2.3- USAID Approval
1.2.4- Signing of contract
1.2.5- Mobilization
1.2.6- Implementation
1.2.7-Establish toolbank
1.2.8-Project Completed
1.3.- Irrigation System Rehabilitation at Cavaillon-Bercy (Dory)
1.3.1-Submission of Draft Proposal to PADF
1.3.2-Submission of Final Proposal to USAID
Project: HGRP Final Report
Task
Progress
Baseline
Milestone
Baseline Milestone
Summary
Rolled Up Task
Rolled Up Milestone
Baseline Summary
Rolled Up Baseline
Rolled Up Baseline Milestone
Rolled Up Progress
Split
Baseline Split
External Tasks
Project Summary


Hurricane Georges Recovery Program
Task Name
Qtr 4, 1999
Qtr 1, 2000
Qtr 2, 2000
Qtr 3, 2000
Qtr 4, 2000
Qtr 1, 2001
Qtr 2, 2001
Qtr 3, 2001
Qtr 4, 2001
Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov
1.3.3- USAID Approval
1.3.4- Signing of contract
1.3.5- Mobilization
1.3.6- Implementation
1.3.7-Establish toolbank
1.3.8-Project Completed
1.4.- Potable Water System
1.4.1-Submission of Draft Proposal to PADF
1.4.2-Submission of Final Proposal to USAID
1.4.3- USAID Approval
1.4.4- Signing of contract
1.4.5- Mobilization
1.4.6- Implementation
1.4.7-Establish toolbank
1.4.8-Project Completed
1.5.- Soil and Water Conservation at Cavaillon-Bercy (Dory)
1.5.1-Submission of Draft Proposal to PADF
1.5.2-Submission of Final Proposal to USAID
1.5.3- USAID Concurrance
1.5.4- Signing of contract
1.5.5- Mobilization
1.5.6- Implementation
1.5.7-Establish toolbank
1.5.8-Project Completed
2.- PLAN International
Submission of Contract
USAID Approval
Signature of Contract
2.1.-Soil and Water Conservation at Lafond
2.1.1-Submission of Draft Proposal to PADF
2.1.2-Submission of Final Proposal to USAID
2.1.3- USAID Approval
2.1.4- Signing of contract
Project: HGRP Final Report
Task
Progress
Baseline
Milestone
Baseline Milestone
Summary
Rolled Up Task
Rolled Up Milestone
Baseline Summary
Rolled Up Baseline
Rolled Up Baseline Milestone
Rolled Up Progress
Split
Baseline Split
External Tasks
Project Summary

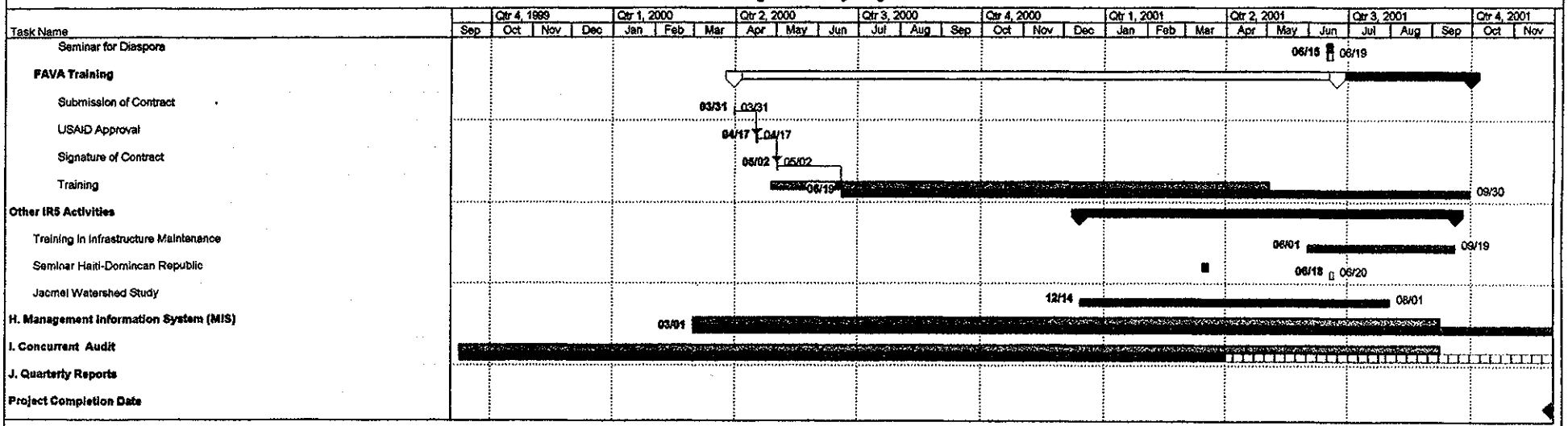

Hurricane Georges Recovery Program
Task Name
Qtr 4, 1999
Qtr 1, 2000
Qtr 2, 2000
Qtr 3, 2000
Qtr 4, 2000
Qtr 1, 2001
Qtr 2, 2001
Qtr 3, 2001
Qtr 4, 2001
Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov
2.1.5- Mobilization
2.1.6- Implementation
2.1.7-Establish toolbank
2.1.8-Project Completed
2.2.- Potable Water System at Lafond
2.2.1-Submission of Draft Proposal to PADF
2.2.2-Submission of Final Proposal to USAID
2.2.3- USAID Approval
2.2.4- Signing of contract
2.2.5- Mobilization
2.2.6- Implementation
2.2.7-Establish toolbank
2.2.8-Project Completed
2.3.- Riverbank Protection Project
2.3.1-Submission of Draft Proposal to PADF
2.3.2-Submission of Final Proposal to USAID
2.3.3- USAID Approval
2.3.4- Signing of contract
2.3.5- Mobilization
2.3.6- Implementation
2.3.7-Establish toolbank
2.3.8-Project Completed
3.- CHF
Submission of Contract
USAID Approval
Signature of Contract
3.1- School Repair I (7 schools)
3.2.1- Project Preparation
3.2.2- Submission of Project Proposal
3.2.3- USAID Approval
3.2.4- Implementation
3.2- Potable Water Systems (3 systems)
3.2.1- Project Preparation
06/28 07/14
07/31 02/28
03/01 03/07
03/07
07/07 07/07
07/24 07/24
08/08 08/08
08/28 08/28
10/30 04/30
03/01 05/07
03/07 05/07
11/13 11/13
11/28 11/28
12/13 12/13
12/14 12/14
12/15 01/08
01/09 07/09
07/10 07/16
07/16
03/27 03/27
04/11 04/11
04/13 04/13
06/28 08/25
07/07 07/26
07/17
07/17 09/30
08/24 10/13
Project: HGRP Final Report
Task
Progress
Baseline
Milestone
Baseline Milestone
Summary
Rolled Up Task
Rolled Up Milestone
Baseline Summary
Rolled Up Baseline
Rolled Up Baseline Milestone
Rolled Up Progress
Split
Baseline Split
External Tasks
Project Summary


Hurricane Georges Recovery Program
Task Name
Qtr 4, 1999
Qtr 1, 2000
Qtr 2, 2000
Qtr 3, 2000
Qtr 4, 2000
Qtr 1, 2001
Qtr 2, 2001
Qtr 3, 2001
Qtr 4, 2001
Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov
3.2.2- Submission of Project Proposal
3.2.3- USAID Approval
3.2.4- Implementation
3.3- School Repair II (8 schools)
3.3.1- Project Preparation
3.3.2- Submission of Project Proposal
3.3.3- USAID Approval
3.3.4- Implementation
3.4- School Repair III (6 schools)
3.4.1- Project Preparation
3.4.2- Submission of Project Proposal
3.4.3- USAID Approval
3.4.4- Implementation
3.5- Bois d'Orme School
3.5.1- Project Preparation
3.5.2- Submission of Project Proposal
3.5.3- USAID Approval
3.5.4- Implementation
3.6- Potable Water Systems (Artigue)
3.6.1- Project Preparation
3.6.2- Submission of Project Proposal
3.6.3- USAID Approval
3.6.4- Implementation
4.- CECI
Submission of Contract
USAID Approval
Signature of Contract
4.1.- Irrigation System Rehabilitation at Lavanneau-Blaise-Munite
4.1.1-Submission of Draft Proposal to PADF
4.1.2-Submission of Final Proposal to USAID
4.1.3- USAID Approval
4.1.4- Signing of contract
4.1.5- Mobilization
10/16 10/23
10/24 11/06
11/07 04/30
09/08 09/08
09/22 09/27
09/28 10/19
10/26 12/28
11/30 11/30
12/11 12/11
01/08 01/08
01/08 06/30
07/06 07/18
07/18 07/18
10/26 10/26
11/02 06/05
09/11 10/13
10/23 10/27
10/30 10/30
11/01 05/30
03/27 03/27
05/19 05/19
05/26 05/26
03/14 03/22
03/31 04/06
05/26
07/17 07/19
Project: HGRP Final Report
Task
Progress
Baseline
Milestone
Baseline Milestone
Summary
Rolled Up Task
Rolled Up Milestone
Baseline Summary
Rolled Up Baseline
Rolled Up Baseline Milestone
Rolled Up Progress
Split
Baseline Split
External Tasks
Project Summary


Hurricane Georges Recovery Program
Task Name
Qtr 4, 1999
Qtr 1, 2000
Qtr 2, 2000
Qtr 3, 2000
Qtr 4, 2000
Qtr 1, 2001
Qtr 2, 2001
Qtr 3, 2001
Qtr 4, 2001
Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov
4.1.6- Implementation
4.1.7-Establish toolbank
4.1.8-Project Completed
4.2.- Irrigation System Rehabilitation at Ka-David
4.2.1-Submission of Draft Proposal to PADF
4.2.2-Submission of Final Proposal to USAID
4.2.3- USAID Approval
4.2.4- Signing of contract
4.2.5- Mobilization
4.2.6- Implementation
4.2.7-Establish toolbank
4.2.8-Project Completed
4.3.- Irrigation System Rehabilitation at Civadier-Meyer-Zorangers
4.3.1-Submission of Draft Proposal to PADF
4.3.2-Submission of Final Proposal to USAID
4.3.3- USAID Approval
4.3.4- Signing of contract
4.3.5- Mobilization
4.3.6- Implementation
4.3.7-Establish toolbank
4.3.8-Project Completed
5.- Winrock Belle Fontaine Schools
5.1-Submission of Contract
5.2-USAID Approval
5.3-Signature of Contract
5.4- Mobilization
5.5- Implementation
5.7-Project Completed
6.- PADF Additional Projects
6.1.- Soil and Water Conservation at Bel Air(Source Kokont)
6.1.1-Preparation of Draft Proposal
6.1.2-Submission of Final Proposal to USAID
6.1.3- USAID Approval
07/31
04/30
01/31
05/02
02/01
05/07
08/12
09/12
10/03
10/04
10/05
10/06
10/26
10/27
04/30
04/06
05/01
04/12
05/07
11/13
11/28
12/13
12/22
01/10
01/25
02/14
02/15
04/30
05/04
05/04
05/25
06/09
08/25
08/28
09/15
08/31
08/31
07/03
09/29
10/02
10/17
10/18
Project: HGRP Final Report
Task
Progress
Baseline
Milestone
Baseline Milestone
Summary
Rolled Up Task
Rolled Up Milestone
Baseline Summary
Rolled Up Baseline
Rolled Up Baseline Milestone
Rolled Up Progress
Split
Baseline Split
External Tasks
Project Summary


Hurricane Georges Recovery Program
Task Name
Qtr 4, 1999
Qtr 1, 2000
Qtr 2, 2000
Qtr 3, 2000
Qtr 4, 2000
Qtr 1, 2001
Qtr 2, 2001
Qtr 3, 2001
Qtr 4, 2001
Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov
6.1.4- Signing of contract
6.1.5- Mobilization
6.1.6- Implementation
6.1.7-Establish toolbank
6.1.8-Project Completed
6.2.- Soil and Water Conservation at Ravine Bolivar (Nan Piezi)
6.2.1-Preparation of Draft Proposal
6.2.2-Submission of Final Proposal to USAID
6.2.3- USAID Approval
6.2.4- Signing of contract
6.2.5- Mobilization
6.2.6- Implementation
6.2.7-Establish toolbank
6.2.8-Project Completed
6.3.- Rehabilitation of the Cap Rouge Road
6.3.1-Submission of Final Proposal to USAID
6.3.2- USAID Approval
6.3.3- Tender for road works
6.3.4- USAID Selection Approval
6.3.5- Signing of contract
6.3.6- Mobilization
6.3.7- Implementation
6.3.8- Establish toolbank
6.3.9- Project Completed
G. Subcontracts IR5
CDRH Training
Submission of Contract
USAID Approval
Signature of Contract
Development of Curriculum
Training in Disaster Preparedness and Mitigation
Follow-up to training
Training in Potable Water System Maintenance
Project: HGRP Final Report
Task
Progress
Baseline
Milestone
Baseline Milestone
Summary
Rolled Up Task
Rolled Up Milestone
Baseline Summary
Rolled Up Baseline
Rolled Up Baseline Milestone
Rolled Up Progress
Split
Baseline Split
External Tasks
Project Summary

## *Hurricane Georges Recovery Program*




Project: HGRP Final Report

| | | | | | |
|---|---|---|---|---|---|
| Task | Baseline Milestone | Baseline Summary | Split | | |
| Progress | Summary | Rolled Up Baseline | Baseline Split | | |
| Baseline | Rolled Up Task | Rolled Up Baseline Milestone | External Tasks | | |
| Milestone | Rolled Up Milestone | Rolled Up Progress | Project Summary | | |