



BURUNDI C3P Work Plan



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Revised August 31, 2006

**Submitted on behalf of the
Burundi C3P Country Coordinating Unit**

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I. EXECUTIVE SUMMARY

CRS and the C3P Country Coordinating Unit for Burundi are requesting \$280,000 U.S. for the implementation of the Burundi C3P work plan for a period of 16 months starting in July 2006 through October 15, 2007. This amount represents \$8,002 more than the amount originally earmarked for C3P activities in Burundi.

The Burundi C3P work plan will be implemented through a Country Coordinating Unit (CCU) whose responsibilities will include selecting sub-grantees/sub-contractors to carry out the country work plan, managing and monitoring the work of these sub-grantees/sub-contractors, and coordinating with CRS, IITA, and the C3P management team with respect to technical, administrative, and financial standards. The CCU is headed by the CRS Burundi Head of Programming, Kevin Doyle, who will serve as the Country Program Manager and all activities will be coordinated by a national C3P project coordinator. The Burundi CCU shall defer to the C3P Chief of Party, or their designate, for all administrative, financial, and programmatic issues related to the C3P work plan as listed in the C3P Project Document.

The severe pandemic-associated form of cassava mosaic disease (CMD) was first identified in Burundi in late 2002. Since then, it has spread to all 16 provinces of the country, having a tremendous impact on the food and livelihoods security of the vast majority of Burundi's estimated 7.4 million inhabitants.

As of July 2006, banana xanthomonas bacterial wilt disease (BXW) has not yet been identified in Burundi, but it poses a considerable threat to food and livelihood security in Burundi due to the fact that 1) bananas are the most important food/cash crop in Burundi, 2) the disease is now found in all three surrounding countries (Tanzania, Rwanda, Democratic Republic of Congo) and 3) Burundi's borders with its neighbors where BXW is present are relatively porous and there is little or no control of the flow of planting material between countries.

In essence, the Burundi C3P project will consist of the coordination and planning of activities between the relevant government agencies and non-government organizations involved in cassava recovery efforts as well as the multiplication of 150 ha of CMD-resistant cassava with implementing partners via sub-award grants. Moreover, CRS Burundi has secured funding from USAID using Famine Fund Fast Track Funds to multiply 75ha in the 2007A season. The CCU will work to ensure that these efforts are well coordinated with other C3P and national multiplication efforts. The C3P project will also help plan and coordinate a national awareness raising campaign to prevent the introduction and spread of BXW in Burundi, while introducing and demonstrating macro-propagation technologies to key national personnel in order to propagate wilt-escaping varieties of bananas in anticipation of the arrival of BXW. It is foreseen that a number of activities will be contracted out to qualified organizations/agencies.

A total of 75% of the budget is earmarked for responding to the CMD crisis and the other 25% towards the prevention of a BXW crisis, while helping the country prepare to respond if and when BXW is confirmed in Burundi.

II. CRS Burundi C3P PROJECT FRAMEWORK

Goal: Threats to food security caused by agricultural crisis in Burundi are reduced.

SO 1: Stakeholders in Burundi institutionalize coordinated agricultural disaster response mechanisms.

IR 1.1: Responses to CMD and BXW in Burundi are well coordinated.

Outputs:

- National Commission to Combat Cassava Mosaic Disease (NCCCMD) strengthened
- BXW prevention and control unit included in the NCCCMD mandate
- CCU set-up
- National strategy on CMD and BXW developed
- Strategy to ensure sustainable funding of coordinating taskforces/committee developed

IR 1.2: GIS technology links data on diseases to data on vulnerability and food insecurity.

Outputs:

- Data based on food insecurity, food vulnerability, CMD and BXW prevalence established
- Maps designed and shared with all stakeholders on food insecurity, CMD and BXW prevalence
- Better targeting of on-the-ground activities for CMD recovery and BXW prevention and control

IR 1.3: Existing institutions in Burundi carry forward proven methods for coordination and knowledge sharing regarding agricultural disasters.

Outputs:

- Strategy on disasters management defined
- Contingency Plan designed
- Early Warning System set-up

SO 2: Burundian farmers employ effective measures to control CMD and BXW

IR 2.1: Effective control of CMD in Burundi is achieved through multiplication and distribution of CMD-resistant varieties and promotion of improved management practices.

Outputs:

- C3P targeted areas of multiplication identified
- Partnerships established with local NGO/CBOS involved in multiplication and dissemination of CMD resistant planting material

- Multiplication of 150 ha of CMD resistant varieties by partner organizations in targeted areas
- 50 provincial and communal agricultural extension officers trained in CMD management
- 422 colline-level agricultural agents trained in Kirundo and Muyinga Provinces in CMD multiplication technologies and monitoring techniques
- 30,000 families accede to CMD escaping planting material (1500 ha) through farmers' associations (2008-A agricultural season).

IR 2.2: Effective prevention and control of BXW in Burundi is achieved through raising public awareness to the BXW threat and equipping stakeholders with skills to recognize the disease and knowledge of actions to be taken to prevent disease introduction and spread, and macro-propagation technologies are introduced and demonstrated.

- Production and distribution of BXW prevention and control posters/brochures to targeted areas
- National strategy for BXW prevention and control planned and launched
- Diffusion of 5 press releases to national media outlets
- 100 provincial and communal agents (agriculture and administration) trained in macro-propagation techniques
- 1,100 colline-level leaders/agricultural monitors/model farmers trained in BXW recognition and management in six provinces.
- 5 macro-propagation demonstration nurseries will be established in strategic locations and 7,500 wilt-escaping suckers are produced (1,500 at each nursery) and disseminated to 200 farmers, with training on appropriate management
- Three people trained at national level on macro-propagation to train others (farmers groups and micro-entrepreneurs) and set up five demonstration nurseries.

III. PROBLEM ANALYSIS

Country Level Coordination

Numerous government agencies as well as non-governmental organizations have been involved in responding to the CMD pandemic since it first appeared in Burundi in late 2002. The response, however, has not been as well coordinated as it could be due mainly to budgetary constraints as well as the lack of CMD-resistant cuttings for large-scale multiplication.

In early 2006, the new administration in Burundi created a national commission to oversee and coordinate recovery efforts for cassava in the country. This represented an important strengthening of the government's response to the pandemic, which has played a major role in the food insecurity situation in the country. To date, however, funding is still at less than desirable levels in order to fully recover cassava production and restore a certain degree of food security amongst the rural population, especially the most vulnerable households.

The Burundi CCU will work to assist and provide guidance to the National Commission by helping bringing consensus amongst the key actors involved in cassava recovery efforts – including ISABU, FAO, officials from the Ministry of Agriculture and representatives of NGOs.

Perhaps the greatest challenge in the area of country-level coordination is in helping the Government to deal with the pressure it currently faces with demands to respond as quickly as possible in providing an estimated 800,000 agricultural families with CMD-resistant varieties. This pressure is exacerbated because of the relatively slow speed of multiplication that is possible with cassava.

Linkages with regional mechanisms exist on the research level, but are not critical for the multiplication/diffusion phase, which this project represents, although IITA, working with ISABU, will provide support in the management of the quality of planting material multiplied through the project.

The Cassava Mosaic Disease Pandemic

The severe form of CMD associated with the pandemic was first identified in Burundi in May 2003. Since then, it has spread to all 16 provinces of the country, having a tremendous impact on the food and livelihoods security of the vast majority of Burundi's estimated 7.4 million inhabitants. Together with sweet potato, cassava comprises an estimated 70% of the diet of rural households. ISABU has been leading the research effort on CMD-resistant varieties. Since 2003, a large number of CMD-resistant varieties have been imported from Uganda and have been field-tested in Burundi for their continued resistance to CMD. Seven varieties were initially shown to have good levels of resistance during initial screening in northeastern Burundi. Subsequent assessments of multiplication blocks under strong disease pressure, however, have indicated that only five of the seven have the high levels of resistance required for the Burundi CMD situation. The five varieties are:

- MM96/5280
- MM96/0287
- MM96/7204
- MM96/7688
- ABBEY-IFE

A total of approximately 194 ha are currently under multiplication by ISABU, FAO, CRS and other NGOs in Burundi. While geographic targeting using data on historical production, food insecurity, etc., would be helpful, the most important next steps for Burundi to recover cassava production are

to rapidly expand its multiplication efforts while providing technical supervision to assure the production of disease-free cuttings.

The Banana Xanthomonas Pandemic

As of July 2006, BXW has not yet been identified in Burundi, but it poses a considerable threat to food and livelihood security in Burundi due to the facts that 1) bananas are the most important food/cash crop in Burundi, 2) the disease is now found in all three surrounding countries (Tanzania, Rwanda, Democratic Republic of Congo) and 3) Burundi’s borders with its neighbors where BXW is present are relatively porous and there is little or no control of the flow of traded products and planting material between countries.

Bananas, along with cassava, constitute a major food staple for the majority of households in Burundi with an estimated consumption of 300 kg per inhabitant/per year (IRAZ). Banana is mixed with other crops and is said to occupy more than 25% of agricultural land (IRAZ). Furthermore, the banana crop on average provides more than 70% of cash income. The introduction and spread of BXW, therefore, would have terrible consequences on food security in the country. Access to cash would also be severely impeded for a large percentage of the population who rely on the sale of bananas for food or beer consumption, thus further impacting the population’s ability to meet their basic needs.

To date, almost no effort has been made to institute a national prevention campaign, although IRAZ has recently began public education efforts via the local media. Indeed, awareness of the disease and its symptoms is very low amongst agricultural extension agents, and virtually non-existent amongst rural farmers, who together make up the first line of defense against the disease.

While it is perhaps impossible to prevent BXW from entering Burundi, it is nevertheless important to try to inhibit and hopefully delay its introduction. It is also important to make sure that once introduction occurs, there is a rapid response system in place to control its impact and its spread throughout all banana-producing regions of the country.

Table 1 - Draft framework for response to banana *Xanthomonas* Wilt

	Immediate	Medium term
Pre-epidemic zone e.g. Burundi	<ul style="list-style-type: none"> • Education, Information and Communication/Training • Surveillance on disease presence and vulnerability • Quarantine inbound banana products (fruits, suckers,) • Form BXW management coordination task forces • Cultural measures (male bud removal, • Policy to support prevention e.g. regulate trade in banana products coming from affected areas. 	<ul style="list-style-type: none"> • EIC/Training for prevention • Surveillance • Training in rapid multiplication with demonstrations

IV. TARGET AREA AND PARTNER CRITERIA

A. Target Area

CMD Interventions

While GIS can play a role in the geographical targeting of CMD response efforts in Burundi, the relatively small size of the country and the on-the-ground situation presents an opportunity for the C3P project in Burundi to give preferential treatment to the northern half of the country which has been hardest hit by CMD. In each of the identified six Provinces (Bubanza, Kayanza, Ngozi, Kirundo, Muyinga and Karuzi), viable potential partners to aid in multiplication efforts have been pre-identified (Parishes, CARE, World Vision, Action Contre la Faim, Action Agro-Allemande, CARITAS Belgium, etc.). The Provinces and Cibitoke will be addressed by FAO under separate funding.

The selection process for the small grants program will allow us to narrow down individual Communes in each Province where activities financed by C3P will be undertaken in order to avoid duplication of efforts in certain Communes and any gaps in efforts. Each Province will put in place 25 ha of multiplication fields in partnership with 25 farmers' associations consisting of 20 or more persons. Due to limited funds, multiplication will be carried out in only five communes in each province.

Nevertheless, the CCU will work with the IITA GIS team to further develop and analyze relevant data sets in order to further hone geographical targeting of C3P efforts in country.

Table 2 - Target Provinces/District/Zone and Location of the Program Intervention for CMD

Province / District / Zone	Specific Location of Program Intervention	Total population of Province/ District/Zone	Population of Location of Program Intervention	Estimated Number of Farmers (HHs) to be served as direct beneficiaries of the CMD program per Location*
1. Karuzi	5 communes	389.219	211.356	5,500
2. Kayanza	5 communes	501.975	218.326	5,500
3. Kirundo	5 communes	564.280	287.140	5,692
4. Muyinga	5 communes	553.866	166.328	5,730
5. Ngozi	5 communes	674.632	337.316	5,500
6. Bubanza	5 communes	329.528	65.956	5,500

* Served here would include any goods or services received during the duration of the C3P project such as trainings, sensitization, planting material.

BXW Interventions

While some limited BXW interventions will be nationwide in scope, concerted efforts will be made in the communes of the Provinces bordering Rwanda, northwestern Tanzania, and Eastern DRC to prevent the introduction of BXW into Burundi and its eventual spread to other banana-producing regions of the country if and when the disease is identified within Burundi's borders. All communes of Karuzi will be targeted, as it is adjacent to Tanzania and is surrounded by Ngozi, Ruyigi, Muyinga and Cankuzo.

Table 3 - Target Provinces/District/Zone and Location of the Program Intervention for BXW

Province / District / Zone	Specific Location of Program Intervention	Total population of Province/District/Zone	Population of Location of Program Intervention	Estimated Number of Farmers (HHs) to be served as direct beneficiaries of the BXW program per Location*
1. Bubanza	Gihanga	329,528	52,600	50
2. Cibitoke	Mugina, Rugombo, Mabayi, Bukinanyana, Buganda	449,767	396,565	250
3. Kayanza	Kabarore	501,975	52,860	50
4. Kirundo	Bugabira, Busoni, Ntega,	564,280	302,400	150
5. Muyinga	Giteranyi, Muyinga, Buhinyuza,	553,866	288,215	150
6. Ngozi	Marangara, Busiga, Mwumba, Nyamurenza	674,632	302,560	200
7. Ruyigi	Gisuru, Kinyinya	358,185	120,915	50
8. Cankuzo	Kigamba, Mishiha, Gisagara, Cendajuru	209,225	161,035	200

* Served here would include any goods or services received during the duration of the C3P project such as training, sensitization, planting material.

B. Partner Criteria

Partners for the C3P project in Burundi will be selected based on:

- 1) Experience in cassava, banana and/or agriculture sector in general
- 2) The capacity of the organization to get results on the ground in geographic target areas for CMD and/or BXW interventions
- 3) Human resource capacity of the partner involved in CMD and BXW management
- 4) Past partnerships and good reputation with national programs/organizations
- 5) Existing/current programs/projects in intervention areas

All potential partners will be invited to submit Sub-Award proposals and will be asked to demonstrate the experience of their key staff in the cassava and/or banana sectors and/or their agricultural experience. The CCU team will work closely with all potential Sub-Award partners to help them develop viable proposals that fit within this work plan.

V. PROGRAM DESIGN and STRATEGY

Goal: Threats to food security caused by agricultural crisis in Burundi are reduced.

SO 1: Country stakeholders institutionalize coordinated agricultural disaster response mechanisms.

IR 1.1: Country responses to CMD and BXW are well coordinated.

Activities: The C3P project in Burundi will provide assistance and guidance to the existing National Commission to Combat Cassava Mosaic Disease to ensure high-level coordination of CMD-resistant cassava multiplication during the course of the project. CRS already has a seat on this Commission and will use it to work to improve the planning and coordination of activities while fostering greater collaboration amongst the key actors working on CMD.

Likewise, the C3P project will formally request the Minister of Agriculture to expand the scope of the CMD National Commission to include BXW prevention and control. This would be a significant step towards pushing the BXW threat to the forefront of the minds of the country's top agricultural officials and would help to coordinate efforts to prevent BXW from entering Burundi and deal with its control following its arrival in the country.

The Burundi CCU will be part of the National Commission. However, there will also be a small C3P committee responsible for final decision-making on strategy and activities. This will comprise the C3P country coordinator, CRS Burundi staff and IITA, assisted by the C3P chief of party and monitoring & evaluation coordinator. All interested NGOs will be invited to take part in the CCU, with CRS Burundi as the lead agency.

Outputs:

- National Commission to Combat Cassava Mosaic Disease (NCCCMD) strengthened
- BXW prevention and control unit included in the NCCCMD
- CCU set-up
- National strategy on CMD and BXW developed
- Strategy to ensure sustainable funding of coordinating taskforces/committee developed

IR 1.2: GIS technology links data on diseases to data on vulnerability and food insecurity.

Activities: The C3P project in Burundi will work with ISABU, FAO, the Ministry of Agriculture and other relevant agencies to provide the missing data identified by the IITA GIS unit in order to complete the vulnerability and food insecurity geographical targeting. IITA will be responsible for producing the geographic targeting maps and the Burundi CCU will work to validate and confirm the outputs.

Outputs:

- Data based on food insecurity, food vulnerability, CMD and BXW prevalence established
- Maps designed and shared with all stakeholders on food insecurity, CMD and BXW prevalence

IR 1.3: Existing institutions at country level carry forward proven methods for coordination and knowledge sharing regarding agricultural disasters.

Activities: The C3P project will work with the National Commission and other key actors working in Burundi, namely the Ministry of Agriculture, ISABU, FAO, and NGOs intervening in food security to define a strategy on agricultural disaster management. Meetings will be organized by CRS, main agricultural disasters identified and strategies discussed. CRS will be responsible for drafting the strategy and sharing the information with all the actors involved in food security. A contingency plan as a supporting document to the Strategy on disasters management will also be elaborated during a two to three day workshop. In order to insure coordination, information flows need to be as efficient as possible and known by every single actor of the food security sphere. Meetings will be held on ways to improve information flows, and information sharing in order to set up an early warning system. Outputs:

- Strategy on disasters management defined
- Contingency Plan designed
- Early Warning System set-up

SO 2: Farmers employ effective measures to control CMD and BXW

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IR 2.1: Effective control of CMD is achieved through multiplication and distribution of CMD-resistant varieties and promotion of improved management practices.

Activities: The C3P Project in Burundi will financially support the multiplication of 150 ha of CMD-resistant varieties by partner organizations through the administration of a small grants program, and provide financial assistance to ISABU to provide technical monitoring and oversight of these multiplication efforts. It is expected that farmers associations (around 25 associations per province) will be responsible for multiplication activities: 500 farmers are expected to be involved in CMD-resistant cassava multiplication per province. 3,000 farmers will therefore be directly benefiting from the project. IITA will also provide technical monitoring and oversight of country-wide multiplication efforts to ensure CMD-free multiplication. CRS in collaboration with ISABU will train 50 provincial and communal agricultural extension officers in CMD management and 422 colline-level agricultural agents in Kirundo and Muyinga provinces (Kirundo and Muyinga are the only provinces that have colline-level agricultural agents). Planting material will be provided by ISABU and/or FAO depending on the availability of clean cuttings.

In addition to these efforts, approximately 75 ha will be multiplied in the 2007-A agricultural season by USAID Consortium Livelihoods Security Initiative partners (Africare, CARE, CRS, and World Vision) using Famine Fund Fast Track funds. The Burundi CCU will work to ensure that these efforts are coordinated with other C3P and national multiplication efforts.

While the C3P project does not envisage the possibility of diffusing CMD-resistant cassava cuttings to the general farming population during the current project period, the C3P CCU will promote a demand-driven approach to cassava diffusion amongst the key actors involved in CMD response efforts, using CRS Burundi's long experience and expertise in organizing and implementing seed fairs and presenting a similar approach as a potential method for CMD-resistant cassava cuttings.

Outputs:

- C3P targeted areas of multiplication identified
- Partnerships established with local NGO/CBOS involved in multiplication and dissemination of CMD resistant planting material
- Multiplication of 150 ha of CMD resistant varieties by partner organizations in targeted areas
- 50 provincial and communal agricultural extension officers trained in CMD management
- 422 colline-level agricultural agents trained in Kirundo and Muyinga Provinces in CMD multiplication technologies and monitoring techniques
- 3,000 families are targeted to receive CMD resistant planting material (1500 ha) through farmers' associations and local partners (2008A season).

IR 2.2: Effective control of BXW is achieved through promotion of improved disease management techniques and through multiplication and distribution of wilt-escaping varieties.

Activities: Although BXW has not been reported, Burundi is one of the countries threatened by the disease as it shares borders with Rwanda, DRC and Tanzania where the disease is serious. The strategy for Burundi will be to prevent disease introduction by helping coordinate a nationwide BXW prevention campaign to warn and prepare Provincial and Communal agricultural extension agents of the threat of BXW. Training sessions will be run for 50 Provincial and Communal agricultural extension agents from the northern border provinces of Bubanza, Kirundo, Muyinga, Cibitoke, Ngozi, Cankuzo, Ruyigi and Kayanza, and 1,110 colline-level agricultural monitors (50 per commune of intervention) in the targeted provinces will be trained on the symptoms and signs of BXW as well as the methods of control in order to contain the disease if and when its presence is confirmed. 150 farmers' associations will also be trained in BXW management. Training sessions will be reinforced by the publication and distribution of BXW prevention and control posters/brochures to targeted areas.

A media campaign will be launched using radio, newspaper and television media outlets and 5 press releases will be distributed (one every quarter) about the threats of BXW and an update on ongoing prevention and control activities.

All communication materials will promote a rapid response network, which will consist of a chain of communication to IRAZ and a process of verification.

Finally, the C3P project in Burundi will financially support the introduction of banana macro-propagation technologies with the assistance of IITA and INIBAP scientists. Three national-level agriculturalists will be trained in these macro-propagation technologies. The three will act as trainers to farmers groups and through NGOs. Five demonstration macro-propagation nurseries will be established and eight thousand suckers of macro-propagated wilt-escaping banana varieties (realized in the process of demonstrations) will be distributed to approximately 200 farmers for further demonstration.

Outputs:

- Production and distribution of BXW prevention and control posters/brochures to targeted areas
- National strategy for BXW prevention and control planned and launched
- 5 press releases to national media outlets diffused
- 50 provincial and communal agents (agriculture and administration) trained in macro-propagation techniques
- 150 farmers' associations will be trained in BXW management
- 10 ha of macro-propagated wilt-escaping banana varieties for demonstration under strong survey installed
- 1,110 colline-level agricultural leaders in the targeted Provinces trained in BXW identification and management
- Three people trained at national level on macro-propagation to train others (farmers groups and micro-entrepreneurs) and set up five demonstration nurseries.
- 5 macro-propagation demonstration nurseries will be established in strategic locations and 7,500 wilt-escaping suckers are produced (1,500 at each nursery) and disseminated to 200 farmers, with training on appropriate management

Key Assumptions and Risks

The key assumptions for the successful implementation of this plan are: 1) that peace and political stability continue in Burundi, 2) that the relevant Government agencies are cooperative to the efforts of this project, 3) that the five confirmed CMD-resistant varieties identified in Burundi continue to be resistant to CMD, and 4) that no or a limited outbreak of BXW will occur during the project period.

VI. IMPLEMENTATION CALENDAR

See attached implementation calendar.

DRAFT

VII. MONITORING AND EVALUATION

<i>Intermediate Result</i>	<i>Key Indicators</i>	<i>Frequency of collection?</i>	<i>Whom Responsible for collection?</i>
A regional response to CMD and BXW is well coordinated.			
GIS technology links data on diseases to data on vulnerability and food insecurity.	<i>Production of validated GIS maps to aid in geographical targeting and planning of CMD interventions</i>	<i>Quarterly</i>	<i>C3P Coordinator</i>
	<i>Production of validated GIS maps to aid in geographical targeting and planning of BXW interventions</i>	<i>Quarterly</i>	<i>C3P Coordinator</i>
Existing institutions carry forward proven methods for coordination and knowledge sharing regarding agricultural disasters.	<i>Number of planning/coordination meetings held re: CMD interventions</i>	<i>Quarterly</i>	<i>C3P Coordinator</i>
	<i>Number of planning/coordination meetings held re: BXW interventions</i>	<i>Quarterly</i>	<i>C3P Coordinator</i>
	<i>Strategic plan developed for BXW prevention and control</i>	<i>Quarterly</i>	<i>C3P Coordinator</i>
Effective control of CMD is achieved through multiplication and distribution of CMD resistant varieties and promotion of improved management practices.	<i>Number of ha of CMD-resistant varieties planted with the coordination support of C3P project</i>	<i>Quarterly</i>	<i>C3P Coordinator</i>
	<i>Number of ha of CMD-resistant varieties planted with financial support of C3P project</i>	<i>Quarterly</i>	<i>C3P Coordinator</i>
	<i>Number of monitoring visits conducted by ISABU that were financially supported by C3P</i>	<i>Quarterly</i>	<i>C3P Coordinator</i>
	<i>Number of Agricultural Monitors in Kirundo and Muyinga Provinces trained in CMD multiplication and monitoring techniques</i>	<i>Quarterly</i>	<i>C3P Coordinator</i>
Effective control of BXW is achieved through promotion of improved disease management	<i>Number of Provincial and Communal agricultural extension agents trained in BXW identification and control techniques</i>	<i>Quarterly</i>	<i>C3P Coordinator</i>

techniques and through multiplication and distribution of wilt-escaping varieties	<i>Number of Agricultural Monitors in Kirundo and Muyinga Provinces trained in BXW symptom identification and control techniques</i>	<i>Quarterly</i>	<i>C3P Coordinator</i>
	<i>Number of agricultural extension agents trained in macro-propagation techniques</i>	<i>Quarterly</i>	<i>C3P Coordinator</i>
	<i>Number of ha of banana macro-propagation demonstration plots installed</i>	<i>Quarterly</i>	<i>C3P Coordinator</i>
	<i>Number of posters distributed to targeted Communes and other targeted audiences about the threat and symptoms of BXW</i>	<i>Quarterly</i>	<i>C3P Coordinator</i>
	<i>Number of brochures distributed to targeted agricultural extension agents, monitors and other targeted audiences about the threat and symptoms of BXW</i>	<i>Quarterly</i>	<i>C3P Coordinator</i>
	<i>Number of press releases about BXW threat and control measures distributed to local media outlets</i>	<i>Quarterly</i>	<i>C3P Coordinator</i>
	<i>Number of media stories generated by press releases</i>	<i>Quarterly</i>	<i>C3P Coordinator</i>

Briefs

The Burundi C3P project will create five (5) briefs during the life of the project to share best practices developed in Burundi and lessons learned in Burundi with the other C3P countries.

Five potential briefs identified for Burundi are:

- 1) Impact of Cassava Mosaic Disease on Food and Livelihoods Security in Burundi
- 2) Approaches to Multiplication and Diffusion techniques of CMD-resistant Cassava Varieties in Burundi
- 3) Prevention of Introduction and Spread of a Potentially Devastating Plant Disease, the BXW, in Burundi?
- 4) The Introduction of Macro-propagation Technologies in the Banana Sector in Burundi
- 5) Co-ordination mechanisms in the fight against Cassava Mosaic Disease and the prevention of BXW in Burundi.

VIII. BUDGET

The following budget outlines the key activities for each Strategic Objective and Intermediate Result, the estimated cost of the activity, and the period of implementation. A budget amount is only provided for activities that will be funded via the Sub-Award program. All other activities will be undertaken by CRS Burundi and IITA with dedicated funds from the C3P program as well as CRS and IITA cost shares. Note that for each activity identified to be part of the Sub-Award program, it is indicated whether the award will be on a grant or a contract basis. Grant activities will be more flexible in terms of approaches and methodologies with various partner organizations, whereas contract awards will be for the provision of specific services by specific partner agencies or organizations.

Objective / Intervention	Strategic Activities	Sub-Award Amount	Period
STRATEGIC OBJECTIVE 1: Regional actors institutionalize coordinated agricultural disaster response mechanisms	I.R. 1.1 National response to CMD and BXW is well coordinated		
	1. Participate in quarterly coordination meetings with the National Commission to Combat CMD	X	ALL
	2. Hold regular quarterly coordination meetings with the Steering Technical Working Group for BXW	X	ALL
	3. Attend regional workshops and seminars for C3P	X	ALL
	I.R.1.2. GIS technology links data on disease to data on vulnerability and food insecurity		
	1. Collect missing data for GIS geographical targeting for CMD by IITA	X	Q4 FY06; Q1 FY07
	2. Validate GIS outputs for CMD from IITA	X	Q1 FY07
	3. Map presence of ABB-type bananas and complete diagnostic survey to identify most vulnerable areas to insect transmission of BXW	X	Q4 FY06
	I.R. 1.3. Existing institutions carry forward proven methods for coordination and knowledge sharing regarding agricultural disasters		
	1. Planning of secondary and tertiary multiplication during 2007-A and 2008-A agricultural seasons	X	Q4 FY06; Q4 FY07
	2. Plan, launch and help implement a nationwide campaign to prevent and control BXW	X	Q1 FY07

STRATEGIC OBJECTIVE 2: Farmers employ effective measures to control CMD and BXW	I.R. 2.1. Effective control of CMD is achieved through multiplication and distribution of CMD resistant varieties and promotion of improved management practices			
	1. Multiplication of 150 ha of CMD-resistant varieties by partner organizations in targeted areas	\$180,000 (grants)	Q1 FY07	
	2. Technical monitoring of multiplication fields	\$5,000 (contract)	Q2 FY07	
	3. Promotion of a demand-driven approach to eventual cassava diffusion	X	ALL	
	4. Train 422 agricultural monitors in Kirundo and Muyinga Provinces in CMD multiplication technologies and monitoring techniques	\$13,000 (contract)	Q1-Q4 FY07	
	5. Train 50 Provincial and Communal agricultural extension agents from targeted Provinces and Communes	\$4,500	Q1-Q2 FY 07	
	I.R. 2.2. Effective control of BXW is achieved through promotion of improved disease management techniques and through multiplication and distribution of wilt-escaping varieties			
	1. Training of 50 Provincial and Communal agricultural extension agents from targeted Provinces and Communes	\$4,500 (contract)	Q1-Q2 FY07	
	2. Training of 1,110 colline-level agricultural leaders in all provinces of intervention	\$33,000 (contract)	Q1-Q4 FY07	
	3. Publication and distribution of BXW prevention and control posters/brochures to targeted areas	\$10,000 (contract)	Q2 FY07	
	4. Diffusion of 5 press releases to national media outlets	\$2,500 (contract)	ALL	
	5. Promotion of "rapid response" network	\$2,500 (contract)	ALL	
	6. Training of 8 persons in banana macro-propagation techniques and establishing five macro-propagation demonstration nurseries	\$10,000 (contract)	Q3 FY07	
	7. Distribution of 7,500 macro-propagated wilt-escaping banana suckers to 200 farmers for demonstration purposes	\$15,000 (contract)	Q3 FY07	
		CMD	\$210,000	75%
		BXW	\$70,000	25%
		TOTAL	\$280,000	100%