



**CTB**

**AGENCE BELGE  
DE DÉVELOPPEMENT**

# ANNUAL REPORT 2010

SUSTAINABLE IMPROVEMENT OF THE BANANA  
CROPPING SYSTEM IN KAGERA REGION AND  
KIBONDO DISTRICT IN KIGOMA REGION,  
TANZANIA (TAN 0400911)



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## 1 Project form

Country	Tanzania
DGCD intervention number:	1969911/12
Navision code BTC formulation number	TAN0400911
Navision Code BTC Execution	TAN0400911
Partner institution:	MOFSE & MAFSC Tanzania
Duration of intervention:	48 months
Duration of Specific Agreement:	54 months
Tanzanian Government contribution:	EUR 80,000
Beneficiaries	EUR 70,000
Belgian contribution:	EUR 1,500,000
Total contribution:	EUR 1,650,000
Start date of project	2009
End date of project	2013

### NOTE:

- The contribution of the GoT will be through the eight participating Districts and ARDI-Maruku in terms of personnel (salaries), and office space.
- The contributions of the beneficiaries will be mainly in kind (material and labour).

Banana is the most important staple food in many communities of the Great Lakes Region of East Africa; in Kagera Region, banana is food for about 70 to 95 percent of the total population and it plays a very significant role to the regional economic development. The combination of increasing infestations of banana pests and diseases, tenure pressure, declining soil fertility, low genetic vigour of local varieties and inadequate access to markets, are threatening banana farmer's livelihoods. Growing local banana varieties susceptible to one or more of these threats has led to a decline of banana production and high vulnerability to food and income insecurity for poorer farmers. This situation has been compounded by the prolonged price crises of coffee, the major traditional cash crop grown by smallholder farmers in the region.

In 1997, the Belgian-Tanzanian funded Kagera Community Development Programme (KCDP) was established with the goal of improving the standard of living for the rural communities, with a component focused on "Superior banana varieties that are either resistant to weevils, panama, nematodes, low fertility and drought, alone or in combination are introduced, multiplied and distributed." The justification for the project was that existing varieties of bananas, the main staple food in a large part of the region, were not resistant to a number of pests and diseases and should be replaced as fast as possible by more resistant varieties, accepted by the population. A gradual replacement should be based on a simple laboratory technique, merismatic in-vitro production of clean plant material. Banana plants raised in nurseries and multiplied in multiplication fields were distributed to farmers in 5

districts. By 2003, at the end of the project and according to the project final report, an estimated 2,5 million banana suckers had diffused among farmers in Kagera Region either directly from the multiplication fields or indirectly from farmer to farmer. The KCDP project may be considered a frank success in terms of introduction of improved hybrid varieties. An initial adoption study conducted in 2002 indicated that 29 percent of 177 households surveyed from the all districts of the Kagera region had planted at least one new banana variety; adoption has increased in the aftermath of the project. The impact on productivity and income was evaluated as very positive, with some social bias in adoption towards more market-oriented farmers.

This new project is conceived as a consolidation phase, with an expansion to Kibondo district in Kigoma region. The main challenges for this new project are:

- Overcoming constraints in diffusion of new varieties: multiplication fields and nurseries transferred at the end of KCDP to district authorities and NGOs have mostly stopped functioning, showing low sustainability while farmer-to-farmer diffusion has thrived although demand is still not met with spontaneous diffusion.
- Targeting the poor and vulnerable households;
- Facing new challenges from BXW: the outbreak of Bacterial Xanthomonas Wilt, to which new varieties are not resistant, raises new technical constraints on banana production;
- Strengthening innovation in soil fertility management: good practices exist among banana farmers to maintain soil fertility although they are generally labour-intensive and thus not always adequate for poorer households; there is ample space for further applied research to overcome some of the constraints;
- Mainstreaming banana development in the decentralization process.

Four axes of intervention within the new strategy are:

1. Consolidate institutional capacities and networking.
2. Improve the efficiency of the dissemination of the banana varieties already tested and demanded by many farmers because of superior productivity and tolerance to pests, disease and drought.
3. Disseminate best management practices for improved banana production & protection.
4. Improve post harvest, value adding and marketing skills.

The Overall Objective is “Incomes and food security in Kagera Region and Kibondo district increased.” The Specific Objective is: “Strengthened institutional capacities and public-private partnerships ensuring the sustained spread of farmer-led innovation in banana production in Kagera region and Kibondo district”. Four expected results have been defined:

- Institutional capacities and farmer empowerment consolidated allowing an enabling environment for technical and entrepreneurial innovation.
- A sustainable supply of improved banana varieties planting material ensured through public-private partnerships and a farmer-based dissemination system.
- Dissemination of best available banana cropping and management practices ensured through participatory experimentation and farmer-to farmer extension.
- Spread of innovations increased and sustained by improved post-harvest, processing and marketing skills.

The local level activities are implemented by Local Government Authorities (LGAs) All activities implemented at district level and funded under the project are embedded in the District Agricultural Development Plans (DADPs). Village-level activities are working on Participatory Farmers Groups (PFG). The Maruku Agricultural Research and Development Institute (ARDI-Maruku) is an important stakeholder of the project as public service provider. International scientific support and backstopping is provided to the stakeholders, primarily in the technical field, including services provided through K.U Leuven.

## 2 Summary

### 2.1 Analysis of the intervention

Intervention logic	Efficiency	Effectiveness	Sustainability
<p><b>Specific objective:</b> Strengthened institutional capacities and public-private partnerships ensuring the sustained spread of farmer-led innovation in banana production in Kagera region and Kibondo district</p>			
<p><b>Result 1:</b> Consolidate institutional capacities and networking</p>	<p>The project management team (PMT) is liaising with the project coordinators, DALDOs and contacting some NGOs pertaining dissemination of new banana varieties and improvement of farmers livelihood</p>	<p>JLPC meetings, Technical committee meetings and planning meetings have been held to ensure that all districts are employing similar approaches towards banana sucker multiplication and dissemination</p>	<p>Coordination of stakeholders and planning together, makes the follow-up and monitoring of the activities simple. In addition, the sharing of information makes continuation of activities sustainably</p>
<p><b>Result 2:</b> Improve the efficiency of the dissemination of the banana varieties already tested and demanded by many farmers</p>	<ul style="list-style-type: none"> <li>104 banana nurseries have been established in all project districts of Kagera region and Kibondo in Kigoma region</li> <li>Because of erratic rains some of nurseries have not produced enough banana suckers</li> </ul>	<ul style="list-style-type: none"> <li>67, 000 banana suckers have been distributed to vulnerable households</li> <li>About 100,000 banana suckers will be distributed in February and March 2011</li> </ul>	<p>All banana nurseries are managed either by group of farmers or by individual farmers. Nursery keepers own the nurseries and will keep them even after the project ends.</p>
<p><b>Result 3:</b> Disseminate best management practices for improved banana production &amp; protection</p>	<p>All banana nursery keepers have been trained on the banana nursery management (including false and complete decapitation, safe removal of banana suckers etc.) and management of banana fields</p>	<ul style="list-style-type: none"> <li>more than 1000 farmers have been trained</li> <li>farmers use nursery management skills from the trainings</li> </ul>	<p>The training of farmers was on Training of Trainers (ToTs) this ensures the continuity of the technology transfers especially when a farmer is trained by a fellow farmer.</p>
<p><b>Result 4:</b> Improve post harvest, value adding and marketing skills</p>	<p>An assessment mission by PMT was organized to Mbeya and learnt on drying of banana chips, making of banana flour and cooking</p>	<p>A demonstration on drying of bananas will be done at ARI Maruku</p>	<p>A study tour comprising of farmers is planned in the year 2011 so that farmers can learn from their fellows in Mbeya and will be ToTs of banana postharvest processing in Kagera and Kibondo and when deem possible to other banana growing areas of Tanzania</p>

## 2.2 Key points

- Distribution of banana suckers to vulnerable households need to be recorded for closer follow up
- Field decapitation need to be effected where banana suckers have attained the recommended size
- Technical and planning meetings need to be held frequently for update of the progress and sharing of information among key actors in the districts
- Study tour by farmers to Mbeya need to be effected so that farmers can start drying and processing of banana flour while the project is existing
- Banana marketing study need to be effected so that the recommendations from the study are used

## 2.3 Lessons learned and recommendations

- Farmers feel owning the project if they are involved from the planning to the implementation of the project
- Weather uncertainty can cause the failure to reach the target of the planned activities in the field

### 3 Evolution of the context

#### **Introduction**

Activities that were implemented in the year 2010 included the training of farmers on banana field management, planting and management of banana nurseries, gap filling after recommendations by the international backstopping consultant (Prof. Swennen), partial decapitation for multiple sucker production and harvesting and distribution of banana suckers that have attained the required size to be planted.

Apart from the banana nurseries, there was JLPC meetings, planning meetings, technical committee meetings and external audit. A junior assistant to the project joined the Project management Office (PMO) in August 2010.

The PMO involved mainly in monitoring and supervising field activities, advising on the field management and sometimes training of senior district staff on banana nurseries field management. Report preparation and sending them to the headquarters is a continuous process. In addition, the AFO has been travelling to the respective districts to collect the bank statements and harmonize the finance matters as they have been arising. Hitherto, the project progress is good as already some of the secondary nurseries have started producing suckers and multiplied to the project targeted individuals. Because of the intermittent rains it has been difficult to uproot and plant banana suckers although they were ready for planting. It is foreseen that massive distribution of suckers will commence in January 2011 onwards.

#### **Banana nurseries**

Planting of secondary banana nurseries in most of districts commenced in April 2010 after suckers been available from ARI Maruku with the objectives of multiplying banana suckers to vulnerable households. In the former planning meetings, it was envisaged that the vulnerable households will start receiving the first banana suckers by November/December 2010.

Moreover, partial decapitation that was planned was done in most of the nurseries where rainfall was not a problem.

#### **Distribution of currently available banana suckers**

As it can be noted from the pictures below, that is the banana suckers in the secondary (Missenyi on the right) nursery ready for harvesting and been distributed to targeted households.





The picture below shows banana suckers harvested from the nursery in Missenyi district already for distribution.



The table below, represents the summary to indicate the number of already available suckers for distribution. Although it was planned to distribute suckers to vulnerable households by December 2010, the activity will be accomplished by first week of February 2011.

District	Number of banana nurseries	Total number of planted suckers	Available number of suckers by December 2010	Suckers to be distributed by end of December 2010	Number of suckers already distributed (in early December 2010)
Biharamulo	3	1,000	2,000	2,000	453
Bukoba	14	2,806	15,422	8,400	1200
Chato	13	2,329	11,645	11,645	1876
Karagwe	7	2,400	9,600	9,600	231
Kibondo	17	2,485	7,400	4,628	800
Missenyi	12	1,286	6,430	3,858	1,047
Muleba	27	6,400	25,600	10,200	1,200
Ngara	10	4,235	12,600	12,600	1137
ARI Maruku	1		5010	5010	5010
Total	104	22,941	95,707	67,941	12,954

## **Decapitation**

Partial decapitation to induce many sucker emergence is the recommended practice. Most of banana nurseries have been decapitated and a great number of banana suckers are emerging. It is expected that if weather will not change, by May 2011 there will be a bout 275,000 banana suckers to be distributed to vulnerable households.

## **Gap filling**

During backstopping mission by Prof. Swennen, he recommended to reduce the space in the secondary nurseries to maximize the plant population for more sucker production. This activity has been implemented in some districts while in some areas is not done because of drought that extended abnormally in 2010. Already planting holes are made in most of nurseries and planting will be finalized by mid of February 2011.

The pictures below show the nursery that is already gap-filled



## **External audit mission**

The Project Management Team (PMT) received two external auditors. Because of limited time, the mission could visit and audit project finances in Bukoba District, Missenyi and Project head office at ARI Maruku. The mission has not produced the report. The PMT will debrief the districts once the report is made on the matters that may arise and that needs project implementers' attention.

## **Planned activities for the year 2011**

- Continuation of distribution of banana suckers from secondary nurseries to the vulnerable households. A seed voucher system as envisaged in the project TFF will be implicated
- Field management of banana nurseries will continue including training of farmers on new banana management practices
- Close monitoring of sucker distribution in all districts to ensure they are reaching the targeted destinations. In addition, monitoring of all other banana project activities will continue as it has been done.
- To participate in the monitoring of banana nursery development and advise to district project coordinators and farmers of Kibondo, Ngara and Karagwe with Prof. Swennen during the backstopping mission in January 2011.
- Banana marketing study since is a major constraint to banana producers following the low

price of banana bunches

- Post-harvest processing of bananas mainly drying of peeled bananas and demonstration on the utilization of banana flour
- Plan and implement study tours for some of banana project farmers to learn on the drying of bananas and flour making the activity that is common in Rungwe district in Mbeya region
- Training of district project coordinators, DALDOs, ARI Maruku and other interested partners on GIS to be done by the Junior Assistant after acquiring the necessary training materials
- Organizing the JLPC meetings and project technical committee meetings as the needs may be arising.
- Attending the instructions from BTC local head-office and BTC headquarters; writing of the reports; attending necessary meetings and workshop and all matters that builds to the success of the project.

## 4 Analysis of the intervention

### 4.1 Institutional anchoring and execution modalities

### 4.2 Specific objective

#### 4.2.1 Indicators

<b>Specific objective:</b> Strengthened institutional capacities and public-private partnerships ensuring the sustained spread of farmer-led innovation in banana production in Kagera region and Kibondo district					<b>Progress:</b>
<b>Indicators</b>	<b>E</b>	<b>G</b>	<b>Baseline</b>	<b>Progress year N</b>	<b>Comments</b>
Overcoming constraints in diffusion of new varieties					The project is going on very well although in some districts the weather conditions were not good. There was unexpected long dry conditions so that banana sucker development and other practices like decapitation could not be done effectively
Targeting the poor and vulnerable households;					Already vulnerable households targeted have been identified in all districts implementing the project and will receive the planting materials through seed voucher system as planned whenever suckers will be available and if they have prepared planting sites
Strengthening innovation in soil fertility management: good practices					Although some farmers are advocating to the use of farm yard manure, recommendations on intercropping and use of nitrogen fixing agents (rhizobiums etc) already recommended through agriculture extension departments in the districts
Mainstreaming banana development in the decentralization process					The banana project is operating from the district level. Local field coordination and monitoring is decentralised in the respective districts.

## 4.2.2 Analysis of progress made

The progress made so far is good (see evolution of the context)

## 4.2.3 Risks and Assumptions

- The project is operating on bananas that is a weather dependant. In the early year 2010 everything seem could go as planned, but, as the major activities were commencing (sucker harvesting, decapitation, gap filling etc) the rains became unfavourable. This affected the number of suckers that could have disseminated. However, the rains have resumed and we hope everything will go back to normal.
- Some vulnerable households (targeted group) receiving banana suckers have little resources mainly the farm yard manure needed to make a banana produce good bunches. This could be a limitation to them achieving good livelihood as planned.

## 4.2.4 Quality criteria

	Score	Comments
<b>Effectiveness</b>	90%	Most of the planned activities have been achieved
<b>Efficiency</b>	75%	If not for erratic rains, most of the districts played their role in the project
<b>Sustainability</b>	80%	The approach of making farmers own the project and get involved in the implementation plans of the project are making the project sustainable
<b>Relevance</b>	100%	The project is operating in the banana growing community and is relevant in terms of food, income and social value

## 4.2.5 Impact

The impact of the project will be fully evaluated once most of vulnerable households have received the planting materials. However, nursery keepers already benefitted from selling of the materials through seed vouchers and are feeling the project have a positive impact to their livelihoods

## 4.2.6 Lessons learned and recommendations

Unexpected/unpredictable factors can slow down the plans. Factors such as drought has halted some of progress on banana sucker distribution. It is recommended that for any plan there should be a benefit of the doubt before drawing the conclusions.

## **4.3 Results**

### **4.3.1 Analysis of progress made**

The progress is good and more positive indicators are expected in the coming year

### **4.3.2 Risks and Assumptions**

Unpredictable weather especially drought could retard the expected results

### **4.3.3 Quality criteria**

- Banana nurseries are growing well. There are available banana suckers already for distribution in the first quarter of 2011.
- Gap filling to minimize the spacing and increase sucker production is progressing
- False decapitation will be done in all banana nurseries in the first quarter

### **4.3.4 Budget execution**

Is in FIT

## 5 Beneficiaries

The project is targeting approximately 300 farmer innovators in 112 wards of the 8 districts concerned. At least 250 of them will also work as banana multipliers. The vast majority of banana producers, who combine food security and market-oriented production with banana as pivotal crop, constitute the bulk of beneficiaries of the project. Tentatively 112 wards in the 8 districts have been targeted for their potential for banana improvement. An estimate of 300 Participatory Farmer Groups will be supported with capacity-building, including about 6.000 households. Indirectly, a much bigger number of households will be reached by the intervention

The project is implemented within the framework of the Agricultural Sector Development Programme applying its core principles of increased control of resources by beneficiaries, pluralism in service provision, results-based resource transfers, integration with government systems and client-oriented research and development approach.

## 6 Follow-up of the decisions taken by the JLPC

The second JLPC meeting for the year 2010 was held in Bukoba in September. The following were the decisions made following the narrated subject on top of each decision.

### **Lack of reliable transport**

- It was commented that from the project TFF, it is the duty of the local authority to put it in the district budget rather than buying transport vehicles from the project budget. District representatives informed on the progress made to acquire vehicles for the agriculture department. Some of districts have assigned vehicles to the staff working on the project. The chairperson congratulated those who have already purchased vehicles and emphasized on the follow up of others to avail transport to project staff if they have not affected it.

### **Presence of uncoordinated NGOs working on agriculture**

- The chairperson promised to take the lead to organize the NGOs at the region level: he explained that the list of all NGOs and CBOs is available at Regional level and ready for distribution. The next step is to organize a meeting and to make a common understanding on this issue. It could be a challenge for the project so that some of the NGOs can be partners of the project so that they can catalyze the activities of the project or influence them.

### **Financial procedures in Local Government Authorities are slow and take unnecessary time to release funds for field activities**

- The National Project Coordinator (NPC) informed the meeting that most districts are still having the problems in availing money to the field attendants. Remarkably, Karagwe and Biharamulo are the poor performers. The NPC proposed to include a mechanism to tackle this. The NPC informs that timing of funds is important as the suckers are to be planted in the right season. If the money is not made available timely it can slow down the project seriously as plants need to be planted on the right moment.
- NPC informs that the problems are not at the DEDs office, as the requests are endorsed within a day if have all necessary information. But the problem is after-wards at the treasuries' office. NPC proposed a checklist to be made by DEDs which can help to



follow up what is endorsed. Cooperation at the treasuries' office for the project should be requested. It is commented that the DALDO should follow up each step of fund request

- The Resident Representative informed that the project approach in development cooperation is changing and that more responsibility is given to the districts as the donor does not want to manage the project themselves but would like to go more towards budget support. Of course there is a need of facilitation by the NPC and for financial follow up by the AFO. He emphasizes to strengthen the responsibility of the districts.

#### **Other matters commented during the JLPC meeting**

- It was explained that in the context of the banana project; vulnerability is considered as the inability to access the banana planting suckers. It was remarked that after the end of the former KCDP project, several farmers were producing the varieties introduced and the farmers are selling them now sometimes very expensive. Several studies of adoption were done, the really poor households could not access banana suckers because of the price and therefore vulnerable.
- The question was raised if there is need to do research on intercropping bananas with other crops (such as coffee, leguminous, and or other crops grown in Kagera). It was noted that ARI Maruku has done research on this. The results need to be translated into extension material: leaflets, brochures, posters etc.
- The JLPC members reacted on monthly technical reporting that it could not be feasible. However, it was agreed that since financial report is sent monthly this should contain some technical information on what was done in that month. The report should be short and simple. Follow up by DALDOs/DEDs is required. The meeting proposed that the local PMT design a report format and make it available to all project implementing districts. However it was finally concluded that all district adopt the Tanzania District report format and append necessary documents.

## 7 Annexes

Financial Planning in FIT