



**Trees For Global Benefits (TGB) Program in Uganda
A Plan Vivo Carbon offset Project with Small landholders in Bushenyi District, Uganda**

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A Collaborative program between:

The Environmental Conservation Trust of Uganda (ECOTRUST)

Bio Climate Research and Development (BR&D) /Edinburgh Centre for Carbon Management (ECCM)

The World Agroforestry Centre (ICRAF)

Annual Report 2005

Executive Summary

This second progress report on the Trees for Global Benefits Program (TGB) provides information about what has been accomplished from January to October 2005. This is the third year of implementation; the activity having commenced in May 2003.

The program has expanded from the initial 31 farmers and now has registered up to 156 applicants. Majority of these have gone through all the recruitment processes resulting in payments being administered to more farmers and others being processed and are awaiting securing of carbon buyers.

The program through support from BR&D has secured additional carbon buyers besides Tetra Pak. These are The Carbon Neutral Company (formerly Future Forests) (2,702 tonnes CO2), INASP (28 tonnes CO2) and the Katoomba Group (21.58 tonnes of CO2). These additional purchases have enabled more farmers to join, and receive carbon payments and reduce those on the waiting list. ECOTRUST is grateful to ECCM/BR&D for having facilitated these purchases.

ECOTRUST continued to improve program administrative and management systems through regular updates of the database, improvement of tracking of carbon payments and payment to farmers. Support to field activities has been improved through hiring of a forestry technician to provide day-to-day technical support on tree planting and management to farmers. An important aspect that has been addressed during the reporting period is seedling supply to farmers. ECOTRUST has encouraged private tree nursery operators to raise seedlings by running tree nurseries as businesses. As a result, at least one commercial tree nursery has been established in every sub county, managed by private nursery operators, majority of whom are involved with the carbon project already.

There is growing interest amongst other farmers to join the program. Recruitment of more farmers will depend on the availability of carbon buyers. The conditions are now set for expansion of the program within the two counties where it is already operational and subsequently to the whole district. A baseline survey has just been concluded which has identified potential areas for expansion based on availability of land for tree planting and well-organized groups that could potentially mobilize their members into tree planting.

ECOTRUST would like to thank ECCM for their continued support to ensure that the program grows into one that meets the Plan Vivo standards. ICRAF Uganda has been very instrumental in conducting the baseline survey as well as continuing with the development of technical specifications. The interest of participating farmers has been so strong during the reporting period enabling them to meet the set milestone, which has further strengthened the program. Further, the individuals who have taken on tree nursery management as a business helping in providing timely and inexpensive seedlings to farmers, enabling them to meet their tree planting targets. It is hoped that the nursery businesses will become viable for the benefit of the nursery operators, the farmers and generally the program.

1.0 Introduction.

This is a second annual report about The Trees for Global Benefits program (TGB) implemented by ECOTRUST in collaboration with the Edinburgh Centre for Carbon management (ECCM) and The World Agroforestry Centre (ICRAF).

The program's aims are:

- Building the capacity of farmers and project implementation partners in the administration of carbon projects.
- Increasing household incomes through carbon payments that would enable farmers meet costs of tree establishment to meet their tree products requirements while contributing to climate change mitigation.
- Conserving biodiversity by promoting planting of indigenous tree species

Having commenced in May of 2003, the program has been implemented for close to two and a half years now. A first annual report covering the period from May 2003 to December 2004 was produced. This second annual report covers the period from January to October 2005.

Activities implemented during this period were focused on consolidating and streamlining program implementation having gone through a full plan vivo cycle during the first year of implementation. In particular the program concentrated on recruitment of more farmers into the program, strengthening of program management including improving database management, streamlining of payments to farmers, raising funds for supporting program activities, securing of additional carbon buyers, improved activity planning and coordination, enhancement of capacity for activity implementation among partners and establishment of linkages with other carbon trade initiatives in Uganda and elsewhere.

The project implementation team also aimed at improving the coordination of field activities, streamlining farmer recruitment processes, providing forestry extension, enhancing seedling supply, development of community based monitoring systems, training of Community technicians, improvement of technical specifications and carbon accounting. As a result a strong foundation has been laid that will facilitate efficient activity implementation within the areas where the program is operational and also to expand to other areas within Bushenyi district.

2.0 Recruitment of additional farmers into the program.

Having conducted farmer trainings during the last quarter of 2004, a number of farmers expressed interest and have been recruited into the program. From the original, 33 farmers that were recruited during

2003/2004, the program now has a total of 156.



These farmers are now at different stages in the program, including some who have received two payments so far (the original 33), some who have received only a first payment, some who have signed sale agreements and are waiting to receive payment, and some who are on a waiting list and have not yet been allocated to buyers.

Table 1. Farmer recruitment and buyer allocation

Year of recruitment	Number of farmers recruited	Number allocated to buyers	Farmers not yet allocated to buyers
2003	30	30	0
2004	126	44	82
Total	156	74	82

The recruitment exercise attracted many farmers especially as a number of them had realized that money had started exchanging hands. Many more farmers are willing to join but expansion is limited by the availability of carbon buyers. As an immediate step, carbon buyers to cover all the recruited farmers need to be identified before more farmers can be recruited. In the meantime, ECOTRUST has taken a position of not entering carbon sale agreements with farmers before securing buyers. These farmers have therefore been put on a waiting list. Although farmers were informed that they are on a waiting list, some of them have taken it as full registration and have been complaining that they were recruited and not yet paid. This is being managed but points to a potential challenge about determining when to recruit farmers.

3.0 Strengthening of Program Management

Efforts were made to strengthen program management through improved database management, streamlining payments to farmers in view of reducing transactions costs, improved planning, enhancement of capacity for activity implementation among partners, establishment of linkage with other carbon trade initiatives and raising funds for supportive activities such as establishment of baselines.

3.1. Fund raising

The program continued to run on a limited budget and therefore there was need to raise additional funds to help in conducting some activities. Funds in the amount of USD \$20,300 were secured from (SyTems Analysis, Research and Training (START) to help conduct a baseline survey for the carbon activity in the whole of Bushenyi District. This has enabled us to collect baseline data about the areas where the carbon activity is operational as well as identifying potential areas for possible expansion within the district.



The baseline survey also acted as a monitoring exercise that established the numbers of trees that each farmers has planted, the area involved (through taking actual measurements of the area planted).

Additional carbon purchases were secured through ECCM. Table 2 shows all the purchases that have been made to date. ECOTRUST secured a small purchase from Forest Trends/Katoomba group through offsetting their carbon footprint for international travel during a conference on building foundations for pro-poor Payment for Ecosystem Services (PES) in Africa.

Table 2: Carbon buyers so far secured for the Trees for Global Benefits (TGB) program.

BUYER NAME	PURCHASE CODE	CARBON TONNES
Tetra Pak 2003	TPK 01	3055
Tetra Pak 2004	TPK 02	2515
Future Forests	FF 01	2702
INASP	INASP 01	28
PES conference International travel carbon footprint offset.	Katoomba 05	21.58
	Total	8321.58

Accessing additional carbon buyers is still a challenge to the extent that some of the farmers that were recruited in 2004 are not yet assigned to buyers. There are more farmers that are interested in joining the program but we have decided to suspend recruitment until more buyers have been secured with the exception of those that chose to be on a waiting list. Although it was made clear that carbon payments would only be administered once buyers have been secured, this has demoralized farmers and especially those who went an extra mile of using their money meant for other domestic requirements or borrowing funds to inject into tree planting. It is important therefore that carbon buyers are secured so that all farmers recruited can get payments without a lot of delays.

3.2. Database management.

One important tool for administration of carbon payments is a database that helps track information on each farmer and each carbon purchase. Additional entries for new farmers, carbon buyers, farmer allocation to different buyers, data related to payments were made. Data clean up was also undertaken to ensure consistency in the database. During the data clean up exercise, it was noted that information was missing on some farmers. Based on this, a system to track information for each farmer was developed and is regularly updated. This system has formed a basis for a quick check on the available data and therefore requesting the forestry technician, the community technicians and the farmers to identify the missing information. With increase in the numbers it has been realized that all the required data from the farmers needs to be collected in a timely and organized manner, entered into the database as soon as it is received.

3.3. Streamlining of payments to farmers.

ECOTRUST continued to explore ways of reducing transaction costs associated with administering payments to farmers through use of microfinance institutions. During this most recent round of payments, staff from ECOTRUST did not have to physically carry funds to the microfinance institutions but rather, telegraphic transfers (TTs) were made to farmers accounts. Carbon payments through the microfinance institutions constitutes one of the single big deposits received and therefore are valued by the microfinance institutions. Indeed, because of this, one of the microfinance institutions, Bunyaruguru Corporative Saving and Credit Society limited is considering providing some credit to tree farmers, especially those involved in tree nursery management.

The original 33 farmers³⁰ that met their planting targets as stated in the sale agreements received their second payments under the first Tetra Pak sale. Additional farmers were allocated to the balance of the Tetra Pak first sale and also the second Tetra Pak sale. All these



additional farmers have received their first payments. Additional farmers allocated to the Future Forests purchase received first payments early November 2005 as all their data has already been processed.

3.4. Planning

Activity planning as an important tool for improved program management has been conducted on a quarterly basis at ECOTRUST as well as regular meetings amongst individuals involved in the project through one to one meetings. Regular field visits have been conducted to help the forestry technician and the community technicians to plan their field activities.

Originally it was hoped that annual experience sharing workshops would be organized where farmers from different sub counties would meet to share their experiences. Such a workshop was organized at the end of 2003 and was very helpful. A similar workshop was not organized this year due to lack of funds. Experience sharing has however been toned down to joint farmer trainings at selected sites within a given sub county.

3.5. Establishment of linkage with other carbon trade initiatives

ECOTRUST has been very active in establishing linkage between the ECOTRUST carbon activity and other carbon trade initiatives both at national and international levels. The following are the initiatives that the TGB program has made links with and/or participated in the following.

- Forest Trends' Katoomba group and the ecosystem Marketplace.
- Participation and facilitation in the Capacity Building for Clean Development Mechanism project in Uganda (CDM4CDM).
- The Carbon Expo 2004, Cologne, Germany where the TGB project was exhibited among other Ugandan projects and our staff was involved in a panel discussion about sinks for carbon sequestration.
- The Climate Emissions Reduction Association (CERA) that is a newly established association that brings together individuals and institutions interested in carbon trade.

ECOTRUST is benefiting from these links through information sharing and training opportunities. Through the Forest Trends link, ECOTRUST co-hosted a workshop for building foundations for ecosystems services in Africa at the end of September 2005. The workshop was held in Mweya, Queen Elizabeth national park and visited sites of farmers under the TGB program for experiential learning.



4.0 Coordination of field activities.

Coordination of field activities has mainly been through engagement of part time field coordinators initially Martin Asimwe, and now Nathan Koporo. The capacity enhancement of community technicians has also helped further to improve communication between farmers and ECOTRUST. We hope to explore ways of institutionalizing this field coordination through farmer groups and also further build the capacity of community technicians to take on other roles.

4.1. Farmer recruitment processes

The project continued with recruitment of farmers into the program by ensuring that all the necessary documentation was in place. The team in particular ensured that all the tree planting plans were in place, reviewed and evidence for the review filed. Based on the previous experience where some farmers dropped out of the program after registration, the team has now made it a condition that for a farmer to be registered they must first demonstrate that they have planted at least a quarter of their plot. Community technicians were very instrumental in ensuring that only those that had attained the set target were registered.

Table 3. List of farmers recruited in 2005 by sub counties of origin.

Year of recruitment	Ruhinda County		Bunyaruguru County		Total
	Bitereko	Kiyanga	Ryeru	Kichamba	
2004	5	5	9	11	30
2005	66	38	18	4	126
Total	71	43	27	17	156

The majority of the farmers recruited were from Bitereko and Ryeru subcounties of Ruhinda and Bunyaruguru respectively. This can be explained by the level of organization in Bitereko primarily through the Bitereko Women's Group and the strength and interest of the Ryeru subcounty community technician – Wilson Turyahikayo. Kichamba subcounty performed poorly in its recruitment of new farmers which can be partly explained by the limited interest of the community technician in that area.

This is a very important observation and will influence how the program expands and also how community technicians are selected. Motivation and enthusiasm from community technicians is important in ensuring that farmer recruitment (and indeed other field activities) takes place.

4.2. Forestry extension.

Good management of trees is an important aspect for the success of any tree planting project. This prompted ECOTRUST to hire a forestry technician to guide farmers in good silvicultural practices. The forestry technician, who doubles as a local contact in the district, has trained farmers in

aspects of tree nursery management including land preparation for tree planting, timing the planting and initial management to establishment. Farmers have previously lost trees that were not properly planted or were not planted at the right time.

With regard to farmers that were recruited into the program in 2003, their trees have reached a stage for pruning. Initial assessment indicated that farmers did not have skills in undertaking pruning. The forestry technician has therefore been training farmers in tree pruning.

The forestry extension package will be developed and delivered to provide hands-on skills to the farmers as they implement their tree planting plans. Since not all farmers are at the same stage of implementation, this will be a continuous exercise.

4.3. Tree Seedling supply.

Tree seedling supply has been one of the most challenging aspects of this program. This was initially achieved through two nurseries run by ICRAF, combined with procurement of seedlings from nurseries in Bushenyi and Mbarara. This approach was not only unsustainable but was causing farmers a lot of delays. Seedlings would only be delivered once there was transport available through field visits by ECOTRUST staff.

ECOTRUST made a deliberate move to ensure that tree seedlings are produced locally and are available to farmers at the right time and within the sub counties where the farmers live. A tree nursery operator in each Subcounty was identified and trained. As a result, there are now three nursery operators who are running their tree nurseries as businesses in Ryeru, Bitereko and Kichamba sub counties respectively. Two of the nursery operators are also registered as carbon farmers and are therefore able to market their tree seedlings to fellow farmers. The farmers can now have easy access to seedlings and also can obtain them on credit.

Tree nursery labor and materials are quite expensive in terms of seeds, potting material and equipment. The nursery operators requested that ECOTRUST advance them some funds to be returned once tree seedlings have been sold. ECOTRUST considered this request and advanced some money to three tree nursery operators that had improved the quality of tree nursery management. The money would be paid in installments of up to four months. It is hoped that tree

nurseries will be a worthwhile business for the operators to continue engaging in while providing a cheap and timely source of seedlings to the carbon farmers.

4.4. Development of community based monitoring systems.

Participatory community based monitoring systems are important for the success of community based projects. In this respect therefore, ECOTRUST had been working on establishment of community based monitoring systems for the TGB program. This has initially been tested in Bitereko Sub County where there is a well-organized farmers group. The outcome of the community monitoring was very impressive and, based on this, the system will be rolled out to other sub counties as members are getting more organized. Box 1 explains how the community monitoring system operates.

Box 1: the operations of the community monitoring system

Simple monitoring forms have been designed to guide farmers to collect data on trees planted, those surviving, dates of planting etc. A self checking system by fellow farmers has been developed where a group of farmers undertakes farm visits counting the surviving trees from one farm to another. Later, a community technician verifies the tree numbers that the farmers have recorded. A forestry technician then undertakes a second verification and approves the results which are then entered into the database.

5.0 Technical specifications and carbon accounting

Technical specifications are an important aspect in any project involved with administration of carbon sales. For the TGB project, ICRAF was contracted by the then Uganda Forestry sector Coordination Secretariat to develop technical specifications for the program. This has been met with extremely slow progress though draft technical specifications having been were finally submitted in June 2005. These were discussed and comments have been provided. The revised technical specifications have now been developed and shared with ECOTRUST and ECCM and are under review.

The majority of the carbon funds have been used to pay farmers though some of the carbon funds are used for administering the project. Two payments were made to old and new farmers in June

and August respectively. A total US dollars \$11,297 was paid out to farmers. Us dollars \$8,449 is yet to be paid to farmers under the Future Forests sale.

6.0 Building a foundation for sustaining the program.

The TGB program has been running for close to two and a half years now. During this period, the program implementation team has gained insight on how to implement a Plan Vivo project. The capacity of participating communities has been built. As a result they have taken on new roles. There is need for continued trainings to ensure that additional roles can be taken up by the community members themselves.

One important aspect of sustaining the program is financial sustainability. At current levels of carbon sales, the funds retained ECOTRUIST for administration and program support are not adequate to meet costs required. It is important therefore that more carbon sales are made so that enough funds are available for running the program in a viable way.

7.0 Future outlook.

The program has undergone two “Plan Vivo” cycles having recruited two sets of farmers and carried out all the processes leading to farmers receiving their payments.

The program has made considerable progress and needs further support in order for it to move out of the pilot phase. There is need to evaluate program achievement against Plan Vivo standards so that the gaps towards achieving the standards could be addressed.

The Bushenyi pilot has demonstrated that carbon payments can contribute to farmers tree planting objectives while addressing a global concern of climate change. As a result there is growing interests to scale up the Plan Vivo system in Uganda demonstrated through the formation of the Uganda Carbon Bureau, the Mityana fruit forests program and the Mabira tree-planting program; who are all drawing lessons from the Bushenyi project.

The program is however confronted with a number of challenges that need to be addressed to ensure smooth program implementation. The challenges are:

- Lack of adequate funding for activity implementation besides the proceeds from limited carbon sales. There is need to secure funding to take the program through its

establishment phase. This situation has been made worse by the finalisation of a USAID project that was heavily subsidizing the operation of the carbon activity.

- The need to secure additional carbon buyers to enable the program expand.
- Lack of resources for the finalization of the technical specifications. This is critically important if the program is to maintain credibility. Right now conservative estimates are being used based on technical specifications for *Maesopsis eminii*. ICRAF has expressed continued interest in finalizing the technical specifications and it is hoped that this will be done soon.