THE ENVIRONMENTAL CONSERVATION TRUST OF UGANDA

Trees For Global Benefits (TGB) Program in Uganda

A Plan Vivo Carbon Offset Project, Uganda.

A Collaborative program between:

The Environmental Conservation Trust of Uganda

Bio Climate Research and Development (BR&D)

Annual Report

December, 2007

1.0 Executive summary

The Environmental Conservation Trust of Uganda (ECOTRUST) in collaboration with Bio- Climate Research and Development (BR&D) has been implementing a carbon-offset project since May 2003. The program aims at building the capacity of farmers planting trees for the carbon project as they contribute to climate change mitigation, increasing household incomes through carbon payments and conserving biodiversity by promoting planting of indigenous tree species.

The report indicates that since the project inception, the number of farmers that have been allocated buyers for planting trees for carbon sequestration has grown from 33 to 140 farmers. Out these 38 have been allocated buyers during the reporting period. Currently 32 farmers who have recieved training in the previous years and planted trees as result of the project have not been allocated buyers. The coming in of more buyers such as CAMCO is timely and there is hope that all farmers who planted will get the buyers with time. More farmers are interested in joining the programme after realizing from colleagues the social, economic and environmental benefits of the programme. A total of 63 farmers in Bushenyi have expressed interest in joining the programme. The project will train these farmers and assist them to prepare plan vivos as soon as the ones on the waiting list have been allocated buyers.

ECOTRUST has embarked on activities to expand the programme to new areas (Hoima and Masindi) were farmers have expressed interest. Induction trainings for potential farmers in the new areas have already been conducted. Farmers have started applying and writing their plan vivos. A total of 40 farmers (33 from Masindi and 7 from Hoima) have submitted their plan vivos. Some of those who submitted the plan vivos early have had theirs verified and those whose plan vivos are insufficient have had corrective actions suggested and will re-submit at a later stage.

Finally, the report has two sections: The first section is about the activities and updates that have been carried out since the previous reporting period. The report follows (in as much as possible) the reporting guidelines prescribed for the annual report developed by BR&D. The second section of the report is an appendix with a report of the induction in the new areas as well as a report of the field visit that was carried out by Plan vivo, CAMCO and ECOTRUST teams between the 24th November to the 1st of December 2007.

2.0 Key Events, Developments and Challenges

2.1. Key Events

The project has not registered any negative environmental event that has affected its performance. During the reporting period, the project enjoyed prolonged rains however, in good amounts. Most of the trees have benefits from this sufficient rain. Some of the positive events that have been experienced include:

- The project was show-cased during the peoples' forum which was one of the side events during the Commonwealth Heads of Government Meeting (CHOGM) 2007 Kampala. The Trees for Global Benefits exhibition in the CHOGM people's space was intended to bring awareness on a good practice as well as encourage all individuals to act in combating climate change. This exhibit was selected among the top three that were toured by The Prince of Edinburgh - Prince Charles. In addition, ECOTRUST led an online discussion on communicating climate change, hosted by the British council, Kampala website.
- ECOTRUST conducted a scoping of carbon-offset activities in the new districts in western Uganda (Hoima and Masindi). As a result of this 7groups in these districts have expressed interest in joining the programme.
- The BR&D and CAMCO visit in November where CAMCO has expressed willingness to buy 40,000tCO_2.

2.2 Developments

2.2.1 Expansion of TGB programme

ECOTRUST coordinators have received a number of expressions of interest to participate in the project from potential farmers. Several of these have submitted plan vivos, which have not yet been reviewed. Reviewing of more plan vivos from Bushenyi will be conducted when there is a significant reduction in the number of farmers on the waiting list.

2.2.2 New Project Areas: Hoima and Masindi Districts

There has been willingness expressed by the local communities near Bugoma and Budongo central forest reserves in Hoima and Masindi respectively to grow trees for carbon sequestration. A scoping exercise has been conducted and the results indicate that there are several biodiversity, livelihood and environmental benefits in promoting TGB in these districts. In addition, the farmers have land and there

are several native trees that can do well in these districts. The communities have expressed interest in afforestation on private land, reafforestation in communal forests and forest reserves as well as avoided deforestation. They have also expressed interest in planting *Maesopsis sp, Markhamia sp, Ficus sp,* Mango, Avocado and Jackfruit. ECOTRUST is supporting these communities to register Communal Land Associations (CLA), which would enable them manage the communal forests legally under a community arrangement. Through this arrangement ECOTRUST anticipates that they would also use their organization to tap carbon funds for forest conservation for forest rehabilitation and avoided deforestation.

Awareness meetings to initiate a carbon –offset project were carried out in both districts (Hoima and Masindi) and the turn up was good. In Masindi, three meetings were carried out and a total of 85 people attended. While in Hoima, two meetings were done and 78 people were registered. These figures show how interested the communities in these two districts (Hoima and Masindi) are. The communities are looking forward to join if any opportunity arises.

2.3 Challenges during implementation of programme

These are:

- Complaints from the farmers who joined the programme and started planting trees in 2004 and 2005 as a result of this project and have not got buyers.
- Delayed or no training by ECOTRUST about the project for the new farmers from Bushenyi that have expressed interest
- Low price of carbon being paid to farmers
- Non availability and sometimes high cost of seedlings.

3.0 Activities

Farmers have continued to use different land use systems, the major ones being mixed native species (planting a variety of indigenous timber species on fragmented land plots), boundary planting (planting trees at the periphery of the farmers plot and agroforestry (mixing trees such as *Maesopsis sp.* and *Grevillea sp.* with crops like bananas, beans, maize etc). This has enabled the farmers to diversify farm production and provide multiple benefits such as timber, firewood, medicine and fodder while minimizing land management requirements and boundary planting. The tree species being planted are *Maesopsis*

eminii, Terminalia sp, Funtumia elsatica, Markhamia lutea, Cordia melleni, Carapa sp, Khaya anthoceca, Prunus africana, Newtonia buchananii, Entandrophragma angolense etc.

Indigenous timber tree species occurring in nearby protected areas and growing well in the farmers plots are planted and they fall under 3 major rotation categories. The farmers are growing mixed native species with *Maesopsis sp.* as the majority similar to the project's technical specifications although some of the species being planted are not listed in the specifications. Fast growing species (*Maesopsis, Terminalia*) are harvested for timber after 15 to 18 years, medium rotation species (*Funtumia, Markhamia, Cordia, Carapa*) are harvested at 25 years or so and slow growing species such as *Khaya, Entandrophragma, Milicia, Prunus, Fagara, Warbugia, Newtonia* are harvested after 40 to 60 years. Table 1 shows the three rotation categories

Table 1: Rotation categories of tree species

Short rotation	**Medium rotation**	**Long rotation**
Maesopsis sp.	*Funtumia sp*	*Khaya sp*
Terminalia sp.	*Markhamia sp*	*Entandrophragma sp*
	Cordia sp	*Milicia sp*
	Albizzia	*Prunus sp*
		Fagara sp
		Newtonia sp

Planting of indigenous tree species will enable to produce high-quality timber at the end of established rotations, as well as fuelwood obtained through woodlot management operations (thinning and pruning). Native woodlots also produce medicinal products, honey, as well as herbaceous fodder for goats growing under trees where possible. Integration of indigenous trees into rural landscapes also provides soil erosion control as well as biodiversity conservation benefits.

4.0 Participation and Recruitment

4.1 Number of producers registered and total area covered

The total number of farmers participating in the project is 172. These are all the farmers who have plan vivos and have planted the trees. Of these, 136 farmers have been allocated buyers and have signed carbon sale agreements and their sale agreements have been registered. The remaining 36 farmers (also called waiting farmers) have not signed sales agreements, since they are yet to be allocated buyers. Waiting farmers are those who started the project activities i.e. creating and writing plan vivos, having them verified and also started planting but have never been allocated buyers. Table 2 shows the number of farmers who have been allocated buyers over the years since inception of the project.

Table 2: Carbon buyer allocation

Year of Allocation	**Number of farmers allocated to buyer**
2003	30
2004	54
2006	18
2007	38
Total	**140**

Following the Plan vivo/CAMCO recent visit (see section 2), there is hope for the waiting farmers to be allocated buyers. CAMCO is yet to sign a formal agreement with ECOTRUST to buy at least 40000tCO_2. This quantity will be enough to settle all the outstanding farmers and including a good number of new applicants. When the agreement is signed, the farmers will be monitored to ensure that they have the right number of seedlings as per their plan vivo's and sales agreements. The waiting farmers are distributed within the four sub counties as shown in Table 3. The table also shows the corresponding volume of carbon dioxide (CO_2) to be sequestered in the respective sub-counties.

Table 3: Waiting farmers and corresponding carbon volumes

Sub-county	**Number of farmers**	**Area (Ha) to be planted**	**Volume of Carbondioxide**	**Volume of Carbon (tC) to be sequestered**
Bitereko	12	20.7	4757.85	1299.96
Kiyanga	8	44.5	10256.182	2794.6
Ryeru	7	12	2765.71	753.56
Kichwamba	5	9.6	2212.57	602.88

Total	**32**	**86.8**	**19,992.32**	**5262.4**

The 32 waiting farmers have a total area of 86.8Ha which if effectively planted with trees at a spacing of 5mx5m should translate into an effective population of 38,720 trees. These will sequester 19,992.32 tCO_2.

4.2 New Producers

The recent visit of both Plan vivo and CAMCO team brought much hope to those farmers who expressed willingness to join the project a year back. In addition, it is hoped that more farmers will express interest to the program after realizing that those that joined earlier are already benefiting. A list of all the new farmers is being kept in the database and will be notified in the event that a buyer is secured. Reports from the field coordinators indicate that the farmers who have submitted plan vivos are all ready to begin planting in the year 2008, if their plan vivos are approved. The reviewing of plan vivos is likely to raise the farmers' expectations as far as availability of buyers is concerned. The project will therefore review and approve plan vivos based on the availability of buyers.

The table below indicates the number of producers that have submitted their plan vivos with ECOTRUST in Bushenyi, Hoima and Masindi and are waiting reviewing and a go ahead from ECOTRUST to begin planting:

Table 4: New Producers who have submitted their Plan Vivos from Bushenyi, Hoima and Masindi

Subcounty	**Number of farmers**	**Area (Ha) to be planted**	**Volume (tCO2)**	**Volume of Carbon (tC)**
BUSHENYI				
Bitereko	25	62	14250.58	3893.6
Kiyanga	17	51	11722.25	3202.8
Ryeru	9	22	5056.66	1381.6
Kichwamba	12	30	6895.44	1884
Total	**63**	**165**	**37924.93**	**10362**
HOIMA				
Kyangwali	5	14.5	3341.902	910.6

Kaseta	*	*	*	*
Kabwoya	3	8.5	1959.046	533.8
Kiziranfumbi	28	56.5	13021.894	3548.2
Total	36	79.5	18322.842	4992.6
MASINDI				
Pakanyi	*	*	*	*
Karujubu	*	*	*	*
Budongo	33	54	12,202	3,858
Total	33	54	**12,202**	3,858
GRAND TOTAL	**69**	**133.5**	**68,449.772**	**8850.6**

* Information still being compiled

5.0 Community Participation in project Governance

There is regular communication between ECOTRUST and the field coordinators as well as the carbon producers (farmers). For example, before any carbon payments are effected, the farmers have to be visited by both the field coordinators and the ECOTRUST staff. During this time, the farmers who have any issues or problems share them with the visiting staff and a solution found. In addition, whenever funds are available and /or during the monitoring, farmers are gathered and discussions about the project are held. As a result of these interactions, the farmers feel the trees are theirs and are economically benefiting from them. This has enabled them to spread the information to other people leading to many applications being submitted to the field coordinators and subsequently to ECOTRUST.

6.0 Social and Environmental Benefits

6.1 Social benefits

The project is targeting the small scale landholder farmer who has land but is lacking the funds to invest in the land. Participants gain access to local and national markets for timber, poles, fuel wood, fruit and fodder. Due to the process of working as a team, individuals share new economic/ income generating ideas such as tree-based enterprises such as apiary, nursery establishment and production of seedlings to add value to the trees. This also improves on their economic situation.

6.2 Environmental benefits

The project gives priority to households neighbouring protected areas. This way, the project contributes to increasing the tree cover in the areas surrounding the protected areas. This reduces pressure on the protected area. Small-scale production of fuel wood and timber will alleviate pressure on nearby forest reserve and national park resources.

The current project area is very steep hence, highly susceptible to erosion due to the slope that are devoid of vegetation. Tree planting therefore contributes to soil erosion control as well as Improved Watershed Management. The proposed new project area is Uganda's main source of timber and therefore experiencing loss of tree cover at alarming rates. By adding value to trees and rewarding those that have not cut trees in the past five years, the project hopes to reduce on this habitat degradation. The project is specifically targeting to contribute to Budongo and Bugoma forest reserves as well as Ongo and Alimugonza Communal Forests.

7.0 Sales

Since 2003, ECOTRUST has been collaborating with BR&D and this relationship has brought in many Carbon buyers (especially from Europe). The buyers include Tetra Pak, which has been buying carbon every year. The list of carbon buyers and their corresponding quantity and price is shown in Table5.

Table 5 Carbon sales to date

Year	Buyer	tC02	Price C02	Tt cost $	EC/T share	Producer share	BR&D share
2003	Tpk2003	11200	3.82				
2005	Tpk2004	9222	3.82				
2005	INASP1	102	7.64				
2005	One World	3.65	7.64				
2005	Future Forest	10000	5.5				
2006	Tpk2005	10933	3.82				
2006	INASP2	133.29	7.64				
2006	U&W1	22	7.64				
2006	Key Travel	24	7.64				
2006	Save Children	3.06	7.64				
2006	In-2 technology	21.27	8.48				
2006	U&W2	2550	5.5				
2007	Tpk2006	5000	5.5				
2007	U&W3	5625	4.4				

2007	In-2 technology	22	7.6				
2007	Individual-1	10	9				
2007	U&W	265	7				
2007	U&W	2744	4.7				
2007	Sandra Hughes	50	10.45				
2007	Hambleside & Danelaw	1217	6.8				
	Grand Total	**57930.27**		**258963.2896**	**73804.53754**	**145599.7546**	**39166.91**

* Individual sale prices blanked in public version for client confidentiality reasons.

8.0 Allocation of Sales and Payments to producers

During the year 2007, allocation of carbon sales was based on the fact that some farmers who had joined in the earlier years had began project activities (planting) and had never been allocated any buyers. So they were priority. These farmers planted at the same time with some farmers who have already been allocated buyers and have subsequently been paid. A total of 38 farmers have been allocated buyers during this reporting period.

9.0 Payment to producers

The table 6 below is a summary of payments that has been made to producers since the inception of the project. The table also indicates the amount of money each of these farmers has received and how much the balance is.

Table 6: Payment to producers

Name	I.D	Total deposit($)	Yr0-30%	Yr1-20%	Yr3-20%	Received	Balance
Ntabirweki Eva	402/02/001	363.9888	109.19664	72.79776	72.79776	**254.7922**	**109.1966**
Ntsigaireho Betty	402/02/002	1130.4	339.12	226.08	226.08	**791.28**	**339.12**
Kato Eliasaph	402/02/003	1356.48	406.944	271.296	271.296	**949.536**	**406.944**
Ahimbisibwe Beatrice	402/02/005	452.16	135.648	90.432	90.432	**316.512**	**135.648**
Kantereine Fabius	402/02/004	565.2	169.56	113.04	0	**282.6**	**282.6**
Tusasirwe Martia	402/19/001	271.296	81.3888	54.2592	54.2592	**189.9072**	**81.3888**
Bushoborozi Benon	402/19/002a	1469.52	440.856	293.904	293.904	**1028.664**	**440.856**
Buherero Milton	402/19/003	904.32	271.296	180.864	180.864	**633.024**	**271.296**
Kapaasi Garvase	402/19/004	197.82	59.346	39.564	39.564	**138.474**	**59.346**
Turyasingura medard	402/19/005	452.16	135.648	90.432	90.432	**316.512**	**135.648**
Bagambe Francis	402/16/004	451.0296	135.30888	90.20592	90.20592	**315.7207**	**135.3089**
Bikanshobera Patrick	402/16/005	339.12	101.736	67.824	67.824	**237.384**	**101.736**
Byarufu Francis	402/16/008	124.344	37.3032	24.8688	24.8688	**87.0408**	**37.3032**
Matuga Joseph	402/16/010	113.04	33.912	22.608	22.608	**79.128**	**33.912**

Besekya Hillary	402/16/012	1921.68	576.504	384.336	384.336	**1345.176**	**576.504**
Mugisha Akleo	402/16/013	127.7352	38.32056	25.54704	25.54704	**89.41464**	**38.32056**
Muhoozi Zabron	402/16/015	1299.96	389.988	259.992	259.992	**909.972**	**389.988**
Bahigana Violet	402/16/016	226.08	67.824	45.216	45.216	**158.256**	**67.824**
Byabagambi David	402/16/017	169.56	50.868	33.912	33.912	**118.692**	**50.868**
Turyahikayo Wilson	402/28/002	1808.64	542.592	361.728	361.728	**1266.048**	**542.592**
Batecereza Salongo	402/28/003	226.08	67.824	45.216	45.216	**158.256**	**67.824**
Tibanyendera Jolly	402/28/004	339.12	101.736	67.824	67.824	**237.384**	**101.736**
Kateba Eric	402/28/006	452.16	135.648	90.432	90.432	**316.512**	**135.648**
Birungi Evaristo	402/28/008	113.04	33.912	22.608	22.608	**79.128**	**33.912**
Turyomugendo medar	402/28/009	339.12	101.736	67.824	67.824	**237.384**	**101.736**
Tweteise charles	402/19/009	1808.64	542.592	361.728	0	**904.32**	**904.32**
Tukamuhabwa Paturi	402/19/019	689.544	206.8632	137.9088	0	**344.772**	**344.772**
Besigayo Molly	402/02/015	565.2	169.56	0	0	**169.56**	**395.64**
Bandi Lilian	402/02/025	565.2	169.56	0	0	**169.56**	**395.64**
Byaruhanga Annet	402/02/026	565.2	169.56	0	0	**169.56**	**395.64**
Barisimaki Charles	402/02/032	565.2	169.56	0	0	**169.56**	**395.64**
Nshekanterirwe Peterenia	402/02/019	565.2	169.56	0	0	**169.56**	**395.64**
Bushoborozi benon	402/19/002b	2967.3	890.19	0	0	**890.19**	**2077.11**
Kashagama Godfrey	402/19/023	452.16	135.648	0	0	**135.648**	**316.512**
COU Ndekye Parish	402/28/013	2260.8	678.24	452.16	0	**1130.4**	**1130.4**
Apporonali Bakanyihi	402/28/017	565.2	169.56	113.04	0	**282.6**	**282.6**
Tumwesigye Anatoli	402/28/020	565.2	169.56	113.04	0	**282.6**	**282.6**
Byamugisha Florence	402/28/021	678.24	203.472	135.648	0	**339.12**	**339.12**
Rugazi Parish Priest	402/28/025	3391.2	1017.36	678.24	0	**1695.6**	**1695.6**
Kabiite Siragi	402/28/026	4521.6	1356.48	904.32	0	**2260.8**	**2260.8**
Tibenderana Gilazio	402/28/033	452.16	135.648	90.432	0	**226.08**	**226.08**
Baryeha Harriet	402/19/007	3139.121	941.73624	627.8242	0	**1569.56**	**1569.56**
Bigumire Urbano	402/19/020	752.8464	225.85392	150.5693	0	**376.4232**	**376.4232**
Ndyanabo Justus	402/19/017	1255.874	376.76232	251.1749	0	**627.9372**	**627.9372**
Turyahikayo Stanley	402/19/011	501.8976	150.56928	100.3795	0	**250.9488**	**250.9488**
Mugerwa Paul	402/16/020	1218.571	365.57136	243.7142	0	**609.2856**	**609.2856**
Tibatunga Horistus	402/16/014	113.04	33.912	22.608	22.608	**79.128**	**33.912**
Bangirana George	402/19/010	1130.4	339.12	226.08	0	**565.2**	**565.2**
Tumwebaze G.	402/19/021	847.8	254.34	169.56	0	**423.9**	**423.9**
Nshemereirwe Simple	402/19/022	847.8	254.34	169.56	0	**423.9**	**423.9**
Kyabera Christine	402/19/024	565.2	169.56	113.04	0	**282.6**	**282.6**
Bandiniiza Jackson	402/19/028	847.8	254.34	169.56	0	**423.9**	**423.9**
Bagira Steven	402/19/041	565.2	169.56	113.04	0	**282.6**	**282.6**
Kisegyesi Yovanis	402/02/017	627.372	188.2116	125.4744	0	**313.686**	**313.686**
Rukundo scolar	402/02/027	1255.874	376.76232	251.1749	0	**627.9372**	**627.9372**
Tumugabiirwe Donoz	402/02/029	1255.874	376.76232	251.1749	0	**627.9372**	**627.9372**
Beth Waide	402/02/014	1003.795	301.13856	200.759	0	**501.8976**	**501.8976**
Rwamuriro Teddy	402/02/016	1255.874	376.76232	251.1749	0	**627.9372**	**627.9372**
Rwabayambire Resty	402/02/036	1255.874	376.76232	251.1749	0	**627.9372**	**627.9372**
Sinta Silver	402/02/056	452.16	135.648	90.432	0	**226.08**	**226.08**
Kakyanira Fred	402/02/050	784.215	235.2645	156.843	0	**392.1075**	**392.1075**

Barindwa Fausta	402/02/051	784.215	235.2645	156.843	0	**392.1075**	**392.1075**
Bainomugisha Lawren	402/02/059	1569.843	470.9529	313.9686	0	**784.9215**	**784.9215**
Byashushaki Dezi	402/02/060	784.215	235.2645	156.843	0	**392.1075**	**392.1075**
Kamugisha Lilian	402/02/062	784.215	235.2645	156.843	0	**392.1075**	**392.1075**
Rwakinene Rose	402/02/064	784.215	235.2645	156.843	0	**392.1075**	**392.1075**
Ampaire Samuel	402/02/065	980.622	294.1866	196.1244	0	**490.311**	**490.311**
Ngabirano Paura	402/02/021	1373.436	412.0308	274.6872	0	**686.718**	**686.718**
Mukiga Bonny	402/02/008	1961.244	588.3732	392.2488	0	**980.622**	**980.622**
Nabaasa Velly	402/02/070	989.1	296.73	0	0	**296.73**	**692.37**
Bagira Milka	402/19/012	566.613	169.9839	0	0	**169.9839**	**396.6291**
Karisa Yoana	402/16/018	610.416	183.1248	122.0832	0	**305.208**	**305.208**
Begumisa Moses	402/16/020	2178.281	653.48424	435.6562	0	**1089.14**	**1089.14**
Tukamuhabwa	402/19/043	452.16	135.648	90.432	0	**226.08**	**226.08**
Mugaba Amos	402/19/044	452.16	135.648	90.432	0	**226.08**	**226.08**
Kanyarufu	402/19/045	519.984	155.9952	103.9968	0	**259.992**	**259.992**
Kahadiki Juliet	402/19/046	746.064	223.8192	149.2128	0	**373.032**	**373.032**
Mihanda Potiano	402/19/047	599.112	179.7336	119.8224	0	**299.556**	**299.556**
Muhereza Topista	402/19/048	678.24	203.472	135.648	0	**339.12**	**339.12**
Saba Mujuni	402/19/049	452.16	135.648	0	0	**135.648**	**316.512**
Baryeha Geoffrey	402/19/050	599.112	179.7336	119.8224	0	**299.556**	**299.556**
Bwida Group	402/19/051	678.24	203.472	135.648	0	**339.12**	**339.12**
Byarugaba Francis	402/19/052	373.032	111.9096	74.6064	0	**186.516**	**186.516**
Muhumuza Jennifer	402/02/009	1569.843	470.9529	313.9686	0	**784.9215**	**784.9215**
Rutebemberwa Joverin	402/02/010	1569.843	470.9529	313.9686	0	**784.9215**	**784.9215**
Mpungirehi Imerida	402/02/086	1413	423.9	0	0	**423.9**	**989.1**
Basiga Vereriano	402/02/012	1569.843	470.9529	313.9686	0	**784.9215**	**784.9215**
Mutabazi Margret	402/02/013	1961.244	588.3732	392.2488	0	**980.622**	**980.622**
Musinguzi Harriet	402/02/023	980.622	294.1866	196.1244	0	**490.311**	**490.311**
Mugisha Beatrice	402/02/024	245.862	73.7586	49.1724	0	**122.931**	**122.931**
Natukunda Ann	402/19/042	2543.4	763.02	508.68	0	**1271.7**	**1271.7**
Kajurubu alfred	402/19006	1681.47	504.441	0	0	**504.441**	**1177.029**
Turyasingura Polikalipo	402/28/022	1362.132	408.6396	272.4264	0	**681.066**	**681.066**
Byarugaba Yeremia	402/02/035	565.2	169.56	0	0	**169.56**	**395.64**
Turyatemba Flugyensia	402/02/068	565.2	169.56	0	0	**169.56**	**395.64**
Twesigye Denis	402/02/075	847.8	254.34	0	0	**254.34**	**593.46**
Mirenzo Charles	402/02/019	847.8	254.34	0	0	**254.34**	**593.46**
Basera Tereza	402/02/079	565.2	169.56	0	0	**169.56**	**395.64**
Tugumisirize Christopher	402/02/031	565.2	169.56	0	0	**169.56**	**395.64**
Mbanoha Benon	402/02/028	565.2	169.56	0	0	**169.56**	**395.64**
Tibaijuka Emmauel	402/02/034	989.1	296.73	0	0	**296.73**	**692.37**
Ruth Musisa	402/02/007	565.2	169.56	0	0	**169.56**	**395.64**
Tikwendera Appolinari-3rd inst	402/21/001	565.2	169.56	113.04	113.04	**395.64**	**169.56**
Torimpena Fulugensia	402/19/008	706.5	211.95	0	0	**211.95**	**494.55**
Natukunda Ann	402/19/042b	1096.67	329.001	0	0	**329.001**	**767.669**
Akambikiira Nazarius	402/28/027	847.8	254.34	169.56	0	**423.9**	**423.9**
Bagyenzire Syril	402/02/011	784.215	235.2645	156.843	0	**392.1075**	**392.1075**
Sande Augustance	402/02/049	989.1	296.73	0	0	**296.73**	**692.37**

Tirwakunda Franco	402/02/057	565.2	169.56	0	0	**169.56**	**395.64**
Turyahikoayo Wilson	402/28/002b	2826	847.8	0	0	**847.8**	**1978.2**
Ainake Didas	402/16/011	525.636	157.6908	105.1272	105.1272	**367.9452**	**157.6908**
Kyomukama Mary	402/19/053	2402.1	720.63	0	0	**720.63**	**1681.47**
Bushoborozi Benon	402/19/002	3108.6	932.58	0	0	**932.58**	**2176.02**
Alleluya Winfred	402/02/038	847.8	254.34	0	0	**254.34**	**593.46**
Karikuratako zabron	402/02/092	706.5	211.95	0	0	**211.95**	**494.55**
Agaba ann	402/19/051	1724.47	517.34	0	0	**517.34**	**1207.13**
Bananura elsam	402/19/047	1869	560.7	0	0	**560.7**	**1308.3**
Total		**115523.3**	**34656.994**	**15742.85**	**3170.546**	**54079.07**	**61444.24**

10.0 Summary of Monitoring Results

Monitoring of carbon farmers is always done before payments are made. This ensures that the right payment is made for farmers who have produced the required carbon. Since the previous reporting, most farmers met the criteria leading to the release of their payments. However, two farmers namely Kantereine Fabious and Sinta Silver did not meet the required standards and have since not been paid their third and second carbon payment respectively. These two farmers deliberately grazed their domestic animals (goats and cows) in the farms resulting into death of a fairly large number of trees. The number of trees counted in these two farms did not match those requirement for them to be paid. Corrective measures were suggested to them and it was proposed that in the next monitoring, the farms will be visited to ensure they abided with the measures. During monitoring in this reporting period, most of the trees/farms were progressing quite well. However, the following challenges were observed:

I. Some of the trees were being damaged (debarked) by mainly domestic animals
II. In some field some of the trees such as *Terminalia sp* and *Maesopsis sp* was observed to be stunted
III. Disease infections were seen in some plots.
IV. Poor pruning by farmers
V. Uneven/ poor spacing of trees especially in woodlots.

<u>Corrective actions</u>

1. Farmers were advised to desist from grazing animals in tree farms and using the zero grazing technique
2. It was not clear why trees are getting stunted. But probably poor planting material and type of soils could be some of the reasons. Farmers were advised to always check with the nearest forest officer for right planting materials. Also, before planting farmers have

to consult on where (type of soils) they plant the species of trees. Forest extension services exist in every sub county.

Although farmers get some field advise during monitoring, they still need some general training (as a group) were they can share experiences. Insufficient funds is the main reason for not carrying out refresher trainings. However, as soon as funds become available efforts will be made for all participating farmers to have some training. ECOTRUST has been relying mainly on other projects for the training of these farmers. However, discussions are under way to establish a Community Carbon Fund that will address these and any other issues related to the development of the Trees for Global Benefits Programme.

11.0 Improvements and Future Development.

11.1. Verification

Verification of plan vivo carbon credits is in the pipeline. The Trees for Global Benefits is a leading exemplary community carbon project in Uganda. One of the activities ECOTRUST would like to undertake in order to maintain this lead in the sector is verification carbon credits. Discussions have been initiated between ECOTRUST, BR&D and Rainforest Alliance on the process of verification.

11.2. Technical specifications

The project is using technical specifications of mixed native with *Maesopsis sp.* as the dominant species. Most of the farmers have adhered to the mixed species and *Maesopsis* as dominant. However, the farmers have included many more trees than were approved in the list of technical specifications. This is mainly because as farmers conduct their business other factors such as availability of seedlings at the time of planting come in to play. A list of all the trees that the farmers have planted is in table 7 below. In addition, the new farmers have expressed interest in some tree species that are currently not in the specifications. There is need therefore for on the development of more technical specifications to meet the farmers' needs.

In addition, the new farmers have expressed interest in participating in the carbon project through forest rehabilitation and avoided deforestation activities. There is need therefore for the project to develop technical specifications for these activities.

Table 7: Tree species and crops grown in the project area

Tree species	**Crops grown**
Antiaris toxicaria	Bananas
Peptadeniastrum africana	Coffee
Prunus africana	Beans
Cordia africana	Maize
Beilschmiedia ugandensis	Millet
Ficus mucusu	Pineaple
Strombosia schefflei	Millet
Vitex doniana	Sorghum
Psidium guajava	Sweet Potatoes
Croron macrophylus	
Makhamia lutea	
Dodonea angustifolia	
Albizia gummifera	
Albizia coriaria	
Maesopsis emini	
Zanthoxyllum gilletti	
Ficus nanatalesis	
Entadrophragma excelsa	
Spathodea campanulata	
Warbugia ugandensis	
Azadirachta indica	
Funtumia africana	
Albizia zygia	
Poluscius fulva	

N.B In the table above, the trees are planted as woodlots, agroforestry, boundary and sometimes scattered. Also there is no direct relationship between the crops mentioned above and the corresponding trees in the rows.

11.3 Technical Assistance in Disease Control

The increase in disease infection to trees of many farmers has been observed making it inevitable for ECOTRUST to intervene. ECOTRUST is proposing to consult research organizations such as Forestry Resources Research Institute (FORRI), Makerere University etc. to identify some of these diseases and where possible find a remedy to them.

11.4. Carbon Community Fund

During the various discussions, it has been suggested that a separate fund to address issues such as refresher training, group extension services targeting management of pests and diseases, disaster preparedness and other issues that may be affecting the groups. ECOTRUST is currently drafting guidelines, which will be discussed by the various stakeholders.

SECTION 2

PLAN VIVO and CAMCO TEAM FIELD VISIT TO UGANDA

A team of visitors from Plan vivo and CAMCO arrived in Uganda on the morning of 24th November 2007. The team together with ECOTRUST staff proceeded to the field the same day.

The team included;

I. Willie McGhee-from plan vivo (Team leader)
II. Robert Harley-CAMCO
III. Sarah Carter-Plan vivo
IV. Alexa Morrison-Plan vivo

The team from ECOTRUST included:

I. Pauline Nantongo- (ECOTRUST team leader team)
II. Gerald Kairu
III. Rose Nankya

Other ECOTRUST staff joined later. These were the project officers of Hoima and Masindi (Mercellinus Bbale and Jane Kugonza respectively). Isaac Kawooya and James Kiwanuka drove the team to the field and back to Kampala.

The aim of the visit was to:

I. Carry out annual monitoring of carbon farmers
II. Familiarization to the plan vivo system by Robert from CAMCO before going into an agreement with ECOTRUST
III. Estimate the capacity of plan vivo carbon in Uganda
IV. Agree on a verification plan for the plan vivo carbon

Willie explained that BR&D works with ECCM but is not tied to it and it is not working as a go between the seller (ECOTRUST) and buyer (CAMCO) for this particular deal (Buying the 40,000 tCO_2 by CAMCO). It was further explained that BR&D is neither a project developer nor a technical specification developer but among its functions is governance for the plan vivo system, organize the database as well as register carbon credits.

Willie mentioned that plan vivo documents haven't been reviewed for a very long time and the process has started. One of the issues to be handled is listing all the carbon buyers on the plan vivo website and auditing of the plan vivo system by an external auditor(similar to obtaining an I.S.O certification).

Robert from CAMCO explained its origin and aims. One of the aims of CAMCO is to develop projects that are involved in Clean Development Mechanism (CDM). CAMCO is involved in carbon commercialization and is good in project financing and would like to buy plan vivo carbon. It would like to be involved in land use projects and plan vivo certification. These projects were initially left out from the project design by the IPCC of the UNFCCC. This requires issues of verification to be sorted out before the carbon can be bought. Therefore, the main aim of Roberts visit was to learn more about the plan vivo system and be able to report to CAMCO and also take the information to the market. Robert said commercialization is essential by providing finance to projects in form of carbon purchase and there is a growing market worldwide.

The Executive Director of ECOTRUST mentioned that the Trees for Global Benefits is among the first carbon sequestration projects in Uganda. As a result, many stakeholders consult ECOTRUST because of its experience in this field.

Team discussion at Hotel Margherita

At a meeting in Kasese (Margherita Hotel), the team agreed on the way to proceed. By the end of the trip it was agreed that the following points would be tackled.

I. Verification
II. Commercial agreement
III. Capacity estimation
IV. ECOTRUST-BR&D and Plan vivo standing Plan vivo as it stands)
V. Technical specifications
VI. Baselines

Day 2: Field visit to Kiyanga and Meeting at Bitereko sub county

Four farmers fields were visited (see appendix i) Table A. The main observations were:

I. Domestic animals especially goats and cows are de-barking the trees

II. Trees were not being pruned properly
III. Weeding or cleaning the gardens was lacking in some farms
IV. Pests and disease attacks
V. Trees are getting stunted in some farmlands

2. Meeting at Kiyanga

The visiting team had a meeting with farmers at Kiyanga subcounty headquarters. Willie thanked farmers for the work well done while Robert from CAMCO explained that they want to buy plan vivo carbon. He also said that the price per ton of CO2 will be better.

The issues raised by farmers were as below:

- No seedlings/seedlings are expensive. The cost is between 300-500/= per seedling
- Drying up of seedlings/planted trees
- They (farmers) are getting little money/ Price of Carbon is low.
- Trees are being destroyed by pests (especially Ants) and other pests
- Need for more training
- Trees stagnating
- Loan
- Saws for pruning
- Fire
- Training
- Should farmers who want to plant more trees use same plan vivo?
- Floods
- We heard they are paying $81 per ton of carbon-in Newspapers
- Pine and Eucalyptus for plan vivo
- Bee hives

Proposed Solutions

1.Seedlings: The nursery operator will be identified and give seedlings of the preffered choice to the farmers (as long as they are acceptable in the TGB programme). Details of the species supplied, number of seedlings and price per seedling will be recorded by the nursery operator (supplier) and

the recipient (farmer) and the coordinator will take a copy. The coordinator will then inform the ECOTRUST office. Payments will be made directly by ECOTRUST to the supplier. ECOTRUST will deduct the farmers carbon payment by an amount equivalent to seedlings obtained on credit form the nursery operator.

2. Drying up of seedlings/trees in the field: Farmers were advised to plant at beginning of the rainy season. If there are no serious changes in weather in Bushenyi, the months of March and September are preferred for planting out of seedlings. In addition watering during drought season may be necessary.

3. Stunted trees: Although it is not yet clear what may be the cause of the problem, It was be observed that farmers are grazing animals (goats and cattle) in the tree fields. As a result, the trees are debarked and the animals compact the soil making it difficult for the roots to penetrate and absorb water and the necessary nutrients for the plants. Willie explained that the site where trees are planted matters a lot. For example a hill slope or bottom can affect the trees in different ways. Therefore trees should be planted in suitable sites. Good seedlings/ seeds should always be used and these are normally from good mother trees.

4. Saws for pruning/ beehives equipment: Farmers were advised to contribute towards the buying of a saw/saws (cooperative buying)and then share it out.

5. Loans: The executive director of ECOTRUST explained that this organization does not give loans, but encourages partnerships with other organizations/institutions. Farmers were therefore advised to contact Savings and Credit Cooperative Societies (SACCOs) in there area if they do exist. Also farmers should make use of other programmes such as National Agriculture Advisory Services (NAADS), National Forestry Authority (NFA) to solve other issues relating to the growing of trees.

6. Pests and Diseases: Willie advised farmers to make use of locally mixed materials, which effectively work as pesticides. For example crushing Tobacco leaves and mixing them in water form a good pesticide. This solution is then poured onto the bottom of the tree. This enables to kill pests and also keep moisture hence, enabling faster growth of trees. ECOTRUST is to make the necessary consultations with the research institutions to find out the diseases that are affecting the trees. Institutions

to be contacted include NARO, FORRI and Makerere University. However, farmers were advised to also manage there trees/fields properly.

7. Fire: This is a problem that affects farmer's trees during droughts. However, they have been advised to make fire lines. This is very essential in that when a fire breaks out, it will be prevented from reaching all the tree compartments.

8. Training: Farmers wanted to know when they would have some training about some of the issues in the project. As part of the explanation, it was mentioned that ECOTRUST did not have enough funds to carry out the trainings. In the meantime there is always on spot training during monitoring of farmers before they get their carbon payments.. Farmers are advised on what to do whenever there is a problem. However, When funds become available, farmers will be gathered together and taken through the whole carbon process to refresh there minds on issues of concern.

9.Plan vivo: Farmers who intended to have the second field or want to plant more trees were advised to make a fresh application and write another plan vivo. Similar procedure will be done as for the first application.

10. **Farmers Receiving less money from bank:** The issue of carbon farmers not getting all their carbon money from the recipient bank after it has been sent by ECOTRUST. This issue wasn't very clear but ECOTRUST is to investigate and take the necessary steps about this. The first will be writing a letter to the recipient bank requesting for a bank statement showing the amount received by all the carbon farmers. A follow up will then be done after looking at the bank statement.

11. Price of Carbon: The price of carbon varies because carbon comes from different sources and also different buyers pay different prices. The price of carbon is like for any other commodity in the market. It goes up and down. However, the plan vivo carbon is still among the most expensive although still in small quantities.

12. Eucalyptus and Pine trees inclusion in the carbon project: One of the objectives of the project is to contribute to the conservation of our Ugandan native trees. In addition carbon from trees such as eucalyptus is not attractive to buyers. In addition, these tree species have enough investments from other projects. Therefore, exotic trees are not considered in this project.

Meeting carbon farmers of Bitereko subcounty

Agenda:

1.Prayer
2.Communication from the chairman L.C1
3.Self-introductions
4.Speeches from visitors and discussions with the community
5.A.O.B

Translation from English to Rikiga was done by Beatrice Ahimbisibwe (coordinator) and Benon mbanoha a carbon farmer.

Chairman L.C (Mr. Donozio Tumugabirwe) of Kigarama parish thanked the visiting team for the efforts they are putting in to make the project a success. He also thanked the carbon farmers for having joined the programme and successfully managing it. Later he wished every one a good deliberation and a safe journey back to their homes.

Willie from Plan vivo also thanked participants in the meeting. He introduced Robert from CAMCO as one of the intending buyer of plan vivo carbon.

Robert from CAMCO said they buy carbon from around the world and now would like to buy plan vivo carbon. However, before CAMCO buys the plan vivo carbon, they need to learn about the project and how ECOTRUST implements the activities. CAMCO initiated the buying of plan vivo carbon four months ago but needed to know exactly what to do. Robert said CAMCO plans to begin buying the plan vivo carbon in two months time from now if an agreement between them and the seller is reached.

The coordinator (Beatrice) thanked the visitors for coming and gave the progress of the project in Bitereko subcounty. She enumerated some of the aims and benefits of the project as follows: protecting the environment, Increasing the value of land so that at selling you get a higher pay, getting animal feed (mainly for goats and cows) and enabling farmers to do other project such as bee keeping. Other farmers are using the carbon money to pay school fees and also to buy more land.

Issues raised by farmers

The farmers mentioned some of the challenges that they are facing. These problems were similar to those of the farmers in Kiyanga. They include insufficient seedlings, drought, at times get heavy rains leading to floods, diseases and pests and need for more training.

Response to farmers issues

Willie repeated the same explanations as for the previous farmers in Kiyanga (see Section 2, Meeting at Kiyanga; proposed solutions)

Day 3: Field visit to Ryeru and Kichwamba carbon farmers.

The observations for individual farmers as seen from farmer's fields by the team are presented in Table B (Appendix ii) below. However, in general terms, the main issues were:

I. Animals de-barking the trees- at the school
II. Trees not being pruned properly
III. Weeding or cleaning the gardens
IV. Pests and diseases

Meeting farmers of Ryeru and Kichwamba Subcounties at Ryeru subcounty

Agenda

i. Prayers
ii. Introductions
iii. Speeches
iv. A.O.B

Willie thanked the farmers for coming and participating in the project. He also said that he is expecting to hear more of there experiences and any issues or problems.

Robert from CAMCO said that their role is to link carbon sellers to the market e.g America, Europe and have now started in Japan. He said CAMCO is soon starting to buy plan vivo carbon and requires to move step by step so that carbon is bought at a higher price.

Issues raised by farmers of Ryeru and Kichwamba

The issues raised by farmers of this area are similar to those of the previous subcounties (Kiiyanga and Bitereko) as presented before (See Section 2 Meeting at Kiyanga; proposed solutions)

Day 5 & 6: Visit to Hoima and Masindi districts

Meeting of potential Carbon farmers

A) Kyangwali

Agenda:

1. Anthems: Uganda and Bunyoro
2. Prayer
3. Introduction
4. Opening by chairman L.C 3
5. Training of potential carbon farmers

Chairman L.C 3

The chairman L.C 3 thanked the visitors and ECOTRUST for the work they are doing with the communities in Kyangwali sub-county. Kyangwali sub-county is in the East of HOIMA. The chairman said to achieve an objective requires stamina. This is through use of knowledge, skills and transformation. He said the Uganda People s Defence Forces (UPDF) is one of the most disciplined army in the world, but economically its one of the poorest in the world. We must follow the three pillars (knowledge, skills and transformation). He said the visitors have come with lots of knowledge for the kyangwali community; so appealed to members to listen, understand and ask questions.

Willie thanked the chairman for the wise words and said that ECOTRUST is the implementer and coordinator for this project in Uganda (Trees for Global Benefits project). The project has been very successful in Bushenyi district, were it began in May 2003. The ECOTRUST project officer in Hoima will be on ground to monitor payments to farmers. The project has rules and regulations that have to be adhered to before and after joining. The aim of the workshop was to reinforce to those who have already been in the previous meeting (induction carbon meeting) on carbon. Willie appealed to farmers who never attended the induction meeting to listen carefully.

Procedure of Training

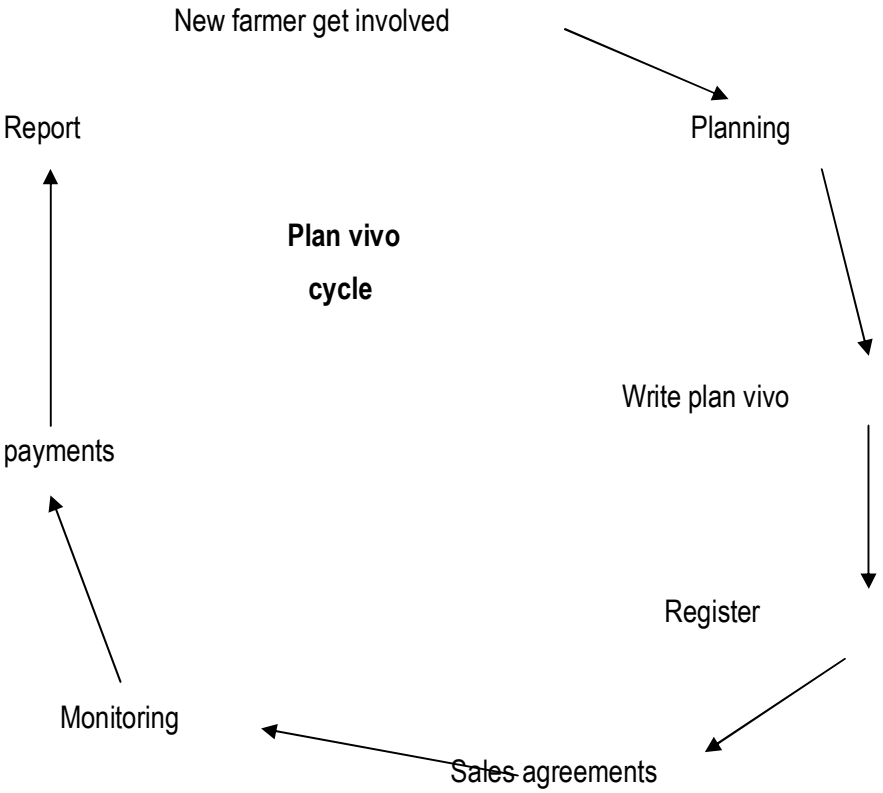
Sarah and Alexa both from plan vivo did the initial training. Willie made the final part of the presentations followed by taking up the questions. The ECOTRUST staff supplemented whenever necessary.

Sarah's' Presentations

Sarah explained the concept of trees taking in Carbondioxide from the atmosphere and why trees take it in. She also mentioned the concept of global warming and the writing of plan vivo by potential carbon farmers.

Alexas' Presentations

Alexa discussed the plan vivo cycle as below:



Willies presentation

He explained the volume of CO2 sequestered (measuring carbon) by the trees and how payment to farmers will be done.

The example used was as follows:

- Assume 400 trees and each tree has ¼ tonne of carbon, therefore, the quantity of carbon in 400 trees is 100 tonnes.
- Assuming the price of carbon is $5 per ton, then it means the farmer has $500 (5x100) worth of carbon in his trees.
- But not all the $500 will be received by the farmer because buyer has bought carbon which is not complete- still accumulating (trees are growing) until the rotation age. This may take some

years depending on the species. e.g. *Maesopsis eminii* may take up to 25 years before it is converted to timber.

N.B: The species that will be planted must be approved in the programme ant therefore must technical specifications which is the basis on which carbon is calculated.

The buyer may ask ECOTRUST to have a buffer (an Insurance). The value of the buffer may be 10% but the value goes up to 20%.

How the farmer will receive money

Farmers who will be successful to join the programme and plant the required numbers of trees as per the regulations contained in the sales agreement will be paid 5 times within a period of 10 years. Payments are done after monitoring is done. This is done by ECOTRUST and involves determining the number of surviving trees.

As an example, a farmer who is to be paid $500 actually has a balance of $450 after deducting the buffer ($50 or 10%) will be the insurance.

Year a farmer receives money				0	1	3	5	10
Percent	100	Buffer-10%	100	30%	20%	20%	10%	20%
Total-$	500	50	450	135	90	90	45	90

If $1 = Shs1750, the amount can be calculated in Uganda Shillings.

The list of questions for potential farmers in both Hoima and Masindi is presented in appendix ii.

NOTE: *The trainings were carried out in both Hoim,a and Masindi district. The specific areas areKyangwali, Kabwoya, Pakanyi and Ongo. The areas mentioned above are also CFM sites where ECOTRUST is implementing the Collaborative Forest Managent (CFM) Project sponsored by PRIME/west-USAID. The procedure of training and content was similar as presented in section 2, day 5 and 6. A list of questions from the potential carbon farmers is presented in appendix ii. In total 329 farmers attended the meetings as follows Kyangwal (81), Kabwoya (78), Pakanyi(103) and ongo (67).*

Meeting at lake Albert safaris on 28/11/2007

I. We will need a baseline
II. Issue of a risk buffer has to be clarified to new farmers.
III. In the agreement there should be replanting after felling the trees at the rotation age.

The CAMCO proposed purchase was discussed in this meeting. An agreement is yet to be signed. The agreed base price is $5/tCO2. Details of this information including the share price for BR&D, ECOTRUST and Carbon farmers will be indicated in the agreement.

Verification

A verification plan was discussed. This involved when they verification would be done, who will do it and where the funding will come from. After an extensive discussion, ECOTRUST agreed on a base price (of $5/tCO2) to which a tonne of CO_2 should be bought . The final price of CO2 will be confirmed after confirming the cost of verification. Verification will be done anytime from June 2008 onwards. ECOTRUST was advised to search for the verifiers and find out the cost of verification. Two verifiers were mentioned. These are SGS and the Rain Forest Alliance.

Commercial agreement

The draft commercial agreement was discussed and some amendments done. However, signing will only be done after the amendments are presented to the legal people in CAMCO.

Capacity estimation

It was agreed that ECOTRUST provides a capacity estimation for the carbon project. Capacity estimation refers to the potential carbon production over a period of time. The estimation can be for several months as follows: 6, 12 and 24 months. It does not matter in which district/ area this is done as long as its in Uganda i.e. can be in Bushenyi, Hoima or Masindi. Amount estimated during the 6 months is not counted in the subsequent estimations. (See Table 6). This is important because the buyer can come up sometime in future and want to buy more carbon. This will be part of the carbon to be sold if such a case arose. ECOTRUST potential sale capacity will be as below:

Table 6: ECOTRUST capacity estimation

Category	**Estimates**
Imminent: more than or equal 6 months	Estimates for project
Near term: more or equal to 12 months	Estimates for project

This excludes Imminent	
Distant: More or equal to 24 months Excludes imminent and near term	Estimates for project

ECOTRUST and CAMCO will exchange estimates for categories every two months from January 2008.

Technical specification

The available technical specification in Uganda according to BR&D are two (Mixed native and pure (*Maesopsis eminii*). However, the projects needs technical specification for the following types of land use systems and others that we will come up with.

1. Mixed fruit trees
2. Agroforestry (especially native trees mixed with coffee)
3. Forest Rehabilitation (enrichment planting)
4. Avoided deforestation. -

Baselines. Baselines will need to be established at the time of visiting potential farmers in Masindi and Hoima districts.

Conclusion

The visits in the old sites were successful and more farmers are willing to join if there is an opportunity. In the new areas the large numbers of people that attended the trainings and enthusiasm they had was good enough to show their interest in joining the programme.

APPENDIX

Appendix I Results of the Monitoring visits

Table A: Farmers visited in Kiyanga Subcounty.

Name of Farmer	Number of trees	Species	Intended use	Condition /issues	Suggested solutions
Bangirana George	800	*Maesopsis sp., Terminalia sp., Vitex doniana, Khaya sp*	Timber	Trees are in good condition but there are signs of some being debarked due to domestic animals	Keeping domestic animals away from the tree farm. Gap filling is required for the dead trees.
Bushoborozi Benon	1300	*Prunus Africana Terminalia sp. Khaya sp. Markharmia sp Cordia sp.*	Timber	Trees were well weeded and maintained, Some trees poorly prunned. Trees growing well	Proper pruning is required. Use a saw to prune will avoid infection by pests and diseases.
Kajarubu Alfred	1200	*Maesopsis Terminalia*	Timber	Trees were stunted and there is evidence of grazing in the field.	Keep away animals from tree farm; weeding is required
Ndyanabo Geofrey	400	*Maesopsis sp. Terminaluia sp. Prunus sp*	Timber Fuelwood	Trees look good. There signs of invasion by pests and diseases. Farmer has done gap filling	Needs chemical to spray. Tobacco/water mixture is suggested

Table B: Farmers visited in Ryeru and Kichwamba subcounties

Name of Farmer	Number of trees	Species	Intended use	Condition/ issues	Suggested solutions
Kateba Eric	400	*Melica sp. Funtamia sp.*	Timber	Tree look good; there is evidence of infection by diseases especially *Maesopis sp*; some trees	For any next planting , trees should be planted in suitable site; needs thinning

		Maesopsis sp. *Grevilea sp.* *Markhamia sp.* *Prunus sp.*		branches broken by wind;	and cutting off of excess branches
Rugazi Catholic Parish-Fr Kihembo	2700	*Prunus sp.* *Maesopsis sp.*	Timber	Trees over shaded by bananas; Domestic animals debarking the trees especially in the compound;	Need to reduce banana plant by cutting out some; Planting to complete the area; restrict animals reaching the trees
Anatoli Tumwesigye	600	*Maesopsis sp.* *Markhamia sp.*	Timber	Tree look to be healthy; Sign of care for trees evidenced.	Weeding required; pruning is necessary for some species
Medard Ruromurugyendo	400	*Maesopsis sp.*	timber	Disease infection on the *Maesopsis sp*. plants;	Pruning to be done and some banana plants need to be cut down to avoid over shadowing of the trees.
Florence Byamugisha	400	*Prunus sp.* *Maesopsis sp*	Timber	Trees doing very well; well maintained and growing fast	Need to maintain good management: Need to keep trenches unblocked to allow clear flow of water.

Appendix ii

List of questions from potential carbon farmers

1.Where shall we get the seedlings
2. Shall we get any form of support
3. What is the price of Carbon
4. What type of trees do we have to plant
5. What is the difference between writing plan vivo and registration
6. Wont plan vivo be like NAADS
7. Where shall we get good quality seedlings-NFA +CFM+ ECOTRUST
8. Avoided deforestation-technical specification for existing forest is yet to be calculated
9. How will carbon be harvested
10. Trees take along time to grow. What if its interplanted with cocoa- technical specification will be done for agroforestry
11. Do farmers have to be in groups or individuals