



Trees for Global Benefits

2016 Plan Vivo Annual Report



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The Environmental Conservation Trust of Uganda (ECOTRUST)

Contact Person:

Pauline Nantongo Kalunda - Executive Director

Plot 49 Nakiwogo Road, Entebbe

P. O. Box 8986, Kampala, Uganda

Tel/fax +256-31-2266419, Mob 0772 743 562

Email: pnantongo@ecotrust.or.ug

www.ecotrust.or.ug

1. Summary

Project overview	
Reporting period	January to December 2016
Geographical areas	Albertine Rift (Rubirizi, Mitooma, Kasese, Hoima, Masindi Districts)) Mt. Elgon (Mbale, Manafwa, Bududa, Bulambuli, Sironko Districts)
Technical specifications in use	<i>Maesopsis Eminii</i> – Original technical specification (applied until 2015) <i>Mixed Native Sp.</i> – Approved 1 April 2016. This technical specification comprises three different systems: ¹ - Boundary Planting (carbon potential 65.24 tCO ₂ /ha equivalent to 163.1 tCO ₂ /Km) - Dispersed Interplanting (carbon potential 170.40 tCO ₂ /ha) - Woodlots (carbon potential 238.80 tCO ₂ /ha)

Project indicators	Historical (2003-2015)	Added/ Issued this period (2016)	Total
No. smallholder households with PES agreements	4,608	708	5316
No. community groups with PES agreements (where applicable) by Dec 2016	40	41	81
Approximate number of households (or individuals) in these community groups	244		262
Area under management (ha) where PES agreements are in place (includes boundary planting)	4,886.81	524.11	5,410.92
Total PES payments made to participants (USD)	\$1,841,304.82	\$330,504.77	\$2,171,808.82
Total sum held in trust for future PES payments (USD)	\$1,376,830.84	\$9,283.36	\$1,386,114.20
Saleable emission reductions achieved this period (tCO ₂)		133,364	
Adjustments corresponding to previous years		-26,051	
Total Saleable emissions reductions (tCO ₂)	989,059	107,313	1,096,372
Allocation to Plan Vivo buffer (tCO ₂)	109,895	11,924	121,819
Unsold Stock at time of submission (PVC)			
Vintage 2010	4,202	-3033	1169
Vintage 2012	2,665	-2665	0
Vintage 2013	19,104		19,104
Vintage 2014	950	-589	361
Vintage 2016 (current request)	0	+84,149	84,149
Total Unsold Stock (PVC)			104,783
Plan Vivo Certificates (PVCs) issued to date			989,059
Plan Vivo Certificates requested for issuance (2016 Vintage)			107,313
Total PVCs issued (including this report)			1,096,372

¹ <http://www.planvivo.org/docs/ECOTRUST-Mixed-native-agroforestry-V1.1.pdf>

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2. Key Events, Developments and Challenges

Trees for Global Benefits Programme is a cooperative carbon offsetting scheme linking small scale landholding farmers to the voluntary carbon market based on the Plan Vivo standard. TGB which was initiated in 2003 with 33 farmers in the districts of Rubirizi and Mitooma works as a Programme of Activities introducing new communities and new activities through the development of technical specifications.

Trees for Global Benefit won the 2013 UN SEED Award for being an exceptional social and environmental low carbon enterprise. The Award recognises TGB's achievements in innovation and entrepreneurship so far, its promising efforts to promote economic growth, social development and environmental protection in Uganda, and not least the potential of its partnership to inspire others. The Founding partners of the SEED Initiative are UNEP, UNDP and IUCN. The 2013 Low Carbon SEED Awards were supported by the International Climate Initiative (ICI) of the Germany Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU).

This report covers the progress of implementation of activities for the project year January to December 2016.

2.1 Key Developments

2.1.1 A new strategic direction

ECOTRUST developed a new strategic plan to guide its activities including the Trees for Global Benefit for the period 2017 to 2021. The new strategic direction, which has been developed through a consultative process that aligns ECOTRUST initiatives to Sustainable Development Goals (SDGs). The activities developed are expected to achieve 4 Key result areas: KRA 1:Rural livelihoods and resilience in high climate risk prone communities built, KRA 2: Private land trust management in fragile corridors promoted, KRA 3: Integrity and functionality of protected natural capital maintained and KRA 4: Institutional re-engineering and capitalization of ECOTRUST for long term sustainability enhanced.

2.1.2 The one millionth tonne CO₂ emission reduction

The project has finally attained a significant milestone, recruiting farmers that will contribute emission reductions equivalent to one million tonnes of carbon dioxide.

2.1.3 Development of partnerships

2.1.3.1 *Ten Million Tree project*

ECOTRUST initiated a partnership with a local NGO called *Mbale Coalition Against Poverty* (Mbale CAP). Mbale CAP is implementing a Government of Wales-funded project in the Mt Elgon region that is aimed at planting trees over an area that would cover the size of Wales, called the *Ten Million Tree* project. Under this partnership, the feasibility is being studied of incorporating the targeted beneficiaries of the ten million trees into the TGB programme.

2.1.3.2 *Shared Resources Joint Solutions*

Supported by the Netherlands Committee of IUCN, ECOTRUST together with IUCN Uganda, AFIEGO and NAPE have formed a partnership with Shared Resources Joint Solutions in a programme aimed at

supporting evidence based advocacy for conservation. Through this partnership, lessons learned from TGB will be combined with those of other initiatives to feed into the national development processes.

2.1.3.3 *Certificate of Communal Ownership for Ongo forest*

The project has made a significant achievement in supporting Ongo Communal Land Association – one of the Community forest groups – to acquire a title of communal ownership for the forest they are in charge of. This is the first in the country, although the guidelines for issuing these kind of titles have been in place for more than a decade. This achievement has motivated other organisations that are working with similar groups, particularly Motocayi & Tengere Forests in Masindi, to express interest in joining Trees for Global Benefit.

2.1.3.4 *Introduction of energy-saving stoves in Bushenyi*

The project has during the reporting period, the project completed processes of enabling tree growing farmers to access energy efficient stoves at a subsidized price. This has been achieved by registering an improved cook stoves project under the ICSEA umbrella programme.

2.2 *Key challenges*

2.2.1 *Monitoring*

The monitoring of the ever growing number of very small and/or scattered landholdings have continued to increase the burden of monitoring making it costly both in terms of human and financial resources. The project is investing in a number of innovations to reduce the cost of monitoring and these include:

- Development of a mobile App that will reduce on the time taken to process data since the information is sent from the field straight to an online database
- Remote sensing & use of gadgets e.g. drones to support access to farms that are hard to reach areas.
- Separating Extension service provision from monitoring. We have started developing a farmer oriented extension service provision programme whose delivery does not depend on monitoring.

2.2.2 *Reduction in sales relative to last year*

The project has experienced a significant decline in the volume of emissions reductions that have been sold in this reporting period, primarily due to the timing of various large, multiple-year sales that occurred in the previous reporting period. The project has sold 29,134 tCO₂ to date compared to 257,842 tCO₂ in 2015 (-90% y-o-y). However, it is hoped this is an anomaly and sales will pick up over the following 12 months. The number of farmers that are expressing interest in joining the programme continues to grow.

2.2.3 *Failure to meet monitoring targets*

Despite the project increasing its engagement with participating farmers, we have continued to record monitoring targets not being met. This has mainly affected farmers in year 1 & 3, especially those who

are still using the old technical specifications, which includes about 80 per cent composition of *Maesopsis eminii*. There are a number of reasons accounting for the poor performance, but generally every site experienced a prolonged dry spell that led to death of newly planted (replacement) trees. *Maesopsis eminii* in particular among the old trees is also experiencing increasing disease and pest attacks, even for those trees of 5 years and older. This was further compounded by the general elections that created an atmosphere of uncertainty, which greatly affected any discussions and/or investments in long-term projects such as tree planting.

A total of 124 farmers (122.2ha) have been replaced for failure to meet targets. Negotiations are ongoing with other farmers to reduce their original targets. The project has also given farmers the go ahead to increase the diversity of tree species, even within the *Maesopsis eminii* woodlots, to try and slow down the spread of diseases. There are a number of additional measures that the project has put in place to address the issue of continued underperformance against monitoring targets. These are summarized in table 4g in section 6 on monitoring.

2.2.4 Escalation of threats to forestry in Budongo – Bugoma landscape

There has been an escalation of threats to forest conservation in the Budongo – Bugoma landscape, which is one of the most forested areas in Uganda. The main drivers include oil and gas developments - for example a refinery, road construction and pipeline, etc. - that threaten to displace people, the cultivation of sugarcane, which is shifting from Masindi to Hoima, illegal takeovers of protected areas, etc.

Although the above challenges are in only two sub-counties, they do affect the morale of a larger body of farmers. These farmers in Hoima have lost motivation and require assurance that if they continue to plant trees they will not be evicted from their land. Currently, they are dealing with this situation and managing risk by investing in shorter-term enterprises.

3. Activities, total project size and participation

3.1 Current Technical Specifications

The project has continued to use *Maesopsis eminii* technical specification as well as the Mixed Native Spp. technical specification, in boundary, woodlot and intercropping systems. The farmers recruited prior to 2015 have continued to apply the *Maesopsis eminii* technical specification, whereas the new recruits have applied Mixed Native Spp.

During the reporting period, the project gave approval to a total of 1,009 farmers expected to bring 746.11 ha of farmland under improved management under using the Mixed Native Spp. technical specification. Approval of *plan vivos* serves as demonstration of the intention to purchase the climate services (emissions removals) generated by the respective *plan vivos*. In addition, the project has continued monitoring the application of *Maesopsis eminii* technical specifications. Table 1 below provides a summary of farmers who were given the go ahead to plant.

Table 1: Total no. farmers given the go-ahead to plant under different Technical Specifications

TOTAL NUMBER OF FARMERS GIVEN THE GO AHEAD TO PLANT						
District	No. of Farmers	Ha to be planted	Target No of Trees to be planted	No. of trees monitored	Total tCO ₂	Saleable tCO ₂
Mixed Native Woodlot						
Hoima	94	73.40	29360	7570	17527.92	15775.13
Kasese	417	366.10	146600	82641	87424.68	78682.21
Masindi	150	132.00	52360	26553	31521.60	28369.44
Mitooma	5	5.00	2000	1498	1194.00	1074.60
Rubirizi	101	104.00	41600	34015	24835.20	22351.68
Mt. Elgon	8	1.47	1182	1728	351.04	315.93
TOTAL	775	681.97	273102	154005	162854.44	146568.99
Boundary & Dispersed						
Mbale (dispersed interplanting)	54	27.18	6707	5536	4631.47	4168.32
Mbale (boundary planting)	9	4.39	430	617	286.40	257.76
Bulambuli (boundary planting)	105	17.14	1358	1199	1118.21	1006.39
Sironko (boundary Planting)	66	15.43	1221	1026	1006.85	906.16
Total	234	64.14	9716	8378	7042.94	6338.64
GRAND TOTAL	1009	746.11	282819	162383	169897.37	152907.64

The details of the number of producers that have been recruited from the different sites are presented in the next chapter.

4. Submission for Plan Vivo Certificate Issuance

During the reporting period, the project has recruited a total of **832** (down from 1,532 recruited in 2015) farmers bringing **646.31 ha** (compared to 1375.12 ha in 2015) of farmland under improved management, under using the Mixed Native Spp technical specification. The majority of the farmers have continued to come from Kasese District (411 farmers), which accounts for more half of the recruited farmers. The table 2a provides the breakdown per district and sub-county, table 2b gives a breakdown according to technical specifications, and table 2c summarises the overall benefits from this reporting period.

Table 2a: Summary of farmers, per district and sub-county, whose *plan vivos* have been presented for PVC issuance and their performance in achieving the first monitoring target

FARMERS THAT QUALIFIED						
Sub/county	No. of Farmers	Ha to be planted	Target no. of planted trees	No. of trees monitored	Total tCO ₂	Saleable tCO ₂ (net of buffer)
Mixed Native Woodlot						
Hoima						
Kabwoya	9	9.00	3600	1324	2149.20	1934.28
Kiziranfumbi	13	12.50	5000	2947	2985.00	2686.50
Kyagwali	11	10.40	4160	2356	2483.52	2235.17
Total Hoima	33	31.90	12760	6627	7617.72	6855.95
Kasese						
Bugoye	188	183.10	73240	36624	43724.28	39351.85
Buhuhira	16	14.50	5800	3281	3462.60	3116.34
Karusandara	2	2.00	800	610	477.60	429.84
Kitswamba	22	19.50	7800	4427	4656.60	4190.94
Kilembe	79	45.20	18080	15936	10793.76	9714.38
Kyabarungira	2	3.00	1200	258	716.40	644.76
Maliba	93	90.30	36280	19618	21563.64	19407.28
Rukoki	9	4.50	1800	1517	1074.60	967.14
Total Kasese	411	362.10	145000	82271	86469.48	77822.53
Masindi						
Budongo	46	37.60	15180	10310	8978.88	8080.99
Bwijanga	18	16.70	6700	3932	3987.96	3589.16
Karujubu	16	13.30	4700	3923	3176.04	2858.44
Nyangahya	12	11.00	4420	2999	2626.80	2364.12
Pakanyi	12	11.30	4520	2757	2698.44	2428.60
Total Masindi	104	89.90	35520	23921	21468.12	19321.31
Mitooma						
Kiyanga	5	5.00	2000	1498	1194.00	1074.60
Total Mitooma	5	5.00	2000	1498	1194.00	1074.60
Rubirizi						
Katanda	12	13.00	5200	5513	3104.40	2793.96
Katerera	6	7.50	3000	2810	1791.00	1611.90
Kichwamba	22	21.50	8600	6914	5134.20	4620.78
Kirugur	4	5.00	2000	2048	1194.00	1074.60
Ryeru	57	57.00	22800	16730	13611.60	12250.44
Total Rubirizi	101	104.00	41600	34015	24835.20	22351.68
Mt. Elgon	8	1.47	1182	1728	351.04	315.93
Total Mt. Elgon	8	1.47	1182	1728	351.04	315.93
Mixed Native Woodlot TOTAL	662	594.37	238062	150060	141935.56	127742.00

Mixed Native Boundary planting						
Mbale	9	4.39	430	617	286.40	257.76
Manafwa	0	0	0	0	0	0
Bududa	0	0	0	0	0	0
Bulambuli	64	10.97	877	1110	715.36	643.82
Sironko	43	9.41	753	931	613.78	552.40
Mixed Native Boundary TOTAL	116	24.76	2060	2658	1615.54	1453.98
Mixed Native Dispersed						
Interplanting						
Budwale	4	3.41	757	404	581.06	522.96
Bukibokholo	8	6.11	1438	1692	1041.14	937.03
Bukusu	6	1.95	507	521	332.28	299.05
Bumbo	4	1.70	442	246	289.68	260.71
Kaato	2	0.24	62	57	40.90	36.81
Nakatsi	6	4.29	1115	1252	731.02	657.91
Nyundo	8	2.58	671	601	439.63	395.67
Wanale	16	6.90	1714	763	1175.76	1058.18
Dispersed interplanting TOTAL	54	27.18	6707	5536	4631.47	4168.32
GRAND TOTAL ALL	832	646.31	246830	158254	148182.57	133364.31

Table 2b: Summary of issuance per technical specification

	No. of Farmers	Ha to be planted	Target no. of trees to be planted	No. of trees monitored	Total tCO ₂	Saleable tCO ₂ (net of buffer)
Mixed Native Spp Woodlot	662	594.37	238062	150060	141935.56	127742.00
Mixed Native Spp Boundary planting	116	24.763	2060	2658	1615.54	1453.98
Mixed Native Spp Dispersed Interplanting	54	27.18	6707	5536	4631.47	4168.32
Total	832	646.31	246,830	158,254	148,183	133,364

Table 2c: Summary of Plan Vivo Certificate (PVC) issuance request

Item	tCO ₂
Qualified total tCO₂	148,183
Total saleable tCO₂	133,364
Prior year adjustments	26,051
Saleable tCO₂ available for issuance	107,313
Allocated to 2016 sales	23,164
Balance for sale (unsold stock) tCO₂	84,149
Buffer Allocation (based on saleable tCO₂ available for issuance)	11,924

5. Sales of Plan Vivo Certificates

During the annual reporting period (2016), the project has sold 29,451 tCO₂ (down from 257,842 tCO₂ in 2015) to various buyers as indicated in table 3a below. This includes 23,164 tCO₂ from new issuances (vintage 2016), and 6,287 tCO₂ from existing vintages of stock.

Table 3a: Sales for the reporting period January to December 2016

Vintage	Name of purchaser/ source of funds	No. PVCs purchased	Price per Certificate	Total amount received (\$)
2016	U&We Arla Q1	16500		
2016	U&We Arla & others Q2	3200		
2016	U&We ArlaQ3	3249		
2016	Uganda Carbon Bureau	215		
Subtotal		23,164		
2014	COTAP	589		
2012	MyClimate	2,665		
2010	MyClimate	3,033		
Subtotal		6,287		
Total sales in 2016		29,451		\$171,340.10

NB/ Individual pricing information supplied to the Foundation is for internal purposes only.

Total sales of Plan Vivo Certificates stands at 991,589 tCO₂ broken down as follows:

Table 3b: Total Number of Certificates sold since project inception

Year	tCO ₂	Price/tCO ₂ (\$)	Total Price (\$)
Pre-2008	59,093	4.37	258,186.47
2008	80,428	5.92	476,468.21
2009	38,700	6.51	251,773.80
2010	80,896	6.07	491,302.23
2011	82,298	5.63	463,149.18
2012	148,411	5.11	758,637.15
2013	34,598	5.96	206,170.20
2014	179,872	5.93	1,066,073.40
2015	257,842	5.91	1,523,937.30
2016	29,451	5.82	171,340.10
Total	991,589	\$ 5.72	\$ 5,667,038.04

For a full sales record, with respective volumes, see Appendix I. Below is the list of *unsold stock* for vintages 2010 to 2016 at 31 December 2016.

Table 5c: Number of Certificates available for sale.

Vintage	No. of PVCs
2010	1,169
2013	19,104
2014	361
2016 (after current issuance)	84,149
Total	104,783 PVC

6. Summary of Monitoring Results

6.1 Introduction

Following observations in the previous reports of farmers that take a very long time to either achieve or go beyond the first milestone, a review of the monitoring strategies was undertaken. The review process included a comprehensive monitoring exercise in which almost all continuing farmers in all districts (Mbale, Manafwa, Bududa, Kasese, Rubirizi, Mitooma, Masindi & Hoima) were visited. The objectives of this field – based activity were:

- 1) Assess the tree survival rates and growth rate;
- 2) Take GPS coordinates of farmer gardens to ease location;
- 3) Measure the size of land per plan vivo;
- 4) Provide extension services & Interact with farmers.

The results of the monitoring exercise were discussed with the monitoring team, farmer facilitators, as well as the farmers during follow up meetings with the groups. The discussion with the farmer groups was intended to generate information that would be useful in understanding why some farmers never go beyond the first milestones despite their continued engagement with the programme.

6.2 General Performance

A total of 3,324 farmers were visited in Mitooma & Rubirizi (967), Hoima (451), Masindi (520), Mt. Elgon (202) and Kasese (1,173). Out of these 3,324 farmers, 1,977 farmers met their targets while 1,347 did not meet these targets. More than half of the farmers (59.5%) had the required number of trees and 40.5% failed to meet the tree stocking target. There are a number of reasons accounting for the poor performance, as described in the section on each respective site.

In general, every site experienced a prolonged dry spell that led to mortality of the newly planted trees. Most of the older trees survived and the majority of farmers that did not progress to the next target were found not to have planted due to insufficient rains.

In addition, the year was characterised by a lot of politicking surrounding presidential and parliamentary elections, as well as local government elections, which took up a lot of the farmers' time that could otherwise have been used in tree planting.

The majority of farmers that have not met targets are still in the early project stages of years 0, 1, & 3 and the project is working with them on a number of corrective actions to enable them to catch up with their target, as follows:

- a) The farmers that have continued to have very few trees (less than 20% of the required number of trees), thus failing to progress beyond year 0, have been replaced with new recruits. The project will continue to monitor and follow up with these farmers. They have an opportunity to be brought back into the programme if they manage to demonstrate that they have achieved their target.
- b) Some of the farmers have failed to progress to year 3 because of the failure of *Maesopsis eminii* in the single species woodlots. The project is working with these farmers to support

their migration to the new technical specifications of Mixed Native Woodlots, where even *Maesopsis* has been observed to survive among a wider selection of species.

- c) Some farmers have been advised to lower their (tree count) targets to manageable levels and are being facilitated to undergo voluntary revision of sale agreements. The unmet carbon benefits (in tCO₂) will be substituted from new recruits.

Table 4a: Performance of continuing farmers based on the monitoring results

Years	Yr0	Yr1	Yr3	Yr5	Yr10	Total
Fully Monitored						
Qualified	561	517	493	234	24	1829
Not qualified	250	564	391	80	6	1291
Sub Total	811	1081	884	314	30	3120
Partially monitored						
On track	0	0	27	107	14	148
not on track	0	0	10	29	17	56
Sub Total	0	0	37	136	31	204
Grand Total	811	1081	921	450	61	3324

6.3 Rubirizi / Mitooma

In Rubirizi & Mitooma, the oldest project site, a total of 967 farmers were visited and their gardens monitored. These included farmers that were not due for monitoring as well as farmers who have already received their final payment. 667 farmers (69%) were on schedule, whereas 300 farmers (31%) were not on track. The farmers whose results of year zero monitoring were delayed due to late planting in the CFM site have either qualified or have been replaced by others who had not been shortlisted, but ended up performing better. A total of 125 farmers have been replaced in this reporting period for failure to meet targets. Negotiations are still ongoing with other farmers to reduce their original targets.

Table 4b: Performance of continuing farmers in Rubirizi & Mitooma based on the monitoring results

Year	Yr0	Yr1	Yr3	Yr5	Yr10	Total
Due for Monitoring						
Qualified	173	166	192	43	24	598
Not qualified	20	104	122	31	6	283
Sub Total	193	270	314	74	30	881
Not Due for monitoring						
On track	0	0	0	59	10	69
not on track	0	0	0	0	17	17
Sub Total	0	0	0	59	27	86
Total Rubirizi & Mitooma	193	270	314	133	57	967

The majority of farmers that are not on track are between Year 1 and Year 3. This is mainly a result of drought, coupled with misinformation originating from some of the seedling suppliers. This is the

oldest project site and information from this area suggests that there is very little land outside the project area for expansion.

6.4 Hoima

A total of 520 farmers have been monitored and only 33% (172 out of 520) of the farmers were found to be fully on track. This has been the poorest performing district, especially for farmers in Year 1 & Year 3. This region is one of the most forested in Uganda and has been experiencing a number of forest management challenges. These challenges include oil and gas developments – for example a refinery, road construction, and pipeline – that threaten to displace people. Another threat is sugarcane cultivation, which is shifting from Masindi to Hoima and has resulted in illegal takeovers of protected areas.

Although the above challenges are in only two sub-counties, they do affect the morale of a larger body of farmers. These farmers in Hoima have lost motivation and require assurance that if they continue to plant trees they will not be evicted from their land. Currently, they are dealing with this situation and managing risk by investing in shorter-term enterprises.

Table 4c: Performance of continuing farmers in Hoima, based on the monitoring results

Year	Yr0	Yr1	Yr3	Yr5	Yr10	Total
Due for Monitoring						
Qualified	76	33	25	8	0	142
Not qualified	113	176	20	0		309
Sub Total	189	209	45	8	0	451
Not due for monitoring						
On track	0		17	13	0	30
not on track	0		10	29		39
Sub Total	0	0	27	42	0	69
Total Hoima	189	209	72	50	0	520

6.5 Masindi

A total of 462 farmers have been monitored and 63% (289 out of 520) of the farmers were found to be on track. In addition to the drought, some of these farmers are quite advanced in age or lack the experience for tree growing and have not been attending the training as they should. Fires, termites and diseases have also destroyed some of the trees and others are simply drying out due to drought. Some farmers say goats are grazing from their tree farms and eating them while they are still young.

Table 4d: Performance of continuing farmers in Masindi, based on the monitoring results

Year	Yr0	Yr1	Yr3	Yr5	Yr10	Total
Fully Monitored						
Qualified	112	55	65	8		240
Not qualified	54	66	53			173
Sub Total	166	121	118	8	0	413
Partially monitored						
On track	0		10	35	4	49
not on track	0					0
Sub Total	0	0	10	35	4	49
Total Masindi	166	121	128	43	4	462

6.6 Kasese

A total of 1173 farmers have been monitored and 60% (701 out of 1173) of the farmers were found to be on track. These are usually the best performing farmers, but this time around they were significantly affected by drought and political instability due to the presidential and parliamentary elections. In addition to the drought, fires, termites and diseases have destroyed some of the newly planted trees and some trees are simply drying out due to drought. Most of the farmers, however, retained most of the trees they had recorded during the previous monitoring period.

Table 4e: Performance of continuing farmers in Kasese, based on the monitoring results

Years	Yr0	Yr1	Yr3	Yr5	Yr10	Total
Fully Monitored						
Qualified	130	217	179	175	0	701
Not qualified	51	182	190	49		472
Total Kasese	181	399	369	224	0	1173

6.7 Mt. Elgon

A total of 202 farmers have been monitored and 73% (148 out of 202) of the farmers were found to be on track. These are the best performing farmers for the year and this could be attributed to the additional support in form of community visioning. In addition, the numbers here continue to be few, making it significantly easier for the assigned coordinator to follow up.

Table 4f: Performance of continuing farmers in Mt. Elgon based on the monitoring results

Year	Yr0	Yr1	Yr3	Yr5	Yr10	Total
Fully Monitored						
Qualified	70	46	32	0	0	148
Not qualified	12	36	6	0		54
Sub Total	82	82	38	0	0	202
Total Mt. Elgon	82	82	38	0	0	202

6.8 Progress on Corrective action

Most if not all the observations/challenges noted during 2016 monitoring are similar to those in 2015. Table 4g shows the progress on the interventions that were made in 2016.

Table 7: Key observations/challenges noted during monitoring:

Issues/field observations	Likely cause	Corrective Action Progress in 2016
Poor farm management e.g. poor spacing, bushy gardens, failure to undertake corrective actions	<ul style="list-style-type: none"> Some farmers have carbon payments as their only incentive and under-estimate the cost (time, expertise, etc.) involved in growing trees. They can lose interest after Yr0 Others are either too old or the farm has changed ownership either through a land purchase or the original owner passing away. 	<ul style="list-style-type: none"> Revision of agreements to lower targets and replace lost carbon Replacement of some of the farmers especially whose performance has significantly deteriorated
Tree mortality	<ul style="list-style-type: none"> Pests and diseases, especially relating to <i>Maesopsis eminii</i> Droughts & fires 	<ul style="list-style-type: none"> Approval for modification of the <i>Maesopsis</i> technical specifications to focus on trees that have proven to do well in the area. Silvicultural training to adapt to the modifications in technical specifications Free seedlings to compensate for loss due to drought and fires
Limited silvicultural practices	<ul style="list-style-type: none"> Poor attendance in capacity building opportunities. 	<ul style="list-style-type: none"> Bring the meetings closer to the farmers through farmer field schools Farmer led extension service provision.
Reduction in Morale	<ul style="list-style-type: none"> Mainly due to delays in processing payments after monitoring Farmers forget their due date for payment and expect payments after any form of interaction with the project staff 	<ul style="list-style-type: none"> Increase number of personnel dedicated to processing farmer payments. Complete the switch to mobile App to reduce amount of time lost in processing monitoring results. Farmers will be regularly provided with payment status updates (mini statements)

7. PES update

The project has continued to pay all producers that have complied with the minimum requirements following monitoring activities. Payments to farmers are made through their respective Banks and/or Village SACCOs/ Financial institutions where they hold individual accounts. For the reporting period, ECOTRUST has used a mobile money platform to make direct payments to farmers in project sites such as Masindi, Hoima and Mt. Elgon, were some farmers have failed to identify a trustworthy SACCO and are at the same time unable to maintain a regular bank account.

Tables 5a & 5b below show payment disbursements to farmers and seedling suppliers of the various project sites

Table 5a: Summary of payments to producers in 2016

Date	Site	Amount (UGX)	Rate	Amount (\$USD)
20/01/16	MASINDI	22,371,658	3,300	6,779.29
20/01/16	KASESE	98,458,384	3,300	29,835.87
22/04/16	HOIMA	26,379,407	3,300	7,993.76
01/06/16	HOIMA	10,296,563	3,300	3,120.17
01/06/16	MASINDI	21,739,264	3,300	6,587.66
11/07/16	MBALE	3,481,901	3,300	1,055.12
30/09/16	RUBIRIZI	73,294,571	3,310	22,143.37
09/11/16	MASINDI	34,008,310	3,310	10,274.41
09/11/16	HOIMA	12,564,234	3,310	3,795.84
22/11/16	BUSHENYI	29,379,434	3,310	8,875.96
23/11/16	MITOOMA & RUBIRIZI	52,214,919	3,310	15,774.90
08/12/16	BUSHENYI	23,942,375	3,310	7,233.35
09/12/16	KASESE	185,885,794	3,310	56,158.85
07/12/16	KASESE	321,562,334	3,310	97,148.74
07/12/16	KASESE	43,150,953	3,310	13,036.54
Total		\$ 958,730,101		\$ 289,813.84

Table 5b: Amount for seedlings received by producers in 2016

Date	Site	Amount (UGX)	Rate	Amount (\$USD)
11/01/16	KASESE	2,820,000	3,129	901.25
11/01/16	MASINDI	1,685,000	3,129	538.51
09/02/16	KASESE	2,460,000	3,129	786.19
09/02/16	KASESE	5,500,000	3,129	1,757.75
11/02/16	KASESE	3,630,000	3,129	1,160.12
11/03/16	MASINDI	340,000	3,427	99.20
04/03/16	HOIMA	1,000,000	3,427	291.766
05/05/16	KASESE	7,280,000	3,290	2,213.08
16/05/16	KASESE	9,170,000	3,290	2,787.62
30/05/16	MASINDI	6,657,140	3,290	2,023.73
30/05/16	HOIMA	1,764,700	3,290	536.46
30/05/16	HOIMA	930,000	3,427	271.36
01/06/16	MASINDI	4,189,500	3,397	1,233.21
03/06/16	KASESE	8,837,500	3,338	2,647.84
14/06/16	MASINDI	1,515,500	3,397	446.10
14/06/16	KASESE	5,582,500	3,397	1,643.26
14/06/16	KASESE	10,740,000	3,397	3,161.41
14/06/16	KASESE	7,623,000	3,397	2,243.89
30/06/16	HOIMA	2,200,000	3,397	647.59

05/07/16	KASESE	3,930,000	3,290	1,194.70
05/07/16	KASESE	1,920,000	3,129	613.61
13/09/16	KASESE	10,250,000	3,421	2,996.25
12/09/16	KASESE	3,787,500	3,338	1,134.79
19/09/16	MASINDI & HOIMA	3,514,000	3,338	1,052.85
31/10/16	KASESE	5,810,000	3,488	1,665.75
31/10/16	MASINDI	2,520,000	3,488	722.50
31/10/16	KASESE	6,317,500	3,488	1,811.26
07/12/16	KASESE	5,200,000	3,635	1,430.62
07/12/16	KASESE	4,935,000	3,635	1,357.71
07/12/16	KASESE	4,800,000	3,635	1,320.57
Total		\$ 136,908,840		\$ 40,690.93

Carbon Community Fund

Table 6 below represents the groups whose proposals for CCF were approved during the reporting period (For further details on this fund, please refer to the updated PDD on the Plan Vivo website).

Table 6: List of CCF groups whose proposals were approved

#	Organisation / Association	District	Subcounty	Proposal	Required (UGX)	ECOTRUST Contribution (UGX)	Farmers contribution (UGX)
1	Ruboni Community Conservation and development	Kasese	Bugoye	Tree nursery	6,200,000	5,000,000	1,200,00
2	Mobuku integrated farmers association(MIFA)	Kasese	Mobuku	Kick kerosene lamps out of Mobuku	8,910,000	5,000,000	Community: 1,500,000 MIFA: 2,410,000
3	Kilembe Inter community based organization for development	Kasese	Kilembe	Bee keeping project	5,053,000	4,050,000	1,003,000

8. Ongoing Community Participation

The TGB programme recognizes that continuously building social capital and facilitation of knowledge / experience sharing in order is key to the overall success of this program. The TGB project held participatory farmer trainings/sensitization meetings in all the sub counties/districts, where TGB is implemented. The main issues discussed in the training sessions and meetings include global warming, the plan vivo cycle, tree planting and carbon management. Farmers also discuss the challenges and threats in the community and jointly come up with possible solutions. During the reporting period, the project conducted farmer training sessions and meetings. This section highlights some of the issues discussed in these meetings.

8.1 Farmer Sensitization/Trainings and participation

Training sessions for participating and potential TGB farmers were held to build their capacity in areas concerning livelihood improvement, tree management and the plan vivo cycle. These were conducted in the various sub-counties in the districts of Kasese, Bushenyi, Hoima, Masindi, Mbale, Bududa and Manafwa (as shown in the table below). The training focused on the plan vivo cycle on making farmers understand silvicultural practices (planting, weeding, pruning and thinning) and the carbon sales agreement. In addition to the usual key issues – climate change and global warming and the link between tree growing and climate change – the project also include HIV/AIDS as a cross-cutting issue. The procedure to be followed while joining the project was emphasized especially for the new sites.

Table 7a: Summary of participation in farmer training meetings in 2016

Date	District	Sub county	Male	Female	Total
5 th -8 th April 2016	Hoima	Kyangwali	63	6	69
		Kabwoya	26	22	48
		Kiziranfumbi	29	14	43
		Kigorobyia	23	0	23
		Total	141	42	183
January 2016	Masindi	Nyakafunjo	18	4	22
		Kapeka	46	23	69
		Kabalye	12	8	20
		Siiba	33	20	53
		Hanga	14	8	22
		Katanga	83	31	114
		Total	206	94	300
29 th Sept 2016	Masindi	Karujubu	40	6	46
29 th Sept 2016		Pakanyi	13	0	13
30 th Sept 2016		Bwijanga	27	9	36
30 th Sept 2016	Nyangaluya	Nyangaluya	28	8	36
01 st Oct 2016		Nyantonzi	48	0	48
	Total		156	23	179
21 st -22 nd Sept 2016	Kasese	Maliba	19	6	21
		Kiruri			
		Kilembe	5	1	6

		Omukathi			
		Kinyambwamba			
		Katooke			
		Ruboni	12	7	19
		Kyandale			
		Total	372	186	558
19 th -20 th Sept 2016	Bushenyi	Bitereko	41	29	70
		Kiyanga	82	14	96
		Ryeru/ Kichwamba	69	11	80
		Katerera	44	4	48
		Total	236	58	294
29 th march 2016	Masindi	Bwinjanga	49	3	52
30 th march 2016		Budongo/Nyantonzi	93	6	99
4 th April 2016		Karujubu	55	6	61
18 th April 2016		Budongo/Kasenene	35	2	37
20 th April 2016		Masindi town	22	6	28
		Total	254	23	277
28 th sept 2016	Hoima	Kigorobya	18	2	20
27 th sept 2016		Kabwoya	12	4	16
27 th sept 2016		Kyangwali	56	3	59
26 th sept 2016		Kiziranfumbi	42	7	49
26 th sept 2016		Kaseeta	23	4	27
		Total	151	20	171

Table 7b: Summary of participation in farmer training meetings in Mt. Elgon in 2016

Date	District	Sub County	Male	Female	Total
March 2016	Bulambuli	Lusha	23	12	35
March 2016	Bulambuli	Bulegeni	46	21	67
March 2016	Sironko	Budadiri TC	39	18	57
October 2016	Mbale	Wanale	23	12	35
October 2016	Bududa	Bukibokolo	25	02	27
October 2016	Bududa	Nakatsi	20	05	25
Grand Total			176	70	246

8.2 General Issues raised during training sessions

8.2.1 Benefit Sharing

Farmers have expressed concern over the delays in payments after the monitoring, thus discouraging some from continuing with project activities. Timely payments are very critical in giving weight to the incentive package, since these funds are the main reliable source of income to the farmer. The delays are mainly as a result of the current manual process of generating monitoring results, verification of the results and the payment process. The project recognizes that this manual process is no longer tenable and is addressing this issue by developing a Mobile App that will be used to collect data from the field and update an online database, which can then be used to process payments.

There are also other complications arising, such as some farmers using pet names and nicknames which hinders access by the farmer coordinators.

The farmers have also proposed improvements in the incentive package through:

- Improvement in the process of obtaining seedlings and planting equipment, including saws
- Provision of improved cook stoves
- Greater post yr10 support (after the last payment), e.g. developing the enterprises through provision of materials (such as beehives and goats) as well as helping to find a market for their timber

8.2.2 Training Needs

The farmers observed that two trainings in a year are not sufficient for farmers to fully understand some of the planting practices recommended in the technical specifications. Farmers need capacity building in areas such as managing drought, pest and diseases, and fires, as well as proper management of land to reduce competition for other enterprises like sugarcane.

There is a need for activities such as farmer field schools and exchange visits among different farmer groups.

8.2.3 Technical Specifications

The farmers have reported poor performance by *Maesopsis eminii*, which continues to disappoint farmers who've been in the programme for some time, as the species continues to dry up, and can suffer from disease even after year 5. This has been cited as the main reason why farmers have failed to progress beyond years 1 & 3 and have requested modification of the associated technical specifications. These farmers signed contracts for *Maesopsis eminii*.

8.2.4 Tree planting in central Forest Reserves under 'Collaborative Forest Management (CFM)'

Whereas farmers growing trees in the Central Forest Reserves in Rubirizi have continued to be recruited into the project, it has not been possible for the ones in Hoima and Masindi. This is due to numerous misunderstandings between the farmers & NFA officials, with each accusing the other actor of promoting illegal activities. According to NFA, farmers have abused the licences, planting food crops instead of trees as indicated in the licence. The farmers on the other hand claim that this is

simply an excuse for NFA to deprive poorer farmers of access to land, in preference for more wealthy people who can afford to plant trees on larger areas of land.

The CFM has been further complicated by the court case between the *Omukama (King) of Bunyoro* and NFA, in which the Omukama claims ownership of Bugoma Central Forest Reserve and has proceeded to lease it to a private company for sugar cane cultivation. The affected communities are worried that if the Omukama won the case, it would be likely that the communities would be evicted and lose all the trees they have planted to date.

9. Breakdown of Operational Costs

Below is a breakdown of all operational costs connected to the project for the reporting period:

Table 8. Breakdown of operational costs

2016 costs	Total Cost (\$)	Carbon sales (\$)	Other sources (\$)	Notes
3 rd party Verification	10000	3000	7000	Internal & external financial audit IUCN Mbale CAP IIED
Staff time	195738	95738	100000	
Farmer capacity building	12186	7186	5000	
Monitoring	53,897	43897	10000	
Office running costs	60559	30559	30000	
Vehicle running costs	30140	20140	10000	
Research & Project Development	29464	10000	19464	
Coordinators	16977	16977	0	
Other travel	7845	5000	2845	
Total	\$ 401,806	\$ 232,497	\$ 184,309	

The monitoring costs have increased significantly due to the decision to visit in year 2 and post-year 10, which is not usually included in the monitoring schedule. The purpose, as explained previously, was to ensure continued adherence to the technical specifications beyond the final payments.

10. Future Development

10.1 Farmer training

10.1.1 Farmer Field Schools

In the past ECOTRUST has provided farmers with knowledge on the silvicultural practices required for mainly young trees. However, as we have noticed that the attendance in the trainings covers about 20% of the farmers and mainly new farmers, the project is planning to invest in bringing the training sessions closer to the farmers by developing farmer field schools. The plan is to identify and recognise model farmers (certificates of excellence) and train them to train other farmers. The target set is to establish within the next 5 years at least one field school in each village. Each trainer will join the coordinators as field technicians and they will be rewarded according to the number of people trained and according to the number of farmers whose performance has improved as a result of the training.

10.1.2 Community visioning

Based on the experience from the Mt. Elgon area where we have engaged farmers in community visioning, an activity aimed at strengthening the existing livelihood enhancing options, the project plans to conduct similar training sessions in the Kasese/Bushenyi and Masindi/Hoima regions. These sessions will focus on empowering farmers in aspects of group formation at the level of farmer recruitment, mainly to allow farmers with small land holdings to participate in the project activities.

Farmers will also be supported in the formation of farmer groups and guided on how to register their groups as legal entities. They will be equipped with skills that will enable them to manage their finances and property appropriately, have formal decision making processes and clear governance structures and processes, e.g. conflict resolution and involvement of marginalized groups. In the implementation of TGB, group formation is part of strengthening farmers' social capital and hence their livelihood opportunities. Farmer groups are key in farmer recruitment, dissemination of information, provision of extension services, peer monitoring and exchange of knowledge and best practices.

10.1.3. Training in tree based enterprises

The project will invest in activities that build capacity for managing tree – based enterprises. This activity will mainly focus on farmers that are in Yr5 and beyond.

10.2 Advocacy for Forest Conservation

With support from the IUCN Netherlands Committee, ECOTRUST has formed a consortium with organisations with expertise in advocacy to use the project's findings to develop and implement an advocacy programme focusing on forest conservation, oil and gas, as well as agriculture that employs out-growers. These are the main drivers of deforestation and forest degradation in the Budongo–Bugoma area, where tree planting motivation has suffered considerably.

10.3 Improving access to comprehensive health care, focusing on HIV/AIDS

The project will continue raising the visibility of the participating communities to other development partners. The project will through a partnership with World Vision to support access to comprehensive health care. This will be made possible with funding from USAID targeting communities around the three Protected Areas of Queen Elizabeth, Murchison Falls and Mt. Elgon Conservation Areas.

10.4 Strengthening Monitoring & Evaluation

The project will complete the development of the mobile app that will be used for collecting data. In addition, with support from IUCN shared landscapes, ECOTRUST will link the Mobile App to a web based map, which will be useful in tracking progress.

11. APPENDICES

Appendix I - List of buyers since project inception

Year of Sale	Buyer	tCO ₂ purchased	Total cost (USD)
2003	Tpk2003	11200	
2005	Tpk2004	9222	
2005	INASP1	102	
2005	One World	4	
2005	Future Forest	10000	
2006	Tpk2005	10933	
2006	INASP2	133	
2006	U&W1	22	
2006	U&W2	2550	
2006	Nicola Webb	20	
2006	Save Children	3	
2006	In-2 technology	21	
2006	Hambleside Danelow	1217	
2007	Tpk2006	5000	
2007	In-2 technology	22	
2007	Robert Harley	10	
2007	U&W	265	
2007	U&W	2744	
2007	U&W	5625	
2008	Camco	40000	
2008	U&W	2786	
2008	U&W	2062	
2008	U&W	1155	
2008	U&W	11266	
2008	U&W	1001	
2008	Tpk2007	21000	
2008	Live Climate	250	
2008	It's the Planet	600	
2008	In-2 technology	23	
2008	Pam friend	17	
2008	Sandra Hughes	54	
2008	Steffie Broer	40	
2008	Gloria Kirabo	1	
2008	INASP	168	
2008	Tapani Vainio	5	
2009	Tetra Pak	5000	
2009	U&W	20590	
2009	U&W	2022	
2009	Emil Ceramica	125	
2009	Ceramica Sant Agostino SpA	424	
2009	In2 Technology	23	
2009	Classic Africa Safaris	167	
2009	City of London	220	
2009	Blue Green Carbon	29	
2009	Tetra Pak	10100	
2010	U&W	28538	
2010	U&W	3111	
2010	Ceramica Sant'Agostino S.p.A	1615	
2010	Tetra Pak	15100	
2010	Uganda Carbon Bureau	199	
2010	Straight Plc	1000	

2010	IIED	779	
2010	Danish Embassy Kampala	414	
2010	International Lifeline Fund (UCB)	123	
2010	Nedbank	30000	
2010	Wilton Park	17	
2011	U&W NCC & other	11000	
2011	Ceramica Sant'Agostino S.p.A	3150	
2011	Max Hamburger	55000	
2011	KALIP	160	
2011	SPGS	77	
2011	G&C Tours	253	
2011	UBoC	2507	
2011	International Lifeline Fund (UCB)	96	
2011	Nkuringo Gorilla Camp	55	
2011	Myclimate	10000	
2012	Max Hamburger	60498	
2012	Max Hamburger	78892	
2012	Straight Plc	1100	
2012	Bartlett Foundation	412	
2012	U&W	3400	
2012	Ceramica Sant'Agostino S.p.A	2120	
2012	Emil Ceramica	100	
2012	Econometrica	110	
2012	Classic Africa Safaris	129	
2012	The Embassy of Ireland in Uganda	211	
2012	N. Uganda Agricultural Livelihoods Recovery Prog. & Karamoja Livelihoods Prog.	62	
2012	Mihingo Lodge	45	
2012	Kampala Aero Club & Flight Training Center	1332	
2013	Granite Fiandre Spa	4600	
2013	KALIP	107	
2013	Royal Danish Embassy	196	
2013	Classic Africa Safaris	81	
2013	Kampala Aero Club	1680	
2013	Arla	21308	
2013	Ima	114	
2013	Ima	13	
2013	climate path	70	
2013	Max stock	5610	
2013	COTAP-1	287	
2013	COTAP-2	309	
2013	COTAP-3	208	
2013	Source Sustainable	15	
2014	Max	90000	
2014	Arla Foods	2975	
2014	Arla Foods	14,168	
2014	U&We Arla & Other	13,480	
2014	U&We Other	400	
2014	U&We Other	14,168	
2014	U&We Arla	37,000	
2014	ZeroMission	1,488	
2014	Arvid Nordquist	5000	
2014	Royal Danish Embassy	192	
2014	Nkuringo Gorilla Camp	38	
2014	Embassy of Ireland	226	
2014	Karamoja Livelihoods Program (KALIP)	145	
2014	Embassy of Ireland	178	
2014	COTAP-4	414	

2015	COTAP-5	309	
2015	COTAP-6	364	
2015	COTAP-7	254	
2015	U&We Arla Q1	34500	
2015	U&We Arla Q2 & others	31000	
2015	U&We Arla Q3	27885	
2015	U&We Arla Q4	36500	
2015	U&We Max	96000	
2015	Max	30000	
2015	Others	982	
2015	Mihingo Lodge	48	
Total		962,138	\$ 5,495,697.94

UN SOLD STOCK UP TO AND INCLUDING 2016 VINTAGE CREDITS

Vint.2010	Unsold stock	1169	
Vint.2013	Unsold stock	19104	
Vint.2014	Unsold stock	361	
Vint.2016	Unsold stock	84149	
Total unsold stock including 2016 issuance		104,783	

SALES RELATED TO 2016 ANNUAL REPORT

Vint.2016	U&We Arla Q1	16500	
Vint.2016	U&We Arla Q2 & others	3200	
Vint.2016	U&We Arla Q3	3249	
Vint.2016	Uganda Carbon Bureau	215	
Vint.2014	COTAP	589	
Vint.2012	MyClimate	2665	
Vint.2010	MyClimate	3033	
Total		29,451	\$ 171,340.10
Total PVCs after 2016 issuance		1,096,372	
Total historical revenue received by ECOTRUST			\$ 5,667,038.04